

Post Graduate Diploma in Vocational Education and Training

PGDVET PROGRAMME
REGULATIONS AND SCHEME OF STUDIES

2024 – 2025



PSS Central Institute of Vocational Education

(A constituent unit of NCERT, Under Ministry of Education, Government of India)

Shyamla Hills, Bhopal – 462 002, Madhya Pradesh, India

www.psscive.ac.in





PROGRAMME REGULATIONS AND SCHEME OF STUDIES for

Post Graduate Diploma in Vocational Education and Training

The PSSCIVE reserves the right to make amendments, additions, deletions, and modifications to PGDVET programme as and when deemed fit.

PGDVET Highlights

- ✓ Programme for aspiring vocational trainers
- ✓ 12 Month Programme with 2 Semesters
- ✓ Distance-Cum-Contact Mode
- ✓ Contact Programme for hands on training cum field visit
- ✓ Experiential learning with Internships & Project Work
- ✓ NEP 2020 - Exit and Entry Mode
- ✓ NCrF 2023 - Credit System based
- ✓ NCFSE 2023 - aligned
- ✓ NSQF - Level 6
- ✓ Semester-1: Exit after passing with Certificate in Vocational Pedagogy
- ✓ Semester-2: Exit after passing with PG Diploma in Vocational Education and Training

Electronic version of the PGDVET PROGRAMME REGULATIONS AND SCHEME OF STUDIES is available for download at PSSCIVE website <http://www.psscive.ac.in/programmes/pgdvet>

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Published by:

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PREFACE

Dear Prospective Learners,

Welcome to the revamped Post Graduate Diploma in Vocational Education and Training (PGDVET) programme!

Aligned with the National Skill Qualifications Framework (NSQF) and the National Education Policy (NEP) 2020, our program stands at the forefront of vocational education, integrating seamlessly with general education, industry demands, and employability skills. This updated curriculum emphasizes a symbiotic relationship with industry stakeholders, ensuring that our graduates emerge equipped with the practical skills necessary for today's job market.

In this dynamic learning environment, we prioritize not only expertise in pedagogy but also domain-specific skills essential for vocational teachers/trainers. Our faculty members, along with consultants from the PSSCIVE and external experts, are dedicated to guiding you through this transformative journey.

The PGDVET programme is meticulously designed to cater to the aspirations of individuals aiming to excel as vocational educators. Whether you're a seasoned professional or new to the field, this program offers a structured pathway to enhance your teaching competencies. By embracing a distance-cum-contact mode of learning, we ensure flexibility without compromising on quality education.

Here's a glimpse of what awaits you in the PGDVET journey:

A 12-month program divided into two semesters, offering depth and breadth in vocational education.

Embracing the NEP 2020's Exit and Entry mode, allowing you to exit after Semester-1 with a Certificate in Vocational Pedagogy or continue to Semester-2 for the PG Diploma in Vocational Education and Training.

Engage in hands-on training and field visits during a one-month contact program, fostering experiential learning.

Internships and project work opportunities for practical application and skill refinement.

Adhering to the National Credit Framework (NCrF) 2023, ensuring a credit system-based evaluation.

Attaining a Level 6 certification under the NSQF, aligning with industry standards.

Integration with the National Curriculum Framework for Skill Education (NCFSE) 2023, ensuring relevance and currency of content.

This Programme Regulations and Scheme of Studies serves as your compass, navigating through the course structure, teaching methodologies, assessment criteria, and elective subject choices tailored to your interests and professional goals.

By embarking on this transformative journey, you are taking a significant step towards honing your skills, empowering future generations, and contributing to the evolving landscape of vocational education.

Welcome aboard, and let the journey to excellence begin!

Dr. Deepak Paliwal

Joint Director

PSS Central Institute of Vocational Education, Bhopal





About the PGDVET Programme

The Post Graduate Diploma in Vocational Education and Training (PGDVET) is a comprehensive program designed to equip aspiring vocational educators with the pedagogical skills and domain-specific expertise necessary to excel in the field of vocational education. Developed in alignment with the National Skill Qualifications Framework (NSQF) and the National Education Policy (NEP) 2020, this program bridges the gap between academic learning and industry demands.

The PGDVET curriculum is structured to cater to the diverse needs of educators, offering a balanced blend of theoretical knowledge and practical application. Spanning over 12 months and divided into two semesters, the program provides participants with the flexibility of a distance-cum-contact mode of learning, ensuring accessibility without compromising on educational quality.

Key highlights of the PGDVET program include:

Pedagogical Excellence: Participants undergo rigorous training in pedagogy, learning various instructional methods, curriculum development techniques, and assessment strategies tailored for vocational education.

Domain-Specific Skills: Recognizing the importance of specialized knowledge in vocational fields, the program offers in-depth training in specific domains relevant to the participants' areas of interest or expertise.

Industry Integration: Close collaboration with industry stakeholders ensures that the program remains up-to-date with evolving industry trends and demands, providing participants with real-world insights and experiences.

Hands-on Training: A one-month contact program offers participants the opportunity for hands-on training and field visits, enabling experiential learning and practical skill development.

Internships and Project Work: Participants engage in internships and project work, allowing them to apply theoretical knowledge in real-world settings and gain valuable industry experience.

Credit System Evaluation: The program follows a credit system-based evaluation, aligning with the National Credit Framework (NCrF) 2023, to ensure a fair and transparent assessment process.

Certification and Accreditation: Upon successful completion of the program, participants receive a Post Graduate Diploma in Vocational Education and Training, accredited under NCERT equivalent to NSQF Level 6, signifying their proficiency in vocational education.

Continuous Professional Development: Participants are encouraged to engage in continuous professional development activities to stay abreast of emerging trends, pedagogical approaches, and industry advancements, ensuring lifelong learning and growth.

Overall, the PGDVET program equips participants with the knowledge, skills, and confidence to become effective vocational educators, empowering them to make a meaningful impact in the lives of students and contribute to the growth and development of the vocational education sector.

- Dr. R. Ravichandran, PGDVET Coordinator





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Part- B SYLLABUS

SEMESTER – 1

1	PGDVET-101	Vocational Education and Training System
2	PGDVET-102	Curriculum Development, Implementation & Evaluation
3	PGDVET-103	Instructional Design and Development
4	PGDVET-104	Assessment and Evaluation
5	PGDVET-105	Employability Skills Development
6	PGDVET-106	Vocational Guidance and Counselling
7	PGDVET-107	Research in Vocational Education and Training
8	PGDVET-108	Internship in School
8	PGDVET-109	Project Work in School

SEMESTER – 2

1	PGDVET-201	ICT Application in Vocational Education and Training
2	PGDVET-202	Entrepreneurship and Innovation
2	PGDVET-202	*Sector Specific Elective Paper-1
3	PGDVET-203	*Sector Specific Elective Paper-2
4	PGDVET-204	Internship in Industry
5	PGDVET-205	Project Work in Industry

* Sector Wise Elective Paper Details

Sector: AGRICULTURE

PGDVET 302-AG: Advances in Agriculture

PGDVET 303-AG: Advances in Horticulture

Sector: IT/ITeS

PGDVET 302-IT: Multimedia and Web Technology

PGDVET 303-IT: Python Programming

Sector: HEALTHCARE

PGDVET 302-HC: Changing Healthcare and Education Context

PGDVET 303-HC: Infection, Prevention and Control

Sector: RETAIL

PGDVET 302-RE: Fundamentals of Marketing and Salesmanship

PGDVET 303-RE: Retail Marketing Management

Sector: AUTOMOTIVE

PGDVET 302-AU: Automobile Technology Development

PGDVET 303-AU: Automobile Sales and Marketing

Sector: APPAREL, MADE-UPS AND HOME FURNISHING

PGDVET 302-AP: Hand Embroidery

PGDVET 303-AP: Hand Embroidery- Adda work

Sector: TOURISM AND HOSPITALITY

PGDVET 302-TH Fundamentals of Tourism and Hospitality



PGDVET 303-TH Advances in Tourism and Hospitality

Sector: BANKING FINANCEAL SERVICES & INSURANCE

PGDVET 302-BI Indian Financial System

PGDVET 303-BI Financial Institutions and Services

Sector: FOOD PROCESSING

PGDVET 302-FP Fundamentals of Food Science & Technology

PGDVET 303-FP Advanced Food Processing & Preservation

Sector: SECURITY

PGDVET 302-SE Security Systems in India

PGDVET 303-SE Private Security Systems

About PSSCIVE

PSSCIVE Faculty Profile

Details of PGDVET Program Coordinator

List of Contributors

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Part- A

**REGULATIONS AND
SCHEME OF STUDIES**





Post Graduate Diploma in VOCATIONAL EDUCATION AND TRAINING

1. BACKGROUND

India stands at a crucial juncture, benefiting from a significant demographic advantage, with over 54% of its population under 25 years of age and more than 62% within the working age group of 15-59 years. However, projections indicate that this advantage will endure only until 2040, offering a limited window for India to leverage its demographic dividend and tackle its skill shortages effectively.

Recognizing the imperative of this demographic transition, the Indian education landscape has witnessed substantial transformations. Vocational Education and Training (VET) have emerged as pivotal instruments in nurturing the skills of the youth and nurturing human capital for economic progress.

In response to this paradigm shift, the government has undertaken substantial initiatives to revamp the vocational education system and integrate vocational courses alongside traditional academic subjects at all Grades. The Vocationalisation of School Education initiative seeks to introduce vocational subjects as integrated disciplines at the lower grades and as compulsory paper at the secondary level.

The Ministry of Skill Development and Entrepreneurship has identified 24 priority sectors based on meticulous skill gap analyses, encompassing diverse technical and non-technical domains such as Agriculture, Tourism, Apparel, Automotive, Hospitality etc. The National Occupation Standards developed by the National Skill Development Corporation (NSDC) for these priority sectors equip students with the requisite knowledge, vocational/technical skills, and core values to excel in various crafts and trades.

Nevertheless, vocational educators employed by VET institutions/ vocational training providers/ schools across states and union territories often lack specialized vocational teaching skills and pedagogy due to the absence of formal vocational education. In response, the Post Graduate Diploma in Vocational Education and Training (PGDVET) has been meticulously crafted to equip educators/trainers with advanced vocational pedagogy. This program aims to empower educators/trainers to deliver vocational courses in alignment with the objectives of Samagra Shiksha, NEP 2020, NCFSE 2023 etc, employing learning outcome-driven, experiential learning, activity-based hands on methodologies with competency based assessment practices.

In essence, India's demographic dividend, coupled with the escalating significance of skills and innovation in the global economy, presents a dual-edged scenario of opportunities and challenges. The government's steadfast commitment to vocational education and training, coupled with endeavors to bridge the skills gap, holds the promise of unlocking India's demographic potential and fostering sustained economic advancement in the foreseeable future.

2. OVERVIEW OF THE PROGRAMME

In response to the pressing demand for proficient vocational educators nationwide, the PSS Central Institute of Vocational Education (PSSCIVE) has introduced the Post Graduate Diploma in Vocational Education and Training (PGDVET) programme. This initiative caters to in-service teachers aspiring to enhance their competencies in vocational education and

training, utilizing a blend of distance and contact learning methods to ensure accessibility and effectiveness.

The PGDVET curriculum encompasses eight compulsory papers and two elective papers, complemented by an internship and project work component. Each paper's curriculum and course materials are meticulously crafted by seasoned faculty from PSSCIVE and subject matter experts, guaranteeing relevance and rigor. The program delivery adopts a blended teaching-learning approach, seamlessly integrating distance learning, face-to-face contact sessions, and practical training components.

The practicum aspect of the program is instrumental in providing learners with immersive experiences in both school and industry settings, facilitating the acquisition of essential knowledge and skills crucial for proficient teaching and training. Through the internship program and project work, educators and trainees undergo a transformative journey, honing their abilities to deliver skill-based training effectively within their respective domains.

The syllabus section of this document elucidates the rationale, objectives, and unit contents of each paper within the PGDVET curriculum, offering a comprehensive roadmap for participants. Upon completion of the program, educators and trainees emerge equipped with the requisite skills and competencies to deliver high-quality vocational education and training, aligning with the mandates outlined in the National Education Policy of 2020.

The PGDVET program stands as a beacon of excellence, empowering educators to navigate the complexities of vocational education and training with confidence and proficiency.

2.1 Aims

The primary aim of the Post Graduate Diploma in Vocational Education and Training (PGDVET) program is to elevate the competencies and expertise of educators and professionals within the realm of vocational education and training. By equipping participants with advanced skills and knowledge, the program endeavors to fortify the vocational education system, ensuring its effectiveness and relevance in addressing the evolving needs of learners and industry demands.

2.2 Objectives

The objectives of the Post Graduate Diploma in Vocational Education and Training (PGDVET) program are as follows:

- To cultivate effective teaching practices in vocational education and training, fostering comprehensive understanding and application of instructional strategies.
- To empower participants in the development, implementation, and assessment of vocational education curricula, ensuring relevance and efficacy.
- To equip educators with the proficiency to employ diverse methods and media, optimizing learning outcomes within vocational contexts.
- To enable participants to adeptly select and utilize valid and reliable assessment techniques, ensuring accurate evaluation of student progress.
- To integrate Information and Communication Technology (ICT) tools seamlessly into vocational teaching, learning, and assessment processes.
- To provide comprehensive vocational guidance and support systems, nurturing students' career development and employability skills.
- To foster research capabilities pertinent to vocational education and training, promoting inquiry and innovation in the field.
- To facilitate the application of vocational skills within authentic work environments, bridging the gap between classroom learning and real-world practice.

2.3 Learning Outcomes of PGDVET

The Post Graduate Diploma in Vocational Education and Training (PGDVET) aims to equip participants with a range of competencies and skills to excel in the field of vocational education. Upon completion of the program, participants are expected to achieve the following learning outcomes:

Pedagogical Proficiency: Demonstrate effective teaching methodologies and strategies tailored to vocational education settings, fostering entrepreneurial mindset and skills among students.

Curriculum Development: Design, implement, and evaluate vocational education curricula that integrate entrepreneurship education, empowering students to identify and pursue entrepreneurial opportunities.

Assessment Expertise: Apply valid and reliable assessment methods to evaluate entrepreneurial competencies and readiness, providing personalized guidance and support for entrepreneurial development.

Integration of Technology: Utilize Information and Communication Technology (ICT) tools effectively to promote entrepreneurship education, enabling students to leverage digital resources for business innovation and growth.

Vocational Guidance: Provide comprehensive vocational guidance and support for entrepreneurship, equipping students with the knowledge and skills to start and manage their own ventures successfully.

Research Capabilities: Conduct research on entrepreneurship education and its impact on vocational training, contributing to the advancement of knowledge in the field and informing evidence-based practices.

Practical Application: Facilitate hands-on entrepreneurial experiences and projects, enabling students to apply entrepreneurial concepts and skills in real-world contexts.

Collaboration and Communication: Foster collaboration and communication skills essential for entrepreneurial success, encouraging networking, team-building, and effective communication with stakeholders.

Lifelong Learning: Cultivate a culture of lifelong learning and entrepreneurial mindset among educators and learners, promoting continuous innovation and adaptation to changing market dynamics.

By integrating entrepreneurship education into vocational training, the PGDVET program aims to nurture a new generation of entrepreneurial leaders capable of driving economic growth, innovation, and social change.

2.4 Recognition

Pandit Sunderlal Sharma Central Institute of Vocational Education, Bhopal is a constituent unit of National Council of Educational Research and Training (NCERT), under Ministry of Education, Government of India.

2.5 Target Group

The Post Graduate Diploma in Vocational Education and Training (PGDVET) program is tailored for individuals aiming to forge a career path within the domain of vocational education and

training. It welcomes both pre-service and in-service candidates, offering a comprehensive platform for professional development and advancement in the field.

2.6 Duration

The PGDVET program spans over one year and is divided into two semesters, as outlined below:

Semester	Mode	Activity	Duration
I	Distance	Self-learning, online classes, assignment, portfolio.	6 months (July - Dec)
	Contact	Skill development, Theory Examination, Internship in School, project work in School	Nov (15 days) Dec (15 days) Dec (15 days)
II	Distance	Self-learning, online classes, assignment, portfolio.	6 months (Jan - June)
	Contact	Skill development, Theory Examination, Internship in Industry, project work in Industry	May (30 days) June (15 days) June (15 days)

2.7 Medium of Instruction

As English is the language of instruction, a fundamental level of written and spoken English proficiency will be necessary.

2.8 Study Centre

PSS Central Institute of Vocational Education (PSSCIVE), Shyamla Hills, Bhopal

2.9 PGDVET Highlights

The Post Graduate Diploma in Vocational Education and Training (PGDVET) stands as a comprehensive program tailored for aspiring vocational trainers, offering a structured pathway to excellence in the field. Spanning 12 months across two semesters, the program adopts a blended approach, combining distance learning with contact sessions to ensure accessibility and effectiveness. Participants engage in hands-on training through a dedicated contact program, complemented by field visits for practical exposure. The curriculum emphasizes experiential learning, integrating internships and project work to enhance skill development and real-world application. Aligned with the National Education Policy (NEP) 2020, the program offers both Exit and Entry modes, facilitating seamless progression. Utilizing the National Credit Framework (NCrF) 2023, the program adopts a credit system-based evaluation, while aligning with the National Curriculum Framework for Skill Education (NCFSE) 2023. Upon successful completion, participants attain a prestigious PG Diploma in Vocational Education and Training, accredited at NSQF Level 6, marking their readiness to excel in the vocational education landscape.

3. ADMISSION REQUIREMENT

3.1 Qualification

To be eligible for the PG Diploma in Vocational Education and Training program, applicants must be Indian Nationals and possess the qualifications listed below:

Essential: A three-year (10+2+3) University Degree in any discipline or a four year (10+2+4) Engineering/Technology/Medicine/Other University Degree in any discipline, recognized by the UGC/AIU/AICTE/MCI/NCTE or an equivalent qualification in any field from a University or Institution recognized by the Government of India. Candidates must have studied the sector-specific elective paper offered in Semester 2 as part of their qualifying degree.

Desirable: Candidates should ideally possess a minimum of one year of experience in teaching vocational courses in a school or working within an industrial setting, along with proficiency in basic English and ICT skills.

3.2 Number of Seats and Reservation Policy

The maximum numbers of seats are 100 (Hundred). The PSSCIVE provides reservation in admission for various categories of learners, including Scheduled Castes, Scheduled Tribes, non-creamy layer of OBC, Economically Weaker Sections (as notified by MHRD through OM 12-4/019-U1 in January 2019), and Physically Handicapped learners, in accordance with the Government of India rules for admission to its PGDVET programme. However, any learner found to have submitted a forged certificate under any category will not only have their admission cancelled but also face legal action, as per the rules of the Government of India. Reservation of seats: EWS-10%, OBC(NCL)-27%, SC-15%, ST-7.5%, and PH-4%.

3.3 Admission Procedure

To seek admission in the PG Diploma Programme, candidates must download the APPLICATION FORM format from the PSSCIVE website (www.psscive.ac.in) and fill it as per the instructions provided. Candidates must pay a non-refundable application fee of Rs. 500 (online payment preferred) and submit the completed application by speed post / in-person to PGDVET Coordinator, PSS Central Institute of Vocational Education (PSSCIVE), Shyamla Hills, Bhopal – 462 002, well before the due date. Applications that are received after the designated due date will not be considered, regardless of the reason for their delay. Applications without the application fee, incomplete data, without a signature, or proof of claim will not be accepted.

3.4 Selection Process

Screening of the applications will be conducted by a Screening Committee constituted by the Joint Director, PSSCIVE, Bhopal. A merit list will be prepared based on the marks obtained in the qualifying examination and as per the government of India reservation policy. The applicants may be required to appear for an Aptitude Test and a Personal Interview conducted by the PSSCIVEI through an online mode. Candidates who are selected will be informed through registered e-mail, and the list of selected candidates will be available on the Institute's website (www.psscive.ac.in). After selection, candidates must pay a Programme Fee of Rs. 15,000 for semester-1 to confirm their admission. All communications with regard to admission and programme will be done through electronic mails and therefore the candidates are advised to keep track of their Email provided in application form.

Physical cross verification of documents will be conducted at an appropriate time, and if any discrepancy is found, the admission of the candidate will be cancelled, and disciplinary action will be taken. For any queries, candidates can send an e-mail message to PGDVET (pgdvet@psscive.ac.in).

3.5 Programme Fees and other Expenses

Application Fee

An application fee of Rs. 500 (non-refundable) must be paid by any online mode (Account details are given below) from any Nationalized bank and the payment details must be entered in the application form.

Programme Fee

The selected candidates are required to pay a programme fee as detailed below.

Semester-1 Fee:

Semester-1 fee of Rs. 15,000 (Rupees Fifteen Thousand only) (non-refundable) by any online mode (Account details are given below) from any Nationalized bank. Tuition fee (Rs.2000/-) is exempted for applicants belonging to SC/ST. Admission will be confirmed only upon receipt of this fee in time.

(a)	Admission Fee	:	1,000
(b)	Tuition Fee (No Tuition fee for SC/ST)	:	2,000
(c)	Study Material, Library, Sports, Examination, Contact programme, Field visit etc.	:	12,000

Programme Fee	Total	:	15,000
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Semester-2 Fee:

Semester-2 fee of Rs. 15,000 (Rupees Fifteen Thousand only) (non-refundable) by any online mode (Account details are given below) from any Nationalized bank. Tuition fee (Rs.2000/-) is exempted for applicants belonging to SC/ST. Admission in semester 2 will be confirmed only upon receipt of this fee in time.

(a)	Admission Fee	:	1,000
(b)	Tuition Fee (No Tuition fee for SC/ST)	:	2,000
(c)	Study Material, Library, Sports, Examination, Contact programme, Field visit etc.	:	12,000

Programme Fee	Total	:	15,000
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Payment of fees can be made by any online mode from any Nationalized bank.

The account details are given below:

1. Name of the Account: **PT SUNDERLAL SHARMA C I V E**
2. Account Number: **10121604354**
3. Name of the Bank: **STATE BANK OF INDIA**
4. Name of the Branch: **R.C.E. Bhopal**
5. IFSC Code: **SBIN0002889**

Scheme of Fee Support to SC/ST Students

The PSSCIVE has a policy of exempting programme fees for students belonging to the SC/ST category. This policy is reviewed for every admission cycle. However, certain SC and ST students are not eligible for fee exemption, including those who are employed or receiving fellowships or fee exemptions from other agencies, as well as those whose parents or guardians' income from all sources exceeds Rs 8 lakhs during the financial year according to Government of India norms. When applying for admission, applicants must provide an income certificate issued by an authorized government agency. It's important to note that the fee exemption is limited to the extent of the Tuition Fee only.

Hostel and Canteen Facility

During the contact learning period, candidates are required to bear the expenditure towards boarding and lodging. However, for non-local candidates, boarding and lodging facilities are available upon request at the Training Hostel of PSSCIVE, in accordance with NCERT norms. To avail of these facilities, candidates must indicate their requirements in the application form and make advance payment for the entire period upon arrival at the PSSCIVE Hostel.

Accommodation

The availability of hostel facilities is subject to request, and it follows a first-come, first-served basis. The charges for accommodation in a shared room with AC are Rs. 200 per day. Please note that the hostel does not permit other members accompanying you to stay with you.

Meals

The Institute offers a canteen facility to its patrons, which serves solely vegetarian meals. The cost of meals may differ based on the type of meal chosen.

*Please note that the charges for both accommodation and meals are subject to change in accordance with NCERT norms.

4 PROGRAMME STRUCTURE

4.1 SEMESTER - I

Mode: Distance (Guided Self-Learning) and contact Mode

Duration: (July-Dec) (6 months)

Sr. No.	Paper Code	Paper title	Credits	Marks
1	PGDVET-101	Vocational Education and Training System	2	70
2	PGDVET-102	Curriculum Development, Implementation & Evaluation	2	70
3	PGDVET-103	Instructional Design and Development	3	100
4	PGDVET-104	Assessment and Evaluation	3	100
5	PGDVET-105	Employability Skills Development	2	50
6	PGDVET-106	Vocational Guidance and Counselling	2	70
7	PGDVET-107	Research in Vocational Education and Training	2	70
8	PGDVET-108	Internship in School	2	70
8	PGDVET-109	Project Work in School	2	50
TOTAL			20	650

***EXIT with CERTIFICATE IN VOCATIONAL PEDAGOGY**

4.2 SEMESTER – II

Mode: Distance (Guided Self-Learning) and contact Mode

Duration: (Jan-June) (6 months)

Sr. No.	Paper Code	Paper title	Credits	Marks
1	PGDVET-201	ICT Application in Vocational Education and Training	2	65
2	PGDVET-202	Entrepreneurship and Innovation	2	65
2	PGDVET-202	*Sector Specific Elective Paper-1	4	130
3	PGDVET-203	*Sector Specific Elective Paper-2	4	130
4	PGDVET-204	Internship in Industry	4	130
5	PGDVET-205	Project Work in Industry	4	130
TOTAL			20	650

* Choose any ONE relevant Sector from the list.

Details of Sector Specific Elective Papers	
Sector: AGRICULTURE	
PGDVET 302-AG	Advances in Agriculture
PGDVET 303-AG	Advances in Horticulture
Sector: IT/ITes	
PGDVET 302-IT	Multimedia and Web Technology
PGDVET 303-IT	Python Programming
Sector: HEALTH CARE	
PGDVET 302-HC	Changing Health Care and Education Context
PGDVET 303-HC	Infection, Prevention and Control

Sector: RETAIL	
PGDVET 302-RE	Fundamentals of Marketing and Salesmanship
PGDVET 303-RE	Retail Marketing Management
Sector: AUTOMOTIVE	
PGDVET 302-AU	Automobile Technology Development
PGDVET 303-AU	Automobile Sales and Marketing
Sector: APPAREL, MADE-UPS AND HOME FURNISHING	
PGDVET 302-AP	Hand Embroidery
PGDVET 303-AP	Hand Embroidery- Adda work
Sector: Tourism and Hospitality	
PGDVET 302-TH	Fundamentals of Tourism and Hospitality
PGDVET 303-TH	Advances in Tourism and Hospitality
Sector: Banking Financial Services & Insurance	
PGDVET 302-BI	Indian Financial System
PGDVET 303-BI	Financial Institutions and Services
Sector: Food Processing	
PGDVET 302-FP	Fundamentals of Food Science & Technology
PGDVET 303-FP	Advanced Food Processing & Preservation
Sector: Security	
PGDVET 302-SE	Security System in India
PGDVET 303-SE	Private Security System

Course Preparation

A team of experts, consisting of professionals from various universities and specialized institutions across the country, as well as in-house faculty, carefully prepare the Study Materials. The content undergoes thorough scrutiny by content experts and in-house faculty and is then edited by language experts at PSSCIVE before being sent for printing. In addition, audio and video materials are produced in consultation with course writers, in-house faculty, and producers. The faculty and external experts preview and review the material and make any necessary modifications before dispatching the final materials to the PGDVET students.

The PGDVET programme comprises theoretical instructions, practical work and internship. The theory courses are with the basic elements of vocational education and training system and pedagogy of vocational education.

Credit System

The PGDVET programme is structured around a 'Credit System', which helps students to gauge the amount of academic effort required to successfully complete each course. In this system, each credit is equivalent to 30 hours of student study, encompassing all learning activities such as reading and comprehending print material, listening to audio, watching video, attending online sessions, teleconferences and writing assignment responses. Therefore, a 3-credit course will entail 90 hours of study.

The structure of the PGDVET programme spans over a period of 12 months, divided into two semesters. Each paper is identified by a code and title, indicating the credits, marks, mode of learning, and duration. To complete the Semester, students must successfully complete all assignments, practicals, projects, term-end examinations, and other requirements for each paper in the semester programme. The PGDVET programme consists of a total of 40 credits (1200 hours) and has 1300 marks. Each semester will be for 20 credits.

Evaluation and Examination

The evaluation and examination framework will be accessible on the PSSCIVE website. Across both Semester I and II, students will undergo assessment based on five key parameters: Assignments, Portfolios, Skills, Internship, Project Work and written theory examination.

Student Support Services

To cater to the unique needs of each learner, the academic faculty and staff, along with other learners, encourage online/mobile interaction. Learners can engage in discussion forums, refer to library books, and access web-based resources such as video/audio programs and use ICT tools. Additionally, learners can participate in online peer-to-peer discussions and virtual interactions with teachers and experts. They can also seek support from the Coordinator for administrative and academic matters through virtual means.

Details of DVET Paper / Sector Coordinators:

SEMESTER 1		
PGDVET-101	Vocational Education and Training System	Dr. Abhijit Nayak a.nayak@psscive.ac.in
PGDVET-102	Curriculum Development, Implementation & Evaluation	Dr. Punnam Veeraiah p.veeraiah@psscive.ac.in
PGDVET-103	Instructional Design and Development	Dr. Vinay Swarup Mehrotra v.mehrotra@psscive.ac.in
PGDVET-104	Assessment and Evaluation	Dr. Saurabh Prakash s.prakash@psscive.ac.in
PGDVET-105	Employability Skills Development	Dr. Rajiv Kumar Pathak r.pathak@psscive.ac.in
PGDVET-106	Vocational Guidance and Counselling	Dr. Vipin Kumar Jain v.jain@psscive.ac.in
PGDVET-107	Research in Vocational Education and Training	Dr. R. Ravichandran r.ravichandran@psscive.ac.in
PGDVET-108	Internship in School	Dr. Pravin Narayan Mahamunni p.mahamuni@psscive.ac.in
PGDVET-109	Project Work in School	Dr. Vinod Kumar Yadav vinod.det@psscive.ac.in
SEMESTER 2		
PGDVET-201	ICT Application in Vocational Education and Training	Dr. Dipak Shudhalwar d.shudhalwar@psscive.ac.in
PGDVET-202	Entrepreneurship and Innovation	Dr. Vipin Kumar Jain v.jain@psscive.ac.in
PGDVET-203 and DEVT-204 (ELECTIVE PAPERS)	Agriculture Sector	Dr. Rajiv Kumar Pathak r.pathak@psscive.ac.in
	IT/ITeS Sector	Dr. Munesh Chandra m.trivedi@psscive.ac.in
	Health Care Sector	Dr. Abhijit Nayak a.nayak@psscive.ac.in
	Retail Sector	Dr. Punnam Veeraiah p.veeraiah@psscive.ac.in
	Automotive Sector	Dr. Saurabh Prakash s.prakash@psscive.ac.in
	Apparel, Made-ups and Home Furnishing Sector	Dr. Pinki Khanna p.khanna@psscive.ac.in

	Tourism & Hospitality	Dr. Prakash Chandra Rout prakash.rout@psscive.ac.in
	Banking Financial Services & Insurance	Dr. Pravin Narayan Mahamuni p.mahamuni@psscive.ac.in
	Food Processing	Dr. Rakesh Kumar Raman rakesh.ftp@psscive.ac.in
	Security	Dr. Sonam Singh sonam.singh@psscive.ac.in
PGDVET-205	Internship in Industry	Dr. R. Ravichandran r.ravichandran@psscive.ac.in and concerned sector coordinator
PGDVET-206	Project Work in Industry	Dr. R. Ravichandran r.ravichandran@psscive.ac.in and concerned sector coordinator

5. STUDY MATERIAL

The instructional methodology employed for this programme will be a hybrid approach combining distance and contact modes of learning. This approach is designed to be more learner-oriented, with the learner actively participating in the teaching and learning process. To achieve this, the PSSCIVE will adopt a multimedia approach for instruction, utilizing a variety of tools such as print materials, Flip Books, audio-video resources, and online programmes. By incorporating these diverse methods, the programme aims to deliver a comprehensive and engaging learning experience for all participants.

Programme Regulations and Scheme of Studies

The PGDVET programme Regulations and Scheme of Studies serves as a comprehensive resource, containing crucial information on various aspects of the programme. It encompasses details on guidelines, rules, programme structure, curriculum, syllabus, content transaction, evaluation, and certification. By referring to the programme Regulations and Scheme of Studies, individuals can gain a thorough understanding of all the essential components of the PGDVET programme, ensuring they are equipped with the necessary knowledge to successfully navigate through it. Electronic version of the PGDVET PROGRAMME REGULATIONS AND SCHEME OF STUDIES is available for download in PSSCIVE website: <http://www.psscive.ac.in/>

5.1 Study Material

The PGDVET programme offers self-learning format course material for all its papers that has been designed to be easily understood by learners. The material has been prepared with the assistance of experienced experts in their respective fields. The main focus of the programme is the Print material, which serves as the Study Material for all papers. Enrolled candidates will receive the Study Material for semesters I and II via speed post just before the respective semester begins. Additionally, the guideline Manual for Internship and Project Work will also be sent to students via speed post just before the activity.

5.2 Audio-Video Materials

As a means of reinforcing the concepts and their application, additional supplementary learning resources in the form of audio-video materials will also be integrated into the teaching learning process. These resources will encompass NCERT/PSSCIVE digital content, government of India digital resources, and curated content from reputable platforms like YouTube, all aimed at enhancing the learning experience.

