

NEP 2020 ALIGNED OBE CURRICULUM



PROGRAM: DIPLOMA IN TRAVEL AND TOURISM



by

**Curriculum Development Cell,
Government Polytechnic, Nagpur**

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FOREWORD- Chairman Governing Board



Dr. Vinod Mohitkar
Chairman, Governing Board
&
Director, Technical Education, Mumbai

It is with immense pride and a deep sense of purpose that I present the *NEP aligned 2023 Curriculum for Diploma in Engineering*, a landmark step in advancing technical education. As Chairman of the Governing Board of Government Polytechnic, Nagpur and Director of Technical Education, Maharashtra State, I consider this curriculum a reflection of our collective commitment to the transformative vision laid out in the National Education Policy (NEP) 2020.

This curriculum embraces the core principles of Outcome-Based Education (OBE) and integrates the modern educational framework of Bloom's Taxonomy, focusing on equipping students with future-ready skills, practical knowledge, and professional competencies. Designed to foster innovation, critical thinking, and a hands-on learning approach, it addresses the rapidly evolving needs of industries and communities alike.

I wish to place on record my sincere appreciation for the Board of Studies Chairman and all Board of Studies members, whose leadership, insight, and dedication played a pivotal role in shaping this curriculum. Special thanks are also due to the Principal, Heads of Departments (HODs) and faculty members of various programs who actively contributed by

sharing ground-level teaching insights, refining course content, and ensuring alignment with real-world applications. Their collaborative efforts with the Program-wise Board of Studies academic and industry experts, who brought in valuable field experience, ensured that the curriculum remained dynamic, relevant, and future-oriented.

Through multiple rounds of consultations, workshops, and rigorous reviews, the curriculum has evolved to incorporate sector-specific innovations, practical implementation pathways, and learner-centric strategies. The collaboration between academia and industry—spearheaded by the Boards of Studies—has ensured that the curriculum is not only academically robust but also aligned with current industry standards and future demands.

This curriculum document, including chapters on NEP 2020, OBE philosophy, SWOT analysis, and curriculum development methodology, along with more than 50 carefully curated course curricula of each program, stands as a testimony to the vision and meticulous planning behind this academic reform.

I am confident that *Curriculum 2023* will serve as a cornerstone for excellence in technical education. It is our collective responsibility to implement it with the same spirit of dedication that guided its creation, as we work toward nurturing a generation of skilled, thoughtful, and responsible technocrats.

(Dr. Vinod Mohitkar)

Chairman, Governing Board, Government Polytechnic, Nagpur
and Director, Technical Education, Maharashtra State.

FOREWORD- Past Member Secretary Governing Board



Dr. Manoj Daigavane
Ex. Member Secretary, Governing Board,
Government Polytechnic, Nagpur &
Jt. Director, Technical Education, R.O. Nagpur

It is with immense pride and a deep sense of accomplishment that I pen this foreword for the revised NEP aligned curriculum document of Government Polytechnic, Nagpur. Having had the privilege to serve as the Member Secretary when the journey of aligning our educational framework with the transformative vision of the National Education Policy (NEP) was first initiated, I witnessed firsthand the dedication and foresight that has culminated in this comprehensive and forward-thinking curriculum.

The landscape of technical education is ever-evolving, and the NEP 2020 has provided a robust framework for fostering holistic, multidisciplinary, and skill-oriented learning. This curriculum document is a testament to our institution's commitment to embracing these progressive ideals. It meticulously integrates key NEP principles, ensuring that our students are not only academically proficient but also adaptable, innovative, and socially responsible citizens ready to contribute meaningfully to the nation's growth.

A cornerstone of this revision has been the unwavering focus on Outcome-Based Education (OBE), meticulously structured around the principles of Bloom's Taxonomy. This ensures that every learning experience is purposeful, with clearly defined outcomes that empower students to

acquire not just knowledge, but also critical thinking, problem-solving, and practical skills. The shift towards an outcome-centric approach will undoubtedly enhance the quality of learning and prepare our graduates for the complex demands of the 21st-century workforce.

The development of this curriculum has been a truly collaborative endeavor, embodying the spirit of collective expertise. The rigorous curriculum development process, involving extensive deliberations, workshops, and feedback sessions, has been instrumental in shaping this document. This curriculum is a testament to collaborative effort. My sincere gratitude goes to the distinguished experts and dedicated faculty, especially the In-charge of the Curriculum Development Cell, who spearheaded the writing of various chapters, ensuring their depth and relevance. Their tireless work has been instrumental.

As the Ex. Member Secretary of the Governing Board, Government Polytechnic, Nagpur, the supreme authority for curriculum approval, I can attest to the thorough scrutiny and thoughtful consideration given to every aspect of this revision. We are confident that this new curriculum will not only uphold the high standards of academic rigor that Govt. Polytechnic, Nagpur is known for, but also empower our students to become lifelong learners and leaders in their chosen fields.

I commend everyone involved in this monumental undertaking. This curriculum is a beacon guiding our students towards a brighter future, and I am confident it will contribute significantly to their personal and professional growth, and ultimately, to the progress of our nation.

[Dr. M. B. Daigavane]

Ex-Member Secretary, Governing Board,
Government Polytechnic, Nagpur

FOREWORD- Member Secretary Governing Board



(Dr. R.P.Mogre)
Member Secretary, Governing Board
&
Principal, Government Polytechnic, Nagpur

It gives me immense pleasure to present this comprehensive curriculum document developed by our autonomous polytechnic, a result of collaborative academic vision, pedagogical advancement, and policy alignment. This curriculum reflects a strategic response to the National Education Policy (NEP) 2020, integrating its transformative vision into technical education.

The document outlines the systematic curriculum development process, beginning with institutional introspection through SWOT analysis and guided by the principles of Outcome-Based Education (OBE). The integration of Bloom's Taxonomy ensures that the curriculum targets holistic cognitive development, fostering analytical, creative, and application-level competencies in students.

The curriculum has been developed by teams of experienced faculty members and subject experts under the guidance of the In-charge of the Curriculum Development Cell. Their efforts were directed toward making the curriculum learner-centric, industry-responsive, and future-ready. Notably,

the design process included inputs from domain specialists and industry professionals previously associated with our Program-wise Board of Studies and Board of Studies, ensuring both academic relevance and industrial applicability.

As the Member Secretary of the Governing Board—the apex academic authority for curriculum approval—I take pride in acknowledging the tireless dedication and academic integrity with which this document has been developed and approved. I am confident that this curriculum will serve as a robust foundation to produce competent, ethical, and innovative diploma professionals aligned with national aspirations.

(Dr. R.P. Mogre)

Member Secretary,

Governing Board, Government Polytechnic, Nagpur

&

Principal, Government Polytechnic, Nagpur

FOREWORD- Member Secretary, Board of Studies



Mr. Sudhir P. Pathak
Chairman, Board of Studies
Government Polytechnic, Nagpur

It gives me immense pleasure to present the NEP aligned 2023 Curriculum for the Diploma in Engineering, developed at Government Polytechnic, Nagpur.

As a Chairman of the Board of Studies and with the background of having served in Engineering and Auto industry for several decades, I deeply recognize the need for a dynamic, responsive, and industry-aligned technical education framework. This curriculum is a forward-looking document, inspired by the National Education Policy 2020 and built upon the principles of Outcome-Based Education (OBE).

The demands of the modern industrial landscape viz. digital transformation, sustainability, automation, global competitiveness, et al. requires diploma engineers who are not just technically competent but also, innovative, versatile, resourceful, and ethically grounded. This curriculum assuredly reflects those very values. It is designed with inter and intra institute deliberations and with careful consideration to the needs of students, industry, and society as well. It integrates modern pedagogical approaches such as Bloom's Taxonomy, continuous curriculum enhancement through SWOT analysis, and comprehensive assessment techniques. It also emphasizes skill development, entrepreneurship, and holistic learning

through internship and industry interaction and fosters a vibrant academic environment, ensuring that students graduate with the competencies required in the 21st-century workplace.

The Board of Studies has worked collaboratively with faculty, industry experts, alumni, and academic leaders to ensure that every course and learning outcome is relevant and robust.

I commend the entire curriculum development team for their assiduous efforts and dedication to excellence. Their work marks a significant step toward creating technically sound, socially responsible, and globally employable engineers. I am confident that this document will serve as a strong foundation for academic delivery and industry collaboration in the years to come.

Let us continue to inspire, evolve and, innovate building a stronger future for technical education in India.

[Sudhir P. Pathak]

Chairman, Board of Studies, Government Polytechnic, Nagpur

Preamble

The 2023 Curriculum of Government Polytechnic, Nagpur for the Diploma in Engineering reflects a transformative shift in technical education, firmly rooted in the Outcome-Based Education (OBE) framework, and aligned with the visionary directives of the National Education Policy (NEP) 2020. This curriculum has been thoughtfully designed to respond to the changing educational landscape, technological advancements, and evolving industry requirements, with a strong focus on practical skills, flexibility, and holistic development.

Our institute, renowned for its commitment to excellence in technical education, continues to play a vital role in shaping competent professionals who contribute meaningfully to national development. Through the modernization and continuous refinement of our academic offerings, we aim to empower students with the skills, attitudes, and knowledge necessary for lifelong success. Our focus has always remained on innovative, learner-centered curriculum development, emphasizing both technical competence and personal growth.

In line with NEP 2020 reforms, the revised curriculum embraces several key features: a choice-based credit system, multiple entry and exit options, skill-based education, soft skill and industry internship, and value-based education. These features not only support multidisciplinary learning but also foster creativity, critical thinking, and ethical responsibility among students.

The curriculum revision process was undertaken through a highly participative and structured approach. Valuable inputs were gathered from a wide spectrum of stakeholders, including industry experts, alumni, academic leaders, and students, ensuring the curriculum remains relevant, responsive, and forward-looking. Guided by the Governing Board (GB), Board of Studies (BOS), Program-wise Board of Studies (PBOS), and the Curriculum

Development Cell (CDC) of the institute, played integral roles in shaping this document. The contributions of faculty members, Heads of Departments (HODs), and domain experts further enriched the content and ensured alignment with the latest technological and pedagogical standards.

The implementation of OBE principles ensures clarity in learning outcomes, structured assessment strategies, and continuous improvement through feedback and evaluation. The integration of Bloom's Taxonomy, domain-specific learning objectives, and a clearly defined assessment framework supports differentiated learning across cognitive, affective, and psychomotor domains. A SWOT analysis methodology was employed to identify program-level strengths, gaps, opportunities, and challenges—laying the foundation for robust and future-ready program structures.

The NEP aligned 2023 curriculum offers a balanced and flexible learning scheme incorporating classroom instruction, laboratory experience, tutorials, and self-directed learning. Innovative elements such as skill enhancement courses, value education, NPTEL and Spoken Tutorial integration, and notional hour calculation reflect the comprehensive nature of the new academic structure.

Our institutional vision is to emerge as a Center of Excellence in technical education, committed to nurturing innovation, employability, and entrepreneurship. The NEP aligned 2023 Curriculum is a significant milestone in our academic journey, reinforcing our legacy of quality and our dedication to continuous educational advancement. It sets the stage for dynamic, student-centric learning environments that inspire students to contribute actively to society and industry.

[Dr. G. V. Gotmare]

Member Secretary, Board of Studies &

I/C, Curriculum Development Cell, Government Polytechnic, Nagpur

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CHAPTER 1

Introduction

This chapter describes the history, organization structure, curriculum development system and the various bodies responsible for the development of curriculum of Government Polytechnic, Nagpur (GPN).

1.1 History

The Government Polytechnic, Nagpur, stands as one of the oldest technical institutions in central India. Established on July 14, 1914, it began as the Government Engineering School. Initially housed in the Victoria Science College (currently the Institute of Science), the institution started with just 16 students. In its inaugural year, it offered diploma-level courses in Civil and Mechanical Engineering. By 1915, an Automobile Engineering course was introduced, which later evolved into a Post Diploma program in Automobile Engineering. The institution played a pivotal role in the establishment of what is now the Visvesvaraya National Institute of Technology (VNIT), Nagpur. Over the years, the institution experienced significant growth, expanding from its modest beginnings to an enrollment of nearly 2,000 students today. The Government Engineering School was eventually renamed Government Polytechnic, Nagpur.

1.1.1 Autonomy

The Institute recently commemorated its centenary, celebrating 111 years of outstanding contribution to technical education. Government

Polytechnic, Nagpur has a rich history of evolving to meet the needs of industry and society. The institution remains committed to addressing the educational demands of an ever-changing world.

In 1995, the Government of Maharashtra granted the institute autonomous status under Government Resolution No. WBP-1093/(2640) (69)VE-5, dated March 31, 1994. This autonomy empowered the institute to independently introduce new programs, design curricula, implement self-developed academic plans, and oversee the assessment, evaluation, and certification of students.

1.1.2 Awards

Some of the prestigious awards received by Government Polytechnic, Nagpur are as follows:

- State Award "Best Overall Performance 1996" (ISTE Narsee Monjee Award)
- State Award "Best Polytechnic, 1997" , (Govt. of Maharashtra)
- National Awards "Best Polytechnic, Student Chapter 2002", (Institute of Engineers (India))
- National Awards "Best Polytechnic, Student's Project ,2002" (ISTE Narsee Monjee)
- State Award "Best Overall Performance 2016" (ISTE Narsee Monjee Award)
- National Education Award for "Best Technical Educational Institute in Maharashtra State-2016"

1.1.3 Geographical Location

Nagpur, located in India, lies at a latitude of 21.146633 and a longitude of 79.088860. Its geographical coordinates are 21° 8'

47.8788" N and 79° 5' 19.8960" E. The city sits at an elevation of 311 meters above sea level and is positioned at the very center of the Indian subcontinent. As shown in Figure 1.1, Nagpur is home to the Zero Mile Stone, a landmark that historically marked the geographical center of India and was used by the British to measure distances across the Indian subcontinent. The city's name is derived from the Nag River, which flows through it, originating from a village named Lavha. Nagpur is renowned for its oranges, often referred to as "Nagpur oranges," and has earned the title of the "Orange City" due to its prominence as a major trading hub for the region's orange cultivation.



Figure 1.1. Location of Nagpur City

1.1.4 Campus

Government Polytechnic, Nagpur is situated in heart of the Nagpur City at "Sadar" area, 2.1 km walking distance from zero-mile stone as well as Nagpur railway station.



Figure 1.2. Government Polytechnic, Nagpur Campus

1.2 Organizational Structure

GPN, as a part of the Polytechnic Education System, has been addressing the needs of individuals, the community, society, and industry for over 111 years. Until 1995, its services operated under various affiliations, including the university, MP DTE, and MSBTE.

In 1995, the Government of Maharashtra granted GPN autonomous status. This autonomy empowered the institute to independently manage academic matters such as identifying the need for new

programs, designing requisite curricula, implementing self-designed curricula, and conducting student assessment, evaluation, and certification. In essence, the institute became fully accountable for these academic responsibilities, including facilitating student placements in the workforce.

To ensure effective and efficient operations under autonomous status, a functional organization was established alongside the institute's hierarchical structure, enabling streamlined management and governance.

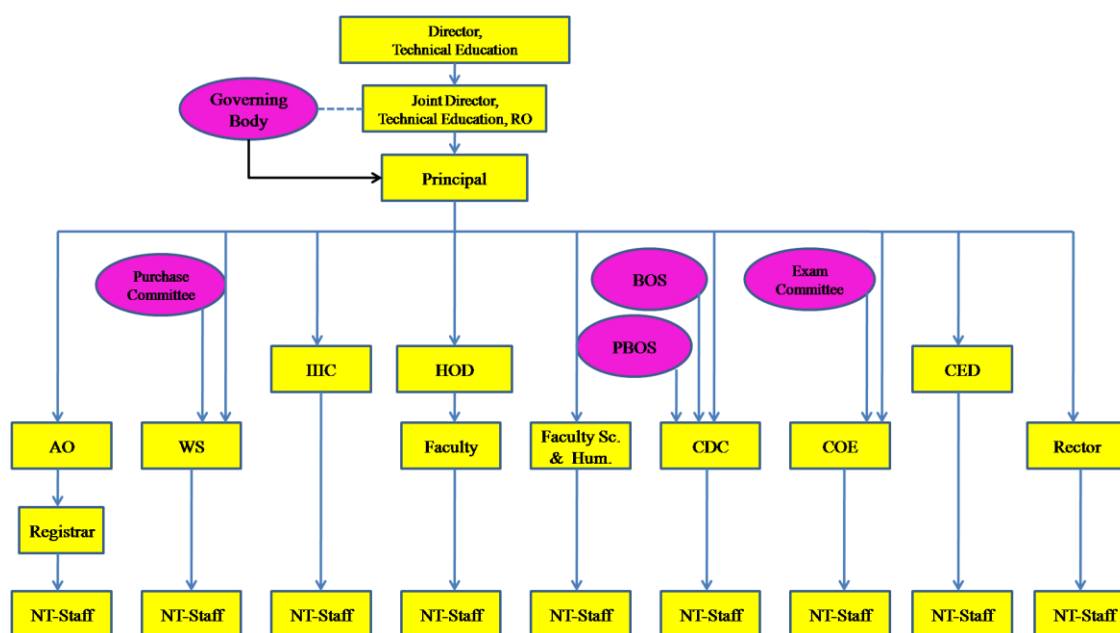


Figure 1.3. Organizational Structure of GPN

1.3 Curriculum Development System

Since 1995, the institute has been independently designing, revising, and implementing curricula for all programs under its autonomous status, except for Mining and Mine Surveying. This process is carried out using the Curriculum Development System illustrated in the accompanying figure 1.4.

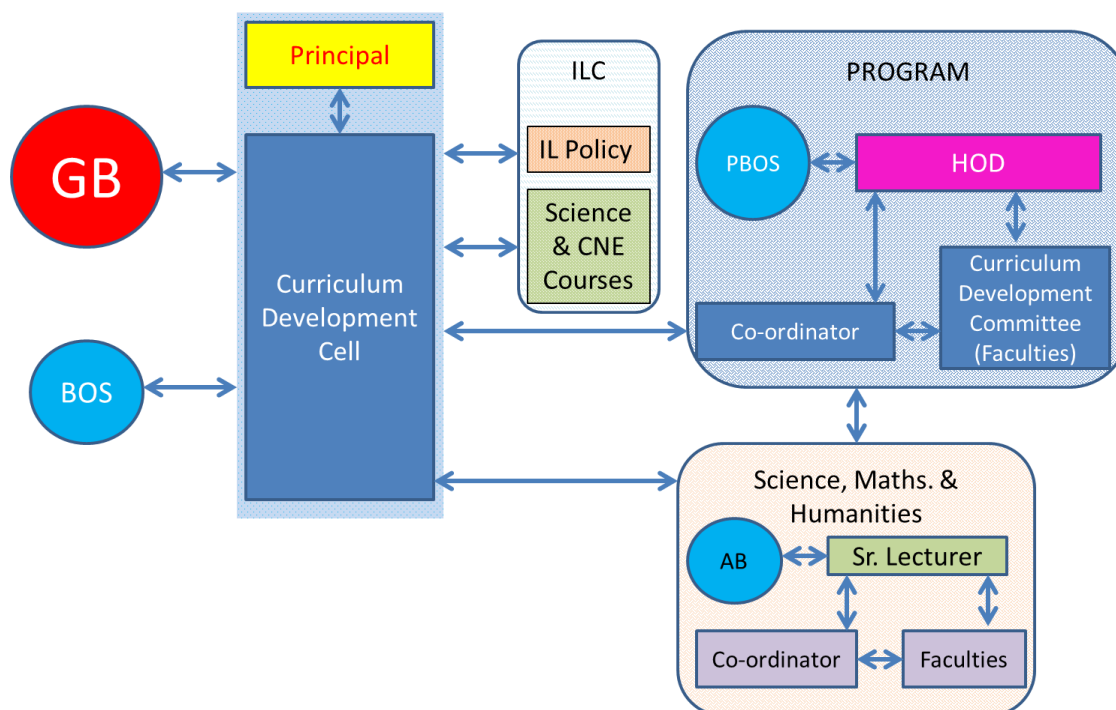


Figure 1.4. Curriculum Development System

The Curriculum Development System comprises various entities, including Program Departments (such as Civil, Mechanical, and Electrical), Non-Program Departments (such as Science, Mathematics, and Humanities), the Institute Level Committee (ILC), and the Curriculum Development Cell (CDC), which is headed by the Principal of the Institute. The institute follows a systematic process for designing, revising, developing, implementing curricula, and assessing and evaluating students to enhance their learning outcomes.

Constitutional bodies, such as the Governing Body (GB), Board of Studies (BOS), and Program-wise Board of Studies (PBOS) for specific programs, along with the non-constitutional Advisory Board (AB) for Non-Program Departments, are responsible for curriculum approval.

This section outlines the philosophy underpinning curriculum design, the mechanisms for its implementation, and the approach adopted for assessing student performance.

1.3.1 Governing Board (GB)

The Governing Body (GB) serves as the apex authority of GPN. Below is a detailed outline of its committee members, along with their roles and responsibilities.

- **Committee Members:**

1. Joint Director of Technical Education Maharashtra State, Bombay - Chairman
2. Nominee from Western Regional Committee Govt. of India - Member
3. Regional Officer, Human Resource Development or Co-ordinator, TTTI, Pune - Member
4. Representative from the Local Centre the I.E.(India) - Member
5. Representative from the Engineering Association - Member
6. Representative from the District Industries - Member
7. Project Director, State Project Implementation Unit (World Bank) – Member
8. Principal of the Polytechnic – Member Secretary

- **Functions and Responsibilities:**

1. To decide the policy of the institute and decide guidelines of the function of various committees.
2. To analyse all issues and provide policy directive for developing the scheme and implementing it at the institute level.

3. To appoint the various committees of Governance for smooth functioning of the Institute.
4. To institute scholarships fellowships studentships, Mudat prize and certificates on the recommendation of Board of Studies.
5. Approve new programmes of studies leading to Diploma/Post-Diploma.
6. Approve modifications in present curriculum in order to meet the changed demands of the industry society from time to time.
7. Approve Annual Reports of the Institute.
8. Approve Continuing Education Programmes or similar Activities Beneficial to the Students/Community Institute.
9. To approve the fees and other charges payable by the students of the Polytechnics on the recommendation of Board of Studies.

1.3.2 Board of Studies (BOS)

The Board of Studies (BOS) functions as an institute-level committee at GPN. The composition of its members, along with their roles and responsibilities, is detailed below.

- **Committee Members:**

1. Representative of the Industry - Chairman
2. Head of Department of 5 Programmes - Member
3. Local Experts of 5 Programmes- Member
4. Nominee of Board of Technical Examinations, M.S. Bombay- Member
5. In-charge of Curriculum Development Component– Member Secretary

- **Functions and Responsibilities:**

1. To prepare Syllabi for various courses and develop curriculum keeping in view the objectives of the Institute and the national requirement for consideration. Syllabi shall be equivalent to Syllabi of Board of Technical Examinations.
2. To suggest methodologies for innovative teaching and evaluation techniques.
3. To Co-ordinate research teaching, extension, and other academic activities in the various departments/ institute.
4. To recommend books including test books for various courses of studies.

1.3.3 Program Wise Board of Studies (PBOS)

The Program Board of Studies (PBOS) is a program-specific committee, with GPN comprising 13 PBOS committees. The composition of its members, along with their roles and responsibilities for each program, is outlined below.

- **Committee Members:**

1. Head of the Department concerned- Chairman
2. Two Senior Lecturers- Member
3. One expert in the programme from the neighbouring institution - Member
4. Nominee from the Board of Technical Examinations Bombay - Member
5. One Expert from the local industry in each Programme – Member
6. In-charge of Curriculum Development component - Member-Secretary

- **Functions and Responsibilities:**

1. To decide Philosophy of curriculum design course wise.
2. To analyse present needs and to identify desirable changes, additions, deletions course-wise.
3. Analyse of personnel development.
4. Formation of Programme objectives.
5. Selection of contents.
6. Design of student's evaluation.
7. To decide resources required and development thereof.
8. To decide strategy of implementation.
9. Recommend equivalence for granting exemptions.

1.3.4 Advisory Board (AB)

The Non-Program Departments (Science, Mathematics, and Humanities) do not have PBOS as per the Government Resolution. Instead, an Advisory Board (AB) has been constituted to function similarly to PBOS for these departments. There are four ABs, one each for the Physics, Chemistry, Mathematics, and English Departments.

1.4 Outline of Document

This document comprises nine chapters, each covering a key aspect of curriculum development at GPN:

Chapter 1 provides an overview of GPN, its organizational structure, and the curriculum development system.

The key provisions of NEP 2020 and relevant Government Resolutions (GR) issued by the Government of Maharashtra are examined in Chapter 2.

A detailed discussion on the principles and implementation of Outcome-Based Education (OBE) is presented in Chapter 3.

Chapter 4 focuses on Bloom's Taxonomy and its significance in designing effective learning outcomes.

A structured approach to conducting a SWOT analysis is outlined in Chapter 5.

The process for revising the 2023 curriculum is comprehensively detailed in Chapter 6.

Chapter 7 highlights the key features of an NEP 2020-aligned curriculum at GPN.

Detailed course curriculum content is presented in Chapter 8.

The complete curriculum document, along with comprehensive descriptions, is compiled in Chapter 9, while the appendix provides course-specific details.

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CHAPTER 2

National Education Policy 2020

The National Education Policy (NEP) 2020 aims to revolutionize India's education system for the 21st century by fostering holistic learning, inclusivity, and global competitiveness. Key reforms include flexible learning pathways, vocational integration, and a focus on research and sustainability. This chapter explores these features, highlighting their impact on engineering education and India's evolution into a vibrant knowledge society.

2.1 NEP 2020: Reforms in Education System

The National Education Policy (NEP) 2020 is a landmark reform in India's educational landscape, promising transformative changes to prepare students for the 21st century and beyond. Rooted in Indian ethos, NEP 2020 aspires to create a knowledge society by ensuring high-quality, inclusive, and equitable education for all. It emphasizes holistic development, employability, and international competitiveness while maintaining alignment with India's traditions, culture, and value system.

2.1.1 Pillars of NEP

NEP 2020 is built on five foundational pillars:

- **Access:** Ensuring education is available to all.
- **Equity:** Bridging disparities across regions and communities.
- **Quality:** Enhancing educational standards to global levels.

- **Affordability:** Making education economically accessible.
- **Accountability:** Promoting transparency and efficiency.

2.2 Features of NEP 2020

The NEP 2020 emphasizes holistic and multidisciplinary learning, flexible academic pathways with multiple entry and exit options, and the integration of vocational education for skill development. Following paragraph describes these features.

2.2.1 Holistic and Multidisciplinary Learning

NEP 2020 emphasizes a multidisciplinary approach, enabling students to explore diverse subjects beyond their core disciplines. For engineering students, this approach:

- Encourages creativity, critical thinking, problem-solving, and digital literacy.
- Allows for degree customization with minors in humanities, social sciences, or management, complementing technical expertise.
- Offers options for degrees with research, honors, or dual specializations.

2.2.2 Multiple Entry and Exit Options

The policy introduces flexibility in education:

- **Stages of Certification:** Students can receive certificates, diplomas, or degrees based on their level of completion, ensuring recognition at every stage.
- **Academic Bank of Credits (ABC):** Facilitates credit accumulation and transfer across institutions.

- **Lifelong Learning:** Enables students to re-enter education at any stage for skill enhancement.

2.2.3 Education in Mother Tongue/Local Language

Promoting instruction in regional languages enhances comprehension, retention, and communication, fostering a deeper connection to cultural roots.

2.2.4 Flexibility and Choice-Based Credit System (CBCS)

NEP 2020 introduces CBCS to:

- Allow students to tailor their learning paths.
- Enable deeper exploration of specialized areas or interdisciplinary studies.
- Support internships and research projects for hands-on skill development.

2.2.5 Vocational Education and Skill Development

Integrating vocational education ensures:

- Alignment with industry needs.
- Access to skill-based courses, apprenticeships, and collaborations.
- Graduates are both academically proficient and industry-ready.

2.2.6 Research and Innovation Ecosystem

The policy fosters a culture of research and innovation by:

- Encouraging institutes to establish research parks, incubators, and technology transfer offices.
- Promoting collaboration between students and industry partners.

- Supporting commercialization of student innovations.

2.2.7 Emphasis on Ethical and Sustainable Practices

Engineering curricula under NEP 2020 incorporate ethics, environmental studies, and social responsibility. This equips students to:

- Tackle societal challenges like climate change and resource scarcity.
- Develop solutions that prioritize sustainability and equity.

2.2.8 Global Exposure and Collaboration

NEP 2020 encourages:

- Internationalization through partnerships, exchange programs, and joint research.
- Exposure to diverse cultures and advanced technologies, enhancing global competence.

2.2.9 Gradual De-affiliation from Universities

The policy advocates autonomous institutions, allowing them to develop independent academic frameworks and standards.

2.3 Implementation of NEP 2020 in Engineering Institutes

A flexible credit framework, detailed in Maharashtra Government's GRs dated July 4 and August 3, 2023, mandates NEP-aligned curricula from AY 2023-24 for autonomous institutions and AY 2024-25 for affiliating institutions.

2.3.1 Key Highlights of the GoM GR

1. Multiple Entry and Exit Options

- Certificates, diplomas, and degrees are awarded at progressive stages.
- Holistic and multidisciplinary education is facilitated, with major and minor subject combinations.

2. Choice of Major and Minor Subjects

- Students must complete a minimum of 50% credits in core subjects.
- Options for multidisciplinary minors and honors degrees are provided.

3. Indian Knowledge Systems (IKS)

- Integration of IKS courses promotes interdisciplinary research and societal applications.

4. Academic Bank of Credits (ABC)

- Enables credit transfer and mobility within the education system.

5. Outcome-Based Curriculum

- Designed per international standards, focusing on learning outcomes and assessments.

6. Strengthening Industry-Academia Linkages

- Emphasizes internships and apprenticeships, fostering collaboration with industries.

7. Key Result Areas (KRAs)

- Institutions are advised to implement KRAs for the successful execution of NEP 2020.

2.4 Conclusion

The NEP 2020 is a transformative step toward reimagining India's education system. It not only addresses the present educational challenges but also paves the way for creating a globally competent, ethically grounded, and environmentally conscious workforce. For engineering students, it opens doors to multidisciplinary learning, research opportunities, and industry alignment, equipping them to meet the demands of a dynamic global landscape.

CHAPTER 3

OBE Approach in Curriculum Design

Outcome-Based Education (OBE) focuses on achieving specific learning outcomes to meet real-world demands. It emphasizes skill development through learner-centric methods, preparing students for modern challenges. OBE ensures quality education aligned with accreditation standards and societal needs, fostering holistic student growth. This chapter describes some aspect of OBE.

3.1 Introduction to OBE

Outcome-Based Education (OBE) is a transformative educational framework that prioritizes the attainment of specific outcomes or graduate attributes by students upon the completion of an academic program. Unlike traditional teacher-centric models, OBE is inherently learner-centric, emphasizing what students are expected to know, demonstrate, and achieve at the end of their learning journey. This paradigm shift ensures that educational programs align closely with the demands of industry, society, and other stakeholders.

The adoption of OBE has gained significant momentum globally due to its focus on measurable outcomes and its ability to produce graduates who are better equipped to meet real-world challenges. Recognizing its importance, the National Board of Accreditation (NBA) in India has mandated the implementation of OBE for all engineering programs seeking accreditation from 2013 onwards. By adopting the OBE model, educational institutions ensure that their programs meet international standards of quality and relevance.

3.2 Why the OBE Approach?

The NBA's emphasis on OBE stems from its fundamental focus on producing competent and industry-ready graduates. OBE shifts the focus from the teaching process to the learning outcomes, making it a student-focused model. This approach ensures that the curriculum, teaching methods, and assessments are designed to enable students to achieve predefined outcomes, thereby enhancing the overall educational experience.

Key reasons for adopting OBE include:

- **Learner-Centric Philosophy:** OBE places the student at the center of the educational process, focusing on their ability to apply knowledge and skills effectively in practical scenarios.
- **Alignment with Accreditation Standards:** As accreditation bodies like NBA prioritize OBE, its adoption is essential for programs aiming for national and international recognition.
- **Focus on Graduate Attributes:** OBE ensures that students develop specific attributes such as critical thinking, problem-solving, communication, teamwork, and ethical responsibility, which are crucial for success in their careers.

3.3 Outcome-Based Education

The framework required for implementation of OBE consists of the following as shown in Figure:

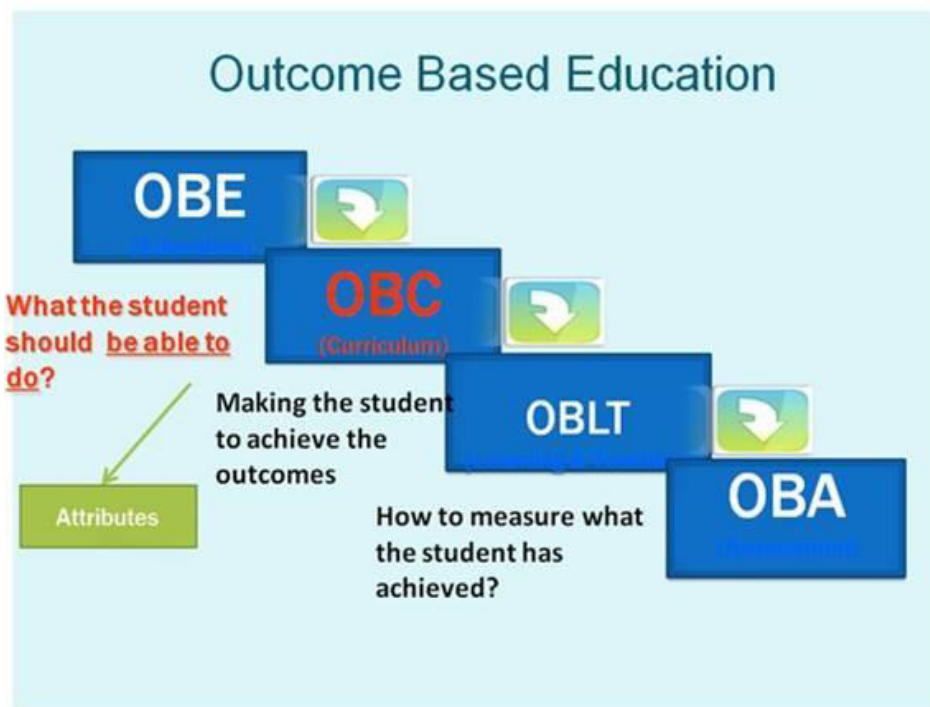


Figure 3.1. Outcome Based Education Framework

3.3.1 Outcome-Based Curriculum (OBC)

The curriculum forms the foundation of the OBE framework. An outcome-based curriculum is structured around the specific abilities and knowledge students should acquire by the end of the program. The design process begins by defining program educational objectives (PEOs), program outcomes (POs), and course outcomes (COs). These outcomes are tailored to meet the needs of stakeholders, including industries, employers, and society at large.

The key question driving an outcome-based curriculum is: **“What should students be able to do upon completing the program?”**

3.3.2 Outcome-Based Learning and Teaching (OBLT)

OBE extends beyond curriculum design to include teaching and learning practices. Outcome-based teaching and learning involve

adopting instructional strategies that actively engage students and help them achieve the desired outcomes. These methods include project-based learning, case studies, problem-solving exercises, and hands-on practical sessions.

The focus of OBLT is: **“How can we facilitate students in achieving the defined outcomes?”**

3.3.3 Outcome-Based Assessment (OBA)

Assessment plays a pivotal role in measuring whether students have achieved the intended outcomes. Outcome-based assessment uses various tools and methods, such as rubrics, assignments, projects, and exams, to evaluate student performance. These assessments are designed to provide feedback on students' mastery of skills, knowledge, and competencies.

The central question for outcome-based assessment is: **“How do we measure what students have achieved?”**

3.4 Benefits of Outcome-Based Education

The OBE approach offers several advantages that make it a preferred choice for curriculum design in engineering and technical education:

1. **Directed and Coherent Curriculum:** OBE ensures that the curriculum is well-structured and aligned with the desired outcomes, enabling a seamless progression of learning.
2. **Relevance to Industry and Stakeholders:** Graduates from OBE-aligned programs possess skills and knowledge that meet the needs of employers, industries, and society, making them more employable and impactful.
3. **Focus on Lifelong Learning:** By emphasizing critical thinking, problem-solving, and adaptability, OBE prepares students for

continuous learning and growth in their professional and personal lives.

4. **Improved Accountability:** With clear outcomes, institutions are better able to demonstrate the effectiveness of their programs to accreditation bodies and stakeholders.
5. **Enhanced Student Engagement:** The learner-centric nature of OBE encourages active participation, fostering a deeper understanding of concepts.

3.5 Key Constituents of OBE

Outcome-based education (OBE) focuses on clearly defined learning outcomes, ensuring students achieve specific knowledge, skills, and attitudes by the end of their educational experience. The following are the key constituents of OBE, which are shown in following figure:

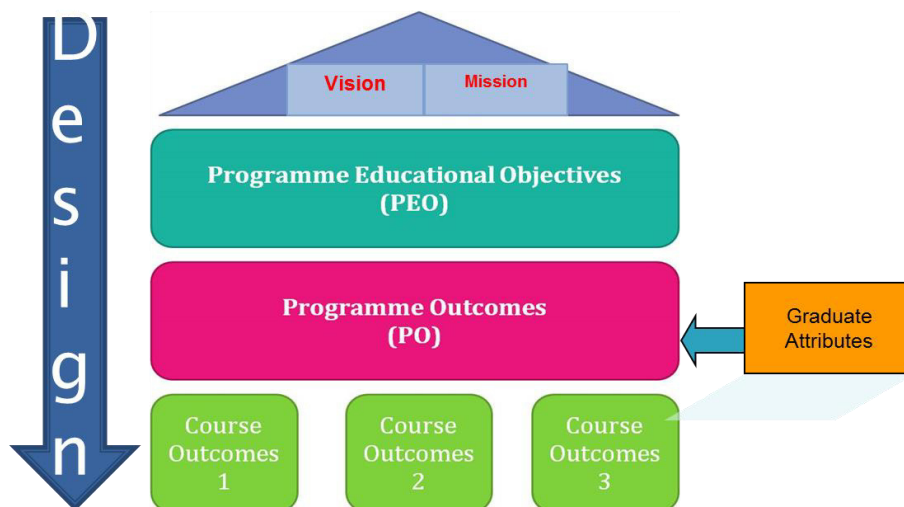


Figure 3.2. Key Constituents of OBE

1. **Vision:** Vision is a picture of the future you seek to create, described in the present tense, as if it were happening now. It

shows where we want to go, and what we will be like when we get there.

2. **Mission:** Mission statement defines what an institution is, why the institution exists, and its reason for being. It defines what we are here to do together.
3. **Graduate Attributes (GAs):** Graduate attributes are the qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include but go beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. WA (Washington Accord) defines 12 GA's for Engineering Graduates.
4. **Program Outcomes (POs):** Programme Outcomes (POs) describe what students should know and be able to do at the end of the programme. They are to be in line with the graduate attributes (GAs). PO's are to be specific, measurable and achievable. POs transform the PEOs into specific student performance and behaviors that demonstrate student learning and skill development.
5. **Program Specific Outcomes (PSOs):** PSOs focus on equipping students with specialized knowledge, skills, and competencies required for industry, research, or higher education, ensuring they are ready to contribute effectively in their chosen field.
6. **Program Educational Objectives (PEOs):** The Program Educational Objectives (PEOs) are broad statements that describe the career and professional accomplishments that the programme is preparing graduates to accomplish. PEOs should

be measurable, appropriate, realistic, time bound and achievable.

7. **Course Outcomes (COs):** Course Outcomes (COs) are specific, measurable statements that describe the knowledge, skills, and attitudes students are expected to acquire upon completing a particular course.
8. **Specific Learning Outcomes (SLOs):** Specific Learning Outcomes (SLOs) are precise, actionable statements that define the intended achievements of students for each topic or unit within a course, focusing on knowledge, skills, or attitudes.

3.6 Role of Feedback in Curriculum Design

Feedback from stakeholders plays a crucial role in designing and refining an OBE-based curriculum. Insights from industry experts ensure that the curriculum remains aligned with current trends and demands. Alumni feedback provides valuable information on the relevance of the program in real-world applications, while academic experts offer guidance on integrating innovative pedagogical practices. This collaborative approach ensures that the curriculum remains dynamic, relevant, and effective.

3.7 Conclusion

The adoption of Outcome-Based Education in curriculum design marks a significant step forward in aligning technical education with the evolving needs of the 21st century. By focusing on clearly defined outcomes and employing a structured framework, OBE ensures that students are equipped with the skills and knowledge required to thrive in their professional and personal lives. As the NBA continues to emphasize the importance of OBE for accreditation, institutions must

embrace this learner-centric approach to deliver quality education and contribute meaningfully to society.

CHAPTER 4

Bloom's Taxonomy

Outcome-Based Education (OBE) is a learning-centered educational model where the curriculum, teaching methods, and assessments are designed to achieve specific student learning outcomes. Learning is defined as a relatively permanent change in behavior or abilities resulting from reinforced practice or experience. Educational taxonomies, such as Bloom's Taxonomy, play a crucial role in developing an OBE curriculum. Benjamin Bloom and a group of educational psychologists created this classification system to categorize learning objectives. Key aspects of Bloom's Taxonomy are foundational to designing effective learning outcomes in OBE which are outlined below.

4.1 Introduction to Bloom's Taxonomy

In 1948, Benjamin Bloom developed a framework for classifying intellectual behavior and learning to identify and measure progressively advanced learning levels. Bloom's Taxonomy is particularly significant in higher education, where outcomes must assess students' ability to apply information rather than simply recall and repeat concepts. While lower levels of learning are easier to evaluate, they fail to fully demonstrate students' ability to utilize their knowledge. Additionally, learning extends beyond cognitive processes; it varies when it involves performing a skill or re-evaluating behavior. This approach is rooted in the biological structure of human beings, as illustrated in the figure 4.1.

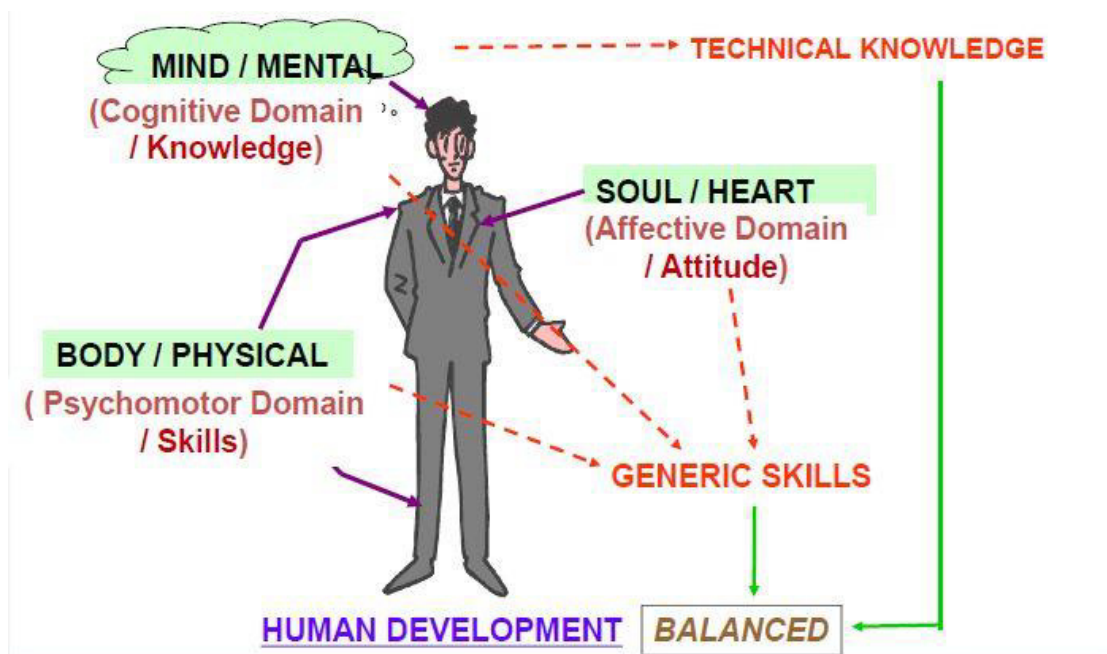


Figure 4.1. Human Being and Domains of Learning

The key elements of this approach, which form the foundation of learning, are outlined below.

4.2 Domains of Learning

Learning is the process through which students achieve a relatively permanent change in mental associations through experience, as defined by cognitive psychologists. Behavioral psychologists, on the other hand, define learning as a relatively permanent change in behavior. However, learning is not solely a cognitive function; it varies when it involves performing skills or re-evaluating behavior.

Learning encompasses the following three domains:

- **Cognitive Domain:** Focuses on intellectual skills and abilities.
- **Affective Domain:** Relates to emotions, attitudes, preferences, and values.

- **Psychomotor Domain:** Involves physical skills, such as hand-eye coordination and manipulative abilities.

In Engineering and Technology courses, the curriculum is designed to emphasize the development of cognitive skills through classroom teaching. Psychomotor skills are cultivated in workshops, laboratories, and seminars where students engage in individual or group activities. Affective skills, including attitudes and values, are nurtured through projects, co-curricular activities, and the institution's work culture.

Student progress in cognitive and psychomotor domains is evaluated through classroom learning and laboratory learning assessments respectively. Additionally, self-study learning plays a vital role by encouraging independent exploration, critical thinking, and problem-solving skills, enabling students to deepen their understanding and apply knowledge effectively.

4.2.1 Cognitive Domain

In 1956, Dr. Benjamin Bloom analyzed examination questions in the American education system and proposed a hierarchical structure of instructional objectives based on the intellectual abilities these questions assessed.

At the most basic level of cognitive learning, students demonstrate their ability to recall information directly from long-term memory. This includes retrieving facts, concepts, principles, laws, definitions, properties, and procedures. Objectives focused on memory recall were classified as knowledge-level objectives, representing the lowest tier in Bloom's hierarchy of intellectual abilities. Questions testing memory were considered the simplest form of assessment.

The higher levels of the hierarchy introduced by Dr. Bloom in 1956, and later revised in 2001, involve progressively more complex

cognitive processes required to answer questions. These levels reflect increasing demands on the brain's ability to process and use information. The complete hierarchy, including its revised version, is depicted in the accompanying figure 4.2.

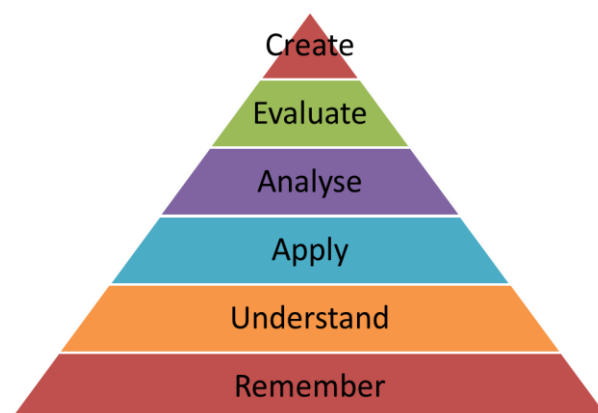


Figure 4.2. Revised cognitive hierarchy Levels

Table 4.1. Cognitive Domain Levels Action Verbs

Cognitive Domain Levels	Behavior descriptions	Action Verbs
Remember	Recall or recognize information	Define, Duplicate, List, Name, Identify, Recall, Reproduce, Recognize, Retrieve
Understand	Understand meaning, re-state data in one's own words, interpret, extrapolate, translate	Calculate, Categorize, Clarify, Classify, Compare, Conclude, Contrast, Describe, Exemplify, Expand, Illustrate, Infer, Interpret, Locate, Paraphrase, Predict, Report, Restate, Summarize, Translate

Apply	Use or apply knowledge, put theory into practice, use knowledge in response to real circumstances	Carry out, Classify, Demonstrate, Execute, Illustrate, Implement, Practice, Solve, Use, Utilize
Analyse	Interpret elements, organizational principles, structure, construction, internal relationships; quality, reliability of individual components	Appraise, Attribute, Compare, Contrast, Deconstruct, Detect, Differentiate, Discriminate, Distinguish, Examine, Formulate, Infer, Integrate, Organize, Parse, Relate, Select, Sequence, Structure, Test
Evaluate	Assess effectiveness of whole concepts, in relation to values, outputs, efficacy, viability; critical thinking, strategic comparison and review; judgment relating to external criteria	Appraise, Check, Coordinate, Critique, Defend, Detect, Dispute, Judge, Monitor, Prioritize, Rate, Reconstruct, Select, Support, Verify
Create	Develop new unique structures, systems, models, approaches, ideas; creative thinking, operations	Change, Combine, Compile, Compose, Construct, Create, Design, Formulate, Generate, Hypothesize, Improve, Invent, Plan, Predict, Produce

4.2.1 Psychomotor Domain

The Psychomotor Domain, as defined by R.H. Dave in 1970, was introduced to focus on the development of skills related to the physical aspects of performing tasks. Since 'motor' skills go beyond the traditional notion of manual and physical abilities, it is important to incorporate this domain, even if the Cognitive and Affective Domains appear sufficient in your context. Regardless of the scenario, the Psychomotor Domain is likely to play a significant role.

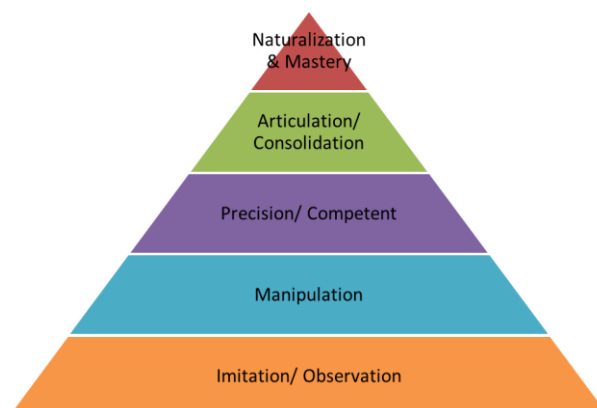


Figure 4.3. Psychomotor hierarchy Levels

Table 4.2. Psychomotor Domain Levels Action Verbs

Psychomotor Domain Levels	Behavior descriptions	Action Verbs
Imitation/ observation	Copy action of another; observe and replicate	Copy, follow, replicate, repeat, adhere, attempt, reproduce, organize, sketch, duplicate
Manipulation	Reproduce activity from instruction or memory	Re-create, build, perform, execute, implement, acquire, conduct, operate
Precision/ competent	Execute skill reliably, independent of help, activity is quick, smooth, and accurate	Demonstrate, complete, show, perfect, calibrate, control, achieve, accomplish, master, refine
Articulation/ consolidation	Adapt and integrate expertise to satisfy a new context or task	Solve, adapt, combine, coordinate, revise, integrate, adapt, develop, formulate, modify, master
Naturalization & Mastery	Instinctive, effortless, unconscious mastery of activity and related skills at strategic level	Construct, compose, create, design, specify, manage, invent, project-manage, originate

4.2.1 Affective Domain

The Affective Domain, as outlined by Bloom, Krathwohl, and Masia in *Taxonomy of Educational Objectives: Vol. II* (1964), *The Affective Domain*, emphasizes the development of attitudes, which are now often referred to as 'beliefs' in personal development. Bloom's theory proposes a structure and sequence for cultivating attitudes, providing a framework for teaching, training, and evaluating the effectiveness of instruction. This framework also helps assess the impact on learners, including how well the training is retained and its influence on the individual.

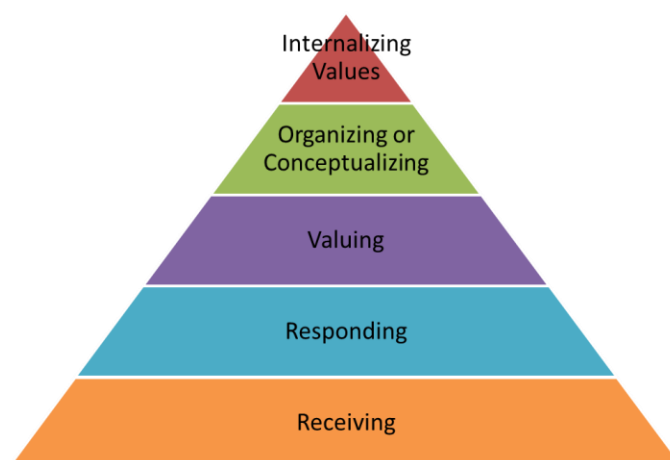


Figure 4.4. Affective Domain hierarchy Levels

Table 4.3. Affective Domain Levels Action Verbs

Affective Domain Levels	Behavior descriptions	Action Verbs
Receiving	Open to experience, willing to hear	Ask, listen, focus, attend, take part, acknowledge, hear, be open to, retain, follow, concentrate, read, do, feel
Responding	React and participate actively	React, respond, interpret, clarify, contribute, question, present, cite, write, perform

Valuing	Attach values and express personal opinions	Argue, challenge, debate, refute, confront, justify, persuade, criticize,
Organizing or Conceptualizing	Reconcile internal conflicts; develop value system	Build, develop, formulate, defend, modify, relate, prioritize, reconcile, contrast, arrange, compare
Internalizing Values	Adopt belief system and philosophy	Act, display, influence, solve, practice,

4.3 Program Outcomes and Domains of Learning

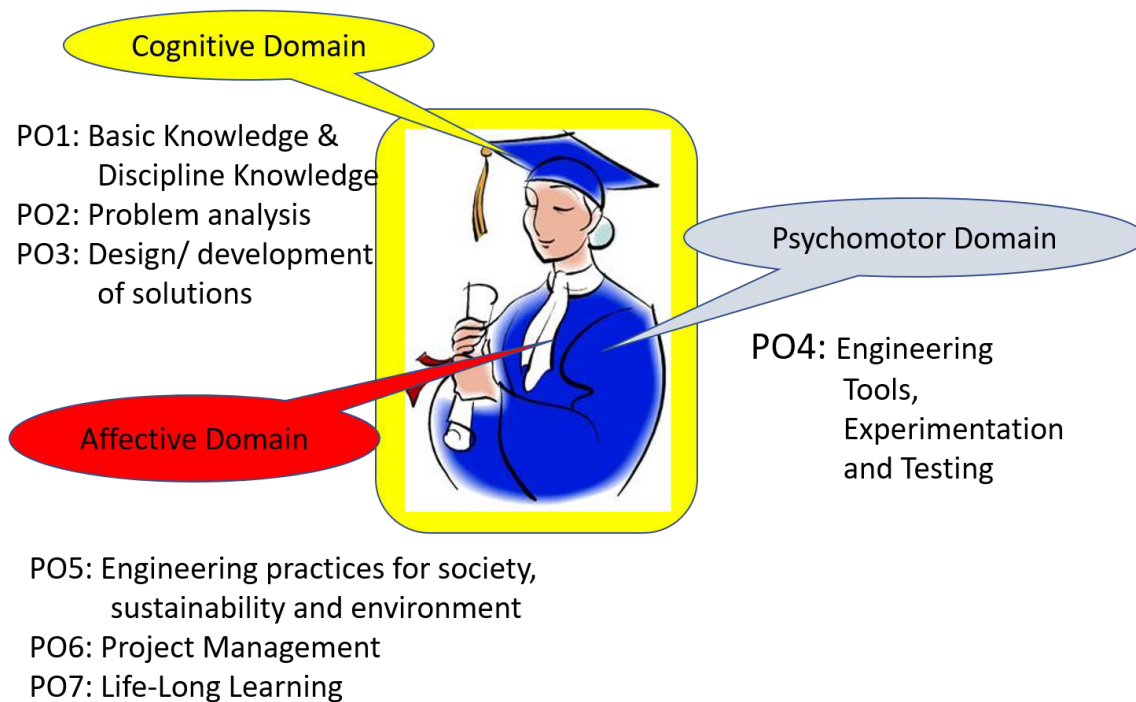


Figure 4.5. Program Outcomes and Domains of Learning

Program Outcomes (POs) defined by the NBA for diploma students represent the specific skills and characteristics expected by stakeholders from the students. These outcomes are closely linked to the three domains of learning, as illustrated in the figure. This classification plays a key role in shaping the curriculum.

4.4 Conclusion

Outcome-Based Education (OBE) provides a structured framework for aligning curriculum, teaching methodologies, and assessments with clearly defined learning outcomes. Rooted in the OBE philosophy, this approach ensures that the curriculum of GPN is designed to develop competencies that meet academic and professional expectations. By leveraging educational taxonomies, educators can systematically define and assess learning objectives across cognitive, affective, and psychomotor domains. A well-implemented OBE model enhances student learning by focusing on measurable outcomes and continuous improvement.

