



FYUGP
MINOR VOCATIONAL COURSES
For Semester-II, IV, VI & VIII

FOR UNDER GRADUATE COURSES UNDER RANCHI UNIVERSITY



Upgraded & Implemented from 3rd Semester of Academic Session 2022-26
& From 1st Semester of Session 2023-27 Onwards



Syllabus for the Curriculum Framework and Credit System for the Four-Year Undergraduate Programme (FYUGP)

**Upcoming Syllabus:
Likely to be modified after receiving the feedback
of Stakeholders.**

Please provide your valuable suggestions for upgradation of these courses in the larger interest to the students on the e-mail

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HIGHLIGHTS OF REGULATIONS OF FYUGP**CREDIT OF COURSES**

The term 'credit' refers to the weightage given to a course, usually in terms of the number of instructional hours per week assigned to it. The workload relating to a course is measured in terms of credit hours. It determines the number of hours of instruction required per week over the duration of a semester (minimum 15 weeks).

- a) One hour of teaching/ lecture or two hours of laboratory /practical work will be assigned per class/interaction.

One credit for Theory = 15 Hours of Teaching i.e., 15 Credit Hours

One credit for Practicum = 30 Hours of Practical work i.e., 30 Credit Hours

- b) For credit determination, instruction is divided into three major components:

Hours (L) – Classroom Hours of one-hour duration.

Tutorials (T) – Special, elaborate instructions on specific topics of one-hour duration

Practical (P) – Laboratory or field exercises in which the student has to do experiments or other practical work of two-hour duration.

MULTIDISCIPLINARY COURSES

1. The introductory Multidisciplinary course will be of 9 credits to be covered during the first three semesters, in which 03 credits will be for each courses aligned with broad disciplines mentioned above.
2. Students are not allowed to choose or repeat courses already undergone at the higher secondary level (12th class) in the proposed major and minor stream under this category.

Abbreviations:

AEC	Ability Enhancement Courses
SEC	Skill Enhancement Courses
IAP	Internship/Apprenticeship/ Project
MNV	Multidisciplinary Courses
MJ	Major Disciplinary/Interdisciplinary Courses
DMJ	Double Major Disciplinary/Interdisciplinary Courses
MN	Minor Disciplinary/Interdisciplinary Courses
AMJ	Advanced Major Disciplinary/Interdisciplinary Courses
RC	Research Courses

Regulation related with any concern not mentioned above shall be guided by the Regulations of the University for FYUGP.

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COURSE STRUCTURE FOR FYUGP 'HONOURS/ RESEARCH'

Table 1: Credit Framework for Four Year Undergraduate Programme (FYUGP) under State Universities of Jharkhand [Total Credits = 160]

Level of Courses	Semester	MJ; Discipline Specific Courses – Core or Major (80)	MN; Minor from discipline (16)	MN; Minor from vocational (16)	MINV; Multidisciplinary Courses [Life sciences, Physical Sciences, Mathematical and Computer Sciences, Data Analysis, Social Sciences, Humanities, etc.] (9)	AEC; Ability Enhancement Courses (Modern Indian Language and English) (8)	SEC; Skill Enhancement Courses (9)	VAC; Value Added Courses (6)	IAP; Internship/ Dissertation (4)	RC; Research Courses (12)	AMJ; Advanced Courses in lieu of Research (12)	Credits	Double Major (DMJ)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
100-199: Foundation or Introductory courses	I	4	4		3	2	3	4				20	4+4
	II	4+4		4	3	2	3					20	4+4
Exit Point: Undergraduate Certificate provided with Summer Internship/ Project (4 credits)													
200-299: Intermediate-level courses	III	4+4	4		3	2	3					20	4+4
	IV	4+4+4		4		2		2				20	4+4
Exit Point: Undergraduate Diploma provided with Summer Internship in 1st or 2nd year/ Project (4 credits)													
300-399: Higher-level courses	V	4+4+4	4						4			20	4+4
	VI	4+4+4+4		4								20	4+4
Exit Point: Bachelor's Degree													
400-499: Advanced courses	VII	4+4+4+4	4									20	4+4
	VIII	4		4						12	4+4+4	20	4+4
Exit Point: Bachelor's Degree with Hons. /Hons. with Research												160	224

Note: Honours students not undertaking research will do 3 courses for 12 credits in lieu of a Research project / Dissertation.