The Government of India provides a diverse array of digital resources aimed at enriching educational experiences. Among these resources are platforms like the National Digital Library of India (NDLI), SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), and the National Repository of Open Educational Resources (NROER). Additionally, initiatives such as ePathshala and the Digital India Portal offer comprehensive access to educational content and resources. Ministries like the Ministry of Education (MoE) also administer online learning platforms, including DIKSHA and PM eVidya, which cater to various educational needs. Furthermore, programs like NISHTHA focus on teacher training and professional development, while platforms like the National Apprenticeship Training Scheme (NATS) Portal provide avenues for vocational training. These digital resources serve as vital tools in democratizing education and fostering lifelong learning opportunities for individuals across the country.

6. TRANSACTION OF THE PROGRAMME

The transaction of the programme is divided into two semesters. The details of the same are as follows:

6.1 Semester 1

Distance Learning

Before the commencement of the semester, enrolled learners will be provided with the study material in a printed/PDF format. This material will comprise a concise write-up intended to orient learners to the nature of the material dispatched, the process of assessment activities applicable during both distance and contact learning. Learners will receive support in the form of expert online lectures and personal interaction to clarify any doubts, as per their needs.

Maintaining Portfolio

The portfolio is a crucial component for the candidate, as it serves as a record for the candidate's assignments, self-check and self-evaluation exercises, and activities. Maintaining this portfolio is a requirement for the candidate, who is responsible for documenting their work in it.

Portfolio Assessment

A portfolio is a comprehensive document that provides an accurate depiction of a trainee's accomplishments, validated by appropriate evidence. These achievements are exemplified by carefully selected samples of the trainee's work. To create this portfolio, the trainee must maintain a detailed record of their work, including completed worksheets, preforms, and self-check exercises, along with feedback received on assignments.

Additionally, the portfolio should include the trainee's self-evaluation and self-reflections on their work, as well as their progress in terms of acquiring knowledge and changes in attitude

and behavior. To facilitate the evaluation of progress over time, each item in the portfolio should be dated.

Ultimately, the portfolio is a valuable tool that allows both the trainee and their instructor to assess the trainee's development throughout the course of their learning experience. When the trainee comes for contact learning, they should bring their portfolio as a means of showcasing their growth and development.

Assignments

Enrolled learners can expect to receive 5 to 6 assignments per paper, delivered separately by Email. These assignments are related to specific units of the course material and come with detailed instructions and a calendar for submission. The paper coordinator will provide feedback on the completed assignments, and if deemed unsatisfactory, trainees will be given a deadline for re-submission. To keep track of assessment activities and feedback, candidates can refer to the sample proformas found under the 'portfolio assessment' section.

It's crucial to note that completing and submitting assignments on time is mandatory, as they are used to evaluate trainees' performance in the distance learning phase. Failure to submit assignments before the contact learning phase will result in the candidate being marked as absent. The timetable for assignment submission will be provided to enrolled candidates by Email.

Contact mode

There will be face-to-face (contact) learning sessions for a duration of 15 days, held at PSSCIVE in Bhopal. Contact mode will consist of hands on practical training, on-site visits, instructional sessions, teaching practice, assessments, examination, and orientation on other activities. The specific dates of these sessions will be communicated in advance to allow the candidate to make appropriate plans. The candidate's participation in the contact learning sessions will depend on the satisfactory completion of assignments assigned during the distance learning phase. Out-of-town trainees shall reside at PSSCIVE/ Bhopal during the contact learning period.

Teaching Internship

Teaching Internship experience is a vital component of any teacher training program. It allows trainees to apply the ideas, theories, and techniques they have learned in a real-life setting. For this reason, the trainee will complete a 15 days internship at a school in India under the guidance of an expert teacher and principal. The PGDVET GUIDELINE MANUAL for Internship and Project work will provide detailed information on the requirements for the internship, including the procedure for selecting a school, as well as the evaluation process.

Project Work

Project work evaluation is a crucial component of the assessment process, designed to gauge participants' practical application of learned concepts and their ability to solve real-world problems within the vocational education and training domain. Evaluation criteria encompass various aspects such as project design, methodology, implementation, analysis of results, and presentation skills. Emphasis is placed on the originality, relevance, and effectiveness of the project outcomes in addressing identified challenges or opportunities. Through meticulous evaluation, participants' creativity, critical thinking, collaboration, and project management

skills are assessed, contributing to a holistic assessment of their overall performance and readiness for the professional arena.

Semester End Examination

At the end of the semester, a comprehensive written theory exam will assess learners' understanding. Exam details, including schedule, format, and syllabus, are communicated in advance. Crafted by subject experts, questions cover multiple formats to gauge comprehension, analysis, and problem-solving. Learners must apply critical thinking to respond effectively. Results are promptly provided with constructive feedback, aiding academic growth. This examination serves as a pivotal assessment, allowing learners to demonstrate their readiness for academic success.

6.2 Semester 2

Distance Learning

Before the commencement of the semester, enrolled learners will be provided with the study material in a printed/PDF format. This material will comprise a concise write-up intended to orient learners to the nature of the material dispatched, the process of assessment activities applicable during both distance and contact learning. Learners will receive support in the form of expert online lectures and personal interaction to clarify any doubts, as per their needs.

Maintaining Portfolio

The portfolio is a crucial component for the candidate, as it serves as a record for the candidate's assignments, self-check and self-evaluation exercises, and activities. Maintaining this portfolio is a requirement for the candidate, who is responsible for documenting their work in it.

Portfolio Assessment

A portfolio is a comprehensive document that provides an accurate depiction of a trainee's accomplishments, validated by appropriate evidence. These achievements are exemplified by carefully selected samples of the trainee's work. To create this portfolio, the trainee must maintain a detailed record of their work, including completed worksheets, preforms, and self-check exercises, along with feedback received on assignments.

Additionally, the portfolio should include the trainee's self-evaluation and self-reflections on their work, as well as their progress in terms of acquiring knowledge and changes in attitude and behavior. To facilitate the evaluation of progress over time, each item in the portfolio should be dated.

Ultimately, the portfolio is a valuable tool that allows both the trainee and their instructor to assess the trainee's development throughout the course of their learning experience. When the trainee comes for contact learning, they should bring their portfolio as a means of showcasing their growth and development.

Assignments

Enrolled learners can expect to receive 5 to 6 assignments per paper, delivered separately by Email. These assignments are related to specific units of the course material and come with detailed instructions and a calendar for submission. The paper coordinator will provide

feedback on the completed assignments, and if deemed unsatisfactory, trainees will be given a deadline for re-submission. To keep track of assessment activities and feedback, candidates can refer to the sample proformas found under the 'portfolio assessment' section.

It's crucial to note that completing and submitting assignments on time is mandatory, as they are used to evaluate trainees' performance in the distance learning phase. Failure to submit assignments before the contact learning phase will result in the candidate being marked as absent. The timetable for assignment submission will be provided to enrolled candidates by Email.

Contact mode

There will be face-to-face (contact) learning sessions for a duration of 30 days, held at PSSCIVE in Bhopal. Contact mode will consist of hands on practical training, on-site visits, instructional sessions, teaching practice, assessments, examination, and orientation on other activities. The specific dates of these sessions will be communicated in advance to allow the candidate to make appropriate plans. The candidate's participation in the contact learning sessions will depend on the satisfactory completion of assignments assigned during the distance learning phase. Out-of-town trainees shall reside at PSSCIVE/ Bhopal during the contact learning period.

Industry Internship

Industry Internship experience is a vital component of any vocational teacher training program. It allows trainees to apply the ideas, theories, and techniques they have learned in a real-life setting. For this reason, the trainee will complete a 15 days internship at a industry in India under the guidance of an expert in industry. The PGDVET GUIDELINE MANUAL for Internship and Project workwill provide detailed information on the requirements for the internship, including the procedure for selecting the industry, as well as the evaluation process.

Project Work

Project work evaluation is a crucial component of the assessment process, designed to gauge participants' practical application of learned concepts and their ability to solve real-world problems within the vocational education and training domain. Evaluation criteria encompass various aspects such as project design, methodology, implementation, analysis of results, and presentation skills. Emphasis is placed on the originality, relevance, and effectiveness of the project outcomes in addressing identified challenges or opportunities. Through meticulous evaluation, participants' creativity, critical thinking, collaboration, and project management skills are assessed, contributing to a holistic assessment of their overall performance and readiness for the professional arena.

Semester End Examination

At the end of the semester, a comprehensive written theory exam will assess learners' understanding. Exam details, including schedule, format, and syllabus, are communicated in advance. Crafted by subject experts, questions cover multiple formats to gauge comprehension, analysis, and problem-solving. Learners must apply critical thinking to respond effectively. Results are promptly provided with constructive feedback, aiding academic growth. This examination serves as a pivotal assessment, allowing learners to demonstrate their readiness for academic success.

7. SCHEME OF EVALUATION

The evaluation system for both theory and practical work includes the following aspects:

- a) Portfolio assessment on self-learning activities.
- b) Continuous evaluation is conducted through assignments and activities for each paper.
- c) A semester-end examination is also conducted.
- d) Performance in the workshop/lab is assessed.
- e) Trainees are evaluated during their internship.
- f) Project work is also assessed.

The grading system is used to evaluate trainees, with the credits assigned to each paper indicating its weightage. The allotment of credits for a particular paper depends on the importance of its content and the time required for studying and learning it.

The day-to-day schedule for contact learning, internship, and project work will be provided separately to the enrolled trainees.

The evaluation of trainees follows a system of continuous comprehensive evaluation. The modalities and criteria for the program evaluation are described in detail below.

7.1 PGDVET Scheme for Credit System and Assessment

Paper Code	Paper Name	1 Credit = 30 hours			Learning (Hours)						Assessment (Marks)						
		Credits	Hours	Theory	Tutorial	Self Study	Practical	Internship	Project Work	Total	Portfolio	Assignment	Theory Exam	Skill Assessment	Internship	Project Work	Total Marks
PGDV ET-101	Vocational Education and Training System	2	60	2	3	55				60	15	20	35				70
PGDV ET-102	Curriculum Development, Implementation & Evaluation	2	60	2	3	55				60	15	20	35				70
PGDV ET-103	Instructional Design and Development	3	90	2	3	85				90	20	30	50				100
PGDV ET-104	Assessment and Evaluation	3	90	2	3	85				90	20	30	50				100
PGDV ET-105	Employability Skills Development	2	60	2	3	55				5	10	15	20				50
PGDV ET-106	Vocational Guidance and Counselling	2	60	2	3	55				60	15	20	35				70
PGDV ET-107	Research in Vocational	2	60	2	3	55				60	15	20	35				70

	Education and Training																
PGDV ET-108	Internship in School	2	60	2	3	5		50		60					70		70
PGDV ET-109	Project Work in School	2	60	2	3	5			50	60						50	50
EXIT: CERTIFICATE IN VOCATIONAL PEDAGOGY		20	600	15	23	482		80		600	110	155	260		70	50	650
PGDV ET-201	ICT Application in Vocational Education and Training	2	60	5	1.5	28	25.5			60	6	6.5	12.5	40			65
PGDV ET-202	Entrepreneurship and Innovation	2	60	5	1.5	28	25.5			60	6	6.5	12.5	40			65
PGDV ET-203	Sector Specific Paper-1	4	120	10	3	56	51			120	12	13	25	80			130
PGDV ET-204	Sector Specific Paper-2	4	120	10	3	56	51			120	12	13	25	80			130
PGDV ET-205	Internship in Industry	4	120	1	2	7		110		120					130		130
PGDV ET-206	Project Work in Industry	4	120	1	2	7			110	120						130	130
	Total	40	1200	47	36	664	153	270	110	1200	152	213	365	240	230	130	1300

7.2 Semester I and II

The trainee's assessment will consist of six components: assignments, portfolio, Contact Programme, Internship, Project work and written examination. The following details the different evaluation components and the assigned weightage for each.

Components of Evaluation and Weightage

S. No.	Type of Evaluation	Details of Evaluation	Weightage
1.	Assignments	5-6 of each paper	10%
2.	Portfolio	Record of work done on self-evaluation, self-check exercises, and activities across various units in all modules	10%
3.	Contact Programme	Continuous internal assessment	20%
4.	Internship	Continuous internal assessment	20%
5.	Project work	Continuous internal assessment	20%
6.	Written Examination	Conducted at the end of the contact learning/semester	20%
		Total	100%

7.1.1 Assignments Evaluation

The completion of assignments is mandatory. Each paper requires the completion of 5-6 assignments, which will be evaluated by the paper coordinator. Assignments will be sent to the students by Email. The assignments must be submitted on A4 size white paper and it must be hand-written. The completed hand-written assignments should be sent by SPEED POST to PGDVET Cell. Submission deadline for Assignment will be intimated in advance. The Envelop and first page should have the following information for each activity of each paper.

Activity: Assignment

Paper Code & Paper Title

Name and Enrollment Number

Signature with Date

Proforma for Report of the Assignments			
Paper Code	Title of the Assignment	Date of submission	feedback by the paper coordinator

7.1.2 Portfolio Assessment

The student will prepare portfolio as given below.

Semester-1 / II Portfolio on self-reading	
Student NAME:	Enrollment No.
Paper Code:	
Paper Title:	
Unit(s) studied	
No. of Self-check Exercises completed	
No. of Self-evaluation Exercises completed	
No. of Activities completed	
Reasons for not completing (if any)	
Any difficulty faced (please specify)	
Total number of pages attached to this	

The student will have to submit the completed in A4 size white paper and hand-written self-evaluation exercises and the activities listed in the study material sent to them, by SPEED POST to PGDVET Cell. Submission deadline for Portfolio will be intimated in advance. The Envelop and first page should have the following information for each activity of each paper.

Activity: Portfolio

Paper Code & Paper Title

Name and Enrollment Number

Signature with Date

7.1.3 Contact Programme

Continuous internal assessment of skills during the contact programme is integral to ensuring the effectiveness and relevance of the learning experience. Through ongoing evaluation, participants have the opportunity to gauge their progress, identify areas for improvement, and receive timely feedback from instructors and peers. This iterative process not only fosters a deeper understanding of vocational concepts but also promotes skill refinement and mastery. By actively engaging in continuous assessment, participants can optimize their learning outcomes and enhance their readiness to apply acquired skills in real-world scenarios.

7.1.4 Internship in School

Assessment will be done by the teacher coordinator / Head Master/Principal as detailed below.

Internship in School - ASSESSMENT

Criteria						Total Marks (50)		
Preparation of Lesson plan (10 Marks)	Vocational Theory Teaching (10 Marks)	Vocational Practical Activities (Demo, Lab. work/ Workshop Management) (10 Marks)	Employability Skills (2 x 5 = 10 Marks)					School Activities as assigned By Head Master (10 Marks)
			E1	E2	E3	E4	E5	

Abbreviations:

- E1- Communication Skill
- E2- Entrepreneurial Skill
- E3- ICT Skill
- E4- Green Skill
- E5- Self Management

Project Work in School

The project work involves a series of steps, beginning with initial planning and preparation, followed by theme identification, needs analysis, setting aims and objectives, conducting a literature review, project planning, organization and implementation, report preparation, seminar presentation, and viva-voce. These elements will be assessed by two supervisors: one from the internal sector coordinator at PSSCIVE Bhopal, and the other from an industry/institution approved by the institute. The evaluation of the trainees' projects will be based on their scope, relevance, and implementation potential. The assessment will follow the distribution of marks determined by the internal and external supervisors, along with the evaluation criteria detailed below:

Project Work in School - Assessment

Project planning (synopsis, need analysis, scope, relevance etc) (5 Marks)	Project work execution (5 Marks)	Project Report (5 Marks)	Seminar presentation and Viva voce (10+10 Marks)	Total Marks (35 Marks)

Internship and Project Work in School -Assessment (Internal)

	Report	Seminar presentation	Viva voce	Total Marks
School Based Internship	(5 Marks)	(5 Marks)	(10 Marks)	(20 Marks)
School Based Project Work	(5 Marks)	(5 Marks)	(5 Marks)	(15 Marks)

7.1.5 Internship in Industry



INTERNSHIP IN INDUSTRY - ASSESSMENT

Assessment will be done by the industry coordinator / Head as detailed below.

Marks (Grading scale) for Assessment Excellent-05, Very Good-04, Good-03, Satisfactory -02, Unsatisfactory-1

Assessment Criteria

Maximum Total Marks for this Assessment is 100



Sr. No.	Key Criteria	Excellent (5 marks)	Very Good (4 marks)	Good (3 marks)	Average (2 marks)	Unsatisfactory (1 mark)
1.	Punctuality on work					
2.	Behaviour (professional manner)					
3.	Dressed appropriately					
4.	Effectively performed activities and tasks assigned					
5.	Showcasing employability skills					
6.	Progress in sector-specific skills acquisition					
7.	Attention to accuracy and details					
8.	Strong analytical skills – demonstrated critical thinking and problem-solving skills					
9.	Ability to adapt to a variety of tasks and activities					
10.	Took initiative to do and get the task done, including overcoming obstacles					
11.	Met stated deadlines					
12.	Basic Computer/technical skills					
13.	As a Team member					
14.	Good interpersonal skills					
15.	Willingness to ask for help and guidance					
16.	Seemed interested in and enthusiastic about the internship experience					
17.	Self-motivated, showed initiative and creative approach					
18.	Was able to set priorities					
19.	Experience with intern					
20.	Overall performance					

The above assessment will be done by the assigned industry coordinator/supervisor and manager.

7.1.6 Project Work

The project work encompasses a series of steps, including initial planning and preparation, identification of themes, needs analysis, determination of aims and objectives, literature review, project planning, organization and implementation, report preparation, seminar presentation, and viva-voce. These aspects will be evaluated by two supervisors, one from the internal sector coordinator at PSSCIVE Bhopal, and the other from an industry/institution approved by the institute. The trainees' projects will be assessed based on their scope, relevance, and implementation prospects. The evaluation will be conducted according to the distribution of marks determined by the internal and external supervisors and the evaluation criteria outlined below:

Project Work Assessment (External)

Assessment will be done by the industry coordinator / Head as detailed below.

Project Work in Industry -Assessment

Project planning (synopsis, need analysis, scope, relevance etc) (20 Marks)	Project work execution (20 Marks)	Project Report (20 Marks)	Seminar presentation and Viva voce (20+20 Marks)	Total Marks (100 Marks)

Internship and Project Work in Industry - Assessment (Internal)

	Report	Seminar presentation	Viva voce	Total Marks
Industry Based Internship	(5 Marks)	(10 Marks)	(15 Marks)	(30 Marks)
Industry Based Project Work	(5 Marks)	(10 Marks)	(15 Marks)	(30 Marks)

7.1.7 Written Examination Evaluation

The evaluation of semester-end exam papers places significant emphasis on a written examination. This examination will be administered offline at the conclusion of the contact programme. Through rigorous assessment of written responses, participants' comprehension, analytical skills, and application of theoretical concepts will be thoroughly scrutinized. This evaluation method aims to provide a comprehensive measure of participants' academic performance and proficiency in the subject matter.



The question paper will have questions from all the units with choice, and the general pattern is given below.

Theory Examination December 2024

Trimester-1 DVET-101 Vocational Education and Training System

3 hours

Max Marks 100

Answer the following questions to the point in brief.

Write the following details on the top of the first page of your answer sheet.

Student NAME:

Enrollment Number:

Paper CODE & TITLE:

Signature:

Date:

1. Multiple Choice Questions (MCQs): These questions present several options, typically four or five, with only one correct answer. MCQs are effective for testing factual knowledge and understanding of concepts.
2. True/False Questions: Students are presented with statements, and they have to determine whether each statement is true or false. True/false questions are useful for assessing basic understanding of concepts and principles.
3. Fill-in-the-Blank Questions: In fill-in-the-blank questions, students are provided with a sentence or phrase with one or more blanks, and they have to fill in the missing words. These questions test students' knowledge of specific terminology, concepts, or facts.
4. Matching Questions: Matching questions require students to match items from two columns, such as terms and definitions, cause and effect, or concepts and examples. Matching questions assess students' ability to recognize relationships between different elements.
5. Short Answer Questions: These questions require brief responses, typically one or two sentences long. Short answer questions can assess students' ability to recall information, explain concepts, or solve problems concisely.
6. Essay Questions: Essay questions require students to provide longer, more detailed responses. They often involve analyzing complex issues, evaluating arguments, or discussing theoretical concepts in depth. Essay questions are effective for assessing critical thinking, analytical skills, and the ability to communicate ideas effectively.
7. Diagram or Graph-based Questions: Students may be asked to interpret diagrams, charts, graphs, or other visual representations and answer questions based on the information presented. These questions assess students' ability to analyze data and draw conclusions.
8. Case Study Analysis: Students may be presented with a case study or scenario and asked to analyze it, identify key issues, and propose solutions or recommendations. Case study questions assess students' ability to apply theoretical knowledge to real-life situations and demonstrate problem-solving skills.



7.3 Grading

A grading system is used to evaluate and communicate the level of achievement or performance of a student in a particular course or subject. It serves as a quantitative measurement of a student's understanding and knowledge of the subject matter, and helps to determine their academic progress and level of success. A grading system provides a standardized method for evaluating academic performance, and serves as an important tool for measuring and communicating academic progress.

The evaluation of performance is done through the use of grades. Trainees in the program are graded not only on their overall performance, but also on individual course activities they complete throughout the program such as assignments, tests, assessment work, internships, and project work. These activities will be converted into points to calculate the Cumulative Grade Point Average (CGPA). A ten-point grading scale will be used to grade students. PSSCIVE uses 10-Point Grading System as per UGC guidelines to evaluate the achievements of learners in the PGDVET Programme.

10-Point Grading System of PSSCIVE as per UGC guidelines*

Letter Grade	Numerical Grade	Percentage
A	10	>85
B	9	> 75 to < 85
C	8	> 65 to < 75
D	7	> 55 to < 65
E	6	> 50 to < 55
F	5	> 40 to < 50
G	0	39 and below
Ab	0	Absent

*Modified

The final marks will be rounded off to the nearest whole number, without including any decimal points. Additionally, when evaluating trainees' performance on various tasks, the qualitative descriptions mentioned above should be taken into consideration. A Grade Point is calculated by dividing the marks obtained by 10 if it is out of 100. Credit Point, on the other hand, is obtained by multiplying Grade Point with the respective course credits. Cumulative Grade Point Average (CGPA) is a comprehensive indicator of a student's overall academic performance across all trimesters. It is computed by dividing the total credit points earned by the student in all courses throughout the program by the total credits of all courses across semesters. CGPA is typically presented with two decimal places for accuracy.

8. RULES AND REGULATIONS

- (i) The selected candidate must pay the semester fee to secure their admission well before the due date. Failure to do so will result in automatic cancellation of admission. Please note that the fee paid is non-refundable.
- (ii) Candidates must put in a minimum of 75% attendance in online classes of each paper.
- (iii) Contact programme, Internship and Project work are compulsory and no leave can be availed during this time.
- (iv) If attendance is less or failed to pass any paper, the candidate has to repeat it in the next following examination. Further chances will not be given.
- (v) Only after passing Semester 1, one can take up Semester 2.

(vi) For award of certificate/PG Diploma a minimum grade of "F" in all papers, and a minimum overall final grade of "E" in the semester/program is essential.

(vii) The certificate/ PG Diploma will be awarded by PSSCIVE to candidates who successfully complete the program, and a final cumulative Grade Card will be issued. Both these documents will have the NCERT logo.

Sexual Harassment / Ragging

PSSCIVE has implemented a policy that aims to prevent, prohibit, and penalize sexual harassment of women in accordance with the guidelines of the Supreme Court. Additionally, in accordance with the directives of the Hon'ble Supreme Court of India, ragging is strictly prohibited. If any instances of ragging are brought to the attention of the authorities, the implicated student will be given an opportunity to provide an explanation. If the explanation is deemed unsatisfactory, the student will be expelled from the programme.

Grievance Redressal

The submission of grievances by students must be done in writing and sent solely through registered or speed post / in-person to either the PGDVET Coordinator or Joint Director at PSSCIVE in Bhopal.

Disputes on any matter related to PGDVET

The PSSCIVE enforces suitable administrative and disciplinary actions to ensure seamless operations in compliance with the existing regulations and standards. If any conflicts arise regarding Admission and other PGDVET Matters, legal action, if required, must be filed exclusively in Bhopal as the place of jurisdiction.

Tentative Schedule of PGDVET

Advertisement for admission	1 Sep
Last Date to apply	23 Sep
Fee payment	25 Sep
Admission	30 Sep
Semester 1	
Online Classes	1 Oct to 14 Feb
Contact Classes	15 to 30 Feb
Semester End Exam	28 to 30 Feb
Internship in School	1 to 15 March
Project Work	16 to 30 March
Results	31 March
Exit- Certificate Award	10 April
Semester 2	
Fee payment	1 April
Online Classes	1 April to 30 July
Contact Classes	1 to 30 August
Semester End Exam	28 to 30 August
Internship in Industry	1 to 15 Sep
Project Work	16 to 30 Sep
Results	5 Oct
PG Diploma Award	10 Oct



Part- B

SYLLABUS



Paper Code: PGDVET 101
Paper Title: Vocational Education and Training System
Total Credits: 2
Recommended Study Hours: 60
Total Marks: 70

Rationale (100 words)

The term Vocational Education and Training (VET) means learning a skill that is related to work. It provides practical skills needed for becoming employable and to gain employment. VET provides youth with occupational or work-related knowledge and skills. The VET sector is responsible for developing the skills and knowledge of individuals for work. It includes VET undertaken in industries, enterprises, government agencies, and community and school or college settings. On acquiring the right kind of skills, a learner gets better equipped for employment in the long run. Vocational education and training should be seen as complementing academic education. For example, if you are learning Microbiology in academic education and Composting through vocational education, then you would be able to apply your knowledge of Microbiology in preparing good compost. The skills acquired through the process of vermicomposting can be utilized to make a living. Similarly, if you are learning arts, you can take up a course of animation in vocational education which would help you to acquire the skills needed for entertainment or gaming industry.

Learning Outcomes (5 numbers)

1. **Understanding the Structure and Scope:** Students will comprehend the structure, scope, and significance of vocational education and training (VET) in India, including its role in addressing skill gaps and fostering economic growth.
2. **Knowledge of VET Systems:** Gain insight into the various VET systems in India, such as Industrial Training Institutes (ITIs), Polytechnics, and Skill Development Centers, understanding their objectives, governance, and accreditation mechanisms.
3. **Awareness of Sector-specific Skills:** Develop awareness of sector-specific skills in demand within the Indian job market, including emerging sectors such as information technology, healthcare, and renewable energy, and the corresponding training programs available.
4. **Integration of Technology:** Upon completion of the program, learners will be able to demonstrate proficiency in utilizing industry-specific technology tools and software to enhance productivity and problem-solving in their field.
5. **Understanding Policy Frameworks:** Acquire knowledge of the policy frameworks governing VET in India, including initiatives such as the National Skill Development Mission, Apprenticeship Act, and Skill India Mission, and their implications for stakeholders.

UNIT CONTENT

UNIT I: VOCATIONAL EDUCATION AND TRAINING IN INDIA: AN OVERVIEW

- 1.1: Introduction
- 1.2: Objectives
- 1.3: Vocational Education and Training (VET)-Need and Importance
- 1.4: Vocational Education and Training in India - A Historical Perspective
- 1.5: Committees and Commission on work-based education
- 1.6: Committees and Commissions on Vocational Education and Training and their Recommendations
- 1.7: VET in the Current Education System in India
- 1.8: Socio-economic Context of VET
- 1.9: Policy Framework of VET in India
- 1.10: Management of Vocational Education in India and New age Skills
- 1.11: Summary
- 1.12: Self-Evaluation Exercises
- 1.13: Answer Keys of Self-Check Exercises
- 1.14: References
- 1.15: Suggested Readings

UNIT 2: MAJOR FORMS OF VOCATIONAL EDUCATION AND TRAINING

- 2.1: Introduction to Major Forms of Vocational Education and Training
- 2.2: Objectives
- 2.3: Vocationalisation of Education in India
- 2.4: Formal, Informal and Non-formal Skilling System
- 2.5: Continuing Vocational Education and Training System
- 2.6: Apprenticeship Training
- 2.7: Summary
- 2.8: Self-Evaluation Exercises
- 2.9: Answer Keys of Self-Check Exercises
- 2.10: References
- 2.11: Suggested Readings

UNIT 3: PLANNING AND MANAGEMENT OF VOCATIONAL EDUCATION AND TRAINING

- 3.1: Introduction on Planning and Management of Vocational Education and Training
- 3.2: Objectives
- 3.3: National Qualifications Framework
- 3.4: National Policies Governing VET
- 3.5: Planning of VET in India
- 3.6: Financing of VET
- 3.7: Public-Private Partnership
- 3.8: Role of International Agencies in TVET
- 3.9: Summary

- 3.10: Self-Evaluation Exercises
- 3.11: Answer Keys of Self-Check Exercises
- 3.12: References
- 3.13: Suggested Readings

UNIT 4: INNOVATIVE MODELS AND BEST PRACTICES IN VET

- 4.1: Introduction to Innovative Models and Best Practices in VET
- 4.2: Objectives
- 4.3: Introduction to Innovation
- 4.4: Models of TVET
- 4.5: Innovations in Teaching- learning in VET
- 4.6: Best Practices in VET
- 4.7: Best Practices - Employer's engagement in work- based learning
- 4.8: Professional Development of VET Practitioners
- 4.9: New Technologies Facilitating VET
- 4.10: Collaboration and Networking for Promotion of VET
- 4.11: Summary
- 4.12: Answer Keys of Self-Check Exercises
- 4.13: Self-Evaluation Exercises
- 4.14: References

UNIT 5: CHALLENGES IN VOCATIONAL EDUCATION AND TRAINING SYSTEM

- 5.1: Introduction
- 5.2: Objectives of the Unit
- 5.3: Skill development through Harnessing the Demographic Dividend
- 5.4: Social Stigma (Traditional and modern system of VET)
- 5.5: Mismatch between demand and supply of skilled manpower
- 5.6: Policy support from Government
- 5.7: Recognition of Prior Learning
- 5.8: Linkages with Industry
- 5.9: Training of teachers/ trainers
- 5.10: Summary
- 5.11: Self-Evaluation Exercises
- 5.12: Answer Keys of Self-Check Exercises
- 5.13: References
- 5.14: Suggested Readings

Instructional Strategies

A variety of approaches can be adopted like:

Interactive lecture, Group Discussion, Role Playing, Case Studies, Discussion, Experiential Learning, Problem based approach, Audio-video programmes, Group Projects, Surveys.

Learning Resources (5)

1. <http://mhrd.gov.in/technical-education-4> looked at 05/04/2015
2. <http://mhrd.gov.in/technical-education-6> looked at 05/04/2015
3. Ismail A. and Abiddin N.Z., 2014, Issues and Challenges of Technical and vocational Education and Training in Malaysia Towards Human Capital Development, Middle East Journal of Scientific Research 19 (Innovation Challenges in Multidisciplinary Research & Practice), 07-11, 2014
4. Okwelle C.S., Chijioke P., and Okeke B.C., 2013 towards quality technical vocational education and training (TVET) programmes in Nigeria: challenges and improvement strategies by Ayonmike. Paper Presented at International Vocational Education and Training Association (IVETA) 2013 Conference on Quality Assurance in Technical-Vocational Education and Training (TVET) at Las Vegas, Nevada, Georgia USA.

Contact Programme Activities

Here are some effective activities for a contact programme designed to improve skill pedagogy:

1. Interactive Workshops

Hands-On Training: Engage participants in practical exercises that mimic real-life scenarios relevant to the skills being taught. For example, in a technical workshop, learners could work with actual tools and software.

Simulations and Role-Playing: Use simulations and role-playing to allow learners to practice and apply skills in a controlled environment. This is particularly effective in fields like healthcare, customer service, and management.

2. Group Discussions and Brainstorming Sessions

Peer Learning: Facilitate group discussions where participants can share their experiences and solutions to common problems. This encourages collaborative learning and helps in developing problem-solving skills.

Brainstorming Activities: Encourage participants to brainstorm on real-world problems and come up with innovative solutions, fostering critical thinking and creativity.

3. Case Studies and Problem-Solving Tasks

Case Study Analysis: Present real or hypothetical case studies related to the skills being taught. Have participants analyze the cases, identify key issues, and propose solutions.

Problem-Solving Workshops: Organize sessions where learners work on specific problems, using their newly acquired skills to find solutions. This reinforces learning through practical application.

4. Mentoring and Coaching

One-on-One Mentoring: Pair participants with mentors who can provide personalized guidance, feedback, and support. This helps in addressing individual learning needs and challenges.

Coaching Sessions: Arrange for expert coaches to conduct sessions focusing on specific skills, providing advanced tips and techniques.

5. Project-Based Learning

Collaborative Projects: Assign group projects that require participants to work together, applying their skills to complete a task or create a product. This promotes teamwork and practical application of knowledge.

Individual Projects: Have learners undertake individual projects that challenge them to use their skills creatively and independently.

6. Reflection and Feedback Sessions

Reflective Journals: Encourage participants to keep journals where they reflect on what they've learned, how they've applied it, and areas for improvement.

Feedback Loops: Implement regular feedback sessions where learners receive constructive feedback from instructors and peers. This helps in continuous improvement and learning.

7. Technology-Enhanced Learning

E-Learning Modules: Use online modules and tutorials to supplement in-person training, providing flexible and accessible learning opportunities.