CHAPTER 5

SWOT Analysis for OBE Curriculum Development

SWOT analysis, a strategic planning tool, plays a vital role in developing an effective Outcome-Based Education (OBE) curriculum. By systematically identifying Strengths, Weaknesses, Opportunities, and Threats (SWOT), institutions can align their educational programs with stakeholders' needs and expectations. This chapter outlines a stepwise approach for conducting a SWOT analysis as part of the curriculum development process.

5.1 Stepwise Procedure for SWOT Analysis

The stepwise procedure for SWOT analysis involves preparing a questionnaire, gathering feedback via digital forms, and analyzing responses at the department level. This systematic approach concludes with actionable insights to refine the curriculum and align it with stakeholder needs.

5.1.1 Identify the Questionnaire for Conducting SWOT Analysis

The first step involves formulating a questionnaire that will serve as a foundation for gathering feedback. The Curriculum Development Cell (CDC) collaborates with stakeholders to create questions targeting key areas such as academic quality, infrastructure, teaching methodologies, industry relevance, and overall program effectiveness.

These questions must be:

- Clear and concise.
- Relevant to the program's objectives and outcomes.
- Designed to elicit actionable insights.

Example Questions:

- What are the program's key strengths that contribute to achieving its objectives?
- What challenges or weaknesses hinder program effectiveness?
- What opportunities can be leveraged to enhance the curriculum?
- What external threats could impact the program's success?

5.1.2 Finalize the Questionnaire through Program-Level Brainstorming

The draft questionnaire is reviewed and refined through brainstorming sessions at the program level. Faculty members, department heads, and other relevant stakeholders participate in this collaborative process to ensure:

- Comprehensive coverage of all critical aspects.
- Inclusion of diverse perspectives.
- Alignment with the program's vision and mission.

The finalized questionnaire should be validated for clarity and relevance before proceeding to the next step.

5.1.3 Prepare Google Forms for Feedback Collection

Each program uses the finalized questionnaire to create digital feedback forms, such as Google Forms, to ensure ease of access and convenience for respondents. The forms are designed to:

- Include multiple-choice, Likert scale, and open-ended questions.
- Ensure anonymity to encourage honest feedback.
- Be mobile-friendly to maximize response rates.

Feedback is solicited from key stakeholders:

- **Faculty:** Insights on academic and administrative challenges.
- **Students:** Perspectives on learning experiences and outcomes.
- **Alumni:** Reflections on the program's impact in their professional lives.

5.1.4 Conduct Feedback Analysis at the Department Level

The collected data is analyzed at the departmental level to derive meaningful insights. The analysis process includes:

- **Quantitative Analysis:** Statistical methods to summarize responses and identify trends.
- **Qualitative Analysis:** Thematic analysis of open-ended responses to uncover nuanced insights.

Departments categorize the findings under the four SWOT components:

- **Strengths:** Areas of excellence and key program differentiators.
- **Weaknesses:** Areas needing improvement.
- **Opportunities:** Emerging trends and potential areas for growth.
- **Threats:** External factors that may pose challenges.

5.1.5 Conclude the SWOT Analysis

The final step is to summarize and document the findings of the SWOT analysis. This involves:

- Preparing a comprehensive report highlighting key observations and actionable recommendations.
- Sharing the report with stakeholders, including the CDC and institutional leadership.
- Using the findings to inform curriculum revisions, resource allocation, and strategic planning.

Example Outcome:

- **Strength:** Strong industry tie-ups for internships and placements.
- **Weakness:** Limited access to advanced laboratory equipment.
- **Opportunity:** Growing demand for skill-based courses in emerging technologies.

- Threat: Increasing competition from online education platforms.

5.2 SWOT analysis of Travel and Tourism Program

5.2.1 Strengths (S):

1. Very good infrastructure and good atmosphere for study.
2. Well qualified and experienced teaching staff.
3. Departmental Library, availability of PPTs and CDs, maps, globe, etc.
4. Very good industry relations.
5. Fulfilment of balanced curricular, co-curricular and extra curricular activities.

5.2.2 Weaknesses (W):

1. Regular staff is very less. Department is heavily dependent on visiting faculty.
2. Less number of admissions.
3. Less availability of funds.
4. Smart classrooms are available but on sharing basis.
5. Non availability of resources.

5.2.3 Opportunities (O):

1. Bright career opportunities are available due to the policies in favour of tourism.
2. Emerging areas provide new fields for the students to make their career.
3. Industry and government sector coming with various plans that will be beneficial for the students.
4. Opportunities for new entrepreneurs due to policies and

programmes.

5. Opportunities in the field of Research for the students and the faculty as well.

5.2.4 Threats (T):

1. Due to the lack of regular staff scarcity of good staff may arise in future.
2. Practicals may hamper due to lack of resources.
3. Scarcity of funds may stop the department from new ventures.
4. Less staff may cause to burden with variety of curricular and administrative work.
5. Less admission may cause the department to close.

5.3 Conclusion

SWOT analysis is a critical step in the OBE curriculum development process, enabling institutions to align their programs with stakeholder needs and industry trends. By following the stepwise procedure outlined in this chapter, programs can ensure a systematic, inclusive, and data-driven approach to curriculum improvement, fostering academic excellence and long-term success.

CHAPTER 6

Curriculum Revision Process

Since attaining autonomous status, GPN has revised its curriculum every five years, with the 2023 revision marking the seventh iteration. While the concept of Bloom's Taxonomy has been part of the GPN curriculum from the start, the comprehensive Outcome-Based Education (OBE) model was first implemented in the 2016 curriculum and has been carried forward to the 2023 curriculum. The 2023 curriculum is also aligned with the National Education Policy 2020. The detailed process of revising the 2023 curriculum is outlined below.

6.1 Change Management

GPN, a diploma-level educational institute, offers 14 diploma programs, 13 of which operate under autonomous status. Revising the curriculum for these programs within a short timeframe, while adopting a new and unfamiliar model, posed a significant challenge for the Curriculum Development Committee (CDC). It is natural for individuals to resist change, even under the best circumstances.

To address this, GPN implemented the ADKAR model for change management. This diagnostic tool enabled the institution and its staff to understand their position in the change process. It also helped identify gaps in the change management process and provided effective coaching for faculty members.

The ADKAR model was instrumental in:

- Managing faculty resistance.
- Guiding faculty through the transition process.

- Creating a successful action plan for curriculum development.
- Developing an effective strategy for curriculum design and implementation.

6.1.1 ADKAR Model for Change Management

The ADKAR model has gained significant popularity among managers and project teams due to its simplicity and ease of application. It is also effective in educating others, including executive sponsors of change. ADKAR represents five key building blocks for successful change:

- **Awareness:** Understanding the need for change.
- **Desire:** Willingness to participate in and support the change.
- **Knowledge:** Learning how to implement the change.
- **Ability:** Developing the skills and behaviors required for the change.
- **Reinforcement:** Ensuring the change is sustained over time.

In the curriculum revision process, the following change management tools are utilized:

1. Communication
2. Motivation
3. Workshops
4. Resistance Management
5. Training

Figure 6.1 illustrates the mapping of these tools with the ADKAR framework.

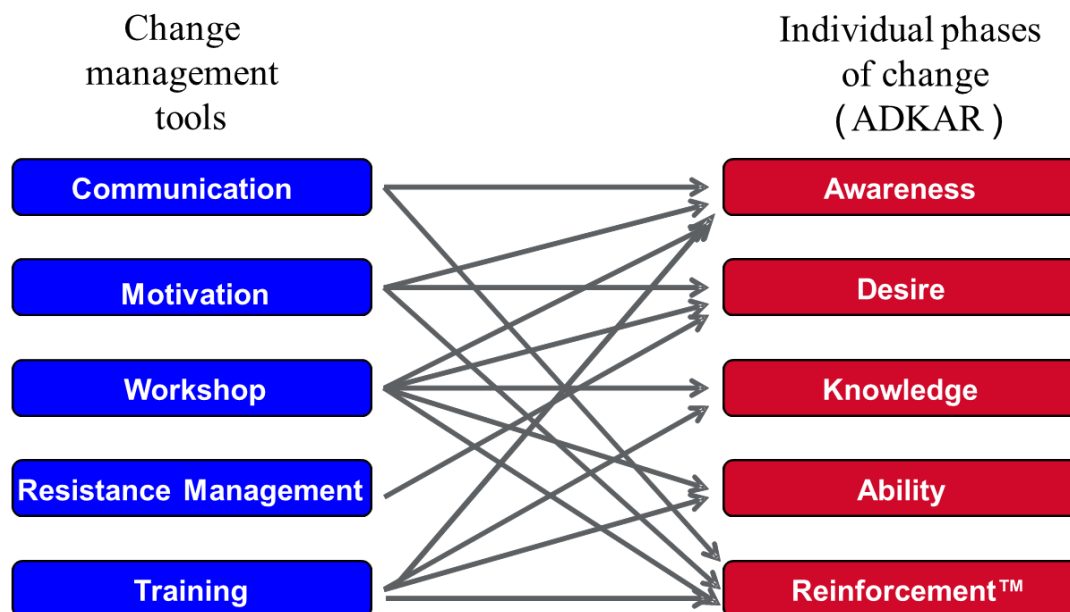


Figure 6.1. Mapping of change management tools with ADKAR

6.1.2 Results of ADKAR Model

The application of the ADKAR model in the curriculum revision process achieved the following results:

- Start Date of Curriculum Revision Process: **16/08/2023**
- Completion Date of Curriculum Revision Process: **31/12/2024**
- Duration to Complete Curriculum Revision: **16 ½ months**
- Number of Programs: **13**
- Number of Course curriculum Developed: **383**
- Implementation of NEP aligned OBE curriculum from for First Semester: **September 2023**

6.2 Curriculum Development Process

Curriculum development is a systematic process aimed at designing and refining educational programs to meet the needs of learners and

stakeholders. The steps outlined below describe an effective approach for developing a curriculum based on identified competencies and skills

6.2.1 Identify the Competencies and Skills

The first step in curriculum development involves identifying the key competencies and skills that students must acquire. This stage requires a thorough understanding of industry demands, technological advancements, and stakeholder expectations. Input from subject matter experts, educators, and industry professionals is crucial to ensure the relevance of the competencies and skills being identified.

Key Activities:

- Conduct surveys through internet.
- Review current trends and advancements in the field.
- Analyze job descriptions and roles to pinpoint essential skills.

Outcome: A comprehensive list of competencies and skills required by learners to succeed in their field. List of competencies and skills for various diploma programs prepared by Curriculum Development Cell is shown in Figure 6.2 (Screen Shot).

S.N.	Diploma in Electrical Engineering Students will be able to:
1	Apply principles of physics to solve broad based relevant engineering problems.
2	Apply principles of chemistry to solve broad based relevant engineering problems.
3	Use computers for documentation, presentation, analyse data and Internet services.
4	Prepare engineering drawing using prevailing drawing instruments.
5	Apply the concept of Mathematics to solve industry-based technology problems.
6	Use different engineering tools for performing shop floor activities.
7	Use basic principles in electrical engineering for different applications
8	Use electronic components and circuits for electrical applications.
9	Apply principles of mechanical engineering to solve broad based engineering problems
10	Analyze electrical circuits to determine voltage, current, and power relationships.
11	Conduct electrical tests and measurements accurately and interpret the results.
12	Operate and maintain various electrical machines, ensuring optimal performance.
13	Operate and maintain transformers for electrical systems.
14	Operate and maintain generators for power generation.
15	Apply the principles of power distribution systems and effectively manage electrical distribution.
16	Apply the principles of power transmission systems and effectively manage electrical transmissio
17	Proficient in using electrical instrumentation for data collection and analysis.

Figure 6.2. Identification of Competencies and Skills

6.2.2 Finalize Competencies and Skills

Once the competencies and skills have been identified, they are refined and finalized to ensure alignment with the program's objectives. This involves collaboration with key stakeholders to validate the findings and incorporate their feedback.

Key Activities:

- Organize meetings with curriculum development cell.
- Prioritize competencies and skills based on their importance and applicability.
- Document finalized competencies and skills for further use.

Outcome: A finalized and well-documented list of competencies and skills, forming the foundation of the curriculum.

Score	Hands on Skills
3.7	Conduct electrical tests using instruments such as multimeters, and other testing equipment to evaluate the performance of electrical system.
3.5	Wire and install electrical components, switches, outlets, and lighting fixtures.
3.5	Diagnose and troubleshoot electrical faults and problems in electrical equipment and domestic appliances.
3.4	Assemble and solder electronic components onto circuit boards.
3	Repair and modify electronic devices and PCBs.
3.3	Calibrate and maintain electrical instrumentation devices for measurement and control.
3.2	Install and maintain solar panels, wind turbines, and other renewable energy systems.
3	Install and maintain EV charging stations and systems.
3.3	Create and interpret electrical schematics and drawings using CAD software.
3.4	Conduct safety audits and inspections to ensure compliance with electrical safety standards.
3.2	Build and wire electrical panels and control cabinets.
2.8	Develop digital control systems for motors, power converters and battery stems using MATLAB and Simulink

Figure 6.3. Finalized List of Competencies and Skills

6.2.3 Obtain Feedback Through Google Forms

To ensure the relevance and quality of the identified competencies and skills, feedback is gathered from a broader audience. Google Forms is an effective tool for collecting responses from various stakeholders, including faculty members, industry representatives, and alumni.

Key Activities:

- Design a structured feedback form.
- Share the Google Form with relevant stakeholders through email and social media.
- Encourage stakeholders to provide honest and constructive feedback.

Outcome: A diverse set of feedback data that highlights the strengths and areas for improvement in the proposed competencies and skills.

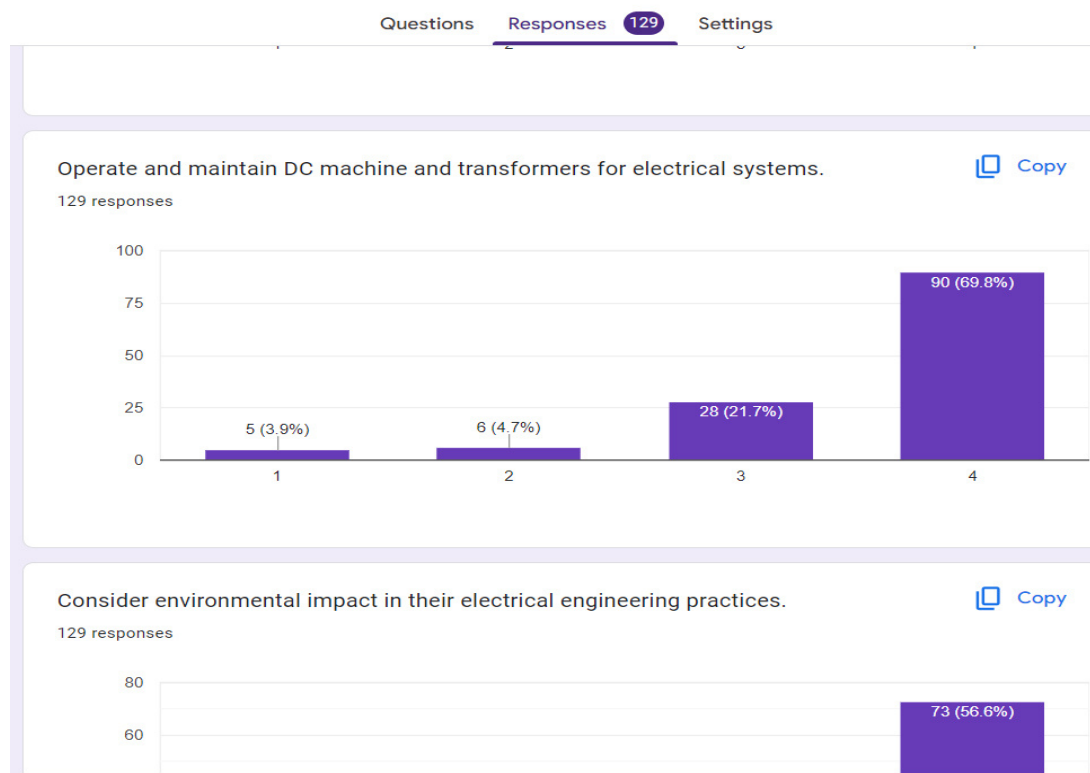


Figure 6.4. Feedback through Google Form

6.2.4 Perform Feedback Analysis

The feedback collected is analyzed to identify patterns, trends, and actionable insights. This step ensures that the curriculum aligns with stakeholder expectations and meets industry requirements.

Key Activities:

- Categorize feedback based on common themes and suggestions.
- Use data analysis tools to interpret quantitative and qualitative responses.
- Summarize findings and identify key takeaways.

Outcome: A clear understanding of stakeholder perspectives, which informs the validation process.

	A	B	C	D	E	F	G
1	Competencies	ME	E	D	NR	Total	Score
2	Communicate technical information clearly and effectively.	105	16	4	4	105	3.72093
3	Create and interpret electrical drawings and diagrams accurately.	95	26	3	5	95	3.635659
4	Prioritize safety in electrical engineering practices and adhere to established safety protocols.	97	21	7	4	97	3.635659
5	Identify, select, and use appropriate electrical materials and components.	90	30	6	3	90	3.604651
6	Use computers for documentation, presentation, analyze data and Internet services.	93	24	7	5	93	3.589147
7	Operate and maintain DC machine and transformers for electrical systems.	90	28	6	5	90	3.573643
8	Maintain electrical switchgears and protection systems to safeguard equipment and personnel.	88	29	9	3	88	3.565891
9	Optimize energy usage and promote energy efficiency in electrical systems.	87	30	8	4	87	3.550388
10	Use basic principles in electrical engineering for different applications.	89	25	12	3	89	3.550388
11	Exhibit leadership qualities and Manage time efficiently to meet project deadlines and goals.	84	35	6	4	84	3.542636
12	Implement renewable energy systems.	84	34	8	3	84	3.542636
13	Demonstrate a commitment to lifelong learning and professional development.	85	29	12	3	85	3.51938
14	Use electronic components and circuits for electrical applications.	86	30	6	7	86	3.511628
15	Use electrical instrumentation for data collection and analysis.	83	32	11	3	83	3.511628

Figure 6.5. Feedback Analysis

6.2.5 Validate Competencies and Skills in Search Conference

The search conference is a structured event aimed at fostering dialogue among key stakeholders in education and industry. It serves as a forum for validating existing skills, identifying new competencies, and refining curriculum frameworks to ensure that graduates are equipped to meet industry demands. By involving a diverse array of participants, including industry professionals, academic experts, and alumni, the search conference creates a comprehensive feedback loop essential for continuous improvement in education.

The search conference is organized after systematically gathering feedback from stakeholders, ensuring that their insights and suggestions form the foundation of discussions and decisions. This preparatory step ensures that the conference discussions are relevant, targeted, and actionable, paving the way for meaningful outcomes.

During the Search Conference, additional suggestions are gathered from participants to further refine the curriculum. This step ensures inclusivity and leverages the expertise of diverse participants.

Objectives of the Search Conference

The primary objectives of organizing a search conference are as follows:

1. **Validation of Skills:** The search conference provides an opportunity to validate the competencies and skills outlined by the academic program. Industry experts assess whether these competencies and skills align with current workplace requirements, ensuring graduates possess competencies relevant to their fields.

2. **Identification of New Skills:** With rapid technological advancements and changing job roles, new skill sets are continually emerging. Industry and field experts suggest additional competencies that technicians need to excel in their specific work areas.
3. **Feedback Collection:** Feedback on the existing curriculum is gathered to identify strengths and areas for improvement. This includes reviewing suggestions from prior conferences or feedback sessions, creating a continuous cycle of curriculum enhancement.
4. **Curriculum Enhancement:** The conference serves as a brainstorming platform to propose new course content that reflects industry trends and innovations. This ensures the curriculum remains dynamic and forward-looking.
5. **Program Structure Analysis:** Stakeholders provide insights and suggestions on broader aspects of the program structure, such as course sequencing, interdisciplinary integration, and practical training components.
6. **Skills Analysis and Course Formation:** The validated and newly identified competencies and skills are analyzed to prepare a final list. This serves as a foundation for designing or revising courses that align with these skills, ensuring a targeted and effective educational approach.

Key Activities:

- Organize the Search Conference with representatives from academia, industry, and alumni.
- Present the identified competencies and skills for discussion.

- Facilitate group discussions to ensure active participation and consensus-building.

Outcome: The courses are designed based on competencies and skills validated during the Search Conference, ensuring alignment with industry needs. Inputs from the conference were systematically incorporated to create an industry-relevant, practical, and dynamic curriculum.

Industry Survey Rating Report for Diploma in Electrical Engineering

Competencies Required for Diploma in Electrical Engineering

S.N.	Competencies (What diploma holders will be able to do in the industry at entry level) Legends: ME-Most Essential, E-Essential, D-Desirable, NR-Not Required	ME	E	D	NR	Total	Score	Rank
1	Communicate technical information clearly and effectively.	105	16	4	4	129	3.72093	1
2	Create and interpret electrical drawings and diagrams accurately.	95	26	3	5	129	3.635659	2
3	Prioritize safety in electrical engineering practices and adhere to established safety protocols.	97	21	7	4	129	3.635659	3
4	Identify, select, and use appropriate electrical materials and components.	90	30	6	3	129	3.604651	4

ty: Investigate

Figure 6.6. Industry Survey Rating Report

Diploma in Electrical Engineering

Formation of Courses according to Industry Feedback

S.N.	Competencies (What diploma holders will be able to do in the industry at entry level)	Rank based on Industry Feedback	Name of Course to be introduced in Curriculum	Remarks (if any)	Course Category DSC/DSE/SEC/AEC/VEC/INP etc.	Semester of the course
1	Communicate technical information clearly and effectively.	1	Communication Skill		AEC	First
2	Create and interpret electrical drawings and diagrams accurately.	2	Electrical Software and Computer Aided Drawing		SEC	
3	Prioritize safety in electrical engineering practices and adhere to established safety protocols.	3	Testing and Maintenance of Electrical Machines		DSC	Sixth
4	Identify, select, and use appropriate electrical materials and components.	4	Electrical Wiring		SEC	Third

Figure 6.7. Identified Courses List based on Industry Survey

6.2.6 Preparation of Program Structure

After analyzing the NEP 2020 guidelines, Government of Maharashtra GRs for NEP implementation, and conducting brainstorming sessions, the program structure is designed to align with NEP 2020 policies and industry standards. This step ensures a balanced curriculum that fosters holistic development and interdisciplinary learning.

Key Activities:

- Map courses to the seven verticals defined in NEP 2020 guidelines.
- Identify core, elective, skill-enhancement, value education, and internship courses for comprehensive coverage.
- Define semester-wise and course-wise credit distribution.
- Ensure interdisciplinary and multidisciplinary integration as per NEP requirements.

Outcome:

A well-structured program framework that reflects NEP 2020 principles, integrates stakeholder inputs, and supports the achievement of desired learning outcomes.

Table 6.1 presents the basic program structure common to all diploma programs in engineering. Figure 6.5 provides a visual representation of the program structure, including the exit options for a Certificate in Vocation after the first year and a Diploma in Vocation after the second year.

Table 6.1. Basic Program Structure

SN	Semester	DSC	DSE	GE	AEC	SEC	VEC	INP	Total Courses (Credits)
1	Sem I	DSC 1 (4) DSC 2 (4) DSC 3 (3)			AEC 1 (3)	SEC 1 (2) SEC 2 (2)	VEC 1 (2)		7 (20)
2	Sem II	DSC 4 (4) DSC 5 (4) DSC 6 (3) DSC 7 (3)			AEC 2 (2)	SEC3 (2)	VEC 2 (2)		7 (20)
3	Sem III	DSC 8 (3) DSC 9 (3) DSC10(3) DSC11(3)		GE 1 (2)		SEC 4 (2)	VEC 3 (2)	INP (4)	8 (22)
4	Sem IV	DSC12(3) DSC13(5) DSC14(4)	DSE 1 (3)	GE 2 (2)		SEC 5 (3)	VEC 4 (2)		7 (22)
5	Sem V	DSC15(3) DSC16(4)	DSE 2 (3)	GE 3 (2)		SEC 6 (2)	VEC 5 (1)	INP 1 (1) INP 2 (6)	8 (22)
6	Sem VI	DSC17(3) DSC18(3) DSC19(3)	DSE 3 (3)			SEC 7 (2)	VEC 6 (1)	INP 3 (1) INP 4 (6)	8 (22)
	Total Courses (Credits) Percentage Credits	19 (65) 50.78%	3 (9) 7.03%	3 (6) 4.68%	2 (5) 3.90%	7 (15) 11.71%	6 (10) 7.81%	5 (18) 14.06%	45 (128)

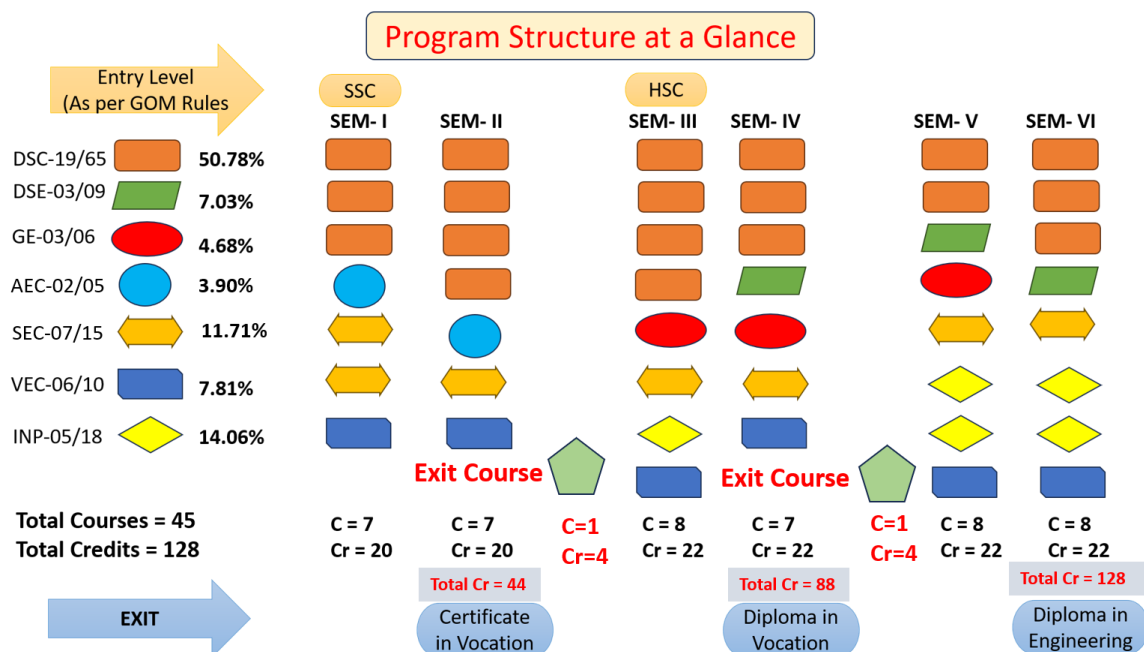


Figure 6.8. Basic Program Structure

6.2.7 Preparation of Course Curriculum

The course curriculum is developed based on industry-identified competencies, ensuring alignment with real-world demands and enhancing employability. Faculty members play a key role in integrating these competencies into the course design, focusing on practical and theoretical balance.

Key Activities:

- Align identified competencies with course outcomes (COs) and specific learning outcomes (SLOs).
- Develop course content that integrates classroom learning, laboratory learning, and self-study learning.
- Design assessment strategies to effectively measure the attainment of industry identified competencies.

- Identify essential textbooks, e-references, and major equipment required for course delivery.
- Establish a mapping framework to correlate course outcomes (COs) with program outcomes (POs) and program-specific outcomes (PSOs).

Outcome:

A NEP 2020 aligned competency-based OBE course curriculum that addresses industry requirements, promotes skill development, and ensures students are job-ready upon completion of diploma program.

6.2.8 Approval from AB, PBOS, BOS and GB

The program structure for all programs and the course curricula are approved by their respective PBOS, while the curricula for Science, Mathematics, and Humanities departments are approved by the Academic Board (AB). Science, Mathematics, and Humanities courses are also presented to the PBOS of each program for review and approval. Suggestions received during PBOS meetings are incorporated before submission to the Board of Studies (BOS). All approved curricula are then forwarded to the Governing Body (GB) for final approval, incorporating the suggestions obtained from BOS.

6.3 Curriculum Development at a Glance

- | | |
|------------------------|-------|
| • No. of Programs | : 13 |
| • No. of Courses | : 383 |
| • No. of GB Meetings | : 04 |
| • No. of BOS Meetings | : 04 |
| • No. of PBOS Meetings | : 52 |
| • No. of AB Meetings | : 04 |
| • No. of ILC Meetings | : 02 |

• No. of Coordinators Meetings	: 09
• Trainings Workshops	: 04
• Search Conference	: 01
• No. of Industry Experts in Search Conference	: 39
• No. of Faculties Involved	: 101
• No. of outside Experts Involved	: 39
• Curriculum Editing Workshops	: 52
• Industries Feedback (for each Program)	:100+

6.4 Conclusion

The detailed process of revising the 2023 curriculum has been comprehensively outlined in this chapter, covering the key methodologies, considerations, and steps involved in the revision. This structured approach ensures alignment with industry requirements, technological advancements, and educational best practices. While this chapter focuses on the process of curriculum revision, the subsequent chapter delves into the distinctive features of the revised curriculum, highlighting its key components.

CHAPTER 7

Features of NEP Aligned Curriculum

The National Education Policy (NEP) 2020 marks a transformative shift in the Indian education system, emphasizing holistic, multidisciplinary, and flexible learning. Its curriculum framework is designed to foster critical thinking, creativity, and global competencies while rooted in India's cultural ethos. Below are the key features of an NEP 2020-aligned curriculum of GPN.

7.1 Introduction

The National Education Policy (NEP) 2020 has introduced significant reforms in India's education system, emphasizing a holistic, flexible, multidisciplinary, and skill-based approach to learning. To align with these objectives, the Government of Maharashtra issued guidelines for implementing NEP 2020 in undergraduate (UG) engineering courses. The Board of Studies (BOS) deliberated on these developments, highlighting the need to align diploma-level curricula with NEP principles.

Although specific guidelines for diploma institutions were initially unavailable, the BOS decided to implement the NEP-aligned curriculum from the 2024 academic session. Consequently, the Curriculum Development Cell (CDC) was tasked with formulating an action plan for program structure and first-semester curriculum development by December 2023. Meanwhile, the Maharashtra State Board of Technical Education (MSBTE) had already initiated curriculum restructuring four months earlier and announced the implementation of an NEP-aligned curriculum for diploma institutions. Subsequently, MSBTE mandated

that all autonomous diploma institutions adopt the NEP-aligned curriculum from the 2023-24 academic year.

In light of these developments, the restructuring of the 2021 curriculum to comply with NEP 2020 guidelines has become essential. A final decision has been made to implement the NEP-aligned curriculum from the 2023-24 academic year.

7.2 Initiatives by the CDC Cell

Before MSBTE's Decision

1. **Institute-Level Committee Meeting:** Conducted on 24th July 2023 to plan curriculum alignment with NEP 2020.
2. **NEP 2020 Workshop:** Organized on 7th and 8th August 2023 for Heads of Departments (HODs) and faculty members.
3. **Formation of Program-Wise Board of Studies (PBOS):** PBOS committees were constituted to oversee curriculum development.

After MSBTE's Decision

1. **Development of Tentative Program Structure and Curriculum Format:** Drafted between 15th and 16th August 2023, adhering to NEP, UG, and MSBTE guidelines.
2. **Institute-Level Committee Meetings:** Conducted on 17th and 29th August 2023 to review progress.
3. **Curriculum Development Workshop:** Held on 19th August 2023 for curriculum drafting and refinement.
4. **PBOS Meetings:** Held between 22nd to 29th August 2023 for detailed discussions on program structure.

7.3 Features of NEP aligned curriculum

The features of NEP aligned curriculum of GPN are mentioned below.

7.3.1 Seven Verticals

The Curriculum Development Cell (CDC) conducted a comparative analysis of the verticals and found that all verticals proposed for the undergraduate (UG) program by the Government of Maharashtra (GoM) are already included in the Maharashtra State Board of Technical Education (MSBTE) framework, with only differences in nomenclature. The detailed nomenclature of UG program proposed by GOM and their percentage are mentioned in table.

Table 7.1. UG Verticals

UG Verticals as per GOM GR	Percentage
Basic Science Course & Engineering Science Course	43
Program Courses (PCC & PEC)	17
Multidisciplinary Courses (MDM & OE)	12
Skill Courses (VSEC)	4.5
Humanities Social Science and Management (AEC, EDP, IKS, VEC)	8.5
Experiential Learning Courses (FP, IN, OJT)	12.5
Liberal Learning Courses (CC)	2.5

To ensure equivalence with MSBTE, the NEP-aligned curriculum of the institute adopts MSBTE's nomenclature, as detailed below. Since diploma graduates require a higher level of skill development compared to undergraduates, the proportion of Skill Enhancement and Generic Elective (MDM) courses has been adjusted, prioritizing skill components. The proposed percentage distribution for these

components before finalization of program structure and the actual percentage adopted after finalizing program structure in the NEP-aligned curriculum across various verticals is outlined in the following table.

Table 7.2. Seven Verticals adopted by GPN

GPN Verticals equivalent to MSBTE	Proposed	Actual
DSC = Discipline Specific Courses Core	50%	50.78%
DSE = Discipline Specific Elective	8%	7.03%
GE = Generic Elective	5%	4.68%
AEC = Ability Enhancement Course	5%	3.90%
SEC = Skill Enhancement Course	12%	11.71%
VEC = Value Education Course	8%	7.81%
INP = Internship/Apprentice/Community	12%	14.06%

The curriculum is structured into seven verticals as explained below.

1. Discipline Specific Courses Core (DSC)

These are mandatory courses fundamental to a student's discipline. The aim is to build a strong foundation by covering essential concepts and principles specific to the chosen field of study. DSC courses ensure that students acquire the requisite core competencies for their professional journey.

A total of 16 Discipline Specific Courses Core (DSC) courses has been incorporated into the curriculum to provide in-depth knowledge and hands-on skills in diploma engineering. These courses cover fundamental, applied, and emerging topics essential for diploma students.

2. Discipline Specific Elective (DSE)

DSE courses allow students to explore advanced and specialized areas within their discipline. Offered in the fourth, fifth and sixth semesters, these electives provide deeper insights into specific topics, enabling students to tailor their learning experience based on interests and career goals.

A total of 2 Discipline-Specific Elective (DSE) courses have been incorporated into the curriculum to enhance specialized knowledge and practical skills in diploma engineering. These courses cover advanced, industry-relevant, and emerging topics, allowing students to explore specific areas of interest and improve their employability.

3. Generic Elective (GE)

GE courses promote interdisciplinary and multidisciplinary education and offered in the third, fourth, and fifth semesters. These courses offer students the flexibility to choose subjects beyond their core specialization, fostering broad-based knowledge and skills. The objective is to enhance personal and professional development while encouraging intellectual curiosity. Minor diploma is based on these courses.

A total of 3 Generic Elective (GE) courses has been incorporated into the curriculum, offered in the third, fourth, and fifth semesters for awarding a Minor Diploma. To earn a Minor Diploma alongside their Major Diploma, students must select all three courses from the same discipline. These courses provide interdisciplinary knowledge, industry-oriented skills, and a broader understanding of specialized domains, enhancing career opportunities and academic progression.

4. Ability Enhancement Courses (AEC)

AEC courses aim to strengthen social, communication, and leadership skills essential for personal and professional success. These courses

focus on areas such as language, and communication, empowering students to navigate diverse challenges effectively.

A total of 2 Ability Enhancement Courses (AEC) have been incorporated into the curriculum in the first and second semesters, focusing on Communication Skills and Business Communication. These courses aim to develop students' proficiency in verbal and written communication, workplace etiquette, and professional interaction, enhancing their confidence and employability in technical and business environments.

5. Skill Enhancement Courses (SEC)

Skill Enhancement Courses (SEC) are designed to equip diploma engineering students with practical, hands-on skills in their specialization, combining theoretical knowledge with lab work, training, and fieldwork to meet industry demands.

A total of 7 SEC courses has been incorporated into the curriculum, with at least one course in each semester, ensuring vocational and technical proficiency. These courses emphasize hands-on training, technical expertise, problem-solving, and industry-relevant competencies, preparing students to work effectively as technicians (supervisors). By bridging the gap between theory and practice, SEC courses ensure graduates are job-ready and capable of handling real-world engineering challenges.

6. Value Education Courses (VEC)

VEC courses focus on holistic personality development and instilling ethical, cultural, and constitutional values. These courses encourage critical thinking, teamwork, sportsmanship, and scientific temperament. Topics such as Indian Knowledge Systems, Personality

development, human rights, and Sustainability Development are integral to these courses, ensuring well-rounded growth.

A total of 5 Value Education Courses has been incorporated into the curriculum, with one course in each semester, common to all diploma engineering programs. These courses include Integrated Personality Development, Advanced Personality Development, Yog and Meditation, Environmental Sustainability, Indian Constitution, and Indian Knowledge System. They aim to foster holistic development, ethical values, environmental responsibility, constitutional awareness, and a deeper understanding of India's rich knowledge traditions, ensuring well-rounded personal and professional growth.

7. Internship/Apprenticeship/Community (INP)

Internship (INP) courses offer experiential learning through professional work environments, providing students with meaningful, practical exposure aligned with their field of study or career aspirations. These structured and credit-bearing internships help students develop industry-relevant skills, build professional networks, and gain real-world experience, effectively bridging the gap between academic knowledge and practical application. By integrating domain-specific expertise, multidisciplinary exposure, skill-building, and values-based education, INP courses ensure holistic learning, aligning with NEP 2020's vision for well-rounded professional and personal development.

Internship courses include summer internships after the second and fourth semesters, along with courses on Industrial Management, Entrepreneurship, and Startups. These courses provide students with practical industry exposure, managerial insights, and entrepreneurial

skills, preparing them for technical roles, leadership positions, and startup ventures.

7.3.2 Outcome-Based Education (OBE)

OBE ensures that the curriculum is designed to achieve predefined outcomes such as skills, competencies, and knowledge levels. This approach shifts the focus from traditional teaching to measurable learning outcomes, preparing students for industry needs and societal contributions. It aligns with NEP's emphasis on learner-centric education and continuous assessment for mastery of concepts. OBE philosophy is explained in details in chapter 3.

7.3.3 Multiple Entry-Multiple Exit (MEME)

The MEME framework allows students to join and exit academic programs at different stages, earning appropriate certification, diploma, or degree based on their completion level. This flexibility caters to diverse learner needs, supports lifelong learning, and provides resilience in adapting to changing career paths or personal circumstances. The details of MEME adopted by GPN is mentioned in table 7.3.

Table 7.3. Multiple Entry-Multiple Exit

Academic Level	Entry Qualification	Exit Qualification	National Credit Level (NCrF)
I Year Diploma Engineering	10 Grade (SSC)	Certificate of Vocation	3.5
II Year Diploma Engineering	I Yr. Diploma / As prescribed by AICTE/State Govt.	Diploma in Vocation	4.0

III Year Diploma Engineering	II Yr. Diploma Engineering	Diploma in Engineering	4.5
---------------------------------	-------------------------------	---------------------------	-----

The National Credit Framework (NCrF) categorizes education into eight levels, with school education spanning levels 0 to 4. Students who complete Class 5 are placed at Level 1, those passing Class 8 at Level 2, and Class 10 at Level 3. Hence, upon completing three-year diploma in engineering, students reach Level 4.5 as mentioned in table 7.2.

7.4 Lateral Entry (As per AICTE/State Govt. Guidelines)

Lateral entry provisions enable diploma holders and other eligible candidates to enter higher semesters of degree programs, promoting vertical mobility in education. This feature, guided by AICTE and state policies, aligns technical education pathways, recognizing prior learning and practical experience as integral to academic progression.

7.5 Credit-based System

A credit-based system quantifies learning achievements, making the academic workload transparent and transferable. It supports flexible learning pathways, aids in credit accumulation and transfer, and aligns Indian education with global standards, thereby fostering student mobility and lifelong learning.

In the credit system, credits serve as formal recognition of a student's completion of prior learning that aligns with a specific qualification level. Under the NCrF framework, one credit corresponds to 30 notional learning hours.

Each semester, a student must earn a minimum of 20 credits, amounting to at least 40 credits per year, corresponding to 1,200

notional learning hours. However, students have the flexibility to earn more than the minimum required credits within a year as per NCrF framework.

To complete the Diploma in Engineering at GPN, students must earn a total of 128 credits. The credit distribution across semesters is as follows: Semester I – 20 credits, Semester II – 20 credits, Semester III – 22 credits, Semester IV – 22 credits, Semester V – 22 credits, and Semester VI – 22 credits, as detailed in the table 6.1 and the detailed program structure mentioned later on.

7.6 Industrial Training

Mandatory industrial training for 15 weeks bridges the gap between academic learning and real-world application. It immerses students in industry practices, enhances employability skills, and provides practical insights into their disciplines, aligning with NEP's focus on experiential and vocational learning.

As per the directives of the Directorate of Technical Education (DTE), industrial training as internship must have a duration of 16 weeks. In accordance with the AICTE internship policy, the proposed schedule is as follows:

- i) 4 weeks during the summer vacation after the completion of the Second Semester Examination.
- ii) 12 weeks from 16th May to 15th August following the Fourth Semester Examination.

For Travel and Tourism the industrial training as internship is mandatory for the students of 6th semester for a period of 16 weeks.

7.7 Self-Study Learning & Its Assessment

Incorporating self-study components encourages independent learning, critical thinking, and time management skills. Structured assessments ensure accountability and validate the knowledge gained, promoting a culture of self-driven education and lifelong learning as envisioned in NEP 2020.

Self-study learning hours are included in the credit calculation; however, they do not contribute to the faculty's workload. Nevertheless, faculty members should guide students during their self-study and conduct a summative assessment to evaluate their learning progress.

7.8 Inclusion of Spoken Tutorials and NPTEL Courses

The integration of Spoken Tutorials by IIT Mumbai and NPTEL courses provides access to high-quality, standardized online learning resources. These platforms enhance conceptual understanding and technical skills, supporting NEP's vision of leveraging technology for inclusive and equitable education.

Every student must register for the "Basics of Computer" course under IIT Bombay's Spoken Tutorial program during their course of study, as specified in the program structure. The course must be completed under the mentorship of department faculty. The related guidelines are mentioned elsewhere in this document.

A student may register for an NPTEL course with a minimum duration of 8 weeks as a generic elective course from any discipline. However, they must submit the completion certificate to acquire the credits specified in the program structure. For obtaining a minor diploma,

students are required to complete three NPTEL courses from the same discipline.

7.9 One Skill Enhancement Course (SEC) in Every Semester

Including at least one SEC per semester ensures continuous skill development, making students industry-ready. These courses focus on technical, vocational, and soft skills, bridging the gap between theoretical knowledge and practical application. (Explained in 7.3.1 (5))

7.10 One Value Education Course (VEC) in Every Semester

VECs foster ethical awareness, social responsibility, and personal development. By embedding value-based education in every semester, the curriculum nurtures compassionate and socially conscious individuals, in line with NEP's holistic education goals. (Explained in 7.3.1 (6))

7.11 Generic Elective Courses

Offering multidisciplinary Generic Elective courses in the middle semesters allows students to explore interests beyond their core discipline. This flexibility fosters innovation, broadens perspectives, and supports the concept of a Minor Diploma, enriching the academic experience. (Explained in 7.3.1 (3))

7.12 Introduction of Notional Hours

Notional hours represent the total estimated time a student spends on all academic activities, including lectures, practical, assignments, and self-study. Establishing a minimum of 600 notional hours per semester ensures a well-rounded academic workload, fostering deeper engagement and comprehensive learning.

7.13 Award of Certificate/Diploma

As the Multiple-Entry Multiple-Exit (MEME) system is implemented at GPN, the awarding of certificates and diplomas is based on the percentage of marks obtained by students upon completing the total credits outlined in the program structure, as follows:

1. **Certificate in Vocation** – Based on the percentage of marks obtained in the first and second semesters, including the exit course.
2. **Diploma in Vocation** – Based on the percentage of marks secured in the third and fourth semesters, including the exit course.
3. **Diploma in Engineering** – Based on the percentage of marks achieved in the fifth and sixth semesters.

7.14 Conclusion

NEP 2020-aligned curriculum represents a paradigm shift in education, focusing on fostering critical thinking, practical skills, and holistic development. By incorporating flexibility, technology, and diverse learning opportunities, it empowers students to thrive in a rapidly changing world. Through its innovative features, this curriculum ensures that learners are equipped with the knowledge, skills, and values needed for personal growth, professional success, and societal contributions, fulfilling the vision of NEP 2020.

CHAPTER 8

Course Curriculum

The Model Course Curriculum for one course, developed by the CDC of GPN, is circulated among various programs for curriculum development. A workshop is organized to explain the contents of the curriculum, providing further insights into its structure and implementation for academic enhancement. The details are described below.

8.1 Basic Information

EE204H

2023 CURRICULUM



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	: Diploma in Electrical Engineering
Course Category	: DSC
Course Code	: EE204H
Course Title	: DC Machines and Transformers

Figure 8.1. Basic Information

8.1.1 Program

Government Polytechnic, Nagpur offers thirteen diploma engineering programs, with their respective abbreviations listed below.

Civil Engineering- CE

Mechanical Engineering- ME

Electrical Engineering- EE

Electronics and Telecommunication Engineering- EC

Packaging Technology- PK
 Metallurgical Engineering- MT
 Information Technology- IT
 Automobile Engineering- AE
 Computer Engineering- CM
 Travel and Tourism- TR
 Textile Manufacture- TX
 Mechatronics Engineering- MK
 Artificial Intelligence & Machine Learning- AI

8.1.2 Course Category

As per the National Education Policy 2020, the institute has adopted seven verticals as course categories, mentioned in 7.3.1.

8.1.3 Course Code

A unique method has been developed for assigning course codes to various courses, as illustrated in the figure 8.2.

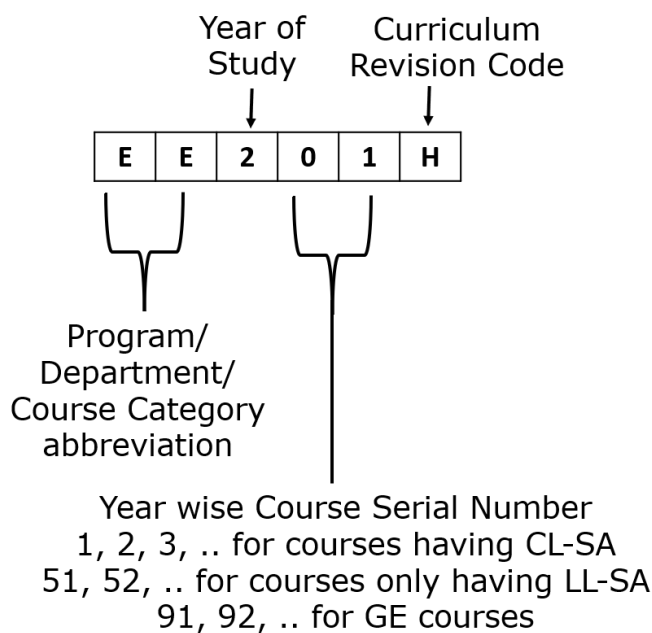


Figure 8.2. Course Code Details

Program codes are mentioned above, however department and other codes for common courses are as follows:

Departments:

English- EN

Mathematics- MH

Physics-PH

Chemistry-CH

Workshop-WS

Applied Mechanics-AM

Hotel Management- HM

Other Codes:

Value Education- VE

Internship/Management- IN

8.1.4 Course Title

The course title provides a concise and descriptive name that reflects the primary focus and objectives of the course. It serves as an identifier for students and educators, ensuring clarity and alignment with the course content and learning outcomes. A course is designed based on an industry-identified competency.

8.2 Rationale

The rationale of a curriculum explains the purpose and importance of the course or program. It outlines how the curriculum aligns with educational goals, addresses the needs of students, industry, and society, and supports the development of skills and knowledge. It serves as a foundation for curriculum design and implementation.

I Rationale:

This course deals with basics of DC machines and transformers. Students will learn to choose the right machines and transformers for different needs. They'll be able to differentiate between special and conventional transformers. These are crucial in power systems for generating, transmitting, and distributing electricity. Students will apply this knowledge in studying courses like power system management, equipment operation, and maintenance. They'll use these skills in roles like supervisors, controllers, and technicians..

Figure 8.3. Rationale

8.3 Industry-identified competency

Industry-identified competencies in a curriculum refer to the specific skills, knowledge, and abilities that are recognized as essential by industry professionals. These competencies ensure that students are equipped with practical, relevant expertise to meet the demands of the workforce, fostering employability and bridging the gap between academic learning and real-world applications.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Operate and maintain DC machine and transformers for electrical systems.

Figure 8.4. Industry-identified Competency

8.4 Course Outcomes (COs)

Course Outcomes (COs) are considered the "building blocks" of the Outcome-Based Education (OBE) system. They are measurable statements that define the knowledge, skills, and abilities students are expected to achieve by the end of the course. COs are aligned with Program Outcomes (POs) and are linked to assessments that evaluate

student performance. Typically, every course has six COs, and these outcomes are closely related to the desired graduate attributes.

In OBE, Bloom's Taxonomy plays a significant role in shaping COs, focusing on higher-order thinking skills rather than just recalling facts. COs are written at higher levels of learning, ensuring that students can apply, analyze, and synthesize information. They are based on all domains of learning—cognitive, psychomotor, and affective—to achieve a comprehensive set of POs. Each CO begins with an action verb, emphasizing active learning.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1:** **Select** the suitable DC generator as per requirement.
- CO2:** **Suggest** the suitable D.C motor on the basis of applications.
- CO3:** **Analyse** different parameters obtained from various tests on transformer.
- CO4:** **Recommand** special transformer for perticular application.
- CO5:** **Suggest** the suitable three-phase transformer for various applications.
- CO6:** **Operate** single-phase and three-phase transformers in parallel for load sharing.

Figure 8.5. Course Outcomes

Course Outcomes (COs) are designed based on industry-identified competencies and are specified for each unit.

Example COs:

- "Analyze electrical circuits to identify faults" (Cognitive Domain).

- "Design and build a simple electrical prototype" (Psychomotor Domain).
- "Practice electrical circuits for lighting" (Affective Domain).

8.5 Learning Scheme

Each curriculum is designed for 15 weeks, and for calculations under the National Credit Framework (NCrF), 30 notional learning hours are equivalent to one credit. For instance, if a course involves a total of 6 learning hours per week, this translates to 90 notional hours over the duration of the course, resulting in a total of 3 credits.

As per National Education Policy 2020, the total outcome-based learning hours for credits shall, subject to assessment, include: Classroom Learning (CL), Tutorial Learning (TL)/Laboratory Learning (LL), and Self-study Learning (SL).

8.5.1 Classroom Learning (CL)

Classroom learning is a structured educational process that occurs in a formal setting, typically led by an instructor or teacher. It focuses on the delivery of theoretical knowledge and conceptual understanding.

8.5.2 Laboratory Learning (LL)

Laboratory learning provides hands-on experience to reinforce theoretical concepts through practical application. It is essential for technical and engineering education.

8.5.3 Tutorial Learning (TL)

Tutorial Learning (TL) emphasizes interactive sessions, allowing students to clarify concepts, engage in discussions, and solve problems with personalized guidance.

8.5.4 Self-Study Learning (SL)

Self-study is a personalized learning process where students take initiative to acquire knowledge independently. It complements classroom and laboratory learning.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

Figure 8.6. Learning Scheme

8.6 Assessment Scheme

Assessment scheme consists of formative and summative assessment as specified in respective curriculum.

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

Figure 8.7. Assessment Scheme

8.6.1 Formative Assessment (FA)

Formative assessment is a continuous evaluation process aimed at monitoring student learning and providing ongoing feedback to improve teaching and learning.

8.6.2 Summative Assessment (SA)

Summative assessment evaluates student learning at the end of a course, unit, or academic period. It focuses on measuring outcomes against predefined standards.

8.7 Classroom Learning Content

Classroom learning content is structured into five or six units, each comprising topics and subtopics. Specific Learning Outcomes (SLOs) in the cognitive domain are defined based on the Course Outcomes (COs) and learning content. Action verbs from higher levels of the cognitive domain—Apply, Analyze, Evaluate, and Create—are utilized to align the SLOs with the Course Outcomes (COs).

8.7.1 Specific Learning Outcomes

Specific Learning Outcomes (SLOs) are defined as "statements describing what students are expected to achieve as a result of a learning activity," such as at the end of a unit, chapter, or practical session. SLOs should represent assessable and measurable knowledge, skills, abilities, or attitudes that students acquire by the conclusion of the sub-topic or practical.

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: DC Generator	1a	Select the laws suitable for dc machines operation	1.1	Introduction to DC and AC.Machines, types of DC and AC machines, Principle of DC motor and DC Generator,Fleming's Right hand rule, Flemings Left hand rule.	CO1
	1b	Suggest the materials used for given parts of dc machines with justification	1.2	Construction of DC machines,Different parts of D.C.Machines and their functions, Different materials used for the parts of DC machines.	
	1c	Calculate EMF induced in DC generator on the given data.	1.3	Types of Armature winding Lap and Wave windings, EMF equation.Calculate the emf induced in the generator	
	1d	Select the suitable DC generator as per given requirement	1.4	Symbolic representation of a generator,Types of DC generator and Load characteristics of separately excited and self excited DC generators, Various losses inDC generator. efficiency of generator (No Numericals) and their applications.	

Figure 8.8. Classroom Learning Content**8.8 Laboratory Learning Content**

Laboratory learning content is organized into five or six units, with all Specific Learning Outcomes (SLOs) focused on the psychomotor domain at higher levels. These SLOs are aligned with the Course Outcomes (COs) to develop practical skills as per industry-identified

competency. Each SLO will be assessed formatively, and summative assessment will be conducted using rubrics.

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Identify different parts and windings of DC machine.	2	CO1
I	2	Find the value of critical resistance of DC shunt generator by plotting OCC	2#	CO1
I	3	Perform load test on DC shunt generator. Plot internal and external characteristics of DC shunt generator	2#	CO1

Figure 8.9. Laboratory Learning Content

8.9 Self-Study Learning (SLO in Cognitive / Psychomotor / Affective Domain)

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a microproject on small dc generator and prepare report.
2. Draw the constructional diagram of DC machine showing various parts and write their functions along with materials used for the different parts. prepare report.

Figure 8.10. Self-Study Learning Content

Self-study learning content is structured into 10 to 15 activities, with all Specific Learning Outcomes (SLOs) targeting higher levels of the Cognitive, Psychomotor, or Affective domains. Learners will select and complete one activity under the guidance of a faculty mentor. Summative assessment will be conducted by the faculty using rubrics.

8.10 Specification Table for Classroom Learning Assessment

The specification table serves as a blueprint for designing a valid question paper. In the curriculum, it is included to guide both question paper setting and student preparation. The table highlights level-wise cognitive process dimensions across three levels: Remember (R), Understand (U), and Apply/Higher Level (A).

The suggested distribution of levels is as follows: Remember (R) – 20%, Understand (U) – 30%, and Apply/Higher Level (A) – 50%.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/○	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	DC Generator	5	C	02	04	00	06
			○	00	00	06	06
2	D.C. Motor	10	C	02	04	06	12
			○	02	04	04	10
3	Single phase transformer	8	C	06	04	06	16
			○	04	04	00	8
4	Special transformer	6	C	00	08	00	08
			○	02	04	00	06
5	Three phase transformer	10	C	02	04	10	16
			○	00	04	00	04
6	Parallel operation of transformers	6	C	02	04	06	12
			○	00	00	06	06
Total		45	C	14	28	28	70
			○	8	16	16	40

*C - Compusory

O - Optional

*R - Remember

U - Understand

A - Analyze / Apply

Figure 8.11. Specification Table

8.11 Question Paper Format for Summative Assessment (SA)

The Question Paper Profile (QPP) is a tool that facilitates the implementation of e-governance in the question paper-setting process. By using QPP along with a question bank for each component, a question paper can be generated through a computer program. QPP serves as a ready reckoner for setters, enabling them to create questions across different cognitive domain levels and topics. It significantly reduces the time required to prepare printed question papers for classroom learning summative assessments.