Upgraded & Implemented from 3rd Sem. of Session 2022-26 & 1st Sem. of Session 2023-27 Onwards

COURSES OF STUDY FOR FOUR YEAR UNDERGRADUATE PROGRAMME **2022 onwards****Table 2: Semester wise Course Code and Credit Points for Single Major:**

Semester	Common, Introductory, Major, Minor, Vocational & Internship Courses		Credits
	Code	Papers	
I	AEC-1	Language and Communication Skills (MIL 1 - Hindi/ English)	2
	VAC-1	Value Added Course-1	4
	SEC-1	Skill Enhancement Course-1	3
	MDC-1	Multi-disciplinary Course-1	3
	MN-1A	Minor from Discipline-1	4
	MJ-1	Major paper 1 (Disciplinary/Interdisciplinary Major)	4
II	AEC-2	Language and Communication Skills (MIL 2 - English/ Hindi)	2
	SEC-2	Skill Enhancement Course-2	3
	MDC-2	Multi-disciplinary Course-2	3
	MN-2A	Minor from Vocational Studies/Discipline-2	4
	MJ-2	Major paper 2 (Disciplinary/Interdisciplinary Major)	4
	MJ-3	Major paper 3 (Disciplinary/Interdisciplinary Major)	4
III	AEC-3	Language and Communication Skills (Language Elective 1 - Modern Indian language including TRL)	2
	SEC-3	Skill Enhancement Course-3	3
	MDC-3	Multi-disciplinary Course-3	3
	MN-1B	Minor from Discipline-1	4
	MJ-4	Major paper 4 (Disciplinary/Interdisciplinary Major)	4
	MJ-5	Major paper 5 (Disciplinary/Interdisciplinary Major)	4
IV	AEC-3	Language and Communication Skills (Language Elective - Modern Indian language including TRL)	2
	VAC-2	Value Added Course-2	2

	MN-2B	Minor from Vocational Studies/Discipline-2	4
	MJ-6	Major paper 6 (Disciplinary/Interdisciplinary Major)	4
	MJ-7	Major paper 7 (Disciplinary/Interdisciplinary Major)	4
	MJ-8	Major paper 8 (Disciplinary/Interdisciplinary Major)	4
V	MN-1C	Minor from Discipline-1	4
	MJ-9	Major paper 9 (Disciplinary/Interdisciplinary Major)	4
	MJ-10	Major paper 10 (Disciplinary/Interdisciplinary Major)	4
	MJ-11	Major paper 11 (Disciplinary/Interdisciplinary Major)	4
	IAP	Internship/Apprenticeship/Field Work/Dissertation/Project	4
VI	MN-2C	Minor from Vocational Studies/Discipline-2	4
	MJ-12	Major paper 12 (Disciplinary/Interdisciplinary Major)	4
	MJ-13	Major paper 13 (Disciplinary/Interdisciplinary Major)	4
	MJ-14	Major paper 14 (Disciplinary/Interdisciplinary Major)	4
	MJ-15	Major paper 15 (Disciplinary/Interdisciplinary Major)	4
VII	MN-1D	Minor from Discipline-1	4
	MJ-16	Major paper 16 (Disciplinary/Interdisciplinary Major)	4
	MJ-17	Major paper 17 (Disciplinary/Interdisciplinary Major)	4
	MJ-18	Major paper 18 (Disciplinary/Interdisciplinary Major)	4
	MJ-19	Major paper 19 (Disciplinary/Interdisciplinary Major)	4
VIII	MN-2D	Minor from Vocational Studies/Discipline-2	4
	MJ-20	Major paper 20 (Disciplinary/Interdisciplinary Major)	4
	RC/ AMJ-1 AMJ-2 AMJ-3	Research Internship/Field Work/Dissertation OR Advanced Major paper-1 (Disciplinary/Interdisciplinary Major) Advanced Major paper-2 (Disciplinary/Interdisciplinary Major) Advanced Major paper-3 (Disciplinary/Interdisciplinary Major)	12/ 4 4 4
		Total Credit	160

VOCATIONAL COURSE – I
“SERICULTURE”

Semester-II

MNV 1A: GENERAL SERICULTURE

(Credits: Theory-03)
Theory: 45 Lectures

Marks: (ESE: 3Hrs) = 75	Pass Marks: Th (ESE) = 30
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(Credits: Theory-03) **45 Hours**

Course Learning Outcomes:

1. The learners would be able to know about the basics of Sericulture.
2. They would easily identify the host plants.
3. They would also know the methods of propagation.

Course Content:

UNIT 1: Introduction to basics of Sericulture: Its origin and history.

UNIT 2: Silkworm's scientific name and its different species are grown in India.

UNIT 3: Silkworm and its life cycle.

UNIT 4: Host plants

UNIT 5: Mulberry cultivation.

UNIT 6: Familiarising with the method of propagation

Reference Books

1. A textbook on Sericulture by Dr. Sanjay Sarkar
 2. Sericulture: A Silk Revolution in India by Dr Babita Kumara
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MNV 1A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

<i>Experiment</i>	<i>= 15 marks</i>
<i>Practical record notebook</i>	<i>= 05 marks</i>
<i>Viva-voce</i>	<i>= 05 marks</i>

Practicals:

1. Sericulture maps:
 - a. World maps and Silk Road
 2. Preparation of histograms and pie charts on:
 - a. Production of Textile Fibers in India
 - b. World Silk Production
 - c. The pie chart on mulberry and non-mulberry silk production in India
 3. Identification and study of Sericulture products:
 - a. Cotton and Silk Yarn different types, Pupae, Silk Yarn, Noil Yarn
 - b. Collection of cocoons of different species.
 4. Visit to the orchard to identify host plants.
 5. Preparation of chart and model on details of the life cycle of Silk worm?
 6. Laboratory Note Book
-

Semester-IV**MNV 1B: SILKWORM AND SILKWORM CROP PROTECTION** (Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The learners would be able to identify the different stages of development of Silkworm.
2. The learners would know the pests of host plants and silkworms.