Interactive Tools and Apps: Integrate interactive tools and applications that offer simulations, quizzes, and practice exercises to reinforce learning.

8. Assessments and Evaluations

Skill Assessments: Conduct regular assessments to evaluate the learners' skill levels and progress. Use various assessment methods like quizzes, practical tests, and peer evaluations.

Feedback Surveys: Use surveys to gather feedback on the effectiveness of the contact programme and make necessary adjustments to improve future sessions.

Field Visit

Field visits allow learners to observe and engage with professionals in their working environments, thereby bridging the gap between theoretical knowledge and practical application.

Activities for Contact Programme Field Visits

1. Pre-Visit Preparation

Briefing Sessions: Conduct sessions to outline the objectives of the field visit, what learners should observe, and specific skills they should focus on.

Background Research: Assign participants to research the organization or location they will visit, understanding its operations, challenges, and industry context.

Question Development: Have learners prepare a list of questions they might ask during the visit to maximize their learning experience.

2. Field Visit Execution

Site Tours: Arrange guided tours of the facility, allowing learners to see the operational processes, equipment, and work environment.

Observation Tasks: Assign specific observation tasks where learners must note particular practices, techniques, or workflows relevant to their skill development.

Interactive Sessions: Include Q&A sessions with on-site professionals where learners can ask their prepared questions and gain deeper insights.

3. Post-Visit Activities

Debriefing Sessions: Conduct a debriefing session where participants share their observations, experiences, and what they learned during the visit.

Reflective Reports: Ask learners to write reflective reports summarizing their insights, what skills they observed, and how they can apply these skills in their own contexts.

Discussion Forums: Create forums or group discussions to allow participants to discuss their findings, compare notes, and collaboratively extract key learning points.

Paper Code: PGDVET102

**Paper Title: CURRICULUM - DEVELOPMENT, IMPLEMENTATION
AND EVALUATION**

Credit: 02

Recommended Study Hours: 60

Total Marks: 70

Rationale

Curriculum is a vehicle to reach destination. It guides us to attain predetermined objectives/ outcomes. It is considered as planned, purposeful, progressive, and systematic process in order to create positive improvements in the educational system. Curriculum has a broad scope because it is not only about the school, the learners and the teachers. It is also about the development of a society in general.

In education, a curriculum is broadly defined as the totality of student experiences that occur in the educational process. The term often refers specifically to a planned sequence of instruction, or to a view of the student's experiences in terms of the educator's or school's instructional goals. Curriculum may incorporate the planned interaction of pupils with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives. Curriculum is split into several categories, the explicit, the implicit (including the hidden), the excluded and the extra-curricular.

In today's knowledge economy, curriculum plays a vital role in improving the economy of a country. It also provides answers or solutions to the world's pressing conditions and problems, such as environment, politics, socio-economics, and other issues on poverty, climate change and sustainable development.

Every time there are changes or developments happening around the world, the school curricula are affected. There is a need to update them in order to address the society's needs.

Learning Outcomes

On completion of this module, trainees will be able to:



Paper Code: DVET 103
Paper Title: INSTRUCTIONAL DESIGN AND DEVELOPMENT
Total Credits: 3
Recommended Study Hours: 120
Total Marks: 100

Rationale (100 words)

Grasping the instructional purpose is pivotal in crafting impactful learning activities. The paper on "Instructional Design and Development" (DVET Code 103) underscores the importance of systematic instruction in attaining predefined outcomes. Commencing with foundational principles of learning and instruction, it advances toward an array of teaching methodologies and mediums, including digital tools. Clear learning outcomes direct learners to comprehend, apply, and exhibit strategies, as well as media selection and instructional planning. Each unit delivers organized content, self-assessment exercises, and reference materials to facilitate comprehensive learning. The paper will empower learners to deliver effective instructions within vocational education domain, thereby elevating educational standards holistically.

Learning Outcomes

- Demonstrate knowledge of basic learning processes and theories, including their significance in instructional design.
- Differentiate between traditional and modern teaching approaches relevant to vocational education, and apply them appropriately in instructional contexts.
- Classify instructional media and technological tools for vocational instruction, and make informed choices based on instructional objectives and learner needs.
- Describe the evolution of instructional design and various instructional design models, and use this knowledge to develop well-structured instructional plans aligned with identified curricular goals and learning standards or outcomes.
- Create detailed instructional plans that encompass instructional strategies, media selection, and learning activities, and manage learning situations to achieve successful vocational education outcomes.

UNIT CONTENT

UNIT 1: LEARNING AND INSTRUCTIONS

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Basics of Learning
- 1.4 Basics of Teaching
- 1.5 Writing Learning Outcomes
- 1.6 Summary
- 1.7 Self-Evaluation Exercises
- 1.8 Answer Keys to Self-Check Exercises
- 1.9 References
- 1.10 Suggested Readings

UNIT 2: INSTRUCTIONAL METHODS

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Instructional Strategies
- 2.4 Methods of Teaching
- 2.5 Traditional v/s Modern Methods of Teaching
- 2.6 ICT-Enabled Methods of Teaching
- 2.7 E-learning Tools in Education
- 2.8 Methods of Teaching in Vocational Education
- 2.9 Criteria for Selection of Teaching Method
- 2.10 Methods of Teaching Motor Skills
- 2.11 Summary
- 2.12 Self-Evaluation Exercises
- 2.13 Answer Keys to Self-Check Exercises
- 2.14 References
- 2.15 Suggested Readings

UNIT 3: INSTRUCTIONAL MEDIA

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Classification of Instructional Media
- 3.4 Classification of Teaching and Training Aids
- 3.5 Selection of Suitable Media
- 3.6 Social Media
- 3.7 Summary
- 3.8 Self-Evaluation Exercises
- 3.9 Answers to Self-Check Exercises
- 3.10 References
- 3.11 Suggested Readings

UNIT 4: INSTRUCTIONAL DESIGN

- 4.1 Introduction
- 4.2 Objectives
- 4.3 History and Evolution of Instructional Design
- 4.4 Models of Instructional Design
- 4.5 Assessing Needs to Identify Instructional Goals
- 4.6 Summary
- 4.7 Self-Evaluation Exercises
- 4.8 Answer Keys to Self-Check Exercises
- 4.9 References
- 4.10 Suggested Readings



UNIT 5: PLANNING AND MANAGEMENT OF INSTRUCTIONS

- 5.1 Introduction
- 5.2 Objectives
- 5.3 Instructional Plan Preparation
- 5.4 Annual Plan
- 5.5 Instructional Delivery
- 5.6 Management of Learning Situations
- 5.7 Summary
- 5.8 Self-Evaluation Exercises
- 5.9 Answer Keys to Self-Check Exercises
- 5.10 References
- 5.11 Suggested Readings

Instructional Strategies (10)

1. Create curriculum and modules that effectively introduce foundational theories and concepts, demonstrating proficiency in organizing and delivering instructional content through lectures and presentations.
2. Plan and execute field visits to educational institutions, training centers, or industries to observe instructional design practices in action, allowing learners to gain firsthand experience and insights into real-world applications of instructional design principles.
3. Plan and execute hands-on sessions that allow learners to apply theoretical knowledge to practical scenarios, demonstrating competency in translating theory into practice.
4. Utilize case studies and discussions to explore real-world applications and challenges, fostering deeper understanding and critical thinking skills among learners.
5. Arrange guest lectures by instructional design experts to provide insights into current trends and best practices, enhancing learners' awareness of industry standards and innovations.
6. Design and implement group projects and assignments that promote collaborative learning and critical thinking skills development, fostering effective teamwork and problem-solving abilities.
7. Collect and organize online resources and multimedia materials to support self-directed learning and extend instructional content, enabling learners to access additional learning resources independently.
8. Lead workshops focusing on instructional design methodologies and strategies for effective course development, empowering learners with practical skills and techniques for designing engaging and impactful instruction.



9. Coordinate seminars discussing emerging technologies and innovations relevant to instructional design and development, providing learners with exposure to cutting-edge advancements in the field.
10. Develop and deploy interactive quizzes and self-assessment exercises to evaluate learner comprehension and reinforce key instructional design principles, fostering self-directed learning and mastery of course concepts.

Learning Resources (5)

1. Gagne, R. M., Wager, W. W., Golas, K. C., Keller, J. M., & Russell, J. D. (2005). Principles of instructional design.
2. Reigeluth, C. M. (2013). What is instructional-design theory and how is it changing?. In *Instructional-design theories and models* (pp. 5-29). Routledge.
3. Mahajan, R., Gupta, K., Gupta, P., Kukreja, S., & Singh, T. (2020). Multimedia instructional design principles: Moving from theoretical rationale to practical applications. *Indian pediatrics*, 57, 555-560.
4. Karthik, B. S. S., Chandrasekhar, B. B., David, R., & Kumar, A. K. (2019). Identification of instructional design strategies for an effective e-learning experience. *The Qualitative Report*, 24(7), 1537-1555.
5. Nalini, K., & Raj, V. D. A. (2023). Instructional Design for the New Age: A Review of ID Principles and Models for Teaching the 21st Century Skills through ICT. *Language in India*, 23(3).
6. Delavar, A. (2017). The effect of moocs instructional design model-based on student's learning and motivation. *Man In India*, 97(11), 115-126.
7. Malini, K., & Rajkumar, R. (2022). Different innovative instructional designs for teacher education students. A. Muthumanickam & B. Kannan (eds). *Essentials of Techno-Pedagogy*, 60-70.

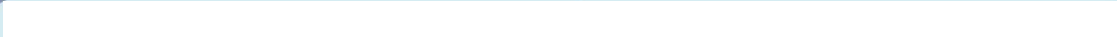
Contact Programme Activities (5)

1. Learning Theories Debate: Divide participants into groups and assign each group a learning theory discussed in Unit 1. They can then debate the strengths, weaknesses, and applications of their assigned theory.
2. Teaching Methods Workshop: Conduct a series of mini-workshops where participants rotate through stations focused on different teaching methods from Unit 2. They can practice each method and discuss its effectiveness with peers.
3. Media Selection Activity: Provide scenarios where participants must choose the most suitable instructional media based on the content and learning objectives. They can then justify their choices in small group discussions.
4. Instructional Design Model Gallery Walk: Create posters or presentations showcasing various instructional design models covered in Unit 4. Participants can walk around the gallery, discuss each model's key features, and vote on which they find most effective.

5. Instructional Planning Simulation: Divide participants into teams and provide them with a scenario requiring instructional planning and management.

Field Visit

Visit to nearby vocational education and training institution or a school offering vocational courses. It will include visits to classrooms, workshops, laboratories, and other learning spaces and discussion with the faculty of the institution on instructional strategies.



Code - DVET 104
ASSESSMENT AND EVALUATION
Recommended Study Hours:90
Total Credits: 2
Total Marks: 50

Rationale

Everyone has experienced the rigors of assessment and evaluation. With advancements in cognitive and psychometric theories and the rise of ICT technology, these processes have significantly evolved. Assessment and evaluation are now integral parts of teaching and learning. While designed to assist learning, assessments greatly influence it, particularly in vocational skills. Thus, the quality of assessment is crucial. This course aims to address this issue and will benefit vocational teachers, especially those involved in vocational education measurement and evaluation. In line with NEP 2020 and NCFSE 2023, discussion on Holistic Progress Card, as applicable to different stages of learning, is also included in the book.

Learning Outcomes

On completion of this Paper, trainees will be able to:

- Explain the purpose of evaluation and assessment.
- Describe the role of students' evaluation in vocational education.
- Design tests to measure cognitive and psychomotor objectives using scientific principles of test design.
- Construct various types of item, questions and other testing tools for assessing and evaluating students' performance.
- Plan and implement - valid and reliable schemes of assessment.
- Conduct skill test for assessing students' performance.
- Appreciate and employ new trends in Assessment & Evaluation.

Units and Unit Contents

UNIT 1: INTRODUCTION OF ASSESSMENT AND EVALUATION

- 1.1 Introduction
- 1.2 Learning Objectives
- 1.3 Terminology: Measurement, Assessment, Evaluation and Examination
- 1.4 Power test and Speed test
- 1.5 Achievement test, Aptitude test, Interest Inventory test, Personality test and Skill test – Concept and their Interrelationship
- 1.6 Assessment for Learning, Assessment of Learning, Assessment as Learning (Formative and Summative)
- 1.7 Competency-based Assessment and its Models

UNIT 2: TEST CHARACTERISTICS OF ASSESSMENT CONTENT

- 2.1 Introduction
- 2.2 Learning Objectives



- 2.3 Basic Characteristics- Validity, Reliability, Objectivity, Usability, Practicability- Their Meaning and Concept
- 2.4 Validity and its Concept
- 2.5 Reliability and its Concept
- 2.6 Difference between Validity and Reliability

UNIT 3: COGNITIVE DOMAIN ASSESSMENT

- 3.1 Introduction
- 3.2 Learning Objectives
- 3.3 Different Types of Items/Questions
- 3.4 Issues in Assessing Cognitive Abilities
- 3.5 Correction for Guessing and its Implication

UNIT 4: PERFORMANCE AND SKILL ASSESSMENT

- 4.1 Introduction
- 4.2 Learning Objectives
- 4.3 Assessment of Laboratory Work, Project Work and Workshop
- 4.4 Use of Checklists and Rating Scales
- 4.5 Issues in Performance Assessment

UNIT 5: NEW TRENDS IN ASSESSMENT AND EVALUATION

- 5.1 Introduction
- 5.2 Learning Objectives
- 5.3 Computerized Question Bank
- 5.4 Computer-Assisted / Adaptive Testing (CAT)
- 5.5 Rubric Based Assessment
- 5.6 Norm Reference and Criterion Reference Testing
- 5.7 Marks, Grades, Credit Based and Profile Reporting of Assessment
- 5.8 Portfolio Assessment
- 5.9 Student Portfolio

UNIT 6: HOLISTIC PROGRESS CARD (HPC)

- 6.1 Introduction to Holistic Progress Card (HPC)
- 6.2 HPC and multidisciplinary approach
- 6.3 Implementation of HPC at preparatory stages
- 6.4 Implementation of HPC at foundation stages
- 6.5 Implementation of HPC at middle stages
- 6.6 Implementation of HPC at secondary stages

Instructional Strategies

1. Use multimedia presentations to explain theoretical concepts.
2. Encourage collaborative learning through discussions on assessment practices.
3. Present real-life scenarios to illustrate assessment techniques.

4. Conduct hands-on sessions for practical skills in test construction and evaluation.
5. Use online tools to create quizzes that illustrate validity, reliability, and other characteristics.
6. Organize sessions where students create tests and analyse their validity and reliability.
7. Conduct demonstrations in labs or workshops to show skill assessment techniques.
8. Provide access to online courses and resources for self-paced learning.
9. Develop multiple-choice questions to assess students' understanding of a given topic effectively.

Learning Resources (5)

- Books
 1. Aggarwal, J. C. (2006). "Essentials of Examination System, Evaluation Tests and Measurement". Vikas Publishing House Pvt Ltd.
 2. Kapoor, R. (2018). "Educational Evaluation and Assessment". Atlantic Publishers & Distributors Pvt Ltd.
- Websites
 1. National Council of Educational Research and Training (NCERT): www.ncert.nic.in
 3. Textbook from PSS Central Institute of Vocational Education (PSSCIVE): www.psscive.ac.in
 4. https://www.researchgate.net/publication/311563885_CompetencyBased_Assessment_From_Conceptual_Model_to_Operational_Tool
 5. <https://www.flightliteracy.com/general-characteristics-of-effective-assessment>
 6. Hunter, J. E. (1986). Cognitive ability, cognitive aptitude, job knowledge, and job performance. *Journal of Vocational Behavior*, 29(3), 340-362.

Contact Programme Activities (5)

1. Interactive Seminar on Types of Assessments
2. Workshop on Designing Valid and Reliable Tests
3. Design a personality test tailored to assess specific traits relevant to a career in counselling. Describe the way to ensure its validity and reliability.
4. Group Discussion on Formative vs. Summative Assessments
5. Hands-on Session: Creating Cognitive and Psychomotor Test Items
6. Case Study Analysis: Real-life Assessment Challenges
7. Practical Lab: Conducting Performance and Skill Assessments
8. Demonstration: Use of Checklists and Rating Scales in Workshops
9. Simulation Exercise: Implementing Computer-Assisted Testing
10. Collaborative Project: Developing a Rubric-Based Assessment
11. Portfolio Creation and Evaluation Workshops.

Field Visit

1. Visit to a Vocational Training Institute
2. Tour of an Industrial Training Center
3. Field Trip to an Educational Testing Service Provider
4. Observation at a School Using Competency-Based Assessment
5. Visit to an Institution with Advanced Assessment Techniques

Paper Code: PGDVET 105
Paper Title: Employability Skills Development
Total Credits: 2
Recommended Study Hours: 60
Total Marks: 50

Rationale (100 words)

The course "Employability Skills Development (PGDVET- 105)" is designed to equip individuals with essential abilities needed for success in today's job market. It covers communication, self-management, basic computer skills, entrepreneurial skills, and green skills. Students learn to communicate effectively, manage their time efficiently, and utilize technology for work tasks. They also develop the skill for spotting business opportunities and understanding the importance of environmental sustainability in job opportunities. Through practical learning, the course helps students become problem solvers, ready to tackle challenges in various work environments.

Learning Outcomes (5 numbers)

- Demonstrate various methods of communication, elements of communication cycle and factors affecting perspectives in communication
- Apply the strategies that help in building self-confidence and use stress management techniques
- Identify various factors influencing self-motivation and developing personality traits
- Demonstrate the use of various components and peripherals of computer system
- Apply basic skills for use of various software for word processing, calculations and presentations.

UNIT CONTENT

UNIT 1: COMMUNICATION SKILLS

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Meaning and Concept of Communication
- 1.4 Types of Communication
- 1.5 Characteristics of Effective Communication
- 1.6 Benefits of Effective Communication
- 1.7 Communication Network
- 1.8 Communication Skills
- 1.9 Common Teaching Methods for Communication Skills
- 1.10 Communication Models
- 1.11 Barriers to Communication
- 1.12 Self-Evaluation Exercises
- 1.13 Answer Keys to Self-Check Exercises
- 1.14 Summary
- 1.15 References and Suggested Readings

UNIT 2: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS

- 2.1 Introduction
- 2.2 Objectives



- 2.3 Basic Operations of a Computer System
- 2.4 Creating Documents
- 2.5 Preparing Spreadsheet
- 2.6 Preparing Power Point Presentation
- 2.7 Self-Evaluation Exercises
- 2.8 Answer Keys to Self-Check Exercises
- 2.9 Summary
- 2.10 References and Suggested Readings

UNIT 3: SELF-MANAGEMENT SKILLS

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Self-Management Skills
- 3.4 Personal Appearance and Presentation
- 3.5 Team Building Skills
- 3.6 Building Self-Confidence
- 3.7 Working Independently
- 3.8 Time Management Skills
- 3.9 Stress Management
- 3.10 Self-Evaluation Exercises
- 3.11 Answer Keys to Self-Check Exercises
- 3.12 Summary
- 3.13 References and Suggested Readings

UNIT 4: ENTREPRENEURSHIP SKILLS

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Meaning and Concept of Entrepreneurship
- 4.4 Types of Businesses
- 4.5 Role and Rewards of Entrepreneurship
- 4.6 Entrepreneurship as a Career Option
- 4.7 Entrepreneurship Values, Attitude and Motivation
- 4.8 Self-Evaluation Exercises
- 4.9 Answer Keys to Self-Check Exercises
- 4.10 Summary
- 4.11 References and Suggested Readings

UNIT 5: GREEN SKILLS

- 5.1 Introduction
- 5.2 Objectives
- 5.3 Importance of Green Skills
- 5.4 Environment, Society and Ecosystem
- 5.5 Natural Resources and Conservation
- 5.6 Conserving Natural Resources
- 5.7 Green Economy and Sustainable Development



- 5.8 Components of Green Economy
- 5.9 Skill Development for Green Economy
- 5.10 Green Economy
- 5.11 Role of Government and Private Sector in Promoting Green Jobs
- 5.12 Self-Evaluation Exercises
- 5.13 Answer Keys to Self-Check Exercises
- 5.14 Summary
- 5.15 References and Suggested Readings

Instructional Strategies (10)

1. Lectures and presentations to introduce concepts and theories related to communication, self-management, basic computer skills, entrepreneurial skills, and green skills.
2. Workshops and practical sessions for hands-on experience in communication techniques, time management strategies, computer literacy, and green skills.
3. Case studies and group discussions to analyze real-world scenarios and challenges encountered.
4. Inviting guest speakers from various industries to share their experiences
5. Projects and collaborative assignments aimed at promoting teamwork, critical thinking, and creativity.
6. Utilization of online resources, interactive tutorials, and multimedia materials to facilitate self-directed learning.
7. Practical exercises focusing on self-assessment and reflection to identify strengths and areas for improvement.
8. Seminars and discussions on emerging technologies and innovations relevant to employability skills.
9. Organizing field visits to companies, startup incubators, and environmentally sustainable organizations to provide firsthand exposure to workplace environments and green practices.
10. Interactive quizzes, role-playing activities, and simulation exercises to reinforce learning outcomes and understanding of employability skills concepts.

Learning Resources (5)

1. Sharma, R. (2019). *Effective Communication Skills: An Indian Perspective*. McGraw Hill Education.
2. Chhabra, T. N. (2017). *Self-Management Skills: Building Success with Indian Ethos*. Jaico Publishing House.
3. Das, S. K., & Das, A. (2020). *Computer Fundamentals: A Practical Approach for Indian Learners*. Oxford University Press.
4. Jain, R. K. (2018). *Entrepreneurship: Concepts and Cases - Indian Context*. Vikas Publishing House.
5. Reddy, A., & Rao, V. (Eds.). (2016). *Green Skills Development in India: Policies, Strategies, and Initiatives*. Orient BlackSwan.

Contact Programme Activities (5)

1. Role-play interviews to practice communication skills.

2. Time management workshop for better self-organization.
3. Basic computer skills training.
4. Business idea pitch competition to encourage entrepreneurial thinking.
5. Green practices workshop.

Field Visit

Visit nearby center for entrepreneurship development MP (CEDMAP).



Code –PGDVET 106
VOCATIONAL GUIDANCE AND COUNSELLING
Recommended Study Hours:120
Total Credits: 03
Total Marks: 130

Rationale

Guidance can be broadly defined as the process of assisting individuals to enable themselves. It is a supportive engagement that enables a person to find direction for making their own decisions and take actions — all with the objective of moving towards personal well-being and useful social participation. Often, it involves a trustful relationship where the person guiding is in some position of trustworthiness, seniority, or authority or is deemed insightful or knowledgeable. Counselling as a process involves an individual consulting another for advice. Much like the process of guidance, it involves helping individuals understand and act upon their attitudes and decisions. Except that, here, this change-seeking aspect takes a more central feature and often requires a skilful (and well-trained) individual to engage and challenge individual patterns of belief and behaviour. In the school environment, Guidance and Counselling can be seen as paired activities and not separate ones. Here, it refers to the process of supporting the learning and maturation of students and not as a standalone or a separate part of the school curriculum. It must be seen as complementary to the overall curriculum. Another important point to note is that the school curriculum is almost wholly designed for student groups. The pointed focus of Guidance and Counselling is on an individual student's needs of learning, health, and well-being. Having a system of Guidance and Counselling would also help Teachers, parents, and administrators meet the academic and psycho-social well-being needs of different students, e.g., difficulties in learning, career and higher education choices, maturation-related issues (adolescence, autonomy, social cohesion), and mental health and well-being.

Learning Outcomes

On completion of this Paper, trainee will be able to

- describe meaning and importance of guidance and counselling and its role in the present educational set up;
- describe the role of guidance services in the scheme of vocationalisation of secondary and senior secondary education;
- explain the process of career development;
- enlist the career guidance activities;
- plan and organize vocational guidance services;
- use formal and informal methods of psychological and educational assessment of students;
- develop and maintain career Information service;
- organize various vocational guidance activities.

Units and Unit Contents

UNIT 1: INTRODUCTION TO GUIDANCE AND COUNSELLING

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Concept of Guidance
- 1.4 Types of Guidance
- 1.5 Guidance and Counselling: Indian Scenario
- 1.6 Status of Guidance and Counselling Services in the Country

- 1.7 Counselling as a Specified Service of Guidance
- 1.8 Summary
- 1.9 Self-Evaluation Exercises
- 1.10 Suggested Guidelines for Self-Evaluation Exercises
- 1.11 Answer Keys to Self-Check Exercises
- 1.12 References
- 1.13 Suggested Readings

UNIT 2: GUIDANCE SERVICES IN THE CONTEXT OF VOCATIONAL EDUCATION AND TRAINING

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Need and Importance of Vocational Guidance and Counselling in Vocational Education and Training (VET)
- 2.4 Role of Vocational Guidance Services in VET in School
- 2.5 Introducing Guidance Services in VET in School
- 2.6 Various Guidance Service in VET
- 2.7 Vocational Teacher as a Guidance Functionary: Skills, Roles, Functions and Ethics of Vocational Teachers as Guidance Functionary
- 2.8 Understanding Relationship between World of Work and Human Resource Development
- 2.9 Survey Method of Collecting Information Regarding Human Resource Requirement at Local Level
- 2.10 Summary
- 2.11 Self-Evaluation Exercises
- 2.12 Answer Keys to Self-Evaluation Exercises
- 2.13 Suggested Readings and References

UNIT 3: INDIVIDUAL DIFFERENCES, OCCUPATIONAL DIVERSITY AND CAREER GUIDANCE

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Understanding Individual Differences and Occupational Diversity
- 3.4 Career Development Concept and Approaches
- 3.5 Factors affecting Career Development and Career Choices
- 3.6 Process of Career Guidance
- 3.7 Summary
- 3.8 Self-Evaluation Exercises
- 3.9 Suggested Guidelines for Self-Evaluation Exercises
- 3.10 Answer Keys to Self-Check Exercises
- 3.11 References
- 3.12 Suggested Readings

UNIT 4: PSYCHO EDUCATIONAL ASSESSMENT OF STUDENTS

- 4.1 Introduction
- 4.2 Objectives

- 4.3 Assessment of Students
- 4.4 Students Appraisal through Non-Testing Techniques
- 4.5 Summary
- 4.6 Self-Evaluation Exercises
- 4.7 Answer Keys to Self-Check Exercises
- 4.8 References
- 4.9 Suggested Readings

UNIT 5: CAREER INFORMATION SERVICE

- 5.1 Introduction
- 5.2 Objectives
- 5.3 Careers Information: Concept, Importance and Sources
- 5.4 Sources of Career Information
- 5.5 Compilation, Classification and Filling of Careers Information
- 5.6 Dissemination of Careers Information – Individual and Group Activities
- 5.7 Evaluation and Updating of Careers Information
- 5.8 Summary
- 5.9 Self-Evaluation Exercises
- 5.10 Answer Keys to Self-Check Exercises
- 5.11 References
- 5.12 Suggested Readings

UNIT 6: VOCATIONAL GUIDANCE SERVICES IN SCHOOL: ROLE OF STAKEHOLDERS

- 6.1 Introduction
- 6.2 Objectives
- 6.3 Vocational Guidance Services in School
- 6.4 Various Stakeholders in School Guidance Programme and their Role
- 6.5 Setting up a Career Information Service
- 6.6 Summary
- 6.7 Self-Evaluation Exercises
- 6.8 Suggested Guidelines to Answer Self-Evaluation Exercises
- 6.9 Answer keys to Self-Check Exercises
- 6.10 Suggested Readings and References

Instructional Strategies

A variety of approaches can be adopted like:

Interactive lecture, Group Discussion, Role Playing, Case Studies, Discussion, Experiential Learning, Problem based approach, Audio-video programmes, Group Projects, Surveys.

Learning Resources

- Joneja, G.K. (1997). Occupational information in guidance. N.C.E.R.T., New Delhi.

- Career Information in Guidance and Counselling part 1 and 2, Module 6 and 13, (2008), NCERT, Delhi.
- In-service Training of Vocational Teachers in Career Guidance- Theoretical Modules,(2005),PSSCIVE, NCERT, Bhopal
- B.G., Mukhopadhyay, B. (1998). Guidance and Counselling – A Manual. New Delhi: Sterling.
- Crites, John. D., (1969), Vocational Psychology, New York: McGraw Hill Book Co.
- Education Vocational Guidance and Counselling: Principles, Techniques and Programme. Shipra Publications.
- Grewal, J.S. (1980), Vocational Environment and Educational –Vocational Choices. Agra: National Psychological Corporation.
- Paal, H., Sharma, Manjulata (2012) O;kolk;dlaiz{k.k, Hindi Madhyamam Karyanvyan Nideshalaya, Delhi University.
- Sidher, H.S., Duggal, Nisha. Guidance and Counselling.
- Oberoi,S.C., Lall, R. (2016) Educational,Vocational Guidance And Counselling.
- Educational Vocational Guidance and Counselling: Principles, Techniques and Programmes, Shipra Publications.
- International Handbook of Career Guidance, (2008). Editors: Athanasou, James A., Esbroeck, Van R. (Eds.), Springer, Netherlands.
- Kochar, S. K. (1994). Educational and Vocational Guidance in Secondary Schools, New Delhi: Sterling.
- Lakshmi, K. S. (Ed.) (2002). Encyclopedia of Guidance and Counselling (Vol. I-IV), New Delhi: Mittal
- In-service Training of Vocational Teachers in Career Guidance, (2005), Published by PSSCIVE, Bhopal.
- Training in Career Guidance: A Practical Manual for Vocational Teachers, (2005), Published by PSSCIVE, Bhopal.



Paper Code: PGDVET 107
Paper Title: RESEARCH IN VOCATIONAL EDUCATION AND TRAINING
Total Credits: 2
Recommended Study Hours: 60
Total Marks: 70

Rationale

The Research in Vocational Education and Training paper aims to equip vocational teachers and trainers in Indian schools with essential research skills to enhance the effectiveness of vocational education delivery. Understanding research methodologies enables educators to critically analyze existing practices, identify areas for improvement, and innovate teaching strategies tailored to students' needs. By fostering a culture of inquiry and evidence-based practice, this paper empowers educators to contribute meaningfully to the advancement of vocational education, ultimately enhancing students' employability and ensuring alignment with industry demands.

Learning Outcomes

1. Recognize the scope and significance of vocational education and research, elucidating their interconnectedness and impact.
2. Summarize the foundational concepts and principles underlying vocational education and research, identifying their essential characteristics and objectives.
3. Apply effective vocational pedagogy techniques, integrating theory with practical application to enhance student learning and skill development.
4. Identify and prioritize research areas within vocational education, recognizing emerging trends and gaps in current knowledge.
5. Evaluate VET research policies and strategies, discerning their effectiveness in fostering innovation and addressing societal needs within the education system.

UNIT CONTENT

UNIT 1: RESEARCH IN TECHNICAL & VOCATIONAL EDUCATION & TRAINING (TVET)

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Research Concept, Meaning and Scope
- 1.4 Types of Research
- 1.5 Distinct Characteristics of Research in TVET
- 1.6 Case Study and Survey Research in TVET
- 1.7 Conducting Action Research
- 1.8 Summary
- 1.9 Unit End Question
- 1.10 Unit End Activity
- 1.11 References and Suggested Readings

UNIT 2: PROCESS OF RESEARCH

- 2.1 Introduction
- 2.2 Objectives
- 2.3 What is a Research Problem?
- 2.4 Steps of Research Process



- 2.5 General Challenges with Research
- 2.6 Summary
- 2.7 Unit End Questions
- 2.8 Unit End Activity
- 2.9 References and Suggested Readings

UNIT 3: COLLECTION OF DATA IN RESEARCH

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Scales of Measurement
- 3.4 Tools and Techniques of Research
- 3.5 Characteristics of a Good Research Tool
- 3.6 Summary
- 3.7 Unit End Questions
- 3.8 Unit End Activity
- 3.9 References and Suggested Readings

UNIT 4: POPULATION, SAMPLE AND VARIABLE

- 4.1 Introduction
- 4.2 Objective
- 4.3 Population
- 4.4 Sample
- 4.5 Sampling
- 4.6 Types of Sampling
- 4.7 Characteristics of a Good Sample
- 4.8 Variables
- 4.9 Types of Variables
- 4.10 Summary
- 4.11 Unit End Questions
- 4.12 Unit End Activity
- 4.13 References and Suggested Readings

UNIT 5: PRESENTATION AND ANALYSIS OF DATA

- 5.1 Introduction
- 5.2 Objectives
- 5.3 Types of Data
- 5.4 Data Management
- 5.5 Analysis of Qualitative Data
- 5.6 Analysis of Quantitative Data
- 5.7 Measures of Dispersion
- 5.8 Descriptive Statistics and Introduction to Inferential Statistics
- 5.9 Correlation and Causation
- 5.10 Degree of Correlation
- 5.11 Interpretation of Correlation Coefficient
- 5.12 Measurement of Coefficient of Correlation



- 5.13 Karl Pearson's Correlation Coefficient
- 5.14 Summary
- 5.15 Unit End Questions
- 5.16 Unit End Activity
- 5.17 References and Suggested Readings

UNIT 6: RESEARCH REPORT WRITING

- 6.1 Introduction
- 6.2 Objectives
- 6.3 Research Report
- 6.4 Purpose of Research Report
- 6.5 Types of Reports
- 6.6 Steps of Report Writing
- 6.7 Planning Report Writing
- 6.8 Format of Report Writing
- 6.9 Chapterisation
- 6.10 Principles of Writing Report
- 6.11 Pagination, Typing, Font and Style
- 6.12 References
- 6.13 Summary
- 6.14 Unit End Questions
- 6.15 Unit End Activity
- 6.16 References and Suggested Readings

UNIT 7: ICT TOOLS IN EDUCATIONAL RESEARCH

- 7.1 Introduction
- 7.2 Components of ICT
- 7.3 Application of ICT in Research
- 7.4 Unit End Questions
- 7.5 Multiple Choice Questions
- 7.6 Unit End Activity
- 7.7 References and Suggested Readings

Instructional Strategies

1. **Lecture Presentations:** Provide structured lectures to deliver foundational knowledge and theoretical frameworks in vocational education and research.
2. **Case Studies:** Engage trainees with real-world scenarios and case studies to illustrate the practical application of vocational pedagogy and research concepts.
3. **Group Discussions:** Facilitate collaborative discussions to encourage critical thinking and exchange of ideas on challenges, opportunities, and best practices in vocational education and research.
4. **Hands-on Workshops:** Conduct hands-on workshops to enable trainees to develop practical skills in vocational pedagogy techniques and research methodologies.