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	5R2	6R2	2R2	4R2	5	7
2	2U4	1U4	3R4	4U4	3R4			3	5
3	3U4	4U4	5U4	5U4	2A4			3	5
4	4U4	6U4	5A4	2U4	3U4			3	5
5	3A6	2A6	1A6					2	3
6	5A6	6A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

Figure 8.12. Question Paper Profile

8.12 Scheme of Laboratory Formative Assessment (FA)

A maximum of four criteria are defined in the curriculum for the formative assessment of laboratory learning. Each SLO will be

assessed by faculty using rubrics, which are based on the criteria outlined in the curriculum.

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Drawing circuit diagram, selection of equipment	5
2	Performance	10
3	Calculation, Result, Drawing Graphs (if any)	5
4	Viva Voce	5
TOTAL		25

Figure 8.13. Scheme of Laboratory Formative Assessment

8.13 Scheme of Self-Learning Summative Assessment (SA)

A maximum of four criteria are defined in the curriculum for the summative assessment of self-study learning. The activity performed by the learner will be evaluated by the faculty using rubrics, based on the criteria specified in the curriculum.

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Drawing circuit diagram, selection of equipment, survey	5
2	Performance, collection of literature	10
3	fabrication, Calculation, Result, Drawing Graphs (if any)	5
4	Viva Voce	5
TOTAL		25

Figure 8.14. Scheme of Laboratory Formative Assessment

8.14 COs-POs/PSOs Mapping Matrix

A curriculum map helps identify the program's strengths (attributes widely addressed) and gaps (attributes addressed by only a few learning experiences). The simplest form of a curriculum map is a matrix, where the rows represent learning experiences (Course Outcomes), and the columns represent Program Outcomes (or Graduate Attributes). The seven Program Outcomes for diploma engineering courses, as defined by the National Board of Accreditation, serve as the columns. The strength of mapping is categorized into three levels: Low (1), Medium (2), and Strong (3).

CO-PO mapping is conducted by a group of faculty members using the method established by the Curriculum Development Cell.

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CO1	3	-	-	3	-	2	3	-	-
CO2	3	-	-	3	-	2	3	-	-
CO3	3	-	-	3	-	2	3	-	-
CO4	3	-	-	3	-	-	3	-	-
CO5	3	-	-	3	-	-	3	-	-
CO6	3	-	-	3	-	-	3	-	-

Figure 8.15. COs-POs/PSOs Mapping Matrix

8.15 Textbooks, BIS Codes References

The reference books, textbooks, and standards needed for the curriculum content are provided as resources for both students and faculty. Only standard books with ISBN numbers are given priority in the curriculum document.

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Electrical Machines	S.K. Bhattacharya, The McGraw Hill companies, Seventh Reprint, 2011.	13:978-007-0669215 10:0-07-066921-X
2	Principle of Electrical Machines	V K Mehta, Rohit Mehta, S. Chand Publishing, 2nd Edition, 2002	9788121921916

Figure 8.16. Textbooks, BIS Codes References

8.16 e-References

E-references are included in the curriculum to serve as valuable resources for both students and faculty. Priority is given to standard and credible e-references to ensure quality and reliability. These references are carefully selected to enhance students' learning experience and support their academic growth.

XV e-References:

1. <http://nptel.ac.in/courses/108108076/1> , accessed on 29th April 2024
2. <https://www.youtube.com/watch?v=-xebh8wU8qY> accessed on 29th April 2024

Figure 8.17. e-References

8.17 List of Major Equipment/Machineries with Specification

The document includes a detailed list of major equipment and instruments necessary for conducting practical exercises aimed at developing psychomotor skills. The listed equipment and instruments are integral to facilitating effective practical sessions, enabling students to gain proficiency and confidence in applying theoretical concepts to real-world scenarios.

XVI List of Major Equipment/Machineries with Specification:

1. Auto transformer (Dimmerstat), single-phase, Input-240 V, Output 0-270 V,
2. Auto transformer (Dimmerstat), three-phase, Input-440 V, Output 0-440 V
3. D.C. Shunt, Series and Compound Generators, Voltage rating 220 Volts,
4. D.C. Shunt and Series Motors, Voltage rating 220 Volts, Power rating 2 KW

Figure 8.18. List of Major Equipment/Machineries

8.18 List of Industry Experts and Faculties who contributed for this curriculum

The document includes a list of experts and faculty members who contributed to the development of the curriculum. Their valuable inputs and expertise have ensured the curriculum's relevance and quality. The document is authenticated with the signatures of the Chairman and Member Secretary of the Program Board of Studies (PBOS), underscoring its credibility and approval.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. M.B.Daigavane	Principal	Government Polytechnic, Nagpur
2	Dr.P. M.Daigavane	H.O.D. Electrical Engineering, Academic Expert.	G.H.Raisoni College of Engineering, Nagpur
3	Mrs. Divya Piprode	Sr. Engineer, Industry Expert	PGCIL, Nagpur
4	Mr. M.N. Gawande	Lecturer in Electrical Engineering, MSBTE Nominee.	Government Polytechnic, Gondia
5	Dr G.V.Gotmare	I/C HoD, Electrical Engineering	Government Polytechnic, Nagpur
6	Mrs. A. A. Alegaonkar	Lecturer in Electrical Engineering, Course Incharge	Government Polytechnic, Nagpur



(Dr.G.V.Gotmare)
HOD & Chairman PBOS,



(Dr. G. V. Gotmare)
Member Secretary PBOS,

Figure 8.19. List of Industry Experts and Faculties

CHAPTER 9

Curriculum Document

Detailed curriculum document of Diploma in **Travel and Tourism** is given below.

9.1 Vision of Institute

To become a Center of Excellence, providing quality technical education and training

9.2 Mission of Institute

The mission of Government Polytechnic, Nagpur is-

1. To frame institutional policies for effective implementation of teaching learning process
2. To inculcate values and ethics for life-long learning through curricular, co-curricular and extra-curricular activities
3. To develop facilities and services for academic excellence
4. To enhance the skills of faculties and staff through industry institute collaboration.

9.3 Vision of Program

Vision of the Travel and Tourism Program:

“To become a center of excellence in imparting skill based Travel & Tourism Education.”

9.4 Mission of Program

Mission of the Travel and Tourism Program:

M1: To impart high quality travel & tourism education and professional

ethics to students.

M2: To adopt the best pedagogical methods in order to maximize knowledge transfer.

M3: To have adequate mechanisms to enhance understanding of implementation of theoretical concepts in practical scenarios.

M4: To provide the best facility, infrastructure, and environment to the students and Faculty members, creating an ambience conducive for excellence in travel & tourism education.

Program Educational Objectives (PEOs)

The Program Educational Objectives of (PEOs) Travel and Tourism Program are:

PEO1: To acquire a strong background in basics of travel, technical arts and ability to use these tools in travel and tourism.

PEO2: To develop the ability to demonstrate technical competence in the fields of travel & tourism and develop solutions to the problems in various areas of travel and tourism.

PEO3: To develop professional skills by using modern tools in travel & tourism.

PEO4: To attain the qualities of professional leadership to deliver effectively in a multi-disciplinary team and domains.

PEO5: To produce travel professionals who ensures social responsibility and environmental concern.

9.5 Program Outcomes (POs)

PO1: Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2: Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

PO3: Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

PO4: Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5: Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.

PO6: Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

PO7: Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

9.6 Program Specific Outcomes (PSOs)

PSO1: Plan, organize, market, sell and execute tours.

PSO2: Assist people make their travel easier and convenient

9.7 Mapping of Vision, Mission, PEOs, POs, PSOs

9.7.1 Mapping of Vision and Mission

Table 9.1. Mapping of Vision-Mission

	Mission Statements			
	M1	M2	M3	M4
Vision Statement	✓	✓	✓	✓

9.7.2 Mapping of Mission and PEOs

Table 9.2. Mapping Mission-PEOs

Mission Statements	Program Educational Objectives (PEOs)				
	PEO1	PEO2	PEO3	PEO4	PEO5
M 1			✓	✓	✓
M 2	✓	✓	✓	✓	✓
M 3	✓	✓	✓		
M 4				✓	✓

9.7.3 Mapping of PEOs and POs- PSOs

Table 9.3. Mapping PEOs-POs & PSOs

PEOs	Program Outcomes (POs)							PSOs	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
PEO1							✓	✓	✓
PEO2		✓	✓	✓					✓
PEO3				✓	✓	✓	✓	✓	✓
PEO4	✓	✓	✓	✓	✓	✓		✓	
PEO5					✓		✓	✓	✓

9.8 Industry Identified Competencies in Search Conference

S.N.	Competencies (What diploma holders will be able to do in the industry at entry level) Legends: ME-Most Essential, E-Essential, D-Desirable, NR-Not Required	ME	E	D	NR	Total	Score	Rank
1	Communicate technical information clearly and effectively	45	39	6	6	96	4.28125	1
2	Formulate English language into meaningful structures and assess the given information.	81	12	3		96	3.8125	2
3	Use computers for documentation, presentation, analyse data and Internet services.	78	18			96	3.1825	3
4	Provide exceptional customer service to traveller's, including effective Communication, problem-solving, and interpersonal skills.	75	18	3		96	3.75	4
5	Provide excellent customer service to travellers and tourists.	72	24			96	3.75	5
6	Use tools and techniques of marketing and sales for tourism products.	69	27			96	3.741935	6
7	Adopt and adapt to emerging travel technology trends for tourism promotion.	72	21	3		96	3.71875	7
8	Perform various activities related to travel agency.	69	27			96	3.7096	8
9	Design and manage personalized travel packages.	66	27	3		96	3.6562	9
10	Assist travellers with travel documentation requirements ensuring compliance with travel policies and regulations.	69	21	6		96	3.65	10
11	Competence in having in-depth knowledge of Geographical and Political features of the world in	69	21	6		96	3.645161	11

	general.							
12	Competence in having in-depth knowledge of popular travel destinations, including cultural, historical, and tourist attractions.	63	27	6		96	3.625	12
13	Comprehend knowledge of the travel and tourism industry.	60	36			96		13
14	Handle travel-related emergencies and providing assistance to travellers in crisis situations, Respond effectively to crisis situations in tourism.	58	31	7		96	3.625	14
15	Address environmental concerns and provide sustainable solutions.	66	21	9		96	3.59375	15
16	Lead guided tours and provides informative commentary.	60	30	6		96	3.5625	16
17	Coordinate travel-related events and exhibitions, Market tourism events and festivals, plan and manage travel-related events and activities.	57	33	6		96	3.53125	17
18	Demonstrate leadership, effective communication, project management, and Resilience in professional and personal environments.	54	33	9		96	3.516129	18
19	Perform medical tourism related activities for tourism industry.	54	36	6		96	3.5	19
20	Use travel technology and online booking tools to research, book, and manage travel arrangements	51	42	3		96	3.5	20
21	Become culturally sensitive and respect diversity in travel interactions	51	42	3		96	3.5	21
22	Plan and execute tourism projects effectively.	54	33	9		96	3.46875	22
23	Bridge theoretical knowledge with practical experience in a professional Environment.	48	39	9		96	3.451613	23
24	Work efficiently in tourism and hospitality industry	48	42	6		96	3.4375	24

	environment.							
25	Manage hospitality services and accommodations.	45	42	9		96	3.419355	25
26	Perform front office operations in hotel industry.	45	42	9		96	3.419355	26
27	Provide excellent service to the customers related to food and beverages service.	45	39	12		96	3.387097	27
28	Apply advanced culinary techniques to create authentic regional Indian Cuisine.	48	36	12		96	3.375	28
29	Apply the Knowledge of French Language.	42	42	12		96	3.354839	29
30	Innovate and launch travel technology start-ups.	48	33	15		96	3.34375	30
31	Use constitutional provisions in society.	36	54	3	3	96	3.28125	31
32	Practice Yog and Meditation in daily life	42	39	15		96	3.28125	32

Technical Skills Required for Diploma in Electrical Engineering

S.N.	Technical Skills (What diploma holders will be able to do in the industry at entry level) Legends: ME-Most Essential, E-Essential, D-Desirable, NR-Not Required	ME	E	D	NR	Total	Score	Rank
1	Providing exceptional customer service to travellers, including effective communication, problem-solving, and interpersonal skills.	65	21	10		96	3.608696	1
2	Create travel itineraries, booking accommodations, arranging transportation, and planning activities for travelers.	63	27	6		96	3.59375	2
3	Competence in having in-depth knowledge of popular travel destinations, including cultural, historical, and tourist attractions.	51	39	6		96	3.516129	3

4	Use reservation and booking systems such as GDS (Global Distribution Systems) and online travel platforms to make travel arrangements.	60	18	12	6	96	3.451613	4
5	Assist travelers with visa applications, passport renewals, and other travel documentation requirements.	51	39	6		96	3.46875	5
6	Guide and lead tour groups, providing information, and interpreting cultural and historical sites.	54	36	6		96	3.5	6
7	Handle travel-related emergencies and providing assistance to travelers in crisis situations.	60	36			96	3.625	7
8	Speak foreign languages commonly used in travel destinations to assist international travelers.	27	51	12	6	96	3.03125	8
9	Respect cultural differences and promoting diversity and inclusion in travel services.	45	51			96	3.46875	9
10	Market and promote travel packages and destinations through various channels, including digital marketing and social media.	60	33	3		96	3.59375	10
11	Use travel technology and online booking tools to research, book, and manage travel arrangements.	63	33			96	3.65625	11
12	Plan and organize travel-related events, conferences, and group travel for corporate clients.	69	18	9		96	3.387097	12

9.9 Courses Identification

Courses are formed based on feedback obtained from alumni and industries, industry identified competencies finalized in search conference, and identified gaps previous curriculum, NEP and AICTE

guidelines and institute policy framed by ILC. The following table shows various courses formed based on identified competencies.

Table 9.4. Courses Identification from Identified Competencies.

S. N.	Competencies (What diploma holders will be able to do in the industry at entry level)	Rank based on Industry Feedback	Name of Course to be introduced in Curriculum	Course Category DSC/DSE /SEC/AEC/VEC/ INP etc.	Semester of the course
1	Communicate technical information clearly and effectively	1	Business Communication	AEC	II
2	Formulate English language into meaningful structures and assess the given information.	2	Communication Skills	AEC	I
3	Use computers for documentation , presentation, analyse data and Internet services.	3	Basics of Computers	SEC	I
4	Provide exceptional customer service to traveller's, including effective Communication , problem-solving, and interpersonal skills.	4	Key Skills for Self Development	SEC	I

5	Provide excellent customer service to travellers and tourists.	5	Employability Skills	SEC	II
6	Use tools and techniques of marketing and sales for tourism products.	6	Marketing and Sales Techniques,	DSC	V
7	Adopt and to emerging travel technology trends for tourism promotion.	7	Web Application in Tourism	SEC	V
8	Perform various activities related to travel agency.	8	Travel Agency Operations	DSC	III
9	Design and manage personalized travel packages.	9	Tour Operations	DSC	IV
10	Assist travellers with travel documentation requirements ensuring compliance with travel policies and regulations.	10	Travel Documentation	DSC	III
11	Competence in having in-depth knowledge of Geographical and Political features of the world in general.	11	International Travel Geography	DSC	II

12	Competence in having in-depth knowledge of popular travel destinations, including cultural, historical, and tourist attractions.	12	World Tourism- America, Europe, Australia, Africa, Asia Tourism in Northern States of India, Tourism in Southern States of India Tourism in Maharashtra	DSC DSC DSC DSC	III, IV,V III IV II
13	Comprehend knowledge of the travel and tourism industry.	13	Profile of Tourism Industry	DSC	I
14	Handle travel-related emergencies and providing assistance to travellers in crisis situations, Respond effectively to crisis situations in tourism.	14	Adventure Tourism	DSE	IV
15	Address environmental concerns and provide sustainable solutions.	15	Environmental Sustainability		III

16	Lead guided tours and provides informative commentary.	16	Basic Guide Training	DSC	II
17	Coordinate travel-related events and exhibitions, Market tourism events and festivals, plan and manage travel-related events and activities.	17	Business and Incentive Travel	DSC	III
18	Demonstrate leadership, effective communication , project management, and Resilience in professional and personal environments.	18	Integrated Personality Development Advanced Personality Development	VEC VEC	I II
19	Perform medical tourism related activities for tourism industry.	19	Medical Tourism	DSE	IV
20	Use travel technology and online booking tools to research, book, and manage travel arrangements	20	Basic Airfare and Ticketing	SEC	IV
21	Become culturally sensitive and respect diversity in travel	21	Architectural Heritage of India,	DSC DSC	I II

	interactions		Cultural Traditions of India		
22	Plan and execute tourism projects effectively.	22	Project	SEC	V
23	Bridge theoretical knowledge with practical experience in a professional Environment.	23	Internship (Professional Skills) Internship and Report Writing	INP	VI
24	Work efficiently in tourism and hospitality industry environment.	24	Internship	INP	II
25	Manage hospitality services and accommodations.	25	Hotel Operations	DSC	I
26	Perform front office operations in hotel industry.	26	Front Office Operations	GE	III
27	Provide excellent service to the customers related to food and beverages service.	27	Food and Beverage Services	GE	IV
28	Apply advanced culinary techniques to create	28	Basic Food Production	GE	V

	authentic regional Indian Cuisine.				
29	Apply the Knowledge of French Language.	29	Spoken French	AEC	V
30	Innovate and launch travel technology start-ups.	30	Entrepreneurship and Startup	INP	V
31	Use constitutional provisions in society.	31	Indian Constitution	VEC	V
32	Practice Yog and Meditation in daily life	32	Yog and Meditation	VEC	IV

9.10 Program Structure

The program structure of the Travel and Tourism program is developed as described previously and is given in appendix.



Appendix I

Curriculum



Government Polytechnic, Nagpur

Diploma in Travel and Tourism

NEP 2020 Align Curriculum 2023 Program Structure



Semester: First

SN	Course Code	Course Title	Course Category	Learning Scheme (Hours/Week)				Notional Hours/ Week (Total Notional Hours)		Credits	Assessment Scheme (Marks)						Total Marks
											CL		TL/LL		SL		
				CL	TL	LL	SL	NLH	Cr		SA	FA	SA	FA	SA		
1	TR101H	Profile of Tourism Industry	DSC	3	-	2	1	6	(90)	3	70	30	25	25	25	175	
2	TR102H	Architectural Heritage of India	DSC	4	-	-	2	6	(90)	3	70	30	-	-	25	125	
3	TR103H	Hotel Operations	DSC	4	-	-	2	6	(90)	3	70 **	30	-	-	25	125	
4	EN101H	Communication Skills	AEC	2	-	2	2	6	(90)	3	70	30	25	25	25	175	
5	TR151H	Key Skills for Self Development	SEC	2	-	4	2	8	(120)	4	-	-	50	50	25	125	
6	CM151H	Basics of Computer	SEC	-	-	2	2	4	(60)	2	-	-	25	25	25	75	
7	VE151H	Integrated Personality Development	VEC	-	-	2	2	4	(60)	2	-	-	25	25	25	75	
			Total	15	0	12	13	40	(600)	20	280	120	150	150	175	875	

Abbreviations:

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Government Polytechnic, Nagpur

Diploma in Travel and Tourism

NEP 2020 Align Curriculum 2023 Program Structure



Semester: Second

SN	Course Code	Course Title	Course Category	Learning Scheme (Hours/Week)				Notional Hours/ Week (Total Notional Hours)		Credits	Assessment Scheme (Marks)						Total Marks
											CL		TL/LL		SL		
				CL	TL	LL	SL	NLH	Cr		SA	FA	SA	FA	SA		
1	TR104H	Cultural Traditions of India	DSC	4	-	-	2	6	(90)	3	70	30	-	-	25	125	
2	TR105H	International Travel Geography	DSC	4	-	2	2	8	(120)	4	70	30	25	25	25	175	
3	TR106H	Tourism In Maharashtra	DSC	3	-	2	1	6	(90)	3	70	30	25	25	25	175	
4	TR107H	Basic Guide Training	DSC	3	-	2	1	6	(90)	3	70	30	25 +	25	25	175	
5	EN151H	Business Communication	AEC	2	-	2	-	4	(60)	2	-	-	25	25	-	50	
6	TR152H	Employability Skills	SEC	1	-	4	1	6	(90)	3	-	-	50	50	25	125	
7	VE152H	Advanced Personality Development	VEC	-	-	2	2	4	(60)	2	-	-	25	25	25	75	
			Total	17	0	14	9	40	(600)	20	280	120	175	175	150	900	

Exit Course for "Certificate in Vocation"

8	IN152H	Internship (Soft Skills)	INP	-	-	-	8	8	(120)	4	-	-	-	-	50		50
Total				17	0	14	17	48	(720)	24	280	120	175	175	200		950

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Diploma in Travel and Tourism

NEP 2020 Align Curriculum 2023 Program Structure



Semester: Third

SN	Course Code	Course Title	Course Category	Learning Scheme (Hours/Week)				Notional Hours/ Week (Total Notional Hours)		Credits	Assessment Scheme (Marks)						Total Marks
											CL		TL/LL		SL		
				CL	TL	LL	SL	NLH			Cr	SA	FA	SA	FA	SA	
1	TR201H	Travel Agency Operations	DSC	3	-	2	3	8	(120)	4	70		30	25 +	25	25	175
2	TR202H	World Tourism - America	DSC	3	-	2	1	6	(90)	3	70		30	25	25	25	175
3	TR203H	Business & Incentive Travel	DSC	4	-	2	-	6	(90)	3	70		30	25 +	25	-	150
4	TR204H	Tourism In Northern States of India	DSC	3	-	2	3	8	(120)	4	70		30	25	25	25	175
5	TR251H	Travel Documenation	SEC	4	-	4	-	8	(120)	4	-		-	50 +	50	-	100
6	##291H	Generic Elective	GE	2	-	2	-	4	(60)	2	70	**	30	25	25	-	150
7	VE251H	Environmental Sustainability	VEC	-	-	2	2	4	(60)	2	-		-	25	25	25	75
8																	
			Total	19	0	16	9	44	(660)	22	350	150	200	200	100		1000

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Government Polytechnic, Nagpur

Diploma in Travel and Tourism

NEP 2020 Align Curriculum 2023 Program Structure



Semester: Third

List of Generic Elective Courses MDM (Multidisciplinary Minor)

SN	Course Code	Course Title
1	HM291H	Front Office Operation
2	GR291H	German I (NPTEL Course)
3	JP291H	Japanes I (NPTEL Course)

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NEP 2020 Align Curriculum 2023 Program Structure



Semester: Fourth

SN	Course Code	Course Title	Course Category	Learning Scheme (Hours/Week)				Notional Hours/ Week (Total Notional Hours)		Credits	Assessment Scheme (Marks)						Total Marks	
											CL		TL/LL		SL			
				CL	TL	LL	SL				NLH		Cr	SA		FA		SA
1	TR205H	World Tourism- Africa and Europe	DSC	4	-	2	2	8	(120)	4	70		30	25	25	25		175
2	TR206H	Tourism in Southern States of India	DSC	3	-	2	1	6	(90)	3	70		30	25	25	25		175
3	TR207H	Tour Operations	DSC	3	-	2	1	6	(90)	3	70		30	25 +	25	25		175
4	TRXXXH	Discipline Specific Elective	DSE	3	-	4	3	10	(150)	5	70		30	25	25	25		175
5	TR252H	Basic Airfare & Ticketing	SEC	2	-	4	-	6	(90)	3	-		-	50 +	50	-		100
6	##292H	Generic Elective	GE	2	-	2	-	4	(60)	2	70	**	30	25	25	-		150
7	VE252H	Yog & Meditation	VEC	-	-	2	2	4	(60)	2	-		-	25	25	25		75
			Total	17	0	18	9	44	(660)	22	350	150	200	200	125			1025

List of Discipline Specific Elective

1	TR208H	Adventure Tourism
2	TR209H	Medical Tourism

Exit Course for "Diploma in Vocation"

8	IN253H	Internship (Professional Skills)	INP	-	-	-	8	8	(120)	4	-	-	-	-	50		50
			Total	17	0	18	17	52	(780)	26	350	150	200	200	175		1075

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Diploma in Travel and Tourism

NEP 2020 Align Curriculum 2023 Program Structure



Semester: Fourth

List of Generic Elective Courses MDM (Multidisciplinary Minor)

SN	Course Code	Course Title
1	HM292H	Food and Beverages Service
2	GR292H	German II (NPTEL Course)
3	JP292H	Japanes II (NPTEL Course)

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NEP 2020 Align Curriculum 2023 Program Structure



Semester: Fifth

SN	Course Code	Course Title	Course Category	Learning Scheme (Hours/Week)				Notional Hours/ Week (Total Notional Hours)		Credits	Assessment Scheme (Marks)						Total Marks	
											CL		TL/LL		SL			
				CL	TL	LL	SL	NLH			Cr	SA	FA	SA	FA	SA		
1	TR301H	Marketing & Sales Techniques	DSC	3	-	2	3	8	(120)	4	70		30	25 ⁺	25	25		175
2	TR302H	World Tourism- Asia & Australia	DSC	4	-	2	2	8	(120)	4	70		30	25	25	25		175
3	TR351H	Web Application in Tourism	SEC	2	-	4	-	6	(90)	3	-		-	50 ⁺	50	-		100
4	TR352H	Spoken French	AEC	2	-	4	-	6	(90)	3	-		-	50	50	-		100
5	##391H	Generic Elective	GE	2	-	2	-	4	(60)	2	70 ^{**}		30	25	25	-		150
6	IN354H	Entrepreneurship & Startup	INP	2	-	2	2	6	(90)	3	-		-	25	25	100		150
7	VE351H	Indian Constitution	VEC	-	-	2	-	2	(30)	1	-		-	25	25	-		50
8	TR353H	Project	SEC	-	-	4	-	4	(60)	2	-		-	50 ⁺	50	-		100
			Total	15	0	22	7	44	(660)	22	210		90	275	275	150		1000

List of Discipline Specific Elective

Abbreviations:

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NEP 2020 Align Curriculum 2023 Program Structure



Semester: Fifth

List of Generic Elective Courses MDM (Multidisciplinary Minor)

SN	Course Code	Course Title
1	HM391H	Basic Food Production
2	GR391H	German III (NPTEL Course)
3	JP391H	Japanes III (NPTEL Course)

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Diploma in Travel and Tourism

NEP 2020 Align Curriculum 2023 Program Structure



Semester: Sixth

SN	Course Code	Course Title	Course Category	Learning Scheme (Hours/Week)				Notional Hours/Week (Total Notional Hours)		Credits	Assessment Scheme (Marks)					Total Marks
				CL	TL	LL	SL	NLH	Cr		CL		TL/LL		SL	
											SA	FA	SA	FA	SA	
1	IN355H	Internship & Report Writing	INP	-	-	2	42	44	(660)	22	-	-	100 +	100	300	500
		Total		0	0	2	42	44	(660)	22	0	0	100	100	300	500
LL- SA - Viva (External) - 100																
LL - FA - Diary - 100																
SL - SA - Training Report - 100, Appraisal - 100, Presentation & Seminar - 100																

Abbreviations:

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Semester

I



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR101H
Course Title	:	Profile of Tourism Industry

I Rationale:

Tourism industry is the rapidly growing industry and it is one of the world's biggest businesses. This course will introduce the student to all aspects of tourism industry. The student will realize that a single trip involves many others who work behind the scene. The student will get familiarized with the constituents of Travel & Tourism & get Enlighten with the vast career opportunities available in this field.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Comprehend knowledge of the travel and tourism industry.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Analyze key terms related to the tourism industry to explain the development of tourism in India.

CO2: Appraise the development of Indian Tourism.

CO3: Identify basic motivation behind different Tourism.

CO4: Analyze the role of infrastructure in supporting and enhancing tourism development.

CO5: Identify various impacts of Tourism.

CO6: Categorize the types of Tourism.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Introduction of Tourism Industry	1a	Illustrate the meaning of different terms related to tourism industry.	1.1	Meaning & Concept of Tourism, Tour, Tourist, Visitor, Excursionist.	CO1
	1b	Distinguish between given types of Tourism.	1.2	Domestic & International Tourism, Inbound & Outbound Tourism.	
	1c	Illustrate 'A's of tourism.	1.3	Essential elements of Tourism - Attraction, Accessibility, Accommodation, Amenities, Activities, Affordability.	
UNIT II: History (Evolution) of Tourism	2a	Illustrate History of Tourism.	2.1	History and Growth of Tourism (Ancient and Middle period).	CO2
	2b	Illustrate development of Tourism worldwide.	2.2	Thomas Cook (Grand Circular Tours).	
	2c	Illustrate development of Tourism in India.	2.3	Development of Tourism in India after Independence.	
	2d	Illustrate present status of Tourism in India.	2.4	Present status of Tourism in India.	
	2e	Illustrate importance of Tourism in Indian Economy.	2.5	Importance of Tourism in Indian Economy.	

UNIT III: Motivation for Tourism	3a	Identify the theories related to motivation behind tourism.	3.1	Different theories related to motivation behind tourism.	CO3
	3b	Identify basic motivation behind different Tourism.	3.2	Basic motivation for Tourism, Social & Cultural, Sport, Business, Political, Religious, Health.	
UNIT IV: Infrastructure of Tourism	4a	Illustrate the modes of transport.	4.1	Mode of Transport - Air, Land (Rail, Road), Water.	CO4
	4b	Illustrate the role of transportation.	4.2	Role of Transport in Tourism Industry in India.	
	4c	Illustrate role of Accommodation and amenities in Tourism.	4.3	Role of Accommodation in Tourism Industry.	
	4d	Illustrate ancillary Services.	4.4	Ancillary Services (Travel Insurance, Guide, Escort, Forex, courier, etc).	
UNIT V: Impacts of Tourism	5a	Apply concepts of tourism economics to explain its role in development.	5.1	Economic-Employment generation, for ex. Multiplier effect, leakage, infrastructure development, Foreign Exchange Earnings.	CO5
	5b	Analyze the impacts of tourism.	5.2	Social and cultural political impact- Standard of living, passport to peace, international understanding, national integration.	
UNIT VI: Types of Tourism	6a	Illustrate various types of Tourism.	6.1	Types of Tourism, Leisure Tourism, Religious Tourism, Cultural Tourism, Eco Tourism, Rural and Agro Tourism, Sports Tourism, Adventure Tourism, Medical and Wellness Tourism, Cruise Tourism, Business Tourism.	CO6
	6b	Illustrate upcoming types of tourism.	6.2	Upcoming types of Tourism : Space Tourism and other types.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Collect information brochures from Government Tourist Offices (State tourism boards) and compile the information Part 1.	2#	CO1
I	2	Collect information brochures from Government Tourist Offices (State tourism boards) and compile the information Part 2.	2#	CO1
II	3	Collect information brochures from Government Tourist Offices (State tourism boards) and compile the information Part 3.	2#	CO2
III	4	Collect information brochures from Government Tourist Offices (State tourism boards) and compile the information Part 4.	2#	CO3
IV	5	Prepare a short report on six A's of Destination by visiting nearest tourist place Part 1.	2#	CO4
IV	6	Prepare a short report on six A's of Destination by visiting nearest tourist place Part 2.	2#	CO4
V	7	Prepare a short report on six A's of Destination by visiting nearest tourist place Part 3.	2	CO5
V	8	Prepare a chart on motivation of travel with two examples of each motivation.	2#	CO5
V	9	Search and enlist the important website of tourism industry components. Airline, rail, Tour operator, Govt. tourism boards (all state), Hotel.	2#	CO5
V	10	Prepare a report on different type of Transport which includes : Types of Transport, Class of travel, Merits and demerits of transportation, Current status of available transportation infrastructure, Conclusion.	2#	CO5
VI	11	Prepare a report on impacts of tourism at a particular destination Part 1.	2#	CO6
VI	12	Prepare a report on impacts of tourism at a particular destination Part 2.	2	CO6
VI	13	Prepare and present a power point presentation on any one type of tourism.	2#	CO6
VI	14	Draw a silk route on a given map and analyze its importance (Trading, communication).	2	CO6
I to VI	15	Prepare and present a power point presentation on any one upcoming type of tourism.	2	CO1 to CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a chart of different terms related to tourism with relevant examples.
2. Prepare a presentation depicting the 'A's of tourism.
3. Prepare a chart of the stages of development of tourism around the world.
4. Prepare a chart of the stages of development of tourism in India.
5. Correlate the "motivation for tourism" and "type of tourism".
6. Interview a tourist to know his /her motivation behind tourism.
7. Prepare micro project on transportation system in and around Nagpur.
8. Prepare micro project based on accommodation in and around Nagpur.
9. Prepare micro project based on the impacts of tourism.
10. Suggest solutions to limit the impacts of tourism.
11. Prepare a report on any one type of tourism.
12. Prepare a report on the idea to develop an upcoming type of tourism.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Introduction of Tourism Industry	8	C	02	04	06	12
			O	02	04	00	6
2	History (Evolution) of Tourism	5	C	02	04	00	6
			O	00	04	00	4
3	Motivation for Tourism	6	C	02	04	06	12
			O	00	00	06	6
4	Infrastructure of Tourism	12	C	02	12	06	20
			O	00	08	04	12
5	Impacts of Tourism	8	C	00	04	06	10
			O	02	04	00	6
6	Types of Tourism	6	C	02	04	04	10
			O	00	00	06	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	6R2	1R2	5R2	5	7
2	1U4	2U4	3U4	1U4	2U4			3	5
3	4R2	4U4	4U4	4U4	4U4			3	5
4	5U4	6U4	6A4	5U4	4A4			3	5
5	1A6	3A6	3A6					2	3
6	4A6	5A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva Voce	5
4	Activity	-
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva Voce	5
4	Activity	-
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	3	-	3	3	-
C02	3	-	-	-	3	-	3	3	-
C03	3	-	-	-	3	-	3	3	-
C04	3	-	-	-	3	-	3	3	-
C05	3	-	-	-	3	-	3	3	-
C06	3	-	-	-	3	-	3	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	An Introduction to Travel and Tourism	Foster Dennis L., McGraw Hill, 1990	10: 0026808617 13: 9780026808613
2	The Travel Industry	Chuck Y. Gee, James C. Makes, Dexter J. L. Choy, Van Nostrand, Reinhold, 3rd Edition, 1997	13: 978-0-471-28774-2
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4	Tourism in new Millennium	Dr. S. P. Bansal, Abhishek Publication, Chandigarh, 2002	10: 8185733295 13: 978-8185733296
5	Basic Tourism	Krishnan K. Kamara & Mohinder Chand, Kanishka Publication, New Delhi, 2004	10: 8173915237 13: 978-8173915239
6	Successful Tourism Management	Premnath Seth, Sterling Publication Ltd., New Delhi, 1986	10: 8120700295 13: 978-8120700291

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1. https://www.youtube.com/watch?v=k6_PeO-E_Cs , accessed on 10 July, 2023
2. <http://business.mapsofindia.com/india-budget/infrastructure/tourism.html> accessed on 10 July, 2023
3. <https://www.youtube.com/watch?v=9mqXXVf8chw> accessed on 10 July, 2023
4. <https://www.youtube.com/watch?v=95uJc0ye-EM> accessed on 10 July, 2023

XVI List of Major Equipment/Machineries with Specification:

1. NIL

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR

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Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR102H
Course Title	:	Architectural Heritage of India

I Rationale:

Architectural Heritage Tourism is related to a country or regions historical era particularly the lifestyle, history, art, architecture, religion and other elements that determine the way of life. In this course students will study about architectural and heritage tourism, with particular emphasis on Indian architecture and heritage.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Become culturally sensitive and respect diversity in travel interactions.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Identify the role of Indus valley Civilization in tourism.

CO2: Categorize architectural development in different dynasties of ancient India.

CO3: Illustrate unique architectural styles of medieval India.

CO4: Classify unique architectural styles of modern India.

CO5: Illustrate unique architectural styles of Maharashtra.

CO6: Appraise unique architectural development post-independence.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	-	2	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	-	-	-	-	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Indus Valley Civilization	1a	Identify various places related to Indus valley Civilization.	1.1	Indus Valley Civilization.	CO1
	1b	Identify the places found in excavation in India.	1.2	Harappa and Mohenjo-Daro Civilization.	
	1c	Illustrate the Architecture found in various places of indus valley civilization.	1.3	Architectural sites, Antiquity, Artifact found.	
	1d	Justify the importance of antiquity and artifact.	1.4	Archeological sites in India.	
	1e	Justify the relevance of Indus valley to Indian Tourism.	1.5	Importance of Indus valley in Indian Tourism.	

UNIT II: Architectural Development During Ancient India	2a	Describe the various Architectural styles in Ancient India.	2.1	Architectural styles in Ancient India.	CO2
	2b	Differentiate between architecture during Maurya and Gupta Dynasty.	2.2	Maurya Dynasty, Monumental stone architecture, Rock-cut caves, Decorated stupas, Stand-alone temples.	
	2c	Describe the term Medieval Age.	2.3	Gupta Dynasty. Golden Age of Architecture. Truncated pyramidal temples, Square prostyle temples, Palatial architecture.	
	2d	Illustrate the importance of various cave architectural sites in India.	2.4	Early Middle Ages (550 CE–1200 CE).	
	2e	Identify the Architecture in Satvahan period.	2.5	Architecture of Karnataka, Kalinga architecture, Dravidian architecture, Western Chalukya architecture, and Badami Chalukya Architecture, Satvahan, Theater and stadium.	
UNIT III: Architect in Medieval period	3a	Appreciate the Temple Architecture style in different parts of India.	3.1	Temple Architecture development across the medieval India by various dynasty.	CO3
	3b	Differentiate between the North Indian and South Indian Temples.	3.2	Nagar and Dravidian style.	
	3c	Illustrate Islamic Architecture in India.	3.3	Architecture development during Islamic period. Architectural Description Importance and monuments of all major Mughal Emperors.	
	3d	Illustrate the Evolution and Importance of Indo Islamic Architecture in India.	3.4	Importance of the Fort and palaces in Indian Tourism.	

UNIT IV: Architecture in Modern India	4a	Illustrate British Architecture in India.	4.1	Buildings imitating contemporary styles of European architecture were constructed in India.	CO4
	4b	Illustrate the main Features of British and European Architecture.	4.2	British architectural Description, Importance and Buildings.	
	4c	Appreciate importance of British architecture in tourism Industry.	4.3	Major European and British architecture.	
	4d	Illustrate the evolution of various Modern Architecture sites of India.	4.4	Churches in Kerala, Kolkata, Goa and Tamil Nadu.	
UNIT V: Architecture in Maharashtra	5a	Identify the architecture in Maharashtra, and Differentiate between fort architecture in Maharashtra and rest part of India.	5.1	Major and important fort and palaces in Western Maharashtra, Marathwada and rest of Maharashtra.	CO5
	5b	Identify the fort and palaces in Maharashtra.	5.2	Trimbakeshwar Shiva Temple, Mahalaxmi Temple, Mount Mary Basilica, Bibi Ka Maqbara, Shaniwar Wada.	
	5c	Identify the Heritage Building and Historical places of Vidarbha.	5.3	Important fort and Architecture in Vidarbha.	

UNIT VI: Architectural Development Post Independence	6a	Describe terms Post independence architectural development.	6.1	The chief Indian architect, Ganesh Bhikaji, Deolalikar, Auroville Dome, Puducherry.	CO6
	6b	Compare architectural development in British era and post Independence era.	6.2	Central Vista, Sri Ram Cultural Center, New Delhi.	
	6c	Name the various Post Independence Architectural site in India.	6.3	The Central Institute of Educational Technology, New Delhi, Lotus Temple, Delhi , Jehangir Art Gallery, Mumbai.	
	6d	Elaborate the significance of the Post Independence architectural developments.	6.4	The capital of the state Punjab, Chandigarh design by Le Corbusier.	
	6e	Identify Restoration and preservation measures undertaken by central and state governments.	6.5	Restoration and preservation measures undertaken by central and state governments.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)	Hours	Aligned COs
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VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a Map of indus valley civilisation sites.
2. Prepare a chart of various architectural styles of India till present time.
3. Prepare a chart of architectural structures of Gupta, Mourya, Chalukya, Kalinga Dynasties.
4. Collect pictures & videos of top 20 Architectural heritage structures of india.
5. Prepare a report on potential of heritage tourism of India.
6. Collect feedbacks of domestic & foreign tourist on indian heritage tourist destinations.
7. Prepare micro project on heritage tourism circuit of Maharashtra.
8. Prepare micro project based on challenges of Heritage tourism in India.
9. Prepare microproject based on road map for growth in Heritage tourism in India.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Indus Valley Civilization	6	C	02	06	00	8
			O	02	04	00	6
2	Architectural Development During Ancient India	14	C	02	10	04	16
			O	00	04	00	4
3	Architect in Medieval period	14	C	02	04	06	12
			O	00	00	06	6
4	Architecture in Modern India	10	C	02	04	08	14
			O	00	08	04	12
5	Architecture in Maharashtra	10	C	02	04	04	10
			O	02	04	00	6
6	Architectural Development Post Independence	6	C	00	04	06	10
			O	00	00	06	6
Total		60	C	10	32	28	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R - Remember

U - Understand

A - Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	5R2	1R2	5R2	5	7
2	2U4	3U4	4U4	1U4	2U4			3	5
3	5R4	6U4	2A4	4U4	4U4			3	5
4	4A4	4A4	5A4	5U4	4A4			3	5
5	1U6	2U6	3A6					2	3
6	3A6	6A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R - Remember

U - Understand

A - Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question -Remember, Marks - 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):**XII Scheme of Self-Learning Summative Assessment (SA):**

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	3	-	3	3	-
C02	3	-	-	-	3	-	3	3	-
C03	3	-	-	-	3	-	3	3	-
C04	3	-	-	-	3	-	3	3	-
C05	3	-	-	-	3	-	3	3	-
C06	3	-	-	-	3	-	3	3	-

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2. <http://business.mapsofindia.com/india-budget/infrastructure/tourism.html> accessed on 19 June, 2023
3. <https://www.youtube.com/watch?v=9mqXXVf8chw> accessed on 10 July, 2023
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XVI List of Major Equipment/Machineries with Specification:

1. NIL

XVII List of Industry Experts and Faculties who contributed for this curriculum:

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6	Dr Arvind Upasani	Expert Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
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Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR103H
Course Title	:	Hotel Operations

I Rationale:

Hotel industry is an integral part of tourism industry. One of the major constituent of tourism, hotel industry contributes a major share in tourism development. Knowing this, the industry can help promotion of tourism in the future.

Since its evolution, Hotel & Catering industry has come a long way in its development & simultaneously in tourism development. Studying Hotel operation will enhance prospectus of Tourism professional.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Manage hospitality services and accommodations.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Identify** and recognize the evolution & growth of Hotel Industry, Types of hotels, basic hotel facilities and terminology.
- CO2: Identify** the gradation & classification criterion along with various bodies who undertake this gradation.
- CO3: Recognize** various different departments & their functions in hotel.
- CO4: Identify** stand alone & chains of hotels and various licenses & permits required for hotels.
- CO5: Implement** various methods of charging room rates.
- CO6: Locate** challenges faced by hotel industry and new age marketing strategies to overcome challenges.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	-	2	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70**	100	40	-	-	-	-	25	10

** Online Objective Type

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Hotel & Catering Industry	1a	Evaluate past and present scenario of hotel industry.	1.1	Evolution & growth of Hotel Industry.	CO1
	1b	Identify the steps in the growth of Hotel industry.	1.2	Growth of Hotel Industry in India.	
	1c	Recognize hotels by grades.	1.3	Hotel & Restaurant gradation & classification.	
	1d	Illustrate Criterion for classification & gradation of Hotels.	1.4	Criterion for classification & gradation of Hotels.	
	1e	Identify the National & International bodies responsible for grading & classification.	1.5	National & International bodies responsible for grading & classification. Types of hotels in organized sector.	

UNIT II: Hotel Chains in India & Major International Chains	2a	Accustom with different categories of hotel.	2.1	Classification of Hotels.	CO2
	2b	Clarify Domestic and international chains of hotels.	2.2	National & International stand alone Hotels & Hotel Chains.	
	2c	Enlighten different factors that affect the gradation.	2.3	Categories of Hotels & its world famous Hotels.	
	2d	Aware about the Public sector Hotels in India.	2.4	Public sector Hotels in India.	
	2e	Aware about the Public private partnership (PPP) hotels in India.	2.5	Public private partnership (PPP) hotels in India.	
UNIT III: Hotel Organization & Administration	3a	Differentiate between Operating and Non Operating and Revenue Producing and Non Revenue Producing departments.	3.1	Departments in Hotels: Operating and Non-operating, Revenue producing and non-revenue producing.	CO3
	3b	Classify various departments in a hotel with its functions.	3.2	Functions, Operations & Departmental structure : Front Office, House Keeping, Food & Beverage Production, Food & Beverage Service.	
	3c	Appraise the role of non-operating departments.	3.3	Role of non-operating department: Personnel, Purchase, Store and Finance, Engineering and security etc.	
	3d	Appraise the Importance of Co-ordination among st different departments of Hotel.	3.4	Importance of Co-ordination among st different departments of Hotel.	

UNIT IV: Hotel & Catering	4a	Enlighten legal requirement to be fulfilled by the Hotels and Restaurants.	4.1	Licenses and permits required for Hotels & Restaurants. General rules and regulation followed by Hotels & Restaurants.	CO4
UNIT V: A Room Charges	5a	Identify the terminology related to hotel accommodation.	5.1	Types of rooms, meal plans and accommodation terminologies.	CO5
	5b	Recognise the elements affecting room rates.	5.2	Elements affecting room rates.	
	5c	Explore Different methods of charging and fixing room rates.	5.3	Different methods of fixing room rate, Different modes of bill settlement.	
UNIT VI: Future Trends in the Hospitality Industry in Tourism	6a	Analyse challenges faced by hotel industry.	6.1	New age challenges for the hotel Industry.	CO6
	6b	Plan different strategies to overcome common problems.	6.2	Current & futuristic Marketing strategies for Hotels & Restaurants, Role of Information Technology in Hotel Industry.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)	Hours	Aligned COs
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VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a chart of accommodation in Evolution period worldwide.
2. Prepare a chart of accommodation in Evolution period in India.
3. Prepare a chart on types of Hotel & its Departments.
4. Collect information on various types of international chain hotels & Restaurants.
5. Prepare a report on inter departmental co-ordination in a hotel.
6. Collect and compile information of various types of Luxury services served in hotels.
7. Prepare micro project on Hotel lobby.
8. Prepare micro project based on sales & marketing of hotels.
9. Prepare micro project based on 5 star resorts & its services.
10. Collect various types of pictures of equipments used in hotels.
11. Prepare a chart of room amenities used in hotels.
12. Prepare a chart of payment modes with pictures.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Hotel & Catering Industry	12	C	04	04	04	12
			O	00	00	00	0
2	Hotel Chains in India & Major International Chains	12	C	04	04	04	12
			O	00	00	00	0
3	Hotel Organization & Administration	12	C	04	04	04	12
			O	00	00	00	0
4	Hotel & Catering industry : Legal aspects & Infrastructure	10	C	04	04	04	12
			O	00	00	00	0
5	A Room Charges	10	C	04	04	04	12
			O	00	00	00	0
6	Future Trends in the Hospitality Industry in Tourism Perspective	4	C	04	04	02	10
			O	00	00	00	0
Total		60	C	24	24	22	70
			O	0	00	00	00

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
Q. 1 to Q. 35	1R2	1R2	1U2	1U2	1A2	1A2	2R2	35/35	
	2R2	2U2	2U2	2A2	2A2	3R2	3R2		
	3U2	3U2	3A2	3A2	4R2	4R2	4U2		
	4U2	4A2	4A2	5R2	5R2	5U2	5U2		
	5A2	5A2	6R2	6R2	6U2	6U2	6A2		

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):**XII Scheme of Self-Learning Summative Assessment (SA):**

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	3	3	-
C02	3	-	-	-	-	-	3	3	-
C03	3	-	-	-	-	-	3	3	-
C04	3	-	-	-	-	-	3	3	-
C05	3	-	-	-	-	-	3	3	-
C06	3	-	-	-	-	-	3	3	-

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6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



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(Dr. G. V. Gotmare)
Member Secretary PBOS, TR

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Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
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Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/AE/CM/IT/AI/ML/MC/PK/MT/TX/TR
Course Category	:	AEC
Course Code	:	EN101H
Course Title	:	Communication Skills

I Rationale:

Communication and proficiency in language grants an access to communicate on global platform. This course focuses on enhancing language skills like reading, listening, speaking and writing. Proficiency in English language enables a student to make connection with people around through effective communication. In engineering domain, excellence in English language enables a technician to pursue professional career and holistic development as an individual to stand strongly in the society.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Formulate English language into meaningful structures and assess the given information.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Formulate grammatically correct sentence structures and incorporate appropriate use of vocabulary.

CO2: Interpret the text and appreciate literature.

CO3: Enhance ability to comprehend text and observe the rules of effective writing.

CO4: Apply communicative principles in daily activities.

CO5: Construct logical and meaningful sentence structures.

CO6: Elaborate thoughts and ideas constructively.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	2	2	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Application of Grammar & Vocabulary Building	1a	Use Tenses as per given situation.	1.1	Tenses: Present tense, past Tense, Future Tense and Sub types, identification and modification as per instruction.	CO1
	1b	Change the narration of given sentences.	1.2	Narration: Types of Sentence: Assertive, Imperative, Interrogative, Exclamatory. Change into Direct Speech and Indirect Speech.	
	1c	Use words effectively in given sentences.	1.3	Applying Synonyms, Antonyms, Homophones, Homonyms in given situations as per instructions.	
	1d	Enhance the understanding of word formation.	1.4	Replace a group of words/phrases with One Word Substitution.	
	1e	Construct effective sentences using idioms and phrases.	1.5	Enlist Idioms & Phrases with their meanings, make sentences using idiom and phrases.	

UNIT II: Prose	2a	Inculcate the habits to make good impression.	2.1	Abstract Summary of Dale Carnegie: Six Ways to Make People Like You-By Dale Carnegie. Read the text: Understand the 6 ways suggested by the writer. Elaborate the points using real examples. Suggest more ways that help create good impression. Display behavioral changes in yourself.	CO2
	2b	Incorporate positive attitude.	2.2	When Life Gave Me Lemons-By Rashmi Raj: Improve reading skills. Identify the important characters of the story. Associate the situation of the characters with your life. Apply the attitude suggested by the writer. Highlight the moral of the story.	
	2c	Reflect on thoughts, feelings and experiences.	2.3	Two Gentlemen of Verona- By A. J. Cronin: Read the text with correct intonations. Summarize the story in your own words. Highlight new words and write their synonyms and antonyms. Perform the story in a dramatic manner. Write a critical review.	
UNIT III: Comprehension of Seen & Unseen Passages	3a	Prioritize IQ, EQ and SQ for career building.	3.1	Be Remarkable- Naren: Read, interpret and apply the acquired principles in real life.	CO3
	3b	Enhance abilities to stand in job market.	3.2	Employers Look for Potential Employees- By Manish Sabharwal: Acquire the necessities of professional world and implement them for career building.	
Communicative Skills	4a	Recognize the need of effective communication.	4.1	Introduction of communication process/cycle, definition of communication, elements of communication. Acquire the manner in which communication is conducted.	CO4

UNIT IV: Comm	4b	Recognize communication barriers.	4.2	Introduction to types of communication barriers, develop a way in which barriers to communication can be minimized so as to ensure effective interactions.	CO4
	5a	Formulate paragraphs with synchronized sentence structure on the given situation/topic.	5.1	Paragraph Writing: Structure of paragraph writing, Types of Paragraphs, Expansion of Ideas.	CO5
UNIT V: Writing Skills	5b	Develop articulation of thoughts and ideas into logical structure.	5.2	Speech Writing: : Structure of speech writing, principles of speech writing, Welcome Speech, Introducing the Guests, Vote of Thanks.	
	5c	Summarize the given information and ideas.	5.3	Note Making: Scanning and skimming of text, identifying key words in the given text, comprehend the central idea and write the gist of given text.	
UNIT VI: Speaking Skills	6a	Draft dialogues logically.	6.1	Principles of dialogue writing, format of dialogue writing, identify formal and informal conversational situations in day to day life, develop and draft dialogues on given situation.	CO6
	6b	Compose sentences to present self and others impressively.	6.2	Identify personality traits and achievements of self and others, draft the information into an effective coherent structure.	
	6c	Develop sentence structure to ask, refuse and give permission.	6.3	Asking, Giving and Refusing Permission, identify formal and informal conversational situations in day to day life, develop and draft dialogues on given situation.	

6d	Develop dialogues to practice language skills in a structured and a meaningful way.	6.4	Inquiries and Information, identify formal and informal conversational situations in day to day life, develop and draft dialogues on given situation.
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VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Perform Tense Busters- All levels (Language lab/Worksheets on 12 tenses).	2#	CO1
I	2	Change the narration (20 sentences from Direct into Indirect Speech).	2#	CO1
I	3	Use dictionary for vocabulary building (solve worksheet on synonyms & antonyms, homophones, homonyms & one word substitution).	2#	CO1
I	4	Enrich word power (construct 20 effective sentences using frequently used phrases & idioms).	2	CO1
II	5	Express views and counter-views based on given text.	2	CO2
II	6	Expand the idea given in a logical and structured manner.	2#	CO2
III	7	Comprehend seen passages (comprehend any three topics from unit 2/3).	2	CO3
III	8	Comprehend unseen passages (comprehend any two unseen passages).	2#	CO3
IV	9	Identify the various elements of communication in the given situation (formal/informal) and draw a communication cycle.	2#	CO4
IV	10	Identify the barriers to communication in the given situation (formal/informal) and suggest means to minimise it.	2#	CO4
IV	11	Demonstrate through role play, skills of a good communicator like news reader, commentator, RJ, announcers etc.	2	CO4
V	12	Write a paragraph on given topic (write 3 paragraphs of about 75 words on given topics).	2#	CO5
V	13	Write a book review of a book by renowned Indian author.	2#	CO5
VI	14	Introduce self and others impressively (practice self-introduction/introduction of others in formal situation).	2#	CO6
VI	15	Prepare and present speech (draft & present a speech to introduce the guests and vote of thanks speech of any departmental/institute event).	2#	CO6
VI	16	Compose & Practice conversation (compose and practice dialogues on given formal and informal situation/Role play).	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Make a list of synonyms and antonyms frequently used in spoken English (minimum 50).
2. Enlist frequently used 30 idioms, write their meanings and make sentences using them.
3. Prepare a report on Teachers' Day/Engineers' Day celebrated in your college.
4. Read a moral based story book and write a review.
5. Enlist any 50 frequently used homophones and homonyms.
6. Write a short story (in about 150 words) using past tense.
7. Write five sentences each in simple present, simple past and simple future tense .
8. Take a sentence in simple present tense and convert into remaining 11 tenses.
9. Formulate 15 words each with prefixes – dis,mis,im,en, un, anti and formulate 15 words each with suffixes – able,ful, less, ment, tion.
10. Interview a renowned personality around you and draft an interview in dialogue format.
11. Prepare a vlog on an event celebration (planning, preparation and execution).
12. Listen a audio lecture of an Indian speaker and summarize it.
13. Interact with and collect monthly budget from three households and compare and contrast them
14. Write a diary noting down your daily activities for a specified period of time.
15. Visit and write a report on a place of interest (Railway museum, Ajab Bangla, Raman Science center).