Course Content:**UNIT 1** Understanding the nutritional requirements of both the silkworm and host plants.**UNIT 2:** Races & classification of silkworm: Classification based on the number of Larval Moults, Voltinism. Indigenous pure race & cross breed of India. Races with sex-limited Characters**UNIT 3:** Silkworm morphology: Morphology of the egg, larva, pupa, adult.**UNIT 4:** Pruning of mulberries, harvesting mulberries, and pest management (White flies, Bihar hairy caterpillar, Leaf roller).**UNIT 5:** Silkworm Diseases: Protozoan disease, Bacterial disease, Fungal disease, Viral disease, Sototo disease, septicemia and Gattine disease**UNIT 6:** Silkworm Pests: Uzi fly, Ants, Dermestid Beetles.**Reference Books**

1. Silk culture by S.K Ananthanarayanan
2. Ganga, G., And J. Sulochana Chetty. (1991) An Introduction to Sericulture. Oxford & IBH Publishing Company.
3. Manual-2 - Silkworm Rearing. Agriculture Service Bulletin, Fao, Rome.
4. Madan Mohan Rao, M. (1999) Comprehensive Sericulture Manual. Ps Publications, Hyderabad.
5. Silkworm Crop Protection, Central Silk Board, Bangalore, India.
6. Govindan, R.; Narayanaswamy, T.K. And Devaiah, M.C. (1998) Principles of Silkworm Pathology. Seri Scientific Publishers, Bangalore.
7. Govindan, R.; Ramakrishna Naika and Sannappa, B. (2004) Advances in Disease and Pest Management in Sericulture. Seri Scientific Publishers, Bangalore

MNV 1B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:*

<i>Experiment</i>	<i>= 15 marks</i>
<i>Practical record notebook</i>	<i>= 05 marks</i>
<i>Viva-voce</i>	<i>= 05 marks</i>

Practicals:

1. Anatomy of Silkworm
2. Collection of diseased host- plant leaves and silkworm stages of life cycle of bombyx mori:
3. Collection of egg, larva, pupa and adult of silkworm Bombyx mori:
4. Silk gland
5. Cocoon characters of popular uni-, bi-, and multivoltine races
6. Laboratory Note Book

Semester-VI**MNV 1C: SILKWORM REARING**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Outcomes:**

1. The learners would be able to know about the rearing house.
2. Table to differentiate the difference between chowki rearing and late age rearing.
3. They can differentiate between mounting, moutage, and spinning.

Course Content:**UNIT 1:** Silkworm Rearing (C.S.B. proposed model rearing house)**UNIT 2:** Rearing appliances, disinfection, disinfectants, bed cleaning, feeding of worms**UNIT 3:** Maintaining the optimum condition of rearing, brushing, frequency of spacing, care during mounting**UNIT 4:** Mounting and moutages, process of spinning, cocoon harvesting**UNIT 5:** Rearing method: chawki rearing or young age worm rearing.**UNIT 6:** Late age Silkworm rearing - 3rd, 4th and 5th stage rearing, shelf rearing, floor rearing and shoot rearing.**Reference Books**

1. An introduction to seri culture by Ganga.
2. Sericulture manual by R.K Patnaik
3. Hand Book of Silkworm Rearing by Tazim Fazi

MNV 1C PRACTICAL:**Marks: Pr (ESE: 3Hrs) = 25****Pass Marks: Pr (ESE) = 10**(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for*****End Semester Examination (ESE):***There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:*

<i>Experiment</i>	<i>= 15 marks</i>
<i>Practical record notebook</i>	<i>= 05 marks</i>
<i>Viva-voce</i>	<i>= 05 marks</i>

Practicals:

1. Rearing houses: Model rearing house and low-cost rearing house. (Demonstration and Exercise); Rearing Appliances (Estimation of rearing appliances for 100df/s)
2. Disinfection: Types of disinfectants; Concentration and dosage requirement; Preparation of spray formulation of disinfectants (For 100df/s)
3. Rearing Techniques: Harvesting and preservation technique; leaf selecting for different instants; mulberry leaf estimation; Identification of moulting larva, care during moulting, mounting and mounting density, types of moutages; Harvesting of cocoons, assessment of cocoons.
4. Maintenance of records for silkworm rearing/Internal Assessment/Local silkworm rearing field visit.
5. Laboratory Note Book.

Semester-VIII**MNV 1D: MULBERRY CROP CULTIVATION AND PROTECTION**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The learners would be able to know the characteristics of family Moraceae.
2. Able to study soil characteristics.
3. Be aware of how to protect the plant.
4. Different disease of root and stem and their management.