5. **Field Visits:** Organize visits to vocational education institutions, research centers, and industry sites to provide firsthand exposure to diverse vocational settings and practices.
6. **Role-Playing Exercises:** Create role-playing scenarios to simulate vocational teaching/training situations, allowing trainees to practice communication, problem-solving, and instructional techniques.
7. **Guest Lectures:** Invite experts from academia, industry, and research organizations to deliver guest lectures on specialized topics and share their insights and experiences.
8. **Online Resources:** Provide access to online resources such as e-books, articles, videos, and interactive modules to supplement learning and facilitate self-paced exploration.
9. **Reflective Journals:** Encourage trainees to maintain reflective journals to document their learning experiences, insights, and challenges encountered during the course.
10. **Mock Research Projects:** Assign mock research projects where trainees formulate research problems, conduct literature reviews, design methodologies, analyze data, and present findings, allowing them to apply research concepts in a supportive environment.

Learning Resources

1. Research and Education, By Will Curtis, Mark Murphy, Sam Shields, by Routledge, 2022, ISBN 9780415809597
2. Education Research Across Multiple Paradigms by Royce Kimmons, 2022, DOI 10.59668/133
3. EDUCATIONAL RESEARCH, University of Mumbai, https://archive.mu.ac.in/myweb_test/ma%20edu/Research%20Methodology%20-%20III.pdf
4. Winch, C. (2012). Research in vocational education and training. *British Journal of Educational Studies*, 60(1), 53-63.
5. Wyse, D., Brown, C., Oliver, S., & Poblete, X. (2021). Education research and educational practice: The qualities of a close relationship. *British Educational Research Journal*, 47(6), 1466-1489.
6. 2024 Twelve Best FREE AI tools for Academic Research and Researchers, <https://www.youtube.com/watch?v=qB4HGMvrhWE>

Contact Programme Activities

1. Research Proposal Development
2. Data Analysis and Interpretation
3. Action Research
4. AI tools and web resources
5. Interviews with Stakeholders
6. Observational Studies
7. Field Surveys
8. Exposure to Innovative Practices
9. Community Engagement

Field Visit

Visiting DMS, RIE, Vocational Training Centers etc

PGDVET 108
Paper Title: Internship in School
Total Credits: 2
Recommended Study Hours: 60
Total Marks: 70

Rationale :

The Internship in School aims to provide students with practical experience in a school setting. Through this hands-on approach, teachers will gain valuable insights into classroom management, lesson planning, and student engagement strategies, enhancing their teaching skills and overall effectiveness.

Learning Outcomes:

1. Demonstrate effective classroom management techniques.
2. Develop engaging lesson plans tailored to vocational education.
3. Apply student-centered teaching methodologies.
4. Utilize assessment strategies to monitor student progress.
5. Reflect on teaching experiences to enhance professional growth.

CONTENT:

- Classroom observation and participation
- Lesson planning and delivery
- Student assessment and feedback
- Classroom management techniques
- Reflective practice in teaching

Instructional Strategies:

1. Demonstration sessions by experienced educators
2. Peer observation and feedback
3. Collaborative lesson planning sessions
4. Role-playing classroom scenarios
5. Group discussions on teaching strategies
6. Case studies of effective teaching practices
7. Simulated teaching exercises
8. Video analysis of teaching sessions
9. Guest lectures from education professionals
10. Online forums for sharing experiences and insights



Learning Resources :

1. Teaching manuals and handbooks
2. Educational videos and documentaries
3. Online learning platforms for professional development
4. Research articles on effective teaching practices
5. Access to school facilities and equipment

Contact Programme Activities :

1. Classroom observation sessions
2. Participation in teaching activities under supervision
3. Reflective journaling on teaching experiences
4. Peer feedback sessions
5. Consultation with mentor teachers

Field Visit: Scheduled visits to schools relevant to the subject matter to provide real-world context and insights into vocational education practices.



Paper Code: PGDVET -109
Paper Title: Project Work in School
Total Credits: 2
Recommended Study Hours: 60
Total Marks: 50

Rationale:

The course aims to equip students with practical skills in implementing project-based learning methodologies within school settings. By engaging in hands-on projects, students will enhance their pedagogical approaches, fostering experiential learning and critical thinking among students. This course fosters an environment where students can innovate and adapt teaching methods to address diverse learning needs, thus promoting a more effective and inclusive educational experience.

Learning Outcomes:

1. Demonstrate proficiency in designing and implementing project-based learning activities.
2. Foster students' problem-solving and collaboration skills through project work.
3. Evaluate the effectiveness of project-based learning in achieving curriculum objectives.
4. Adapt project-based learning strategies to cater to diverse student needs.
5. Reflect on personal teaching practices and continuously improve project-based pedagogy.

Content :

1. Introduction to Project-Based Learning (PBL)
2. Principles and Components of PBL
3. Designing Project-Based Learning Activities
4. Implementation Strategies for PBL
5. Assessment and Evaluation in PBL

Instructional Strategies :

1. Lectures and Discussions
2. Case Studies Analysis
3. Group Work and Collaboration Exercises
4. Hands-on Project Design Sessions
5. Peer Teaching and Feedback Sessions
6. Role-plays and Simulations
7. Reflective Journals and Portfolios
8. Guest Lectures by Practicing Educators
9. Online Resources and Tutorials
10. Real-life Application Exercises



Learning Resources :

1. Textbooks on Project-Based Learning
2. Online Learning Platforms and Resources
3. Educational Websites and Journals
4. Video Tutorials and Demonstrations
5. Classroom Project Kits and Materials

Contact Programme Activities :

1. Interactive Workshops
2. Presentations and Demonstrations
3. Group Discussions and Debates
4. Problem-solving Exercises
5. Classroom Observations and Feedback Sessions

Field Visit:

Field visits to local schools or educational institutions to observe and analyze real-world implementation of project-based learning methodologies.





SEMISTER 2



Module Code: PGDVET 201

ICT Application in Vocational Education and Training

Recommended Study Hours:120

Total Credits: 3

Total Marks: 100

1. RATIONALE

Information and communications technology (ICT) refers to a set of technological tools and hardware & software resources. Technology Based Learning is the use of technology in teaching learning process. The technology has the capability to enhance the skills, motivate and engage in learning, assist in linking experiences to work practice. ICT has demonstrated dramatic effects on the standard and quantity of instruction. ICT enables to learn in a more personalized manner. It is essential for every teacher to acquire the basic ICT skills, such as keyboarding skills, wordprocessing, using spreadsheet and presentation software. The internet surfing has become the basic iCT literacy. This course equips the learners with necessary knowledge and skills in adopting ICT in vocational education.

2. LEARNING OUTCOMES

On completion of this paper, trainees will be able to:

- Identify and name various components of Computer system
- Identify and name various input, output and peripheral devices
- Perform the basic computer operations.
- Create, edit and format the documents in word processor
- Create a worksheet, enter and edit data
- Create and deliver the presentations.
- Print the document
- Search and download the information from Internet
- Send/ receive email and manage the mailbox
- Use multimedia content and social media for educational purposes
- Access and use e-learning platform
- Integrate ICT and web tools for teaching and training

3. UNIT CONTENTS

Unit 1: Overview of Computer

Theory

- Computer: Definition, Characteristics, Block diagram.
- Input devices
- Output device
- Peripherals
- Storage devices

- Computer connectivity
- Starting and shut down of computer
- Working with operating system

Practical

- Identify and name various Hardware parts of the Computer such as Keyboard, Mouse, Monitor, CD-ROM Drive, CPU, Printer, Cables and connectors.
- Connect UPS/CVT to mains and computer,
- Connect Monitor, Keyboard, Mouse, Speaker, Microphone to the CPU.
- Identify the printer port on CPU and connect printer to CPU.
- Start and Shutting down of a computer system in proper sequence.
- Use various keys on keyboard – Function Keys, Numeric Pad, Navigation Keys, Hotkeys such as Windows key, Ctrl, Alt etc.
- Use Mouse to perform different clicking and scrolling operations.
- Operate the computer using various operating system options.

Unit 2: Word processing

Theory

- Creating Documents,
- Formatting Text,
- Modifying Documents,
- Editing Documents,
- Formatting Documents,
- Adding Tables and Graphics,
- Grammar and spell check,
- Inserting pictures,

Practical

- Simple examples on creating, opening, saving, closing, editing, formatting and printing the document
- Make use of WordArt, Various fonts, Table, Border Clipart for preparing the certificate.
- Save the document and take printout.

Unit 3: Spreadsheet

Theory

- Introducing Excel,
- Creating Workbooks,
- Editing Worksheets,
- Formatting Worksheets,
- Entering formulae and functions,



- Performing Calculations,
- Creating different types of charts,
- Printing spreadsheet.

Practical

- Simple examples on creating, opening, saving, closing, editing, formatting and printing worksheet.
- Create mark list using excel consisting of roll no, name of student, marks obtained in 6 subjects, total, percentage, grade, result pass/fail.
- Make use of formula, cell formatting, copy, insertion of logo/clipart.
- Create various graphs of passing percentage, class performance, grade-wise distribution.
- Save the worksheet and take printout.

Unit 4: Presentation

Theory

- Creating a Presentation,
- Editing, Working with Text,
- Adding Visual Appeal,
- Using Layouts and Views,
- Using Toolbars,
- Using the Clipboard Toolbar,
- Using the Drawing Toolbar,
- Making a Presentation,
- Printing Presentation (Slides).

Practical

- Create a presentation of your school/ college information of various activities like sports, academic, culture, etc.
- Make use of clip arts, audio clips, and animation effects, scan photos etc.

Unit 5: Internet and its Applications

Theory

- Introduction to Internet – history and development,
- Connecting to Internet,
- Usage of Internet
- Working with web browser
- Working with email – creating email account
- Sending and receiving email, Address book,
- Sending files using attachments,
- Internet searching – search engines and websites
- Downloading and uploading files.



Practical

- Connecting to the Internet using browser.
- Accessing the web sites through browser
- Create an Internet mail account.
- Send/Receive an email/voicemail.
- Search topic on Internet.
- Download the required information from the internet.
- Create your address book, export/import addresses.

Unit 6: ICT and Web tools

Theory

- ICT as tools of Learning and teaching: Concept, Meaning & Scope
- Introduction to e-learning and blended learning
- Social media for teaching
- Web tools for teaching

Practical

- List and use the various ICT tools for teaching
- Search e-learning applications of your subject area
- Search and use MOOC and repository for teaching
- Design a learning community on Facebook
- Use Web tools such as Google drive, Google form, Google Docs

4. INSTRUCTIONAL STRATEGIES

A variety of instructional approaches and learning materials will be utilized for curriculum transactions. The instructional strategies that would be adopted will include but not limited to the following:

- Interactive lecture
- Learner-centered Teaching
- Digital Learning
- Mobile Learning
- Demonstration and Practical Hands-on
- Discussion Strategies
- Group discussion
- Team Based Learning
- Experiential Learning
- Independent study
- Group projects



5. LEARNING RESOURCES

The E-learning Handbook: A Comprehensive Guide to Learning (Hardcover) by Saul Carliner

Fundamentals of Computers by V. Rajaraman, EEE, Prentice Hall India.

Employability Skills Class IX, X, XI, XII published by NCERT, New Delhi

ICT book published by PSSCIVE, NCERT, Bhopal

Web resouces

PSSCIVE Official YouTube channel

Videos by Experts

5. CONTACT PROGRAMME ACTIVITIES (5)

1. Basic computer operation – starting, shut down of computer, opening applications, creating, saving and editing files on the computer,
2. Use various keys on keyboard – Function Keys, Numeric Pad, Navigation Keys, Hotkeys such as Windows key, Ctrl, Alt etc.
3. Use Mouse to perform different clicking and scrolling operations.
4. Operate the computer using various operating system options.
5. Creating, editing, formatting and printing a document by using the word processor software.
6. Creating, opening, saving, closing, editing, formatting and printing a document.
7. Creating, opening, saving, closing, editing, formatting and printing worksheet.
8. Make use of formula, cell formatting, copy, insertion of logo/clipart.
9. Create a presentation of your school/ college with information of various activities like sports, academic, culture, etc.
10. Make use of clip arts, audio clips, and animation effects, scan photos.
11. Search the various teaching learning resouces from the internet
12. Search the digital contents from the internet

6. FIELD VISIT

Visit to nearby IT industry such as IT Park, Software Techology Park, Data Centre

Paper Code: PGDVET- 202
Paper Title: ENTREPRENEURSHIP and INNOVATION
Total Credits: 2
Recommended Study Hours: 60
Total Marks: 65

Rationale:

Entrepreneurship education is crucial in today's dynamic society, driven by technological advancements and innovation. It equips students with the mindset and skills necessary to thrive in the ever-changing business landscape. By fostering entrepreneurship, we aim to create job providers rather than job seekers, thus contributing to the economic growth and development of the nation.

Learning Outcomes:

1. Develop an entrepreneurial mindset among students.
2. Encourage students to consider self-employment as a viable career option.
3. Enable students to understand the dynamic changes in the economy.
4. Familiarize students with the role of entrepreneurship in national economic development.
5. Enhance students' life skills, including creation and management of entrepreneurial ventures.

UNIT CONTENT:

1. Unit 1: Entrepreneurship: Concept and Functions
2. Unit 2: An Entrepreneur
3. Unit 3: Entrepreneurial Journey
4. Unit 4: Entrepreneurship as Innovation and Problem Solving
5. Unit 5: Understanding the Market
6. Unit 6: Business Finance and Arithmetic
7. Unit 7: Resource Mobilization

Instructional Strategies:

1. Lectures: Provide theoretical foundation and conceptual understanding.
2. Case Studies: Analyse real-world entrepreneurial challenges and solutions.
3. Group Discussions: Encourage peer learning and idea exchange.
4. Role-Playing: Simulate entrepreneurial scenarios to develop decision-making skills.
5. Guest Lectures: Invite successful entrepreneurs to share their experiences.
6. Workshops: Practical sessions on business planning, financial management, etc.

Learning Resources:

1. Textbooks and reference materials on entrepreneurship.



2. Online courses and video lectures.
3. Entrepreneurship-themed documentaries and TED talks.
4. Relevant articles, journals, and research papers.
5. Business simulation software for practical exercises.

Contact Programme Activities:

1. Entrepreneurship Boot Camps: Intensive workshops to develop entrepreneurial skills.
2. Idea Pitching Sessions: Provide platforms for students to present their business ideas.
3. Business Plan Competitions: Encourage students to develop comprehensive business plans.
4. Networking Events: Facilitate interactions with industry professionals and potential mentors.
5. Incubation Support: Provide guidance and resources for students interested in starting their ventures.

Field Visit:

Organize visits to local businesses, start-ups, and entrepreneurial incubators to provide students with first-hand exposure to real-world entrepreneurial environments.



Paper Code: PGDVET 203 - AG
Paper Title: Advances of Agriculture
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale (100 words)

The course "Advances in Agriculture (PGDVET 302-Ag)" is designed to provide a comprehensive understanding of basic concepts and their applications in the field of agriculture and animal husbandry. This course focuses on how agriculture has been pivotal in shaping human civilization. Emphasizing food security, fiber production, and sustainable resource management, it equips students with insights into modern farming techniques and emerging technologies. Topics include the impact of industrial agriculture, crop production, organic farming, soil health, effects of climate on agriculture and agricultural marketing. Through theoretical knowledge and practical applications, students gain a comprehensive understanding of the significance of agriculture and its implications for the future.

Learning Outcomes (5 numbers)

- Describe the importance of agriculture in Indian economy;
- Demonstrate the basic agricultural practices for production of different crops;
- Demonstrate the basic animal husbandry practices;
- Explain the importance and scope of commercial agriculture, value addition and agriculture entrepreneurship;
- Demonstrate the knowledge of processing and marketing of agricultural produce.

UNIT CONTENT

UNIT 1: INTRODUCTION TO AGRICULTURE

- 1.1. History of Scientific Agriculture
- 1.2. Scope of Agriculture in India
- 1.3. Agro-ecological Zones of India
- 1.4. Disciplinary Streams in Agriculture
- 1.5. Principles of Sustainable Agriculture
- 1.6. Agriculture and National Economy
- 1.7. Entrepreneurship in Agriculture
- 1.8. Summary
- 1.9. Self-Evaluation Exercises

UNIT 2: SOIL MANAGEMENT

- 2.1. Introduction to Principles of Soil Science
- 2.2. Soil Testing and Integrated Nutrient Management
- 2.3. Global Warming and Conservation Agriculture
- 2.4. Biological Soil Health Management

- 2.5. Problems Soils of India and their Management
- 2.6. Summary
- 2.7. Self-Evaluation Exercise

UNIT 3: CROP PRODUCTION AND MANAGEMENT

- 3.1. Development of Plant Varieties
- 3.2. Advances in Seed Science and Technology
- 3.3. Precision Agriculture
- 3.4. Advances in Fertilizer Technology
- 3.5. Organic Agriculture and Biofertilizers
- 3.6. Integrated Pest and Disease Management
- 3.7. Managing Mechanized Crop Production
- 3.8. Water Management; Soil and Water Conservation
- 3.9. Post-Harvest Technology and Management
- 3.10. Summary
- 3.11. Self-Evaluation Exercises

UNIT 4: INTRODUCTION TO LIVESTOCK FARMING

- 4.1. Advances in Livestock Farming
- 4.2. Animal Health Management
- 4.3. Feed Management
- 4.4. Housing Systems for Livestock
- 4.5. Summary
- 4.6. Self-Evaluation Exercises

UNIT 5: MARKETING OF AGRICULTURAL PRODUCE

- 5.1. Introduction to Agricultural Marketing
- 5.2. Demand and Supply of Agricultural Produce
- 5.3. Diversification of Marketing Chains
- 5.4. Summary
- 5.5. Self-Evaluation Exercises

Instructional Strategies (10)

1. Lectures and presentations to introduce key concepts and theories.
2. Laboratory sessions for soil testing.
3. Case studies and discussions to explore real-world applications and challenges.
4. Guest lectures by industry experts to provide insights into current trends and practices.
5. Group projects and assignments to promote teamwork and critical thinking.
6. Online resources and multimedia materials for self-directed learning.
7. hands-on experience on livestock feed management.

8. Seminars on emerging technologies and innovations in the agriculture.
9. Field visits to agriculture institute, dairy farm for practical exposure.
10. Interactive quizzes and self-assessment exercises to reinforce learning outcomes.

Learning Resources (5)

1. Handbook of Agriculture. Indian Council of Agricultural Research.
2. Weil, R. R., & Brady, N. C. (1996). The Nature and Properties of Soils. Pearson Education.
3. Singh, C. (2003). Modern Techniques of Raising Field Crops, Oxford & IBH Publishing.
4. Banerjee, G. C. A Textbook of Animal Husbandry. Oxford & IBH Publishing.
5. Fundamentals of Agronomy- <https://bscagriculture.com/fundamentals-of-agronomy-semester-1-pdf/>

Contact Programme Activities (5)

1. Soil sampling and Testing
2. Identification of different types of soils
3. Preparation of vermicompost
4. Seed treatments with bioagents
5. Identification of pest and diseases
6. Identification of tools & equipment.

Field Visit

Visit to nearby agriculture farm/ Academic Institutions such as CIAE, IISS, Bhopal, Sahakari Dugdh Sangh Maryadit (Sanchi Dairy Cooperatives) etc.



Paper Code: PGDVET 204 - AG
Paper Title: Advances of Horticulture
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale (100 words)

The course "Advances in Horticulture (PGDVET 303-Ag)" is designed to provide comprehensive information about horticulture, fundamental principles and their practical implications. Focus on the cultivation of fruits, vegetables, flowers, spices, and medicinal plants, along with post-harvest management, this course equips students with a deep understanding of modern horticultural techniques in crop production, landscaping, and post-harvest management. Topics include plant propagation, greenhouse management, pest and disease control, urban gardening, and the integration of horticulture with environmental conservation efforts. Through theoretical study and hands-on experience, students grasp the significance of horticulture in addressing global challenges.

Top of Form

Learning Outcomes (5 numbers)

- Identify fruits, vegetables, flower, medicinal and aromatic crops.
- Demonstrate the ability to grow and maintain vegetable crops
- Describe the Plantation and spices crop cultivation practices
- Demonstrate the special horticultural operations.
- Demonstrate the ability to grow and maintain medicinal and aromatic plants.
- Demonstrate the post-harvest management, preservation of horticultural crops.

UNIT CONTENT

UNIT-1: INTRODUCTION TO HORTICULTURE

- 1.1. Introduction
- 1.2. Objectives
- 1.3. Importance and Scope of Horticulture
- 1.4. Disciplinary Streams in Horticulture
- 1.5. Nursery Management in Horticultural Crops
- 1.6. Special Horticultural Operations
- 1.7. Protected Cultivation
- 1.8. Kitchen and Terrace Gardening
- 1.9. Summary
- 1.10. Self-Evaluation Exercises
- 1.11. Answer Keys to Self-Check Exercises
- 1.12. Answer Keys to Self-Evaluation Exercises

UNIT-2: OLERICULTURE

- 2.1. Introduction



- 2.2. Objectives
- 2.3. Introduction to Vegetable Crops
- 2.4. Classification of Vegetable Crops
- 2.5. Package of Practices for Important Vegetable Crops [Tomato, Potato, Cauliflower, Radish and Bottle Gourd]
- 2.6. Summary
- 2.7. Self-Evaluation Exercises
- 2.8. Answer Keys to Self-Check Exercises
- 2.9. Answer Keys to Self-Evaluation Exercises

UNIT-3: POMOLOGY

- 3.1. Introduction
- 3.2. Objectives
- 3.3. Introduction to Pomology
- 3.4. Classification of Fruit Crops
- 3.5. Package of Practices for Important Fruit Crops (Mango, Guava, Orange, Banana, Grapes and Apple)
- 3.6. Summary
- 3.7. Self-Evaluation Exercises
- 3.8. Answer Keys to Self-Check Exercises
- 3.9. Answer Keys to Self-Evaluation Exercises

UNIT-4: FLORICULTURE AND LANDSCAPING

- 4.1. Introduction
- 4.2. Objectives
- 4.3. Introduction to Floriculture and Landscaping
- 4.4. Classification of Ornamental Plants
- 4.5. Package of Practices for Important Flowering Crops (Rose, Marigold, Jasmine, Gladiolus, Gaillardia, Chrysanthemum)
- 4.6. Principles and Features of Garden
- 4.7. Topiary and Rockery
- 4.8. Garden
- 4.9. Lawn Management
- 4.10. Summary
- 4.11. Self-Evaluation Exercises
- 4.12. Answer Keys to Self-Check Exercises
- 4.13. Answer Keys to Self-Evaluation Exercises

UNIT-5: PLANTATION, SPICES, MEDICINAL AND AROMATIC PLANTS

- 5.1. Introduction
- 5.2. Objectives
- 5.3. Introduction to Plantation and Spices
- 5.4. Introduction to Medicinal and Aromatic Plants
- 5.5. Package of Practices for Coconut, Turmeric, Alovera, and Citronella Cultivation



- 5.6. Summary
- 5.7. Self-Evaluation Exercises
- 5.8. Answer Keys to Self-Check Exercises
- 5.9. Answer Keys to Self-Evaluation Exercises

UNIT-6: POST HARVEST MANAGEMENT AND PRESERVATION

- 6.1. Introduction
- 6.2. Objectives
- 6.3. Introduction to Post-Harvest Management and Preservation
- 6.4. Harvesting Maturity
- 6.5. Post-Harvest Handling of Horticultural Produce
- 6.6. Cold Chain Management
- 6.7. Principles and Methods of Food Preservation
- 6.8. Commercial Processed Products of Fruits, Vegetables and Flowers
- 6.9. Summary
- 6.10. Self-Evaluation Exercises
- 6.11. Answer Keys to Self-Check Exercises
- 6.12. Answer Keys to Self-Evaluation Exercises

Instructional Strategies (10)

1. Lectures and presentations to introduce key concepts and theories.
2. Laboratory sessions for food processing.
3. Case studies and discussions to explore real-world applications and challenges.
4. Guest lectures by industry experts to provide insights into current trends and practices.
5. Group projects and assignments to promote teamwork and critical thinking.
6. Online resources and multimedia materials for self-directed learning.
7. hands-on experience on different methods of plant propagation.
8. Seminars on emerging technologies and innovations in the horticulture.
9. Field visits to horticulture institute, polyhouse unit and food processing industry for practical exposure.
10. Interactive quizzes and self-assessment exercises to reinforce learning outcomes.

Learning Resources (5)

1. Singh, S. R. (2005). Handbook of Horticulture. Indian Council of Agricultural Research.
2. Sharma, A. K. (2014). Greenhouse Technology and Management for Vegetable Production. New India Publishing Agency.
3. Prasad, J. (2009). Horticultural Crops Production Techniques. Oxford & IBH Publishing.
4. Pandey, V. K. (2008). Postharvest Management of Horticultural Crops: Practices and Techniques. New India Publishing Agency.
5. Thamburaj, S. Textbook of Vegetables, Tubercrops, and Spices. Indian Council of Agricultural Research.

6. Peter, K. V. (2004). Handbook of Herbs and Spices. Woodhead Publishing India.

Contact Programme Activities (5)

1. Identification of ornamental plants
2. Preparation of nursery and their management
3. Propagation of plants by Cutting, Budding, and Grafting
4. Hands on experience of Potting, Repotting and De-potting
5. Training and pruning of ornamental crops.
6. Preparation of jam, jelly, beverages and pickles.

Field Visit

Visit to nearby polyhouse unit/ Academic Institutions such as CIAE, IISS, Bhopal and Fruit research station, Entkhedi, Bhopal for practical exposure.



Elective Course: Multimedia and Web Technology

Paper Code: PGDVET 203 IT
Paper Title: Multimedia and Web Technology
Total Credits: 04
Recommended Study Hours: 130
Total Marks: 130

Rationale:

This elective course for a Post Graduate Diploma in Vocational Education and Training equips teachers with essential skills in multimedia and web technology, enhancing their instructional capabilities. Beginning with an overview of multimedia concepts and history, teachers gain foundational knowledge of its applications across various industries. Web development basics, including HTML, CSS, and JavaScript, are taught through hands-on exercises, enabling the creation of static and interactive web pages.

Graphic design fundamentals and multimedia content creation are covered, providing practical experience with industry-standard software. Additionally, the course emphasizes digital media ethics and copyright, preparing teachers to navigate legal and ethical considerations in multimedia production. This comprehensive training enables teachers to integrate advanced digital skills into vocational education, enriching the learning experience and better preparing students for the digital economy.

Learning Outcomes:

1. Demonstrate a comprehensive understanding of multimedia technology, its history, and its applications across various industries, enabling the creation of engaging and informative educational content.
2. Develop, design, and deploy static and interactive web pages using HTML5, CSS3, and JavaScript, along with basic web hosting and domain management skills.
3. Apply principles of graphic design, including layout, typography, and color theory, to create visually appealing graphics using industry-standard software like Adobe Photoshop, Illustrator, or GIMP.
4. Produce and edit high-quality multimedia content, including images, audio, and video, using software such as Adobe Premiere Pro, Audacity, or OpenShot, and integrate these elements into cohesive digital projects.



5. Navigate ethical considerations and copyright laws in multimedia creation and distribution, ensuring responsible and legally compliant use of digital media in educational settings.

Unit -1 Introduction to Multimedia Technology:

- 1.1 Overview of multimedia concepts
- 1.2 Components and applications of Multimedia Technology
- 1.3 History and evolution of multimedia technology
- 1.4 Importance of multimedia in various industries and sectors

Unit- 2 Web Development Basics:

- 2.1 Introduction to web technologies
- 2.2 HTML
- 2.3 CSS
- 2.4 JavaScript
- 2.5 Hands-on exercises to create static web pages and simple interactive elements, 2.6 Basics of web hosting
- 2.7 Domain management and FTP

Unit-3 Graphic Design Fundamentals:

- 3.1 Principles of graphic design
- 3.2 layout, typography, and color theory
- 3.3 Introduction to graphic design software such as Adobe Photoshop, Illustrator, or GIMP
- 3.4 Practical assignments to create graphics for web and multimedia projects.

Unit-4 Multimedia Content Creation:

- 4.1 Techniques for creating multimedia content including images, audio, and video, 4.2 Introduction to multimedia editing software such as Adobe Premiere Pro, Audacity, or OpenShot,
- 4.3 Projects to develop multimedia presentations and digital content

Unit- 5 Digital Media Ethics and Copyright:

- 5.1 Ethical considerations in multimedia creation and distribution
- 5.2 Understanding copyright laws
- 5.3 Fair use, and intellectual property rights
- 5.4 Case studies and discussions on ethical dilemmas in multimedia production



Instructional Strategies (10)

1. **Blended Learning:** Combine online digital media with traditional face-to-face classroom methods. This approach allows for flexibility and caters to diverse learning styles, enhancing engagement and understanding.
2. **Project-Based Learning:** Engage students in real-world projects that require the application of multimedia and web technology skills. This hands-on approach fosters practical problem-solving and critical thinking.
3. **Flipped Classroom:** Provide instructional content, such as video lectures and reading materials, for students to review at home. Class time is then used for interactive activities and applying concepts through collaborative projects.
4. **Workshops and Lab Sessions:** Conduct intensive, hands-on sessions where students can practice using multimedia and web development tools. These workshops help reinforce theoretical knowledge through practical application.
5. **Peer Learning and Collaboration:** Encourage group projects and peer-to-peer teaching. This strategy not only builds teamwork skills but also allows students to learn from each other's strengths and perspectives.
6. **Case Studies and Real-World Examples:** Use case studies and examples from various industries to illustrate the practical applications of multimedia and web technology. This contextualizes learning and shows relevance to future careers.
7. **Interactive Tutorials and Simulations:** Provide interactive tutorials and simulations for complex topics, such as web development or animation principles. These tools can make abstract concepts more concrete and understandable.
8. **Guest Lectures and Industry Experts:** Invite professionals from the multimedia and web technology fields to share their experiences and insights. This exposure to real-world expertise can inspire and inform students about industry standards and practices.
9. **Feedback and Reflective Practice:** Implement regular feedback sessions and encourage reflective practice. Students should analyze their work, identify areas for improvement, and understand the rationale behind their design and development choices.
10. **Portfolio Development:** Guide students in creating a professional portfolio that showcases their multimedia and web technology projects. This not only provides a tangible record of their skills but also prepares them for job applications and career advancement.



Learning Resources (5)

1. **Online Tutorials and Courses:** Platforms like Coursera, Udemy, and LinkedIn Learning offer a wide range of tutorials on multimedia and web technology. These resources provide structured, expert-led instruction and can supplement classroom learning.
2. **Industry-Standard Software:** Access to software such as Adobe Creative Cloud (Photoshop, Illustrator, Premiere Pro), GIMP, Audacity, and web development tools (Visual Studio Code, Adobe Dreamweaver) is essential for hands-on learning and project completion.
3. **Textbooks and E-books:** Books such as "Multimedia: Making It Work" by Tay Vaughan, "HTML and CSS: Design and Build Websites" by Jon Duckett, and "The Principles of Beautiful Web Design" by Jason Beard provide foundational knowledge and in-depth exploration of key concepts.
4. **Online Forums and Communities:** Websites like Stack Overflow, GitHub, and specialized forums for graphic design and multimedia production offer peer support, code repositories, and collaboration opportunities, enriching the learning experience through community engagement.
5. **Multimedia Content Libraries:** Access to resources like Shutterstock, Pixabay, and Unsplash for high-quality images and videos, as well as sound libraries like Freesound and AudioJungle, enables students to enhance their projects with professional-grade multimedia content.