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Application of Grammar & Vocabulary Building	6	C	4	4	4	12
			O	4	4	2	10
2	Prose	6	C	6	6	2	14
			O	0	0	10	10
3	Comprehension of Seen & Unseen Passages	4	C	2	4	4	10
			O	0	4	4	8
4	Communicative Skills	4	C	2	4	6	12
			O	0	4	0	4
5	Writing Skills	5	C	0	4	6	10
			O	4	0	0	4
6	Speaking Skills	5	C	0	6	6	12
			O	0	4	0	4
Total		30	C	14	28	28	70
			O	8	16	16	40

*C - Compulsory

O - Optional

*R - Remember

U - Understand

A - Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	2R2	3R2	2A2	1R2	1R2	1A2	4R2	5	7
2	4U4	2A4	1A4	2R4	1U4			3	5
3	1U4	3A4	5U4	3U4	3A4			3	5
4	4U4	6U4	1R4	5R4	3U4			3	5
5	4A6	5A6	6U6					2	3
6	2A6	6A6	2U6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R - Remember

U - Understand

A - Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question -Remember, Marks - 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	5
2	Overall presentation of given assignment	10
3	Viva Voce	5
4	Activity	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Choice Of Topic	5
2	Analysis And Interpretation	10
3	Presentation	5
4	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	-	-	-	-	-	-	3	-	-
C02	-	-	-	-	-	-	3	-	-
C03	-	-	-	-	1	-	3	-	-
C04	-	-	-	-	-	1	3	-	-
C05	-	-	-	-	-	1	3	-	-
C06	-	-	-	-	-	-	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	How to Win Friends and Influence people: Six ways to make people like you	Dale Carnegie, Rupa; First edition (20 May 2016)	978-8129140173
2	Two gentleman of Verona	A.J.Cronin, Oxford University Press 2013	-
3	Our muddled generation	Dinesh Kumar, Manish Sabharwal, Golden Harvest.	9788125059523
4	Contemporary English Grammar-structure and composition	David Green, Revised Edition, 2004, Himalaya Publication.	033392183-6
5	Interactive English	S.K.Gangal, Revised Edition 1997 Allied Publishers.	81-7023-678-9
6	Applied English Grammar and composition	Dr. P.C. Das, 2013, New Central Book Agency.	978-81-7381-542-3
7	English for Practical Purposes	Z. N. Patil, B.S. Valke	033935098

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1. <https://storymirror.com/read/english/story/when-life-gave-me-lemons/krd7xe09>, accessed on 18th March 2021
2. <https://storymirror.com/read/english/story/when-life-gave-me-lemons/krd7xe09>, assessed on 25th July, 2021
3. www.talkenglish.com-grammar, assessed on 12th July, 2021
4. www.perfect-english-grammar.com, assessed on 18th March, 2021

XVI List of Major Equipment/Machineries with Specification:

1. Desktop Computers latest version
2. Headphones
3. Language lab software

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. Rupali Londhe	Lecturer in English	Government Polytechnic, Nagpur
2	Dr. M. M. Machale	Lecturer in English	Government Polytechnic, Nagpur
3	Mr. Nitin Pote	Lecturer in English	Government Polytechnic, Bramhapuri
4	Mr. Ravindra Suryawanshi	Lecturer in English	NIT Polytechnic, Nagpur
5	Mr. Nitin Pathak	Lecturer in English	Kamptee Polytechnic, Nagpur



(Mr. P. T. Khobragade)
HOD & Chairman PBOS, COMMON



(Dr. G. V. Gotmare)
Member Secretary PBOS, COMMON

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Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	SEC
Course Code	:	TR151H
Course Title	:	Key Skills for Self Development

I **Rationale:**

Over a period of time, it has been observed that efficiency of polytechnic student can be increased at the workplace by imparting key skills right from entry to the polytechnic. It is designed by keeping self in focus with a clear objective of developing Key Skills, to enhance the capabilities in the fields of searching, assimilating and using information on job. It is an effort to develop student that enables him to be successful in finding a practical and quick solution to any problem he comes across. It covers more or less all aspects of life skills. The development of subject is progressively ascending parallel to development of study in polytechnic.

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Provide exceptional customer service to traveller's, including effective communication, problem-solving, and interpersonal skills.

III **Course Outcomes (COs):**

After completing this course students will be able to:

CO1: Apply teamwork and public relation skills in professional group settings.

CO2: Demonstrate emotional intelligence and ethical values in workplace interactions.

CO3: Use time management tools to plan and prioritize daily tasks.

CO4: Manage workplace change and conflict using interpersonal and SWOT skills.

CO5: Create digital presentations using structured content, visuals, and voiceovers.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	4	2	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50	20	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Public Relations	1a	Demonstrate effective teamwork and interpersonal skills by applying principles of public relations, cooperation, and group behavior in a professional setting.	1.1	Cooperation, Collaboration, Team Building, Group behavior	CO1
UNIT II: Emotional Intelligence	2a	Demonstrate emotional intelligence and ethical behavior by applying empathy, authenticity, and humility in workplace interactions.	2.1	Emotional Intelligence, Empathy & Humility, Authenticity & Work Ethics	CO2
UNIT III: Time Management	3a	Apply time management techniques to prioritize tasks and create an effective daily schedule.	3.1	Time Management, Urgent Vs Important Jobs, Daily Schedule.	CO3

UNIT IV: Interpersonal Skills	4a	Apply interpersonal skills to manage change, resolve conflicts, and conduct SWOT analysis in workplace scenarios.	4.1	Interpersonal Skills: Change Management, Conflict Management, SWOT Analysis.	CO4
UNIT V: Presentation Skills	5a	Create engaging presentations using digital tools by integrating well-structured content, visuals, videos, and voice-overs.	5.1	Presentation tools, PPT Making, Content writing, Use of Videos, Voice overs.	CO5

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Perform a roleplay activity to simulate a tourism office team responding to a customer inquiry. Emphasize cooperation and respectful communication.	4#	CO1
I	2	Perform a task (e.g., planning a virtual tour) in small teams to develop group coordination and public relations strategies.	4#	CO1
I	3	Conduct a feedback session where each student evaluates their peers' collaboration and interpersonal approach during teamwork.	4#	CO1
II	4	Create an empathy map for a tourist facing a stressful travel issue and propose a professional response.	4#	CO2
II	5	Analyze a real-world ethical dilemma in hospitality or tourism and suggest a response showing authenticity and humility.	4#	CO2
II	6	Resolve a guest complaint calmly using emotional intelligence principles through role play.	4#	CO2
III	7	Create and present a personal daily schedule with categorized urgent vs. important tasks.	4#	CO3
III	8	Record activities over two days, analyze time usage, and reflect on improvements in scheduling.	4#	CO3
IV	9	Perform a roleplay to simulate a workplace conflict (e.g., over shift schedules) and resolve it through dialogue.	4#	CO5
IV	10	Complete a personal SWOT analysis.	4#	CO5
IV	11	Present a personal SWOT analysis with peers.	4#	CO5
V	12	Develop a 5-slide presentation on a tourism topic using proper formatting, structure, and content flow.	4#	CO5
V	13	Record voice narration for a pre-designed presentation and present it to the class or upload it online.	4#	CO5
V	14	Create a short video or interactive presentation using videos, images, and transitions to explain a tourism concept. (Part I)	4#	CO5
V	15	Create a short video or interactive presentation using videos, images, and transitions to explain a tourism concept. (Part II)	4#	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Group Task: Create digital structured content, visuals, and voiceovers based on curriculum content.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/0	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Public Relations	6	C	0	0	0	0
			0	0	0	0	0
2	Emotional Intelligence	6	C	0	0	0	0
			0	0	0	0	0
3	Time Management	6	C	0	0	0	0
			0	0	0	0	0
4	Interpersonal Skills	6	C	0	0	0	0
			0	0	0	0	0
5	Presentation Skills	6	C	0	0	0	0
			0	0	0	0	0
Total		30	C	0	0	0	0
			0	0	0	0	0

*C - Compulsory

O - Optional

*R - Remember

U - Understand

A - Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Overall presentation	20
3	Activity	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Activity	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	3	3	-	-
C02	3	-	-	-	-	3	3	-	-
C03	3	-	-	-	-	3	3	-	-
C04	3	-	-	-	-	3	3	-	-
C05	3	-	-	-	-	3	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Development of Generic Skill	Baalaraman S., Denett & Company, 2008	13: 9788189904241
2	Basic Managerial Skills for All	Mcgrath E.H, Prentice Hall India Learning Private Limited, 9th Edition, 2011	13: 978-8120343146
3	Improving Individual Performance	Dean R. Spitzer, Educational Technology, 1986	10: 0877781974

XV e-References:

1. <https://www.youtube.com/watch?v=erfgEHHfFkU> assessed on 23rd December 2023
2. <https://www.youtube.com/watch?v=HHEOoRc4XtE> assessed on 23rd December 2023

XVI List of Major Equipment/Machineries with Specification:

1. Desktop Computer with internet connectivity
2. Recording camera
3. Microphone and speaker

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Expert Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/PK/MT/TX/IT/CM/AE/AI/MK/TR
Course Category	:	SEC
Course Code	:	CM151H
Course Title	:	Basics of Computers

I Rationale:

Computer is an essential tool that we cannot avoid as it plays an important role in our day to day life, especially in the present scenario. Basics of Computer course starts with the basic computer skills, learning basic application software tools, Understanding Computer Hardware, Basic Internet awareness. This course will be taken online under spoken tutorial courses IIT, Bombay.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Use computer for Documentation, Presentation, Analyse data and different internet services.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Apply the basics of computer fundamentals.

CO2: Install and configure printer setting.

CO3: Identify Basic Internet skills.

CO4: Recognize various email components.

CO5: Illustrate the use of google drive.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	2	2	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)	Topics and Sub-topics	Aligned Cos
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VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Identify various Input/output devices of computer.	2#	CO1
I	2	Connect the various components of computer.	2#	CO1
II	3	Connect printer to computer and apply its setting.	2#	CO2
II	4	Configure the setting of printer and print the test page.	2#	CO2
II	5	Apply page layout features such as Themes, page background, paragraph, page setup. Create multicolumn page. Use different options to print the documents	2#	CO2
III	6	Use internet for different web services.	2	CO3
III	7	Create a new google account and login to gmail account.	2#	CO3
III	8	Write and compose an email to given email account.	2#	CO3
III	9	Send an email to given recipients.	2#	CO3
III	10	Use mail merge with options.	2	CO3
IV	11	Compose and attach files to e-mails.	2#	CO4
IV	12	Share of files and folders using google drive.	2#	CO4
IV	13	Insert a photo or link into an email and about the compose window options.	2	CO4
V	14	Create , open and edit worksheet.	2#	CO5
V	15	Apply Page setup and print options for worksheet to print the worksheet.	2#	CO5
V	16	Prepare a slide presentation and apply design theme to given presentation.	2#	CO5
V	17	Add new slides and insert pictures/images, shapes on presentation.	2#	CO5
V	18	Add table and charts in the slides.	2#	CO5
V	19	Create a word document and use different option on document.	2#	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a document on Report of Various Printer types.
2. Prepare Notes using Document/Office.
3. Prepare Study Report using Document/Office.
4. Prepare Playbill (salary statement, tax statement) using spreadsheet.
5. Prepare a time table using Spreadsheet
6. Prepare student Mark sheet using spreadsheet.
7. Prepare presentation for advertisement.
8. Prepare presentation of your Branch/Department.
9. Prepare presentation of Study Report.
10. Prepare presentation on Various Components of Computer.
11. Prepare Google Form in Drive and share.

IX Specification Table for Classroom Learning Assessment:**X Question Paper Format for Summative Assessment (SA):**

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	selection of proper tool,execution	5
2	Complete the practical in stipulated time	10
3	Performance	5
4	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Selection of Topic	5
2	Content of Report/Assignment	10
3	Submission of Report	5
4	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific Outcomes	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CO1	3	-	-	-	-	-	-	-	-
CO2	3	-	-	3	-	-	-	-	-
CO3	3	-	-	3	-	-	-	-	-
CO4	3	-	-	3	-	-	-	-	-
CO5	3	-	-	3	-	-	-	-	-
CO6									

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Computer Fundamentals	R.S. Salaria Khanna Publishing House	13: 978-938-1068533
2	Computer Course Made Easy	Ramesh Bangia, Khanna Book Publishing Company, First Edition, 2014	13: 978-938-2609377
3	Internet Applications	Ikvinderpal Singh, Khanna Book Publishing Company, First Edition, 2011	10: 938-1068399

XV e-References:

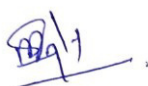
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2. <https://www.latex-tutorial.com/tutorials/> accessed on 22/6/2022
3. <http://www1.maths.leeds.ac.uk/LaTeX/TableHelp1.pdf> accessed on 22/6/2022
4. <https://www.wikihow.com/Create-a-Website-Using-Google-Sites> accessed on 22/6/2022
5. <http://www.tutorialsforopenoffice.org/> accessed on 22/6/2022

XVI List of Major Equipment/Machineries with Specification:

1. Computer system with latest configuration.
2. Any Office software or latest version
3. PC tools
4. Any operating system
5. printer
6. Spokent Tutorials IIT bombay study materials

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.M.V.Sarode	HOD, Computer Engineering	Government Polytechnic, Nagpur
2	Mr P S Thakre	Lecturer in Computer Engineering	Government Polytechnic, Nagpur
3	Dr U B Aher	Lecturer in Computer Engineering	Government Polytechnic, Nagpur
4	Mrs D S Nalinde	Lecturer in Computer Engineering	Government Polytechnic, Nagpur
5	Mrs.V.A.Raje	System Analyst	MSBTE,RO,Nagpur
6	Mr. Dipak Dhote	Operations Manager	IT-Network, Nagpur
7	Dr. Rakesh Kadu	Assistant Professor	Ramdeobaba COEM,Nagpur



(Dr. M. V. Sarode)
HOD & Chairman PBOS, CM



(Dr. G. V. Gotmare)
Member Secretary PBOS, CM



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/CM/IT/MT/PK/AE/TR/TX/ MK/AI
Course Category	:	VEC
Course Code	:	VE151H
Course Title	:	Integrated Personality Development

I Rationale:

This course aligns with the National Education Policy by fostering holistic development in engineering students, emphasizing values, resilience, and personal growth. It builds essential life skills such as leadership, effective communication, project management, and national pride, enhancing students' adaptability in both personal and professional settings. Through diverse learning experiences, students gain practical insights and develop a balanced, informed perspective essential for responsible, impactful careers.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Demonstrate leadership, effective communication, project management, and resilience in professional and personal environments.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Enhance** personal growth by mastering thought-processes, building productive habits, and managing social media impact.
- CO2: Develop** inspiration from Indian icons by applying lessons from their resilience, values, and leadership qualities.
- CO3: Enhance** communication skills by actively listening and bridging generational gaps to strengthen family connections.
- CO4: Build** resilience by adopting a positive outlook, learning from failures, and embracing faith in daily life.
- CO5: Foster** national pride by exploring, researching, and sharing insights about India's rich historical heritage.
- CO6: Develop** professional skills by building networks, adopting leadership qualities, and practicing effective project management.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	2	2	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	25	10

VI Classroom Learning Content:**VII Laboratory Learning Content:**

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
UNIT I: Remaking Yourself	1	Restructuring Yourself: Develop intellectual, physical, emotional, and spiritual quotients by learning six powerful thought-processes.	2#	CO1
	2	Power of Habit: Develop good habits in life by undergoing a study of how habits work, the habits of successful professionals, and the practical techniques.	2#	CO1
	3	Handling social media: Learn how social media can become addictive and imbibe simple methods to take back control.	2#	CO1
UNIT II: Learning from Legends	4	Sachin Tendulkar and Ratan Tata: Learn from the inspirational lives of India's two legends, Sachin Tendulkar and Ratan Tata & implement lessons through related case studies.	2#	CO2
	5	A.P.J. Abdul Kalam: Learn from Dr Kalam's inspirational life displayed legendary qualities such as Dare to Dream, Work Hard, Get Good Guidance, Humility, and Use Your Talents for the Benefit of Others.	2#	CO2

UNIT III: From House to Home	6	Active Listening & Understanding: Learn to listen with eyes, ears, mind, and heart, for academic progress and communications.	2#	CO3
	7	Bonding the Family: Overcome the generation gap and connect with their family more.	2#	CO3
UNIT IV: Facing Failures	8	Welcoming Challenges: Learn to face difficulties through a positive perspective, through the study of successful figures such as Disney, Lincoln and Bachchan.	2#	CO4
	9	Significance of Failures: Acquire constructive skills to understand failure as formative learning experiences.	2#	CO4
	10	Power of Faith: Learn the power and necessity of faith in our daily lives.	2#	CO4
UNIT V: My India My Pride	11	Our Nation: Learn the importance of studying India's glorious past so that they could develop a strong passion and pride for our nation.	2#	CO5
	12	India's Glorious Past: Develop a deeper interest in India's glorious past by appreciating the need to read about it, research it, write about it, and share it.	2#	CO5
UNIT VI: Soft Skills	13	Networking & Leadership: Learn the means of building a professional network and developing a leadership attitude.	2#	CO6
	14	Project Management: Learn the secrets of project management through the Akshardham case study and practice project management skills through an activity relevant to student life.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Perform Selfless Service - Seva: Learn the benefits of performing seva and prepare report showing evidences.

IX Specification Table for Classroom Learning Assessment:

X Question Paper Format for Summative Assessment (SA):

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Content Understanding	10
2	Readability	5
3	Completeness	5
4	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Originality of work	5
2	Organization and Writing	5
3	Use of Evidence	5
4	Viva voce	10
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	-	-	-	-	3	3	3	-	-
C02	-	-	-	-	3	3	3	-	-
C03	-	-	-	-	3	3	3	-	-
C04	-	-	-	-	3	3	3	-	-
C05	-	-	-	-	3	3	3	-	-
C06	-	-	-	-	3	3	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Integrated Personality Development Course Workbook-1	IPDC Team, Swaminarayan Aksharpith, Shahibaug, Ahmedabad- 4, India, 2nd Edition 2021.	13: 978-81-7526-702-2
2	Wings of Fire: An Autobiography	A.P.J. Abdul Kalam, Arun Tiwari (Contributor), Universities Press, 67th Edition 2023	13: 978-817371466
3	The Wit & Wisdom of Ratan Tata	Ratan Tata, Hay House India, January 2016	10: 9789385827297 13: 978-9385827297
4	Chase Your Dreams	Sachin Tendulkar, Hachette India, October 2017	10: 9351951995 13: 978-9351951995

XV e-References:

1. [Julian Treasure: 5 ways to listen better | TED Talk accessed on 7th July, 2023](#)
2. [Listening Statistics: 23 Facts You Need to Hear \(creditdonkey.com\) accessed on 7th July, 2023](#)
3. [Robert Waldinger: What makes a good life? Lessons from the longest study on happiness | TED Talk accessed on 7th July, 2023](#)
4. [The Story Behind the Selfless Love of Ahmedabad's Seva Cafe \(thebetterindia.com\) accessed on 7th July, 2023](#)
5. [What Are Soft Skills? Definition, Importance, and Examples \(investopedia.com\) accessed on 7th July, 2023](#)
6. [Welcome to Mystic India accessed on 7th July, 2023](#)

XVI List of Major Equipment/Machineries with Specification:

1. Desktop Computer, Latest Configuration
2. DLP, Latest Configuration
3. Smart Classroom with internet connection

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. M.B.Daigavane	Principal	Government Polytechnic, Nagpur
2	Mr. Y.K.Chandarana	HoD, Applied Mechanics Engineering	Government Polytechnic, Nagpur
3	Dr. G. K. Awari	HoD, Automobile Engineering	Government Polytechnic, Nagpur
4	Dr. G.V. Gotmare	I/C, Curriculum Development Cell	Government Polytechnic, Nagpur
5	Dr. Megha Machale (Bhelande)	Lecturer in English	Government Polytechnic, Nagpur



(Dr. G.V.Gotmare)
HOD & Chairman PBOS, COMMON



(Dr. G.V.Gotmare)
Member Secretary PBOS, COMMON



Semester

II



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR104H
Course Title	:	Cultural Traditions of India

I Rationale:

Culture and heritage tourism are inter-related, India has a rich culture and heritage, its music, dance arts and fairs and festivals provide a unique experience to the tourist.□

This course will highlight different types of Handicrafts, which are one of the tourist products. Indian Music, Dance, Fair and Festivals, Forts and Palaces attract number of tourist to India. This course will make them aware of the tourism potential of the cultural heritage that India is endowed with.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Become culturally sensitive and respect diversity in travel interactions.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Appraise various Indian festivals.

CO2: Appraise various Indian fairs.

CO3: Classify different kind of Indian handicraft.

CO4: Classify different dances of India and their significance in tourism development.

CO5: Appraise various forms of Indian Music & musical instruments of India.

CO6: Illustrate museums.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	-	2	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	-	-	-	-	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Indian Festivals	1a	Appraise importance of festivals in tourism.	1.1	Calendar Festivals: Pongal, Holi, Janmashtami, Ganesh Chaturthi: Maharashtra, Durga Puja: West Bengal, Navaratri, Dussehra, Baisakhi: Punjab, Bihu: Assam, Hemis Festival: Ladakh, Jammu & Kashmir, Rath Yatra: Orissa	CO1
	1b	Differentiate between organized and calendar festivals.	1.2	Organised Festivals: Goa Carnival: Goa, National Kite Festival: Ahmedabad, Gujarat, Elephanta Festival, Mumbai, Kalidas Mahotsav, Ramtek, Nagpur, Ajanta, Ellora, Aurangabad festival, Khajuraho Festival.	
	1c	Justify the efforts made to Preserve the festival of India.	1.3	Preserve the festival of India.	

UNIT II: Indian Fairs	2a	Appraise importance of fairs in tourism.	2.1	Traditional and Religious Fair in India: Kumbh Mela, Nehru Trophy Boat Race, Kerala, Pushkar Fair, Rajasthan Surajkund, International Crafts Mela, Sonapur Cattle Fair, Baneshwar Fair, Rajasthan.	CO2
	2b	Justify the efforts made to Preserve the Fairs of India.	2.2	Preserve the Fairs of India.	
UNIT III: Indian Handicrafts	3a	Illustrate the different kinds of Indian handicraft.	3.1	Handicrafts style.	CO3
	3b	Appraise the Importance of Handicraft in Tourism.	3.2	Fabric handicrafts and its types.	
	3c	Distinguish between Fabric Handicraft and Carving.	3.3	Carving : stone, ivory, metal, wood.	
	3d	Classify Handicraft.	3.4	Clay handicrafts, Fine Arts.	
	3e	Justify the efforts made for Preservation of Handicrafts of India.	3.5	Preservation of Handicrafts of India.	

UNIT IV: Dances of India	4a	Appraise all dance form of India with its feature.	4.1	Classical Dances Types: (History, Style, Costume, Famous Exponents, Dance Festivals) Bharatnatyam, Kathak, Kathakli, Odissi, Manipuri, Kuchipudi.	CO4
	4b	Classify Hindustani and Carnatic Dance.	4.2	Folk dances of India: Bhangra, Giddha, Bihu, Lavni, Ghoomar, Garbha, Chari, chhau, Karagam.	
	4c	Justify the efforts made for Preservation of Dances of India.	4.3	Preservation of Dances of India.	
UNIT V: Indian Music	5a	Appraise the importance of Indian music in life and tourism industry.	5.1	Indian Music : (History, Style, Costume, Famous Exponents, Music Festivals) Types: Hindustani & Carnatic Music.	CO5
	5b	Differentiate the musical instruments.	5.2	Concepts of Raga and Taal (Names of at least five Ragas).	
	5c	Classify Raga.	5.3	Musical Instrument: Two exponents of each, Wind- Flute, Shehnai, String- Sitar, Vina, Percussion- Tablas, Mrudangum.	
	5d	State the efforts made for Preservation of Indian Music.	5.4	Preservation of Indian Music.	
UNIT VI: National Museums	6a	Illustrate Characteristics and special features of museum in tourism.	6.1	Museums: National Museum: Delhi, Rail Museum: Delhi, Chatrapati Shivaji vastu sangralaya / Prince of Wales: Mumbai, Victoria Memorial Museum: Kolkatta, Salarjung Museum: Hyderabad, Textile Museum: Ahmadabad.	CO6
	6b	Appraise the importance of Museum in Tourism.	6.2	Importance of museum in Indian Tourism.	
	6c	Justify the efforts made for Preservation of National Museums.	6.3	Preservation of National Museums.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)	Hours	Aligned COs
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VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a report on any one temple with details of historical background,
2. Prepare a report on classical dances of India which indicate different dance
3. Prepare a report on fairs and festivals celebrated in Maharashtra and present
4. Prepare a report on of all monuments which indicate British architecture with
5. Suggest innovative ideas to attract and to have the participation of tourists
6. Visit an organized festival and prepare a report.
7. Visit a fair and prepare a report.
8. Visit Handicraft exhibition and prepare a report.
9. Observe various dance forms and note down your observations.
10. Attend a musical festival/concert and note down the details.
11. Visit a museum and prepare a report.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Indian Festivals	12	C	02	06	06	14
			O	02	06	00	8
2	Indian Fairs	8	C	02	04	04	10
			O	00	06	00	6
3	Indian Handicrafts	8	C	00	08	04	12
			O	02	04	00	6
4	Dances of India	14	C	02	04	06	12
			O	00	04	04	8
5	Indian Music	8	C	02	04	04	10
			O	00	00	04	4
6	National Museums	10	C	02	06	04	12
			O	00	04	04	8
Total		60	C	10	32	28	70
			O	4	24	12	40

*C - Compulsory

O - Optional

*R - Remember

U - Understand

A - Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	4R2	5R2	6R2	1R2	3R2	5	7
2	2U4	3U4	3U4	3U4	6U4			3	5
3	4U4	5U4	2A4	4U4	4A4			3	5
4	3A4	5A4	6A4	5A4	6A4			3	5
5	1U6	6U6	1U6					2	3
6	1A6	4A6	2U6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R - Remember

U - Understand

A - Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question -Remember, Marks - 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):**XII Scheme of Self-Learning Summative Assessment (SA):**

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PS01	PS02
C01	3	-	-	-	3	-	3	3	-
C02	3	-	-	-	3	-	3	3	-
C03	3	-	-	-	3	-	3	3	-
C04	3	-	-	-	3	-	3	3	-
C05	3	-	-	-	3	-	3	3	-
C06	3	-	-	-	3	-	3	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Festivals and Holiday of India	P. Thomas, Taraporevala & Sons, 1984	13: 9780906216835
2	Festivals of India	Dirtor, National Book Trust, New Delhi, India, 1982	13: 9788171817559
3	Indian Mythology	Veronica Lons, , Published by Littlehampton Book Services Ltd, 1967	10: 0600023699 13: 9780600023692
4	The Splendour of Indian Dance	Mohan Khokar, Himalayan Books, NewDelhi, 1988	10: 8170020026 13: 9788170020028
5	Iconography of the Hindus, Buddhists and Jains	R. S. Gupte, Latest, D.B. Taraporevala& Sons Co. Pvt. Ltd. Mumbai	10: 0865900280 13: 9780865900288
6	Cultural Tourism of India	S. P. Gupta, Krishna Lal, Indraprashtara Museum of Art and Archeology, New Delhi, 2002	10: 81-7132245-6
7	Foundations of Indian Culture	Kalika Prasad Tiwari, Pointer Publishers, Jaipur, India, 2001	10: 81-7132-250-6

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1. <http://www.india-tourism.net/fairs-festivals.htm>, accessed on 20 June 2023
2. <http://www.walkthroughindia.com/walkthroughs/top-5-famous-museums-of-india/> accessed on 20 June 2023
3. https://en.wikipedia.org/wiki/List_of_Indian_dances accessed on 06 July 2023
4. <http://www.mapsofindia.com/maps/crafts/> accessed on 06 July 2023

XVI List of Major Equipment/Machineries with Specification:

1. NIL

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P. P. Virkhare	HoD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR105H
Course Title	:	International Travel Geography

I **Rationale:**

Travel professionals use Travel geography every day. It comprises a survey of the countries of the world from a tourism perspective. It focuses on the political and physical aspect of the world geography. For this, knowledge of the location of countries & region wise division is essential. In this course the students will acquire the basic knowledge required to provide timely & accurate service to the customers.

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Competence in having in-depth knowledge of Geographical and Political features of the world in general.

III **Course Outcomes (COs):**

After completing this course students will be able to:

CO1: Identify the importance and types of geographies and study of maps.

CO2: Identify world climate zones.

CO3: Calculate Travel time and Flying Times by identifying world time zones.

CO4: Identify Political divisions of the world.

CO5: Identify Physiographic divisions of the world.

CO6: Locate various places of tourist importance on a map.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	2	2	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	20	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Introduction to Travel Geography	1a	Illustrate the importance of geography to a travel agent.	1.1	Concept and types of Geography, Importance of Geography in tourism.	CO1
	1b	Locate the important longitudes and latitudes on the map.	1.2	Earth as a planet and movements of earth, Longitudes and Latitudes.	
	1c	Locate Continents and Oceans on the map.	1.3	Continents and Oceans.	
UNIT II: World Climate Zones	2a	Categorize the types of Climate Zones.	2.1	Climate zones : Tropical, Dry, Mesothermal & Micro thermal, Polar.	CO2
	2b	Identify places as per climate zones of the world.	2.2	Understanding weather reports.	
	2c	Interpret weather reports.	2.3	Impact of weather and climate on Tourist destinations.	

UNIT III: World Time Zones & Travel Time	3a	Recognize world Time Zones.	3.1	World time zone & Travel time, Standard Time & Daylight Saving Time.	CO3
	3b	Convert 24 Hour Clock and AM / PM.	3.2	24 hrs. time clock VS Am Pm Clock.	
	3c	Calculate elapsed travel times and Flying Time.	3.3	Definition and usage International date line, Calculating Elapsed travel Time between selected destinations.	
UNIT IV: World Political Divisions	4a	Locate the capital of important countries on map.	4.1	Countries of the world with 2 letter codes.	CO4
	4b	Locate the key Cities and countries.	4.2	Capitals, Important cities and airport codes.	
	4c	Identify the important currencies of the world.	4.3	Currencies and codes.	
	4d	Identify Major Airlines of the world and codes.	4.4	Major Airlines of the world and codes.	
UNIT V: World Physical Divisions	5a	Define various terms related to World Physiographic Regions	5.1	Definitions with Examples of Physiographic Regions. Oceans, Seas, Rivers and lakes, Mountains, Glaciers and plateaus, Deserts and plains, Waterfalls and Glaciers, Forests, deltas.	CO5
UNIT VI: Understanding Maps	6a	Use various types of maps.	6.1	Types of maps.	CO6
	6b	Read the given map.	6.2	Map reading.	
	6c	Types of mapsPlot political and physical regions of the world.	6.3	Map Plotting of the political regions of the world, Map Plotting of the Physical regions of the world.	
	6d	Locate various cities and countries on given map.	6.4	Countries and cities of tourist importance.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Locate a place on the map using the Longitudes and latitudes.	2#	CO1
II	2	Read and Analyze Weather maps from the Internet.	2#	CO2
III	3	Calculate Travel time and Flying Times.	2#	CO3
IV	4	Prepare a list of the Best Airlines of the world with their taglines.	2#	CO4
IV	5	Plot on the world map Important Countries and capitals.	2#	CO4
IV	6	Use Internet to convert the Various currencies to Indian Rupees.	2#	CO4
IV	7	Plot on the map the Important Physical features of the world.	2#	CO4
V	8	Prepare a Chart with the Highest, Biggest, largest Mountains, Rivers, Lakes, Deserts. (Part I)	2#	CO5
V	9	Prepare a Chart with the Highest, Biggest, largest Mountains, Rivers, Lakes, Deserts (Part II)	2#	CO5
V	10	Prepare a Chart with the Highest, Biggest, largest Mountains, Rivers, Lakes, Deserts. (Part III)	2	CO5
V	11	Plot the important cities of tourist Interest on world map and use separate maps for all the Continents. (Part I)	2#	CO5
VI	12	Plot the important cities of tourist Interest on world map and use separate maps for all the Continents (Part II)	2	CO6
VI	13	Prepare a Presentation on the natural and manmade wonders of the world with their locations. (Part I)	2#	CO6
VI	14	Prepare a Presentation on the natural and manmade wonders of the world with their locations. (Part II)	2#	CO6
VI	15	Prepare a Presentation on the natural and manmade wonders of the world with their locations. (Part III)	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a continentwise chart of countries, capitals, currency, airlines and their respective codes.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/ O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Introduction to Travel Geography	6	C	04	04	00	8
			O	02	04	00	6
2	World Climate Zones	10	C	02	04	00	6
			O	00	04	00	4
3	World Time Zones & Travel Time	12	C	02	08	06	16
			O	00	00	06	6
4	World Political Divisions	12	C	02	12	06	20
			O	00	08	04	12
5	Impacts of Tourism	12	C	00	04	06	10
			O	02	04	00	6
6	Understanding Maps	8	C	00	04	06	10
			O	00	00	06	6
Total		60	C	10	36	24	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	1R2	2R2	3R2	4R2	1R2	5R2	5	7
2	1U4	2U4	3U4	1U4	2U4			3	5
3	4R4	4U4	4U4	4U4	4U4			3	5
4	5U4	6U4	3A4	5U4	4A4			3	5
5	3A6	4A6	3A6					2	3
6	5A6	6A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	3	-	3	3	3
C02	3	-	-	-	3	-	3	3	3
C03	3	-	-	-	3	-	3	3	3
C04	3	-	-	-	3	-	3	3	3
C05	3	-	-	-	3	-	3	3	3
C06	3	-	-	-	3	-	3	3	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Travel Geography	Dr Rosemary Burton , Pearson Education , 2nd Edition, 1994	10: 0273602039 13: 9780273602033
2	Geography of Travel and Tourism	Boniface, B.G., Cooper, Butterworth Heinemann, 2nd Edition 1994	10: 0750616709
3	World Geography of Travel and Tourism: A Regional Approach	Alan Lew, C. Michael Hall, Dallen J. Timothy, Oxford , 1st Edition, 2008	13: 978-0-7506-7978-7 10: 0-7506-7978-6
4	Geography and Air Transport	Brian Graham, Wiley, 1st Edition, 1995	10: 0471957577 13: 978-0471957577

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1. <http://travel.nationalgeographic.com/travel/> , accessed on 21st June, 2023
2. <http://www.worldatlas.com/> , accessed on 11st July, 2023
3. <http://www.geography.learnontheinternet.co.uk/topics/climatezones.html> , accessed on 21st July, 2023

XVI List of Major Equipment/Machineries with Specification:

1. World Political map.
2. World Physical map.
3. Globe.
4. Computers with Internet.
5. LED projector.
6. OAG Extracts.
7. World Clock.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Expert Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
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GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR106H
Course Title	:	Tourism in Maharashtra

I Rationale:

Maharashtra is famous for its varieties of attractions in terms of destinations. People around the world flock towards this enigmatic land to savour its bio-diversity. This course intends to make the students familiar with the flora and fauna, historical monuments and other places of tourist interest in Maharashtra.

They will also appreciate the wide variety of tourist attractions in the form of wildlife sanctuaries, Parks, hill stations, Beach resorts.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Comprehend knowledge of various travel destinations, their attractions, and cultural aspects.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Classify the physical and political features of Maharashtra.

CO2: Illustrate the historical, cultural and Architectural background of Maharashtra.

CO3: Appraise the various pilgrimage places of Maharashtra.

CO4: Practice adventure and nature tourism in Maharashtra.

CO5: Execute wildlife tourism in Maharashtra.

CO6: Appraise the various tourist places of Vidarbha.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Geography	1a	Illustrate and locate on map physical division of Maharashtra.	1.1	Landforms : Mountain ranges, Hills, Plateau. Water Bodies : Sea, Rivers, Lakes, Waterfalls.	CO1
	1b	Illustrate and locate on map important cities of Maharashtra.	1.2	Important cities with their location, culture, life style, tourist attractions Mumbai, Nagpur, Pune, Nashik, Chhatrapati Sambhajnagar.	
	1c	Appraise the various airports, climate and major transport system in Maharashtra.	1.3	Airports, Climate, Transport.	

UNIT II: Historical, Cultural and Architectural Background	2a	Appraise the Historical Background of Maharashtra.	2.1	Maurya, Vakataka, Rashtrakuta, Satavahana, Yadav, Mughal, Maratha, Sultanat, British, Post-Independence.	CO2
	2b	Appraise the Cultural Background of Maharashtra.	2.2	Music, Dance, Cuisine, Malkhamb, Kho-kho, Hututu, Handicraft, Fairs and Festivals.	
	2c	Demonstrate the Architectural Background of Maharashtra.	2.3	Important temples, Museums, Forts Raigarh, Pratapgarh, Sindhudurg, MurudZanzira, Caves: Ajanta, Ellora, Elephanta (Gharapuri), World Heritage sites, Gothic Architecture, Gateway of India.	
UNIT III: Pilgrimage Tourism	3a	A Classify the various pilgrimage places of Maharashtra.	3.1	Nasik, Shirdi, Shegaon, Kolhapur, Mahur, Tuljapur, Wani, Pandharpur, Nanded, AshtaVinayak, Haji Ali.	CO3
UNIT IV: Nature and Manmade Tourism	4a	Appraise the various beaches of Maharashtra.	4.1	Konkan Coast: Ganpatipule, Alibaug, Tarkarli, Malwan, Sindhudurg, Diveagar, Amboli, Bhandardhara, Harihareshvar.	CO4
	4b	Appraise the various hill Station of Maharashtra.	4.2	Hill Stations: Mahabaleshwar, Panchgani, Matheran, Lonavala, Khandala, Igatpuri, Dapoli, Chikhaldara.	
	4c	Appraise the various Amusements Parks of Maharashtra.	4.3	Amusement Parks: Imagica, Essel World.	
	4d	Practice Wine Tourism, Agro Tourism.	4.4	Wine Tourism, Agro Tourism Places, Amenities.	
	4e	Classify the various home Stays of Maharashtra & the latest trends in tourism.	4.5	Home Stay : Places, Amenities, Classification & Deccan Odyssey Train, Cordelia Cruise, Houseboat in Kankan area.	

UNIT V: Wildlife Tourism	5a	Practice Wildlife Tourism in Maharashtra.	5.1	Tadoba Andhari Tiger Reserve, Melghat Tiger Reserve, Pench Sillari Tiger Reserve, Umred Karhandla Tiger Reserve, Navegaon Nagzira Tiger Reserve, Tipeswar Wildlife Sanctuary, Bhimashanka Wildlife Sanctuary, Sanjay Gandhi National Park, Borivali.	CO5
	6a	Classify the geographical features and historical background of Vidarbha.	6.1	Geography, History	CO6
UNIT VI: Vidarbha	6b	Demonstrate the various sightseeing places of important cities.	6.2	Nagpur, Wardha, Chandrapur.	
	6c	Classify the various pilgrimage places of Vidarbha.	6.3	Pilgrimage places: Ramtek, Koradi, Amravati, Chandrapur, Ambhora, Tajudin Baba, Churches of Nagpur, Chandrapur, Markanda. Ashta Vinayak of Vidarbha: 1) Shri Chintamani Ganapati: Kalamb, 2) Shri Ekachakra Ganapati : Kelzar, 3) Shri Atharabhuja Ganapati : Ramtek, 4) Shri Panchanana : Pavani, 5) Shri Gaurala Ganapati: Bhadravati, 6) Shri Bhurshund Ganapati: Bhandara, 7) Shri Shami Vighnesh Ganapati: Aadasa, 8) Shri Varad Vinayaka: Nagpur.	
	6d	Appraise the various historical places of Vidarbha.	6.4	Sewagram, Anandvan, Hemalkasa, Vinjasani Caves Bhandravati.	
	6e	Appraise the places of natural tourism in Vidarbha.	6.5	Chikhaldhara, Hajra Waterfalls, Lonar Crater, Kachargad Caves, Vindhyasini Caves.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Locate on the Map the physical features of Maharashtra.	2#	CO1
I	2	Locate on the Map the important cities of Maharashtra.	2#	CO1
II	3	Prepare a chart of the historical background of Maharashtra.	2#	CO2
II	4	Prepare a project of the various art and craft of Maharashtra.	2#	CO2
II	5	Prepare a project of various caves of Maharashtra.	2#	CO2
II	6	Prepare a project on various Cuisine of Maharashtra.	2#	CO2
III	7	Prepare a Power Point Presentation of various pilgrimage places of Maharashtra.	2#	CO3
IV	8	Prepare a Power Point Presentation of various Hill Stations of Maharashtra.	2#	CO4
V	9	Prepare a Power Point Presentation of various wildlife parks of Maharashtra.	2#	CO5
V	10	Prepare a Power Point Presentation of tourist places of Vidarbha.	2#	CO5
VI	11	Visit to a pilgrimage place of Vidarbha and prepare a report. (Part I)	2#	CO6
VI	12	Visit to a pilgrimage place of Vidarbha and prepare a report. (Part II)	2	CO6
VI	13	Visit to any Museum of Vidarbha and prepare a report. (Part I)	2#	CO6
VI	14	Visit to any Museum of Vidarbha and prepare a report. (Part II)	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Search unexplored geographical features which can become tourist attraction.
2. Prepare a micro project on historical features (place associated with historical event) that can be promoted as tourist attraction.
3. Prepare a chart on cultural and architectural places in Maharashtra.
4. Visit a pilgrimage place and prepare a report.
5. Prepare a list of manmade and natural tourist attractions of Maharashtra with their location and specialty.
6. Prepare a list of manmade and natural tourist attractions of Vidarbha.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/0	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Geography	5	C	00	08	00	8
			0	02	04	00	6
2	Historical, Cultural and Architectural Background	6	C	04	06	00	10
			0	00	10	00	10
3	Pilgrimage Tourism	6	C	02	04	04	10
			0	02	00	04	6
4	Nature and Manmade Tourism	6	C	00	06	04	10
			0	00	04	00	4
5	Wildlife Tourism	10	C	02	06	08	16
			0	00	00	06	6
6	Vidarbha	12	C	02	06	08	16
			0	00	04	04	8
Total		45	C	10	36	24	70
			0	4	22	14	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	2R2	2R2	3R2	5R2	6R2	1R2	3R2	5	7
2	1U4	1U4	3U4	1U4	2U4			3	5
3	3A4	4A4	5A4	4U4	6U4			3	5
4	5A4	6A4	6A4	3A4	6A4			3	5
5	2U6	4U6	2U6					2	3
6	5U6	6U6	5A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	-	-	3
C02	3	3	3	2	-	-	3	3	3
C03	3	3	3	2	-	-	3	3	3
C04	3	3	3	-	2	-	3	3	3
C05	3	3	3	-	2	-	3	3	3
C06	3	3	3	-	2	-	3	3	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Tourist India Hospitality Services	Ratandeep Singh, Kanishka Publishers, 1996	10: 81-7391-147-9
2	India A Travel Guide	Aruna Deshpande, Indiana Publishing House, 2007	10: 81-8408-175-8
3	Lonely Planet India	Lonely Plannet publications pvt ltd, August 2007	10: 1-86450-246-0
4	Facets of Indian Culture	Mridula Ganguly, Gunjan Srivastava, Vikram Gupta, Kalpana Rajaram, Spectrum Books Pvt Ltd, 1992	10: 81-7930-477-9
5	Footprints India	Footprint Handbook, 2001	10: 0-658-01151-0
6	Local Food and Community Empowerment Through Tourism Vol. I, II	Eureka Publications	13: 978-93-91260-29-3
7	All India Travel Companion	Asia Publication Company, 2006	10: 81-7942-019-1

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1. <https://www.maharashtratourism.gov.in/> accessed on 21June , 2023
2. <https://www.mtdc.co/> accessed on 22June , 2023
3. <https://www.maharashtratourism.net/> accessed on 21 July, 2023
4. <http://www.fdcn.nic.in/> accessed on 21 July, 2023

XVI List of Major Equipment/Machineries with Specification:

1. Maharashtra Political map.
2. Maharashtra Physical map.
3. Globe.
4. Computers with Internet.
5. LED projector.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
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2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Expert Lecturer	RSTM Nagpur University, Nagpur



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR107H
Course Title	:	Basic Guide Training

I Rationale:

Tourist guide's job is important for the tourism industry. They serve as a public relation representative for his/her particular site, city, region and country. They guide tours to different places for tourist groups, and tell tourist about the different museums, heritage sites, archaeological and religious sites, art galleries.

This course highlights various aspects of guide and their role and responsibilities, and also introduced how to become a perfect tourist guide.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Commit to continuous learning and professional development in the travel and tourism field.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Identify the different types of tourist guides.

CO2: Identify the roles and responsibilities of guide.

CO3: Resolve service problems of customer requirements.

CO4: Deliver a commentary to tour group.

CO5: Apply the historical knowledge while guiding.

CO6: Experience virtual visits to historical sites.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Tourist Guide	1a	Define a Tourist Guide.	1.1	Definition of Tour Guide	CO1
	1b	Classify tourist guides on the basis of levels.	1.2	Categories: Regional tourist guide, State -level Tourist guide.	
	1c	Classify tourist guides on the basis of location.	1.3	Classification / Types of Tour Guides, Museum guide, wildlife Guide, City Guide, Monument tourist guide.	
	1d	Follow the expected behavior of tourist guide	1.4	Behavior of tourist guide.	

UNIT II: Role and Responsibilities of a Tourist Guide	2a	Identify the role and responsibilities of tourist Guide.	2.1	Roles of Tour Guide: Good communication with tourist, knowledge of art and architecture.	CO2
	2b	Acquire the Skills required for tourist guide.	2.2	Skills required: Leadership, Factual Knowledge, Presentation Skills, and Grooming.	
	2c	State Responsibilities of tour Guide.	2.3	Tourist Guide Personality, Competencies. Responsibilities of Tour Guide.	
	2d	Acquire the qualities of ideal tourist guide.	2.4	Qualities of an Ideal Tour Guide, Tour Guiding as a Profession	
	2e	Practice ethics while working as a tourist guide.	2.5	Ethics of a Tourist guide.	
UNIT III: Handling Customers	3a	Identify the types of customers complaints.	3.1	Handling customer complaints related health, loss of passport, loss of funds and tickets, lost or damaged baggage.	CO3
	3b	Solve the problems of customers.	3.2	Giving solutions of problems.	
UNIT IV: Preparing for a tour Guide	4a	Obtain Licenses and certificates	4.1	Requirements to become a tour guide.	CO4
	4b	Use good vocabulary.	4.2	Delivery of Commentary – clear communication, use of simple vocabulary, giving examples if required.	
	4c	Plan commentary for special tourist	4.3	The preparation of the Commentary-Introduction, site information, background of the place, summaries the commentary and highlight the special features.	
	4d	Use different techniques of tour guiding.	4.4	Techniques of Tour Guiding-maintaining good relationship with tourist.	

UNIT V: History and Architecture of Maharashtra	5a	Describe the historical background of tourist places of Maharashtra.	5.1	History of Maharashtra, the background of each tourist place.	CO5
	5b	Identify the types of architecture.	5.2	Types Architecture: Hindu Architecture, Buddhist architecture, Jain Architecture, Islamic Architecture, British Architecture.	
	5c	Describe given type of art work.	5.3	Art: Himroo shawls, Bidri work, Paithani.	
	5d	Identify the different cuisines of Maharashtra.	5.4	Cuisines: Varhadi cuisine, Saoji, Kolhapuri and Kokan cuisine.	
	5e	Describe fairs and festivals.	5.5	Fairs and Festivals: Ganesh chaturthy, Diwali, Dassera, Marbat, Pateti, Dahi Handi.	
UNIT VI: Virtual Visits	6a	State the history of caves, Pilgrimage and Archaeological sites.	6.1	Caves: Visit any one World Heritage site eg. Ajanta , Ellora, Elephanta.	CO6
	6b	Describe tourist places related to pilgrimage and archaeological sites.	6.2	Pilgrimage: Ramtek, Ashtavinayahs, Heritage Walk in an around Nagpur.	
	6c	Justify the significance of Archeological sites.	6.3	Archeological sites: Mansar, Markanda, Nagardhan Fort.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Introduce your self as a tourist guide.	2#	CO1
I	2	Perform mock demonstration to Change in behavior according to the nature of the tourist.	2#	CO1
II	3	Perform a role play to deliver skills like leadership, presentation skills and grooming.	2#	CO2
II	4	Prepare a presentation on ethics of a tourist guide.	2#	CO2
III	5	Identify the types of coustomer complaints through role play. (Part I)	2#	CO3
III	6	Identify the types of coustomer complaints through role play. (Part II)	2	CO3
III	7	Demonstrate the solutions to the coustomer complaints.	2#	CO3
IV	8	Prepare a commentry to describe the tourist place.	2#	CO4
IV	9	Deliver a commentry according to nature of the tourist.	2#	CO4
IV	10	Demonstrate different techniques of tour guiding.	2#	CO4
V	11	Prepare visit report to any Architectural site. (Part I)	2#	CO5
V	12	Prepare visit report to any Architectural site. (Part II)	2#	CO5
V	13	Prepare visit report to any Architectural site. (Part III)	2	CO5
VI	14	Perform guide role by visiting to Pilgrimage place. (Part I)	2#	CO6
VI	15	Perform guide role by visiting to Pilgrimage place. (Part II)	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Depict the the difference between guides and escorts with the help of power point presentation.
2. Prepare a chart shocasing the history of any aarchaeological site.
3. Create an audio visual for any any tourist place of Nagpur.
4. Prepare a tour guide pre-tour planning checklist.
5. Intreprete a code of conduct for a tpurist guide by using power point presentation.
6. Prepare a cse study of development of any historical site near Nagpur.
7. Suggest solutions to coustomer complaints on tour.
8. Present the importance of grooming for a tourist guide.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Tourist Guide	5	C	04	04	00	8
			O	00	04	00	4
2	Role and Responsibilities of a Tourist Guide	5	C	00	08	06	14
			O	00	06	04	10
3	Handling Coustomers	7	C	00	04	06	10
			O	02	04	00	6
4	Preparing for a tour Guide	8	C	00	04	08	12
			O	02	00	04	6
5	History and Architecture of Maharashtra	8	C	04	06	04	14
			O	00	04	04	8
6	Virtual Visits	12	C	02	04	06	12
			O	00	00	06	6
Total		45	C	10	30	30	70
			O	4	18	18	40

*C - Compulsory

O - Optional

*R - Remember

U - Understand

A - Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	1R2	5R2	5R2	6R2	3R2	4R2	5	7
2	1U4	2U4	2U4	1U4	3U4			3	5
3	3U4	6U4	4U4	2A4	4A4			3	5
4	4A4	4A4	5A4	5U4	5A4			3	5
5	5U6	2A6	2U6					2	3
6	3A6	6A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R - Remember

U - Understand

A - Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question -Remember, Marks - 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	5
2	Overall presentation of given assignment	5
3	Viva voce	10
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	-	3	-	-	-	-	-	-	3
C02	-	3	-	-	-	-	-	-	3
C03	-	3	-	-	-	-	-	-	3
C04	-	3	3	-	3	3	3	3	3
C05	-	3	3	-	3	3	3	3	3
C06	-	3	3	-	3	3	3	3	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Travel India: A Complete Guide to Tourists	Dr. Chitra Garg, Lotus Press, 2007	10: 81-8382-084-0
2	Tourism Operations and Management	Sunetra Roday, Archana Biwal, Vandana Joshi, Heritage Publishers & Distributors Pvt. Ltd.	13: 978-0-19-806001-7 10: 0-19-806001-7
3	Tourist Guides and Tour Operations	Yashwantrao Chavan Maharashtra Open University	—
4	Incredible India –Tourist and Travel Guide	Dr. R.P.Arya, Jitendra Arya, Dr. Gayatri Arya, Anshuman Arya, Indian Map Services (IMS)	13: 9788189875725

XV e-References:

1. <http://www.inc.com/guides/2010/04/handling-customer-complaints.html> , accessed on 22 December, 2023
2. <http://anandasanyal.blogspot.in/2010/02/tour-guide-and-their-role.html> , accessed on 22 December, 2023
3. http://www.victorianartinbritain.co.uk/The_Responsibilities_of_a_Tour_Guide, accessed on 22 December, 2023
4. <https://cultural.maharashtra.gov.in/english/gazetteer/aurangabad/chap19/STYLES%20%20OF%20ARCHITECTURE.htm>, accessed on 22 December, 2023
5. <http://www.maharashtratourism.net/architecture/index.html>, accessed on 22 December, 2023
6. http://www.vetres.net.au/product_files/5374PromoBW.pdf, accessed on 22 December, 2023

XVI List of Major Equipment/Machineries with Specification:

1. Voice Amplifier

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Expert Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/AE/CM/IT/AI ML/MC/PK/MT/TX/TR
Course Category	:	AEC
Course Code	:	EN151H
Course Title	:	Business Communication

I **Rationale:**

Professional Communication is essential for smooth and efficient functioning of any industry or business. The drafting skills and application of business communication principles are essential for engineering professionals. It plays a vital role to help professionals instruct, guide and motivate peers/ subordinates to achieve desired goals at work place. Strong Communication skills contribute to career growth and opportunities. This course focuses to enrich the professional communication skills for effective presentation both in written and oral forms at workplace.

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Communicate technical information clearly and effectively.

III **Course Outcomes (COs):**

After completing this course students will be able to:

CO1: Communicate effectively(oral/written) in formal situations.

CO2: Develop and exhibit language skills in professional interactions.

CO3: Write job application with resume/CV and compose effective e-mails.

CO4: Draft official letters.

CO5: Draft business correspondence with minimal errors.

CO6: Organize formal meetings and maintain official records.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	2	-	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	-	-

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Types of communication	1a	-	1.1	Professional communication - Definition, importance, relevance.	CO1
	1b	-	1.2	Principles/7 C's of Professional communication: Clarity, Conciseness, correctness, coherent, concrete, courteous and complete.	
	1c	-	1.3	Types of communication- Verbal: Written - oral, formal - informal, internal -external, vertical - upward, downward, horizontal, diagonal and Non-verbal.	
	1d	-	1.4	Non-verbal communication - body language: gestures, postures, eye contact, facial expression. Non-verbal codes - dress and appearance, colors, sounds, signs, proxemics, chromatics, artifacts.	

UNIT II: Communication in Practice	2a	-	2.1	Receptive Productive Skills: Receptive language skills- Listening and reading, importance, Difference between listening & Hearing, Types of listening a) Active listening b) Passive listening c) Selective listening, tips to improve receptive skills, qualities of a good listener, scanning & skimming a text, tips to improve receptive skills.	CO2
	2b	-	2.2	Productive language skills- speaking and writing, importance, how receptive skills help to develop productive skills, tips to improve productive skills.	
	2c	-	2.3	Techniques of Note taking, Types of notes taking-Mind Mapping, Flowcharts.	
UNIT III: Formal Drafting	3a	-	3.1	Drafting Letters: Importance of formal drafting, parameters of formal drafting.	CO3
	3b	-	3.2	Job application -Format Resume writing- Differentiate between CV, Bio data and Resume. Leave application: format, use of appropriate language.	
UNIT IV:	4a	-	4.1	Official Drafting: Notice & Circular - difference between notice & circular, purpose of drafting, tips to draft in precise language.	CO4
	4b	-	4.2	Email: Email etiquettes, drafting- email with proper salutation, subject line, cc, bcc, attachments	

UNIT V: Business letters	5a	-	5.1	Business Letters: Enquiry letter and Order letter: format, use of technical language, reply to enquiry and order letter.	CO5
	5b	-	5.2	Complaint letter: format, use of polite language, reply to complaint letter.	
UNIT VI: Minutes & Report Writing	6a	-	6.1	Agenda, Minutes & Report Writing: Preparing checklist to organize official meeting, Drafting agenda: format, sequence of activities.	CO6
	6b	-	6.2	Drafting minutes of meeting: Importance, format, identifying important happenings.	
	6c	-	6.3	Report writing: Investigation /Survey report: format, purpose, techniques.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Enlist advantages and limitations of written/oral communication. Prepare a case study on limitations of written/oral communication and suggest remedies for the same.	2#	CO1
I	2	Undertake a role play/group discussion using suitable body language and non-verbal codes of communication.	2	CO1
I	3	Give a presentation / Seminar using 7 C's of Communication.	2#	CO1
II	4	Listen to motivational audios in the language lab and make notes of it.	2	CO2
II	5	Draw flow chart and mind map for any topic related to the curriculum.	2#	CO2
III	6	Draft a leave application letter to an authority following the rules of drafting.	2#	CO3
III	7	Prepare a Job Application in response to an advertisement following the steps of official drafting.	2#	CO3
III	8	Prepare a Resume highlighting the academic and professional details of the individual.	2#	CO3
IV	9	Draft notices for the organization and events mentioned. (04-topics)	2#	CO4
IV	10	Draft Circulars for the organization and events mentioned (04-topics).	2	CO4
IV	11	Type formal E-mails using email etiquette (04-topics).	2#	CO4
V	12	Draft an Enquiry and order letter for the organization as a designated authority.	2#	CO5
V	13	Draft a complaint letter for various situation (02-topics).	2#	CO5
VI	14	Participate in Group Discussion.	2#	CO6
VI	15	Face mock interview arranged by your teacher.	2#	CO6
VI	16	Write a detailed report on investigation/survey.	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Types of communication	8	C	-	-	-	0
			O	-	-	-	0
2	Communication in Practice	6	C	-	-	-	0
			O	-	-	-	0
3	Formal Drafting	4	C	-	-	-	0
			O	-	-	-	0
4		4	C	-	-	-	0
			O	-	-	-	0
5	Business letters	4	C	-	-	-	0
			O	-	-	-	0
6	Minutes & Report Writing	4	C	-	-	-	0
			O	-	-	-	0
Total		30	C	0	0	0	0
			O	0	0	0	0

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA): -NA-

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	5
2	Overall presentation of given assignment	10
3	Viva Voce	5
4	Activity	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA): -NA-**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	-	-	-	-	-	-	3	-	-
C02	-	-	-	-	-	-	3	-	-
C03	-	-	-	-	1	-	3	-	-
C04	-	-	-	-	-	1	3	-	-
C05	-	-	-	-	-	1	3	-	-
C06	-	-	-	-	-	-	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Professional Communication Skills	S.R.Pravin, S.Chand Publications.	81-219-2092-02
2	Developing Communication Skills	Macmillan Publications, Revised Edition, 2011	0333929195
3	Business Communication and Soft Skills.	G.S.R.K Babu Rao, Himalaya Publication, First Edition, 2009	978-81-8488-596-5
4	Secret of Face-to-Face Communication.	Peter Urs, Bender, Macmillan Publication	0333937139
5	Technical Communication Principles and Practices	Meenakshi Raman, Prakash Singh, Oxford University Press	0-19-567695-5
6	Effective English Communication	Krishna Mohan, Raman Tata Mc Graw Hills	13978-0-19-566804-9
7	Modern Commercial Correspondence	R.S.Pillai, Bhagwati, S.Chand & Co.	812190519-2

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1. https://en.wikipedia.org/wiki/Business_communication, accessed on 29th July 2021
2. <https://www.indeed.com/career-advice/career-development/types-of-business-letters> , accessed on 29th July 2021
3. <https://in.indeed.com/career-advice/resumes-cover-letters/communication-skills> , accessed on 29th July 2021
4. <https://www.youtube.com/watch?v=jaxgeXPgAz0> , accessed on 29th July 2021

XVI List of Major Equipment/Machineries with Specification:

1. Desktop Computers latest version
2. Headphones
3. Language lab software

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. M. M. Machale	Lecturer in English	Government Polytechnic, Nagpur
2	Dr. Rupali Londhe	Lecturer in English	Government Polytechnic, Nagpur
3	Mr. Nitin Pote	Lecturer in English	Government Polytechnic, Nagpur
4	Mr. Ravindra Suryawanshi	Lecturer in English	NIT Polytechnic, Nagpur
5	Mr. Nitin Pathak	Lecturer in English	Kamptee Polytechnic, Nagpur



(Mr. P. T. Khobragade)
HOD & Chairman PBOS, COMMON



(Dr. G. V. Gotmare)
Member Secretary PBOS, COMMON



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GOVERNMENT POLYTECHNIC, NAGPUR
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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	SEC
Course Code	:	TR152H
Course Title	:	Employability Skills

I Rationale:

This subject is classified under Human sciences subject. It is intended to develop the abilities of the students to work in a group, manage groups, disseminate and discuss required information in the group and manage the task in group effectively and efficiently.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Provide excellent customer service to travellers and tourists.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Coordinate and manage team tasks to complete simulated tourism projects.