Course Content:

UNIT 1: Biology of Mulberry plant: Botanical description of mulberry. Economic importance of mulberry Plant; Salient features of family Moraceae; Different cultivars of mulberry; Floral characteristics of mulberry: Structure of male and female flowers, catkins

UNIT 2: Soil characteristics

UNIT 3: Mulberry crop protection: Planting system, pruning and training, propagation, irrigation, fertilizer application, manuring, composting, vermicomposting and weeding method

UNIT 4: Diseases of mulberry Leaf: Leaf spot, Powdery mildew, Leaf Rust, Leaf blight

UNIT 5: Diseases of mulberry root: Root rot disease, Root knot disease

UNIT 6: Mulberry pest management (Major Pest) (Pest Definition, Pest Outbreak, Pest Forecasting)

UNIT 7: Mealy bug, Bihar hairy caterpillar, Jassid, Leaf roller, Scale insect and Thrips: their preventive and control measures. Minor Pest: Termites and mites their preventive and control measures.

Reference Books

1. Fao Manuals- I Mulberry Cultivation. Fao Rome.
 2. Foth, H.D. (1984) Fundamentals of Soil Science. 7th Edn. John Wiley & Sons, New York.
 3. Rajanna, L., Das, P.K., Ravindran, S., Bhogsha, K., Mishra, R.K., Singhvi, N.R., Katiyar, R.S. And Jayaram, H. (2005) Mulberry Cultivation and Physiology. Central Silk Board, Bangalore.
 4. Rangaswami, G.; Narasimhanna, M.N.; Kasiviswanathan, K., Sastry, C.R. and Jolly, M.S. (1976) Sericulture Manual-1- Mulberry Cultivation. Agriculture Services Bulletin, Fao, Rome.
 5. Ravichandra N.G (2013). Fundamentals of Plant Pathology. Prentice Hall India Learning Private Limited.
 6. Dube H.C. (2007). A Textbook of Fungi, Bacteria and Viruses (Student Edition). Agrobios India.
 7. Agrios (2006). Plant Pathology. Elsevier; Fifth Edition (22 September 2006).
 8. Mulberry Crop Protection, Central Silk Board, Bangalore, India
-

MNV 1D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter forEnd Semester Examination (ESE):*There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:**Experiment = 15 marks**Practical record notebook = 05 marks**Viva-voce = 05 marks***Practicals:**

1. Biology of Mulberry Plant: -
 - a. Morphological study of few important cultivars in West Bengal (S1635, S1, C776 and Kajjli)
 - b. Anatomy of petiole, leaf lamina, stem and root
 - c. Identification of common weeds of mulberry and weeding
 2. Mulberry Crop Cultivation: -
 - a. Preparation of nursery beds
 - b. Selection of materials for cuttings, preparation and selection of cutting planting.
Selection and grading of sapling.
 - c. Different propagation methods – grafting and layering.
 - d. Planting System and Intercultural Operations: - pit and row system, mulching, irrigation. (Demonstration basis)
 3. Identification of different types of fertilizers, calculation of dosages (exercise), Preparation Compost
 4. Mulberry Crop Protection: -
 - a. Study of powdery mildew, leaf spot and leaf rust through sectioning, staining and temporary mounting
 - b. Identification of bacterial, viral and minor diseases and their symptoms
 - c. Identification of root knot disease in mulberry
 - d. Collection, mounting/preservation of insect pests of mulberry (field work)
 - e. Identification of mulberry pests, study of nature of damage of the following pests: - Bihar hairy caterpillar, scale insect, mealy bug, Jassid, thrips, beetles and grasshopper
 5. Field Note Book
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VOCATIONAL COURSE – II
“ORGANIC FARMING”

Semester-II

MNV 2A: PRINCIPLES OF ORGANIC FARMING

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. This course provides an introduction to the study of intelligence, mind and brain from an interdisciplinary

Course Content:

UNIT- I:

1. Organic farming – definition – need – scope – principles – characteristics - relevance to modern agriculture.
2. Different ecofriendly farming systems- biological farming, natural farming, regenerative agriculture – permaculture - biodynamic farming.
3. Relevance of organic farming to Jharkhand & other states in India, and global agriculture and future prospects- advantages - barriers.

UNIT- II:

1. Initiatives taken by the central and state governments, NGOs and other organizations for promotion of organic agriculture in India.
2. Organic nutrient sources and their fortification – organic manures- methods of composting
3. Green manures- bio fertilisers – types, methods of application – benefits and limitations.

UNIT- III:

1. Nutrient use in organic farming-scope and limitations.
2. Nutrient management in organic farming.
3. Organic ecosystem and their concepts.
4. Choice of crops and varieties in organic farming – crop rotations – need and benefits
– multiple cropping.

UNIT- IV:

1. Fundamentals of insect, disease and weed management under organic mode of production-cultural-biological methods-non chemical pest & disease management.
2. Botanicals- pyrethrum, neem seed kernel extract, neem seed powder, soluble neem formulations, neem oil.
3. Operational structure of NPOP – other agencies for organic production.