Contact Program Activities (5)

1. **Hands-On Workshops:** Conduct intensive workshops where students can actively engage in creating multimedia projects. These workshops should focus on practical skills like graphic design, video editing, and web development, allowing students to apply theoretical knowledge in a controlled environment.
2. **Collaborative Group Projects:** Facilitate group projects where students work together to design and implement multimedia and web-based solutions. This collaborative approach helps build teamwork skills and allows students to learn from each other's strengths and experiences.
3. **Guest Lectures and Industry Panels:** Organize sessions with industry professionals and experts who can provide insights into current trends, challenges, and opportunities in multimedia and web technology. These interactions offer students real-world perspectives and networking opportunities.



4. **Live Demonstrations and Q&A Sessions:** Include live demonstrations of multimedia software and tools, followed by Q&A sessions. This format allows students to see the tools in action and ask specific questions about their functionality and application.
5. **Portfolio Review and Feedback Sessions:** Schedule regular sessions where students present their work-in-progress to peers and instructors for feedback. These reviews help students refine their projects, learn from constructive criticism, and prepare professional portfolios showcasing their skills and accomplishments.

Field Visit- Field visits can be a valuable component of this course. Here's why:

Real-World Exposure: Field visits to multimedia production studios, web development companies, and digital marketing agencies provide students with first-hand exposure to professional environments. This helps bridge the gap between classroom learning and industry practices.

Networking Opportunities: Engaging with professionals in the field can help students build connections that might be beneficial for future career opportunities. Networking during these visits can lead to internships, mentorships, and job placements.

Practical Insights: Observing how multimedia and web technologies are used in various industries offers practical insights that can't be fully captured in a classroom setting. Students can see the latest tools and techniques in action and understand the workflows involved.

Inspiration and Motivation: Seeing successful projects and innovative solutions in the real world can inspire and motivate students. It can spark new ideas and encourage them to pursue excellence in their own work.

Understanding Industry Standards: Field visits help students understand industry standards and expectations. This knowledge is crucial for producing professional-quality work that meets current market demands.

Implementation:

To integrate field visits effectively into the course: **Schedule Visits to Diverse Venues:** Plan visits to a variety of locations, such as multimedia studios, web development firms, digital marketing agencies, and educational technology companies.

Prepare Students: Brief students on what to expect and prepare them with questions and objectives for each visit.

Post-Visit Discussions: Conduct debrief sessions where students can share their observations, reflect on their experiences, and discuss how these insights can be applied to their projects and learning.



Incorporating field visits into the course enriches the learning experience by providing practical, real-world insights and opportunities for professional growth.

By offering this elective course, students can gain a solid foundation in multimedia and web technology fundamentals, acquire practical skills applicable to various industries, and prepare for careers in areas such as web development, graphic design, digital media production, and user experience design.



Elective Course: Multimedia and Web Technology

Paper Code: PGDVET 203 IT
Paper Title: Multimedia and Web Technology
Total Credits: 04
Recommended Study Hours: 130
Total Marks: 130

Rationale:

This elective course for a Post Graduate Diploma in Vocational Education and Training equips teachers with essential skills in multimedia and web technology, enhancing their instructional capabilities. Beginning with an overview of multimedia concepts and history, teachers gain foundational knowledge of its applications across various industries. Web development basics, including HTML, CSS, and JavaScript, are taught through hands-on exercises, enabling the creation of static and interactive web pages.

Graphic design fundamentals and multimedia content creation are covered, providing practical experience with industry-standard software. Additionally, the course emphasizes digital media ethics and copyright, preparing teachers to navigate legal and ethical considerations in multimedia production. This comprehensive training enables teachers to integrate advanced digital skills into vocational education, enriching the learning experience and better preparing students for the digital economy.

Learning Outcomes:

6. Demonstrate a comprehensive understanding of multimedia technology, its history, and its applications across various industries, enabling the creation of engaging and informative educational content.
7. Develop, design, and deploy static and interactive web pages using HTML5, CSS3, and JavaScript, along with basic web hosting and domain management skills.
8. Apply principles of graphic design, including layout, typography, and color theory, to create visually appealing graphics using industry-standard software like Adobe Photoshop, Illustrator, or GIMP.
9. Produce and edit high-quality multimedia content, including images, audio, and video, using software such as Adobe Premiere Pro, Audacity, or OpenShot, and integrate these elements into cohesive digital projects.



10. Navigate ethical considerations and copyright laws in multimedia creation and distribution, ensuring responsible and legally compliant use of digital media in educational settings.

Unit -1 Introduction to Multimedia Technology:

- 1.5 Overview of multimedia concepts
- 1.6 Components and applications of Multimedia Technology
- 1.7 History and evolution of multimedia technology
- 1.8 Importance of multimedia in various industries and sectors

Unit- 2 Web Development Basics:

- 2.1 Introduction to web technologies
- 2.2 HTML
- 2.3 CSS
- 2.4 JavaScript
- 2.5 Hands-on exercises to create static web pages and simple interactive elements, 2.6 Basics of web hosting
- 2.7 Domain management and FTP

Unit-3 Graphic Design Fundamentals:

- 3.1 Principles of graphic design
- 3.2 layout, typography, and color theory
- 3.3 Introduction to graphic design software such as Adobe Photoshop, Illustrator, or GIMP
- 3.4 Practical assignments to create graphics for web and multimedia projects.

Unit-4 Multimedia Content Creation:

- 4.1 Techniques for creating multimedia content including images, audio, and video, 4.2 Introduction to multimedia editing software such as Adobe Premiere Pro, Audacity, or OpenShot,
- 4.3 Projects to develop multimedia presentations and digital content

Unit- 5 Digital Media Ethics and Copyright:

- 10.1 Ethical considerations in multimedia creation and distribution
- 10.2 Understanding copyright laws
- 10.3 Fair use, and intellectual property rights
- 10.4 Case studies and discussions on ethical dilemmas in multimedia production



Instructional Strategies (10)

11. **Blended Learning:** Combine online digital media with traditional face-to-face classroom methods. This approach allows for flexibility and caters to diverse learning styles, enhancing engagement and understanding.
12. **Project-Based Learning:** Engage students in real-world projects that require the application of multimedia and web technology skills. This hands-on approach fosters practical problem-solving and critical thinking.
13. **Flipped Classroom:** Provide instructional content, such as video lectures and reading materials, for students to review at home. Class time is then used for interactive activities and applying concepts through collaborative projects.
14. **Workshops and Lab Sessions:** Conduct intensive, hands-on sessions where students can practice using multimedia and web development tools. These workshops help reinforce theoretical knowledge through practical application.
15. **Peer Learning and Collaboration:** Encourage group projects and peer-to-peer teaching. This strategy not only builds teamwork skills but also allows students to learn from each other's strengths and perspectives.
16. **Case Studies and Real-World Examples:** Use case studies and examples from various industries to illustrate the practical applications of multimedia and web technology. This contextualizes learning and shows relevance to future careers.
17. **Interactive Tutorials and Simulations:** Provide interactive tutorials and simulations for complex topics, such as web development or animation principles. These tools can make abstract concepts more concrete and understandable.
18. **Guest Lectures and Industry Experts:** Invite professionals from the multimedia and web technology fields to share their experiences and insights. This exposure to real-world expertise can inspire and inform students about industry standards and practices.
19. **Feedback and Reflective Practice:** Implement regular feedback sessions and encourage reflective practice. Students should analyze their work, identify areas for improvement, and understand the rationale behind their design and development choices.
20. **Portfolio Development:** Guide students in creating a professional portfolio that showcases their multimedia and web technology projects. This not only provides a tangible record of their skills but also prepares them for job applications and career advancement.



Learning Resources (5)

6. **Online Tutorials and Courses:** Platforms like Coursera, Udemy, and LinkedIn Learning offer a wide range of tutorials on multimedia and web technology. These resources provide structured, expert-led instruction and can supplement classroom learning.
7. **Industry-Standard Software:** Access to software such as Adobe Creative Cloud (Photoshop, Illustrator, Premiere Pro), GIMP, Audacity, and web development tools (Visual Studio Code, Adobe Dreamweaver) is essential for hands-on learning and project completion.
8. **Textbooks and E-books:** Books such as "Multimedia: Making It Work" by Tay Vaughan, "HTML and CSS: Design and Build Websites" by Jon Duckett, and "The Principles of Beautiful Web Design" by Jason Beard provide foundational knowledge and in-depth exploration of key concepts.
9. **Online Forums and Communities:** Websites like Stack Overflow, GitHub, and specialized forums for graphic design and multimedia production offer peer support, code repositories, and collaboration opportunities, enriching the learning experience through community engagement.
10. **Multimedia Content Libraries:** Access to resources like Shutterstock, Pixabay, and Unsplash for high-quality images and videos, as well as sound libraries like Freesound and AudioJungle, enables students to enhance their projects with professional-grade multimedia content.

Contact Program Activities (5)

6. **Hands-On Workshops:** Conduct intensive workshops where students can actively engage in creating multimedia projects. These workshops should focus on practical skills like graphic design, video editing, and web development, allowing students to apply theoretical knowledge in a controlled environment.
7. **Collaborative Group Projects:** Facilitate group projects where students work together to design and implement multimedia and web-based solutions. This collaborative approach helps build teamwork skills and allows students to learn from each other's strengths and experiences.
8. **Guest Lectures and Industry Panels:** Organize sessions with industry professionals and experts who can provide insights into current trends, challenges, and opportunities in multimedia and web technology. These interactions offer students real-world perspectives and networking opportunities.



9. **Live Demonstrations and Q&A Sessions:** Include live demonstrations of multimedia software and tools, followed by Q&A sessions. This format allows students to see the tools in action and ask specific questions about their functionality and application.
10. **Portfolio Review and Feedback Sessions:** Schedule regular sessions where students present their work-in-progress to peers and instructors for feedback. These reviews help students refine their projects, learn from constructive criticism, and prepare professional portfolios showcasing their skills and accomplishments.

Field Visit- Field visits can be a valuable component of this course. Here's why:

Real-World Exposure: Field visits to multimedia production studios, web development companies, and digital marketing agencies provide students with first-hand exposure to professional environments. This helps bridge the gap between classroom learning and industry practices.

Networking Opportunities: Engaging with professionals in the field can help students build connections that might be beneficial for future career opportunities. Networking during these visits can lead to internships, mentorships, and job placements.

Practical Insights: Observing how multimedia and web technologies are used in various industries offers practical insights that can't be fully captured in a classroom setting. Students can see the latest tools and techniques in action and understand the workflows involved.

Inspiration and Motivation: Seeing successful projects and innovative solutions in the real world can inspire and motivate students. It can spark new ideas and encourage them to pursue excellence in their own work.

Understanding Industry Standards: Field visits help students understand industry standards and expectations. This knowledge is crucial for producing professional-quality work that meets current market demands.

Implementation:

To integrate field visits effectively into the course: **Schedule Visits to Diverse Venues:** Plan visits to a variety of locations, such as multimedia studios, web development firms, digital marketing agencies, and educational technology companies.

Prepare Students: Brief students on what to expect and prepare them with questions and objectives for each visit.

Post-Visit Discussions: Conduct debrief sessions where students can share their observations, reflect on their experiences, and discuss how these insights can be applied to their projects and learning.



Incorporating field visits into the course enriches the learning experience by providing practical, real-world insights and opportunities for professional growth.

By offering this elective course, students can gain a solid foundation in multimedia and web technology fundamentals, acquire practical skills applicable to various industries, and prepare for careers in areas such as web development, graphic design, digital media production, and user experience design.



Paper Code: PGDVET 203 HC

Paper Title: Changing Healthcare and Education Context

Total Credits: 4

Recommended Study Hours: 120

Total Marks: 130

Rationale (100 words)

Healthcare is one of the major service sectors in India. Healthcare services include all the health and wellness related support provided to a person or population by various agencies and resources, including hospitals, dispensaries, primary health centres. In India, provision of healthcare facility is a state subject.

Public health issues in India are on the rise, especially those linked to unhealthy lifestyles. Improper diet, sedentary daily routine, and unhealthy habits like smoking and alcohol consumption, unhealthy lifestyle choices can lead to chronic non-communicable diseases like diabetes, obesity, and hypertension. Such diseases are not only common in India, but also dangerous if left untreated. The development of new technologies have resulted into production of large amount of biochemically-defined proteins of medical significance and created an enormous potential for pharmaceutical industries.

Learning Outcomes (5 numbers)

6. Demonstrate the challenges include unequal distribution of healthcare facilities between urban and rural areas, inadequate funding, shortage of healthcare professionals, and accessibility issues for marginalized communities.
7. Knowledge of range of health challenges, including infectious diseases like tuberculosis, malaria, and dengue fever, as well as non-communicable diseases such as diabetes, cardiovascular diseases, and cancer
8. Understanding how infections are transmitted is crucial for implementing effective prevention and control measures, such as vaccination, hand hygiene, sanitation, and vector control.
9. Integration of Technology: Upon completion of the program, learners will be able to demonstrate proficiency in utilizing industry-specific technology tools and software to enhance productivity and problem-solving in their field.
10. Learning outcomes in biotechnology may include gaining a deep understanding of molecular biology, genetics, bioinformatics, and bioprocessing techniques; developing critical thinking and problem-solving skills to address complex biological challenges;

UNIT CONTENT

Unit 1 : Healthcare System in India

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Healthcare Delivery System
- 1.4 Hospital
- 1.5 AYUSH Healthcare System
- 1.6 Telemedicine
- 1.7 Summary

Unit 2 : Health Scenario of India

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Health Challenges in India
- 2.4 Communicable Diseases
- 2.5 Non-Communicable Diseases
- 2.6 Infection and Transmission
- 2.7 Vaccination
- 2.8 Summary

Unit 3 : National Health Programme

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Health System Strengthening Programs
- 3.4 Reproductive, Maternal, Neonatal, Child and Adolescent Health
- 3.5 National Programme on Communicable Diseases
- 3.6 National Programme on non-Communicable Diseases and nutrition
- 3.7 Summary

Unit 4: Biotechnology

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Basics of biotechnology
- 4.4 Medical biotechnology
- 4.5 Agriculture biotechnology
- 4.6 Challenges in the biotechnology
- 4.7 Summary

Contact Programme Activities

Here are some effective activities for a contact programme designed to improve skill pedagogy:

1. Interactive Workshops

Hands-On Training: Engage participants in practical exercises that mimic real-life scenarios relevant to the skills being taught. For example, in a technical workshop, learners could work with actual tools and software.

Simulations and Role-Playing: Use simulations and role-playing to allow learners to practice and apply skills in a controlled environment. This is particularly effective in fields like healthcare, customer service, and management.

2. Group Discussions and Brainstorming Sessions

Peer Learning: Facilitate group discussions where participants can share their experiences and solutions to common problems. This encourages collaborative learning and helps in developing problem-solving skills.

Brainstorming Activities: Encourage participants to brainstorm on real-world problems and come up with innovative solutions, fostering critical thinking and creativity.

3. Case Studies and Problem-Solving Tasks

Case Study Analysis: Present real or hypothetical case studies related to the skills being taught. Have participants analyze the cases, identify key issues, and propose solutions.

Problem-Solving Workshops: Organize sessions where learners work on specific problems, using their newly acquired skills to find solutions. This reinforces learning through practical application.

4. Mentoring and Coaching

One-on-One Mentoring: Pair participants with mentors who can provide personalized guidance, feedback, and support. This helps in addressing individual learning needs and challenges.

Coaching Sessions: Arrange for expert coaches to conduct sessions focusing on specific skills, providing advanced tips and techniques.

5. Project-Based Learning

Collaborative Projects: Assign group projects that require participants to work together, applying their skills to complete a task or create a product. This promotes teamwork and practical application of knowledge.

Individual Projects: Have learners undertake individual projects that challenge them to use their skills creatively and independently.

6. Reflection and Feedback Sessions

Reflective Journals: Encourage participants to keep journals where they reflect on what they've learned, how they've applied it, and areas for improvement.

Feedback Loops: Implement regular feedback sessions where learners receive constructive feedback from instructors and peers. This helps in continuous improvement and learning.

7. Technology-Enhanced Learning

E-Learning Modules: Use online modules and tutorials to supplement in-person training, providing flexible and accessible learning opportunities.

Interactive Tools and Apps: Integrate interactive tools and applications that offer simulations, quizzes, and practice exercises to reinforce learning.

8. Assessments and Evaluations

Skill Assessments: Conduct regular assessments to evaluate the learners' skill levels and progress. Use various assessment methods like quizzes, practical tests, and peer evaluations.

Feedback Surveys: Use surveys to gather feedback on the effectiveness of the contact programme and make necessary adjustments to improve future sessions.

Field Visit

Field visits allow learners to observe and engage with professionals in their working environments, thereby bridging the gap between theoretical knowledge and practical application.

Activities for Contact Programme Field Visits

1. Pre-Visit Preparation

Briefing Sessions: Conduct sessions to outline the objectives of the field visit, what learners should observe, and specific skills they should focus on.

Background Research: Assign participants to research the organization or location they will visit, understanding its operations, challenges, and industry context.

Question Development: Have learners prepare a list of questions they might ask during the visit to maximize their learning experience.

2. Field Visit Execution

Site Tours: Arrange guided tours of the facility, allowing learners to see the operational processes, equipment, and work environment.

Observation Tasks: Assign specific observation tasks where learners must note particular practices, techniques, or workflows relevant to their skill development.

Interactive Sessions: Include Q&A sessions with on-site professionals where learners can ask their prepared questions and gain deeper insights.

3. Post-Visit Activities

Debriefing Sessions: Conduct a debriefing session where participants share their observations, experiences, and what they learned during the visit.

Reflective Reports: Ask learners to write reflective reports summarizing their insights, what skills they observed, and how they can apply these skills in their own contexts.

Discussion Forums: Create forums or group discussions to allow participants to discuss their findings, compare notes, and collaboratively extract key learning points.

Paper Code: PGDVET 204 - HC
Paper Title: INFECTION PREVENTION AND CONTROL
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale (100 words)

IPC and quality standards of healthcare are essential for the well-being and safety of patients, their families, health workers and the community. A well-organized IPC is a basic requirement in every individual's life to access safe and quality healthcare and improving outcomes by reducing morbidity and mortality. The threats posed by epidemics, pandemics and antimicrobial resistance (AMR) have become increasingly evident as ongoing universal challenges. A multimodal strategy comprises several components or elements (three or more, usually five) implemented in an integrated way with the aim of improving an outcome and changing behavior.

Appropriate educational material on IPC should be made available to all Health Care Workers (HCW), patients and visitors.

Learning Outcomes (5 numbers)

1. Able to differentiate between different types of infections, such as bacterial, viral, fungal, and parasitic infections, and recognize common symptoms associated with each.
2. understanding the principles of infection prevention and control, including standard precautions, transmission-based precautions, and isolation protocols. Students should be able to identify high-risk situations for infection transmission and implement appropriate preventive measures, such as hand hygiene, personal protective equipment (PPE) usage, environmental cleaning, and respiratory etiquette.
3. role of surveillance systems in monitoring infectious diseases, implementing outbreak response measures, conducting infection control audits, and promoting a culture of safety and accountability among healthcare workers and the general population.
4. Students should be familiar with the mechanisms of vaccine-induced immunity and the importance of vaccination in preventing infectious diseases and reducing their burden on public health.
5. knowledge of food safety regulations and standards, such as Hazard Analysis and Critical Control Points (HACCP) principles and Good Manufacturing Practices (GMP). Students should be able to apply food safety principles in various settings, including food production, processing, distribution, and preparation, to prevent foodborne illnesses and ensure the safety and quality of food products consumed by the public.

UNIT CONTENT

Unit 1: INFECTION and Transmission

- 1.1 Introduction*
- 1.2 Objectives*
- 1.3 Infection*
- 1.4 Transmission of Infection*
- 1.5 Level of disease occurrence*
- 1.6 summary*

Unit 2: INFECTION CONTROL AND PREVENTION

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Prevention of Infection Transmission
- 2.4 Infection preventive Practices
- 2.5 Infection Control
- 2.6 Infection control and prevention in Hospital
- 2.7 Immunization
- 2.8 Summary

Unit 3: Food Safety and Hygiene

- 3.1 Introduction*
- 3.2 Objectives*
- 3.3 Food Contamination and Prevention*
- 3.4 Food safety*
- 3.5 Summary*

Instructional Strategies

A variety of approaches can be adopted like:



Interactive lecture, Group Discussion, Role Playing, Case Studies, Discussion, Experiential Learning, Problem based approach, Audio-video programmes, Group Projects, Surveys.

Learning Resources (5)

- Atkinson J (2009) Natural Ventilation for Infection Control in Health-Care Settings (WHO, Geneva).
- Baker MG, et al. (2010) Transmission of pandemic A/H1N1 2009 influenza on passenger aircraft: Retrospective cohort study. BMJ 340:c2424.
- CDC. Interim Infection Prevention and Control Recommendations for Hospitalized Patients with Middle East Respiratory Syndrome Coronavirus (MERS-CoV), 2017;
- CDC. Interim Guidance for Infection Control Within Healthcare Settings When Caring for Confirmed Cases, Probable Cases, and Cases Under Investigation for Infection with Novel Influenza A Viruses Associated with Severe Disease, 2016; available at <https://www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm>
- Atkinson J (2009) Natural Ventilation for Infection Control in Health-Care Settings (WHO, Geneva).

Contact Programme Activities

Here are some effective activities for a contact programme designed to improve skill pedagogy:

1. Interactive Workshops

Hands-On Training: Engage participants in practical exercises that mimic real-life scenarios relevant to the skills being taught. For example, in a technical workshop, learners could work with actual tools and software.

Simulations and Role-Playing: Use simulations and role-playing to allow learners to practice and apply skills in a controlled environment. This is particularly effective in fields like healthcare, customer service, and management.

2. Group Discussions and Brainstorming Sessions

Peer Learning: Facilitate group discussions where participants can share their experiences and solutions to common problems. This encourages collaborative learning and helps in developing problem-solving skills.

Brainstorming Activities: Encourage participants to brainstorm on real-world problems and come up with innovative solutions, fostering critical thinking and creativity.

3. Case Studies and Problem-Solving Tasks

Case Study Analysis: Present real or hypothetical case studies related to the skills being taught. Have participants analyze the cases, identify key issues, and propose solutions.

Problem-Solving Workshops: Organize sessions where learners work on specific problems, using their newly acquired skills to find solutions. This reinforces learning through practical application.

4. Mentoring and Coaching

One-on-One Mentoring: Pair participants with mentors who can provide personalized guidance, feedback, and support. This helps in addressing individual learning needs and challenges.

Coaching Sessions: Arrange for expert coaches to conduct sessions focusing on specific skills, providing advanced tips and techniques.

5. Project-Based Learning

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Paper Code: PGDVET 203 - RE
Paper Title: FUNDAMENTALS OF MARKETING AND SALESMANSHIP
Credit: 04
Recommended Study Hours: 120
Total Marks: 130

Rationale

Marketing is a factor which boosts industrialization and economic development. The growth of industry and economy depends upon the prevalence of demand. Marketing creates such demand by identifying the wants and needs of the customers. It increases the demand by identifying the gap in demand and supply position in the market. The increased demand and economic activity leads to enlarged markets which set the stage for economies of scale in distribution and production that may not have existed before. Increased business operation results in generating new employment opportunities to the society and it also improves standard of living of the people by providing qualitative products and services to the society. It creates value for the products and services. The most of the products and services which we are now using are not the basic necessities. They are the facilities provided by the functions of marketing.

Marketing is an exchange function by which businessmen and customers both exchange their needs and wants. Customers will get the products and services and businessmen receive their income through sales. Marketing is a function which satisfies both the sides. Marketing starts with the customers and also ends with the customer. It includes, identifying the customer needs, designing a product and service which satisfy them. It enables the customers to know about the product and service offered to him to satisfy their needs, making it affordable to them, making it available to them, and continuing relationship with them in order to fulfil their changing needs. These are technically termed as product design, pricing, promotional policies and strategies, distribution and customer satisfaction and retention.

Many salespersons assume that when a customer enters their store it is because they want to purchase a product which they sell. However, many customers may need assistance before making a purchase decision. They may require more information about the product, a product demonstration or even information on guarantees. Selling skills refer to the effective inputs from employees to ensure that they do everything possible to make a sale. The employee should be aware of the importance of providing the customer with the information they require, handling objections and closing the sale. The selling skills includes personal selling techniques, customer relations, handling payment, patience, communication skills, reliability, politeness, always well groomed and dressed, constant brand image and message portrayed, good knowledge of all products and services, and salesmanship. Sales do require a number of skills to be instilled in a person to be a successful salesman. However, they are simple skills which are almost personality dependent.

Supervisor is the person who is directly connected with rank and file or subordinates and acts as a vital link between the management and subordinate. The workers require guidance of supervisor at every step to clear their doubts. He tells them about the proper method of doing a job for better performance. He also acts as a planner and a guide for his subordinates. The supervisor lays down the targets of production for the subordinates and determines the procedures and methods for doing the work and to achieve desired results. Supervisor devotes much of his time in supervision. He makes



systematic arrangements of activities and resources for his group. He assigns work to each subordinate and delegate's proper authority to them. The supervisor occupies a strategic position in the hierarchy of the organization. He is directly responsible for enforcing the rules and regulations of an organization. Supervision is the ignition key that starts the engine of the enterprise and keeps the managerial train into motion.

In this subject we covered introductory aspects of marketing such as marketing concepts, functions, importance, information and environment. We also covered elements of marketing mix under which product mix, price mix, promotion mix & place mix and various types of modern marketing activities such as products & services marketing. We introduced the topics like elements of salesmanship which includes roles and functions of a salesman; importance of personal selling, creative selling, duties and responsibilities of a salesman; qualities of a good salesman, steps in the process of selling, planning for sales presentation and steps in sales presentation. We also elaborated sales management techniques such as buying motives, factors influencing purchase of a product sales management functions human resource management and specialized salespersons.

Learning Outcomes

On completion of this module, trainees will be able to:

- Describe the functions and importance of marketing.
- Examine the difference between the marketing and selling.
- Collect and analyze the marketing information and identify sources and methods of analysis.
- Identify challenges with opportunities in Indian marketing environment.
- Describe the elements of marketing mix.
- Demonstrate the elements and its process of Product Mix, Price Mix, Place Mix and Promotion Mix.
- Describe different types of product marketing and differentiate the functional aspects of them.
- Demonstrate the process of marketing the commercial services.
- Elaborate the methods of marketing by using internet.
- Describe salesmanship and importance of salesman in modern marketing environment.
- Demonstrate creative selling and qualities of a good salesman.
- Demonstrate the process of selling and sales presentation techniques.
- Describe buyers, their behaviour, classification and factors influencing purchase.
- Prepare the consumer profile as per specifications.
- Demonstrate the sequential process of human resource management.
- Perform the functions of specialized salesmen in different business activities.

Unit Contents

UNIT -I: Introduction to Marketing

Markets- Types of Markets- Definition & Scope Marketing: Importance of marketing, functions of marketing; Difference between marketing and selling; Marketing concepts & Philosophies, Market segmentation, targeting and Positioning. Importance of marketing information; Sources and methods of collection of data-analyzing information. Marketing Environment- Special characteristics of Indian marketing environment - Micro and Macro Environmental factors. Consumerism: Challenges and opportunities in the Indian marketing environment.



UNIT -II: Marketing Mix

Concept and elements of marketing mix; Product concept & classification- Branding-Packaging-Labeling/Concept of Product Life Cycle- Price mix; Methods of Pricing and Pricing Policies. Meaning of Place mix and functions of channels of distribution; Role and types of middlemen; Channels used for consumer and industrial goods. Physical distribution; Functions of Storage & Warehousing and Transportation. Choice of modes of transport - Promotion mix; Advertising, Personal selling and Sales Promotion. Public Relations, People: Role of Customer Service and Employee Training, Process: Introduction to Process in Marketing, Types of Processes, Importance of Process, Physical Evidence: Define physical evidence, Importance of Physical Evidence, Managing Physical Evidence.

UNIT-III: Types of Modern Marketing

Concept of modern marketing, Importance of modern marketing, Types: Digital Marketing: SEO, SEM, Social Media Marketing, Email Marketing, Relationship Marketing; Customer Relationship Management (CRM), International Marketing: Globalization, Exporting, Licensing, Joint Ventures, Products Marketing - Wholesale Marketing, Retail Marketing, Rural Marketing, International Marketing, Agricultural Marketing, Animal Products Marketing. Services Marketing: Characteristics of Services, Service Quality Management, Social Responsibility and Ethical Marketing
Marketing of Services - Insurance, Banking, Telecom, Courier, Travel & Tourism, Online Marketing, E-Marketing etc.

UNIT-IV: Elements of Salesmanship

Concept of salesmanship; Changing roles and functions of a salesman; Importance of personal selling in the context of competitive environment; Creative selling - Types of salesmen-retail salesman, wholesale salesman, specialized services salesman; Duties and responsibilities of a salesman; Qualities of a good salesman, Steps in the process of selling, Planning for sales presentation, Steps in sales presentation - Establishing rapport; Introducing product, highlighting benefits and providing information, Prospecting - Handling objections and Closing Sales - After Sales Services, Customer Relationship Building.

UNIT-V: Sales Management

Meaning of Customer and buyer behavior - Classification of buyers - Buying motives - rational and emotional; Method to Identify factors influencing purchase of a product - Analysis of consumer's profile, Meaning of Sales management- Functions- Organization structure - Sources and Procedure of Recruitment and Selection of Sales force, Training, and Motivation Rewards in selling - financial and non-financial rewards; Methods of training of salesmen. Specialized Salesman - Auctioneer, Insurance Salesman, Travelling, Real Estate, Export, Travel & Tourism Agency Salesman etc.

Instructional Strategies

A variety of instructional approaches and learning materials will be utilized for curriculum transactions. The instructional strategies that would be adopted will include but not limited to the following:

- Interactive lecture
- Group discussion
- Role Playing
- Case Studies
- Discussion Strategies
- Experiential Learning
- Learner-centred Teaching
- Problem-Based Learning
- Teaching with Cases
- Team-Based Learning
- Quizzes
- Writing Assignments
- Audio and video programmes
- Teleconferencing and Video-conferencing
- Group projects
- Surveys

Learning Resources

- Reference Books
- Journals
- Periodicals
- Educational Websites
- Online courses
- Graphs
- Charts
- Maps

Contact Programme Activities

UNIT -I: Introduction Marketing

- To visit market and list out available brands of selected consumer products (such as toothpaste, detergents, tea, coffee, mobile phones, shampoos, shaving creams, toilet soap, vegetable, ghee, oil, electrical bulbs, shoes, ceiling fans, washing machines, refrigerators, colour T.V., bicycle, etc.) and classify them into different categories such as durable and non-durable; convenience,



shopping and specialty etc. This may be followed by group discussion on important characteristics of the distribution of each category of the product.

- Visit to some retail establishment to find out the channels through which selected consumer products (a list may be developed) reach the ultimate consumers. This may be followed by a group discussion on the role of various intermediaries in marketing of goods and services.

UNIT -II: Marketing Mix

- Visit to the office of a manufacturer/marketer of some consumer/ industrial goods to discuss the distribution channels used by him, in order to make his product available to the buyers.
- Exercise in identifying distinguishing features of the packaging (containers) of few competitive brands of consumer products e.g. toothpastes, edible oils, snacks etc., followed by group discussion on their plus and minus points, as well as suggestions for improvements, if any.
- Students may be required to observe important features of the sales promotion schemes (such as sales contests/free samples, free gifts, coupons, economy packs, special discounts, etc.) being run for some consumer products in the market, by visiting the market/scanning the advertisements in newspaper/Radio/ T.V.
- Consumers may be asked to observe different ways in which a given product (of their choice) is being promoted in the market. This may be followed by a group discussion on the subject.

UNIT-III: Categories of Modern Marketing

- Visit to the wholesale marketing organization observe how marketing activities are going on.
- Visit to the retail marketing organization observe how marketing activities are going on and prepare a report.
- Visit to the international marketing organization observe how marketing activities are going on and prepare a report.
- Visit to the agricultural marketing organization observe how marketing activities are going on and prepare a report.
- Visit to the animal products marketing organization observe how marketing activities are going on and prepare a report.
- Visit to modern marketing organization and studied how the marketing is done with the modern techniques like mobile marketing, digital marketing, online marketing etc., and understand the operational procedures and prepare a report.
- Collection of data on prices, customers' profile (age, occupation, religion, educational background, income, social background, etc.) in respect of some of the competitive brands of specified products (say toilet soaps, tea leaves, etc.) with the help of a questionnaire administered to a select number of retailers/ consumers.
- Live 5 examples each of durable and Non-durable goods. Exercise in identifying conditions and warranties in respect of selected products.
- Practice in documentation (including covering letter) for bank-under D/P (documents against payment) and D/A (documents against acceptance). Students may be taken to a bank to help them understand all the procedures etc., in this regard.
- Exercise in weighing, measuring and counting.