CO2: Resolve customer service problems using structured analysis and role-play.

CO3: Create tourism campaigns and events demonstrating innovation and initiative.

CO4: Design and organize tourism activities with effective planning and coordination.

CO5: Demonstrate communication competence in practical customer service situations.

CO6: Apply time management techniques to improve productivity and task efficiency.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
1	-	4	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50	20	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Teamwork Skills	1a	Work in teams.	1.1	Working effectively with people of different ages, gender, race, religion or political persuasion.	CO1
	1b	Identify personal strength.	1.2	Recognizing own strengths and limitations.	
	1c	Identify strength of team members.	1.3	Identifying the strengths of team members.	
	1d	Identify, clarify & performing roles.	1.4	Clarifying team roles and performing agreed tasks.	
	1e	Lead the group, Collect & give feedback, Resolve the conflict.	1.5	Demonstrating leadership as appropriate, Giving and receiving constructive feedback, Resolving difference of opinion.	

UNIT II: Problem Solving Skills	2a	Analyze the problem.	2.1	Defining the problem and contributing factors.	CO2
	2b	Create Solution.	2.2	Developing creative, innovative and/or practical solutions.	
	2c	Apply the strategy.	2.3	Applying strategies to problem solving.	
	2d	Solve the problem alone & in group.	2.4	Solving problems independently and in teams.	
	2e	Make realistic plans, Resolve customer issues.	2.5	Making realistic decisions and actions plans, Resolving customer concerns in relation to complex issues.	
UNIT III: Initiative and Enterprise Skills	3a	Identify opportunities.	3.1	Identifying opportunities not obvious to others.	CO3
	3b	Identify customer's requirement.	3.2	Identifying customer or client requirements.	
	3c	Create innovative solutions, Translate ideas into action.	3.3	Being creative, initiating ideas and innovative solutions, Translating ideas into action.	
	3d	Demonstrate sensitivity	3.4	Demonstrating sensitivities (Political, commercial, environmental, cultural, and so on).	
	3e	Liaison with stakeholders, Market & sell product.	3.5	Liaising with stakeholders and sponsors, Marketing and selling a product or service.	
UNIT IV: Planning and Organisational Skills	4a	Establish Goals.	4.1	Establishing clear and attainable goals and deliverables.	CO4
	4b	Use Quality standards.	4.2	Understanding specifications and quality standards.	
	4c	Manage Time.	4.3	Managing time and priorities - setting milestones.	
	4d	Utilize organization information.	4.4	Collecting, analyzing and organizing information.	
	4e	Take decisions, Manage & delegate tasks.	4.5	Being resourceful, taking initiative and making decisions, Managing tasks - delegating, coordinating, monitoring.	

UNIT V: Learning skills	5a	Manage Learning.	5.1	Managing own learning.	CO5
	5b	Share knowledge & experience.	5.2	Sharing Knowledge and experience in the workplace.	
	5c	Apply learning's.	5.3	Applying learning to 'technical' issues (eg, learning about products and 'people' issues and interpersonal / cultural aspects of work).	
	5d	Open to new ideas.	5.4	Being open to new ideas and techniques.	
	5e	Being Enthusiastic, Prepare to invest time.	5.5	Having enthusiasm for on-going, on & off the job learning, Being prepared to invest time and effort in learning new skills.	
UNIT VI: Self - Management skills	6a	Being visionary.	6.1	Having a personal vision and goals.	CO6
	6b	Evaluate performance.	6.2	Being able to evaluate and monitor Your own performance.	
	6c	Display knowledge & confidence.	6.3	Having knowledge and confidence in your own ideas and vision.	
	6d	Articulate for ideas & vision.	6.4	Articulating your own ideas and vision.	
	6e	Take responsibility, Work ethically & under pressure.	6.5	Taking responsibility, Working ethically & under pressure.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Form a team to complete a simulated tour planning task, assigning roles and responsibilities.	4#	CO1
I	2	Demonstrate group coordination through a cooperative activity like managing a mock travel counter.	4#	CO1
II	3	Perform a role-play to handle a dissatisfied customer at a tourism help desk.	4#	CO2
II	4	Execute a case study analysis in teams, identifying the problem and presenting a solution in a group discussion format.	4#	CO2
II	5	Perform a role-play based on a case study where a customer is facing a serious travel issue, such as a cancelled international flight, lost baggage, or booking error during peak season.	4	CO2
III	6	Organize an event for World Tourism Day, assigning tasks among participants.	4#	CO3
III	7	Develop a creative promotional plan for a tourism campaign, showcasing entrepreneurial thinking.	4	CO3
III	8	Perform role-play a formal pitch meeting to stakeholders, addressing their queries and concerns.	4#	CO3
IV	9	Plan a small travel event (e.g., student tour), listing resources, timelines, and responsibilities.	4#	CO4
IV	10	Conduct a role-play on conflict resolution during team-based event execution.	4#	CO4
V	11	Demonstrate communication skills through a role-play handling guest inquiries at a travel agency.	4#	CO5
V	12	Perform a customer service simulation based on handling booking cancellations and rebookings.	4#	CO5
V	13	Perform a role play to handle a customer interaction by simulating a travel consultation session.	4	CO5
VI	14	Design a weekly planner using time management tools.	4#	CO6
VI	15	Execute a personal productivity log, tracking daily tasks and reflecting on time use.	4#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Plan and document a team-based simulated tour project by assigning roles, coordinating tasks, and reflecting on group collaboration.
2. Construct and analyze customer complaint scenarios, propose practical solutions, and perform a role-play to demonstrate conflict resolution.
3. Develop a creative tourism campaign with digital promotional materials and a written pitch highlighting innovation and appeal.
4. Design a detailed event plan for a travel activity including timeline, resources, budget, and coordination strategy.
5. Record and evaluate mock interactions with customers in different service situations to improve communication skills.
6. Implement and track a personal time management plan using digital tools, logs, and reflections for improved productivity.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/0	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Teamwork Skills	2	C	0	0	0	0
			0	0	0	0	0
2	Problem Solving Skills	2	C	0	0	0	0
			0	0	0	0	0
3	Initiative and Enterprise Skills	3	C	0	0	0	0
			0	0	0	0	0
4	Planning and Organisational Skills	3	C	0	0	0	0
			0	0	0	0	0
5	Learning skills	3	C	0	0	0	0
			0	0	0	0	0
6	Self - Management skills	2	C	0	0	0	0
			0	0	0	0	0
Total		15	C	0	0	0	0
			0	0	0	0	0

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Overall presentation of given assignment	20
3	Viva Voce	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Activity	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	3	3	-	-
C02	3	-	-	-	-	3	3	-	-
C03	3	-	-	-	-	3	3	-	-
C04	3	-	-	-	-	3	3	-	-
C05	3	-	-	-	-	3	3	-	-
C06	3	-	-	-	-	3	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Skills for Employability: A Handbook	Dr. M. Sen Gupta, IP Innovative Publication Pvt. Ltd., 2017	13: 978-81-933819-1-5
2	Employability Skills	Manish Sharma, Neelkanth Publishers, 2020	ASIN: B08M3B2QV7
3	Basic Managerial Skills for All	Mcgrath E.H, Prentice Hall India Learning Private Limited, 2011	13: 978-8120343146

XV e-References:

1. <http://www.uq.edu.au/student-services/learning/stages-group-formation>, accessed on 23 June, 2023
2. <https://www.skillsyouneed.com/interpersonal-skills.html> accessed on 23 June, 2023
3. <https://www.sageautomation.com/blog/what-exactly-is-a-time-management-matrix-and-how-can-it-prevent-maintenance> accessed on 2 July, 2023

XVI List of Major Equipment/Machineries with Specification:

1. NIL

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Expert Lecturer	RSTM Nagpur University, Nagpur



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COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/CM/IT/MT/PK/AE/TR/TX/MK/AI
Course Category	:	VEC
Course Code	:	VE152H
Course Title	:	Advance Personality Development

I **Rationale:**

This course equips students with essential life skills, focusing on well-being, leadership, interpersonal relationships, and citizenship. By integrating ancient wisdom, practical financial literacy, and teamwork skills, students develop a balanced and responsible outlook, supporting both professional success and personal fulfillment. This course aligns with holistic development goals in engineering education, fostering adaptability and resilience for real-world challenges.

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Demonstrate resilience, teamwork, integrity, and financial literacy in professional and personal settings.

III **Course Outcomes (COs):**

After completing this course students will be able to:

- CO1: Enhance** personal well-being by setting goals, managing stress, avoiding addictions, and fostering a positive environment.
- CO2: Develop** effective leadership skills by embracing humility and applying mentor-guided solutions to daily challenges.
- CO3: Enhance** interpersonal relationships by practicing forgiveness in both personal and professional settings.
- CO4: Apply** ancient wisdom to effectively address and navigate modern-day challenges.
- CO5: Foster** responsible citizenship by cultivating values of integrity, loyalty, sincerity, and punctuality for national progress.
- CO6: Build** teamwork skills and financial literacy to achieve stability and harmony in professional and personal life.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	2	2	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	25	10

VI Classroom Learning Content:**VII Laboratory Learning Content:**

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)			Hours	Aligned COs
UNIT I: Remaking Yourself	1	Begin with the End in Mind: Visualize future goals and structure lives through smart goals to give direction to achieve desired outcomes.		2#	CO1
	2	Being Addiction-Free: Explore the detrimental effects of addictions on one's health, personal life, and family life and learn how to take control of life by becoming addiction free.		2#	CO1
	3	Stress Management: Cope with current and future causes of stress.		2#	CO1
	4	Better Health Better Future: Maintain good health through regular exercise, healthy eating habits, and regular and sufficient sleep.		2#	CO1
	5	Impact of Company: Develop the ability to create a positive environment around yourself.		2#	CO1
UNIT II: Learning from Legends	6	Leading Without Leading: Explore a new approach to leadership, through humility.		2#	CO2
	7	Words of Wisdom: Gain practical insights by engaging with mentors to address real-life challenges faced in daily life.		2#	CO2

UNIT III: From House to Home	8	Forgive & Forget: Apply the knowledge of forgiveness in personal and professional life.	2#	CO3
UNIT IV: Facing Failures	9	Timeless Wisdom for Daily Life: Use ancient wisdom to solve modern-day challenges.	2#	CO4
UNIT V: My India My Pride	10	Present Scenario: Implement the transformation of India from a developing country into a developed country it is necessary to have a value-based citizen.	2#	CO5
	11	An Ideal Citizen - 1: Develop good values by exploring the values of responsibility and integrity to become value-based citizens.	2#	CO5
	12	An Ideal Citizen - 2: Develop values of loyalty, sincerity, and punctuality by trying to keep perfection in every small task and by looking at the bigger picture.	2#	CO5
UNIT VI: Soft Skills	13	Teamwork & Harmony: Learn the six steps of teamwork and harmony that are essential for students' professional and daily life.	2#	CO6
	14	Financial Planning: Develop a variety of practical financial skills to become financially stable throughout the future careers.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Perform Selfless Service - Seva: Apply previous lessons of seva, to analyse the case study of the Bhuj earthquake relief work or any other relief work.

IX Specification Table for Classroom Learning Assessment:

X Question Paper Format for Summative Assessment (SA):

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Content Understanding	10
2	Readability	5
3	Completeness	5
4	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Originality of work	5
2	Organization and Writing	5
3	Use of Evidence	5
4	Viva voce	10
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	-	-	-	-	3	3	3	-	-
C02	-	-	-	-	3	3	3	-	-
C03	-	-	-	-	3	3	3	-	-
C04	-	-	-	-	3	3	3	-	-
C05	-	-	-	-	3	3	3	-	-
C06	-	-	-	-	3	3	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Integrated Personality Development Course Workbook-2	IPDC Team, Swaminarayan Aksharpith, Shahibaug, Ahmedabad- 4, India, 2nd Edition 2021.	10: 8175267062 13: 978-8175267060
2	Wings of Fire: An Autobiography	A.P.J. Abdul Kalam, Arun Tiwari (Contributor), Universities Press, 67th Edition 2023	13: 978-817371466
3	The Wit & Wisdom of Ratan Tata	Ratan Tata, Hay House India, January 2016	10: 9789385827297 13: 978-9385827297
4	Chase Your Dreams	Sachin Tendulkar, Hachette India, October 2017	10: 9351951995 13: 978-9351951995

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1. [Julian Treasure: 5 ways to listen better | TED Talk accessed on 7th July, 2023](#)
2. [Listening Statistics: 23 Facts You Need to Hear \(creditdonkey.com\) accessed on 7th July, 2023](#)
3. [Robert Waldinger: What makes a good life? Lessons from the longest study on happiness | TED Talk accessed on 7th July, 2023](#)
4. [The Story Behind the Selfless Love of Ahmedabad's Seva Cafe \(thebetterindia.com\) accessed on 7th July, 2023](#)
5. [What Are Soft Skills? Definition, Importance, and Examples \(investopedia.com\) accessed on 7th July, 2023](#)
6. [Welcome to Mystic India accessed on 7th July, 2023](#)

XVI List of Major Equipment/Machineries with Specification:

1. Desktop Computer, Latest Configuration
2. DLP, Latest Configuration
3. Smart Classroom with internet connection

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. M.B.Daigavane	Principal	Government Polytechnic, Nagpur
2	Mr. Y.K.Chandarana	HoD, Applied MechanicsEngineering	Government Polytechnic, Nagpur
3	Dr. G. K. Awari	HoD, Automobile Engineering	Government Polytechnic, Nagpur
4	Dr. G.V. Gotmare	I/C, Curriculum Development Cell	Government Polytechnic, Nagpur
5	Dr. Megha Machale (Bhelande)	Lecturer in English	Government Polytechnic, Nagpur



(Dr. G.V.Gotmare)
HOD & Chairman PBOS, COMMON



(Dr. G.V.Gotmare)
Member Secretary PBOS, COMMON



Exit Course

I Year



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	INP
Course Code	:	IN152H
Course Title	:	Internship (Soft Skills)

I Rationale:

Internship (Soft Skill) is a four-week immersive program designed for first-year diploma students, offering hands-on experience in an industrial setting. Guided by the principles of the National Education Policy (NEP), the course aims to bridge academic learning with industry expectations by fostering practical knowledge, workplace skills, innovation, and professional discipline. Emphasizing skill acquisition and teamwork, students maintain daily activity diaries and submit a comprehensive post-internship report, reflecting on their learning journey. This course serves as an exit option after the second semester, fulfilling the requirements for the award of the "Certificate in Vocation."

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Work efficiently in tourism and hospitality industry environment.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Follow safety guidelines, record measures, and act per tourism and hospitality industry standards.

CO2: Collect data, analyze processes, and write concise reports.

CO3: Follow instructions, observe processes, and document daily work clearly.

CO4: Identify and discuss problems, analyze causes, and suggest possible improvements.

CO5: Compile experiences, refine presentations, and prepare a professional internship report.

CO6: Present internship report and outcomes confidently, showing skills, professional knowledge, and clear communication.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	-	8	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	-	-	-	-	50	20

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)	Topics and Sub-topics	Aligned Cos
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VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Adhere to tourism and hospitality industry practices by consulting the officers/staff, recording professional procedures, noting the do's and don'ts, and following all instructions as per tourism and hospitality industry standards.	10#	CO1
II	2	Conduct an tourism industry process survey by gathering information through discussions with the assigned officer/staff, recording findings, and preparing a concise report.	10#	CO2
III	3	Work effectively in an tourism industry environment by following officer/staff instructions, observing work processes, and maintaining a daily work diary.	60#	CO3
IV	4	Analyze tourism industry problems by discussing with officers and staff, identifying issues in systems or processes, and documenting the findings.	20#	CO4

V	5	Compile internship experiences into a clear, professional report and presentation; conduct practice sessions to enhance presentation skills and prepare documents as per faculty guidelines.	10#	CO5
VI	6	Present internship report and outcomes confidently to faculty and peers, demonstrating professional knowledge, communication skills, and clarity in conveying internship learnings.	10#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Choose entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO"s/ Government organizations/ Micro/ Small/ Medium enterprises to make ready for the industry.

IX Specification Table for Classroom Learning Assessment:**X Question Paper Format for Summative Assessment (SA):**

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):**XII Scheme of Self-Learning Summative Assessment (SA):**

S.N.	Criteria	Max. Marks
1	Selection of Type of Industry	5
2	Work done and Feasibility of work	25
3	Report writing	10
4	Presentation Skills and Viva-Voce	10
TOTAL		50

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	1	-	-	-	-	-	3	-	-
C02	-	-	-	-	-	3	3	-	-
C03	-	-	-	-	-	3	3	-	-
C04	-	-	-	-	1	3	3	-	-
C05	-	-	-	-	-	3	3	-	-
C06	-	-	-	-	-	-	-	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Soft Skills: Enhancing Industrial Training and Education	Lokesh Choudhary, Mittal Publications, 2007	10: 8183242367 13: 9788183242363
2	Training Practice	Penny Hackett, McGraw-Hill Education, September 2003	10: 0852929803 13: 9780852929803
3	AICTE Internship Policy: Guidelines & Procedures	All India council of Technical Education New Delhi	-

XV e-References:

1. <https://internship.aicte-india.org/> assessed on 23rd April 2024
2. <https://internshala.com/internships/travel-and-tourism-internship/> assessed on 23rd April 2024

XVI List of Major Equipment/Machineries with Specification:

1. Desktop computers
2. Laser Printer
3. DLP

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. M.B.Daigavane	Principal	Government Polytechnic, Nagpur
2	Dr. M. V. Sarode	Training & Placement Officer	Government Polytechnic, Nagpur
3	Dr. P. P. Virkhare	HOD, TRavel and Tourism	Government Polytechnic, Nagpur
4	Dr. G. V. Gotmare	I/C Curricullum Development Cell	Government Polytechnic, Nagpur
5	Mr. Rajesh P. Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Semester

III



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	DIPLOMA IN TR
Course Category	:	DSC
Course Code	:	TR201H
Course Title	:	Travel Agency Operations

I Rationale:

The travellers / tourists need the help of travel agents to plan and organise their journey. The suppliers of tourism services also depend on these intermediaries for marketing their services. This course will highlight the procedure for setting up a travel agency. The business of operating a professional & efficient travel agency requires a good mix of qualifications & skills. This course focuses on the operational skills & application of various concepts and functions of operations in travel agency.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Perform various activities related to travel agency.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Identify various types of travel agency.

CO2: Practice overall functions of travel agency.

CO3: Follow the functioning of various departments of a travel agency.

CO4: Draft various forms and documents to facilitate tourist details.

CO5: Prepare various types of voucher.

CO6: Execute mock travel agency.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	3	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25+	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: The Travel agent	1a	Distinguish between Travel Agent and Tour Operator on the basis of given points.	1.1	Meaning of Travel agent, travel consultant & tour operator, meaning and definition of travel agency.	CO1
	1b	Justify the given quality of travel personnel.	1.2	Qualities of a travel personnel (Personality Development, First Impressions, Welcome phrases, Language, fluency and expressions, Using customer related language, The greeting: smile, direct Etiquettes, Pleasantness, Attitude, Body language)	
	1c	Describe the given types of Travel Agency.	1.3	Types of travel agency: Retail travel agency, Wholesale travel agency, Corporate travel agency, Implant travel agency	

UNIT II: Functions & services	2a	Identify the given functions of a travel agency	2.1	Functions & services of a travel agency, Product knowledge, Planning of itinerary, Tour costing and booking, Reservations of domestic and international airlines, Hotel booking, Railway reservations, Cruise booking, Car rentals, coaches, Passport, Visa processing, Travel insurance, Foreign exchange, Settlement of accounts, Planning and Handling special events	CO2
UNIT III: Departments of and its functions	3a	Identify the functioning of given department.	3.1	Departments of Travel agency and its functioning: Documentation section (Passport, Visa, Insurance, Foreign exchange), Reservation section- Air Ticketing, Hotel, Car Rental, Packages – Domestic and International, Sales and Marketing, Accounts.	CO3
UNIT IV: Booking Procedures	4a	Describe airline booking procedure.	4.1	Airline booking – Identify the route, flight options, pricing	CO4
	4b	Identify the procedure of railway reservation and cancellation.	4.2	Railway reservation : Reservation and cancellation procedure – physical and online	
	4c	Identify the procedure of hotel reservation and cancellation.	4.3	Hotel reservation : procedure of booking a hotel room and cancellation	
	4d	Describe given conditions, schedule and policy while selling travel product.	4.4	Tour reservations: Reservation procedures, Tour booking conditions included and excluded tour features, Deposit and payment schedule, Cancellation and refund policy.	

UNIT V: Vouchers And Sources of Income	5a	Prepare a voucher on the basis of given information.	5.1	Travel Vouchers-Preparation and issuing travel voucher.	CO5
	5b	Describe given sources of income available for a travel agent.	5.2	Sources of Income: Commission, Incentives, Service charges, Mark Up, Representation Fee	
UNIT VI: Setting up a travel agency	6a	Describe the given infrastructure and financial requirements for setting up a travel agency.	6.1	Infrastructure and financial requirements	CO6
	6b	Follow the procedure for approval from given organisations for travel agencies.	6.2	Approvals by concerned organizations: IATA, DOT.	
	6c	Identify the linkages with given other segments of the industry.	6.3	Linkages with other segments of the industry: Hotels, Airlines, Cruise, Car rentals, Destination Management Companies.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Collect the details of travel agencies and mention their specializations. (Part I)	2#	CO1
I	2	Collect the details of travel agencies and mention their specializations. (Part II)	2	CO1
II	3	Present different types of package tours before the class.	2#	CO2
II	4	Practice various functions of a travel agency.	2#	CO2
III	5	Prepare a report on a Travel Agency visit.	2#	CO3
IV	6	Prepare Hotel reservation form and reserve a hotel room.	2#	CO4
IV	7	Fill various booking formats and book the tour.	2#	CO4
IV	8	Book and cancel Railway tickets and Air tickets.	2#	CO4
IV	9	Book and cancel Railway tickets and Air tickets.	2#	CO4
V	10	Prepare various types of vouchers.	2#	CO5
V	11	Identify, categorize, and analyze the major income sources in travel agency operations.	2	CO5
VI	12	Prepare a Case study of one travel agency.	2#	CO6
VI	13	Setup a mock travel agency. (Part I)	2#	CO6
VI	14	Setup a mock travel agency. (Part II)	2#	CO6
VI	15	Setup a mock travel agency. (Part III)	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in cognitive/Psychomotor/Affective Domain)

1. Prepare and present a report on one or two travel agencies where you have visited regularly, made a good rapport with it, observed and understood its functioning.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	The Travel agent	5	C	2	4	0	6
			O	0	4	0	4
2	Functions & services	10	C	2	4	6	12
			O	2	4	0	6
3	Departments of and its functions	8	C	2	4	6	12
			O	0	0	6	6
4	Booking Procedures	10	C	2	12	6	20
			O	0	8	4	12
5	Vouchers And Sources of Income	6	C	0	4	6	10
			O	2	4	0	6
6	Setting up a travel agency	6	C	2	4	4	10
			O	0	0	6	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	6R2	2R2	5R2	5	7
2	1U4	2U4	3U4	1U4	2U4			3	5
3	4U4	4U4	4U4	4U4	4U4			3	5
4	5U4	6U4	6A4	5U4	4A4			3	5
5	2A6	3A6	3A6					2	3
6	4A6	5A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance/Report writing	20
2	Overall presentation of given assignment	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	3	3	3	3		3		3
C02	3	3	3	3	3		3		3
C03	3	3	3	3	3		3		3
C04	3	3	3	3	3		3		3
C05	3	3	3	3	3		3		3
C06	3	3	3	3	3		3		3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	An Introduction to Travel and Tourism	Foster Dennis L., McGraw Hill, 1990	10: 0026808617, 13: 9780026808613
2	The Travel Industry	Chuck Y. Gee, James C. Makes, Dexter J. L. Choy, Van Nostrand, Reinhold , 3rd Edition, 1997	13: 978-0-471-28774-2
3	Tourism Operations and Management	Sunetra Roday, Archana Bhiwal, Vandana Joshi, illustrated, Oxford University Press, 2009	10: 0198060017, 13: 9780198060017
4	Tourism in new Millennium	Dr. S. P. Bansal, Abhishek Publication, Chandigarh, 2002	10: 8185733295, 13: 978-8185733296
5	Basic Tourism	Krishnan K. Kamara & Mohinder Chand, Kanishka Publication, New Delhi, 2004	10: 8173915237, 13: 978-8173915239
6	Successful Tourism Management	Premnath Seth, Sterling Publication Ltd., New Delhi, 1986	10: 8120700295, 13: 978-8120700291

XV e-References:

1. <https://tourismnotes.com/travel-agency/> accessed on 28.05.2024
2. <https://www.youtube.com/watch?v=k6moAzkAfQo> accessed on 28.05.2024
3. <https://www.youtube.com/watch?v=qX-7eMMZ1Cc> accessed on 28.05.2024
4. https://www.youtube.com/watch?v=y6TNfKtrT_s accessed on 28.05.2024
5. <https://www.youtube.com/watch?v=BIjah5Al3ng> accessed on 28.05.2024
6. https://www.youtube.com/watch?v=Ohh5xsnRgec&list=PLLZecf5IjjwvUZ_INH8L2fn-nOP0Cwmza&index=2 accessed on 28.05.2024

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity.
2. Various booking software.
3. Computerized Reservation System. (Amadeus, Abacus, Galileo, etc.)

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer, Travel and Tourism Deptt.	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



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Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	: DIPLOMA IN TR
Course Category	: DSC
Course Code	: TR202H
Course Title	: World Tourism - America

I Rationale:

Travel professionals use destination geography every day. It comprises a survey of the countries of the world from a tourism perspective. Knowledge of the location of countries & region wise division is essential. In this course the students will acquire the basic knowledge of geography of America required to provide timely & accurate service to the customers.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Competencies in having in-depth knowledge of popular travel destinations, including cultural, historical, and tourist attractions.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Locate American countries, their capitals & important places on given map.

CO2: Relate the Transportation systems of American countries to Tourism.

CO3: Identify major airports, airlines, currency & their code of American Countries.

CO4: Justify significance of Fairs, Festivals, sports & cuisines of American Countries for Tourism.

CO5: Prepare a catalogue of Natural & Man-made Tourist Attractions of American Countries.

CO6: Identify functions & tagline of respective tourism boards of American Countries.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: USA	1a	Locate countries & important places on given map.	1.1	Location, Capital, language, & currency.	CO1
	1b	Relate given Transportation systems to Tourism.	1.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines, currency and Codes.	
	1c	Justify significance of given areas to the Tourism of USA.	1.3	Fairs and festivals Sports & Cuisine.	
	1d	Justify significance of given Tourist Attractions.	1.4	Natural and Man Made Tourist Attractions	
	1e	Justify the given function of Tourism Board of USA	1.5	Taglines & Functions of Tourism board of USA.	
a, Mexico	2a	Locate countries & important places on given map.	2.1	Location, Capital, language, & currency.	
	2b	Relate given Transportation systems to Tourism.	2.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines, currency and Codes.	

UNIT II: Canada	2c	Justify significance of given areas to the Tourism of given country.	2.3	Fairs and festivals Sports & Cuisine.	CO2
	2d	Justify significance of given Tourist Attractions.	2.4	Natural and Man Made Tourist Attractions	
	2e	Justify the given function of Tourism Board of given country	2.5	Taglines & Functions of Tourism boards of Canada and Mexico.	
UNIT III: Brazil, Peru	3a	Locate countries & important places on given map.	3.1	Location, Capital, language, & currency.	CO3
	3b	Relate Transportation systems to Tourism.	3.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines, currency and Codes.	
	3c	Justify significance of given areas to the Tourism of Given country.	3.3	Fairs and festivals Sports & Cuisine.	
	3d	Justify significance of given Tourist Attractions.	3.4	Natural and Man Made Tourist Attractions	
	3e	Justify the significance of Tourism Board of given Country.	3.5	Taglines & Functions of Tourism boards of Brazil, and Peru.	
UNIT IV: Argentina, Chile	4a	Locate countries & important places on given map.	4.1	Location, Capital, language, & currency.	
	4b	Relate given Transportation systems to Tourism.	4.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines, currency and Codes.	

UNIT IV: Argen	4c	Justify significance of given areas to the Tourism of given Country.	4.3	Fairs and festivals Sports & Cuisine.	CO4
	4d	Justify significance of given Tourist Attractions.	4.4	Natural and Man Made Tourist Attractions	
	4e	Justify the significance of Tourism Board of given Country.	4.5	Taglines & Functions of Tourism boards of Argentina , Chile.	
UNIT V: Columbia, Cuba, Venezuela	5a	Locate countries & important places on given map.	5.1	Location, Capital, language, & currency.	CO5
	5b	Relate given Transportation systems to Tourism.	5.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines, currency and Codes.	
	5c	Justify significance of given areas to the Tourism of given Country.	5.3	Fairs and festivals Sports & Cuisine.	
	5d	Justify significance of given Tourist Attractions.	5.4	Natural and Man Made Tourist Attractions	
	5e	Justify the given function of given Tourism Board.	5.5	Taglines & Functions of Tourism boards of Columbia, Cuba, Venezuela.	
UNIT VI: Caribbean countries	6a	Locate countries & important places on given map.	6.1	Location, Capital, language, & currency.	CO6
	6b	Relate given Transportation systems to Tourism.	6.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines, currency and Codes.	
	6c	Justify significance of given areas to the Tourism of given Country.	6.3	Fairs and festivals Sports & Cuisine.	
	6d	Justify significance of given Tourist Attractions.	6.4	Natural and Man Made Tourist Attractions	
	6e	Justify the significance of Tourism Board of Given Country.	6.5	Taglines & Functions of Tourism boards of Caribbean countries.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Locate all the countries of America on world Map.	2	CO1
I	2	Locate important cities of countries of America on their respective maps.	2#	CO1
II	3	Locate important flight routes of countries of American on their respective maps.	2#	CO2
II	4	Locate important Rail routes of countries of American on their respective maps.	2	CO2
II	5	Locate important Road routes of countries of American on their respective maps.	2#	CO2
II	6	Check the current currency exchange rates for all the countries of America and prepare a chart.	2#	CO2
III	7	Prepare a Power Point Presentation on Air transport system of all the countries of America.	2#	CO3
III	8	Prepare a Power Point Presentation on rail transport system of all the countries of America.	2#	CO3
III	9	Prepare a Power Point Presentation on road transport system of all the countries of America.	2#	CO3
III	10	Prepare a Power Point Presentation on tourist and luxury trains, cruises & ferries of all the countries of America.	2#	CO3
III	11	Prepare Power Point Presentation on the popular Cuisines of the region under study.	2	CO3
III	12	Prepare brochure/ Calendar of various important fairs and festivals of countries of America.	2#	CO3
IV	13	Prepare Power Point Presentation on the Natural & Man-made Tourist attraction of the region under study.	2#	CO4
V	14	Prepare an itinerary of Given American country.	2#	CO5
VI	15	Estimate the costing for the tours of American countries.	2#	CO6
VI	16	Prepare Power Point Presentation on the taglines of the tourism boards	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in cognitive/Psychomotor/Affective

1. Prepare a micro project on Sports Tournament of various sports of international repute of countries of America.
2. Prepare a micro project on Transport system of countries of America.
3. Prepare a micro project on Adventure activities/ Sports of countries of America.
4. Prepare a micro project on Festivals and fairs of international repute of countries of America.
5. Prepare a micro project on Cuisines of countries of America.
6. Prepare a micro project on "Wonders of the world" of America.
7. Prepare a micro project on Theme parks of counties of America.
8. Prepare a micro project on Promotional activities undertaken by tourism boards of countries of America.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classroom Learning Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	USA	10	C	2	12	6	20
			O	2	8	0	10
2	Canada, Mexico	7	C	2	4	0	6
			O	0	4	0	4
3	Brazil, Peru	6	C	2	4	6	12
			O	0	0	6	6
4	Argentina , Chile	6	C	2	4	6	12
			O	0	4	4	8
5	Columbia, Cuba, Venezuela	8	C	0	4	6	10
			O	2	4	0	6
6	Caribbean countries	8	C	2	4	4	10
			O	0	0	6	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	5R2	6R2	5R2	5	7
2	1U4	1U4	1UR	1U4	1U4			3	5
3	2R4	3U4	4U4	2U4	4U4			3	5
4	5U4	6U4	6A4	5U4	4A4			3	5
5	1A6	3A6	3A6					2	1
6	4A6	5A6	6A6					2	1

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance/Report writing	20
2	Overall presentation of given assignment	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific Outcomes	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	3	-	-	3	-	-	-	-
C02	3	3	-	-	3	-	-	-	-
C03	3	3	-	-	3	-	-	-	-
C04	3	3	2	2	3	-	2	2	2
C05	3	3	2	2	3	-	2	2	2
C06	3	3	2	2	3	-	2	2	2

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Travel geography	Dr Rosemary Burton ,Pearson Education , 2nd Edition, 1994	10: 0273602039 13: 9780273602033
2	Geography of Travel and Tourism',	Boniface, B.G. and Cooper, Butterworth Heinemann , 2nd Edition,1994 ,	0750616709
3	World Geography of Travel and Tourism: A Regional Approach	Alan Lew, C. Michael Hall, Dallen J. Timothy ,Oxford , 1st Edition,2008	13: 978-0-7506-7978-7; 10: 0-7506-7978-6
4	Geography and Air Transport',	Graham, John Wiley & Sons Ltd, 1st Edition,November 1995	0471957577

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2. https://www.youtube.com/watch?v=JUfybRQc_1o, accessed on 10th June 2024
3. https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2019-09/tourism_in_the_americas.pdf, accessed on 10th June 2024
4. <https://www.slideshare.net/slideshow/a-brief-description-on-the-american-continent-238799174/238799174>, accessed on 10th June 2024
5. <https://www.worldatlas.com/articles/the-most-visited-countries-in-the-americas.html>, accessed on 10th June 2024
6. <https://www.travelandleisure.com/attractions/amusement-parks/tripadvisor-best-theme-parks-in-america>, accessed on 10th June 2024

XVI List of Major Equipment/Machineries with Specification:

1. smart, digital, interactive, touch screen board.
2. Computer with appropriate software
3. Globe
4. World map
5. Map of North America
6. Map of South America

XVII List of Industry Experts and Faculties who contributed for this

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Dept.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	DIPLOMA IN TR
Course Category	:	DSC
Course Code	:	TR203H
Course Title	:	Business and Incentive Travel

I Rationale:

A variety of tourism related business benefits from domestic and international tourism such as Airline, Auto rental companies, Hotels and Restaurants, Convention Centre, Attractions and Retail outlets. All these business have a number of suppliers and the supply chain. This course highlights various aspects of Business & Incentive travel. This course also introduces the students with the Meeting, Incentives, Conventions, and Exhibitions (MICE) Industry.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Coordinate travel-related events and exhibitions, Market tourism events and festivals, plan and manage travel-related events and activities.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Identify the needs of a business traveler.

CO2: Plan various types of events.

CO3: Plan meetings.

CO4: Plan Incentive Travel.

CO5: Plan various types of Conferences and Conventions.

CO6: Plan various types of Exhibitions.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	2	-	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25+	10	-	-

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Business Travel	1a	Justify the given reason of business travel	1.1	Definition of MICE Tourism, Meeting, Incentives, Convention, Exhibitions, Evolution of Business Travel, Reasons for developing business travel	CO1
	1b	Differentiate given travel on given points	1.2	Difference between Business and Leisure Travel, Business Travel and Travel agency relationship	
UNIT II: Events	2a	Describe given types of Events	2.1	Definition of Events, Types- Business dinners, Golf Tournaments, Networking events, Product launches, Award ceremonies, Holiday parties, Customer appreciation parties, Board Meetings, Happy hours, Seminars, Shareholder Meetings, Charity functions, Press Conferences, Trade Shows , VIP Events	CO2
	2b	Prepare Planning for given Events	2.2	Planning- Procedure and Steps	

UNIT III: Introduction to MICE-Meeting	3a	Identify the types of Meetings	3.1	Types of Meetings- Clinic, Forum, Seminar, Symposium, Workshop., Annul meeting, Board Meeting, Professional or Technical Meeting, Corporate Meeting , Convention , Exposition SMERF, Incentives Meeting, Association Meeting.	CO3
	3b	Suggest facilities/ infrastructure required for MICE tourism in India	3.2	Facilities in India – Ground facilities , Star category hotels, Conference halls	
	3c	Describe the importance of the various arrangements for Meetings to be carried out under MICE tourism	3.3	Importance and need of the various arrangements for Meetings to be carried out under MICE tourism in India	
UNIT IV: Incentive Travel	4a	Describe the different types of Incentive Travel	4.1	Definition of Incentive Travel, Types-three types of service organizations by Dexter. L. Choy and James c. Maken.	CO4
	4b	Plan an incentive travel	4.2	Planning - Procedure and Steps	
UNIT V: Conferences and Conventions	5a	Identify the types of Convention Centres	5.1	Definition of Conferences and Convention, Types of centres- Executive centre, Corporate centre, University campus, Resort conference, Hotel Conference	CO5
	5b	Select the Site for given type of Conferences and Conventions	5.2	Site Selection- Procedure /steps	
	5c	Follow IACC guidelines for Conference	5.3	IACC guidelines for Conference	
	5d	Plan a given type of Conference/ Convention	5.4	Planning a Conferences and Convention – procedure and steps	
UNIT VI: Exhibitions	6a	Describe the types of Exhibition	6.1	Definition of Exhibition, Types-Tread fair , fashion show, expos, tread shows, product launches, Company or educational open days	CO6
	6b	Plan an Exhibition	6.2	Planning- procedure and steps	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Interact with two business travellers to identify their needs.	2#	CO1
II	2	Plan any one event.	2#	CO2
III	3	Plan a meeting and make arrangements accordingly.	2#	CO3
III	4	Identify and Resolve service related problems of customer related to the arrangements made for the meeting.	2	CO3
IV	5	Prepare check list for an incentive tour.	2#	CO4
IV	6	Plan an incentive tour.	2#	CO4
IV	7	Identify and Resolve service related problems of customer related to incentive tour.	2#	CO4
V	8	Prepare a report on visit to Convention and Conference centre.	2#	CO5
V	9	Prepare a check list of the arrangements to be made while organising a conference.	2#	CO5
V	10	Plan a conference. (Part I)	2#	CO5
V	11	Plan a conference. (Part II)	2	CO5
V	12	Identify and Resolve service related problems of customer related to conference arrangements.	2#	CO5
VI	13	Plan an exhibition. (Part I)	2#	CO6
VI	14	Plan an exhibition. (Part II)	2	CO6
VI	15	Identify and Resolve service related problems of customer related to exhibition arrangements.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Business Travel	8	C	2	4	0	6
			O	0	4	0	4
2	Events	10	C	2	4	6	12
			O	2	4	0	6
3	Introduction to MICE-Meeting	10	C	2	4	6	12
			O	0	0	6	6
4	Incentive Travel	12	C	2	12	6	20
			O	0	8	4	12
5	Conferences and Conventions	10	C	0	4	6	10
			O	2	4	0	6
6	Exhibitions	10	C	2	4	4	10
			O	0	0	6	6
Total		60	C	10	32	28	70
			O	4	20	16	40

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	6R2	2R2	5R2	5	7
2	1U4	2U4	3U4	1U4	2U4			3	5
3	4U4	4U4	4U4	4U4	4U4			3	5
4	5U4	6U4	6A4	5U4	4A4			3	5
5	2A6	3A6	3A6					2	3
6	4A6	5A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	3	3	3	3	-	3	-	3
C02	3	3	3	3	3	-	3	-	3
C03	3	3	3	3	3	-	3	-	3
C04	3	3	3	3	3	-	3	-	3
C05	3	3	3	3	3	-	3	-	3
C06	3	3	3	3	3	-	3	-	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	International Tourism Management	A.K. Bhatia ,Sterling publishers Private limited, 2001	13: 978 81 207 2408 2, 13: 978 81 207 2412 9
2	Tourism Concepts and Practices	John R. Walker, Josielyn T. Walker, Dorling Kindersley (India) Pvt.Ltd. 2011	13: 978-81-317-6105-2

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1. <http://www.ereleases.com/pr-fuel/15-types-of-events-your-business-can-host/>, accessed on 22th May, 2024
2. <https://www.ibtmworld.com/en-gb/blog/people-and-culture/what-is-incentive-travel.html>, accessed on 22th May, 2024
3. <https://www.cardiffmet.ac.uk/about/conferenceservices/Pages/How-to-organise-an-event.aspx>, accessed on 22th May, 2024

XVI List of Major Equipment/Machineries with Specification:

1. NIL

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



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COURSE CURRICULUM

Program	:	DIPLOMA IN TR
Course Category	:	DSC
Course Code	:	TR204H
Course Title	:	Tourism in Northern States of India

I Rationale:

India is famous for its varieties of attractions in terms of destinations. This course intends to make the students familiar with the historical monuments and other places of tourist interest in North, West, and North-eastern states in India. They will also appreciate the wide variety of tourist attractions in the form of wildlife sanctuaries, Parks, hill stations, Beach resorts etc.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Comprehend knowledge of various travel destinations, their attractions, and cultural aspects.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Locate North Indian states, their capitals & important tourist places on map.

CO2: Relate the Transportation systems of North Indian states to Tourism.

CO3: Identify major airports and their code of North Indian states.

CO4: Justify significance of Fairs, Festivals, sports, dance, music & cuisines of North Indian states for Tourism.

CO5: Prepare a catalogue of Natural & Manmade Tourist Attractions of North Indian states.

CO6: Identify functions & tagline of respective tourism boards of North Indian states.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	3	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Jammu, Kashmir, Leh and Ladakh, Himachal Pradesh	1a	Locate states & important places on given map.	1.1	Location, Capital, language.	CO1
	1b	Relate Transportation systems to Tourism.	1.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and their codes.	
	1c	Justify significance of given areas to the Tourism of given states.	1.3	Dance, Music, Fairs and festivals, Sports & Cuisine.	
	1d	Justify significance of Natural and Man-made Tourist Attractions.	1.4	Natural and Man Made Tourist Attractions	
	1e	Justify the significance of Tourism Board of given states.	1.5	Taglines & Functions of Tourism boards.	

UNIT II: Punjab, Haryana, Chandigarh, Delhi	2a	Locate states & important places on given map.	2.1	Location, Capital, language.	CO2
	2b	Relate Transportation systems to Tourism.	2.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and their codes.	
	2c	Justify significance of given areas to the Tourism of given states.	2.3	Dance, Music, Fairs and festivals, Sports & Cuisine.	
	2d	Justify significance of Natural and Man-made Tourist Attractions.	2.4	Natural and Man Made Tourist Attractions	
	2e	Justify the significance of Tourism Board of given states.	2.5	Taglines & Functions of Tourism boards.	
UNIT III: Uttar Pradesh, Uttarakhand	3a	Locate states & important places on given map.	3.1	Location, Capital, language.	CO3
	3b	Relate Transportation systems to Tourism.	3.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and their codes.	
	3c	Justify significance of given areas to the Tourism of given states.	3.3	Dance, Music, Fairs and festivals, Sports & Cuisine.	
	3d	Justify significance of Natural and Man-made Tourist Attractions.	3.4	Natural and Man Made Tourist Attractions	
	3e	Justify the significance of Tourism Board of given states.	3.5	Taglines & Functions of Tourism boards.	

UNIT IV: Bihar, Jharkhand	4a	Locate states & important places on given map.	4.1	Location, Capital, language.	CO4
	4b	Relate Transportation systems to Tourism.	4.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and their codes.	
	4c	Justify significance of given areas to the Tourism of given states.	4.3	Dance, Music, Fairs and festivals, Sports & Cuisine.	
	4d	Justify significance of Natural and Man-made Tourist Attractions.	4.4	Natural and Man Made Tourist Attractions.	
	4e	Justify the significance of Tourism Board of given states.	4.5	Taglines & Functions of Tourism boards.	
UNIT V: Rajasthan, Gujarat, Daman and Diu, Dadra and Nagar Haveli	5a	Locate states & important places on given map.	5.1	Location, Capital, language.	CO5
	5b	Relate Transportation systems to Tourism.	5.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and their codes.	
	5c	Justify significance of given areas to the Tourism of given states.	5.3	Dance, Music, Fairs and festivals, Sports & Cuisine.	
	5d	Justify significance of Natural and Man-made Tourist Attractions.	5.4	Natural and Man Made Tourist Attractions.	
	5e	Justify the significance of Tourism Board of given states.	5.5	Taglines & Functions of Tourism boards.	

UNIT VI: North Eastern States	6a	Locate states & important places on given map.	6.1	Location, Capital, language.	CO6
	6b	Relate Transportation systems to Tourism.	6.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and their codes.	
	6c	Justify significance of given areas to the Tourism of given states.	6.3	Dance, Music, Fairs and festivals, Sports & Cuisine.	
	6d	Justify significance of Natural and Man-made Tourist Attractions.	6.4	Natural and Man Made Tourist Attractions.	
	6e	Justify the significance of Tourism Board of given states.	6.5	Taglines & Functions of Tourism boards.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
UNIT No I to VI	1	Locate states on the Map of India.	2#	CO1
	2	Locate important cities of tourist importance on the Map of India.	2#	CO1
	3	Prepare a presentation on using various means of transportation for a tour of North Indian states.	2#	CO2
	4	Calculate average cost of transportation, food, accommodation for respective state, along with special concessions available for students, senior citizens & tourists. (Special emphasis on air transport)	2#	CO2
	5	Identify major airports and their codes of North Indian states.	2#	CO3
	6	Prepare Power Point Presentation on the popular Cuisines of the region under study.	2#	CO4
	7	Prepare a presentation on the famous fairs and festivals of the regions under study.	2	CO4
	8	Prepare Power Point Presentation on the dance and music of North Indian states.	2#	CO4
	9	Plan any one North Indian festival at department level. (Part I)	2#	CO4
	10	Arrange necessary preparation to celebrate any one North Indian festival at department level. (Part II)	2#	CO4
	11	Celebrate any one North Indian festival at department level. (Part III)	2#	CO4
	12	Prepare a catalogue of natural tourist attractions.	2#	CO5
	13	Prepare a catalogue of Manmade tourist attractions.	2	CO5
	14	Prepare Power Point Presentation of Popular tourist destinations of the region under study.	2	CO5
	15	Present the taglines and functions of the tourism boards using Power Point.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in cognitive/Psychomotor/Affective Domain)

1. Prepare various route maps as a preparation for an itinerary.
2. Prepare a collage of various tourist places with the help of map.
3. Prepare a catalogue of the transportation systems available in various states of India under study.
4. Prepare a collage of different fairs and festivals depicting the essentials of their celebrations.
5. Prepare a Power Point Presentation on specialty cuisine of respective states.
6. Prepare a leaflet of Natural Tourist attractions of any one of the states under study.
7. Prepare a leaflet of Man-made Tourist attractions of any one of the states under study.
8. Prepare a Power Point Presentation on Major Tourist and luxury trains, Cruise & ferries.
9. Prepare a chart of Taglines and functions of respective state tourism boards.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Jammu, Kashmir, Leh and Ladakh, Himachal Pradesh	7	C	2	4	6	12
			O	2	4	0	6
2	Punjab, Haryana, Chandigarh, Delhi	7	C	2	4	0	6
			O	0	4	0	4
3	Uttar Pradesh, Uttarakhand	7	C	2	4	6	12
			O	0	0	6	6
4	Bihar, Jharkhand	6	C	0	6	4	10
			O	2	4	0	6
5	Rajasthan, Gujrat, Daman and Diu, Dadra and Nagar Haweli	9	C	2	10	8	20
			O	0	8	4	12
6	North Eastern States	9	C	2	4	4	10
			O	0	0	6	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	5R2	6R2	1R2	4R2	5	7
2	1U4	2U4	3U4	1U4	2U4			3	5
3	5U4	6U4	4A4	4U4	5U4			3	5
4	5A4	5A4	6A4	5U4	5A4			3	5
5	4U6	5U6	3A6					2	3
6	1A6	3A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance/Report writing	20
2	Overall presentation of given assignment	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	3	-	3	3	3	3	-
C02	3	-	3	-	3	3	3	3	-
C03	3	-	3	-	3	3	3	3	-
C04	3	-	3	-	3	3	3	3	-
C05	3	-	3	-	3	3	3	3	-
C06	3	-	3	-	3	3	3	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Insight Guides - India	Samueal Israel & Bikram Grewal	10: 0395662419 13: 978-0395662410
2	India –Lonely Planet	Bryan Thomas & David Collins et al, Lonely Planet Publications, 2015	10: 1743216769 13: 978-1743216767
3	Atlas of India	Any Publication	-
4	Cultural Tourism in India: Museums Monuments and Arts	S.P. Gupta & Krishna Lal, D.K. Printworld, 2003	10: 8124602166 13: 978-8124602164

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2. <https://www.incredibleindia.org/content/incredible-india-v2/en.html> accessed on 10th June 2024
3. https://www.youtube.com/watch?v=N_aO8Bi1ecE, accessed on 10th June 2024
4. <https://www.youtube.com/watch?v=TRr9h99Lxx4>, accessed on 10th June 2024
5. <https://www.youtube.com/watch?v=OIBENjLJL00>, accessed on 10th June 2024
6. <https://www.youtube.com/watch?v=no-qwxTenRM>, accessed on 10th June 2024

XVI List of Major Equipment/Machineries with Specification:

1. DVD's of (All state tourism boards)
2. Magazines (Travtalk,Travel bitz Monitor)
3. TV Channel: TLC, Travelxp, Travel living.
4. Computer Lab with Internet connection
5. LED Projector
6. Miniature of Caves ,Temples , Train, Forts

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HOD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
2	Mr Rajesh P Pund	Lecturer, Travel and Tourism Deptt.	Government Polytechnic, Nagpur
3	Dr Aarti Meshram	I/C Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



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Member Secretary PBOS, TR

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COURSE CURRICULUM

Program	:	DIPLOMA IN TR
Course Category	:	SEC
Course Code	:	TR251H
Course Title	:	Travel Documentation

I Rationale:

Tourism involves the movement of people across city, state & national borders. In order for international movement to occur there must be agreements among countries to ensure the rights of travellers. This course covers all the formalities a traveller is required to complete to ensure that the journey undertaken has no obstacles at the same time is not a threat to the country being visited.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Assist travellers with travel documentation requirements ensuring compliance with travel policies and regulations.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Appraise the various Agreements, Organizations and Associations related to Travel and Tourism.

CO2: Orient the traveller with the formalities to travel abroad.

CO3: Prepare a Passport and a visa case.

CO4: Implement health preventive measures required to travel abroad.

CO5: Follow the various rules related to Customs.

CO6: Practice formalities required at the Airport.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	4	-	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50+	20	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Need for Tourism Regulation	1a	Appraise various international agreements.	1.1	International agreement. Chicago, Warsaw, Freedom of Air.	CO1
	1b	Classify the different associations related to travel and tourism.	1.2	International Air Transport Association, Pacific Asia Transport Association, World Tourism Organization, Federation of Hotels and Restaurants Association of India, Travel Agents Association of India.	

UNIT II: Passport	2a	Carry out formalities for fresh passport.	2.1	Passport: Definition of passport, Passport issuing authority, Contents of a passport.	CO2
	2b	Categorize various types of Passport.	2.2	Types of Indian passport.	
	2c	Select the different types of Passport.	2.3	Requirements for fresh new passport.	
	2d	Categorize the requirements of passport as per the situation.	2.4	Requirements for different kinds of passport services: Tatkal, Lost passport, change of name, change of date or place of Birth, Change of Appearance, Emergency certificate, Miscellaneous service.	
	2e	Identify machine readable passport.	2.5	Machine readable passport.	
UNIT III: VISA	3a	Attribute visa.	3.1	Definition of Visa, Visa issuing authority.	CO3
	3b	Categorize various types of Visas.	3.2	Types of visas: Tourist visa, OCI (Overseas Citizen of India), Transit visa, Entry visa, etc. Visa waiver programme.	
	3c	Carry out requirements for Visa.	3.3	Documentation required for visa of different countries: Schengen visa, Singapore, Malaysia, Australia, U. K., South Africa, UAE, USA.	
	3d	Classify types of visa and Carry out the job of travel agent in relation to visa formalities.	3.4	Registration formalities for foreigner's visiting India in long term visa (F.R.R.O. & F.R.O) Special permits for restricted Job of travel Agent (Checking visa).	
	3e	Illustrate the importance of special permits for restricted areas.	3.5	POE (Protector of emigration) Emigration and immigration.	

UNIT IV: Preventive Measures	4a	Illustrate health preventive measures.	4.1	Health Preventive Measures, General Health Conditions of Tourists, Health, Health preparation.	CO4
	4b	Classify general preventive measures.	4.2	Vaccinations – Compulsory and Recommended, yellow fever, Cholera, Malaria.	
	4c	Attribute general preventive measures pertaining to Food/ water/ drinks/nutrition.	4.3	Health certificate. General preventive measures. Travel insurance.	
	4d	Classify Vaccinations – Compulsory and Recommended.	4.4	Basic rules for Food, water, drinks and nutrition.	
	4e	Follow vaccination rules and SOP for Tourism as specified by the Ministry of Tourism and World Health Organisation.	4.5	Pandemic Vaccination Rules for various Countries and SOP for the Tourism Industry.	
UNIT V: Custom, Currencies and Legal Aspects	5a	Classify Duty Free and non-Duty free goods, Customs and Currency related rules.	5.1	Duty free allowances for tourist.	CO5
	5b	Execute various laws Related to travel and Tourism.	5.2	Rules for Tourists: Baggage. Rules and regulations for currency exchange and carrying currency while inbound and outbound Travel. Restrictions on goods or articles while traveling. Rules & regulations of accompanying pets while travel.	
	5c	Carry out the procedure to carry articles made from animal while travelling abroad.	5.3	Law and order regulations: 1. Police and district officials 2. Laws on cheating 3. Laws on Antiquities 4. Shopping mall practices Regulations	
	5d	Demonstrate the procedure one should follow to carry Antiques/plant.	5.4	Regulation pertaining to food production.	