UNIT- V:

1. Inspection – certification - labelling and accreditation procedures for organic products.
2. Processing, - economic consideration and viability.
3. Marketing and export potential of organic products – national economy

Reference Books

1. Arun K. Sharma. 2002. A Hand book of organic farming. Agrobios, India. 627p.
2. Palaniappan, S.P and Annadurai, K.1999. Organic farming-Theory and Practice. Scientific publishers, Jodhpur,India. 257p.
3. Mukund Joshi and Prabhakarasetty, T.K. 2006. Sustainability through organic farming. Kalyani publishers, New Delhi. 349p.

4. Balasubramanian, R., Balakishnan, K and Siva Subramanian, K. 2013. Principles and practices of organic farming. Satish Serial Publishing House. 453p
5. Tarafdar, J.C., Tripathi, K.P and Mahesh Kumar, 2009. Organic agriculture. Scientific Publishers, India. 369p.
6. Tiwari, V.N., Gupta, D.K., Maloo, S.R and Somani, L.L. 2010. Natural, organic, biological, ecological and biodynamic farming. Agrotech Publishing Academy, Udaipur. 420p.
7. Dushyant Gehlot. 2005. Organic farming- standards, accreditation, certification and inspection. Agrobios, India. 357p

MNV 2A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. Visit to organic farm to study the various components, identification, and utilisation of organic products.
2. Compost making- aerobic and anaerobic methods
3. Vermicompost preparation
4. Preparation of enriched farm yard manure
5. Visit organic clusters and biocontrol lab to study the maintenance of bio-fertilizers/bio-inoculant cultures
6. Biological nitrogen fixers.
7. Methods of application of Bio-pesticides (Trichocards, BT, NPV)
8. Preparation of neem products and other botanicals for pest and disease control
9. Preparation of green pesticides.
10. Different methods of biofertiliser applications.
11. Quality analysis of biofertilisers/ bioinoculants and compost
12. Case studies of Indigenous Technical knowledge e (ITK) for nutrient, insect, pest, disease, and weed management
13. Economic analysis of the organic production system
14. Study of post-harvest management in organic farming
15. Study of quality parameters of organic produce
16. Visit organic farms to study the various components and their utilization

Semester-IV**MNV 2B: FUNDAMENTALS OF CROP PHYSIOLOGY**

(Credits: Theory-03)

Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

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

1. Explain the fundamental concepts and principles of crop physiology.
2. Describe the processes of plant growth and development.
3. Understand the physiological mechanisms of water and nutrient uptake in plants.
4. Analyse the role of photosynthesis and respiration in crop productivity.
5. Identify the impact of environmental factors on crop physiology.
6. Evaluate physiological responses of crops to biotic and abiotic stresses.
7. Apply physiological principles to enhance crop management and yield.

Course Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. Understand Basic Concepts of Crop Physiology:
2. Describe the fundamental principles and concepts of crop physiology.
3. Explain the physiological processes essential for crop growth and development.
1. Comprehend Plant and Crop Anatomy:
2. Identify and describe the structure and function of different plant organs.
3. Understand the anatomical adaptations of crops to various environmental conditions.
4. Analyze Photosynthesis and Respiration:
5. 7.Explain the processes of photosynthesis and respiration in crops.
6. Evaluate the factors affecting these processes and their implications on crop yield.

Course Content:**UNIT – I:**

Introduction to Crop Physiology and its Importance in Agriculture.

Plant cell - The endomembrane system - Plasma membrane, endoplasmic reticulum, nuclear envelope, Golgi apparatus, vacuole, and endosomes - Structure and functional characteristics

- Plastids, mitochondria, oil bodies, peroxisomes, and glyoxysomes - Structure and functions.

UNIT, II:

Absorption of water: Diffusion and osmosis, water potential and its components, Importance of water potential, Active and passive uptake of water, Stomatal complex, Transpiration, Water use efficiency, Water use efficiency of C₃, C₄, and CAM plants, Water requirement / Transpiration ratio
Factors affecting WUE.

Mineral nutrition of plants, Essential mineral elements, Criteria of essentiality of mineral elements, Mengel's classification of mineral nutrients - Nutrient uptake mechanisms - Functional roles of N, P, K, S Ca and Mg, Functional roles of Fe, Mn, Cu, Zn, B, Mo, Cl, Na, Co and Si, Deficiency symptoms of macro and micronutrients. Assimilation of mineral nutrients, Nitrate assimilation, Ammonium assimilation in plants, Biological nitrogen fixation, Free-living and symbiotic bacteria, Nodule formation, Nitrogenase enzyme complex.

UNIT, III:

Photosynthesis: Reactions of photosynthesis, Energy synthesis, Principle of light absorption by plants, Light reactions - Cyclic and non-cyclic photophosphorylation, CO₂ fixation, C₃ and C₄ pathways, Significance of C₄ pathway, CAM pathway and its significance, Photorespiration and its significance, Photosynthetic efficiency of C₃, C₄ and CAM plants - Factors affecting photosynthesis (light, CO₂, temperature and water stress) - Relationship of photosynthesis and crop productivity.

Respiration: Energy balance, Significance of respiration, Oxidative Pentose Phosphate Pathway (OPPP) and its significance, Growth respiration and maintenance respiration, Alternate respiration, Salt respiration, Wound respiration.