- Practice in transportation formalities e.g. railway receipts and other documents used, say in case of loss in transit. In this connection, a visit to some transport companies may be organized to learn the formalities involved in the transportation activity.
- Visit to Transport Company/Railway station, Study how goods loaded etc. Study the kinds of damages to packaging, what improvements may be done?
- Study storage facilities - at retailer's level in respect of various products e.g. low life products like chocolates, milk, medicines, etc.
- Visit to warehouse for consumer products and study of its basic functions.
- Visit some direct marketers e.g. HOL and study direct marketing methods adopted.
- Collect data on 'SKUs' (stock-keeping units).
- Study the prices of several products (consumer + consumer durables). What discounts are applicable to various categories of buyers (e.g. institutions, govt. etc.)
- Distinguish between products having MRP printed on package and those having price of product only + extra local taxes e.g. (octroi, S.T. etc.) why is this done? How is the consumer affected?
- Visit to retail organization/firm and study the packaging, Labeling of several consumer products. What information is provided? What more information is necessary? Which Indian Act mandates the provision of such information? Does information provided conform to act in letter spirit?

UNIT-IV: Elements of Salesmanship

- Survey of friends, relatives, neighbors, etc., to find out their feelings about selling as a career.
- Survey of one or two newspapers/magazines to find:
- Personal qualifications and qualities required prescribed by different firms for the recruitment of salesmen.
- Duties and responsibilities of the sales personnel.
- Alternatively, a field visit to different types of sales organizations may be organized to collect information from managers in respect of qualifications and qualities required, duties and responsibilities of a salesman.
- Discussing relevant cases/ audio-visual sales presentation to evaluate the following:
- Features of the product which is introduced to the customers;
- Handle the promotional support;
- Handle the objections with respect to price, durability, competitive disadvantages, etc., and making follow-up calls;
- Close the sale – obtain the order, counsel, assurance and perform goodwill duties, etc.
- Role play exercise in communication and persuasion in some common situations, for example:
- A non-smoker tries to persuade a smoker to stop smoking;
- A consumer durable product's (say T.V., Radio, washing machine) salesman presenting his company's product to prospective buyer's/handling customer's objections.
- Field visit to some retail outlet to observe selling techniques used by salesmen, followed by a discussion.



UNIT-V: Sales Management

- Field visit to interview sales/ purchase manager of some organization to find out some of their recent purchases and the factors influencing the same as also the role played by the salesman in this regard.
- Simulation practices in suggestive selling - offering a substitute or economy pack or other product in the shop; or alternatively, a successful salesman sales manager may be interviewed to know his personal experiences about the use of suggestive selling, handling of objections, (say what objections are most difficult to answer), plan for the sales presentation, etc.
- Analyze effects of sales promotion schemes on products.
- List out 10 measures to promote sale of durable and non-durable products.

Field Visits

Visit a wholesale store and observe the following aspects Location, Site, Mother block, Office building, Store Layout, Arranging products, Store Design, Signage, Display of Products, Arranging Products into big Gondolas, Billing Counter, Baggage of Products, Information Counters, etc. The following are the Organisations for arranging the field visits:

1. Wholesale dealers
2. Retail shop establishment
3. Departmental stores
4. Super bazaar /janta bazaars
5. Consumers Co-operative Stores
6. Dairy Development Corporations
7. Maintenance Service Organizations
8. Companies of marketing consumers durable goods
9. Companies of marketing consumer non-durable goods
10. Handloom Development Corporations
11. Arts & Crafts emporiums
12. Advertising agencies
13. Export marketing organizations
14. Company's dealing in auction sales
15. Life Insurance Companies
16. General Insurance Companies
17. Real estate agents - Property dealers, Brokers
18. Tourism and Travel agencies
19. Courier services companies
20. Share brokers, Investment agents
21. Hotels & Restaurants ('Front Desk' Reception)
22. Direct marketing organizations such as Mail Order houses, Home shopping services, Tele-Marketing
23. Fares & Exhibitions
24. Computer/ Desk Top Publishing organizations
25. Multi media set-ups
26. Market Research Organizations
27. Malls and Big Bazaars
28. Packaging Agencies
29. Cyber Companies and Internet Cafe's
30. Agricultural Farms

31. Cooperative Marketing Societies

Assessment Methods

Paper will be assessed based on continuous as well as end of the term examinations.

The continuous will include quizzes, class test, seminars, assignments, practical's, simulation activities, presentations, oral examinations as well as demonstrations. While end of the term examination will include written theory examination, practical, presentations, report writings as well as viva-voce examination. Wherever required and feasible, other assessment methods including the Computer based assessment methods will also be used.

Portfolio and other individual material/ product developed and prepared during the term work will also be used for assessment purposes.

Suggested Readings

Patel, I.S.K. 'Salesmanship and Publicity' Published by Sultan Chand & Sons, Delhi.

Davar, Rustom, S., 'Salesmanship and Publicity' Published by Progressive Corporation Pvt.Ltd., Bombay.

Kirpatrick, E.A., Salesmanship Published by D.B. Taraporvala Sons & Co. Pvt. Ltd., Bombay.

Satyanarayan, M., Salesmanship, Sales Management and Advertising, by Vora & Co., Publisher Pvt. Ltd., Bombay.

Raussell, Fedric A., Beach, Frank H., Text book of Salesmanship, Published by McGraw Hill Ltd. (Indian Edition), New Delhi.

S. Neelamegham 'Marketing in India', Published by Vikas Publishing House Pvt. Ltd. New Delhi.

Gandhi J.C.' Marketing - A Managerial Introduction', Published by Tata McGraw Hill Publishing Co. Ltd., New Delhi.

Ramchandran, 'Field Sales Management', Published by Allied Publishers Pvt. Ltd.

Vaid D.K., 'Management Prospective on Sales Force Development' Published by Common Wealth Publishers, New Delhi.

J.C. Sinha, 'Principles of Marketing & Salesmanship,' Published by S. Chand & Co., Delhi.

S.A. Sherlekar, 'Marketing & Salesmanship', Published by Himalaya Publishing House, Delhi.

Rajan Nair, 'Marketing,' Published by Sultan Chand & Sons, Delhi.

C.N. Santakki and R.G. Deshpande, 'Marketing, Salesmanship and Advertising', Published by Ravi Chnadra Publications, Belgaum.

Acharya B.K. and Govekar P.B., 'Marketing and Sales Management', published by Himalaya Publishing House, Delhi.

Ramaswamy & Namakumar, I 'Marketing Management', published by McMillan India, 1995.

Ramanath Majumdar 'Product Management,' Prentice Hall Publications.

Arif Sheikh & Kaneez Fatima, (2012), Himalaya Publishing House, Mumbai.

Phillip Kotler, (1988), Marketing Management- Analysis, Planning, Implementation & Control, Sixth

Edition, Prentice Hall of India, Pvt. Ltd. New Delhi

Charles Lamb, Joe Hair, Carl McDaniel, (2008), Essentials of Marketing, Cengage Learning. p. 363.



Paper Code: DVET 204 - RE
Paper Title: RETAIL MARKETING MANAGEMENT
Credits: 04
Recommended Study Hours: 120
Total Marks: 130

Rationale

Retailing is leading business activities register a remarkable transformation. Till a few years ago, we bought most of daily use products from small shops in our neighbourhood or a close by market. Generally the shop keeps sit in the shop and sell goods either individual as a sole proprietor with help of few assistants. In last few years, however, the concept of large departmental stores and malls has been introduced, which also provide the same products.

The retail industry is divided into organised and unorganized sectors. Organised retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate-backed hypermarkets and retail chains, and also the privately owned large retail businesses. Unorganized retailing, on the other hand, refers to the traditional formats of low-cost retailing, like, the local kirana shops, owner manned general stores, paan/beedi shops, convenience stores, hand cart and pavement vendors, etc.

A retailer is one who stocks the manufactured goods and is involved in the act of selling to the final customer or consumer, at a margin of profit. Retailing is the last link that connecting the individual consumer with the manufacturing and distribution chain. It adds value in terms of bulk breaking and providing a wide variety of goods and services to customers as per their needs.

To-day, the traditional formats like hawkers, grocers and paan shops co-exist with modern formats like super-markets, departmental stores, hypermarkets, shopping malls and non-store retailing units such as multi-level marketing and teleshopping. Retailer's ranges in size from small, independent and owner- operated shops to national and international giant categories. Due to the increasing income levels, new products, standard of living, competition in the market and increasing consumption patterns of customer have contributed for the demand creation of these type stores.

This industry offers ample opportunities and has room for everyone starting from entry level to senior management level. This includes positions like sales associate, cashier, store stock associate, and stock receiver. These positions are typically entry points into retail careers. Retail professionals in the store operations career area oversee overall store operations and profits. They include Head of Store Operations, Regional Executive, and District level executive. These are higher-level positions, but after some years of experience and acquiring additional qualifications one can be placed in such positions. The store manager or management team has responsibility ranging from departmental to overall establishment. Managers at all levels supervise and assist sales and other employees. Additional responsibilities, depending upon store/company size and management level include opening and closing the store, staffing, administration and financial functions.

In this subject we covered retail organization and management includes introduction to retailing, retail organization and management, human resource management in retailing, store planning, design and layout in retailing, office procedures and communication in retailing. We also covered fundamentals of retail marketing management which provides introduction to retail marketing, factors influencing consumer behaviour in retailing, retailing strategy and marketing mix in retailing. We discussed



fundamentals of retail sales management which covers introduction to sales management, sales promotion strategies qualities of good sales persons for handling queries and retail merchandising strategies. We introduce the retail inventory and supply chain management includes introduction to inventory management in retailing, methods of stock valuation and recording, effective inventory management, modern methods of inventory management and disposal system. We also covered supply chain management (SCM), steps of SCM in retailing, advantages and limitations of supply chain management. We elaborated about e-commerce and customer relationship management (CRM) which covered introduction to e-commerce and e-retailing, customer loyalty schemes, customer relationship management process, customer retention strategies, handling customer grievances and electronic customer relationship management.

Learning Outcomes

On completion of this module, trainees will be able to:

- Describe the retailing and its organization.
- Explain the human resource management in retailing.
- Develop the store planning design and layout in retail.
- Follow the office procedures and communication in retailing.
- Explain retail marketing and types of retail formats.
- Identify the factors influencing consumer behaviour in retail.
- Implement retailing strategies and marketing mix in retailing.
- Describe management information system in retailing.
- Perform sales management techniques and selling process in retail sales management.
- Select and implement the sales promotion strategies.
- Identify the features of salesmanship and qualities of a good sales person.
- Demonstrate retail merchandising strategies and consumer psychology.
- Evaluate and appreciate the person's tasks in retail sales management.
- Describe the usefulness of inventory management in a retail business.
- Maintain various methods of stock valuation and recording of stocks.
- Appreciate and adopt modern methods of inventory management.
- Demonstrate the components of supply chain management in retailing.
- Evaluate the inventory and supply chain management system in a retail business.
- Describe e-commerce and electronic data processing in retailing.
- Design the on line marketing and e-payment systems in retail business.
- Classify types of customers, customer relations and loyalty schemes in retail business.
- Handle the customer grievances and their retention in retail business.
- Appreciate and usefulness of e-commerce and online retail business in our country.
- To acquaint the trainees with modern marketing aspects in retailing such as e-commerce, e-retailing, online marketing etc.

Unit Contents

Unit I: RETAIL ORGANIZATION AND MANAGEMENT

Introduction to Retailing, organized and unorganized retail business, Retail Organization and Management, Human Resource Management in Retailing, Store Planning, Design and Layout in Retailing, Office Procedures and Communication in Retailing, Retail Ethics and Social Responsibility

Unit II: FUNDAMENTALS OF RETAIL MARKETING MANAGEMENT

Introduction to Retail Marketing, Concepts of Retail Marketing, Types of Retail Formats, Functions of Retailers, Factors Influencing Consumer Behaviour in Retailing, Market Segmentation and Targeting, Retail Branding and Positioning, Retailing Strategy and Marketing Mix in Retailing – Product Mix, Price Mix, Promotion Mix, Place Mix, Process Mix, Peoples Mix and Physical Evidence Mix, Market Research and MIS in Retail

Unit III: FUNDAMENTALS OF RETAIL SALES MANAGEMENT

Introduction to Sales Management, Concepts of Retail Sales Management, Selling Process, Sales Promotion Strategies, Salesmanship, Qualities of Good Sales Persons for Handling Queries, Retail Merchandising, Merchandise Strategies, Merchandising & Consumer Psychology, Sales Team Management, Sales Techniques and Skills, Sales Performance Evaluation, Sales Technology Tools

Unit IV: RETIAL INVENTORY AND SUPPLY CHAIN MANAGEMENT

Introduction to Inventory Management in Retailing, Role of Inventory Supervisor in Retail, Inventory Planning and Control, Shortages and Overages in Retail, Methods of Stock Valuation and Recording, Effective Inventory Management, Modern Methods of Inventory Management and Disposal System, Introduction to Supply Chain Management (SCM), Distribution strategy in SCM, Principles of SCM, Participants in the Process of SCM, Steps of SCM in Retailing, Advantages and limitations of Supply Chain Management, Technology in Supply Chain Management

Unit V: E-COMMERCE AND CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Introduction to E-commerce, Digital Marketing for E-commerce, Electronic Data Processing, E- retailing, E-Payment System, Online Marketing, Types of Customers in Retail, Customer Loyalty Schemes, Customer Relationship Management Process, Customer Retention Strategies, Handling Customer Grievances and Electronic Customer Relationship Management, Omni channel Retailing



Instructional Strategies

A variety of instructional approaches and learning materials will be utilized for curriculum transactions. The instructional strategies that would be adopted will include but not limited to the following:

- Interactive lecture
- Group discussion
- Role Playing
- Case Studies
- Discussion Strategies
- Experiential Learning
- Learner-centred Teaching
- Problem-Based Learning
- Teaching with Cases
- Team-Based Learning
- Quizzes
- Writing Assignments
- Audio and video programmes
- Teleconferencing and Video-conferencing
- Group projects
- Surveys

Learning Resources

- Reference Books
- Journals
- Periodicals
- Educational Websites
- Online courses
- Graphs
- Charts
- Maps

Contact Programme Activities

Unit I: RETAIL ORGANIZATION AND MANAGEMENT

1. Visit the Wholesale and Retail Organizations to collect information on Trade Practices and identify the difference.
2. Visit the Retail Formats such as Push cart vendor, Footpath vendor, neighborhood shops (Kirana Shops), traditional retail shops, Departmental Stores, semi modern retail format, modern retail format and list out the major differences in trade practices of above formats.
3. Visit nearby retail shop and collect information about licenses and legal formalities to establish and operate.
4. Collect information from retailing outlet about sources of financing, terms and conditions in getting finance from nearby retail organizations.
5. Observe human resource practices in retail outlet.

6. Identify store design and physical facilities.
7. Identify display strategies of goods at retail outlet.
8. List out managerial practices for day to day operations of the retail outlet.
9. Duplicate and collate documents correctly.
10. Study process of incoming and outgoing office mails.
11. Carry out filing tasks appropriate to requirements.
12. Locate information found in common reference sources.
13. Classify the office correspondence and practice it.
14. Prepare the formal letters, receive, records and circulate office information.
15. Maintain incoming and outgoing mail and petty cash activities.

Unit II: FUNDAMENTALS OF RETAIL MARKETING MANAGEMENT

1. Visit to a trading firm like in APMC yard and observe different marketing functions executed such as buying, selling, grading, packaging, storage, transportation, financing etc.
2. Identify the consumer behavior at retail shops.
3. Conduct survey on purchase behavior / store loyalty / brand loyalty / customer satisfaction and choice of a product.
4. Identify the factors influencing for buying decisions in retailing.
5. List out promotional activities undertaken at retail outlets by companies.
6. Observe product range and store brands at retail outlets.
7. List out any product price range and price fixation method at retail stores.
8. Study how place distance will influence cost of the product and services.
9. Find out importance of Process, People and Physical Evidence in retail marketing management.
10. Compare special features of Franchise with old retail outlets. .

Unit III: FUNDAMENTALS OF RETAIL SALES MANAGEMENT

1. List out important companies involved in personnel selling, products handled and popular area to meet the customer (home, office, or at bazaar).
2. Practice the art of personal selling.
3. Take part in personal selling in a company along with regular sales persons observe the communication skills, convincing to customers.
4. Identify the compensation elements to sales personnel.
5. Observe job rotation in personnel selling and discuss its importance.
6. Performing duties/functions of selling.
7. Practice each and every function of selling.
8. Identify merchandise skills and practices for sourcing the brands of products.
9. Observe the merchandise strategies at retail outlet.
10. Establish / conduct a retail outlet at fair / festivals/ exhibitions organized in your place.
11. Open retail Counter at institution/organization/family fest for any goods / services.
12. Make a detail note on out of store retailing by home delivery, institutional supply and long term relationship with the old customers.
13. Collect information on different methods of training and orientation to salesmen at retail outlets, nearby your place.
14. Classify various types of customers and their buying motives.
15. Locating target group of consumers/firms/organizations and observing their buying behavior.

Unit IV: RETAIL INVENTORY AND SUPPLY CHAIN MANAGEMENT

1. Visit stores / warehouses and prepare a report on procedures involved to manage the inventory based on observations.
2. Draw a chart / design suitable for warehouse.
3. Identify factors considered for location of warehouse.
4. Observe security measures for inventory including social security.
5. List out the phases of inventory logistics.
6. Observe the practices followed at retail outlet relating to inventory valuation.
7. List out strategies used by retail outlets to balance inventory levels.
8. Identify supply chain management process at retail outlets.
9. Practice to manage inventory keeping techniques and warehousing management.
10. Observe the cold chain management at retail outlets.
11. List out the procedure / techniques of classification of inventory
12. Prepare a bin card for retail outlet to FMCG
13. Observe the trends to dispose in modern methods of inventory.
14. List out the concession to social causes at retail outlets.
15. Observe modern techniques to enhance the life of inventory.

Unit V: E-COMMERCE AND CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

1. Visit some of the e-commerce sites.
2. Collect information about on-line action of air tickets.
3. Visit and collect information on DELL computers regarding purchase, Amazon.com
4. Visit some of the online books selling vendors and if possible purchase some of the books.
5. Visit to the online marketing firm and observe how to handle the retail marketing aspects through online.
6. Identify the customer relationship acquired by the retail shop.
7. Observe after sales strategies at retail outlets.
8. Observe the complaints handling register at retail outlets.
9. Collect information on electronic customer relationship in retail outlets and identify the differences between traditional customer relationships.
10. Understand the shop loyalty scheme for different types of customers.

Field Visits

Visit a retail store and observe the following these aspects Location, Site, Mother block, Office building, Store Layout, Arranging products in Racks, Store Design, Signage, Display of Products, Arranging Products into Gondolas, Billing Counter, Baggage of Products, Information Counters, etc. During the visit, students should obtain the following information from the owner or the supervisor or manager of the retail store:

1. Area under retail store and its layout
2. Types of retail stores
3. Type of racks used
4. Store layout and design
5. Goods receiving procedure
6. Storage of goods
7. Maintain stock levels

8. Communication between sales persons and customers
9. Communication between sales person and other stakeholders of the retail store
10. Segmentation of products
11. Arranging products in racks, Gondolas etc.
12. Types of signage's its usefulness
13. Duties and responsibilities of store operations assistant
14. Traditional billing system
15. Computerised billing system
16. Manpower engaged
17. Display of products
18. Total expenditure of retail store
19. Total annual income
20. Profit/Loss (Annual)
21. Any other information

Assessment Methods

Paper will be assessed based on continuous as well as end of the term examinations.

The continuous will include quizzes, class test, seminars, assignments, practicals, simulation activities, presentations, oral examinations as well as demonstrations. While end of the term examination will include written theory examination, practical, presentations, report writings as well as viva-voce examination. Wherever required and feasible, other assessment methods including the Computer based assessment methods will also be used.

Portfolio and other individual material/ product developed and prepared during the term work will also be used for assessment purposes.

Suggested Readings

David Gilbert, (2000), Retail Marketing Management, Prentice Hall Publications an impact of Pearson Education, New Delhi.

Andrew J. Newman & Peter Culten, (2002), Retailing: Environment & Operations, Cengage Learning India Pvt. Ltd., New Delhi.

Madhukant Jha, (2009), Retail Management, Gennext Publiction, New Delhi

Patrick M. Dunne, Robert F. Lusch & david A. Gni Hith, (2007), Retailing, Fowth Edition, Akash Press, New Delhi.

Gibson G. Vedamani, (2007), Retail Management, Functional Principles and Practices, Jaico Publishing House, Mumbai.

Suja Nair, (2011), Retail Management, Himalaya Publishing House, Mumbai.

D.P. Sharma, (2009), E-Retailing-Principles and Practice, Himalaya Publishing House, Mumbai.

Arif Sheikh & Kaneez Fatima, (2012), Himalaya Publishing House, Mumbai.

R.S. Tiwari, (2009), Himalaya Publishing House, Mumbai.

1Sumit Kati, (2010), Himalaya Publishing House, Mumbai.

- 1J.K. Sachdeva & Abhishek Sachdeva, (2011), Mathematics for Indian Retail Business, Himalaya Publishing House, Mumbai.
- M.N. Rudrabasvaraj, (2010), Dynamic Global Retailing Management, Himalaya Publishing House, Mumbai.
- Phillip Kotler, (1988), Marketing Management- Analysis, Planning, Implementation & Control, Sixth Edition, Prentice Hall of India, Pvt. Ltd. New Delhi
- C. Mohan Juneja, R.C. Chawla, K.K. Saxena, (1999), Elements of Book Keeping, Kalyani Publishers, Ludhiyana.
- Harper, Douglas, (2008), "Retail", Online Etymology Dictionary.
- Ferrara, J. Susan, (2014), "The World of Retail: Hardlines vs. Softlines", Value Line.
- Time, Forest, (2014), "What Is Soft Merchandising?", Houston Chronicle.
- Charles Lamb, Joe Hair, Carl McDaniel, (2008), Essentials of Marketing, Cengage Learning. p. 363.
- William M Pride, Robert James Hughes, Jack R. Kapoor, (2011), Business, Cengage Learning. ISBN 978-0538478083.
- Jones Lang LaSalle, (2014), Retail Realty in India: Evolution and Potential. p. 6.
- Deloitte, (2014), "Global Powers of Retailing 2014", Retrieved March 2014.
- Mohammad Amin (2007), Competition and Labor Productivity in India's Retail Stores, p.1. World Bank. p. 57.
- Steven Greenhouse, (2012), "A Part-Time Life, as Hours Shrink and Shift", The New York Times.
- Philip H. Mitchell (2008), Discovery-Based Retail, Bascom Hill Publishing Group ISBN 978-0-9798467-9-3



Paper Code - DVET 203 - AU
Paper Title: AUTOMOBILE TECHNOLOGY DEVELOPMENT
Total Credits: 3
Recommended Study Hours:120
Total Marks: 100

Rationale

Automobile engineering encompasses a specialized field of engineering that delves into the intricacies of designing, manufacturing, and operating various types of vehicles, including motorcycles, cars, buses, and trucks. This comprehensive course provides in-depth knowledge about the mechanical systems of automobiles and emphasizes the importance of proper maintenance. It also equips aspiring educators with the expertise to impart valuable insights about automobiles in secondary vocational education.

Learning Outcomes:

Upon completion of this course, participants will achieve the following learning outcomes:

1. Attain a comprehensive understanding of the latest advancements in technology and the burgeoning trends in the Automobile Technology sector.
2. Explore and assess the innovative practices within the Automobile Sector.
3. Conduct a detailed analysis of the Automobile Industry, including market trends and competitive landscape.
4. Evaluate the impact of "Made in India" initiatives on the Automobile Sector.
5. Gain insights into the development of e-content specific to the Automobile Sector.
8. Examine the utilization of Industrial robotics in Automobile manufacturing processes.
9. Acquire proficiency in AutoCAD for technical design and drafting.
10. Explore the principles of tools designing for Automotive components, encompassing aspects of functionality and efficiency.

Units and Unit Contents

UNIT 1: INNOVATION AND DEVELOPMENT IN AUTOMOBILE SECTOR

- 1.1 Introduction
- 1.2 Learning Objectives
- 1.3 Importance of Innovation in Automobile Sector
- 1.4 New Development in Automobile Sector
- 1.5 Safety in Automobile Vehicle
- 1.6 References

UNIT 2: BASIC AUTOMOBILE

- 2.1 Introduction
- 2.2 Learning Objectives
- 2.3 Important Features of a Car
- 2.4 Classification of Vehicle based on Types
- 2.5 Classification of Vehicle based on Fuel
- 2.6 Importance of Transmission System in a Vehicle
- 2.7 Role of Car Colour



2.8 Special Features in Car

2.9 References

UNIT 3: MAJOR SYSTEM AND COMPONENT OF AUTOMOBILE

3.1 Introduction

3.2 Learning Objectives

3.3 Chassis and Auto Body

3.4 Automobile Body or Superstructure

3.5 Engine and its Components

3.6 Lubrication System

3.7 Cooling System

3.8 Fuel Supply System

3.9 Transmission System

3.10 Steering System

3.11 Suspension System

3.12 Brake

3.13 Electrical or Electronic System

3.14 Air Conditioning in Car

3.15 References

UNIT 4: AUTOMOBILE SERVICE TOOLS

4.1 Introduction

4.2 Learning Objectives

4.3 Hand Tools

4.4 Measuring Tools

4.5 Electrical Tools

4.6 Special Tools

4.7 Service Workshop Equipment

4.8 References

UNIT 5: INDUSTRIAL ROBOTICS

5.1 Introduction

5.2 Learning Objectives

5.3 Industrial Robots

5.4 PLC (Programmable Logic Controller)

5.5 Use of PLC in the Automotive Industry

5.6 Role and Function of Supervisory Control and Data Acquisition (SCADA)

5.7 References

Instructional Strategies

1. Engage students through presentations and interactive lectures.
2. Foster critical thinking with reading assignments and discussions.
3. Apply theory to real-world scenarios through challenging assignments.
4. Analyse complex issues using case studies.
5. Evaluate comprehension and skills with rubrics and portfolios.
6. Monitor progress with quizzes and projects.

Learning Resources (5)

1. Introduction to Automotive Engineering by R. Sakthivel, Faisal O. Mahroogi, S. Narayan, S. Abudbaker, M. U. Kisan, Youssef Alammari , April 2019, Wiley-Scrivener, ISBN: 9781119479802
2. Vehicle Dynamics by Thomas D. Gillespie
3. Automotive Engineering (Powertrain, Chassis system & Vehicle body) by David A. Crolla
4. Terramechanics and off-road Vehicle Engineering by J. Y. Wong
5. I C Engines by V. Ganeshan
6. Automotive Chassis by P. M. Heldt
7. The Motor Vehicle by Newton & Steed
8. <https://icat.in/> The International Centre for Automotive Technology (ICAT)
9. <https://www.araiindia.com/> Automotive Research Association of India
10. <https://morth.nic.in/ais>
11. <https://www.asdc.org.in/>
12. <https://www.dpstele.com/scada/applications-of.php>
13. <https://www.mouser.in/applications/>
14. <https://www.elprocus.com/scada-system-architecture-its-working/>

Contact Programme Activities (5)

1. Make a list of new developments in car technology.
2. Draw a hybrid vehicle with its feature.
3. List the importance of engine in an automobile.
4. Identify the safety devices used in Automobile Vehicle.
5. Make a list of active and passive safety devices.
6. Measure the various dimensions of a car mentioned in the module.
7. Show the main dimensions of a typical car using a simple sketch.
8. Make a list of hand tools used in the workshop.
9. Identify the different types of hand tools.
10. Make a list of measuring tools used in automobile workshops.
11. Identify the different types of measuring tools.
12. Identify the major component of any robot in a workshop.
13. Make a list of works performed by a robot in industries.
14. Make a drawing of PLC systems used in vehicle lighting systems.

Field Visit

Take students on a field trip to vehicle factories to see how cars are made. It helps them learn about vehicles in a fun way and see new technology up close. Also, visit the Service centre nearby your city.

Code - DVET 204 -AU
AUTOMOBILE SALES AND MARKETING
Recommended Study Hours:120
Total Credits: 3
Total Marks: 100

Rationale

Automobile Sales and Marketing is vital in the automotive industry, requiring skilled professionals. This course focuses on educating individuals about automobile sales and marketing strategies. It equips trainee teachers with knowledge to teach secondary vocational students about automotive sales and marketing.

Learning Outcomes

On completion of this Paper, trainees will be able to:

1. Get an overview of the sales and marketing components in this sector
2. Human resource personal involved in sales and marketing
3. Role of show room hostess
4. Role of sales executive dealer
5. Customer relation executive and its working
6. Customer retention
7. Promotion of sales of Automotive products

Units and Unit Contents

UNIT 1: BASIC AUTOMOBILE

- 1.1 Introduction
- 1.2 Learning Objectives
- 1.3 Important Features of a Car
- 1.4 Classification of Vehicle based on Types
- 1.5 Classification of Vehicle based on Fuel
- 1.6 Importance of Transmission System in a Vehicle
- 1.7 Role of Car Colour
- 1.8 Special Features in Car
- 1.9 References

UNIT 2 : INNOVATION IN AUTOMOBILE SALES AND MARKETING

- 2.1 Introduction
- 2.2 Learning Objectives
- 2.3 New Innovation
- 2.4 Components of Automotive Sales
- 2.5 Research in Automotive Sales (Automobile growth and air pollution)
- 2.6 Future of Car Sales
- 2.7 References

UNIT 3: AUTOMOTIVE MARKETING STRATEGY

- 3.1 Introduction
- 3.2 Learning Objectives



- 3.3 Driving Better Profit in Automotive
- 3.4 Automotive Marketing Strategy Analysis
- 3.5 Social Media and its Role in Marketing
- 3.6 Total Quality Management in Automobile Industry
- 3.7 References

UNIT 4: HUMAN RESOURCE PERSONNEL INVOLVED IN SALES AND MARKETING

- 4.1 Introduction
- 4.2 Learning Objectives
- 4.3 The Need of HR for Marketing
- 4.4 Product Marketing Team Members and its Role
- 4.5 References

UNIT 5: GENERATION OF SALES LEAD THROUGH TELEMARKETING

- 5.1 Introduction
- 5.2 Learning Objectives
- 5.3 Telemarketing
- 5.4 References

UNIT 6: SHOW ROOM HOST AND ROLE

- 6.1 Introduction
- 6.2 Learning Objectives
- 6.3 Role and Importance of a Showroom Host
- 6.4 References

INSTRUCTIONAL STRATEGIES

Various instructional approaches and learning materials will be utilised for curriculum transactions. The instructional strategies that would be adopted will include but not be limited to the following:

- Interactive lecture
- Group discussion
- Role Playing
- Discussion Strategies
- Experiential Learning
- Games/Experiments/Simulations
- Inquiry-Guided Learning
- Interdisciplinary Teaching
- Learner-centered Teaching
- Mobile Learning
- Hybrid Course
- Problem-Based Learning
- Teaching with Cases
- Team-Based Learning
- Quizzes
- Writing Assignments
- Audio and video programmes
- Teleconferencing and Video-conferencing



- Group projects
- Surveys

Learning Resources

1. auto.indiamart.com/auto-technology
2. www.automobileindia.com/consumer-guide/automobile-technology
3. auto.indiamart.com/auto-technology
4. books.google.com/books/about/Automobile_Engineering.html
5. www.bikeadvice.org
6. www.wikipedia.com
7. <http://psscive.ac.in/publication/studenttextbook>
<https://www.ibef.org/industry/autocomponents-ind>

Contact Programme Activities (5)

1. Measure the various dimensions of a car mentioned in the module.
2. Show the main dimensions of a typical car using a simple sketch.
3. Visit a car showroom and note down the features of a car.
4. Take a photograph of new special cars seen near your school/locality.
5. Identify the engine fitted in a vehicle.
6. Prepare a list of parts of an engine fitted in a vehicle or workshop.
7. Identify the colour of a minimum of 5 cars in your area.
8. Make a list of colours used in automotive vehicles.
9. Make a list of the latest innovations in automobile technology.
10. Make a list of the sales team of a car showroom.
11. Draw a flow chart of the marketing analysis model.
12. Draw a chart of product selling in the market.
13. Identify and list the various automotive promotion websites.

Field Visit

1. Visit the nearby fuel filling station and make a list of fuel being sold in the station along with its prices.
2. Visit the market and collect the data of product feedback.



Paper Code: PGDVET 203 -AP
Paper Title: Hand Embroidery
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale: (100 Words)

Hand embroidery in India holds a rich legacy and continues to thrive in both traditional and contemporary contexts. With its intricate designs and skilled craftsmanship, it serves as a significant cultural and economic asset. In the academic realm, studying its scope entails exploring its historical significance, regional variations, socio-economic impact, and evolving market trends. Understanding its scope aids in preserving cultural heritage, fostering artisan livelihoods, and innovating sustainable fashion practices. The module will help students with Application of vocational skills in the world of work-related environment.