UNIT VI: Airport formalities	6a	Illustrate Airport Formalities.	6.1	Check in formalities Web, Check In and self-check in Kiosk.	CO6
	6b	Differentiate various taxes at the Airport.	6.2	Check out formalities.	
	6c	Identify the various in-flight services provided by Airlines.	6.3	In flight services.	
	6d	Attribute various taxes applicable pertaining to air travel.	6.4	Customs and Immigration Taxes.	
	6e	Differentiate Customs and Immigration, Also Carry out the procedure for boarding an international flight.	6.5	Airport Taxes, Foreign travel tax VAT etc.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Present before the class various international agreements on travel and tourism.	2#	CO1
I	2	Present various organizations related to international air travel with the help of Power point Presentation.	2#	CO1
II	3	Fill an online application form for fresh passport and attach the required documents. (Part I)	2#	CO2
II	4	Fill an online application form for fresh passport and attach the required documents. (Part II)	2#	CO2
II	5	Submit at least two real time Passport cases for processing. (Part I)	2#	CO2
II	6	Submit at least two real time Passport cases for processing. (Part I)	2#	CO2
II	7	Prepare cases of requirements for different kinds of passport services: Tatkal, Lost passport, Change of name, Change of date or place of Birth, Change of Appearance, Emergency certificate, Miscellaneous service. (Part I)	2#	CO2
II	8	Prepare cases of requirements for different kinds of passport services: Tatkal, Lost passport, Change of name, Change of date or place of Birth, Change of Appearance, Emergency certificate, Miscellaneous service. (Part II)	2#	CO2
II	9	Prepare cases of requirements for different kinds of passport services: Tatkal, Lost passport, Change of name, Change of date or place of Birth, Change of Appearance, Emergency certificate, Miscellaneous service. (Part III)	2	CO2
III	10	Prepare checklist of Documentation required for Schengen visa.	2#	CO3
III	11	Prepare checklist of Documentation required for USA visa.	2#	CO3
III	12	Prepare checklist of Documentation required for Singapore visa.	2#	CO3
III	13	Prepare checklist of Documentation required for Malaysia visa.	2#	CO3
III	14	Prepare checklist of Documentation required for Australia visa.	2#	CO3

III	15	Prepare checklist of Documentation required for U. K. visa.	2#	CO3
III	16	Prepare checklist of Documentation required for South Africa visa.	2	CO3
III	17	Submit at least two real time Visa cases for processing. (Part I)	2#	CO3
III	18	Submit at least two real time Visa cases for processing. (Part II)	2	CO3
IV	19	Prepare a format describing health preventive measures.	2#	CO4
IV	20	Prepare a format describing general preventive measures.	2	CO4
IV	21	Demonstrate the Health preventing measures for the travellers.	2#	CO4
IV	22	Prepare a report on Vaccinations required while travelling to certain countries.	2#	CO4
IV	23	Demonstrate the SOP to be followed during the pandemic time by the travellers.	2#	CO4
V	24	Present custom related rules using power point presentation.	2	CO5
V	25	Demonstrate the procedure to be followed to carry pets and articles made from animals.	2#	CO5
V	26	Demonstrate the rules and formalities related to baggage.	2#	CO5
V	27	Handle at least two cases of currency Exchange.	2#	CO5
VI	28	Demonstrate formalities required at the Airport.	2#	CO6
VI	29	Present the inflight services using Power Point Presentation.	2#	CO6
VI	30	Make aware the traveller going abroad on the formalities required to complete by him/her.	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Need for Tourism Regulation	8	C	0	0	0	0
			O	0	0	0	0
2	Passport	10	C	0	0	0	0
			O	0	0	0	0
3	VISA	10	C	0	0	0	0
			O	0	0	0	0
4	Preventive Measures	10	C	0	0	0	0
			O	0	0	0	0
5	Custom, Currencies and Legal Aspects	12	C	0	0	0	0
			O	0	0	0	0
6	Airport formalities	10	C	0	0	0	0
			O	0	0	0	0
Total		60	C	0	0	0	0
			O	0	0	0	0

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Overall presentation of given assignment	20
3	Viva voce	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	-	-	3
C02	3	3	3	2	-	-	3	3	3
C03	3	3	3	2	-	-	3	3	3
C04	3	3	3	-	2	-	3	3	3
C05	3	3	3	-	2	-	3	3	3
C06	3	3	3	-	2	-	3	3	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Sales and Marketing for Travel and Tourism	P. G. Davidhoff, Doris S Davidhoff, Pearson, Second Edition, 1994.	13: 978-0137865185 10: 013786518X
2	A Practical Guide to Selling Travel	Gerald P Jung, Prentice-Hall, 1992.	10: 0136897045 13: 9780136897040
3	Tourism Operations and Management	Sunetra Roday, Archana Biwal, Vandana Joshi, Oxford Higher Education.	13: 978-0-19-806001-7 10: 0-19-806001-7
4	Tourism Development: Principles and Practices	A K Bhatia, Sterling Publishers Pvt.Ltd, Second Edition, 2020	132: 978-9386245625
5	IATA Training Manual	IATA Training & Development Institute, CANADA, 2011	13: 978-92-9233-626-4

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2. <https://visa.vfsglobal.com/sgp/en/gbr/attend-centre/Singapore>, accessed on 10 June 2024
3. <https://services.vfsglobal.com/aus/en/ind>, accessed on 10 June 2024
4. <https://visa.vfsglobal.com/ind/en/gbr>, accessed on 10 June 2024
5. <https://www.emirates.com/in/english/before-you-fly/visa-passport-information/uae-visa-information/>, accessed on 10 June 2024

XVI List of Major Equipment/Machineries with Specification:

1. Smart digital, interactive, touch screen board.
2. Computer with appropriate software
3. Globe
4. World map

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Deptt.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer, Travel and Tourism Deptt.	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Holidays, Nagpur
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	GE
Course Code	:	HM291H
Course Title	:	Front Office Operations

I Rationale:

As Hotel Industry and Tourism industry are co related and comes under hospitality industry, hotel industry plays an integral part in tourism industry . In Hotels Front Office Department is one of the most important revenue earning department and contributes a major part in the hotels . Front office is the nerve centre of the hotel . Studying front office operations will enhance prospectus and communication skills in tourism professional .

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Perform front office operations in hotel industry.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Draw a Layout of Front office department in hotel.

CO2: Draw a chart of organization structure of front office staff of small, medium, and large hotel.

CO3: Prepare a tariff card for the hotel.

CO4: Perform reservation and billing procedure.

CO5: Prepare the registration records according to the type of guests.

CO6: Handle various guest related services.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	2	-	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70**	100	40	25	10	25	10	-	-

** Online Objective Type

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Introduction to Front Office Department	1a	State the importance of Front office.	1.1	Defination of Hotel, Front office, Lobby, Reception .	CO1
	1b	Distinguish between different sections of front office.	1.2	Registration, Reservation, Cashier section	
	1c	Identify the Layout of Front office department.	1.3	Layout of Front office department. Lobby, Travel desk, Concierge desk , Reception desk.	
	1d	Identify the Equipments and Furniture used in front office.	1.4	Equipments and Furniture in front office department . Computer, Printer, Fax machine, credit card machine.	

UNIT II: Staff Organisation of Front Office	2a	Describe the Role of Front Office.	2.1	Role of front office staff in the department.	CO2
	2b	Describe the Duties and Responsibilities of front office.	2.2	Duties and Responsibilities of front office staff.	
	2c	Describe staff Organisation.	2.3	Staff organisation/ Hierarchy.	
	2d	Describe Job Description of Front office staff.	2.4	Job description of Front office manager Lobby manager Receptionists / Reservationists.	
	2e	Describe Personality Traits of front office staff.	2.5	Qualities of front office staff.	
UNIT III: Hotel Brochure /Tariff Card	3a	Identify different types of Room rates	3.1	Room rates: Rack rate, Weekend rate, Commercial	CO3
	3b	Illustrate front office Responsibilities.	3.2	Front office Responsibilities	
	3c	Coordinate front office department with other departments.	3.3	Coordination with House keeping, Food and Beverage, Accounts, Human resource Management.	
	3d	Describe different Guest Services.	3.4	Wakeup call, Left Luggage, Room change procedure Safe deposit locker , Paging	
UNIT IV: Meaning and Need of Reservation	4a	Identify Reservation sources in front office.	4.1	Direct / Central Reservation system / Hotel websites.	CO4
	4b	Describe Reservation process.	4.2	Reservation process in front Office.	
	4c	Illustrate different Types and Modes in front office.	4.3	Guaranteed / Non guaranteed / Tentative / Wishlisted Pre reservation / Walk in/ Online/ Letter/ Telephonic.	
	4d	Enlighten phases of Guest Cycle.	4.4	Pre arrival / Arrival/ Stay in Hotel/ Departure phase	
	4e	Prepare Formats used in Reservation process.	4.5	Reservation form/ Booking Diary / Density chart.	

UNIT V: Meaning and Importance of Registration.	5a	Describe Registration process.	5.1	Step wise Registration process in front office.	CO5
	5b	Identify different types of guests in hotel.	5.2	Types of guests in hotels Walk in / VIP/ Group / Crew members / Foreign.	
	5c	Describe registration process of different guests.	5.3	Registration process of walk in / VIP/ Group/ Crew/ Foreign guest.	
	5d	Identify different Registration Records used in registration.	5.4	Registration records. Loose leaf Hard bound register Guest registration card.	
UNIT VI: Guest Stay / Guest Services.	6a	Describe rooming of a Guest.	6.1	Procedure of Rooming a guest.	CO6
	6b	Describe Handling of Guest.	6.2	Procedure of handling guest	
	6c	Describe Room change procedure.	6.3	Procedure of room change Live move/ Dead move.	
	6d	Describe Safe deposit procedure.	6.4	Safe deposit procedure / safe deposit lockers.	
	6e	Describe Check out procedure of a guest in a hotel.	6.5	Check out procedure of a guest in front office Express check out.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Draw a neat Layout of Front Office Department.	2#	CO1
I	2	Prepare a chart on different sections in front office.	2#	CO1
II	3	Draw a neat chart of Staff Organization in front office department.	2#	CO2
II	4	Draw a neat chart of Hierarchy in front office department.	2	CO2
II	5	Perform role play of front office manager.	2#	CO2
III	6	Prepare Hotel Tariff card and mention room types/ room rates.	2#	CO3
III	7	Prepare Hotel Brochure and mention room types/ room rates/ Facilities and services offered in hotels.	2#	CO3
IV	8	Prepare formats used in Reservation process - Reservation Form.	2#	CO4
IV	9	Prepare formats used in Reservation process - Booking Diary/Conventional chart.	2#	CO4
V	10	Create registration records for different types of Guests.	2#	CO5
VI	11	Prepare formats for different guest services - Room change procedure / Guests messages / Mail Handling / Paging / Safe deposit lockers/ Rooming list. (Part I)	2#	CO6
VI	12	Prepare formats for different guest services - Room change procedure / Guests messages / Mail Handling / Paging / Safe deposit lockers/ Rooming list. (Part II)	2#	CO6
VI	13	Prepare formats for different guest services - Room change procedure / Guests messages / Mail Handling / Paging / Safe deposit lockers/ Rooming list. (Part III)	2	CO6
V	14	Perform Check out procedure of guest.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classroom Learning Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Introduction to Front Office Department	4	C	2	4	6	12
			O	0	0	0	0
2	Staff Organisation of Front Office	4	C	2	4	4	10
			O	0	0	0	0
3	Hotel Brochure /Tariff Card	6	C	2	4	6	12
			O	0	0	0	0
4	Meaning and Need of Reservation	6	C	2	4	6	12
			O	0	0	0	0
5	Meaning and Importance of Registration.	5	C	2	4	6	12
			O	0	0	0	0
6	Guest Stay / Guest Services.	5	C	2	4	6	12
			O	0	0	0	0
Total		30	C	12	24	34	70
			O	0	0	0	0

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C
Q. 1 to Q. 35	1R2	2R2	3R2	4R2	5R2	6R2	1U2	35/35
	1U2	2U2	2U2	3U2	3U2	4U2	4U2	
	5U2	5U2	6U2	6U2	1A2	1A2	1A2	
	2A2	2A2	3A2	3A2	3A2	4A2	4A2	
	4A2	5A2	5A2	5A2	6A2	6A2	6A2	

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	3	-	-	-	-	-
C03	3	-	-	3	-	-	-	-	-
C04	3	-	-	3	2	-	2	-	-
C05	3	-	-	3	2	-	2	-	-
C06	3	-	-	3	2	-	2	-	-

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S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Hotel Front Office Operations and Management	J.R. Tewari, Oxford University Press, New Delhi, 2009	13: 978-0195699197
2	Hotel Front Office: A Training Manual	Andrews Sudhir, McGraw Hill Education, 2017	13: 978-1259004971
3	Front Office Management	S K Bhatnagar, Frank Bros & Publishers, New Delhi, 2011	13: 9788171706525
4	Front Office Management	R. K. Singh. Aman Publications, New Delhi, 2007	13: 9788182040120
5	Accommodation Operations: Front Office	Collin Dix, Pitman Publishing, 2nd Revised Edition, 1986	13: 978-0273025672

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3. <https://www.youtube.com/watch?v=8RzHWyaox7I> accessed on 17th May 2024
4. <https://www.youtube.com/watch?v=G1FoU1p1YPI> accessed on 17th May 2024
5. <https://www.youtube.com/watch?v=DU8TqU4I5mc> accessed on 17th May 2024
6. <https://www.youtube.com/watch?v=xhdKDjb> GFM accessed on 17th May 2024

XVI List of Major Equipment/Machineries with Specification:

1. Computer latest version
2. Printer laser jet
3. Front Office Furniture

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P.P. Virkhare	HOD, Travel and Tourism	Government Polytechnic, Nagpur
2	Mr. Rajesh Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur
3	Dr. Aarti Meshram	I/C Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur
5	Mr. Adityashekhar Gupta	Director	Horizon Safaris, Nagpur
6	Dr. Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur
7	Ms. Rupal Deshmukh	Visiting Lecturer	LED & SRP College, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR

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Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/CO/IT/AE/MT/ PK/TX/TR/AI/MK
Course Category	:	VEC
Course Code	:	VE251H
Course Title	:	Environmental Sustainability

I Rationale:

This course aims to equip students with practical skills and knowledge necessary for promoting environmental sustainability in engineering practices. The focus will be on hands-on activities, real-world applications, and practical projects that address key areas of environmental sustainability.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Address environmental concerns and provide sustainable solutions.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Select** and plant native and drought-resistant tree species to enhance local biodiversity.
- CO2: Manage** different types of waste, and create effective collection and processing plans for recyclable materials.
- CO3: Analyse** environmental data such as temperature and CO₂ levels, and present findings through graphs and reports.
- CO4: Implement** systems for rainwater harvesting, waste water minimization, and conduct audits.
- CO5: Develop** analytical and problem-solving skills to assess environmental practices and recommend improvements for sustainability.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	2	2	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	25	10

VI Classroom Learning Content:**VII Laboratory Learning Content:**

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
	1	Select and plant native and drought-resistant tree species to provide shade and cool the environment through evapotranspiration.	2#	CO1
	2	Prepare seed bomb and plant it in campus.	2#	CO1
	3	Develop a schedule and assign teams to take care of the planted trees.	2#	CO1
	4	Identify and document different species of flora and fauna.	2	CO1
	5	Categorize and quantify different types of waste generated in institute campus.	2#	CO2
	6	Create a collection and processing plan for recyclable materials.	2#	CO2
	7	Monitor the effectiveness of the segregation system and provide feedback.	2	CO2
	8	Prepare a solid waste management plan of your campus.	2#	CO2
	9	Develop composting plant for biodegradable waste of your campus.	2#	CO2
	10	Create graphs and reports on temperature and CO ₂ levels over time.	2	CO3
	11	Calculate the carbon footprint of the campus or individual students.	2#	CO3
	12	Design a rainwater harvesting system for any building in your campus.	2#	CO4

	13	Prepare a report on wastewater generation in any one building in your campus including comments to reduce it.	2#	CO4
	14	Conduct a simple energy audit in the classroom or home.	2#	CO5
	15	Analyse energy consumption and identify saving opportunities in any campus building / home..	2#	CO5
	16	Conduct a simple waste audit in the classroom or home.	2	CO5
	17	Analyse waste generation and identify reduction opportunities.	2	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Organize a tree planting day on campus or in the local community.
2. Design and create useful items from waste materials, such as furniture from pallets or art from plastic bottles.
3. Create educational materials and conduct workshops on energy-saving practices.
4. Organize an awareness drive to educate peers and the community about global warming and its effects.
5. Install a small-scale rainwater harvesting system at home/campus and test its efficiency.
6. Prepare and Install bird feeders in appropriate location.
7. Organize a waste material collection drive in campus or in the local community.
8. Organize a energy conservation drive in campus or in the local community.

IX Specification Table for Classroom Learning Assessment:**X Question Paper Format for Summative Assessment (SA):****XI Scheme of Laboratory Formative Assessment (FA):**

S.N.	Criteria	Max. Marks
1	Prepare SWM Plan / Audit / Graph	5
2	Performance / Observation	10
3	Calculation, Result, Drawing Graphs (if any)	5
4	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Problem statement given to students	5
2	Performance / Observation	10
3	Calculation, Result, Drawing Graphs (if any)	5
4	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CO1	-	-	-	-	3	2	3	-	-
CO2	-	-	-	-	3	-	3	-	-
CO3	-	-	-	-	3	-	3	-	-
CO4	-	-	-	-	3	2	3	-	-
CO5	-	-	-	-	3	2	3	-	-
CO6	-	-	-	-	-	-	-	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	A text book of Environmental Science.	Arvind Kumar	978-8176485906
2	Environmental Science	Y. K. Singh	81-224-2330-2
3	A text book of Environmental Science	Shashi Chawla, Tata McGraw-Hill Publication.	
4	Environmental Studies	Erach Bharucha, UGC, New Delhi	

XV e-References:

1. <https://www.ugc.gov.in/oldpdf/modelcurriculum/env.pdf>. Accessed on 24 may 2024.
2. https://wbchse.wb.gov.in/storage/2024/03/ENVS_FINAL.pdf. Accessed on 24 may 2024.
3. https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/2015wess_ch5_en.pdf. Accessed on 24
4. [https://dl1.cuni.cz/pluginfile.php/909144/mod_resource/content/1/Goodland Environmental%20sustainability.pdf](https://dl1.cuni.cz/pluginfile.php/909144/mod_resource/content/1/Goodland%20sustainability.pdf). Accessed on 25 may 2024.
5. <https://egyankosh.ac.in/bitstream/123456789/85700/1/Unit-4.pdf>. Accessed on 25 may 2024.
6. https://assets-global.website-files.com/5f10ce18aa01d050c26b7c5e/62bc04ffacdfa6cab3fa9b9_Environment

XVI List of Major Equipment/Machineries with Specification:

1. Models of rain water harvesting.
2. Models / chart of biodiversity.
3. Models / charts of composting.
4. Models/ charts of carbon foot print.
5. Models / charts of environmental sustainability.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. D. K. Parbat	Head, Civil Engineering	Government Polytechnic, Nagpur
2	Mr. R. M. Walke	Lecturer, Civil Engineering	Government Polytechnic, Nagpur
3	Dr. B. R. Ambade	Lecturer, Civil Engineering	Government Polytechnic, Nagpur
4	Er. G. B. Takey	EE, Vigilance & Quality Control	PWD, Nagpur
5	Dr. Abhay Shende	Principal	J. L. Priyadarshini College of Engg, Nagpur
6	Dr. V. G. Kondekar	Head, Civil Engineering	Government Polytechnic, Sakoli



(Dr. D. K. Parbat)
HOD & Chairman PBOS, CE



(Dr. G. V. Gotmare)
Member Secretary PBOS, CE



Semester

IV



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR205H
Course Title	:	World Tourism - Africa & Europe

I Rationale:

Travel professionals use destination geography everyday. It comprises a survey of the countries of the world from a tourism perspective. Knowledge of the location of countries & region wise division is essential. In this course the students will acquire the basic knowledge required to provide timely & accurate service to the customers related to the tourism in Africa and Europe.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Competence in having in-depth knowledge of popular travel destinations, including cultural, historical, and tourist attractions in Africa and Europe.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Locate** African & European countries, their capitals & important places on given map.
- CO2: Relate** the Transportation systems of African & European countries to Tourism.
- CO3: Identify** major airports, airlines, currency & their code of African & European countries.
- CO4: Justify** significance of fairs, festivals, sports & cuisines of African & European countries for Tourism.
- CO5: Prepare** a catalogue of Natural & Manmade Tourist Attractions of African & European countries.
- CO6: Identify** functions & tagline of respective tourism boards of African & European countries.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	2	2	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: UK, Netherlands, Austria, Germany	1a	Locate important Cities of the given countries under study on the map.	1.1	Location, Capital, language, currency, Air, Water, Rail & Road Transportation.	CO1
	1b	Identify type of road,rail, air and water transport.	1.2	Major road transport, Major Tourist and luxury trains, Major Airports, Airlines & Codes, Cruises & ferries.	
	1c	Identify the Cuisines, Sports and Fairs and Festivals of the given countries under study.	1.3	The Cuisines ,Sports, adventure sports and Fairs and Festivals.	
	1d	Identify the major natural and manmade Attractions of the given countries under study.	1.4	Natural Tourist Attractions and Manmade Tourist Attractions.	
	1e	State the Tourism boards and Tagline and their functions.	1.5	Tourism boards and Taglineand their functions.	

UNIT II: France, Spain, Italy, Greece	2a	Locate important Cities of the given countries under study on the map.	2.1	Location, Capital, language, currency, Air, Water, Rail & Road Transportation.	CO2
	2b	Identify type of road, rail, air and water transport.	2.2	Major road transport, Major Tourist and luxury trains, Major Airports, Airlines & Codes, Cruises & ferries.	
	2c	Identify the Cuisines, Sports and Fairs and Festivals of the given countries under study.	2.3	The Cuisines, Sports, Adventure sports and Fairs and Festivals.	
	2d	Identify the major natural and manmade Attractions of the given countries under study.	2.4	Natural Tourist Attractions and Manmade Tourist Attractions.	
	2e	State the Tourism boards and Tagline and their functions.	2.5	Tourism boards and Tagline and their functions.	
UNIT III: Turkey, Switzerland, Russia	3a	Locate important Cities of the given countries under study on the map.	3.1	Location, Capital, language, currency, Air, Water, Rail & Road Transportation.	CO3
	3b	Identify type of road, rail, air and water transport.	3.2	Major road transport, Major Tourist and luxury trains, Major Airports, Airlines & Codes, Cruises & ferries.	
	3c	Identify the Cuisines, Sports and Fairs and Festivals of the given countries under study.	3.3	The Cuisines, Sports, Adventure sports and Fairs and Festivals.	
	3d	Identify the major natural and manmade Attractions of the given countries under study.	3.4	Natural Tourist Attractions and Manmade Tourist Attractions.	
	3e	State the Tourism boards and Tagline and their functions.	3.5	Tourism boards and Tagline and their functions.	

UNIT IV: Egypt, Kenya, Zimbabwe	4a	Locate important Cities of the given countries under study on the map.	4.1	Location, Capital, language, currency, Air, Water, Rail & Road Transportation.	CO4
	4b	Identify type of road, rail, air and water transport.	4.2	Major road transport, Major Tourist and luxury trains, Major Airports, Airlines & Codes, Cruises & ferries.	
	4c	Identify the Cuisines, Sports and Fairs and Festivals of the given countries under study.	4.3	The Cuisines, Sports, Adventure sports and Fairs and Festivals.	
	4d	Identify the major natural and manmade Attractions of the given countries under study.	4.4	Natural Tourist Attractions and Manmade Tourist Attractions..	
	4e	State the Tourism boards and Tagline and their functions.	4.5	Tourism boards and Tagline and their functions.	
UNIT V: South Africa, Mauritius	5a	Locate important Cities of the given countries under study on the map.	5.1	Location, Capital, language, currency, Air, Water, Rail & Road Transportation.	CO5
	5b	Identify type of road, rail, air and water transport.	5.2	Major road transport, Major Tourist and luxury trains, Major Airports, Airlines & Codes, Cruises & ferries.	
	5c	Identify the Cuisines, Sports and Fairs and Festivals of the given countries under study.	5.3	The Cuisines, Sports, Adventure sports and Fairs and Festivals.	
	5d	Identify the major natural and manmade Attractions of the given countries under study.	5.4	Natural Tourist Attractions and Manmade Tourist Attractions.	
	5e	State the Tourism boards and Tagline and their functions.	5.5	Tourism boards and Tagline and their functions.	

UNIT VI: Tanzania, Morocco	6a	Locate important Cities of the given countries under study on the map.	6.1	Location, Capital, language, currency, Air, Water, Rail & Road Transportation	CO6
	6b	Identify type of road, rail, air and water transport.	6.2	Major road transport, Major Tourist and luxury trains, Major Airports, Airlines & Codes, Cruises & ferries.	
	6c	Identify the Cuisines, Sports and Fairs and Festivals of the given countries under study.	6.3	The Cuisines, Sports, Adventure sports and Fairs and Festivals.	
	6d	Identify the major natural and manmade Attractions of the given countries under study.	6.4	Natural Tourist Attractions and Manmade Tourist Attractions.	
	6e	State the Tourism boards and Tagline and their functions.	6.5	Tourism boards and Tagline and their functions.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Plan an Itinerary for UK.	2#	CO1
I	2	Plan an Itinerary for Netherlands.	2#	CO1
I	3	Plan an Itinerary for Austria.	2#	CO1
I	4	Plan an Itinerary for Germany.	2	CO1
II	5	Plan an Itinerary for France.	2#	CO2
II	6	Plan an Itinerary for Spain.	2#	CO2
II	7	Plan an Itinerary for Italy.	2#	CO2
II	8	Plan an Itinerary for Greece.	2	CO2
III	9	Plan an Itinerary for Turkey	2#	CO3
III	10	Plan an Itinerary for Switzerland.	2#	CO3
III	11	Plan an Itinerary for Russia.	2	CO3
IV	12	Plan an Itinerary for Egypt.	2#	CO4
IV	13	Plan an Itinerary for Kenya.	2#	CO4
V	14	Plan an Itinerary for South Africa/ Mauritius.	2#	CO5
VI	15	Plan an Itinerary for Tanzania/Morocco.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a report of any destination under study - Location and language, Transportation, Cuisine, Fairs and festivals, Tourist Attractions.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	UK, Netherlands, Austria, Germany	12	C	02	06	04	12
			O	02	00	00	2
2	France, Spain, Italy, Greece	12	C	02	08	06	16
			O	02	08	00	10
3	Turkey, Switzerland, Russia	10	C	02	04	06	12
			O	00	00	06	6
4	Egypt, Kenya, Zimbabwe	10	C	02	04	04	10
			O	00	04	00	4
5	South Africa, Mauritius	8	C	02	08	00	10
			O	00	08	04	12
6	Tanzania, Morrocco	8	C	00	06	04	10
			O	00	00	06	6
Total		60	C	10	36	24	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	5R2	1R2	2R2	5	7
2	2U4	2U4	3U4	2U4	2U4			3	5
3	4U4	5U4	5U4	5U4	5U4			3	5
4	1A4	4A4	6U4	6U4	6A4			3	5
5	1U6	6U6	3A6					2	3
6	3A6	5A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Report Writing	20
2	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	3	3	3
C02	3	3	3	-	-	-	3	3	3
C03	3	3	3	-	-	-	3	3	3
C04	3	-	-	-	3	-	3	3	-
C05	3	-	-	-	-	-	3	3	-
C06	3	-	-	-	-	-		3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Travel Geography	Dr Rosemary Burton ,Pearson Education, 2nd Edition, 1994	10: 0273602039 13: 9780273602033
2	Geography of Travel and Tourism	Boniface, B.G. and Cooper, Butterworth Heinemann, 2nd Edition, 1994	10: 0750616709
3	World Geography of Travel and Tourism: A Regional Approach	Alan Lew, C. Michael Hall, Dallen J. Timothy, Oxford,1st Edition, 2008	13: 978-0-7506-7978-7; 10: 0-7506-7978-6
4	Geography and Air Transport	Graham, John Wiley & Sons Ltd, 1st Edition,November 1995	10: 0471957577

XV e-References:

1. <http://www.worldtravelguide.net/destinations> , accessed on 11th December 2024
2. <https://www.lonelyplanet.com/asia> , accessed on 11th December 2024
3. <http://www.visitdubai.com/en-in/> , accessed on 11th December 2024

XVI List of Major Equipment/Machineries with Specification:

1. Maps, Globe
2. Smart Board
3. Computer with internet connectivity

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR206H
Course Title	:	Tourism in Southern States of India

I Rationale:

This course intends to make students familiar with various places of tourist interest in East & South Indian States. The course highlights special efforts made by Indian Government to promote tourism, which is major foreign exchange earner, in the form of special trains, theme parks, and other forms of tourism.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Comprehend knowledge of various travel destinations, their attractions, and cultural aspects.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Locate** South, Central and East Indian states, their capitals & important tourist places on given map.
- CO2: Relate** the Transportation systems of South Indian states to Tourism.
- CO3: Identify** major airports and their code of South Indian states.
- CO4: Justify** significance of Fairs, Festivals, sports & cuisines of South Indian states for Tourism.
- CO5: Prepare** a catalogue of Natural & Manmade Tourist Attractions of South Indian states.
- CO6: Identify** functions & tagline of respective tourism boards of South Indian states.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: West Bengal and Odisha	1a	Locate important places on given map for Tourism.	1.1	Location, Capital and language of the States of West Bengal & Odisha.	CO1
	1b	Use the information on transportation system of West Bengal & Odisha for tourism.	1.2	Air, Water, Rail and Road Transportation in the States of West Bengal & Odisha. Major Tourist and luxury trains, Cruise & ferries, Major Airports and Codes in the States of West Bengal & Odisha.	
	1c	Justify significance of sports & adventure activities to tourism in West Bengal & Odisha.	1.3	Cuisine, Fairs and festivals, Major Sports and adventure Sports in the States of West Bengal & Odisha.	
	1d	Use the information of Tourist Attractions for Tourism.	1.4	Natural Tourist Attractions and Manmade Tourist Attractions in the States of West Bengal & Odisha.	

	1e	Justify the significance of Tourism Board of given States.	1.5	Tourism boards and Tagline in the States of West Bengal & Odisha.	
UNIT II: Madhya Pradesh and Chhattisgarh	2a	Locate important places on given map for Tourism.	2.1	Location, Capital and language of the States of Madhya Pradesh and Chhattisgarh.	CO2
	2b	Use the information on transportation system of Madhya Pradesh and Chhattisgarh for tourism.	2.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and Codes in the States of Madhya Pradesh and Chhattisgarh.	
	2c	Justify significance of sports & adventure activities to tourism in Madhya Pradesh and Chhattisgarh.	2.3	Cuisine, Fairs and festivals, Major Sports and adventure Sports in the States of Madhya Pradesh and Chhattisgarh.	
	2d	Use the information of Tourist Attractions for Tourism .	2.4	Natural Tourist Attractions and Manmade Tourist Attractions in the States of Madhya Pradesh and Chhattisgarh.	
	2e	Justify the significance of Tourism Board of given States.	2.5	Tourism boards and Tagline in the States of Madhya Pradesh and Chhattisgarh.	
UNIT II: Maharashtra and Goa	3a	Locate important places on given map for Tourism.	3.1	Location, Capital and language of the States of Maharashtra and Goa.	CO3
	3b	Use the information on transportation system of Maharashtra and Goa for tourism.	3.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and Codes in the States of Maharashtra and Goa.	
	3c	Justify significance of sports & adventure activities to tourism in Maharashtra and Goa.	3.3	Cuisine, Fairs and festivals, Major Sports and adventure Sports in the States of Maharashtra and Goa.	

UNIT 1	3d	Use the information of Tourist Attractions for Tourism Natural Tourist Attractions.	3.4	Natural Tourist Attractions and Manmade Tourist Attractions in the States of Maharashtra and Goa.	
	3e	Justify the significance of Tourism Board of given States.	3.5	Tourism boards and Tagline in the States of Maharashtra and Goa.	
UNIT IV: Tamil Nadu, Puducherry, Andaman and Nicobar Islands	4a	Locate important places on given map for Tourism.	4.1	Location, Capital and language of the States of Tamil Nadu, Puducherry, Andaman and Nicobar Islands.	CO4
	4b	Use the information on transportation system of Tamil Nadu, Puducherry, Andaman and Nicobar Islands for tourism	4.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and Codes in the States of Tamil Nadu, Puducherry, Andaman and Nicobar Islands.	
	4c	Justify significance of sports & adventure activities to tourism in Tamil Nadu, Puducherry, Andaman and Nicobar Islands.	4.3	Cuisine, Fairs and festivals, Major Sports and adventure Sports in the States of Tamil Nadu, Puducherry, Andaman and Nicobar Islands.	
	4d	Use the information of Tourist Attractions for Tourism.	4.4	Natural Tourist Attractions and Manmade Tourist Attractions in the States Tamil Nadu, Puducherry, Andaman and Nicobar Islands.	
	4e	Justify the significance of Tourism Board of given States.	4.5	Tourism boards and Tagline in the States of Tamil Nadu, Puducherry, Andaman and Nicobar Islands.	
ap	5a	Locate important places on given map for Tourism.	5.1	Location, Capital and language of the States of Karnataka, Kerala and Lakshadweep.	

UNIT V: Karnataka, Kerala and Lakshadweep	5b	Use the information on transportation system of Karnataka, Kerala and Lakshadweep for tourism.	5.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and Codes in the States of Karnataka, Kerala and Lakshadweep.	CO5
	5c	Justify significance of sports & adventure activities to tourism in Karnataka, Kerala and Lakshadweep.	5.3	Cuisine, Fairs and festivals, Major Sports and adventure Sports in the States of Karnataka, Kerala and Lakshadweep.	
	5d	Use the information of Tourist Attractions for Tourism.	5.4	Natural Tourist Attractions and Manmade Tourist Attractions in the States Karnataka, Kerala and Lakshadweep.	
	5e	Justify the significance of Tourism Board of given States.	5.5	Tourism boards and Tagline in the States of Karnataka, Kerala and Lakshadweep.	
UNIT VI: Andhra Pradesh and Telangana	6a	Locate important places on given map for Tourism.	6.1	Location, Capital and language of the States of Andhra Pradesh and Telangana.	CO6
	6b	Use the information on transportation system of Andhra Pradesh and Telangana for tourism.	6.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports and Codes in the Andhra Pradesh and Telangana.	
	6c	Co-relate Cuisine of given state to its Tourism and Justify significance of sports and adventure activities to tourism.	6.3	Cuisine, Fairs and festivals, Major Sports and adventure Sports in the States of Andhra Pradesh and Telangana.	
	6d	Use the information of Tourist Attractions for Tourism.	6.4	Natural Tourist Attractions and Manmade Tourist Attractions in the States Andhra Pradesh and Telangana.	
	6e	Justify the significance of Tourism Board of given States.	6.5	Tourism boards and Tagline in the States of Andhra Pradesh and Telangana.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Plan itinerary for the state of West Bengal.	2#	CO1
I	2	Plan itinerary for the state of Odisha.	2#	CO1
II	3	Plan itinerary for the state of Madhya Pradesh.	2#	CO2
II	4	Plan itinerary for the state of Chhattisgarh.	2#	CO2
III	5	Plan itinerary for the state of Maharashtra.	2#	CO3
III	6	Plan itinerary for the state of Goa.	2#	CO3
IV	7	Plan itinerary for the state of Tamil Nadu.	2#	CO4
IV	8	Plan itinerary for the Union Territory of Puducherry.	2	CO4
IV	9	Plan itinerary for the Union Territory of Andaman and Nicobar Islands.	2	CO4
V	10	Plan itinerary for the state of Karnataka.	2#	CO5
V	11	Plan itinerary for the state of Kerala.	2#	CO5
V	12	Plan itinerary for the state of Karnataka.	2#	CO6
VI	13	Plan itinerary for the Union Territory of Lakshadweep.	2	CO6
VI	14	Plan itinerary for the state of Andhra Pradesh.	2#	CO6
VI	15	Plan itinerary for the state of Telangana.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare Power Point Presentation of Popular tourist destinations of the region under study.
2. Locate states on the Map of India.
3. Locate important cities of tourist importance on the Map Of India.
4. Calculate average cost of transportation, food, accommodation for respective state.
5. Find out from various sources cost of transportation, special concessions available for students, senior citizens & tourists.
6. Prepare Charts on the popular Cuisines of the region under study.
7. Prepare a presentation on the famous fairs and festivals of the regions under study.
8. Prepare Power Point Presentation on the taglines and functions of the tourism boards
9. Prepare Power Point Presentation on the dance and music of South Indian states.
10. Prepare a catalogue of natural tourist attractions.
11. Prepare a catalogue of Manmade tourist attractions.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	West Bengal and Odisha	7	C	02	04	04	10
			O	00	04	00	4
2	Madhya Pradesh and Chhattisgarh	6	C	02	04	06	12
			O	00	08	00	8
3	Maharashtra and Goa	8	C	00	04	06	10
			O	02	00	06	8
4	Tamil Nadu, Puducherry, Andaman and Nicobar Islands	7	C	02	06	04	12
			O	00	04	00	4
5	Karnataka, Kerala and Lakshadweep	10	C	02	08	06	16
			O	02	08	00	10
6	Andhra Pradesh and Telangana	7	C	02	08	00	10
			O	00	00	06	6
Total		45	C	10	34	26	70
			O	4	24	12	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	4R2	5R2	6R2	3R2	5R2	5	7
2	1U4	2U4	3U4	2U4	2U4			3	5
3	5U4	5U4	6U4	5U4	5U4			3	5
4	6U4	1A4	4A4	1U4	4U4			3	5
5	4U6	2A6	3A6					2	3
6	3A6	5A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Visit	5
2	Report Writing	15
3	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	1	-	-	3	3	1
C02	3	-	-	-	-	-	3	3	1
C03	3	-	-	-	-	-	3	3	-
C04	3	-	-	-	-	-	3	3	-
C05	3	-	-	1	-	-	3	3	1
C06	3	-	-	-	-	-	3	3	1

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	India A Travel Guide	Aruna Deshpande, Indian Publishing House, First Indian Edition, 2007	10: 8184081758
2	Traveller's companion to India	TTK healthcare ltd, 2010	10: 8184459617
3	Incredible India	Dr R. P. Arya, Jitendra Arya, Dr. Gayatri Arya, Anshuman Arya, Indian Map Service, 2007	10: 9127081751
4	India	SamuealIsrael, BikramGrewal, APA Production, Germany, 1985	10: 7156081756
5	India - Lonely Planet	Bryan Thomas, David Collins et al, Lonely Planet publishers, 2018	10: 9538184081
6	Cultural Tourism of India	S.P. Gupta , Krishna Lal, Indraprasthara Museum of Art and Archaeology, 2020	10: 7284081787

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9. <https://www.karnatakaturism.org/>accessed on 13th December, 2024
10. <http://www.keralaturism.org/>accessed on 13th December, 2024

XVI List of Major Equipment/Machineries with Specification:

1. Maps
2. Smart Board
3. Globe

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR207H
Course Title	:	TOUR OPERATIONS

I Rationale:

This course explores the important strategies of tours and key information to manage tour programmes. This course also highlights planning of tour itineraries and preparation of tour brochures. It also focuses on the managerial skills and application of various concepts and functions of management in this business.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Design and manage personalized travel packages.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Categorise types of tour.

CO2: Categorise types of tour operator.

CO3: Design tour itinerary.

CO4: Generate various checklists and briefing for guides and escorts.

CO5: Prepare special interest package tour.

CO6: Design a tour brochure.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	1	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25+	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Types of Tours	1a	Categorize types of tours.	1.1	Meaning and Definition of Tour. Types of Tours: Custom Designed, Independent, Hosted, escorted Common interest tours.	CO1
	1b	Compare the terms FIT and GIT.	1.2	Terms : FIT & GIT.	
UNIT II: The Tour Operator	2a	Differentiate given types of tour operator.	2.1	Meaning and definition of tour operator, Types of tour - on the basis of tourist movement: Inbound tour operator, Outbound tour operator, Domestic tour operator, Ground tour operator.	CO2
	2b	Categorize given type of tour operator on the given basis.	2.2	Types of Tour operator - On the basis of market: Mass market tour operator, Specialist tour operator, Inclusive tour for particular destination, Inclusive tour for specific generating area, Inclusive tour for specific transport, inclusive tour for special interest (Sports, Safari, cruising, business etc.)	

UNIT III: Itineraries	3a	Prepare route maps for given itineraries.	3.1	Definition of itinerary, route map .	CO3
	3b	Prepare Itinerary of given duration and interests.	3.2	Planning of Domestic & International Itineraries – Preference, duration, Budget, mode of transport, etc. Reservations – Hotel, airline, train, Transport (cars, coaches, Cruises).	
	3c	Design special interest itinerary for given data.	3.3	Special interest itineraries.	
	3d	Estimate tour costing for given data.	3.4	Costing of itineraries.	
	3e	Prepare an itinerary template.	3.5	Use of Technology.	
UNIT IV: Managing Tour Operation	4a	Prepare a travel voucher on given data.	4.1	Preparing travel Voucher, issuing travel vouchers, advantages of voucher.	CO4
	4b	Prepare briefing for Escorts and Guides.	4.2	Briefing Escorts and Guides.	
	4c	Prepare various checklists.	4.3	Preparing various checklists.	
	4d	Prepare for arrival and receiving guests.	4.4	Preparations required for arrival and receiving of guests.	
	4e	Prepare a checklist for arrival and departure transfers.	4.5	Arrival and Departure assistance: Lost or Damaged Baggage, Locating Missing passengers and handling emergency situations.	
r Packages	5a	Use the given information for preparing a package tour.	5.1	Meaning, definition of package tour, disadvantages of tour packages, Components of a tour package : Travel arrangements : Air, Rail, Road, Water ways, Ground arrangements: Accommodation, local transport, food and beverages, entertainment, tickets of attractions.	

UNIT V: Tou	5b	Catagorize the types of tour on given basis.	5.2	Types of tour packages, On the basis of Destination: Single country tour, Area tour, Two city tour, Single city tour. On the basis of arrangment: Independent, Inclusive, Escorted, Business.	CO5
	5c	Prepare a special interest package tour.	5.3	Special interest packages tours cultural, rail tour, adventure, sports, incentive convention, charter tour.	
UNIT VI: Tour Brochures	6a	Prepare a checklist for creating a tour brochure.	6.1	Definition, types of brochures, Key aspects & checklist.	CO6
	6b	Design tour brochure.	6.2	Tour Brochures Designing, Pricing, Use of Technology.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Collect the Statistical data of various types of Tours from internet.	2#	CO1
II	2	Collect information of various types of tour operators by visiting tour companies.	2#	CO2
III	3	Prepare a route map of day wise domestic itinerary.	2#	CO3
III	4	Prepare a route map of day one international itinerary.	2#	CO3
III	5	Prepare Itinerary – different duration, circuits and interests. Using websites and apps like canva and vannagage.com Part 1.	2#	CO3
III	6	Prepare Itinerary – different duration, circuits and interests. Using websites and apps like canva and vannagage.com Part 2.	2	CO4
III	7	Estimate Costing of domestic Itinerary.	2#	CO4
III	8	Estimate Costing of international Itinerary.	2	CO4
IV	9	Prepare a travel voucher.	2#	CO5
IV	10	Prepare briefing for Escorts and Guides.	2#	CO5
IV	11	Prepare various checklists.	2#	CO5
V	12	Demonstrate the procedure to be followed in case of Lost or damage baggage.	2#	CO6
VI	13	Collect and display various types of brochures.	2	CO6
VI	14	Design a tour brochure with and without the use of websites like canva, vannagage.com, etc.	2#	CO5
V	15	Prepare special interest package tour.	2#	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a comparative study of various features of different websites of e-travel agents like Goibibo.com, makemytrip.com, etc.
2. Practice finding the locations of various cities on the world map and submit the map .
3. Visit the websites related to Bus, Railways, Airlines to study time tables, calculate fares, calculate distances, time taken for the journey and Submit the report.
4. Prepare various domestic and international itineraries of varying durations.
5. Collect various types of brochures from various sources like tourism boards, hotels, airlines and showcase.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Types of Tours	4	C	02	04	00	6
			O	02	04	00	6
2	The Tour Operator	5	C	02	08	00	10
			O	00	04	00	4
3	Itineraries	14	C	02	04	12	18
			O	00	04	06	10
4	Managing Tour Operation	12	C	02	04	06	12
			O	00	00	06	6
5	Tour Packages	6	C	02	04	06	12
			O	00	04	04	8
6	Tour Brochures	4	C	00	08	04	12
			O	02	04	00	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	1R2	2R2	3R2	4R2	5R2	1R2	6R2	5	7
2	1U4	2U4	2U4	1U4	2U4			3	5
3	3U4	4U4	5U4	3U4	5U4			3	5
4	6U4	6U4	6A4	6U4	5A4			3	5
5	3A6	3A6	3A6					2	3
6	4A6	5A6	4A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Selection of topic, Performance	10
2	Report Writing	10
3	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-		-	3	3	
C02	3	3	3	3	3	-	3	3	
C03	3	3	3	3	3	-	3	3	
C04	3	3	3	3	3	-	3	3	
C05	3	3	3	3	3	-	3	3	
C06	3	3	3	3	3	-	3	3	

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	An Introduction to Travel and Tourism	Foster Dennis L., McGraw Hill, 1990	10: 0026808617 13: 9780026808613
2	The Travel Industry	Chuck Y Gee, James C. Makes, Dexter J. L. Choy, Van Nostrand, Reinhold, 3rd Edition, 1997	13: 978-0-471-28774-2
3	Tourism Operations and Management	Sunetra Roday, Archana Bhiwal, Vandana Joshi, illustrated, Oxford University Press, 2009	10: 0198060017, 13: 9780198060017
4	Tourism in new Millennium	Dr. S.P.Bansal, Abhishek Publication, Chandigarh, 2002	10: 8185733295 13: 9788185733296
5	Basic Tourism	Krishnan K. Kamara & Mohinder Chand, Kanishka Publication, New Delhi, 2004	10: 8173915237 13: 9788173915239
6	Successful Tourism Management	Premnath Seth, Sterling Publication Ltd, New Delhi, 1986	10: 8120700295 13: 9788120700291

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6. <https://venngage.com/blog/travel-brochure-examples/>accesed on 28th Nov 2024

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity.
2. Projector with screen.
3. World map, Map of India, Maps of Indian states and Union Territories.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSE
Course Code	:	TR208H
Course Title	:	Adventure Tourism

I Rationale:

The course helps in understanding the resource potential for adventure tourism in India and the existing popular destinations and activities. It also elucidates the major constraints on way to adventure tourism development and the possible strategies to offset the same.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Handle travel-related emergencies and providing assistance to travellers in crisis situations, Respond effectively to crisis situations in tourism.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Examine the existing & potential adventure Tourism in India.

CO2: Execute Land based adventure Tourism activities.

CO3: Execute Water Based adventure Tourism activities.

CO4: Execute Air Based adventure Tourism activities.

CO5: Execute Wildlife Tourism.

CO6: Practice the various SOP issued by MOT for Adventure Tourism.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	4	3	10	5

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Adventure Tourism	1a	Appraise nature & scope of Adventure Tourism.	1.1	Definition of Adventure Tourism, Nature and Scope of Adventure Tourism.	CO1
	1b	Classify motivations behind adventure tourism.	1.2	Motivation behind adventure tourism.	
	1c	Examine latest trends in Adventure Tourism.	1.3	Adventure in the present context, contemporary trends in adventure tourism - Astro Tourism, Space Tourism, Night Sky Gazing.	
	1d	Examine existing and potential adventure tourism in India.	1.4	Existing and potential adventure tourism in India.	
ivities	2a	Select preferable destinations for land based adventures activities in India.	2.1	Preferable destinations for adventure activities in India.	
	2b	Select Necessary equipment for adventure activities.	2.2	Necessary equipment for adventure activities.	

UNIT II: Land Based Activities	2c	Carry out the relevant measures to maintain and enhance Energy level and physical fitness of Tourist.	2.3	Energy level and physical fitness of Tourist.	CO2
	2d	Prepare do's and don'ts for tourists while undergoing adventure activities.	2.4	Do's and don'ts for tourists while undergoing adventure activities.	
	2e	Prepare the various safety measures necessary for land based adventure sports.	2.5	Safety measures for land based adventure sports.	
UNIT III: Water Based Activities	3a	Identify water resources of India.	3.1	Rafting, Kayaking, Canoeing, Yachting, Water Scooter, Hovercraft, Surfing, Scuba diving, Water Resources of India : Rivers Seas and Lakes.	CO3
	3b	Examine Preferable destinations for adventure activities in India.	3.2	Preferable destinations for adventure activities in India.	
	3c	Select Necessary equipment for adventure activities.	3.3	Necessary equipment for adventure Activities.	
	3d	Carry out the relevant measures to maintain and enhance Energy level and physical fitness of Tourist.	3.4	Energy level and physical fitness of Tourist.	
	3e	Prepare dos and don'ts for tourists for given activities.	3.5	Do's and don'ts for tourists while undergoing adventure activities Safety measures for land based adventure sports.	
	4a	Examine Preferable destinations for Air adventure activities in India.	4.1	Hang gliding, Hot Ballooning, Para Jumping, Parasailing, Sky diving. Preferable destinations for adventure activities in India.	

UNIT IV: Air Based Activities	4b	Select Necessary equipment for adventure activities.	4.2	Necessary equipment for adventure Activities.	CO4
	4c	Carry out the relevant measures to maintain and enhance Energy level and physical fitness of Tourist.	4.3	Energy level and physical fitness of Tourist.	
	4d	Prepare do's and don'ts for tourists while undergoing adventure activities.	4.4	Do's and don'ts for tourists while undergoing adventure activities.	
	4e	Prepare the various safety measures necessary for Air based Adventure sports.	4.5	Safety Measures for Air Based activities.	
UNIT V: Wildlife Tourism	5a	Classify Popular National Parks and Wildlife Sanctuaries.	5.1	Popular National Parks and Wildlife Sanctuaries.	CO5
	5b	Categorise the types of safari.	5.2	Various Types of Safari: Jeep Safari, Elephant Safari, Camel Safari.	
	5c	Prepare do's and don'ts for tourists while undergoing given activities.	5.3	Do's and Don'ts for tourists Safety measures to be followed for wildlife Tourism.	
Regulations, Associations	6a	Follow the Acts and legislations related to adventure sports/ tourism.	6.1	Legislation for adventure activities.	CO6
	6b	Attribute International Associations in adventure sports.	6.2	International Associations in adventure sports.	
	6c	Attribute Indian Associations and organizations in adventure sports.	6.3	Indian Associations and organizations in adventure sports.	

UNIT VI:	6d	Implement the SOP issued by MOT for Adventure Tourism.	6.4	The SOP and various safety measures that are to be followed by Travel Agents and tour operators, Transport industry, Hospitality industry.

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Prepare a Presentation on the available options one adventure sports activity In India.	4#	CO1
II	2	Practice High hill trekking destinations.	4#	CO2
II	3	Practice Rock Climbing.	4#	CO2
III	4	Prepare an observation based key learning points in Kayaking/Water Scooter.	4#	CO3
III	5	Prepare an observation based key learning points in Canoeing.	4#	CO4
IV	6	Follow the expert instructions of Parasailing/ Hang gliding expert.	4#	CO4
V	7	Visit wildlife safari and collect tourist information Part 1.	4#	CO5
V	8	Visit wildlife safari and collect tourist information Part 2.	4#	CO5
V	9	Prepare Power point presentation on wildlife safari visit.	4	CO5
VI	10	Visit adventure campsite and collect data/ Photographs/ information brochures Part 1.	4#	CO5
VI	11	Visit adventure campside and collect data/ Photographs/ information brochures Part 2.	4	CO5
VI	12	Prepare Visit report on adventure camp.	4	CO6
VI	13	Design an advertisement/ promotional campaign for any one adventure activity.	4#	CO6
VI	14	Perform the task given by expert guide/ lecturer on adventure activities.	4#	CO6
VI	15	Prepare an adventure tourism package	4#	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a report on land based adventure activity on performing any or many activities.
2. Prepare a report on water based adventure activity on performing any or many activities.
3. Prepare a report on air based adventure activity on performing any or many activities.
4. Prepare a report on your wildlife tourism experience.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Adventure Tourism	4	C	00	04	04	8
			O	02	04	00	6
2	Land Based Activities	8	C	02	04	06	12
			O	00	04	00	4
3	Water Based Activities	12	C	02	08	06	16
			O	00	04	06	10
4	Air Based Activities	10	C	02	04	06	12
			O	00	00	06	6
5	Wildlife Tourism	6	C	02	08	06	16
			O	00	04	04	8
6	Regulations, Associations	5	C	02	04	00	6
			O	02	04	00	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	2R2	3R2	4R2	5R2	6R2	1R2	6R2	5	7
2	1U4	2U4	4U4	1U4	2U4			3	5
3	3U4	3U4	6U4	3U4	6U4			3	5
4	5U4	5U4	1A4	5U4	5A4			3	5
5	2A6	3A6	3A6					2	3
6	4A6	5A6	4A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Performance, Selection of topic	10
2	Report Writing	10
3	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	3	3	-
C02	3	-	-	-	-	-	3	3	-
C03	3	-	-	-	-	-	3	3	-
C04	3	-	-	-	-	-	3	3	-
C05	3	-	-	-	-	-	3	3	-
C06	3	-	-	-	1	-	3	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Adventure Tourism	R. Buckley, CABI, 2006	10: 1845931238, 13: 978184593123
2	Wild Life Tourism and Development	Ramesh Chawla, Mohit Publication, 2006	10: 817445358X 13: 9788174453587
3	Adventure Tourism: The New Frontier	Rakesh Kumar Sah, Random Publications , July 2014	10: 9351113256 13: 978-9351113256
4	Tourism in New Millennium	Dr. S.P.Bansal, Abhishek Publication, Chandigarh, 2002	10: 8185733295 13: 9788185733296
5	Basic Tourism	Krishnan K. Kamara & Mohinder Chand, Kanishka Publication, New Delhi, 2004	10: 8173915237 13: 9788173915239
6	Successful Tourism Management	Premnath Seth, Sterling Publication Ltd, New Delhi, 1986	10: 8120700295 13: 9788120700291

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3. https://tourism.gov.in/sites/default/files/2020-02/1527867024_gallery_image.pdf accessed on 20th Nov 2024
4. <https://www.canva.com/planners/templates/itinerary/> accessed on 20th Nov 2024
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7. <http://www.andaman.gov.in/> accessed on 20th Nov 2024
8. <https://tourism.assam.gov.in/> accessed on 20th Nov 2024
9. <http://www.arunachaltourism.com/> accessed on 20th Nov 2024
10. <https://www.lakshadweep tourism.com/> accessed on 20th Nov 2024

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity.
2. Projector with screen.
3. World map, Map of India, Maps of Indian states and Union Territories.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR

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Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSE
Course Code	:	TR209H
Course Title	:	Medical Tourism

I Rationale:

Tourism has been expanding its wings in various areas of life. Medical Tourism is comparatively a new such area which is growing in very rapid pace in India. This course intends to introduce the students this new wing of tourism and to understand the scope of this field in near future.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Perform medical tourism related activities for tourism industry.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Identify medical tourism product in India.

CO2: Analyze formal procedures in medical and health tourism.

CO3: Identify the successful medical tourism destinations.

CO4: Design ideal health/medical tourism.

CO5: Prepare packages for promotion of medical tourism in India.