Lipid metabolism, Biosynthesis of fatty acids in plastids, Functions of lipids Significance of lipids in plant metabolism.

UNIT, IV:Physiology of flowering:

Photoperiodism and flowering, Importance of photoperiodism.

Classification of plants based on photoperiodic responses. Perception of photoperiodic stimulus, Biological clock, Phytochrome, Flowering hormones, Vernalization and flowering, importance of vernalization in agriculture.

Plant growth regulators:

Auxins, Occurrence, transport, biosynthesis, mode of action and physiological roles, Commercial uses.

Gibberellins, occurrence, transport, biosynthesis, mode of action and physiological roles, Commercial uses.

Cytokinins, Occurrence, transport, biosynthesis, mode of action and physiological roles, commercial uses. ABA,

Occurrence, transport, biosynthesis, mode of action and physiological roles, Commercial uses.

Ethylene, Occurrence, transport, biosynthesis, mode of action and physiological roles, Commercial uses.

Senescence and abscission:

Definition, Classification of senescence, Physiological and biochemical changes that occur during senescence -

Prevention of leaf and flower senescence, Abscission and its relationship with senescence.

UNIT, V:Post-harvest physiology:

Dormancy, Types of dormancy, Advantages, and Disadvantages of dormancy. Causes of dormancy, Remedial measures for breaking seed dormancy. Fruit ripening - Climacteric and non-climacteric fruits, Metabolic changes during fruit ripening - Hormonal regulation of fruit ripening, ripening induction and ripening inhibition, Use of hormones in increasing vase life of flowers. Metabolic changes during seed development - Seed viability and seed vigor - Tests of viability and vigor- Physiological maturity, harvestable maturity- Indices of physiological maturity in crops - Seed germination - Metabolic changes during seed germination.

Reference Books

1. Taiz, L. and Zeiger, E. 2010. Plant Physiology 5th edition, Sinauer Associates, Sunderland, MA, USA.
2. Gardner, F.P., Pearce, R.B., and Mitchell, R.L. 1985. Physiology of Crop Plants. Scientific Publishers, Jodhpur.
3. Noggle, G.R. and Fritz, G.J., 1983. Introductory Plant Physiology. 2nd Edition. Prentice Hall Publishers, New Jersey, USA.

MNV 2B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter forEnd Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Photosynthesis and Respiration in Plants
2. Water Transport in Plants
3. Nutrient Deficiency Symptoms in Plants

Semester-VI**MNV 2C: PRINCIPLES OF SEED TECHNOLOGY**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. Understand the Fundamentals of Seed Technology:
2. Describe the basic concepts and principles of seed technology.
3. Explain the importance and scope of seed technology in agriculture.
4. Comprehend Seed Development and Maturation:
5. Understand the processes involved in seed development and maturation.

Course Learning Outcomes:

1. Identify the stages of seed formation and the factors affecting seed quality & Seed Production Techniques:
2. Learn the methods and practices for producing high-quality seeds.
3. Understand the principles of seed multiplication and hybrid seed production.
4. Seed Processing and Storage:
5. Explain the techniques of seed processing including cleaning, grading, and treating seeds.
6. Understand the principles and methods of seed storage to maintain seed viability and vigor.

Course Content:**UNIT I:**

Introduction to seed and seed quality: Seed, definition, Seed structure, Seed development, and maturation
Germination, phases of seed germination.

Dormancy, types of seed dormancy, Seed senescence, causes of seed senescence Seed quality characteristics, significance.

Classes of seed, Generation system of seed multiplication in the seed supply chain.

UNIT II:

Principles of Seed Production:

Seed replacement rate and varietal replacement, Seed Multiplication Ratio, Seed renewal period. Causes of varietal deterioration and maintenance Genetic and agronomic principles of seed production Factors affecting quality seed production

Methods of seed production of varieties and hybrids.

UNIT III:

Seed production techniques of crops:

Floral biology and pollination behavior, seed production techniques of varieties and hybrids of rice, maize, cotton varieties, and hybrids – Bt cotton

UNIT IV:

Seed production techniques for vegetable crops

Floral biology and pollination behavior, seed production techniques of varieties and hybrids of tomato, snake gourd, bitter gourd, ash gourd, ribbed gourd, and bottle gourd

UNIT V:

Post-harvest seed handling techniques:

Threshing methods, Drying. Methods of seed drying, Advantages and disadvantages.

Seed processing, definition, importance.

Seed cleaning and grading, upgrading, equipment, and working principles.

Seed treatment, importance, types.

Seed invigoration techniques, seed hardening, seed fortification, and seed priming.

Seed enhancement techniques, seed coating, and seed pelleting.