Learning Outcomes: (5 Numbers)

On completion of this Paper, trainees will be able to:

1. Describe and Demonstrate elements and principles of design with color theories
2. Define types and transferring methods of tracing the design
3. Identify and use the tools and materials for hand embroidery
4. Perform the various basic, advance and Indian traditional embroideries
5. Explain finishing and packaging of hand embroidered products

UNIT CONTENT

UNIT 1: INTRODUCTION TO APPAREL, MADE-UPS AND HOME FURNISHING (AMHF) SECTOR

- 1.1 Introduction
- 1.2 Objectives
- 1.3 About the Sector
- 1.4 About the Job Roles
- 1.5 Summary
- 1.6 Self-Evaluation Exercises
- 1.7 Answer Keys to Self-Check Exercises
- 1.8 References
- 1.9 Suggested Readings

UNIT 2: DESIGN CONCEPT

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Definition of Design



- 2.4 Types of Design
- 2.5 Sources of Information
- 2.6 Definition of Motif
- 2.7 Arrangement of Motif
- 2.8 Enlargement and Reduction of Design
- 2.9 Summary
- 2.10 Self-Evaluation Exercises
- 2.11 Answer Keys to Self-Check Exercises
- 2.12 References
- 2.13 Suggested Readings

UNIT 3: ELEMENTS AND PRINCIPLES OF DESIGN

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Elements of Design
- 3.4 Colour Concept
- 3.5 Dimensions of Colour (Hue, Value and intensity)
- 3.6 Colour Schemes
- 3.7 Principles of Design
- 3.8 Summary
- 3.9 Self-Evaluation Exercises
- 3.10 Answer Keys to Self-Check Exercises
- 3.11 References
- 3.12 Suggested Readings

UNIT 4: BASICS OF HAND EMBROIDERY

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Historical Background of Hand Embroidery
- 4.4 Embroidery Terms
- 4.5 Tools and Materials
- 4.6 Summary
- 4.7 Self-Evaluation Exercises
- 4.8 Answer Keys to Self-Check Exercises
- 4.9 References
- 4.10 Suggested Readings

UNIT 5: TECHNIQUES OF TRANSFERRING THE DESIGN ON FABRIC

- 5.1 Introduction
- 5.2 Objectives



5.3 Material Required for Tracing the Design on the Fabric

5.4 Different Types of Tracing Methods

5.5 Summary

5.6 Self-Evaluation Exercises

5.7 Answer Keys to Self-Check Exercises

5.8 References

5.9 Suggested Readings

UNIT 6: BASIC AND ADVANCE STITCHES OF HAND EMBROIDERY

6.1 Introduction

6.2 Objectives

6.3 Basic Flat and Loop Stitches

6.4 Advance Flat and Loop Stitches

6.5 Combination of Embroidery Stitches and their Application

6.6 Summary

6.7 Self-Evaluation Exercises

6.8 Answer Keys to Self-Check Exercises

6.9 References

6.10 Suggested Readings

UNIT 7: TRADITIONAL EMBROIDERIES OF INDIA

7.1 Introduction

7.2 Objectives

7.3 Traditional Embroidery of Gujarat

7.4 Traditional Embroidery of Rajasthan

7.5 Traditional Embroidery of Punjab

7.6 Traditional Embroidery of Lucknow, Uttar Pradesh

7.7 Traditional Embroidery of Bengal

7.8 Traditional Embroidery of Karnataka

7.9 Traditional Embroidery of Kashmir

7.10 Traditional Embroidery of Himachal Pradesh

7.11 Summary

7.12 Self-Evaluation Exercises

7.13 Answer Keys to Self-Check Exercises

7.14 References

7.15 Suggested Readings

UNIT 8: FINISHING AND PACKING OF FINAL PRODUCTS

8.1 Introduction

8.2 Objectives



- 8.3 Embroidery Finishing Process
- 8.4 Packing
- 8.5 Summary
- 8.6 Self-Evaluation Exercises
- 8.7 Answer Keys to Self-Check Exercises
- 8.8 References
- 8.9 Suggested Readings

Instructional strategies: (10)

1. Class presentations/Interactive lectures
2. Reading and Q and A session
3. Assignments
4. Case Studies
5. Preparation of tools of assessment
6. Use of assessment techniques in classroom
7. Group and panel discussions
8. Developing a portfolio
9. Lab/Studio project
10. classroom activity based teaching and learning

Learning Resources: (5)

1. Textile/ Design Laboratory
2. Adda Workshop in DHSHM
3. Books from library
4. Computers for Research and Design
5. Learning materials

Contact Programme Activities: (5)

1. Develop Embroidery Khakhas and the placement schemes
2. Develop Hand Embroidery samples
3. Develop Traditional Hand Embroidery Samples
4. Develop hand embroidery product
5. Develop portfolio

Field Visit

Visit to industry and exhibitions.



Paper Code: PGDVET 204 AP
Paper Title: HAND EMBROIDERY- ADDAWORK
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale: (100 Words)

Hand embroidery, particularly Adda work, represents a highly intricate form of embellishment on garments, accessories, and various articles. In recent times, designers frequently incorporate Adda work into their collections, gaining popularity globally. Utilizing a pen-like needle resembling crochet, Adda work showcases delicate threadwork, enhancing the essence of hand embroidery. Historically labor-intensive, contemporary advancements in stitching techniques and increased artisan involvement have streamlined production. Prominent stitches in Adda work include chain stitch, butterfly stitch, paani filling stitch, mirror work, and others, with variations such as dabka work, zardozi work, French knot, and satin stitch expanding its repertoire. The module will help students with Application of vocational skills in the world of work-related environment.

Learning Outcomes: (5 Numbers)

On Completion of this Paper, trainee will be able to:

1. Explain terms related to adda/aari work
2. Describe elements and principles of design with color theories.
3. Identify and use tools and materials used for adda/aari work
4. Perform the various basic and advance stitches of adda/aari work
5. Explain finishing and packaging of products of hand embroidery-adda work

UNIT CONTENT

UNIT 1: INTRODUCTION TO APPAREL, MADE-UPS AND HOME FURNISHING SECTOR

- 1.1 Introduction
- 1.2 Objectives
- 1.3 About the Sector
- 1.4 About the Job Roles
- 1.5 Summary
- 1.6 Self-Evaluation Exercises
- 1.7 Answer Keys to Self-Check Exercises
- 1.8 References
- 1.9 Suggested Readings

UNIT 2: DESIGN CONCEPT

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Definition of Design
- 2.4 Types of Design
- 2.5 Sources of Inspiration



- 2.6 Definition of Motif
- 2.7 Arrangement of Motif
- 2.8 Enlargement and Reduction of Design
- 2.9 Summary
- 2.10 Self-Evaluation Exercises
- 2.11 Answer Keys to Self-Check Exercises
- 2.12 References
- 2.13 Suggested Readings

UNIT 3: ELEMENTS AND PRINCIPLES OF DESIGN

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Elements of Design
- 3.4 Colour Concept
- 3.5 Dimensions of Colour (Hue, Value and Intensity)
- 3.6 Colour Schemes
- 3.7 Principles of Design
- 3.8 Summary
- 3.9 Self-Evaluation Exercises
- 3.10 Answer Keys to Self-Check Exercises
- 3.11 References
- 3.12 Suggested Readings

UNIT 4: BASICS OF ADDA WORK

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Historical Background of Adda work
- 4.4 Terminology related to Adda-work
- 4.5 Tools used for Adda Work
- 4.6 Raw Material used for Adda Work
- 4.7 Summary
- 4.8 Self-Evaluation Exercises
- 4.9 Answer Keys to Self-Check Exercises
- 4.10 References
- 4.11 Suggested Readings

UNIT 5: TECHNIQUES OF TRANSFERRING THE DESIGN ON FABRIC

- 5.1 Introduction
- 5.2 Objectives
- 5.3 Material Required for Tracing the Design on the Fabric
- 5.4 Different Types of Tracing Methods
- 5.5 Summary



- 5.6 Self-Evaluation Exercises
- 5.7 Answer Keys to Self-Check Exercises
- 5.8 References
- 5.9 Suggested Readings

UNIT 6: BASIC AND ADVANCE STITCHES OF ADDA WORK

- 6.1 Introduction
- 6.2 Objectives
- 6.3 Fabric Fixation on Adda
- 6.4 Basic Adda work Stitches
- 6.5 Advance Adda work Stitches
- 6.6 Contemporary and Fancy Stitches
- 6.7 Summary
- 6.8 Self-Evaluation Exercises
- 6.9 Answer Keys to Self-Check Exercises
- 6.10 References
- 6.11 Suggested Readings

UNIT 7: FUSION OF TRADITIONAL EMBROIDERY WITH ADDA WORK

- 7.1 Introduction
- 7.2 Objectives
- 7.3 Combination of Embroideries
- 7.4 Placement, Highlighting and Combination of Stitches on Printed and Woven Fabrics
- 7.5 Summary
- 7.6 Self-Evaluation Exercises
- 7.7 Answer Keys to Self-Check Exercises
- 7.8 References
- 7.9 Suggested Readings

UNIT 8: FINISHING AND PACKING OF FINAL PRODUCTS

- 8.1 Introduction
- 8.2 Objectives
- 8.3 Embroidery Finishing Process
- 8.4 Packing
- 8.5 Summary
- 8.6 Self-Evaluation Exercises
- 8.7 Answer Keys to Self-Check Exercises
- 8.8 References
- 8.9 Suggested Readings

Instructional strategies: (10)

1. Class presentations
2. Interactive lectures



3. Reading and Q and A session in class
4. Assignments
5. Case Studies
6. Preparation of tools of assessment
7. Use of assessment techniques in classroom
8. classroom activity based teaching and learning
9. Group and panel discussions
10. Developing a portfolio and Lab/Studio projects

Learning Resources: (5)

1. Textile/ Design Laboratory
2. Adda Workshop in DHSHM
3. Books from library
4. Computers for Research and Design
5. Learning materials

Contact Programme Activities: (5)

1. Develop Embroidery Khakhas and the placement schemes
2. Develop Hand Embroidery Addawork samples (Thread Work)
3. Develop Hand Embroidery Addawork Samples (Bead work and Zardozi)
4. Develop hand embroidery Addawork product
5. Develop portfolio

Field Visit

Visit to industry and exhibitions.



Paper Code: PGDVET 203 - TH

Paper Title: Fundamentals of Tourism and Hospitality

Credit: 04

Recommended Study Hours: 120

Total Marks: 130

Rationale

"Fundamentals of Tourism and Hospitality" provides a comprehensive exploration of the multifaceted tourism and hospitality industry, guiding readers through its various dimensions and operational intricacies. Beginning with an introduction to the industry's historical evolution, economic significance, and fundamental principles, readers gain a contextual understanding of its evolution over time and its current global impact. Delving into the psychology behind travel behavior and motivations, the book uncovers the diverse factors influencing individuals' decision to travel, essential for tailoring experiences that resonate with guests' interests. By examining the operational sectors, including accommodation, food services, transportation, attractions, and destination management, readers develop a holistic understanding of how different components converge to deliver memorable guest experiences. A deep dive into hotel operations, covering management, guest services, housekeeping, revenue management, and marketing strategies, equips readers with practical insights into effectively managing hotel operations. Finally, focusing on personal and professional attributes such as customer service excellence, crisis management, resilience, and adaptability, the book emphasizes the qualities necessary for success in various roles within the industry. Through its structured approach and in-depth exploration, "Fundamentals of Tourism and Hospitality" prepares readers to thrive in the dynamic and ever-evolving landscape of tourism and hospitality.

Learning Outcomes:

- Understand foundational concepts and principles of tourism and hospitality
- Gain insights into tourism's historical evolution and economic significance
- Learn fundamental elements of hospitality service delivery
- Understand psychological factors driving travel behavior
- Identify diverse factors influencing travel decisions
- Tailor experiences to meet diverse traveler needs
- Explore operational sectors within tourism and hospitality
- Understand operational intricacies for memorable guest experiences
- Develop practical skills in hotel management and guest services
- Cultivate attributes like customer service excellence and resilience for hospitality success

UNIT AND UNIT CONTENTS

UNIT 1: INTRODUCTION TO TOURISM AND HOSPITALITY

- INTRODUCTION
- TYPOLOGY OF TOURISM
- HISTORICAL DEVELOPMENT OF TOURISM
- TRANSPORT DEVELOPMENTS
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 2: TOURISM PERSPECTIVES AND TRAVEL MOTIVATIONS

- TOURISM PERSPECTIVES

- TRAVEL MOTIVATIONS
- COMPONENTS OF TOURISM
- IMPORTANCE AND SCOPE OF THE INDUSTRY
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 3: OPERATING SECTORS OF TOURISM AND HOSPITALITY INDUSTRY

- TOURISM AND HOSPITALITY INDUSTRY
- TOURISM AND HOSPITALITY PRODUCT AND SERVICES
- OTHER TOURISM AND HOSPITALITY PRODUCTS AND SERVICES
- CHARACTERISTICS OF TRAVEL, TOURISM AND HOSPITALITY PRODUCTS AND SERVICES
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 4: HOTEL OPERATIONS

- TYPES OF HOTELS
- FUNCTIONAL AREAS OF A HOTEL
- MEAL PLANS, DISCOUNTS AND TAX
- CRISIS MANAGEMENT IN HOTEL OPERATION
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 5: ATTRIBUTES OF TOURISM AND HOSPITALITY PROFESSIONAL

- INTERPERSONAL SKILLS
- PROFESSIONALISM AND INTEGRITY
- GUEST FOCUS AND SERVICE EXCELLENCE
- RESILIENCE AND PERSONAL DEVELOPMENT
- SUMMARY
- SELF-EVALUATION EXERCISE

Instructional Strategies

A variety of instructional methods and learning materials will be utilized for curriculum transactions. The instructional strategies that would be adopted will include but not limited to the following:

- Lecture with Visual Aids
- Interactive Discussion
- Case Studies
- Guest Speakers
- Self-Evaluation Exercises
- Concept Mapping
- Group Projects
- Role-Playing
- Debates
- Lectures with Real-Life Examples
- Industry Visits
- Panel Discussions
- Comparative Analysis
- Simulations
- Workshops

Learning Resources

- Reference Books
- Journals
- Periodicals
- Educational Websites
- Online courses
- Graphs
- Charts
- Maps

Contact Program Activities

Contact program activities for the tourism and hospitality units include interactive lectures, workshops, panel discussions, and field trips to engage students with the content practically and experientially. Group presentations, debates, and role-playing exercises help explore travel motivations and industry perspectives, while industry visits and simulation exercises provide hands-on experience in hotel operations. Professional development is emphasized through mentorship programs, guest speaker sessions, and workshops on interpersonal skills and service excellence. Students participate in self-evaluation activities in collaborative settings, discussing their responses and development plans. These activities enhance understanding, practical application, and professional growth in the tourism and hospitality industry.

Field Visits

- Local Tourism Office
- Tourism and Hospitality Institution
- Hotel and restaurants
- Travel agent and tour operations
- Tourist Destinations and Sites

Assessment Methods

- Paper will be assessed based on continuous as well as end of the term examinations.
- The continuous will include quizzes, class test, seminars, assignments, practicals, simulation activities, presentations, oral examinations as well as demonstrations. While end of the term examination will include written theory examination, practical, presentations, report writings as well as viva-voce examination. Wherever required and feasible, other assessment methods including the Computer based assessment methods will also be used.
- Portfolio and other individual material/ product developed and prepared during the term work will also be used for assessment purposes.

Suggested Readings

- Hospitality Management: A Brief Introduction by Roy C. Wood (2015)
- Tourism: Principles and Practice by John Fletcher, Alan Fyall, David Gilbert, Stephen Wanhill (2005)



- Introduction to Hospitality Management by John R. Walker, Josielyn T. Walker (2020)
- Marketing for Hospitality and Tourism by Philip Kotler, John T. Bowen, James Makens (2013)
- The Business of Tourism Management by John Beech, Simon Chadwick (2006)
- Hotel Front Office Management by James A. Bardi (2010)
- Managing Quality Service in Hospitality: How Organizations Achieve Excellence in the Guest Experience by Robert C. Ford, Michael C. Sturman, Cherrill P. Heaton (2011)
- Human Resource Management in the Hospitality Industry: A Guide to Best Practice by Michael Boella, Alan Pannett (2013)
- Food and Beverage Management by Bernard Davis, Andrew Lockwood, Ioannis Pantelidis, Peter Alcott (2012)
- Hospitality Strategic Management: Concepts and Cases by Cathy A. Enz, Lilly M. Kuch, Joseph J. Raelin (2009)
- Tourism Management by Stephen Page, Peter Robinson (2012)
- Event Management in Leisure and Tourism: A Practical Guide by Chris Ryan (2003)
- Tourism Economics and Policy by Larry Dwyer, Peter Forsyth, Wayne D. Long (2010)
- Sustainable Tourism: Theory and Practice by David Weaver, Laura Lawton (2010)
- Crisis Management in Tourism by Eric Laws, Brian Faulkner, Gianna Moscardo (2006)



Paper Code: PGDVET 204 - TH

Paper Title: Advances in Tourism and Hospitality

Credit: 04

Recommended Study Hours: 120

Total Marks: 130

Rationale

Advances in Tourism and Hospitality offers a comprehensive exploration of the dynamic industry, guiding students through its diverse facets from historical roots to contemporary trends. The foundational section delves into the historical, sociological, and cultural underpinnings shaping tourism and hospitality, providing students with a solid framework to analyze industry complexities. Students then examine the economic aspects of tourism, gaining insights into supply-demand relationships, expenditure patterns, and destination competitiveness, essential for understanding tourism's economic impact on local and national economies. The exploration continues with a journey through global tourist destinations, from iconic landmarks to off-the-beaten-path gems, emphasizing destination management and sustainable practices. Special Interest Tourism delves into niche segments like adventure and culinary tourism, addressing both motivations and implications while stressing responsible tourism practices. Finally, a glimpse into industry innovation and emerging trends through case studies provides students with practical insights into successful business models and strategies for addressing contemporary challenges. Through this comprehensive exploration, "Fundamentals of Tourism and Hospitality" equips students with the knowledge and analytical tools to navigate the industry's complexities and contribute to its sustainable growth.

Learning Based Outcomes

- Understand the historical, sociological, and cultural foundations of tourism and hospitality.
- Develop analytical skills to assess industry trends and complexities.
- Explore the economic dynamics of tourism and its impact on economies.
- Gain knowledge of destination management and sustainable practices.
- Discover diverse global tourist destinations and their management.
- Analyze niche segments like adventure and culinary tourism.
- Emphasize responsible tourism practices for sustainability.
- Gain insights into industry innovation and emerging trends.
- Learn practical strategies for addressing contemporary challenges.
- Acquire skills for navigating the dynamic tourism and hospitality landscape.

UNIT AND UNIT CONTENTS

UNIT 1: FOUNDATIONS OF TOURISM AND HOSPITALITY

- EMERGING CONCEPTS IN TOURISM AND HOSPITALITY INDUSTRY
- FACTORS RESPONSIBLE FOR THE DRAMATIC GROWTH OF TOURISM AND HOSPITALITY INDUSTRY
- GENERATIONS OF MODERN TRAVELLER
- ADVANCEMENTS IN TOURISM AND HOSPITALITY INFRASTRUCTURE
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 2: TOURISM ECONOMICS

- INTRODUCTION TO TOURISM ECONOMICS
- ECONOMIC IMPACT OF TOURISM

- TOURISM DEMAND AND MARKET DYNAMICS
- GOVERNMENT INTERVENTION AND POLICY FRAMEWORKS
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 3: WORLDWIDE DESTINATIONS

- FAMOUS DESTINATIONS OF ASIA
- FAMOUS DESTINATIONS OF AFRICA
- FAMOUS DESTINATIONS OF ANTARCTICA AND EUROPE
- FAMOUS DESTINATIONS OF NORTH AND SOUTH AMERICA
- FAMOUS DESTINATIONS OF AUSTRALIA AND OCEANIA
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 4: SPECIAL INTEREST TOURISM

- ADVENTURE TOURISM
- CULTURAL AND HERITAGE TOURISM
- SUSTAINABLE TOURISM
- NEWER FORMS OF SPECIAL INTEREST TOURISM
- SUMMARY
- SELF-EVALUATION EXERCISES

UNIT 5: INNOVATIVE CASE STUDIES IN TOURISM AND HOSPITALITY

- CASE-1 AIRBNB: DISRUPTING THE ACCOMMODATION SECTOR
- CASE-2 DISNEY PARKS AND RESORTS: CREATING IMMERSIVE EXPERIENCES
- CASE-3 SINGAPORE TOURISM BOARD: DESTINATION BRANDING AND MARKETING
- CASE-4 MARRIOTT INTERNATIONAL: LOYALTY AND BRAND PORTFOLIO
- CASE-5 TRIPADVISOR: EMPOWERING TRAVELER REVIEWS AND RECOMMENDATIONS
- CASE-6 UBER: TRANSFORMING TRANSPORTATION AND MOBILITY
- CASE-7 MAKEMYTRIP: LEADING ONLINE TRAVEL AGENCY (OTA)
- CASE-8 OBEROI HOTELS & RESORTS: LUXURY HOSPITALITY EXCELLENCE
- CASE-9 KERALA TOURISM: PROMOTING RESPONSIBLE TOURISM
- CASE- 10 TAJ HOTELS: HERITAGE AND LUXURY HOSPITALITY
- SUMMARY
- SELF-EVALUATION EXERCISE

Instructional Strategies

A variety of instructional methods and learning materials will be utilized for curriculum transactions. The instructional strategies that would be adopted will include but not limited to the following:

- Lecture with Visual Aids
- Interactive Discussion
- Case Studies
- Guest Speakers
- Self-Evaluation Exercises
- Concept Mapping
- Group Projects
- Role-Playing

- Debates
- Lectures with Real-Life Examples
- Industry Visits
- Panel Discussions
- Comparative Analysis
- Simulations
- Workshops

Learning Resources

- Reference Books
- Journals
- Periodicals
- Educational Websites
- Online courses
- Graphs
- Charts
- Maps

Contact Program Activities

Contact program activities for the tourism and hospitality units include interactive lectures, workshops, panel discussions, and field trips to engage students with the content practically and experientially. Group presentations, debates, and role-playing exercises help explore travel motivations and industry perspectives, while industry visits and simulation exercises provide hands-on experience in hotel operations. Professional development is emphasized through mentorship programs, guest speaker sessions, and workshops on interpersonal skills and service excellence. Students participate in self-evaluation activities in collaborative settings, discussing their responses and development plans. These activities enhance understanding, practical application, and professional growth in the tourism and hospitality industry.

Field Visits

- Local Tourism Office
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Assessment Methods

- Paper will be assessed based on continuous as well as end of the term examinations.
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- Portfolio and other individual material/ product developed and prepared during the term work will also be used for assessment purposes.

Suggested Readings

- Kim, J.-Y., & Park, S. (2021). *Crisis Management and Recovery for Events: Impacts and Strategies*. Routledge
- Saarinen, J., Rogerson, C. M., & Manwa, H. (2020). *Tourism and the Sustainable Development Goals: From Theory to Practice*. Routledge.
- Yeoman, I., & McMahon-Beattie, U. (2021). *The Future of Tourism: Innovation and Sustainability*. Springer.



Paper Code: PGDVET 203 - BI
Paper Title: Indian Financial System
Total Credit: 04
Recommend Study Hours: 120
Total Marks: 130

Rationale:

The syllabus on the Indian financial system is meticulously designed to provide students with a robust understanding of the multifaceted scope of finance in India. It is structured approach begins by introducing students to the foundational aspects of the Indian financial system, including its structure and functions, laying a solid foundation for deeper exploration. As students' progress through the syllabus, they explore into the evolution and nature of financial services, gaining insights into the regulatory frameworks and the transformative impact of technology on the financial sector.

Learning Outcomes: On successful completion of the course the learner will be able to

LO	Cognitive Abilities	Learning Outcomes
LO1	Remembering	Recall the components and functions of the Indian financial system
LO2	Understanding	Explain the evolution and nature of financial services in India
LO3	Applying	Utilize different payment transfer systems in practical banking scenarios
LO4	Analyzing	Analyze the impact of technology on financial services
LO5	Evaluating	Evaluate the impact of capital markets on economic growth in India
LO6	Creating	Develop strategies for utilizing capital market instruments in investment portfolios

Syllabus

UNIT I: FINANCIAL SYSTEM

1.1 Introduction

1.1.1 Indian Financial System

1.1.2 Functions of Indian Financial System

1.1.3 Structure of Indian Financial System

1.2 Introduction to Banking and Non-Banking Institutions

1.2.1 Banking Institutions

1.2.2 Non-Banking Institutions

1.3 Self-Evaluation Exercises

UNIT II: FINANCIAL SERVICES

2.1 Introduction

2.1.1 Meaning of Financial Services

2.1.2 Evolution of Financial Services in India

2.1.3 Nature of Financial Services

2.2 Types of Financial Services



2.2.1 Fund Based Services

2.2.2 Non-fund Based Services

2.3 Regulatory Framework of Financial Services

2.3.1 Reasons of Regulations of Financial Services

2.4 Growth of Financial Services in India

2.5 Impact of Technology on Financial Services

2.6 Self-Evaluation Exercises

UNIT III: CONCEPTS IN BANKING AND ACCOUNTING OF TRANSACTIONS

3.1 Introduction

3.2 Payment Transfer System

3.2.1 Real-Time Gross Settlement (RTGS)

3.2.2 National Electronic Funds Transfer (NEFT)

3.2.3 Immediate Payment Service (IMPS)

3.2.4 Comparison between NEFT, RTGS and IMPS

3.2.5 Electronic Clearing Service (ECS)

3.3.1 Automated Teller Machines (ATMs)

3.3.2 Magnetic Ink Character Recognition Code (MICR Code)

3.3.3 Optical Character Recognition (OCR)

3.3.4 Optical Mark Recognition (OMR)

3.3.5 Datanet

3.3.6 Petty Cash

3.4 Self-Evaluation Exercises

UNIT IV: MONEY MARKET

4.1 Introduction

4.1.1 Money Market

4.1.2 Objectives of Money Market

4.1.3 Key Features of Money Market

4.1.4 Money Market Instruments

4.2 Functions of Money Market

4.3 Structure and Components of Indian Money Market

4.3.1 Organized Money Market

4.3.2 Un-organized Money Market

4.4 Participants in Indian Money Market

4.5 Money Market Instruments

4.6 Self-Evaluation Exercises

UNIT V: CAPITAL MARKETS



- 5.1 Introduction
 - 5.1.1 Definition
 - 5.1.2 Characteristics of Capital Market
 - 5.1.3 Functions of Capital Market
- 5.2 Components of Capital Markets
 - 5.2.1 Primary Market
 - 5.2.2 Secondary Market
- 5.3 Capital Market Instruments in India
- 5.4 Depository
 - 5.4.1 American Depository Receipts (ADRs)
 - 5.4.2 Global Depository Receipts (GDRs)
 - 5.4.3 Indian Depository Receipts (IDRs)
- 5.5 Infographics of Capital Markets
- 5.6 Self-Evaluation Exercises

Instructional Strategies:

- Lecture Sessions
- Case Studies and Problem-Solving Activities
- Interactive Workshops and Group Discussions
- Guest Speakers and Industry Experts
- Simulations and Role-Playing Exercises
- Field Trips and Industry Visits
- Research Projects and Presentations
- Online Resources and Trading Platforms

Learning Resources:

1) Reference and Text Books:

- Indian Financial System – M.Y.Khan
- Indian Financial System – M H.R. Machiraju
- Indian Financial System in the World Monetary Order – H. Y. Kulkarni.
- Indian Financial System: Theory and Practice by Bhole & Mahakud
- Indian Financial System and Markets – M Siddhartha Sankar Saha (TATA McGraw Hill)
- Indian Financial System – M Vasant Desai
- Advance Financial Management – Kohak
- Financial Institutions & Markets – L.M. Bhole
- Marketing of Financial Services – M V. A. Avdhani
- Financial Institutions and Markets – M Madura
- Marketing Financial Services by Hooman Estelami, Dog Ear Publishing, LLC
- Management of Banking and Financial Services (Third Edition) Padmalatha Suresh & Justin Paul (Pearson)
- Banking Theory, Law & Practice by Sundaram & Varshney
- Money and Capital Markets by P.K. Malhotra and A. Singh

2) Online Courses and Tutorials:

- Coursera: Financial Markets and Institutions by University of Illinois
- edX: Introduction to Banking and Financial Markets by New York Institute of Finance



- Khan Academy: Various modules on banking, financial markets, and investment principles
- 3) Educational Websites:
- Investopedia: Offers comprehensive articles, tutorials, and videos covering various financial topics, including banking, financial services, and capital markets.
 - Securities and Exchange Board of India (SEBI) website: Provides regulatory guidelines, reports, and updates on financial markets and institutions in India.
 - Reserve Bank of India (RBI) website: Offers information on banking regulations, policies, and publications.
- 4) Research Journals and Publications:
- Journal of Banking & Finance
 - Journal of Financial Economics
 - Review of Financial Studies
 - Economic and Political Weekly
 - Reserve Bank of India publications: Reports, working papers, and bulletins available on the RBI website.
- 5) Industry Reports and White Papers:
- McKinsey & Company: Publishes reports on financial services industry trends and insights.
 - Deloitte: Produces white papers on banking, insurance, and other financial services sectors.
- 6) Financial Databases and Tools:
- Bloomberg Terminal: Provides real-time financial data, news, and analytics.
 - Thomson Reuters Eikon: Offers financial information, research, and analysis tools for professionals and students.
 - Yahoo Finance: Accessible financial news, stock quotes, and market data.

Contact Programme Activities: Following are the list of activities will be considered for the contact mode and aim of these activities are to enhance learning, skill development, networking, and practical understanding.

- Learning Diary
- Class Test / Open Book Test / Written Assignment / Online Exam
- Case Study / Caselet
- Situation Analysis
- Presentations
- Small Research Project / Activity
- In-depth Viva-Voce
- Field Visit / Study tour and report of the same
- Role Play
- Peer Assessment
- Book Review
- Group Discussion
- Quiz Competitions

Field Visit

A field visit for this subject offers invaluable opportunities for students to bridge the gap between theoretical knowledge and real-world application. In short, a field visit serves as a valuable complement to classroom learning, providing students with a holistic understanding of financial institutions and services. By immersing themselves in real-world financial environments, students can develop practical skills, industry knowledge, and professional networks essential for success in the finance sector.

Paper Code: PGDVET 203 - FP
Paper Title: FUNDAMENTALS OF FOOD SCIENCE & TECHNOLOGY
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale

The paper "Fundamentals of Food Science & Technology" (PGDVET 302-FP) is designed to provide students with a comprehensive understanding of the principles, concepts, and applications in the field of food science and technology. With a focus on theoretical knowledge and practical skills, this course aims to equip students with the necessary foundation to pursue careers in the food industry. By exploring topics such as food chemistry, microbiology, food groups, and packaging, students will gain insight into the complexities of food production, processing, and safety. The course also addresses emerging trends and challenges, preparing students to adapt to the dynamic landscape of the food sector.

Learning Outcomes

11. Recognize the scope and significance of food science and technology in the context of the food industry.
12. Identify the basic constituents and key reactions involved in food chemistry.
13. Explain the role of microorganisms in food microbiology, including factors influencing microbial growth and food spoilage.
14. Analyze the technology and processes involved in the production of animal-based food products such as milk, meat, poultry, and eggs.
15. Evaluate the importance of food packaging materials, formats, regulations, and sustainability in ensuring food quality and safety throughout the supply chain.

UNIT CONTENT

UNIT-1: INTRODUCTION TO FOOD SCIENCE & TECHNOLOGY

- 1.1 Definition and Scope of Food Science and Technology
- 1.2 Food as a Source of Nutrients
- 1.3 Overview of the Various Sectors within the Food Industry
- 1.4 Career Opportunities in Food Science and Technology
- 1.5 Role of a Food Technologist
- 1.6 Emerging Trends and Challenges in Food Science
- 1.7 Summary
- 1.8 Self-Evaluation Exercise

UNIT-2: FOOD CHEMISTRY

- 2.1 Basic Constituents
- 2.2 Macro and Micro Nutrients
- 2.3 Additional Food Constituents
- 2.4 Reactions and transformations in food processing
- 2.5 Food additives: types, functions, and regulations
- 2.6 Maillard reaction and its significance in food flavour and color development
- 2.7 pH and its influence on food properties and stability
- 2.8 Enzymatic reactions in food processing and preservation

- 2.9 Summary
- 2.10 Self-Evaluation Exercise

UNIT-3: FOOD MICROBIOLOGY

- 3.1 Introduction to Food Microbiology
- 3.2 Microorganisms Found in Food
- 3.3 Microbial Growth and Factors Affecting Growth
- 3.4 Food Spoilage and Foodborne illness
- 3.5 Microbiological Quality Assurance
- 3.6 Microbial Fermentation in Food Production
- 3.7 Food Safety Management Systems
- 3.8 Summary
- 3.9 Self-Evaluation Exercise

UNIT-4: FOOD GROUPS: TECHNOLOGY OF ANIMAL FOODS

MILK & MILK PRODUCTS

- 4.1 Milk Composition and Types
- 4.2 Liquid Milk Processing
- 4.3 Cheese Production and Varieties
- 4.4 Yogurt and Fermented Milk Products
- 4.5 Butter and Ghee Manufacturing
- 4.6 Ice Cream and Frozen Desserts
- 4.7 Condensed and Dried Milk
- 4.8 Functional dairy Products
- 4.9 Quality Control and Safety Measures in Milk Processing
- 4.10 Summary

MEAT POULTRY & EGGS

- 4.11 Current status and prospects of meat, poultry, egg and fish production in India
- 4.12 Slaughtering and Dressing Techniques
- 4.13 Meat Cutting and Carcass Fabrication
- 4.14 Meat Preservation Methods
- 4.14 Poultry Processing Technologies
- 4.15 Egg Collection, Grading, and Cleaning Processes
- 4.16 Egg Pasteurization and Liquid Egg Products
- 4.17 Value-Added Meat and Poultry Products
- 4.18 Emerging Technologies in Meat, Poultry, and Egg Processing
- 4.19 Summary
- 4.20 Self-Evaluation
- 4.21 Summary
- 4.22 Self-Evaluation Exercise

UNIT-5: FOOD PACKAGING

- 5.1 Introduction to Food Packaging
- 5.2 Types of Food Packaging Materials
- 5.3 Packaging Formats and Designs
- 5.4 Requirements of package
- 5.5 Packaging Regulations and Standards:
- 5.6 Packaging for Shelf-life Extension:
- 5.7 Sustainable Packaging Solutions:
- 5.8 Packaging Innovation and Future Trends:



5.9 Summary

5.10 Self-Evaluation

Instructional Strategies

11. Lectures and presentations to introduce key concepts and theories.
12. Laboratory sessions for hands-on experience in food analysis and processing techniques.
13. Case studies and discussions to explore real-world applications and challenges.
14. Guest lectures by industry experts to provide insights into current trends and practices.
15. Group projects and assignments to promote teamwork and critical thinking.
16. Online resources and multimedia materials for self-directed learning.
17. Workshops on food safety management systems and quality assurance.
18. Seminars on emerging technologies and innovations in the food industry.
19. Field visits to food processing facilities and packaging plants for practical exposure.
20. Interactive quizzes and self-assessment exercises to reinforce learning outcomes.