CO6: Prepare a model business plan in Medical Tourism.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	4	3	10	5

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Introduction to Medical Tourism	1a	Justify the nature and scope of Medical Tourism.	1.1	Meaning, Nature and Scope.	CO1
	1b	Describe potential of medical tourism in India.	1.2	Factors responsible for growth of health and medical tourism.	
UNIT II: Medical Tourism Product	2a	Describe the advantages of medical tourism.	2.1	Health and medical tourism product. Advantages for India in Global Medical Tourism Market.	CO2
	2b	Describe the disadvantages of medical tourism.	2.2	Disadvantages for India in Global Medical Tourism Market.	
	2c	Describe the medical tourism market.	2.3	Health and medical tourism market at global level.	
UNIT III: Medical Tourism in India	3a	Describe the status of medical tourism in India.	3.1	Health and medical tourism in India.	
	3b	Describe the Role of private sector in health and medical tourism in India.	3.2	Role of private sector in health and medical tourism in India.	

UNIT III: Health and Medical Tourism in India	3c	Describe given Traditional Health Care systems in India.	3.3	Traditional Health Care systems in India - Role of Yoga, Ayurveda and Naturopathy.	CO3
	3d	Relate Wellness tourism with destination.	3.4	Wellness tourism with destination.	
	3e	Identify Government incentives for health and medical tourism in India.	3.5	Government incentives for health and medical tourism in India.	
UNIT IV: Domestic Potential of Medical Tourism	4a	Highlight the relevance of Government and NGOs in medical tourism.	4.1	Government and Private initiatives in rural health sector.	CO4
	4b	Identify the potential of Maharashtra in medical and Health sector.	4.2	Potential of Maharashtra in medical and Health sector.	
	4c	Justify the significance of Medical and Health Insurance policies.	4.3	Medical and Health Insurance policies.	
UNIT V: Rules and Regulations in Medical Tourism	5a	Prepare a model business plan in Medical Tourism.	5.1	Certification and Accreditation in health and medical tourism.	CO5
	5b	Identify given issues in health and medical Tourism.	5.2	Ethical, legal, economic and environmental issues in health and medical Tourism.	
UNIT VI: Case study	6a	Highlight the key issues in given medical tourism destinations.	6.1	Kerala, Miraj, Hyderabad, Mumbai, Nagpur and Ahmedabad.	CO6

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Prepare a study report on factors responsible for growth of health and medical tourism.	2	CO1
II	2	Identify the holistic treatment centres in India with cost comparisons with developed countries.	2#	CO2
II	3	Find out online different medical treatment packages available in renowned hospitals (Appollo, Fortis, Ruby Hall Clinic, Lilavati Hospital, Seven Hills Hospital, etc.) (Part I)	2#	CO2
II	4	Find out online different medical treatment packages available in renowned hospitals (Appollo, Fortis, Ruby Hall Clinic, Lilavati Hospital, Seven Hills Hospital, etc.) (Part II)	2	CO2
II	5	Present a statistical cost comparison between India and other developed countries regarding medical treatments.	2#	CO2
III	6	Identify hospitals which offer special medical treatment or packages to foreign patients.	2#	CO3
III	7	Find out and list the tour operators who provide packages for medical treatment.	2#	CO3
III	8	Prepare packages for promotion of medical tourism in India.	2#	CO3
III	9	Prepare Project on any one renowned hospital in India. It will cover History, Facilities, Brand and medical Treatment packages)	2#	CO3
III	10	Follow /practice the instructions of the Lecture cum demonstration on Yoga therapy.	2#	CO3
III	11	Prepare a report on visit to an alternative treatment centre.	2#	CO3
IV	12	Design an ideal health/medical insurance for a traveller after attending a guest lecture on health/medical insurance.	2#	CO4
V	13	Prepare a model business plan in Medical Tourism. (Part I)	2#	CO5
V	14	Prepare a model business plan in Medical Tourism. (Part II)	2	CO5
VI	15	Prepare a study report on one successful medical tourism destination.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a chart of different terms related to tourism with relevant examples.
2. Prepare a presentation depicting the Medical tourism.
3. Prepare a chart of the stages of development of tourism in India.
4. Prepare a chart of the stages of development of Medical tourism in India.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Introduction to Medical Tourism	6	C	00	04	04	8
			O	02	04	00	6
2	Medical Tourism Product	6	C	02	04	06	12
			O	00	04	00	4
3	Health and Medical Tourism in India	10	C	02	08	06	16
			O	00	04	06	10
4	Domestic Potential of Medical Tourism	8	C	02	04	06	12
			O	00	00	06	6
5	Rules and Regulations in Medical Tourism	8	C	02	08	06	16
			O	00	04	04	8
6	Case study	7	C	02	04	00	6
			O	02	04	00	6
Total		45	C	10	32	28	70
			O	4	20	16	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	2R2	3R2	4R2	5R2	6R2	1R2	6R2	5	7
2	1U4	2U4	4U4	1U4	2U4			3	5
3	3U4	3U4	6U4	3U4	6U4			3	5
4	5U4	5U4	1A4	5U4	5A4			3	5
5	2A6	3A6	3A6					2	3
6	4A6	5A6	4A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Selection of topic, Performance	10
2	Report Writing	10
3	Viva Voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	3	-	3	3	-
C02	3	-	-	-	3	-	3	3	-
C03	3	-	-	-	3	-	3	3	-
C04	3	-	-	-	3	-	3	3	-
C05	3	-	-	-	3	-	3	3	-
C06	3	-	-	-	3	-	3	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Health Tourism: Social Welfare Through International Trade	David Reisman, Edward Elgar Publishing Ltd, UK, 2010	13: 978-184844-8926
2	Health Tourism in India	M. Sarngadharan, V.S. Sunanda, New Century Publications, 2009	13: 978-8177082111
3	Medical Tourism: On The Growth Track in India	Gupta Ambuj, Sharma Vinay, Grin Verlag, 2011	13: 978-3640827213
4	Medical Tourism Facilitator's Handbook	Maria K. Todd, Productivity Press, 2024	13: 978-1032928746
5	Medical Tourism in India: Management and Promotion	Arun Kumar, Kulwant Pathania, Deep & Deep Publications, 2008	13: 978-8184500851

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2. <https://www.mohfw.nic.in>
3. <https://www.imtj.com/marketplace/medical-tourism-agencies/>
4. <https://www.samrattours.com>

XVI List of Major Equipment/Machineries with Specification:

1. NIL

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



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GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	SEC
Course Code	:	TR252H
Course Title	:	Basic Airfare & Ticketing

I Rationale:

This course facilitates the understanding of air transport essentials and the reservation procedures. The subject also lays emphasis on familiarization of CRS (Central reservation systems) and study of airfare and ticketing, which forms an important part of travel and tourism business.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Use travel technology and online booking tools to research, book, and manage travel arrangements.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Prepare** SSR messages using recognized abbreviations and codes.
- CO2: Interpret** airline schedules to guide and assist passenger about flight schedule, class of service.
- CO3: Guide** the passengers regarding baggage and allowance rule.
- CO4: Guide** the passengers about airport, its area and in-flight services.
- CO5: Analyze** the area and sub area to identify the global indicator and trip type accordingly.
- CO6: Check** flight schedule and availability of seats on the CRS.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	4	-	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50+	20	-	-

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Industry Codes Terminology And Definition	1a	Use and interpret message codes used by airlines.	1.1	Sending information to airlines.	CO1
	1b	Identify and name a selection of commonly used terms and definitions.	1.2	Special services codes (SSR message).	
	1c	Illustrate messages using recognized abbreviations.	1.3	Industry terminology and definitions.	
UNIT II: Flight schedule	2a	Use OAG flight guide and web based time table.	2.1	The OAG flight guide and Classes of service.	CO2
	2b	Illustrate procedures involved in booking flight reservation for interliner arises.	2.2	Reading of city to city schedule in an OAG and Web based time table.	
	2c	Check MCT for inter national flights.	2.3	Minimum connecting time (MCT).	
	2d	Suggesting flight options to passengers.	2.4	Booking flight and reservations.	
	2e	Checking & comparing the fares on different web portals.	2.5	Checking one way and Return trip fares with cancellation and Date change Penalty.	

UNIT III: Ancillary Services & Baggage	3a	Identify ancillary services and explain the benefits to passenger.	3.1	Meaning of ancillary services.	CO3
	3b	Distinguish between checked, unchecked baggage, adult, children and infants.	3.2	Definition of baggage and rules.	
	3c	Enlist rule of Baggage handling for specific Carrier.	3.3	Baggage concept, Checked baggage and allowances.	
	3d	Specify procedure for transportation of pets as accompanied baggage.	3.4	Unchecked baggage and allowances, carrier specific, Checked baggage for children and infant.	
	3e	Identify restriction for transport of prohibited items.	3.5	Pets and live animals, Free carry only items, Prohibited items, dangerous goods.	
UNIT IV: The Airport And The Flight	4a	Illustrate airport terminals for departure.	4.1	Airport areas – land side facilities, air side facilities.	CO4
	4b	Illustrate codes and features of different classes of service.	4.2	Air craft types.	
	4c	Interpret seating plans.	4.3	Airport terminals.	
	4d	List flight services and products.	4.4	Seating.	
	4e	Recognize features of aircraft types.	4.5	In flight service.	

UNIT V: IATA Geography	5a	Define IATA areas and sub areas.	5.1	Passenger air tariff (PAT).	CO5
	5b	Locate cities and countries, Identify various global indicators and direction codes based on the routing.	5.2	TC1, TC2, TC3 and Sub areas.	
	5c	Use PAT to locate fare rules, rate of exchange supporting fare construction, Identify and define common fare construction terms, identify types of journey.	5.3	Global Indicator.	
	5d	Differentiate between normal and specialfare, restricted and unrestricted normal fare, Identify significant carrier for international journey.	5.4	The journey concept, Fare Selection Criteria.	
	5e	Apply appropriate currency conversion procedure and differentiate between two types of rounding. procedure.	5.5	Currency conversion, point to point fare construction.	
UNIT VI: Introduction to CRS	6a	Enlist types of CRS.	6.1	Types of CRS	CO6
	6b	Identify city, airlines, country, aircraft codes.	6.2	Sign in, Sign Off, work areas, encode city, airlines, country, aircraft.	
	6c	Check flight schedule on CRS and check flight availability.	6.3	Check flight schedule and check seat availability.	
	6d	Check currency conversion rates.	6.4	Currency conversion.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Prepare messages using recognized abbreviations, Industry codes terminology.	4#	CO1
II	2	Use OAG flight guide to find and interpret airline schedules.	4#	CO2
III	3	Demonstrate the baggage rules to passenger.	4#	CO3
IV	4	Identify various Country, City, Airport Codes.	4#	CO4
IV	5	Identify Airlines and Aircraft Codes.	4#	CO4
V	6	Indicate correct global indicator.	4#	CO5
V	7	Identify and describe anatomy of a journey and differentiate types of journey.	4#	CO5
V	8	Locate cities and countries in each IATA area and sub area.	4	CO5
V	9	Interpret and select proper fare based on class of service travelled, fare level, global indicator and significant carrier.	4#	CO5
V	10	Show the normal procedure for currency conversion from NUC to LCF.	4#	CO5
V	11	Round off local currency fare to the nearest whole number using standard rounding rules.	4#	CO5
V	12	Identify Countrywise Currencies and its Codes.	4	CO5
VI	13	Check one way fare with cancellation and date change penalty.	4#	CO6
VI	14	Check return trip fare with cancellation and date change penalty.	4#	CO6
VI	15	Sign in and Sign off On Computerised Reservation System.	4#	CO6
VI	16	Check flight schedule on CRS and check flight availability.	4#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Industry Codes Terminology And Definition	5	C	00	00	00	0
			O	00	00	00	0
2	Flight schedule	5	C	00	00	00	0
			O	00	00	00	0
3	Ancillary Services & Baggage	5	C	00	00	00	0
			O	00	00	00	0
4	The Airport And The Flight	5	C	00	00	00	0
			O	00	00	00	0
5	IATA Geography	5	C	00	00	00	0
			O	00	00	0	0
6	Introduction to CRS	5	C	00	00	00	0
			O	00	00	00	0
Total		30	C	0	0	0	0
			O	0	0	0	0

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Overall Presentation of given assignment	20
3	Viva Voce	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CO1	3	-	-	-	3	-	3	3	3
CO2	3	-	-	-	3	-	3	3	3
CO3	3	-	-	-	3	-	3	3	3
CO4	3	-	-	-	3	-	3	3	3
CO5	3	-	-	-	3	-	3	3	3
CO6	3	-	-	-	3	-	3	3	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	World Airways Guide (The complete guide to air travel) BlueBook (A-M)	OAG Worldwide, Latest	10: 1845931238, 13: 978184593123
2	Air Tariffs (AT)	Mohit Publication, 2006	10: 817445358X 13: 9788174453587
3	IATA Manuals	Sah Random Publications , July 2014	10: 9351113256 13: 978-9351113256
4	Tourism in new Millennium	Dr. S.P.Bansal, Abhishek Publication, Chandigarh, 2002	10: 8185733295 13: 9788185733296
5	Basic Tourism	Krishnan K. Kamara & Mohinder Chand, Kanishka Publication, New Delhi, 2004	10: 8173915237 13: 9788173915239
6	Successful Tourism Management	Premnath Seth, Sterling Publication Ltd, New Delhi, 1986	10: 8120700295 13: 9788120700291

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2. <https://www.oag.com/accessedon/10.08.2024>
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4. <https://airlineworld.wordpress.com/category/gds/galileoaccessedon/11.10.2024>
5. <https://www.amadeus.in/accessedon/4.05.2024>
6. <https://www.makemytrip.com/flightscodeaccessedon/11.08.2023>
7. <https://www.travelboutiqueonline.com/codeaccessedon/15.09.2023>
8. <https://www.kayak.co.incodeaccessedon/03.08.2023>

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity.
2. Projector with screen.
3. World map, Map of India, Maps of Indian states and Union Territories.

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	GE
Course Code	:	HM292H
Course Title	:	Food & Beverage Services

I Rationale:

This course aims at explaining the food and beverages market, outlet, departments, equipments and accessories. It provides knowledge of Organization structure, duties and responsibilities, types and planning of menu.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Provide excellent service to the customers related to food and beverages service.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Recognize** the types of food & beverage service outlets.
- CO2: Identify** the various equipments used for food & beverages service.
- CO3: Identify** duties responsibility of food & beverage service staff.
- CO4: Plan** Menu.
- CO5: Classify** alcoholic & non alcoholic beverages.
- CO6: Assess** the impact of F & B Controls.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	2	-	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70**	100	40	25	10	25	10	25	10

**Online Objective Type

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Introduction To F & B service	1a	Illustrate Food & beverage service Industry.	1.1	Introduction to Food & Beverage Service Industry.	CO1
	1b	Classify f & b industry.	1.2	Classification of the f & b service industry according to priority (Primary and Secondary), Motive, Market / Types of guest.	
	1c	Identify the types of f & b outlets.	1.3	Types of F & B Outlets in Hotel.	
	1d	Identify the inter departmental relationships.	1.4	Inter- departmental relationship with other departments.	
F & B Service Equipments	2a	Identify equipments used for f & b service.	2.1	Big Equipments Required for F & B Service	CO2
	2b	Relate furniture with its usage.	2.2	Furniture Used for F & B Service, Side Station / Dummy waiter & Different types of Trolley.	
	2c	Justify the use of F & B Service Equipments.	2.3	Crockery, Cutlery & Linen - Types, Size, Capacities, uses.	

UNIT II:	2d	Identify various glassware required.	2.4	Glassware & other accessories required - Types, Size, Capacities, uses.	
UNIT III: Staff Structure	3a	Recognize f & b service staff structure.	3.1	Organization structure of F&B department of a hotel.	CO3
	3b	Recognize duties & responsibilities of f & b staff.	3.2	Duties & Responsibilities of the F&B manager, Restaurant manager, Captain & Waiter. Mise-en-Scene, Mise-en-place.	
	3c	Identify do's & Don'ts of waiter.	3.3	Attributes and Do's & Don'ts of the Waiter (Positive & Negative Attitude), Receiving the Guest.	
UNIT IV: Menu	4a	Identify types of Menu's.	4.1	Introduction & Evolution of menu. Types of menu & Types of Services.	CO4
	4b	Plan Menu	4.2	Menu planning & Menu engineering.	
	4c	Pair Food & Beverage.	4.3	Food & Beverage pairing.	
UNIT V: Beverages	5a	Classify beverages.	5.1	Classification, types & brands of Non Alcoholic Beverages.	CO5
	5b	Identify types of beverages.	5.2	Classification, types & brands of Non Alcoholic Beverages.	
	5c	Prepare cocktails & Mocktails.	5.3	Cocktails & Mocktails, different glasses used for different beverages.	
UNIT VI: F & B Controls	6a	Identify use of control system.	6.1	Necessity and functions of a control system.	CO6
	6b	Use appropriate billing methods.	6.2	Billing Methods – Duplicate and Triplicate System.	
	6c	Identify uses 7 types of KOT's.	6.3	KOTs and BOTs uses and its types.	
	6d	Use computer for f & b Control.	6.4	Use of computer in F & B Controls.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Prepare Charts of various F & B Service outlets of a Hotel.	2	CO1
I	2	Prepare Chart of various F & B service outlets of city Hotels.	2	CO1
II	3	Prepare PPT on the various crockery, Cutlery & the Glassware used in a restaurant.	2#	CO2
II	4	Use various equipments required for F & B service.	2#	CO2
II	5	Prepare side board ready for F & B Service.	2#	CO2
III	6	Practice receiving Guest.	2#	CO3
III	7	Prepare restaurant ready for F & B service.	2#	CO3
III	8	Groom yourself for F & B Service appropriately.	2#	CO3
IV	9	Do Mise En Place for F & b service in a restaurant.	2#	CO4
IV	10	Ensure Mise En Scene for F & B Service in a restaurant.	2#	CO4
V	11	Plan 3 Course French Menu. (Part I)	2#	CO5
V	12	Plan 3 Course French Menu. (Part II)	2#	CO5
V	13	Plan 5 Course French Menu. (Part I)	2#	CO5
V	14	Plan 5 Course French Menu. (Part II)	2#	CO5
VI	15	Make KOT for taking orders of Food & Beverage.	2#	CO6
VI	16	Take order on Tablet computer.	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Not Applicable.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Introduction To F & B service	5	C	02	04	00	6
			O	0	0	0	0
2	F & B Service Equipments	5	C	02	08	00	10
			O	0	0	0	0
3	Staff Structure	5	C	02	04	12	18
			O	0	0	0	0
4	Menu	5	C	02	04	06	12
			O	0	0	0	0
5	Beverages	5	C	02	04	06	12
			O	0	0	0	0
6	F & B Controls	5	C	00	08	04	12
			O	0	0	0	0
Total		30	C	10	32	28	70
			O	0	0	0	0

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
Q 1 to Q 35	1R2	1U2	1U2	2R2	2U2	2U2	2U2	35/35	
	2U2	3R2	3U2	3U2	3A2	3A2	3A2		
	3A2	3A2	3A2	4R2	4U2	4U2	4A2		
	4A2	4A2	5R2	5U2	5U2	5A2	5A2		
	5A2	6U2	6U2	6U2	6U2	6A2	6A2		

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	3	-	-	3	-	-
C02	3	-	-	3	-	-	3	-	-
C03	3	-	-	3	-	-	3	-	-
C04	3	-	-	3	-	-	3	-	-
C05	3	-	-	3	-	-	3	-	-
C06	3	-	-	3	-	-	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Food and Beverage Service (Training Manual).	Andrews,S. TataMcGraw-Hill, New Delhi, 2003	10: 0026808617 13: 9780026808613
2	Food and Beverage Service	Dennis Lillicrap, J.C., Hodder and Stoughton Educational London, 2002	13: 978-0-471-28774-2
3	Food and Beverage Service.	Singaravelavan, R., Oxford University Press, New Delhi, 2011.	10: 0198060017, 13: 9780198060017
4	Food & Beverage Service.	Dhawan ,V.Fraank Bros & co.(Publishers) ltd. New Delhi, 2003.	10: 8185733295 13: 978-8185733296
5	Food & Beverage Service.	Ahmed, M., Anmol Publication, New Delhi, 2005.	10: 8173915237 13: 978-8173915239
6	Professional Food and Beverage Service Management.	Verghese, B.(1999). Bangalore: Macmillan Indian ltd.	10: 8120700295 13: 978-8120700291

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2. <https://www.delhidutyfree.co.in/> accesed on 28th Nov 2024
3. <https://www.bisleri.com/> accesed on 28th Nov 2024
4. <https://www.wine-searcher.com/>accesed on 28th Nov 2024
5. <https://www.mansionz.in/> accesed on 28th Nov 2024
6. <https://www.vegrecipesofindia.com/>accesed on 28th Nov 2024
7. <https://www.coke2home.com/>accesed on 28th Nov 2024
8. <https://www.pizzahut.co.in/>accesed on 28th Nov 2024

XVI List of Major Equipment/Machineries with Specification:

1. F & B Equipments
2. Cutlury
3. Crokeries

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



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Member Secretary PBOS, TR



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	: Diploma in
	: CE/ME/EE/AE/CM/TX/PK/MT/TR/AI/MK
Course Category	: VEC
Course Code	: VE252H
Course Title	: Yog and Meditation

I **Rationale:**

The biggest challenge to student success is stress management, health management, sleep difficulties and depression. World Health Organization (WHO) emphasizes yog and meditation to prevent physical and mental stress. The prime objective of this course is a holistic development of mind and body by incorporating four primary components: physical exercises, breathing exercises, deep relaxation techniques and meditation. The daily practice of the course will prepare student to gain more physical, mental and emotional strength. This course supports the requirements of the National Education Policy (NEP).

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Practice Yog and Meditation in daily life.

III **Course Outcomes (COs):**

After completing this course students will be able to:

CO1: Improve Physical strength, balance and flexibility.

CO2: Enhance concentration and retain memory.

CO3: Increase energy flow within body and develop positive attitude.

CO4: Support stress management, mental health and ensure quality sleep.

CO5: Develop healthy eating habits and physical & mental hygiene.

CO6: Maintain a balanced metabolism and boost immunity.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
--	-	2	2	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	25	10

VI Classroom Learning Content:**VII Laboratory Learning Content:**

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)			Hours	Aligned COs
I	1	Introduction to Yog (Anatomy of Body) and know importance of Yog. Measure weight & height. Calculate BMI (Body Mass Index).		1#	CO1
I	2	Practice Sharirsanchalan, Padasanchalan. Practice basic asana: Uttitvivekasana (Standing Poses :Minor Exercises of Hands and Leg).		1#	CO1
I	3	Repeat day two. Practice Sharirsanchalan of Back (Reclining poses: Minor exercise of Back). Practice Pavanamuktasana.		1#	CO1
I	4	Repeat day two & three. Practice Ashtanga Yog (Yama, Niyam, Asan, Pranayam, Pratyahar). Prepare a Diet Plan for self. Ashtanga Yog in details.		1#	CO1
I	5	Repeat day two, three & four. Practice Sharirsanchalan of Stomach and Bhuja.		1#	CO1
I	6	Repeat day two. Practice Standing Poses Asana: Tadasana,Vrukshasana, Trikonasan, Hastapadasan.		1#	CO1
I	7	Repeat day three. Practice Reclining Poses Asana:Pavanamuktasana,Noukasana. Sandhisanchalana of neck,heap,		1#	CO1
I	8	Repeat day seven. Practice Sandhisanchalana of neck & heap.		1#	CO1

I	9	Repeat day eight. Practice Reclining Poses Asanas: Setubandhasana, Chakrasana, Halasana.	1#	CO1
I	10	Repeat day five. Practice Seated Poses Asanas : Padmasana, Aakarnadhanurasana, Ardhtitali, Purnatitali.	1	CO1
I	11	Repeat day two. Practice 12 poses of Surya Namaskara slowly with pace.	1#	CO1
I	12	Repeat day two. Practice 12 poses of Surya Namaskara in continuation (maximum repeatation as per capacity)	1	CO1
I	13	Practice Sandhisanhalan of feet, neck, hands, joints eyes etc. Practice Seated Poses asanas : Padmasana, Pacchimottanasana, Vakrasana, Gomukhasana	1	CO1
II	14	Introduction of Pranayama and know its benefits. Practice Dirghashwasan, Anulom Vilom and Agnisara.	1	CO2
II	15	Repeat day fourteen. Practice Kapalbharti and Nadi Shodhan Pranayama.	1	CO2
II	16	Practice Sharirsanchalan. Repeat day fifteen. Practice 5 types of Nadi Shodana Pranayama.	1	CO2
II	17	Repeat Sharirsanchalana and day sixteen. Practice Shitali Pranayama, Sitakari Pranayama, Sadanta Pranayama.	1#	CO2
III	18	Repeat Sharirsanchalana. Practice basic Pranayamas. Introduction to Bandhas and know about Mulbandha, Jalandhar Bandha.	1	CO3
III	19	Repeat Sharirshanchalan and day eighteen. Practice Udiyana bandha and Maha bandha.	1	CO3
III	20	Repeat day sixteen. Practice Bhastrika Pranayam: type 1 and 2.	1	CO3
III	21	Repeat Sharirsanchalan and day 20. Practice Bhastrika Pranayam: type 3, 4 and 5.	1	CO3
IV	22	Repeat Sharirsanchalan and day 21. Practice Ujjaiyi Pranayam.	1#	CO4
IV	23	Repeat Sharirsanchalan and day 19, 20, 21 and 22. Practice Vyaghrasana.	1	CO4
IV	24	Repeat Sharirsanchalana and Suryanamaskara. Introduction to meditation and know about benefits of meditation. Practice concentration on Breathing (Inhalation & exhalation).	1#	CO4
V	25	Repeat day 24. Practice Savasana (Relaxation Technique)	1#	CO5
V	26	Practice Sharirsahchalana. Know bout balancing techniques of body. Practice Mayurasana.	1	CO5
V	27	Repeat Sharirsanchalan and 12 poses of Suryanamaskara.	1	CO5

V	28	Introduction to Body Purification Method: Neti and know the steps & benefits of Neti.	1	CO5
VI	29	Practice Purification Method :Perform Neti,Jala Neti (Note: Should be done in the presence of guide)	1	CO6
VI	30	Measure weight. Recalculate BMI	1#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a report on daily practice of yog and meditation by you. Attach Google tag photographs in the report.

IX Specification Table for Classroom Learning Assessment:

X Question Paper Format for Summative Assessment (SA):

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Body alignment for each flow	5
2	Breathing	5
3	Performance Flow and Sequencing	5
4	Attendance	10
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Content	10
2	Report Writing	10
3	Viva-voce	5
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PS01	PS02
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	3	-	-	-	-	-
C03	3	-	-	3	-	-	-	-	-
C04	3	-	-	3	2	-	2	-	-
C05	3	-	-	3	2	-	2	-	-
C06	3	-	-	3	2	-	2	1	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Sulabh Sanghik (Part 1)	Janardhan Swamy Yogabhyasi Mandal, Ramnagar, Nagpur	-
2	Sulabh Sanghik (Part 2)	Janardhan Swamy Yogabhyasi Mandal, Ramnagar, Nagpur	-
3	Surya Namaskar (JSYOG)	Janardhan Swamy Yogabhyasi Mandal, Ramnagar, Nagpur	-
4	Pranayam Book (JSYOG)	Janardhan Swamy Yogabhyasi Mandal, Ramnagar, Nagpur	-

XV e-References:

1. <https://yoga.ayush.gov.in/public/assets/front/pdf/CYP-2023-English.pdf> assessed on 27th May 2024
2. <https://jsyog.org/yogasana/> assessed on 27th May 2024
3. <https://jsyog.org/pakshik-yog-varag/> assessed on 27th May 2024
4. <https://yoga.ayush.gov.in/Publications/index.php?bt=2> assessed on 27th May 2024
5. https://yoga.ayush.gov.in/public/assets/IDY_ebook.pdf assessed on 27th May 2024

XVI List of Major Equipment/Machineries with Specification:

1. Yoga and Meditation Kits
2. Weighing machine
3. Measuring tape
4. Yoga mats

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. M.B.Daigavane	Principal	Government Polytechnic, Nagpur
2	Mrs. Santoshee Soni	Yoga Trainer□	Janardan Swami Yogabhyasi Mandal, Nagpur
3	Ms. Nandini Menjoge	Yoga Trainer	Janardan Swami Yogabhyasi Mandal, Nagpur
4	Dr G.V. Gotmare	Member Secretary Borad of Studies	Government Polytechnic, Nagpur
5	Dr. Megha Bhelande (Machale)	Lecturer in English	Government Polytechnic, Nagpur.



(Dr. G. V. Gotmare)
HOD & Chairman PBOS, COMMON



(Dr. G. V. Gotmare)
Member Secretary PBOS,

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Exit Course

II Year



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	INP
Course Code	:	IN253H
Course Title	:	Internship (Professional Skills)

I Rationale:

The Internship (Professional Skill) course is a vital component for fulfilling the requirements of the diploma in vocation after the fourth semester as per NEP guidelines as an exit course. It provides students with hands-on experience in tourism and hospitality industries related to their field of study. This course bridges the gap between academic learning and practical application, enabling students to apply their theoretical knowledge in real-world industrial settings, enhancing their employability and professional competencies.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Bridge theoretical knowledge with practical experience in a professional environment.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Evaluate** the organization's structure, processes, protocols, and industry standards to determine operational effectiveness.
- CO2: Apply** industry-specific tools, softwares, and skills to perform various operations.
- CO3: Contribute** to organizational goals by handling projects/ tasks under mentor guidance, applying learned skills.
- CO4: Analyze** technical challenges, addressing industry-specific issues effectively.
- CO5: Prepare** a internship report, ensuring accuracy and clarity.
- CO6: Deliver** presentation using visual aids and effective communication.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	-	8	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	-	-	-	-	50	20

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)	Topics and Sub-topics	Aligned Cos
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VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Learn the organization's structure, operational workflow, professional standards, tourism and hospitality industry practices, methodologies, and workplace processes to analyze operational efficiency and compliance requirements.	10#	CO1
II	2	Undergo training on tourism and hospitality industry-specific tools, and software, while gaining hands-on experience in performing basic operations, and tasks, applying relevant skills to real-world industry scenarios and challenges.	20#	CO2

III	3	Participate in daily operations under mentor guidance, handling assigned projects or tasks aligned with industry needs, applying learned skills to contribute to organizational goals and gaining practical experience in real-world scenarios.	60#	CO3
IV	4	Identify and analyze professional challenges in tourism and hospitality and address industry-specific issues (if any).	10#	CO4
V	5	Prepare a comprehensive internship report that effectively documents work experiences, professional tasks, and key achievements throughout the internship. Ensure the accuracy of the content by cross referencing with project details. Organize the report clearly, following tourism industry standards.	10#	CO5
VI	6	Prepare a PowerPoint presentation on internship learnings, create and share a structured seminar outline, review technical documents, and present it.	10#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. During the summer vacations, after the 4th Semester, students are required to undergo internship with industry/ NGO"s/ Government organizations/ Micro/ Small/ Medium enterprises to make ready for the industry.

IX Specification Table for Classroom Learning Assessment:**X Question Paper Format for Summative Assessment (SA):****XI Scheme of Laboratory Formative Assessment (FA):****XII Scheme of Self-Learning Summative Assessment (SA):**

S.N.	Criteria	Max. Marks
1	Selection of industry	5
2	Work done and Feasibility of work	25
3	Daily diary, supervisor remark and report writing	10
4	Presentation	10
TOTAL		50

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	1	-	-	-	-	-	3	-	-
C02	-	-	-	-	-	3	3	-	-
C03	-	-	-	-	-	3	3	-	-
C04	-	-	-	-	1	3	3	-	-
C05	-	-	-	-	-	3	3	-	-
C06	-	-	-	-	-	3	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Industrial Training and Education	Lokesh Choudhary, Mittal Publications, 2007	10: 8183242367 13: 9788183242363
2	Training Practice	Penny Hackett, McGraw-Hill Education, September 2003	10: 0852929803 13: 9780852929803
3	AICTE Internship Policy: Guidelines & Procedures	All India council of Technical Education New Delhi	-

XV e-References:

1. <https://internship.aicte-india.org/> assessed on 23rd April 2024
2. <https://www.coursera.org/articles/computer-science-internships> assessed on 23rd April 2024

XVI List of Major Equipment/Machineries with Specification:

1. Desktop computers
2. Laser Printer
3. DLP

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. R. P. Mogre	Principal	Government Polytechnic, Nagpur
2	Dr. M. V. Sarode	HoD, Computer Engineering and Training & Placement Officer	Government Polytechnic, Nagpur
3	Dr. P. P. Virkhare	HOD, Travel and Tourism	Government Polytechnic, Nagpur
4	Dr. G. V. Gotmare	I/C Curriculum Development Cell	Government Polytechnic, Nagpur
5	Mr. Rajesh P. Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Semester

V



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
 (An Autonomous Institute of Govt. of Maharashtra)
 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	: Diploma in TR
Course Category	: DSC
Course Code	: TR301H
Course Title	: Marketing & Sales Techniques

I **Rationale:**

Marketing is a backbone of any business. Effective marketing ensures better chances of survival in the current era of cut-throat competition. Understanding tourists as consumer and market behavior would be essential to correlate Segmentation-Targeting-Positioning. Marketing Research, forecasting of demand and sales, framing appropriate and timely plan about the product, price, promotion and distribution activities is an essential part of successful marketing. Satisfaction of consumer for Revenue generation and Retention is a big task for Tourism industry as of transient nature of tourists. This course will help students to Locate and target tourist using marketing program for revenue generation through satisfaction.

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Use tools and techniques of marketing and sales for tourism products.

III **Course Outcomes (COs):**

After completing this course students will be able to:

CO1: Use Service Marketing Mix.

CO2: Correlate segment with Target for positioning the product.

CO3: Perform Marketing Research & Forecast sale.

CO4: Execute Product and Pricing plans.

CO5: Design Promotion Program and Select Distribution channel.

CO6: Perform selling process for consumer satisfaction and retention.□

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
3	-	2	3	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25+	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Concept of Marketing	1a	Illustrate functions & concepts of marketing.	1.1	Marketing: Meaning, Scope, concepts, Functions of Marketing. Approach to study tourism marketing. Difference between marketing and selling.	CO1
	1b	Distinguish between product and service on given points.	1.2	Service marketing: Characteristics of service. Points of distinction between Product and Service.	
	1c	Use 7 P's of service marketing mix.	1.3	Need of 7P's over 4P's: Product, Price, Promotion, Place/distribution, People, Physical Evidence & Process.	
UNIT II: Market Segmentation	2a	Identify Segment.	2.1	Segmentation: Meaning, approaches to Tours & consumer, variables of segment and segmentation.	CO2
	2b	Categorize segment on given basis.	2.2	Types of segmentation with Merits and demerits. Geographic. Demographic. Psychographic. Behavioral. Price.	
	2c	Describe given factors of target marketing.	2.3	Target Marketing: Meaning & factors.	

UNIT III: Marketing Research and Sales Forecasting	3a	Illustrate Marketing research and Market research.	3.1	Marketing Research: Meaning, benefits, and Types of research. Distinction between marketing and market research.	CO3
	3b	Collect Data using appropriate method and tools.	3.2	Data Collection: Meaning, types, Methods, and tools.	
	3c	Use various methods for sales forecasting.	3.3	Sales Forecast: Meaning, objectives, and importance of sales forecasting. Factors influencing sales forecasting and limitations.	
UNIT IV: Product and Pricing	4a	Use product life cycle in decisions.	4.1	Tourism Product – Component & Types of Tourism products, Product life cycle [PLC].	CO4
	4b	Develop or Modify and Launch the product.	4.2	Product: New product development process, Modification of the product, launching of a new Product.	
	4c	Apply Pricing Plans.	4.3	Pricing: Meaning, objectives, pricing methods with merits and demerits (suitability).	
	4d	Apply digital technologies to international marketing scenarios including B2B eCommerce and consumer e-Commerce platforms.	4.4	International Marketing and Digital Technology: Introduction, Technological development, The growth of digital business, International B2B e-marketing. Consumer and e-Commerce.	

UNIT V: Promotion and Distribution	5a	Design Promotional Activity.	5.1	Promotion: Means of communication, Steps in development of effective communication, Types of promotion with merits and demerits.	CO5
	5b	Use web marketing.	5.2	E-Marketing - Components and tasks of E-marketing and Web marketing including Blogs & Vlogs. Benefits of web marketing to the seller, consumer, and market. Limitations and problems of web marketing.	
UNIT VI: Consumer Behavior & Selling	6a	Illustrate buyer and consumer using characteristics, behavior and needs.	6.1	Consumer's behavior: concept, consumer's characteristics & behavior affecting buying process. Basic concept of Maslow's hierarchy of needs. Kinds of Tourist. Distinction between the buyer and consumer.	CO6
	6b	Complete selling process.	6.2	Selling process: Steps in selling process. Types of selling.	
	6c	Illustrate benefits of customer retention for the business and consumer.	6.3	Customer satisfaction and retention: Meaning and Benefits for business and consumer.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Illustrate characteristics of service marketing.	2#	CO1
I	2	Illustrate 7 P's of tourism marketing.	2#	CO1
II	3	Select suitable segment on the basis of Geography & Price for planning tour.	2#	CO2
II	4	Select suitable segment on the basis of Demography & Price for planning tour.	2#	CO2
II	5	Select suitable segment on the basis of Psychography & Price for planning tour.	2#	CO2
II	6	Select suitable segment on the basis of Behaviour & Price for planning tour.	2#	CO2
III	7	Prepare a questionnaire to perform marketing research for understanding tourist's needs & preferences.	2#	CO3
III	8	Collect data to perform marketing research for understanding tourist's needs & preferences.	2#	CO3
III	9	Compile and analyse the data to perform marketing research for understanding tourist's needs & preferences.	2#	CO3
III	10	Draw conclusions on the basis of data analysis to prepare tours as per tourist's needs & preferences.	2#	CO3
V	11	Illustrate Product life cycle (PLC) with graph and describe its role in promotion.	2	CO5
V	12	Design Promotion program for individual tour.	2	CO5
V	13	Design Promotion program for group tour.	2#	CO5
VI	14	Demonstrate selling process.	2#	CO6
VI	15	Prepare feed-back form.	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a group tour on the basis of customer choices and preferences by undertaking the market research process.
2. Promote the tour you have prepared.
3. Prepare a feedback form to collect the feedback of tourists after completion of their tour.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classroom Learning Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Concept of Marketing	6	C	00	04	00	4
			O	02	00	00	2
2	Market Segmentation	10	C	06	08	06	20
			O	02	08	00	10
3	Marketing Research and Sales Forecasting	8	C	02	04	06	12
			O	00	00	06	6
4	Product and Pricing	5	C	02	06	00	8
			O	00	04	00	4
5	Promotion and Distribution	10	C	06	04	06	16
			O	04	08	00	12
6	Consumer Behavior & Selling	6	C	02	08	00	10
			O	00	00	06	6
Total		45	C	18	34	18	70
			O	8	20	12	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	2R2	3R2	4R2	5R2	6R2	1R2	2R2	5	7
2	2R4	5R4	1U4	5R4	2U4			3	5
3	2U4	2U4	3U4	2U4	4U4			3	5
4	5U4	6U4	6U4	5U4	5U4			3	5
5	4U6	2A6	3A6					2	3
6	3A6	5A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Preparation of questionnaire	5
2	Data collection, analysis, conclusion	15
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	3	-	-
C02	3	-	-	3	-	-	3	3	-
C03	3	3	3	3	3	-	3	3	-
C04	3	3	3	3	3	-	3	3	-
C05	3	3	3	3	3	-	3	3	-
C06	3	3	3	3	3	-	3	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Marketing for Hospitality and Tourism	Philip T. Kotler, John T. Bowen, James Makens Ph.D. Pearson, 3rd edition 2002	10: 0131200577 13: 978-0131200579
2	Marketing of Hospitality and Tourism Service	Prasanna Kumar, Mc Graw Hill Higher Education, New Delhi, First Reprint 2012	13: 976-0-07-067057-0 10: 0-07-067057-9
3	Tourism Marketing	Manjula Chaudhary, Oxford Higher Education, First Edition, 2010	13: 978-0-19-806630-9 10: 0-19-806630-9
4	Marketing Management	Philip Kotler, Keven Lane Keller, Pearson Education, Fifteenth Edition, 2017	10: 9789332587403 13: 978-9332587403
5	Marketing Management	S.A. Sherlekar, R. Krishnamoorthy, Himalaya Publishing house Pvt. Ltd, Fourteenth Edition. 2019	13: 978-93-5097-005-8

XV e-References:

1. [1 https://www.yourarticlelibrary.com/marketing/marketing-concepts-top-5-important-concepts-of-marketing-explained/32287](https://www.yourarticlelibrary.com/marketing/marketing-concepts-top-5-important-concepts-of-marketing-explained/32287) - accessed on February
2. https://www.tutorialspoint.com/tourism_management/tourism_management_market_segmentation.htm#:~:text=Tourism%20market%20segmentation%2
3. <https://study.com/academy/lesson/what-is-consumer-behavior-in-marketing-factors-model-definition.html> - accessed on February 25, 2022
4. <https://www.investopedia.com/terms/m/market-research.asp> - accessed on July 1, 2023
5. <https://www.yourarticlelibrary.com/marketing/product/what-is-a-product-with-diagrams/50846> - accessed on June 15, 2023
6. <https://www.yourarticlelibrary.com/marketing/marketing-mix/pricing-of-products-definition-factors-and-other-details-marketing-mix/41099> -
7. <https://www.yourarticlelibrary.com/marketing/characteristics-and-objectives-of-physical-distribution/48645> - accessed on November10, 2023
8. <https://www.yourarticlelibrary.com/marketing/promotion-marketing/promotion/99783> - accessed on February 15, 2022
9. <https://www.economicsdiscussion.net/marketing-2/service/service/32466> - accessed on September 15, 2024
10. [https://www.xotels.com/en/glossary/bar-best-available-rate/#:~:text=Best%2Davailable%2Drate%20\(BAR,is%20offered%20to%20t](https://www.xotels.com/en/glossary/bar-best-available-rate/#:~:text=Best%2Davailable%2Drate%20(BAR,is%20offered%20to%20t)

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity
2. Smart Board

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HOD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/C Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.
7	Mr Sandeep Bapat	Lecturer	Tirpude College of Hotel Management,



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



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GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	DSC
Course Code	:	TR302H
Course Title	:	World Tourism- Asia & Australia

I Rationale:

Travel professionals use destination geography every day. It comprises a survey of the countries of the world from a tourism perspective. Knowledge of the location of countries & region wise division is essential. In this course the students will acquire the basic knowledge required to provide timely & accurate service to the customers.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Competence in having in-depth knowledge of popular travel destinations, including cultural, historical, and tourist attractions.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Locate** Australia & Asian countries, their capitals & important places on given map.
- CO2: Relate** the Transportation systems of Australia & Asian countries to Tourism.
- CO3: Identify** major airports, airlines, currency & their codes of Australia & Asian countries.
- CO4: Justify** the significance for Tourism of Fairs, Festivals, sports & cuisines of Australia & Asian countries.
- CO5: Prepare** a catalogue of Natural & Manmade Tourist Attractions of Australia & Asian countries.
- CO6: Identify** functions & tagline of respective tourism boards of Australia & Asian countries.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
4	-	2	2	8	4

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70	100	40	25	10	25	10	25	10

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: AUSTRALIA	1a	Locate important places in the countries under study on the given map.	1.1	Location, Capital, language, & currency.	CO1
	1b	Relate Transportation systems to Tourism.	1.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines and Codes.	
	1c	Justify significance of sports & adventure activities to tourism.	1.3	Major Sports & adventure Sports.	
	1d	Relate Cuisine, Fairs & Festivals with Tourism.	1.4	Cuisine, Fairs and festivals.	
	1e	Justify significance of Natural Tourist Attractions & Manmade Tourist Attractions.	1.5	Natural Tourist Attractions, Manmade Tourist Attractions. Tourism boards and Tagline.	
na	2a	Locate important places in the countries under study on the given map.	2.1	Location, Capital, language, & currency.	

UNIT II: Japan, South Korea, China	2b	Relate Transportation systems to Tourism.	2.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines and Codes.	CO2
	2c	Justify significance of sports & adventure activities to tourism.	2.3	Major Sports & adventure Sports.	
	2d	Relate Cuisine, Fairs & Festivals with Tourism.	2.4	Cuisine, Fairs and festivals.	
	2e	Justify significance of Natural Tourist Attractions & Manmade Tourist Attractions.	2.5	Natural Tourist Attractions, Manmade Tourist Attractions. Tourism boards and Tagline.	
UNIT III: Nepal, Bhutan, Sri Lanka	3a	Locate important places in the countries under study on the given map.	3.1	Location, Capital, language, & currency.	CO3
	3b	Relate Transportation systems to Tourism.	3.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines and Codes.	
	3c	Justify significance of sports & adventure activities to tourism.	3.3	Major Sports & adventure Sports.	
	3d	Relate Cuisine, Fairs & Festivals with Tourism.	3.4	Cuisine, Fairs and festivals.	
	3e	Justify significance of Natural Tourist Attractions & Manmade Tourist Attractions.	3.5	Natural Tourist Attractions, Manmade Tourist Attractions. Tourism boards and Tagline.	
Asia, Thailand	4a	Locate important places in the countries under study on the given map.	4.1	Location, Capital, language, & currency.	
	4b	Relate Transportation systems to Tourism.	4.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines and Codes.	

UNIT IV: Singapore, M	4c	Justify significance of sports & adventure activities to tourism.	4.3	Major Sports & adventure Sports.	CO4
	4d	Relate Cuisine, Fairs & Festivals with Tourism.	4.4	Cuisine, Fairs and festivals.	
	4e	Justify significance of Natural Tourist Attractions & Manmade Tourist Attractions.	4.5	Natural Tourist Attractions, Manmade Tourist Attractions. Tourism boards and Tagline.	
UNIT V: Indonesia, Cambodia, Vietnam	5a	Locate important places in the countries under study on the given map.	5.1	Location, Capital, language, & currency.	CO5
	5b	Relate Transportation systems to Tourism.	5.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines	
	5c	Justify significance of sports & adventure activities to tourism.	5.3	Major Sports & adventure Sports.	
	5d	Relate Cuisine, Fairs & Festivals with Tourism.	5.4	Cuisine, Fairs and festivals.	
	5e	Justify significance of Natural Tourist Attractions & Manmade Tourist Attractions.	5.5	Natural Tourist Attractions, Manmade Tourist Attractions. Tourism boards and Tagline.	
UAE, Saudi Arabia	6a	Locate important places in the countries under study on the given map.	6.1	Location, Capital, language, & currency.	CO6
	6b	Relate Transportation systems to Tourism.	6.2	Air, Water, Rail and Road Transportation, Major Tourist and luxury trains, Cruise & ferries, Major Airports, Airlines and Codes.	
	6c	Justify significance of sports & adventure activities to tourism.	6.3	Major Sports & adventure Sports.	

UNIT VI:	6d	Relate Cuisine, Fairs & Festivals with Tourism.	6.4	Cuisine, Fairs and festivals.
	6e	Justify significance of Natural Tourist Attractions & Manmade Tourist Attractions.	6.5	Natural Tourist Attractions, Manmade Tourist Attractions. Tourism boards and Tagline.

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Plan an Itinerary Australia	2#	CO1
II	2	Plan an Itinerary for Japan.	2#	CO2
II	3	Plan an Itinerary for South Korea	2#	CO2
II	4	Plan an Itinerary for China	2#	CO2
III	5	Plan an Itinerary for Nepal	2#	CO3
III	6	Plan an Itinerary for Bhutan	2	CO3
III	7	Plan an Itinerary for SriLanka	2#	CO3
IV	8	Plan an Itinerary for Singapore	2#	CO4
IV	9	Plan an Itinerary for Malasia	2	CO4
IV	10	Plan an Itinerary for Thailand	2#	CO4
V	11	Plan an Itinerary for Indonesia	2#	CO5
V	12	Plan an Itinerary for Combodia	2#	CO5
V	13	Plan an Itinerary for Vietnam	2#	CO5
VI	14	Plan an Itinerary for UAE	2#	CO6
VI	15	Plan an Itinerary for Saudi Arabia.	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a Visit Report Of Any Destination Under Study - Location and language, Transportation, Cuisine, Fairs and festivals, Tourist Attractions.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	AUSTRALIA	6	C	00	04	06	10
			O	02	00	00	2
2	Japan, South Korea, China	10	C	06	04	06	16
			O	02	08	00	10
3	Nepal, Bhutan, Sri Lanka	8	C	02	04	06	12
			O	00	00	06	6
4	Singapore, Malasia, Thailand	6	C	02	10	00	12
			O	00	04	00	4
5	Indonesia, Combodia, Vietnam	10	C	06	04	00	10
			O	04	08	00	12
6	UAE, Saudi Arabia	5	C	02	08	00	10
			O	00	00	06	6
Total		45	C	18	34	18	70
			O	8	20	12	40

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options	
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C	O
1	2R2	3R2	4R2	5R2	6R2	1R2	2R2	5	7
2	2R4	1U4	2U4	2U4	2U4			3	5
3	5R4	3U4	4U4	5R4	4U4			3	5
4	5U4	6U4	6U4	5U4	5U4			3	5
5	4U6	1A6	3A6					2	3
6	2A6	3A6	6A6					2	3

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Visit (May be virtual)	5
2	Report Writing	20
TOTAL		25

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	3	3	3
C02	3	3	3	-	-	-	3	3	3
C03	3	3	3	-	-	-	3	3	3
C04	3	-	-	-	3	-	3	3	-
C05	3	-	-	-	-	-	3	3	-
C06	3	-	-	-	-	-	-	3	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Travel geography	Dr Rosemary Burton, Pearson Education, 2nd Edition, 1994	10: 0273602039 13: 9780273602033
2	Geography of Travel and Tourism	Boniface, B.G. and Cooper, Butterworth Heinemann, 2nd Edition, 1994	10: 0750616709
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XVI List of Major Equipment/Machineries with Specification:

1. Maps
2. Smart Board

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HOD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/C Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
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 Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	SEC
Course Code	:	TR351H
Course Title	:	Web Application in Tourism

I Rationale:

Use of internet is common these days. In every walk of life internet and various websites are used. Travel and Tourism industry also make very good use of websites. The purpose to include this course for study is the students should understand and be able to apply the use of internet while working in the travel industry.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Adopt and adapt to emerging travel technology trends for tourism promotion.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Examine the use of website in travel industry.

CO2: Analyze the use of websites by the hotel industry.

CO3: Use online services of a tourism board to get service satisfaction.

CO4: Use social media platforms effectively.

CO5: Use e-newspapers and e-magazines.

CO6: Compare manual working Vs working through IT enabled systems.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	4	-	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50+	20	-	-

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Travel Agency Operations	1a	Identify the need of website for a travel agency.	1.1	Introduction to web application in tourism.	CO1
	1b	Explore a website of a travel agency.	1.2	Website of a Travel Agency - Design, content and applications.	
	1c	Identify Different travel software's used world-wide.	1.3	Different travel software's used world-wide.	
	1d	Use E- Travel Portals.	1.4	E- Travel Portals like makemytrip.com, goibibo.com.	
UNIT II: Hotel Operations	2a	Identify the need of website for a Hotel.	2.1	Website of a Hotel - Design, content and applications.	CO2
	2b	Identify the use of computerized systems in various departments of a Hotel.	2.2	Use of computerized systems in various departments of a Hotel.	
	2c	Analyze various features of computerized systems and websites used in hotels.	2.3	Various features of computerized systems and websites used in hotels.	

UNIT III: Tourism Development Boards	3a	Identify the need of website for tourism Board.	3.1	Website of a Tourism Development Board / corporation - Design, content and applications.	CO3
	3b	Analyze Use for promotion, marketing and booking.	3.2	Use for promotion, marketing and booking.	
	3c	Use online services to experience the service satisfaction.	3.3	Online services and satisfaction achieved by customers.	
UNIT IV: Social Media	4a	Identify various social media platforms.	4.1	Social Media Platforms : Whats App, Facebook, Instagram, Linked In.	CO4
	4b	Use social media platform for promotion and marketing.	4.2	Use for promotion and marketing.	
	4c	Analyze Power and social reach of social media in context of tourism industry.	4.3	Power and social reach of social media in context of tourism industry.	
	4d	Create Blogs and Vlogs.	4.4	Blogs writing, Vlogs creating.	
UNIT V: E-news papers and E-Magazines	5a	Identify the concept of e- paper and its usefulness.	5.1	Concept of e- news paper and its usefulness.	CO5
	5b	Identify concept of e- magazine and its usefulness.	5.2	Concept of e- magazine and its usefulness.	
	5c	Analyze use of E- magazines for development of tourism in online world.	5.3	Use of E- magazines for development of tourism in online world.	
UNIT VI: Ease of working	6a	Compare manual working vs working through IT enabled systems in tourism sector.	6.1	Compare manual working vs working through IT enabled systems in the sector of Information dissemination, Promotion, Marketing, Operations, Booking, Feedback.	CO6
	6b	Use E-Payment system used in tourism industry.	6.2	E-Payment system used in tourism industry.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Visit websites of different travel agencies, Observe its design and note down the usefulness of that website.	2#	CO1
I	2	Prepare chart of different Travel Agency websites with its features.	2#	CO1
I	3	Prepare PPT on different software's used in travel agencies.	2#	CO1
I	4	Plan website of startup travel agency. (Part I)	2#	CO1
I	5	Plan website of startup travel agency. (Part II)	2	CO2
II	6	Explore websites of various hotels and note down their features.	2#	CO2
II	7	Explore the use of computerised systems in various departments of hotel.	2#	CO2
III	8	Compare websites of tourism boards of Maharashtra and Madhya Pradesh.	2#	CO3
III	9	Visit websites of different Tourism Development Boards, Observe its design and note down the usefulness of that website	2#	CO3
IV	10	Prepare a list of popular social media platforms.	2#	CO4
IV	11	Prepare an advertisement of any organization for social media platform. (Part I)	2#	CO4
IV	12	Prepare an advertisement of any organization for social media platform. (Part II)	2	CO4
IV	13	Launch a marketing and promotion campaign using social media platform. (Part I)	2#	CO4
IV	14	Launch a marketing and promotion campaign using social media platform. (Part II)	2	CO4
IV	15	Create Blog on tourist products.	2#	CO4
IV	16	Create Vlog on tourist products.	2#	CO4
V	17	Visit websites of different hotels, Observe its design and note down the usefulness of that website.	2#	CO5
V	18	Explore E-magazines and note down your observations. (Part I)	2#	CO5
V	19	Explore E-magazines and note down your observations. (Part II)	2#	CO5
V	20	Explore E-newspapers and note down your observations. (Part I)	2#	CO5

V	21	Explore E-newspapers and note down your observations. (Part II)	2#	CO5
VI	22	Prepare a case study comparing IT enabled systems with manual system in tourism industry. (Part I)	2#	CO6
VI	23	Prepare a case study comparing IT enabled systems with manual system in tourism industry. (Part II)	2#	CO6
VI	24	Prepare a comparison between different IT enabled systems on Tourism. (Part I)	2#	CO6
VI	25	Prepare a comparison between different IT enabled systems on Tourism. (Part II)	2#	CO6
VI	26	Write down your observations after studying any one GDS. (Part I)	2#	CO6
VI	27	Write down your observations after studying any one GDS. (Part II)	2	CO6
VI	28	Explore E-travel portals and note down your observations. (Part I)	2#	CO6
VI	29	Explore E-travel portals and note down your observations. (Part II)	2	CO6
VI	30	Prepare a feedback form using Google forms.	2	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Travel Agency Operations	5	C	00	00	00	0
			O	00	00	00	0
2	Hotel Operations	5	C	00	00	00	0
			O	00	00	00	0
3	Tourism Development Boards	5	C	00	00	00	0
			O	00	00	00	0
4	Social Media	5	C	00	00	00	0
			O	00	00	00	0
5	E-news papers and E-Magazines	6	C	00	00	00	0
			O	00	00	00	0
6	Ease of working	4	C	00	00	00	0
			O	00	00	00	0
Total		30	C	0	0	0	0
			O	0	0	0	0

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Overall Presentation of given assignment	20
3	Viva Voce	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	3	-	-	-	-	-
C03	3	-	-	3	-	-	-	-	-
C04	3	-	-	3	2	-	2	-	-
C05	3	-	-	3	2	-	2	-	-
C06	3	-	-	3	2	-	2	1	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	E-Tourism	Dr. S. Victor Anandkumar, Pondicherry University	13: 978-93-81932-27-8
2	E-Tourism: Information Technology for Strategic Tourism Management	Buhalis D., Prentice Hall India, 2004	13: 9780582357402
3	Tourism, Technology and Competitive Strategies	Auliana Poon, Oxford University Press, 1993	13: 978-0851987514, 10: 0851987516
4	Introduction to e- Commerce	Jeffrey Rayport, Bernard Jaworski, Breakaway Solutions Inc., McGraw-Hill/Irwin, 2003	13: 978-0072553475, 10: 0072553472

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9. <https://www.mtdc.co/en/>, accessed on 21 February 2022
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XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity
2. Smart Board

XVII List of Industry Experts and Faculties who contributed for this curriculum:

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6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.
7	Mr Vishwadeep Mankar	Visiting Lecturer	RSTM Nagpur University.