Reference Books

1. "Seed Technology and Its Biological Basis" by Michael Black, J. Derek Bewley, and Peter Halmer
 2. "Principles of Seed Science and Technology" by Lawrence O. Copeland and Miller F. McDonald
 3. "Seed Biology and Yield of Grain Crops" by Dennis B. Egli
 4. "Seed Production: Principles and Practices" by S. S. Singh and M. L. Bhale
 5. "Handbook of Seed Science and Technology" edited by Amarjit S. Basra
 6. "Seed Quality: Basic Mechanisms and Agricultural Implications" edited by Amarjit S. Basra
 7. "Vegetable Seed Production" by Raymond A. T. George
 8. "Seed Production and Certification" by R. K. Agrawal and B. M. Dadlani
 9. "Seeds: The Ecology of Regeneration in Plant Communities" edited by Michael Fenner and Ken Thompson
 10. "Seed Dormancy and Germination" by J. D. Bewley, K. J. Bradford, H. W. M. Hilhorst, and H. Nonogaki
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MNV 2C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:**Experiment = 15 marks**Practical record notebook = 05 marks**Viva-voce = 05 marks***Practicals:**

1. Study of seed structure of agricultural and horticultural crops.
 2. Seed dormancy breaking methods.
 3. Acid delinting in cotton.
 4. Detasseling techniques for hybrid seed production in maize.
 5. Emasculation and dusting techniques for hybrid seed production in important field crops.
 6. Practicing pre-germinative techniques, enhancing floral ratio and improving seed set in cucurbits
 7. Fruit grading and seed extraction methods in vegetables - tomato, brinjal, chillies, bhendi and cucurbits.
 8. Seed cleaning and grading techniques and detection of seed mechanical injury.
 9. Collection of seeds.
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Semester-VIII**MNV 2D: BREEDING OF FIELD CROPS**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

Upon successful completion of this course, students will be able to:

1. Understand the Principles and Methods of Crop Breeding:
2. Explain the fundamental principles and techniques used in the breeding of field crops.
3. Describe the various methods of breeding, including selection, hybridization, mutation breeding, and biotechnological approaches.
4. Analyze Genetic Variation and Heritability:
5. Understand the genetic basis of variation and its significance in crop improvement.
6. Evaluate the heritability of important agronomic traits and their implications for breeding programs.
7. Implement Breeding Programs for Crop Improvement:
8. Design and execute effective breeding programs to enhance yield, quality, disease resistance, and abiotic stress tolerance in field crops.
9. Apply knowledge of crop genetics and breeding techniques to develop new and improved crop varieties.

Course Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. Apply Breeding Techniques to Field Crops:
2. Utilize various breeding methods such as selection, hybridization, and mutation breeding to develop improved crop varieties.
3. Implement biotechnological tools in crop breeding to enhance genetic traits.
4. Evaluate Genetic Variation and Selection:
5. Assess genetic variation within crop populations and understand its importance in breeding programs.
6. Analyze heritability and genetic gain of important agronomic traits to make informed breeding decisions.
7. Design and Manage Breeding Programs:
8. Develop and manage breeding programs aimed at improving yield, quality, and resistance to biotic and abiotic stresses in field crops.
9. Integrate knowledge of plant genetics, breeding techniques, and field management practices to optimize breeding outcomes.

Course Content:

Place of origin – putative parents – related wild species – classification – objectives of breeding- methods of breeding – quantity – quality – stress – conventional – innovative – heterosis breeding – distant hybridization and important varieties in following crops.

UNIT-I: Cereals

Rice, Wheat, Grain and fodder Maize, Grain and fodder Sorghum

UNIT-II: Millets

Pearl millet, Finger millet, Foxtail millet, Kodo millet, Little millet, Proso millet, Barn yard millet.

UNIT-III: Pulses

Red gram, Bengal gram, Green gram, Black gram, Soybean, lab-lab

UNIT-IV: Oilseeds

Groundnut, Sesame, Mustard, Sunflower and Safflower, Coconut, Oil palm

UNIT-V: Fibres and Sugars Cotton, Jute, Mesta, Sugarcane, Sugar beet

Reference Books

1. "Breeding Field Crops" by John M. Poehlman and David A. Sleper
2. "Principles of Plant Genetics and Breeding" by George Acquaah
3. "Plant Breeding: Principles and Methods" by B.D. Singh
4. "Plant Breeding: Theory and Practice" by Neal C. Stoskopf, David T. Tomes, and Brigitte B. Christie
5. "Breeding of Horticultural Crops: Principles and Practices" by N. Kumar
6. "Plant Breeding for the Home Gardener: How to Create Unique Vegetables and Flowers" by Joseph Tychonievich
7. "Genetics, Genomics and Breeding of Maize" edited by Ramakrishna Wusirika, Rajeev Varshney, and Yunbi Xu
8. "Breeding of Vegetable, Tuber and Spice Crops" by S. K. Gupta and S. K. Singh
9. "Principles of Crop Improvement" by Norman W. Simmonds and J. Smartt
10. "Plant Breeding Reviews" edited by Jules Janick

MNV 2D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:**Experiment = 15 marks**Practical record notebook = 05 marks**Viva-voce = 05 marks***Practicals:**

Observation on floral biology – anthesis and pollination – selfing and crossing techniques – observation on wild species – maintenance of crossing ledger – pedigree record – in following crops.