Learning Resources

1. Fellows, P. J. (2022). Food processing technology: principles and practice. Woodhead publishing.
2. Potter, N. N., & Hotchkiss, J. H. (2012). Food science. Springer Science & Business Media.
3. FOOD TECHNOLOGY: <https://ndritoppers.blogspot.com/2021/08/angrau-notes-pdf-download-free-food.html>
4. FOOD TECHNOLOGY-I: <https://www.agrimoon.com/wp-content/uploads/FOOD-TECHNOLOGY.pdf>
5. FOOD TECHNOLOGY-II: <https://www.agrimoon.com/wp-content/uploads/FOOD-TECHNOLOGY-II.pdf>
6. Entrepreneurship in Food Processing: <https://www.youtube.com/watch?v=QfIXltlv7AI>

Contact Programme Activities

10. Preparation of Cakes & Muffin
11. Preparation of Bread & Sweet Buns
12. Preparation of Fermented Dairy products: Dahi, Yoghurt, Lassi, Chakka and Srikhand
13. Preparation of Kulfi and Ice-lollies
14. Preparation of Paneer & Masala Paneer
15. Preparation of Dairy by Products: Whey Mango drink; Whey Jaljeera Drink
16. Preparation of Jam, Jelly, Ketchup & Pickle

Field Visit

Visit to local food industries and academic institutions like the Central Institute of Agricultural Engineering (CIAE) in Bhopal, the Bhopal Sahakari Dugdh Sangh Maryadit (Sanchi Dairy Cooperatives), Soy Processing Plant, and Ice Cream Industry, among others.

Paper Code: PGDVET 204 - FP
Paper Title: ADVANCED FOOD PROCESSING & PRESERVATION
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale

The module "Advanced Food Processing & Preservation" is designed to provide students with a comprehensive understanding of the principles and practices underlying food preservation, processing, safety, and quality assurance. By exploring various thermal and non-thermal processing methods, along with regulatory frameworks and emerging technologies, students gain insights into the complexities of the food industry. Through a combination of lectures, laboratory sessions, case studies, and interactive activities, this syllabus aims to equip students with the knowledge and skills necessary for careers in food science, ensuring they can contribute effectively to the production of safe, high-quality food products in compliance with industry standards.

Learning Outcomes

1. Understand food preservation and processing principles.
2. Explain heat processing methods like pasteurization.
3. Evaluate preservation techniques such as refrigeration.
4. Analyze advancements in food processing methods.
5. Apply food safety regulations for consumer health.

UNIT CONTENT

UNIT-1: INTRODUCTION TO FOOD PRESERVATION AND PROCESSING TECHNIQUES

- 1.1 Introduction to Food Preservation and Processing
- 1.2 Principles of food preservation
- 1.3 Methods of Heat Processing (e.g., Pasteurization, Sterilization)
- 1.4 Refrigeration and Freezing Techniques
- 1.5 Drying and Dehydration Methods
- 1.6 Fermentation and Pickling Processes
- 1.7 Chemical Preservation Techniques (e.g., Additives, Preservatives)
- 1.8 Summary
- 1.9 Self-Evaluation Exercise

UNIT-2: ADVANCED THERMAL PROCESSING METHODS

- 2.1 High-Temperature Short-Time (HTST) Pasteurization
- 2.2 Ultra-High Temperature (UHT) Processing
- 2.3 Sterilization by Autoclaving



- 2.4 Blanching
- 2.5 Steam Cooking
- 2.6 Baking and Roasting
- 2.7 Frying
- 2.8 Canning
- 2.9 Summary
- 2.10 Self-Evaluation Exercise

UNIT-3: ADVANCED NON-THERMAL PROCESSING METHODS

- 3.1 High-Pressure Processing (HPP)
- 3.2 Ohmic Heating
- 3.3 Microwave Heating
- 3.4 Membrane Processing
- 3.5 Radio Frequency Heating
- 3.6 Implications on Product Quality
- 3.7 Ensuring Safety in Thermal Processing
- 3.8 Summary
- 3.9 Self-Evaluation Exercise

UNIT-4: FOOD SAFETY AND QUALITY ASSURANCE

- 4.1 Introduction to Food Safety and Quality Assurance
- 4.2 Importance of Regulatory Compliance in Ensuring Food Safety
- 4.3 Principles and Implementation of Hazard Analysis and Critical Control Points (HACCP)
- 4.4 Ensuring Personal and Processing Hygiene Practices
- 4.5 Quality Assurance in Food Production and Processing
- 4.6 Implementation of Quality Control Methods and Monitoring Systems
- 4.7 Supply Chain Management Strategies for Ensuring Food Safety
- 4.8 Emerging Technologies and Trends in Food Safety and Quality Assurance
- 4.9 Summary
- 4.10 Self-Evaluation Exercise

UNIT-5: FOOD LAWS AND FOOD STANDARDS

- 5.1 Introduction to Food Laws and Regulations
- 5.2 International Food Standards (e.g., Codex Alimentarius)
- 5.3 Indian Food Laws and Regulatory Bodies (e.g., Food Safety and Standards Authority of India - FSSAI)
- 5.4 Overview of Key Indian Food Regulations (e.g., Food Safety and Standards Act, 2006)
- 5.5 Compliance Requirements for Food Businesses in India
- 5.6 Importance of Adhering to Food Standards for Ensuring Consumer Safety
- 5.7 Enforcement and Monitoring Mechanisms for Food Laws and Standards in India
- 5.8 Summary
- 5.9 Self-Evaluation Exercise

Instructional Strategies

- 21. Lectures and presentations to introduce key concepts and theories.



22. Laboratory sessions for hands-on experience in various food processing and preservation techniques.
23. Case studies and discussions to explore real-world applications and challenges.
24. Guest lectures by industry experts to provide insights into current trends and practices.
25. Group projects and assignments to promote teamwork and critical thinking.
26. Online resources and multimedia materials for self-directed learning.
27. Workshops on various food laws and standards.
28. Seminars on emerging technologies and innovations in the food industry.
29. Field visits to food processing facilities and store houses practical exposure.
30. Interactive quizzes and self-assessment exercises to reinforce learning outcomes.

Learning Resources

7. Brennan, J. G., & Grandison, A. S. (Eds.). (2012). Food processing handbook. Weinheim, Germany.
8. Desrosier, N. W., & Desrosier, J. N. (1977). The technology of food preservation (No. Ed. 4). AVI Publishing Company, Inc.
9. Fellows, P. J. (2022). Food processing technology: principles and practice. Woodhead publishing.
10. Ghoshal, G. (2018). Emerging food processing technologies. In Food processing for increased quality and consumption (pp. 29-65). Academic Press.
11. Potter, N. N., & Hotchkiss, J. H. (2012). Food science. Springer Science & Business Media.
12. FOOD TECHNOLOGY: <https://ndritoppers.blogspot.com/2021/08/angrau-notes-pdf-download-free-food.html>
13. FOOD TECHNOLOGY-I: <https://www.agrimoon.com/wp-content/uploads/FOOD-TECHNOLOGY.pdf>
14. FOOD TECHNOLOGY-II: <https://agrimoon.com/wp-content/uploads/FOOD-TECHNOLOGY-II.pdf>
15. Entrepreneurship in Food Processing: <https://www.youtube.com/watch?v=QfIXltlv7AI>

Contact Programme Activities

1. High-Temperature Short-Time (HTST) Pasteurization Demonstration
2. Freeze-Thaw Cycling Experiment: Effects on Food Quality
3. Air Drying vs. Freeze Drying: Comparative Workshop
4. Hazard Analysis and Critical Control Points (HACCP) Audit Simulation
5. Compliance Case Studies: International Food Standards vs. Indian Regulations and Others

Field Visit

Visit to local food industries and academic institutions like the Central Institute of Agricultural Engineering (CIAE) in Bhopal, the Bhopal Sahakari Dugdh Sangh Maryadit (Sanchi Dairy Cooperatives), Soy Processing Plant, and Ice Cream Industry, among others.

Code - PGDVET 203 - SE
Security System of India

Study hours: 120

Total Credits: 3

Total marks: 100

Rationale

The rationale behind structuring a course or curriculum on the Security System of India with the outlined units is multifaceted. Firstly, the curriculum ensures a comprehensive understanding of national security by covering a wide array of topics, ranging from basic concepts to intricate dynamics. Learners gain insights into external and internal threats, historical perspectives, and the organizational structure of the Indian armed forces, fostering a holistic comprehension of the subject matter. Furthermore, the focus on the national security structure ensures that learners gain a detailed understanding of the institutions responsible for safeguarding the country, including armed forces, border security forces, and police forces at central and state levels. Finally, the curriculum emphasizes practical implications by exploring case studies, simulations, and guest lectures, enabling learners to develop practical skills and insights applicable in real-world contexts. Overall, the curriculum aims to provide learners with a comprehensive, relevant, and practical understanding of India's security system, equipping them with the knowledge and skills necessary to contribute effectively to national security efforts.

Learning outcome

Upon completing this course, students will be able to:

1. Critically analyze India's security challenges and formulate potential solutions or strategies.
2. Demonstrate an integrated understanding of how various elements of security (political, military, economic, etc.) interact within the broader national and international context.
3. Communicate effectively about complex security issues, using appropriate terminology and supporting arguments with evidence.
4. Engage in informed discussions on national security policies and contribute constructively to debates on security-related issues.
5. Assess the role of India's strategic partnerships in enhancing national security.

Unit 1: INTRODUCTION OF SECURITY

- 1.1: Security
- 1.2: Defence Science and Military Science
- 1.3: National Security
- 1.4: Security Threats to India
- 1.5: Type of Security
- 1.6: National Power
- 1.7: Defence Policy

Unit:2 EXTERNAL THREATS TO NATIONAL SECURITY



- 2.1: Traditional State-Based Threats
- 2.2: Non-State Actors
- 2.3: Transnational Threats
- 2.4: Naxlism
- 2.5: Environmental Challenges
- 2.6: Diplomacy and International Alliances
- 2.7: National Security

Unit 3: INTERNAL THREATS TO NATIONAL SECURITY

- 3.1: Insurgency
- 3.2: Domestic Terrorism
- 3.3: Political instability
- 3.4: Social Instability
- 3.5: Economic Security Challenges and Infrastructure
- 3.6: Public Health
- 3.7: Natural disaster and Disaster management

Unit: 4 HISTORY OF INDIAN SECURITY SYSTEM AND NATIONAL POLICY

- 4.1: Historical background of India security System
- 4.2: Understanding National Policy
- 4.3: Historical Context of India's Security
- 4.4: India's Strategic Partnerships
- 4.5: Nuclear doctrine
- 4.6: Ballistic missile defense
- 4.7: Cyber security

Unit: 5 NATIONAL SECURITY STRUCTURE IN INDIAN ARMED FORCES

- 5.1: Armed forces
- 5.2: Border Security Forces and Paramilitary Forces
- 5.3: Central Police Force
- 5.4: State Police Force
- 5.5: Special Divisions
- 5.6: Private Security



Code- PGDVET 204 - SE

Private Security System

Study hours: 120

Total Credits: 3

Total marks: 100

Rationale

The rationale behind structuring a curriculum on Private Security Systems with the outlined units is rooted in recognizing the pivotal role that private security plays in safeguarding individuals, organizations, and assets across India. Each unit serves a distinct purpose in providing learners with a comprehensive understanding of private security operations. The legal and regulatory framework governing private security operations. Detailing guarding duties, legal requirements, and the provisions of the Private Security Agencies (Regulation) Act, 2005, ensures learners grasp the compliance standards and ethical considerations integral to the sector.” Also Introduces learners to the fundamental concepts and components of CCTV systems, crucial for effective surveillance deployment. Understanding camera types, operating principles, and limitations equips learners to make informed decisions regarding the utilization of CCTV technology in security contexts. By fostering a comprehensive understanding of private security operations and compliance standards, the curriculum aims to enhance the safety and security of individuals, organizations, and assets effectively.

Learning outcome

By the end of this unit, students will be able to:

1. Differentiate between public and private security and explain the unique roles of each.
2. Analyze security tasks in commercial and industrial deployments and implement appropriate security measures.
3. Utilize CCTV footage for investigative purposes, including recording, retrieval, preservation, and analysis.
4. Evaluate the advantages, limitations, and ethical considerations associated with CCTV surveillance.
5. Develop and implement Standard Operating Procedures (SOPs) for auditing CCTV video footage, including steps for documenting and reporting findings.
6. Utilize the institutional library to identify trends, patterns, and anomalies in security incidents and develop proactive security measures.

UNIT 1: INTRODUCTION TO PRIVATE SECURITY

1.1: Difference between public and private security

1.2: Structure and function of private security in India

1.3: Types of security guards (personal, residential, corporate, private, mobile, static, etc.)

1.4: principles of security

1.5: Terminologies used in Security system and usage

1.6: Security equipment

UNIT 2: THE RULES AND REGULATIONS IN SECURITY

- 2.1: Guarding duties (observation, access control, handling information)
- 2.2: Security tasks in commercial and industrial deployments
- 2.3: Legal and illegal activities
- 2.4: Regulatory and legal requirements
- 2.5: Rules and regulations governing private security in India
- 2.6: The Private Security Agencies (Regulation) Act, 2005

UNIT 3: INTRODUCTION TO CCTV VIDEO SURVEILLANCE

- 3.1: The knowledge of Closed-circuit television (CCTV) surveillance system
- 3.2: Elements of a basic CCTV system
- 3.3: Camera, monitor and digital recorder
- 3.4: Types of CCTV Cameras and Network Devices
- 3.5: Applications of CCTV cameras on police operations and security.
- 3.6: CCTV coverage techniques
- 3.7: CCTV surveillance techniques
- 3.8: Operating principles and limitations of the surveillance system.
- 3.9: Recording the footage (analogue and digital video recorders.
- 3.10: Backup and archiving) and Data storage devices - cloud storage technology

UNIT 4: INTRODUCTION TO CCTV VIDEO FOOTAGE AUDITOR

- 4.1: Role and importance of CCTV footage
- 4.2: Retrieving and Preserving CCTV footage
- 4.3: Ensuring authenticity of CCTV footage
- 4.4: Video tampering, detection and Analysing CCTV footage
- 4.5: Use of CCTV as evidence before court
- 4.6: Importance of auditing CCTV video footage
- 4.7: Standard Operating Procedures (SoPs) for auditing CCTV video footage
- 4.8: Steps of auditing CCTV video footage

UNIT 5: TAGGING OF AUDIT FINDINGS AND MAINTAINING A LIBRARY

- 5.1: Importance of tagging audit findings/incidents
- 5.2: Tagging the exception anomaly
- 5.3: Adding a tag to single or multiple cameras
- 5.4: Maintenance of institutional library of audit findings
- 5.5: Trends and patterns of the tagged audit findings
- 5.6: Creation of well- categorized institutional library of audit findings /incidents that have been tagged.
- 5.7: Demonstration on use of the library to obtain trends
- 5.8: Patterns of the tagged audit findings/incidents

Instructional Strategies

- Lecture Presentations
- Case Studies
- Group Discussions.
- Hands-on Workshops



- Field Visits
- Role-Playing Exercises
- Guest Lectures
- Online Resources
- Reflective Journals
- Mock Research Projects

Learning Resources (5)

1. CBSE. 2006. Natural Hazards and Disaster Management — A Supplementary Textbook in Geography for Class XI. Central Board of Secondary Education, New Delhi. Gupta, L.C. and Abhitabh Gupta. 2007. Manual of First Aid.
2. Practical Security Training. Elsevier Science. Mohan, Krishna and Meera banerji. 1990.
3. Disaster and its Management. National Council of Educational research and Training, New Delhi.
4. International Politics Theory & Practice by U. R. Ghai
5. Theoretical Aspects of International Politics, Mahendra Kumar, Shiva Lal Agarwala & Co.

Contact Programme Activities (5)

1. Demonstrations of basic security drills, emergency response procedures.
2. Demonstrations of specific security measures implemented in commercial settings, such as CCTV surveillance, access control, crowd management,
3. Engage with the personnel responsible for monitoring the surveillance systems
4. Demonstrations of managing emergency responses,
5. Discussing the integration of technology with traditional policing methods.

Field Visit

1. Visit to Police Traffic Control Security System Surveillance Room.
2. Visit to Malls for Interaction with Security System In charge.
3. Visit to NCC Camp.
4. Introduction Session with Institute Security System Operator.
5. Visit to RI campus.



Paper Code: PGDVET-205
Paper Title: Internship in Industry
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale :

The internship in industry paper aims to provide enrolled students with practical exposure to real-world work environments within their chosen field. Through hands-on experience, students will gain valuable insights into industry practices, enhance their professional skills, and develop a deeper understanding of their subject matter. This practical component complements theoretical learning, fostering a holistic educational experience that prepares students for successful careers in their respective industries.

Learning Outcomes:

1. Gain practical experience relevant to their field of study.
2. Develop professional skills such as communication, teamwork, and problem-solving.
3. Apply theoretical knowledge to real-world scenarios.
4. Acquire insights into industry best practices and current trends.
5. Cultivate networking opportunities with professionals in the field.

CONTENT :

- Overview of internship objectives and expectations
- Preparation for internship placement
- Practical work experience in an industry setting
- Reflection and evaluation of internship experience
- Integration of internship learnings with academic coursework

Instructional Strategies :

1. Lectures on internship guidelines and industry expectations.
2. Workshops on professional skills development.
3. Case studies and discussions on real-world industry scenarios.
4. Hands-on projects related to internship preparation.
5. Peer learning activities to share internship experiences.
6. Guest lectures by industry professionals.
7. Mentorship sessions with faculty advisors.
8. Simulation exercises to simulate workplace challenges.



9. Role-playing activities for practicing workplace interactions.
10. Group presentations on internship reflections and learnings.

Learning Resources :

1. Textbooks and academic journals on internship best practices.
2. Online databases for industry research and trends.
3. Industry-specific websites and publications.
4. Multimedia presentations and video tutorials.
5. Access to professional networking platforms.

Contact Programme Activities :

1. Regular meetings with faculty advisors to discuss internship progress.
2. Progress reports and feedback sessions.
3. Presentations or seminars showcasing internship experiences.
4. Mock interviews and resume workshops.
5. Networking events with alumni and industry professionals.

Field Visit:

Organized field visits to relevant industries or workplaces to observe operations and gain first hand insights into industry practices.



Paper Code: PGDVET- 206
Paper Title: Project Work in Industry
Total Credits: 4
Recommended Study Hours: 120
Total Marks: 130

Rationale :

The Project Work in Industry is designed to provide enrolled students with practical exposure to real-world work environments within their respective fields of study. Through hands-on experience and interaction with industry professionals, students will develop essential skills, deepen their understanding of industry practices, and enhance their skills prospects upon completion of the program.

Learning Outcomes :

1. Gain practical experience in applying theoretical knowledge to real-world scenarios.
2. Develop essential skills relevant to the industry, including problem-solving, communication, and teamwork.
3. Acquire insights into industry practices and standards.
4. Demonstrate the ability to adapt to dynamic work environments and effectively manage tasks and responsibilities.
5. Enhance employability prospects through industry exposure and networking opportunities.

CONTENT :

1. Introduction to the industry and project scope.
2. Research methodologies and data collection techniques.
3. Project planning, execution, and monitoring.
4. Analysis of industry-specific challenges and opportunities.
5. Documentation and presentation of project findings and recommendations.

Instructional Strategies :

1. Case studies and real-life examples.
2. Hands-on projects and simulations.
3. Guest lectures by industry professionals.
4. Group discussions and peer learning.
5. Workshops on relevant tools and technologies.
6. Mentorship and guidance sessions.
7. Practical assignments and assessments.
8. Field visits to industrial sites.



9. Collaborative projects with industry partners.
10. Feedback and reflection sessions.

Learning Resources :

1. Textbooks and reference materials.
2. Online learning platforms and resources.
3. Industry reports and publications.
4. Software tools and applications.
5. Access to industry databases and repositories.

Contact Programme Activities :

1. Weekly lectures and tutorials.
2. Practical sessions and workshops.
3. Project reviews and progress assessments.
4. Consultation hours with instructors.
5. Mid-term and final presentations.

Field Visit:

Scheduled field visits to relevant industries will be organized to provide students with first hand exposure to industry operations, practices, and challenges.



ABOUT PSSCIVE Bhopal

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) is an apex organization dedicated to research, development and training in the field of vocational education at school level. Established in 1993 by the Ministry of Education, Government of India, it operates as a constituent unit of the National Council of Educational Research and Training (NCERT), New Delhi. PSSCIVE is located on a scenic 38-acre campus in Shyamla Hills, Bhopal and offers six major academic disciplines, including Agriculture and Animal Husbandry, Business and Commerce, Engineering and Technology, Health and Paramedical Sciences, Home Science and Hospitality Management, Humanities Science Education and Research. The institute also serves as a UNEVOC (International Project on Technical and Vocational Education) Network Centre in India. This allows PSSCIVE to coordinate with UNESCO-UNEVOC International Centre, Bonn, Germany and exchange knowledge and experiences on all aspects of vocational education and training (VET), as well as discuss issues of common relevance with other countries. The Institute offers quality-training programs in vocational pedagogy and a wide array of disciplines for the key functionaries in vocational education and vocational teachers. The highly qualified team of the Institute possesses excellent professional skills and experience required to impart training for classroom teaching and training.

The evolution of the Institute in the last twenty-five years has witnessed various challenges and hurdles. In a span of these years, the Institute has made significant contributions, which include the following:

1. Contributed to the development of national policies on work education, vocationalisation of education and vocational education and training.
2. Contributed to the development of the National Vocational Education Qualifications Framework (NVEQF), which is subsumed in the National Skills Qualifications Framework (NSQF)
3. Contributed to the development of a framework for Recognition of Prior Learning (RPL)
4. Designed and developed guidelines, curricula and teaching materials for the States/UTs.
5. Guidelines document on various aspects of VET, including work education, guidance and counselling, field visits, student portfolio, quality of vocational trainers, etc.
6. 26 pre-vocational education modules for Grades 9 and 10
7. 100 learning outcome-based curricula for Grades 9 to 10 as per the job roles under the NSQF
8. Multimedia materials, including 34 video films for the popularization of vocational education and teaching-learning in various vocational subjects
9. More than 90 orientation programmes on vocationalisation of education for key functionaries and teachers
10. More than 500 teacher training programmes on vocational pedagogy and domain-specific learning.

Vision

To be a leading organization to strengthen vocational education and training system to meet the skills needs of the current and future workforce.

Mission

To build the capacity of vet institutions for meeting the skill needs of current and future workforce.

Values

- Zeal for Excellence
- Customer Satisfaction
- Teamwork for Success
- Better Performance

Major Activities:

The major activities organised by the Institute has been given below:

Advisory: Advises and assists the Ministry of Human Resource Development (MHRD), Government of India and State Governments in the implementation of vocationalisation of education programme in schools, under the National Skill Qualification Framework (NSQF).

Research: Promotes and conducts research to gain new knowledge and to bring about qualitative improvement in vocationalisation of education.

Development: Develops curricula, student textbooks and teacher guides with the help of experts in different disciplines and organizations or industries to cater to the educational resources for vocational education in schools.

Training: Conducts training programs for the key functionaries and vocational teachers in collaboration with State/UTs on aspects related to vocational pedagogy, employability skills and emerging technologies, such as information and communication technology in vocational education, entrepreneurship and innovation, industry 4.0, etc.

Extension: Share experiences and ideas through extension activities including awareness programs, information dissemination and publication of newsletter and journal.

Strengths and Capabilities

Vibrant and green campus

The campus facilities have been developed to encourage visitors and learners to explore, discover and enrich with academic knowledge and vocational skills. Our campus creates an interactive learning environment for learners and cultivates a passion for vocational learning. It also offers opportunities to develop interests and talents through various extracurricular activities. Each classroom and laboratory has been built with specialized facilities for trainees of different vocational disciplines so that they can gain know-how and practical skills in their chosen areas.

Teaching excellence

Our highly qualified team of PSSCIVE possesses academic and practical experience in vocational pedagogy, training and research. The Institute fulfils the tasks related to the pedagogical and organizational provision of vocational education and training in secondary schools, practical training centres and apprenticeship training.

Strong network with other organisations

We strive to forge long-term partnerships in support of our vocational course planning, design and development. We have direct and indirect support from the Industry in the form of sharing of information, interactive learning activities, opportunities for industry visits and hands-on training.

Departments

Agriculture and Animal Husbandry

Agriculture is the most important sector in the Indian economy, as it is not only the mainstay for food security but also provides livelihood to about 52% of the working population in India. In order to fulfil the need of skilled para-professionals in agriculture and allied sectors, the Department of Agriculture and Animal Husbandry has been involved in designing and developing vocational courses and teaching-learning materials in different areas of agriculture and allied sectors under the National Skill Qualification Framework. The Department is also involved in training key functionaries and teachers and conducting research in vocational education. The strategy for the future is to promote vocational courses for sustainable agriculture such as organic farming, vermicomposting production etc., and improvement in production, processing and quality of food.

Business and Commerce

The Department of Business and Commerce was established for developing guidelines, curricula and teaching-learning materials for the vocational education in various related sectors, such as retail, logistics, banking, financial services and insurance. Over the years, the department has developed its credibility of designing and developing courses and conducting training programs for vocational teachers.

Engineering and Technology

The Department of Engineering and Technology was established to design and implement programmes and activities for research, development of guidelines, curricula and teaching-learning materials for vocational courses related to various sectors, including Automotive, Electronics, Information Technology, IT-enabled Services, Power, etc. Besides research and development inputs, the Department conducts training sessions on the use and applications of Information and Communication Technology.

Health and Paramedical Sciences

The Department of Health and Paramedical Sciences is contributing to the development of high-quality middle-level skilled manpower in the health sector. The department strives for innovation and continuous improvement in the quality and relevance of the training programs and activities for the development of curricula and teaching-learning materials in the healthcare sector.



Home Science and Hospitality Management

The Department of Home Science and Hospitality has established its identity by organizing programs and activities for the development of curricula and courseware and conducting orientation and training programs for the teachers and instructors teaching home science-based vocational courses. It has developed courses for a wide variety of services in different sectors, including Apparel, Textiles, Tourism and Hospitality, etc.

Humanities Science Education and Research

The Department of Humanities, Science Education and Research, having a wider ambit, provides research and development inputs for guiding the process of development of curricula, courseware and other materials in areas like performing arts, commercial art, entrepreneurship development and rural development etc.

In order to fulfil the need of skilled para-professionals in the sector of Beauty and Wellness, the department has developed courses for four job roles such as Assistant Beauty & Wellness Consultant, Hair Stylist, Assistant Hair Stylist and Yoga Instructor. The DHSER has been involved in designing and developing vocational courses and teaching-learning materials under the National Skill Qualification Framework. The Department is also involved in training key functionaries, and teachers and preparing master trainers for vocational pedagogy. The department is also running the Diploma in Vocational Education and Training Course (DVET), DHSER also coordinate activities of Minority cell.

Centres

Centre for Innovation, Incubation & Entrepreneurship (CIIE)

Curriculum Development and Evaluation Centre (CDEC)

Information and Communication Technology Centre (ICTC)

Programme Planning and Monitoring Centre (PPMC)

Centre for International Relations (CIR)

UNEVOC - Network Centre (UNEVOC-NC)

Computer Centre (CC)

Library (LIB)

PSSCIVE FACULTY PROFILE

Sr. No.	Name, Designation and Department of Faculties and their Key Areas
1.	<p>Dr. Rajiv Kumar Pathak Professor and Head, Department of Agriculture and Animal Husbandry E-mail- r.pathak@psscive.ac.in Key Areas: Vocational Education and Training, Horticulture, Floriculture Crop Cultivation, Vegetable Production.</p>
2.	<p>Dr. Saurabh Prakash Professor, Department of Engineering and Technology E-mail. s.prakash@psscive.ac.in Key Areas: Vocational Education and Training, Automobile Technology, Plumbing, Construction, Power.</p>
3.	<p>Dr. Vinay Swarup Mehrotra Professor, Department of Agriculture and Animal Husbandry and, Head, Curriculum Development and Evaluation Centre (CDEC) E-mail- v.mehrotra@psscive.ac.in Key Areas: Agriculture, Curriculum Design and Development, Courseware Development, Policy Formulation and Analysis, Professional Development of Teachers.</p>
4.	<p>Dr. Abhijit Nayak Professor & Head, Department of Health & Paramedical Sciences, E-mail. a.nayak@psscive.ac.in Key Areas : Vocational Education and Training, Ophthalmology, Nursing, Immunology.</p>
5.	<p>Dr. Pinki Khanna Professor & Head, Department of Home Science and Hospitality Management and, Programme Planning and Monitoring Centre (PPMC) E-mail. p.khanna@psscive.ac.in Key Areas : Vocational Education and Training, Foods and Nutrition, Fashion Designing and Garment Technology, Textile Designing, Handicrafts.</p>
6.	<p>Dr. Ponnamm Veeraiah Professor & Head, Department of Business and Commerce, E-mail- vp672000@gmail.com Key Areas :Vocational Education and Training, Marketing Management, Retail Marketing Management, Logistics Management, Financial Management, Rural Marketing, International Marketing.</p>
7.	<p>Dr. Deepak Shudhalwar Professor and Head, Department of Engineering and Technology, E-mail. p.veeraiah@psscive.ac.in Key Areas: Vocational Education and Training, Computer Science Information Technology, Curriculum Design and Development, Educational Technology.</p>

8.	<p>Dr. R. Ravichandran Head, Centre for Innovation, Incubation & Entrepreneurship, Coordinator PGDVET, Associate Professor, Department of Humanities Science Education & Research, E-mail. r.ravichandran@psscive.ac.in Key Areas: Curriculum, Pedagogy, Research, Vocational Education and Training, Green Skills, ICT, Food Processing and Entrepreneurship.</p>
9	<p>Dr. Vipin Kumar Jain Associate Professor and Head, Department of Humanities Science Education & Research, E-mail. v.jain@psscive.ac.in Key Areas : Vocational Education and Training, Entrepreneurship Development, Vocational Guidance and Counselling.</p>
10	<p>Dr. Munesh Chandra Professor, Department of Engineering and Technology, Head, ICT Centre Email Id: m.trivedi@psscive.ac.in Key Area: Computer Science</p>
11	<p>Dr. Vinod Kumar Yadav Associate Professor, Department of Engineering and Technology Email Id: vinod.det@psscive.ac.in Key Area: Mechanical Engineering</p>
12	<p>Dr. Pravin Narayan Mahamunni Associate Professor, Department of Business and Commerce Email Id: p.mahamuni@psscive.ac.in Key Area: Financial Management</p>
13	<p>Dr. Prakash Chandra Rout Assistant Professor, Department of Business and Commerce Email Id: prakash.rout@psscive.ac.in Key Area: Tourism & Hospitality Management</p>
14	<p>Dr. Sangamesh Hugar Assistant Professor, Department of Business and Commerce Email Id: s.hugar@psscive.ac.in Key Area: Finance and Costing</p>
15	<p>Dr. Rakesh Kumar Raman Assistant Professor, Department of Humanities, Science, Education and Research Email Id: rakesh.ftp@psscive.ac.in Key Area: Food Science & Technology, Dairy Technology</p>
16	<p>Dr. Sonam Singh Assistant Professor, Department of Humanities, Science, Education and Research Email Id: sonam.singh@psscive.ac.in Key Area: International Relations, Defence & Strategic Studies</p>
17	<p>Dr. Anoop Kumar Rathore Assistant Professor, Department of Agriculture and Animal Husbandry Email Id: a.rathore@psscive.ac.in Key Area: Agriculture, Agronomy</p>



JOINT DIRECTOR

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