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	AEC
Course Code	:	TR352H
Course Title	:	Spoken French

I Rationale:

French language has grown to the position of an important means of communication in the field of hospitality and tourism. The student will be familiarized with the foreign language that will prepare them for global employment opportunities in travel and tourism.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Apply the Knowledge of French Language.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Read basic words and sentences in French language.

CO2: Use basic French communication.

CO3: Respond to the request in French.

CO4: Introduce themselves in French.

CO5: Practice tourism related words in French.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	4	-	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50	20	-	-

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Basic Sounds	1a	Identify basic sounds and alphabets.	1.1	French Sounds, Pronunciation, Accents, Alphabets.	CO1
	1b	Use basic French Vocabulary.	1.2	Numbers (Cardinal & Ordinal), Days, Date, Months, Time, Seasons & Directions	
UNIT II: Grammar	2a	Use basic grammar for French communication.	2.1	Articles, Preposition, Verbs, Adjectives, Sentence Forms, Nouns & Pronouns	CO2
UNIT III: Conversation	3a	Converse in French.	3.1	Asking Questions, Replying to Queries, Asking & Telling Directions, Situational Conversations	CO3

UNIT IV: Introduction & Salutations	4a	Introduce in French.	4.1	Basic Introduction, Asking Introduction, Describe a Person, Describe a Place	CO4
UNIT V: Tourism related Words	5a	Use Tourism related Words in French.	5.1	Tourism related Words, Hospitality Terms, Salutations, Glossary of general terms (Menu, Transport), Basic Countries and Continents, Body Parts and Family	CO5

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Demonstrate correct pronunciation of French alphabets and accented letters.	2#	CO1
I	2	Interpret short French texts or dialogues with accurate pronunciation.	2#	CO1
I	3	Recite days of the week, months, and seasons in French.	2#	CO1
I	4	Read aloud number sequences and time formats in French.	2#	CO1
I	5	Identify similar-sounding French words using phonetic drills.	2#	CO1
I	6	Locate and articulate directions using French vocabulary on a map.	2	CO1
II	7	Construct grammatically correct simple and compound sentences in French.	2#	CO2
II	8	Demonstrate the correct use of articles, prepositions, and verbs in speech.	2#	CO2
II	9	Modify given words into meaningful sentences using correct tense and structure.	2#	CO2
II	10	Compose short paragraphs using nouns, adjectives, and pronouns.	2#	CO2
II	11	Differentiate and apply masculine/feminine and singular/plural forms in context.	2#	CO2
II	12	Adapt learned structures to express basic needs or observations.	2	CO2
III	13	Role-play realistic tourist interactions by responding to queries.	2#	CO3
III	14	Simulate conversations involving asking and giving directions in French.	2#	CO3
III	15	Respond orally to situational prompts involving greetings and requests.	2#	CO3
III	16	Reconstruct dialogues based on travel situations using appropriate vocabulary.	2#	CO3
III	17	Improvise replies during Q&A sessions using practiced phrases.	2#	CO3
III	18	Demonstrate quick response to auditory French instructions in real-time.	2	CO3
IV	19	Present a structured self-introduction in front of the class.	2#	CO4
IV	20	Introduce a known person using appropriate adjectives and sentence structure.	2#	CO4

IV	21	Introduce a peer by preparing and delivering short oral descriptions.	2#	CO4
IV	22	Demonstrate ability to answer and ask basic introductory questions.	2#	CO4
IV	23	Perform role-play introducing oneself at a tourism reception or meeting.	2#	CO4
IV	24	Create a spoken and written profile of a fictional character.	2	CO4
V	25	Use tourism-related vocabulary in context-specific role-plays.	2#	CO5
V	26	Apply French terms for menu items and hospitality services during a simulation.	2#	CO5
V	27	Label maps, diagrams, and pictures with correct French tourism terms.	2#	CO5
V	28	Recite vocabulary related to countries, continents, and body parts.	2#	CO5
V	29	Enact hotel check-in or travel booking scenarios using relevant terms.	2#	CO5
V	30	Organize and present a mini French travel brochure with key terms and visuals.	2	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Basic Sounds	6	C	00	00	00	0
			O	00	00	00	0
2	Grammar	6	C	00	00	00	0
			O	00	00	00	0
3	Conversation	6	C	00	00	00	0
			O	00	00	00	0
4	Introduction & Salutations	6	C	00	00	00	0
			O	00	00	00	0
5	Tourism related Words	6	C	00	00	00	0
			O	00	00	00	0
Total		30	C	0	0	0	0
			O	0	0	0	0

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Overall Presentation of given assignment	20
3	Viva Voce	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	3	-	-
C02	3	-	-	-	-	-	3	-	-
C03	3	-	-	-	-	-	3	-	-
C04	3	-	-	-	-	-	3	-	-
C05	3	-	-	-	-	-	3	-	-
C06	3	-	-	-	-	-	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	En Echanges (A Text book of French)	Neelima Reddi, Anjali Paranjape, Oxford University Press, 2022	10: 0195635132
2	A Votre Service 1	Rajeshwari Chandrasekar et al, Goyal Publishers, Delhi, 2023	10: 81-87572-02-7
3	Cours de langue et de civilization francaises I	G. Mauger, Goyal Publishers, Delhi, 2024	10: 81-87572-09-4

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2. [Le Conjugueur App.](#)
3. <https://www.youtube.com/watch?v=wtiFx1TRCq0> assessed on 14th December 2023
4. <https://www.youtube.com/watch?v=PzXWJvu9enI> assessed on 14th December 2023

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity
2. Smart Board
3. Mic and Speakers

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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	GE
Course Code	:	HM391H
Course Title	:	Basic Food Production

I Rationale:

This course introduces travel and tourism students to the fundamentals of Indian cuisine, emphasizing ingredient selection, culinary techniques, and kitchen operations. It blends scientific and artistic aspects of food preparation, enhancing employability in hospitality and tourism sectors. Aligned with NEP 2020, it fosters practical, multidisciplinary learning and equips students with essential culinary skills to meet the dynamic demands of the food and travel industry.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Apply advanced culinary techniques to create authentic regional Indian cuisine.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Apply contemporary trends and innovations in culinary practices effectively.

CO2: Exhibit key traits required for working in a professional kitchen.

CO3: Examine key ingredients used in cooking and their characteristics.

CO4: Recognize food commodities and choose suitable processing techniques.

CO5: Perform basic preparation and cooking techniques to produce dishes.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	2	-	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
30	70**	100	40	25	10	25	10	-	-

** Online Objective Type

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Introduction to Cookery	1a	Enumerate the modern developments in cookery.	1.1	Introduction: Meaning of cookery, cuisine, and gastronomy. Origin and development of modern cookery.	CO1
	1b	Justify the importance of given Indian food culture and tradition.	1.2	Indian Food Culture and Traditions: Overview of staple foods, regional food habits, and popular Indian dishes.	
	1c	Illustrate given culinary terms.	1.3	Culinary Terminology: List of basic Indian culinary terms (A-Z), with definitions and examples.	

UNIT II: Kitchen Basics	2a	Enumerate the Duties and responsibilities of the given kitchen staff.	2.1	Professional Kitchen Environment and Operations: Introduction to kitchen behavior, personal and kitchen hygiene, Kitchen layout, functional areas, and the kitchen work triangle, Overview of kitchen staffing, classical kitchen brigade, roles of chefs, and inter-department coordination.	CO2
	2b	Handle given Kitchen Tools, and Equipment safely.	2.2	Kitchen Tools, Equipment, and Safety: Classification of kitchen equipment and tools, Safety procedures in handling and maintaining kitchen equipment.	
UNIT III: Raw Materials	3a	Illustrate given types of basic additives in cooking.	3.1	Basic Additives in Cooking: Salt and sweetening agents: types, uses, and examples. Souring and tenderizing agents used in Indian cuisine.	CO3
	3b	Distinguish between given types of components.	3.2	Fats, Leavening, and Thickening Components: Shortening (fats and oils): role and varieties. Raising and leavening agents: classification and functions. Thickening and binding agents: types and culinary uses.	
	3c	Describe the role of given seasonings and flavoring in Indian cooking.	3.3	Seasonings and Flavor Enhancers: Herbs, spices, and condiments used in Indian cuisine. Role of seasonings and flavorings in enhancing dishes.	

UNIT IV: Commodities	4a	Classify the given types of Commodities.	4.1	Plant-Based Commodities and Their Uses: Classification, selection, storage, and culinary uses of vegetables and fruits. Types and varieties of rice, pulses, and millets, along with their applications in Indian cooking.	CO4
	4b	Judge the quality of given types of Commodities.	4.2	Animal-Based Commodities and Dairy Products: Structure, uses, selection, and storage of eggs; list of 10 common egg preparations. Milk and milk products used in Indian cuisine: milk, curd, butter, cottage cheese, and cream.	
UNIT V: Methods of Cooking Food	5a	Apply the given pre-preparation techniques.	5.1	Pre-preparation Techniques and Cutting Skills: Basic preparation steps: subdivision and portioning of ingredients. Standard vegetable and potato cuts. Methods of mixing and combining ingredients during preparation.	CO5
	5b	Describe given type of cooking principles and heat application.	5.2	Cooking Principles and Heat Application: Heat transfer methods: conduction, convection, and radiation with examples. Common fuels used in cooking (gas, charcoal, electricity, steam) with their pros, cons, and safety measures.	
	5c	Judge the given food product for Texture.	5.3	Cooking Methods and Food Characteristics: Purpose and goals of cooking food. Classification and explanation of various cooking methods with examples. Identification of different food textures and consistencies.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Identify, handle and upkeep Handtools and manual equipment used in the kitchen.	2#	CO1
I	2	Identify, handle and upkeep the Mechanical Equipment, Cooking Ranges and Working table used in the kitchen.	2#	CO1
II	3	Practice Kitchen etiquette and hygiene, Safety and security in the kitchen kitchen with respect to HACCP guidelines.	2#	CO2
II	4	Practice Sharpening and handling of the knife and Organising working table activities in kitchen with respect to HACCP guidelines.	2#	CO2
III	5	Identify and classify, cereals, pulses, condiments, and Spices/millet used in cooking.	2#	CO3
III	6	Convert weight, volumes, and temperature of various raw materials using conversion tables.	2#	CO3
IV	7	Identify and classify vegetables, fruits, Milk and milk products used in Indian cookery.	2#	CO4
IV	8	Sharpen and handle knife: Prepare Cuts - julienne, jardinière, macedoines, brunoise, payassane, mignonnette, dices,cubes, shred, mirepoix.	2#	CO4
V	9	Execute pre-preparations and basic methods ofcooking Boiling, Frying, Steaming, Blanching, Simmering, Sautéing, Roasting. (Part I)	2#	CO5
V	10	Execute pre-preparations and basic methods of cooking Boiling, Frying, Steaming, Blanching, Simmering, Sautéing, Roasting. (Part II)	2#	CO5
V	11	Prepare the following variety of egg dishes: I) Boiled(Soft & Hard) ii) Fried (Sunny side up, Single fried)iii) Poached iv) Scrambled v) Omelet (Plain, masala)	2#	CO5
V	12	Prepare the following variety of egg dishes: I) Boiled(Soft & Hard) ii) Fried (Sunny side up, Single fried)iii) Poached iv) Scrambled v) Omelet (Plain, masala)	2#	CO6
V	13	Prepare a 4 Course basic Indian Menu (Simple veg.Preparation Rice, (absorption method) Chapatti, plaindal) and present it following the rules of plating adish. (Part I)	2#	CO6

V	14	Prepare a 4 Course basic Indian Menu (Simple veg.Preparation Rice, (absorption method) Chapatti, plaindal) and present it following the rules of plating adish. (Part II)	2#	CO6
	15	Prepare a 4 Course basic Indian Menu (Simple veg.Preparation Rice, (absorption method) Chapatti, plaindal) and present it following the rules of plating adish. Part III)		

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classr oom Learn ing Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Introduction to Cookery	6	C	4	6	6	16
			O	0	0	0	0
2	Kitchen Basics	6	C	4	6	4	14
			O	0	0	0	0
3	Raw Materials	6	C	2	6	6	14
			O	0	0	0	0
4	Commodities	6	C	2	6	6	14
			O	0	0	0	0
5	Methods of Cooking Food	6	C	2	4	6	12
			O	0	0	0	0
Total		30	C	14	28	34	70
			O	0	0	0	0

*C - Compusory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

Q. No.	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Options
	TLM	TLM	TLM	TLM	TLM	TLM	TLM	C
Q. 1 to Q. 35	1R2	1R2	1U2	1U2	1U2	1A2	1A2	35/35
	1A2	2R2	2R2	2U2	2U2	2U2	2A2	
	2A2	3R2	3U2	3U2	3U2	3A2	3A2	
	3A2	4R2	4U2	4U2	4U2	4A2	4A2	
	4A2	5R2	5U2	5U2	5A2	5A2	5A2	

*T- Unit/Topic Number

L- Level of Question

M- Marks

*R – Remember

U – Understand

A – Analyze / Apply

*1R2 means Unit Number No- 1, Level of Question –Remember, Marks – 2 Marks

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	3	-	-	-	-	-
C03	3	-	-	3	-	-	-	-	-
C04	3	-	-	3	2	-	2	-	-
C05	3	-	-	3	2	-	2	-	-
C06	3	-	-	3	2	-	2	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Basic Food Production	Rudranath Biranchi, Alka Oraon, Kunal Seth, Akash Indora, aran Publication, 2023	13: 978-8119295173
2	Food Production Operations	Parvinder S Bali, Oxford University Press India, Third Edition, 2021	13: 978-0190992187
3	Basic Food Production Techniques And Skills	Pankaj Kukreti, AG Publishing House, 2023	13: 978-8119152193

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1. <https://www.bing.com/videos/riverview/relatedvideo?q=Youtube+basic+food+production&mid=3E0406B44F23FE2FF18E3E0406B44F23FE2FF18E&FORM=VIRE> assessed on 24th December 2024
2. <https://www.youtube.com/watch?v=r2tuI8uyzA8&t=16s> assessed on 24th December 2024
3. <https://www.bing.com/videos/riverview/relatedvideo?q=kitchen+tools+and+equipments+youtube&&mid=92CCF585967D7AF2833692CCF585967D7AF28336&FORM=VAMGZC> assessed on 24th December 2024

XVI List of Major Equipment/Machineries with Specification:

1. Kitchen Kit (manual tools like Knife, peeler, palate knife, measuring cups, etc)
2. Cooking pans, utensils, ladles lids SS
3. Working Tables
4. Cooking Ranges
5. Mixer and Grinders
6. Sandwich Griller

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. P.P. Virkhare	HOD, Travel and Tourism	Government Polytechnic, Nagpur
2	Mr. Rajesh Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur
3	Dr. Aarti Meshram	I/C Principal	GIHMCT, Nagpur
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur
5	Mr. Adityashekhar Gupta	Director	Horizon Safaris, Nagpur
6	Dr. Arvind Upasani	Visiting Lecturer	RSTM Nagpur University, Nagpur



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	INP
Course Code	:	IN354H
Course Title	:	Entrepreneurship & Startup

I Rationale:

Entrepreneurship & Start up is a process that recognizes, inculcates, designs and refines the skills and proficiencies of an individual to establish own small or medium scale lawcompliant enterprise. This course will help students to locate& grab opportunities in tourism & various government schemes, target & acquire resources for the revenue generation as well overall development of an individual and national economy by initiating & managing enterprise with calculated risk.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Innovate and launch travel technology start-ups.

III Course Outcomes (COs):

After completing this course students will be able to:

CO1: Self-motivate to be an entrepreneur.

CO2: Update entrepreneurial competencies.

CO3: Select suitable business form.

CO4: Select appropriate government scheme offered for entrepreneurship & Start up.

CO5: Draft project report.

CO6: Acquire essential resources to initiate & manage the enterprise.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
2	-	2	2	6	3

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	100	40

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)		Topics and Sub-topics		Aligned Cos
UNIT I: Entrepreneur	1a	Figure out entrepreneur, entrepreneurship, enterprise & Start-up.	1.1	Concept of entrepreneur, entrepreneurship, enterprise & Start-up.	CO1
	1b	Illustrate concept, benefits & functions of entrepreneur.	1.2	Benefits of an entrepreneur over the employment.	
	1c	Elaborate types of entrepreneurs and their difficulties.	1.3	Functions of the entrepreneur.	
	1d	Self-motivate to be an entrepreneur.	1.4	Types of the entrepreneur & Entrepreneurship, Common Difficulties faced by the entrepreneur specially women entrepreneur.	
Entrepreneurial tendencies	2a	Elaborate factors affecting the growth of entrepreneurship.	2.1	Need and approach: factors favorable for Entrepreneurship Development & growth.	CO2
	2b	Illustrate the role of Entrepreneurship in economic Development.	2.2	Role of entrepreneurship in economic development.	

UNIT II: Entr Development & Compete	2c	Identify Entrepreneurial Competencies.	2.3	Entrepreneurial Competencies: Meaning, Types and sources.	CO2
	2d	Update entrepreneurial competencies.	2.4	Process of developing & updating entrepreneurial competencies.	
UNIT III: Form of Commercial Organization	3a	Illustrate characteristics of each type of commercial organization.	3.1	Forms of Commercial organization: Meaning, suitability, types, merits and demerits of each type.	CO3
	3b	Select suitable business form.	3.2	Business arrangements: Franchise and Joint Venture - Meaning, suitability for tourism, types, merits and demerits of each.	
UNIT IV: Institutional & Government Support	4a	Elaborate the need of Entrepreneurship Development.	4.1	Institutions offering various Entrepreneurship Development programs (EDP).	CO4
	4b	Illustrate the role of government in Entrepreneurship Development.	4.2	Government support- various schemes offered by the government to promote small and medium entrepreneurship.	
	4c	Select appropriate scheme.	4.3	Atmanirbhar Bharat Abhiyaan (Self-reliant India campaign) – 5 pillars, Rural Tourism.	
UNIT V: Project Identification, selection and appraisal	5a	Identify project ideas.	5.1	Project identification: Meaning, need, sources of project ideas, identification stages.	CO5
	5b	Select the appropriate project idea.	5.2	Project selection- meaning, Project selection process, Project selection methods.	
	5c	Perform project appraisal.	5.3	Project appraisal-meaning & methods of project appraisal.	
	5d	Draft project report.	5.4	Project Report-meaning, purpose, elements, format and drafting report.	

UNIT VI: Resource Identification, selection and acquisition	6a	Locate required resource.	6.1	Resource- Meaning, Types & Sources. 5M concept.	CO6
	6b	Acquire material and Assemble services. Hire human resource.	6.2	Criteria for selection and acquisition - material, service, know-how, human resource, physical and financial Resources.	
	6c	Select most suitable source of finance.	6.3	Finance: Meaning, objectives, types and sources. margin money, Role of micro finance in small and medium scale enterprises.	
	6d	Acquire essential resources for the enterprise.	6.4	Sponsorship, Social Funding and Subsidies: meaning, merits and demerits of each.	

VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Perform comparative analysis of pros and cons of service and entrepreneurship.	2#	CO1
I	2	Perform comparative analysis of various forms of entrepreneurship.	2#	CO1
II	3	Identify and develop entrepreneurial competencies through SWOT analysis. (Part I)	2#	CO2
II	4	Identify and develop entrepreneurial competencies through SWOT analysis. (Part II)	2	CO2
III	5	Select suitable form of commercial organization.	2#	CO3
III	6	Perform comparative analysis for selection of suitable form of business to start tourism startup.	2#	CO3
IV	7	Identify various schemes offered by the government to promote small and medium entrepreneurship. (Part I)	2#	CO4
IV	8	Identify various schemes offered by the government to promote small and medium entrepreneurship. (Part II)	2	CO4
IV	9	Prepare a report on guest lecture of entrepreneur from tourism field.	2#	CO4
V	10	Perform market survey to identify the startup in tourism. (Part I)	2#	CO5
V	11	Perform market survey to identify the startup in tourism. (Part II)	2	CO5
V	12	Prepare a report on the basis of market survey.	2#	CO5
V	13	Collect sample format of project report from the district industries centre, (DIC).	2#	CO5
VI	14	Identify the required resources to start tourism enterprise.	2#	CO6
VI	15	Identify the various funding agencies/subsidies/schemes to start tourism enterprise.	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Prepare a project report to propose a new start up using all the learnt aspects.

IX Specification Table for Classroom Learning Assessment:

Unit No.	Units	Classroom Learning Hours	C/O	Levels from Cognition Process Dimension			Total Marks
				R	U	A	
1	Entrepreneur	4	C	00	00	00	0
			O	00	00	00	0
2	Entrepreneurship Development & Entrepreneurial Competencies	6	C	00	00	00	0
			O	00	00	00	0
3	Form of Commercial Organization	6	C	00	00	00	0
			O	00	00	00	0
4	Institutional & Government Support	4	C	00	00	00	0
			O	00	00	00	0
5	Project Identification, selection and appraisal	5	C	00	00	00	0
			O	00	00	00	0
6	Resource Identification, selection and acquisition	5	C	00	00	00	0
			O	00	00	00	0
Total		30	C	0	0	0	0
			O	0	0	0	0

*C - Compulsory

O - Optional

*R – Remember

U – Understand

A – Analyze / Apply

X Question Paper Format for Summative Assessment (SA):

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	10
2	Overall Presentation of given assignment	10
3	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Report Writing	75
2	Viva Voce	25
TOTAL		100

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	3	-	-	-	-	-
C03	3	-	-	3	-	-	-	-	-
C04	3	-	-	3	2	-	2	-	-
C05	3	-	-	3	2	-	2	-	-
C06	3	-	-	3	2	-	2	1	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Entrepreneurial Development	Khanka S.S., S Chand & Company; 2011th edition, 2007	10: 8121918014 13: 978-8121918015
2	Fundamentals of Entrepreneurship Development and Project Management	Lipika K. Guliani, R.K. Gupta Himalaya Publishing house Pvt. Ltd First 2017	13: 978-93-5142-684-4
3	Entrepreneurship development (Madras University)	Dr. D. Kesavan and Mr. N. Vivek, Notion Press, 24 October 2019	10: 1647331714 13: 978-1647331719
4	Entrepreneurship Development	S A Kumar, S C Poornima, M K Abraham, K Jayshree, NEW AGE International Pvt Ltd First edition, 2021	10: 8122414346 13: 978-8122414349
5	Entrepreneurship Development	Prof. E. Gordon, Dr. K. Natarajan, Himalaya Publishing house Pvt. Ltd Sixth Edition, 2020	13: 978-93-5202-540-4
6	Entrepreneurship Development	Dr. Vasant Desai, Himalaya Publishing house Pvt. Ltd First Edition, 2019	13: 978-93-5299-662-9
7	Fundamentals Of Entrepreneurship (Principles, Policies and Programmes)	Dr. K.K. Patra, Himalaya Publishing house Pvt. Ltd Second Edition, 2017	13: 978-93-5097-605-0

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2. <https://www.accountingnotes.net/management/entrepreneur/entrepreneur/17621-> accessed on October 31, 2022
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5. <https://www.niir.org/information/content.phtml?content=500#:~:text=Project%20Identification%20and%20selection%20is,This%20is%20a%20systematic%20process.-> accessed on October 31, 2022
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8. <https://www.businesscompilerng.com/2020/09/5-resources-entrepreneur-must-have-at.html-> accessed on October 31, 2022
9. <https://www.indeed.com/career-advice/career-development/forms-of-businesses-> accessed on October 31, 2022

XVI List of Major Equipment/Machineries with Specification:

1. Audio visual system
2. Smart Board

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HOD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/C Principal	GIHMCT, Nagpur.
4	Ms Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.
7	Mr Sandeep Bapat	Visiting Lecturer	Tirpude College of Hotel Management,



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COURSE CURRICULUM

Program	:	Diploma in CE/ME/EE/EC/CM/IT/AE/MT/ PK/TX/TR/AI/MK
Course Category	:	VEC
Course Code	:	VE351H
Course Title	:	Indian Constitution

I **Rationale:**

This course aims to equip students with practical skills and knowledge necessary for promoting constitutional morality in engineering practices and in society as a whole. The focus will be on hands-on activities, real-Indian applications, and practical projects that address key areas of Indian Constitution.

II **Industry Identified Competency:**

The Student will be able to do in Industry at entry level:

Use constitutional provisions in society.

III **Course Outcomes (COs):**

After completing this course students will be able to:

CO1: Narrate the history of Indian Constitution.

CO2: Illustrate the Philosophy of Indian Constitution.

CO3: Represent the significance of fundamental rights and duties in day to day life.

CO4: Demonstrate the importance of directive principles of state policy in governance.

CO5: Illustrate the functioning of constitutional institutions like legislative, executive, judiciary and media.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	2	-	2	1

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	25	10	25	10	-	-

VI Classroom Learning Content:**VII Laboratory Learning Content:**

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Prepare a report on history of making of Indian constitution including montague chelmsford reform, Govt. of India Act 1919, The Southborough Committee, The Simon Commission and Neharu Constitutional committee.	2#	CO1
I	2	Prepare a report on Round Table Conferences, 1935 Act, Cripps Mission 1942, Simla Conference 1945, Cabinet mission 1946, Interim Government 1946, The Indian Independence Act of 1947.	2	CO1
I	3	Prepare a report on parts, Total Articles, Total schedules of Indian Constitution and Total ammendments till date.	2#	CO1
I	4	Summerize Dr. B. R. Ambedkar's Speech in Constitution Assembly on 25th November 1949.	2#	CO1
II	5	Recite the preamble of the Indian Constitution at the time of starting of every assembly in laboratory / class room.	2#	CO2
II	6	Prepare a report on Phylosophy of preamble of Indian Constitution.	2#	CO2
II	7	Prepare a report by reading the definition, vision and importance of Indian Constitution.	2	CO2

II	8	Summarize the Article 1 of Indian Constitution.	2#	CO2
III	9	Prepare a report by reading the Fundamental rights mentioned in Indian Constitution.	2#	CO3
III	10	Prepare a report by reading the Fundamental duties mentioned in Indian Constitution.	2#	CO3
III	11	Prepare a report by reading Legal and Constitutional rights mentioned in Indian Constitution.	2	CO3
IV	12	Illustrate the meaning, importance and significance of Directive Principles of State Policy in Indian Constitution.	2#	CO4
IV	13	Summarize various institutions of Indian Constitution.	2#	CO4
IV	14	Prepare a report on Union and state legislature; Judiciary; Election Commission of India; Human Right Commissions.	2#	CO4
V	15	Prepare a report on the pillars of Indian Constitution and Constitutional morality.	2#	CO5
V	16	Prepare a report on the procedure of amendment in Indian Constitution.	2	CO5

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:

X Question Paper Format for Summative Assessment (SA):

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Prepare report / case study	5
2	Performance / Observation	10
3	Results and Discussions (if any)	5
4	Viva Voce	5
TOTAL		25

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	-	-	-	-	-	3	3	-	-
C02	-	-	-	-	3	3	3	-	-
C03	-	-	-	-	3	3	3	-	-
C04	-	-	-	-	3	3	3	-	-
C05	-	-	-	-	3	3	3	-	-
C06	-	-	-	-	-	-	-	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	The Constitution of India 2024 (English Version)	Legislative Department	
2	The Constitution of India (paperback)	Delhi Book Market	
3	Bhartache Samvidhan (Marathi)	Pradeep Gaikwad	
4	The Constitution of India	Dr. B. R. Ambedkar	13: 978-8119660384
5	The Constitution of India (Coat Pocket Edition)	Gopal Sankaranarayanan Eastern Book Company	13: 9788119868438

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8. <https://www.drishtiias.com/to-the-points/paper1/government-of-india-act-1919> assessed on 04th Nov. 2024

XVI List of Major Equipment/Machineries with Specification:**XVII List of Industry Experts and Faculties who contributed for this curriculum:**

S.N.	Name	Designation	Institute / Industry
1	Dr. D. K. Parbat	Head, Civil Engineering	Government Polytechnic, Nagpur
2	Dr. G. V. Gotmare	Head, Electrical Engineering	Government Polytechnic, Nagpur
3	Dr. B. R. Ambade	Lecturer, Civil Engineering	Government Polytechnic, Nagpur
4	Er. G. B. Takey	EE, Vigilance & Quality Control	PWD, Nagpur
5	Dr. Abhay Shende	Principal	J. L. Priyadarshini College of Engg, Nagpur.
6	Dr. V. G. Kondekar	Head, Civil Engineering	Government Polytechnic, Sakoli



(Dr. D. K. Parbat)
HOD & Chairman PBOS, CE



(Dr. G. V. Gotmare)
Member Secretary PBOS, CE



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)
Near Mangalwari Bazar, Sadar, Nagpur-440001



COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	SEC
Course Code	:	TR353H
Course Title	:	Project

I Rationale:

The project work is to introduce final year students to professional industry practices. In project work students are engaged in the analysis, synthesis and application of the courses covered in their studies and to undertake & tackle an independent problem related to Travel and Tourism. This course is very useful for understanding the higher level knowledge in the field of Travel and Tourism.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Plan and execute tourism projects effectively.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Evaluate** existing literature and industry practices to identify gaps, trends, and successful case studies in Travel and Tourism field.
- CO2: Design** appropriate data collection tools for primary research tailored to the tourism industry.
- CO3: Interpret** findings, identify patterns, and extract insights from the collected tourism data.
- CO4: Develop** a comprehensive and feasible business plan related to tourism services.
- CO5: Summarize** key project findings and present well-grounded conclusions and recommendations.
- CO6: Prepare** a detailed project report.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	4	-	4	2

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	50	20	50+	20	-	-

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)	Topics and Sub-topics	Aligned Cos
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VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
UNIT I: Literature Review	1	Identify key challenges or gaps in the travel and tourism industry.	2#	CO1
	2	Formulate clear and measurable project objectives aligning with industry needs.	2#	CO1
	3	Search for credible sources related to the selected tourism topic.	2#	CO1
	4	Summarize key findings from past research, case studies, or government reports.	2#	CO1
	5	Compare various perspectives and strategies used in similar projects.	2#	CO1
	6	Interpret relevant trends and practices in the tourism sector.	2#	CO1
	7	Evaluate the effectiveness of earlier initiatives in related domains.	2#	CO1
UNIT II: Data Collection	8	Design a structured questionnaire for primary data collection.	2#	CO2
	9	Draft observation tables suited for field visits or interviews.	2#	CO2
	10	Frame questions to capture customer preferences and market trends.	2#	CO2
	11	Organize data collection sheets for consistent field recording.	2#	CO2
	12	Reframe the questionnaire. (if required)	2#	CO2
	13	Finalize instruments for systematic data collection.	2#	CO2
UNIT III: Data Analysis	14	Classify data based on categories such as tourist profiles, feedback, or locations.	2#	CO3
	15	Apply basic statistical methods to interpret results.	2#	CO3
	16	Visualize data using charts, graphs, or tables.	2#	CO3
	17	Identify patterns or trends from the collected data.	2#	CO3
	18	Draw meaningful inferences relevant to tourism business opportunities.	2#	CO3
UNIT IV: Business Plan	19	Outline the key components of a travel/tourism-related business (e.g., tour package, homestay, agro tourism, adventure tourism etc.).	2#	CO4
	20	Calculate estimated budget, pricing, and potential revenue.	2#	CO4
	21	Develop marketing and promotion strategies.	2#	CO4
	22	Draft an operations and management plan.	2#	CO4
	23	Present a sustainable and customer-oriented tourism business model.	2#	CO4

UNIT V: Conclusion	24	Summarize the project's major findings, challenges, and insights. (Part I)	2#	CO5
	25	Summarize the project's major findings, challenges, and insights. (Part II)	2#	CO5
	26	Conclude with key recommendations or learnings for future application.	2#	CO5
UNIT V: Report Writing	27	Compile a structured project report including all sections. (Part I)	2#	CO6
	28	Compile a structured project report including all sections. (Part II)	2#	CO6
	29	Edit for clarity, grammar, and formatting consistency.	2#	CO6
	30	Submit report in prescribed format. Title Page which includes: Project Title, Purpose of submission, Institute logo, Students Name, Guide Name, Program, and Institute Name •Certificates: Student declaration, Certificate from guide •Acknowledgement •Table of contents •List of Tables •List of Figures •List of abbreviations and acronyms (if any) •Text 1. Introduction, objectives 2. Literature Survey 3. Methodology/Materials/Methods/Estimate. 4. Results 5. Summary/Conclusion. 6. References	2#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

IX Specification Table for Classroom Learning Assessment:**X Question Paper Format for Summative Assessment (SA):**

-----NA-----

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Performance	20
2	Project report writing	20
3	Viva Voce	10
TOTAL		50

XII Scheme of Self-Learning Summative Assessment (SA):**XIII COs-POs/PSOs Mapping Matrix:**

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C01	3	3	3	3	3	3	3	3	3
C02	3	3	3	3	3	3	3	3	3
C03	3	3	3	3	3	3	3	3	3
C04	3	3	3	3	3	3	3	3	3
C05	3	3	3	3	3	3	3	3	3
C06	3	3	3	3	3	3	3	3	3

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Project Report Writing	S.Geerthik, F.Mohamed Faiyaz, V.Raghuraman, M.Sinduja, P.Visu, Notion Press, 2024	13: 979-8896106395
2	Handbook On Project Reports Concepts, Preparation, Analysis and Financing	R.K. Garg, Bharat Law House PVT. LTD., 9th Edition, 2025	ASIN: B0DSPYWPHL
3	Project Report Presentation: Hospitality Management & Tourism Development	J.M.S. Negi, Aman Publications.	13: 978-8182040557

XV e-References:

1. <https://www.yourarticlelibrary.com/marketing/marketing-concepts-top-5-important-concepts-of-marketing-explained/32287> - accessed on February
2. https://www.tutorialspoint.com/tourism_management/tourism_management_market_segmentation.htm#:~:text=Tourism%20market%20segmentation%2
3. <https://study.com/academy/lesson/what-is-consumer-behavior-in-marketing-factors-model-definition.html> - accessed on February 25, 2022
4. <https://www.investopedia.com/terms/m/market-research.asp> - accessed on July 1, 2023
5. <https://www.yourarticlelibrary.com/marketing/product/what-is-a-product-with-diagrams/50846> - accessed on June 15, 2023
6. <https://www.yourarticlelibrary.com/marketing/marketing-mix/pricing-of-products-definition-factors-and-other-details-marketing-mix/41099> -
7. <https://www.yourarticlelibrary.com/marketing/characteristics-and-objectives-of-physical-distribution/48645> - accessed on November10, 2023
8. <https://www.yourarticlelibrary.com/marketing/promotion-marketing/promotion/99783> - accessed on February 15, 2022
9. <https://www.economicdiscussion.net/marketing-2/service/service/32466> - accessed on September 15, 2024
10. [https://www.xotels.com/en/glossary/bar-best-available-rate/#:~:text=Best%2Davailable%2Drate%20\(BAR,is%20offered%20to%20t](https://www.xotels.com/en/glossary/bar-best-available-rate/#:~:text=Best%2Davailable%2Drate%20(BAR,is%20offered%20to%20t)

XVI List of Major Equipment/Machineries with Specification:

1. Computer with internet connectivity

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr.P. P. Virkhare	HoD, Travel and Tourism Department.	Government Polytechnic, Nagpur.
2	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur.
3	Dr Aarti Meshram	I/c Principal	GIHMCT, Nagpur.
4	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
5	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.
6	Dr Arvind Upasani	Visiting Lecturer	RSTM Nagpur University.



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



(Dr. G. V. Gotmare)
Member Secretary PBOS, TR



Semester

VI



Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
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COURSE CURRICULUM

Program	:	Diploma in TR
Course Category	:	INP
Course Code	:	IN355H
Course Title	:	Internship & Report Writing

I Rationale:

This course bridges academic learning with real-world experience by placing students in tourism industry settings. It enhances professional skills, industry understanding, and workplace ethics. Aligned with NEP 2020, it fosters experiential learning, critical thinking, and effective communication. Through structured reporting and presentations, students develop analytical and documentation skills essential for tourism careers and further education.

II Industry Identified Competency:

The Student will be able to do in Industry at entry level:

Bridge theoretical knowledge with practical experience in a professional environment.

III Course Outcomes (COs):

After completing this course students will be able to:

- CO1: Evaluate** the organization's structure, processes, safety protocols, and tourism industry standards to determine operational effectiveness.
- CO2: Apply** industry-specific tools, technologies, and skills to perform various operations.
- CO3: Contribute** to organizational goals by handling projects/ tasks under mentor guidance, applying learned skills.
- CO4: Analyze** professional challenges, addressing industry-specific issues effectively.
- CO5: Prepare** a internship report, ensuring accuracy and clarity.
- CO6: Deliver** presentation using visual aids and effective communication.

IV Learning Scheme:

Classroom Learning (CL)	Tutorial Learning (TL)	Laboratory Learning (LL)	Self-Study Learning (SL)	Notional Learning Hours (NLH)	Credits
-	-	2	42	44	22

V Assessment Scheme:

Classroom Learning				Tutorial/Laboratory Learning				Self-Study Learning	
FA	SA	Total		FA		SA		SA	
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min
-	-	-	-	100	40	100+	40	300	120

VI Classroom Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Cognitive Domain)	Topics and Sub-topics	Aligned Cos
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VII Laboratory Learning Content:

Unit No	Specific Learning Outcomes (SLO) (In Psychomotor Domain)		Hours	Aligned COs
I	1	Learn the organization's structure, operational workflow, standards, industry practices, methodologies, and workplace processes to analyze operational efficiency and compliance requirements.	40#	CO1
II	2	Undergo training on industry-specific tools, technologies, and software, while gaining hands-on experience in performing basic operations, and tasks, applying relevant skills to real-world industry scenarios and challenges.	100#	CO2
III	3	Participate in daily operations under mentor guidance, handling assigned projects or tasks aligned with industry needs, applying learned skills to contribute to organizational goals and gaining practical experience in real-world scenarios.	400#	CO3

IV	4	Identify and analyze challenges in tourism industry, and address industry-specific issues (if any).	40#	CO4
V	5	Prepare a comprehensive internship report that effectively documents work experiences, professional tasks, and key achievements throughout the internship. Ensure the accuracy of the content by cross referencing with project details. Organize the report clearly, following tourism industry standards.	40#	CO5
VI	6	Prepare a PowerPoint presentation on internship learnings, create and share a structured seminar outline, review documents, and present it.	40#	CO6

Note: # Compulsory

VIII Self-Study Learning (SLO in Cognitive/Psychomotor/Affective Domain)

1. Students are required to undergo internship with industry/ Government organizations/ Micro/ Small/ Medium enterprises to make ready for the industry.

IX Specification Table for Classroom Learning Assessment:

X Question Paper Format for Summative Assessment (SA):

XI Scheme of Laboratory Formative Assessment (FA):

S.N.	Criteria	Max. Marks
1	Diary	100
TOTAL		100

XII Scheme of Self-Learning Summative Assessment (SA):

S.N.	Criteria	Max. Marks
1	Training Report	100
2	Appraisal	100
3	Presentation & Seminar	100
TOTAL		300

XIII COs-POs/PSOs Mapping Matrix:

Course Outcomes	Program Outcomes							Program Specific	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CO1	1	-	-	-	-	-	3	-	-
CO2	-	-	-	-	-	3	3	-	-
CO3	-	-	-	-	-	3	3	-	-
CO4	-	-	-	-	1	3	3	-	-
CO5	-	-	-	-	-	3	3	-	-
CO6	-	-	-	-	-	3	3	-	-

XIV Textbooks, BIS Codes References:

S.N.	Title	Author, Publisher, Edition and Year of Publication	ISBN Number
1	Education and Training in Tourism and Hospitality	Jennifer Raga, Arcler Education Inc, 2020	13: 978-1774076446
2	Strategies and Planning in Tourism Industry	Dileep Makan, Adhyayan Publishers & Distributors, 2004	10: 8189161504
3	Emerging Strategies for Tourism Industry	Donald Peterson, Willford Press, 2016	13: 978-1682852170
4	AICTE Internship Policy: Guidelines & Procedures	All India council of Technical Education New Delhi	-
5	THE BUSINESS OF TOURISM: Concepts and Strategies	A.K. Bhatia, Sterling Publishers Private Limited, Greater Noida; 2nd Revised & Enlarged Edition. 2023	13: 978-9393853547

XV e-References:

1. <https://internship.aicte-india.org/> assessed on 23rd April 2024
2. <https://internshala.com/internships/travel-and-tourism-internship/> assessed on 23rd April 2024

XVI List of Major Equipment/Machineries with Specification:

1. Desktop computers
2. Laser Printer
3. DLP

XVII List of Industry Experts and Faculties who contributed for this curriculum:

S.N.	Name	Designation	Institute / Industry
1	Dr. R. P. Mogre	Principal	Government Polytechnic, Nagpur
2	Dr. M. V. Sarode	HOD, Computer Engineering and I/C Training & Placement Officer	Government Polytechnic, Nagpur
3	Dr. P. P. Virkhare	HOD, Travel and Tourism Department.	Government Polytechnic, Nagpur
4	Dr. G. V. Gotmare	I/C Curriculum Development Cell	Government Polytechnic, Nagpur
5	Mr Rajesh P Pund	Lecturer in Travel and Tourism	Government Polytechnic, Nagpur
6	Dr Aarti Meshram	I/C Principal	GIHMCT, Nagpur.
7	Miss Erika Kar	Director	Pegasus Institute, Nagpur.
8	Mr Adityashekhar Gupta	Director	Horizon Safaris, Nagpur.



(Dr. P. P. Virkhare)
HOD & Chairman PBOS, TR



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Appendix II

Guidelines

Guidelines

for

Integrated Personality Development Courses (VE151H & VE152H)

1. For registration, use IPDC Campus course registration platform.
2. Use following links for registrations: (Use ipdc-campus-course-portal-user-manual for reference)
 - i) IPDC Coordinators and Faculty Members Login Portal
<https://campus.ipdc.org/portal/Home/LoginForUsers/>
 - ii) IPDC Coordinator registration:
<https://campus.ipdc.org/portal/Home/coordinatorRegistration/>
 - iii) IPDC Faculty Members Registration
<https://campus.ipdc.org/portal/Home/facultyRegistration/>
 - iv) IPDC Students Registration
<https://campus.ipdc.org/portal/Home/studentRegistration/>
3. IPDC Campus Course desktop application will be used to deliver lecture content to IPDC students into the physical classroom. Lecture content will have introductory films, lecture videos, student interactions, and workbook activities.
4. Role of IPDC Coordinators:
 - i) Register yourself as an IPDC Coordinator, ask IPDC Administrator for approval.
 - ii) Make sure that faculty members under your institution must register themselves.
 - iii) Approve faculty members registered under you, by login portal via your profile.
5. Role of IPDC Faculty Members:
 - i) Register yourself as an IPDC Faculty Member, ask your IPDC Coordinator for approval.
 - ii) Make sure that your respective students must register themselves.
 - iii) Enter the particular semester duration (only once) and approve students registered under you, by login portal via your profile.
 - iv) Download desktop application from login portal via your profile login and install it to the computer system from which you want to conduct the multimedia lectures.
 - v) Login to the desktop application by your profile, download the lectures and start conducting IPDC lectures.
6. Lectures will take place in the department classrooms and will be hosted by an integrated personality development course (IPDC) trained Faculty.
7. The Teaching resources will be provided by Swaminarayan Aksharpith on IPDC portal.
8. Each lecture has four components as shown below:
 - i) **Introductory Film:** Each lecture begins with a short film that introduces the topic through modern production. The original content displays relatable scenarios and visuals that captivate the students' attention and stimulates their curiosity to learn more.

- ii) **Lecture Video:** Students watch a lecture video presented by a dynamic speaker. The lecture reinforces the significance and necessity of fundamental principles and skills. The experience of the speaker, eloquence of presentation, and use of interactive visuals collectively create a profound impact on each student's mind and heart.
- iii) **Student Interaction:** Student interaction sessions promote stimulating discussion and conversation and help create safe spaces for the healthy exchange of ideas. Thus, each session provides a forum in which students can openly express their emotions and thoughts.
- iv) **Workbook Activities:** Workbooks assist students to begin implementing the values taught in the lecture into their personal lives. Reliable research, priceless experience, practical scenarios, and reflective questions are innovatively depicted, motivating students to contemplate and think creatively.

9. The assessments should include continuous assessment of 25 marks as mentioned in curriculum and based on the internal examination based on the question-bank with answers from each subject of IPDC provided by IPDC team.

Guidelines

for

Basic Internship Course (IN251H)

Duration of Summer Internship after Second Semester: **1st June to 30th June.**

Duration of Internship in Second Semester for DSY Student: **Part-time within Sem.**

Introduction:

The Basic Internship course provides diploma students in engineering with a four-week summer vacation internship opportunity after the second semester. The internship encompasses various inter/intra-institutional activities aimed at skill development, innovation, and professional growth. Students engage in practical experiences within institutional settings and are evaluated based on their daily activities documented in a diary.

As mentioned in program structure of third semester of NEP aligned 2023 Curriculum "Basic Internship" full time four week (120 Notional Hours) is mandatory for first year admitted students in the year 2023 and part-time (120 Notional Hours) during third semester for direct second year admitted students.

Internship activities:

During Internship students are required to be involved in:

1. Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; (In case of Government Polytechnic, Nagpur by Continuing Education Department (CED)).
2. Contribution at incubation/ innovation /entrepreneurship cell of the institute.
3. Participation conferences/ workshops/ competitions etc.
4. Learning at Departmental Lab/ Tinkering Lab/ Institutional workshop.
5. Working for consultancy/ research project within the institutes and Participation in all the activities of Institute's Innovation Council for eg: IPR workshop/Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.
6. In case student want to pursue their family business, and don't want to undergo internship, a declaration by a parent may be submitted directly to the Head of the Department.

Documentation:

1. The Head of the Department should prepare a list of students indicating their consent for participation in the internship, along with the details of the internship location.
2. Every student is required to prepare a daily diary containing documentary proofs of the activities done by him during internship.

3. The report writing, preparation of presentation and the evaluation of these activities will be done by faculty mentor during third semester.
4. Students should use daily diary prepared by curriculum development cell.

Guidelines

for

Internship Course (IN351H and IN352H)

Duration of summer Internship after Fourth Semester: **1st June to 15th August.**

Introduction:

As mentioned in program structure of fourth and sixth semester of NEP aligned 2023 Curriculum a full time twelve week (360 Notional Hours) is mandatory for the students.

The internship course is a critical component of the diploma program, providing students with hands-on experience in a real-world industry setting. The internship takes place after the fourth semester during summer vacation and involves working in a small, medium, or large-scale industry related to the student's field of study. The course is designed to bridge the gap between academic learning and industrial application, allowing students to apply theoretical knowledge in a practical environment.

For ease, assessment of this course is divided into two semesters, seminar assessment in fifth semester (IN351H- Internship (Seminar)) and report writing (IN352H- Internship (Report Writing)) in sixth semester.

Internship activities:

During the summer vacations, after the 4th Semester, students are required to undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make ready for the industry.

Documentation:

1. The Head of the Department should issue the letter to the industry in prescribed format framed by TPO.
2. The Head of the Department should prepare a list of students indicating their consent for participation in the internship, along with the details of the internship location.
3. Every student is required to prepare a daily diary containing documentary proofs of the activities done by him during internship.
4. The report writing, preparation of presentation and the evaluation of these activities will be done by faculty mentor during fifth and sixth semester as mentioned in curriculum.
5. Students should use daily diary prepared by curriculum development cell.

Guidelines

for

Generic Elective Courses

Introduction:

As third semester curriculum and program structure of NEP aligned 2023 curriculum were approved in 46th Board of studies meeting held on 20th June 2024. However, it is suggested by Hon. Chairman of BOS that the allotment of generic electives course should be as per “Inter-Se-Merit” of students rather than “first cum first serve” basis.

Decision as per Institute Level Committee Meeting held on 1st July, 2024.

- i) Awareness workshop will be arranged by HOD of program related to Generic Elective Courses in offline or online mode for the students of III semester before registration.
- ii) Sealing of Generic Elective seats is as per intake capacity of program plus 20% (for EWS/TFWS/DSY students).
- iii) Quota of Generic Elective courses will be allotted by ILC. Refer annexure-I for program-wise quota for Generic Elective Course.
- iv) Allot Generic Elective Course as per departmental “Inter-Se-Merit” by taking preferences for all Twelve programs other than own program. (For Computer Engineering, Information Technology and AIML for remaining Ten Programs)
- v) Final registration of Generic Elective course of all students will be done by registration in-charge after allotting the GE course as per above procedure.

Timetable slots of Generic Elective Courses.

All program should keep reserved following slots for Generic Elective Course.

Day	Time	Remarks
Thursday	3.45 to 5.45 PM (last two periods)	Practical for first Batch
Friday	10.00 to 11.00 AM (First Period)	Theory Period- 1
Friday	3.45 to 5.45 PM (last two periods)	Practical for Second Batch
Saturday (working)	10.00 to 12.00 Noon (Second Period)	Theory Period- 2
Saturday (working)	1.00 PM to 5 PM	Practical for Third Batch

Use "Zero Period" between 9.00 AM to 10 AM for timetable to adjust department timetable, if required.

Annexure-I
Abstract of Generic Elective Quota

S.N.	Name of Program	Quota/Seats													Total
		CE	ME	EE	EC	IT	MT	TX	AE	PK	CO	MK	AIML	TX	
1	Civil Engineering	00	30	15	38	15	10	8	15	8	15	8	8	8	178
2	Mechanical Engineering	30	00	12	30	12	8	6	12	6	12	6	6	6	146
3	Electrical Engineering	15	12	-	15	6	4	3	6	3	6	3	3	3	79
4	Electronics & Telecommunication Engineering	38	30	15	-	15	10	8	15	8	15	8	8	8	178
5	Information Technology	15	12	6	15	-	4	3	6	3	-	3	-	3	70
6	Metallurgical Engineering	8	6	3	8	3	-	2	3	2	3	2	2	2	44
7	Textile Manufacture	8	6	3	8	3	1	-	3	1	3	1	1	1	39
8	Automobile Engineering	15	12	6	15	6	4	3	-	3	6	3	3	3	79
9	Packaging Technology	8	6	3	8	3	1	1	3	-	3	1	1	1	39
10	Computer Engineering	15	12	6	15	-	4	3	6	3	-	3	-	3	70
11	Mechatronics	8	6	3	8	3	1	1	3	1	3	-	1	1	39
12	Artificial Intelligence and Machine Learning	8	6	3	8	-	2	2	3	2	-	2	-	2	38
		168	138	75	168	66	49	40	75	40	66	40	33	41	

List of Generic Elective Courses (Multidisciplinary) for Civil Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Mechanical Engineering	120	30	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
2	Electrical Engineering	60	15	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
3	Electronics & Telecommunication Engineering	150	38	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
4	Information Technology	60	15	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
5	Metallurgical Engineering	36	10	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	8	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	15	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	8	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	15	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	8	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	8	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	8	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	178			

List of Generic Elective Courses (Multidisciplinary) for Mechanical Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	30	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Electrical Engineering	60	12	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
3	Electronics & Telecommunication Engineering	150	30	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
4	Information Technology	60	12	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
5	Metallurgical Engineering	36	8	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	6	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	12	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	6	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	12	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	6	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	6	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	6	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	146			

List of Generic Elective Courses (Multidisciplinary) for Electrical Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	15	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	12	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electronics & Telecommunication Engineering	150	15	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
4	Information Technology	60	6	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
5	Metallurgical Engineering	36	4	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	3	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	6	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	3	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	6	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	3	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	3	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	3	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	79			

List of Generic Elective Courses (Multidisciplinary) for Electronics & Telecommunication Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	38	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	30	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	15	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Information Technology	60	15	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
5	Metallurgical Engineering	36	10	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	8	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	15	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	8	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	15	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	8	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	8	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	8	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	178			

List of Generic Elective Courses (Multidisciplinary) for Information Technology Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	15	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	12	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	6	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	15	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Metallurgical Engineering	36	4	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	3	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	6	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	3	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Mechatronics	30	3	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
10	Travel and Tourism	30	3	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	70			

List of Generic Elective Courses (Multidisciplinary) for Computer Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	15	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	12	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	6	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	15	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Metallurgical Engineering	36	4	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	3	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	6	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	3	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Mechatronics	30	3	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
10	Travel and Tourism	30	3	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	70			

List of Generic Elective Courses (Multidisciplinary) for AIML Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	8	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	6	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	3	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	8	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Metallurgical Engineering	36	2	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
6	Textile Manufacture	30	2	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	3	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	2	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Mechatronics	30	2	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
10	Travel and Tourism	30	2	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	38			

List of Generic Elective Courses (Multidisciplinary) for Automobile Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	15	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	12	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	6	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	15	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Information Technology	60	6	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
6	Metallurgical Engineering	36	4	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
7	Textile Manufacture	30	3	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
8	Packaging Technology	30	3	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	6	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	3	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	3	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	3	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	79			

List of Generic Elective Courses (Multidisciplinary) for Metallurgical Engineering Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	8	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	6	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	3	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	8	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Information Technology	60	3	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
6	Textile Manufacture	30	2	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
7	Automobile Engineering	60	3	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	2	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	3	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	2	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	2	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	2	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	44			

List of Generic Elective Courses (Multidisciplinary) for Textile Manufacture Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	8	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	6	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	3	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	8	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Information Technology	60	3	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
6	Metallurgical Engineering	36	1	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
7	Automobile Engineering	60	3	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Packaging Technology	30	1	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
9	Computer Engineering	60	3	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	1	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	1	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	1	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	39			

List of Generic Elective Courses (Multidisciplinary) for Packaging Technology Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	8	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	6	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	3	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	8	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Information Technology	60	3	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
6	Metallurgical Engineering	36	1	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
7	Automobile Engineering	60	3	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Textile Manufacture	30	1	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
9	Computer Engineering	60	3	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Mechatronics	30	1	MK291H: Basic Mechatronics	MK292H: Computer Aided Design	MK391H: Automotive Mechatronics
11	Artificial Intelligence and Machine Learning	30	1	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	1	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	39			

List of Generic Elective Courses (Multidisciplinary) for Mechatronics Program Students and Quota for Registration

SN	Name of Program	Intake	Quota/Seats	Third Semester	Fourth Semester	Fifth Semester
1	Civil Engineering	150	8	CE291H: Civil Engineering Practice	CE292H: Basic Surveying	CE391H: Building Services
2	Mechanical Engineering	120	6	ME291H: Elements of Mechanical Engineering	ME292H: Workshop Technology	ME391H: Heat Engine Technology
3	Electrical Engineering	60	3	EE291H: Electrical Generation, Transmission and Distribution	EE292H: Electrical Machines	EE391H: Electrical Wiring and Estimation
4	Electronics & Telecommunication Engineering	150	8	EC291H: Analog and Digital Electronics	EC292H: Principles of Communication Engineering	EC391H: Microcontroller and Applications
5	Information Technology	60	3	IT291H: Applied Multimedia Techniques	IT292H: Web Designing	IT391H: Cyber Security and Privacy
6	Metallurgical Engineering	36	1	MT291H: Foundry Technology	MT292H: Testing of Materials	MT391H: Heat Treatment
7	Automobile Engineering	60	3	AE291H: Basics of Automobile	AE292H: Two-Wheeler Technology	AE391H: Four-Wheeler Technology
8	Textile Manufacture	30	1	TX291H: General Textile Technology	TX292H: Dyeing and Printing	TX391H: Garment and fashion Technology
9	Computer Engineering	60	3	CM291H: Open-Source Technologies	CM292H: Web Development	CM391H: Digital Marketing
10	Packaging Technology	30	1	PK291H: Basics of Packaging Technology	PK292H: Folding Carton & Corrugated Box Manufacturing	PK391H: Injection & Extrusion Blow Molding in Packaging
11	Artificial Intelligence and Machine Learning	30	1	AI291H: Python Programming	AI292H: Basics of Artificial Intelligence	AI391H: Machine Learning
12	Travel and Tourism	30	1	TR291H- Agro & Rural Tourism	TR292H- Wildlife Tourist Guide/ Naturalist	TR391H- Tourism Resources of India
		Total	39			