1. Rice, Wheat
2. Maize, Sorghum
3. Pearl Millet, Finger Millet, Little Millet
4. Kodo Millet, Barn Yard Millet, Proso Millet and Foxtail Millet.
5. Red gram Bengal Gram, Green Gram, Black Gram, Soybean, Lab – Lab.
6. Groundnut, Sesame, Mustard.
7. Sunflower, Safflower.
8. Coconut and Oil palm
9. Cotton, Jute and Mesta
10. Sugarcane and Sugar Beet

VOCATIONAL COURSE – III
“BANKING & INSURANCE”

Semester-II

MNV 3A: INDIAN BANKING SYSTEM

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

The main objectives of this course are to:

1. Acquaint knowledge about the banking system prevailing in India
2. Learn the functions of SBI
3. Understand the acts related to banking regulations
4. Equip with the functions of cooperative banks
5. Learn the working functions of RBI

Course Learning Outcomes:

On the successful completion of the course, students will be able to:

1. Explain the structure of the Indian banking system.
2. Outline the History and Functions of the State Bank of India and its challenges
3. Summarize the various acts related to banking regulation
4. Know about the Regional Rural Cooperative Banks in India and its functions
5. Explain RBI functions, working and policy

Course Content:

Unit:1 Introduction to the Indian Banking System

Indian banking system: structure and organization of bank; Types of Banks- Central bank & Commercial Bank- their functions, Reserve Bank of India, Regional rural banks; Co-Operative banks; Development banks

Unit:2 State Bank of India & Its Function

State Bank of India: Brief History; objectives; Functions; Structure and organization; Working and progress

Unit:3 Banking Acts

Banking Regulation Act, 1949: History; Social control; Banking Regulation Act as applicable to banking companies and public sector banks; Banking Regulation Act as applicable to Cooperative banks

Unit:4 Regional Rural and Co-Operative Banks

Regional Rural and Co- Co-operative Banks in India: Functions; Role of Regional Rural and co-operative banks in rural India; Progress and Performance

Unit:5 Reserve Bank of India

Reserve Bank of India: Objectives; Organization; Function and working; Monetary policy; Credit control measures and their effectiveness.

Unit:6 Contemporary Issues

Expert lectures, - webinars

Reference Books

1. Basu A.K: Fundamentals of Banking- Theory and practice; A Mukerjee and co; Calcutta 2
 2. Sayers R.S: Modern Banking; Oxford University Press.
 3. Panandikar S.G. and Mithani DM: Banking in India; Orient Longman
 4. Prof. Gordon E & Natarajan K: Banking Theory, Law and Practices; Himalaya Publication House, Mumbai
 5. Gopinath M.N: Banking Principles and Operations; Snow White Publisher, Mumbai
 6. Natrarajan and Parameswaran: Indian Banking; S. Chand Company Ltd, New Delhi
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MNV 3A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Practical Session 1: Understanding and Analyzing Financial Statements of Banks****Objectives:**

- To understand the components of a bank's financial statements.
- To analyze the financial performance of banks using key financial ratios.

Materials:

- Annual reports of selected Indian banks (available online).
- Financial ratio analysis templates.
- Calculators or financial analysis software.
- Spreadsheet software (e.g., Microsoft Excel, Google Sheets).

Procedure:

1. **Preparation:**
 - Select annual reports from at least three major Indian banks (e.g., State Bank of India, ICICI Bank, HDFC Bank).
2. **Understanding Financial Statements:**
 - Review the components of the banks' financial statements, including the balance sheet, income statement, and cash flow statement.
 - Identify key items such as total assets, liabilities, equity, income, and expenses.
3. **Financial Ratio Analysis:**
 - Calculate key financial ratios for each bank, such as:
 - Return on Assets (ROA)
 - Return on Equity (ROE)
 - Net Interest Margin (NIM)
 - Capital Adequacy Ratio (CAR)
 - Non-Performing Assets (NPA) Ratio
 - Use spreadsheet software to organize and calculate these ratios.
4. **Analysis and Interpretation:**
 - Compare the calculated ratios across the selected banks.
 - Analyze the financial performance and stability of each bank based on the ratios.
 - Discuss the implications of these ratios on the banks' operations and decision-making processes.
5. **Presentation:**
 - Prepare a brief report or presentation summarizing the financial analysis and findings.
 - Present the findings to the class, highlighting key insights and conclusions.

Practical Session 2: Digital Banking and E-Banking Services**Objectives:**

- To explore various digital banking services offered by Indian banks.
- To understand the benefits and challenges of digital banking.

Materials:

- Access to the websites and mobile apps of major Indian banks.
- Internet-enabled devices (computers, tablets, smartphones).
- Digital banking service comparison templates.

Procedure:

1. **Preparation:**

- Identify major Indian banks offering digital banking services (e.g., SBI, ICICI, HDFC, Axis Bank).
2. Exploring Digital Banking Services:
 - Visit the websites and mobile apps of the selected banks.
 - Explore various digital banking services such as online account opening, fund transfers, bill payments, mobile banking, and investment services.
 3. Service Comparison:
 - Compare the digital banking services offered by different banks based on criteria such as:
 - User interface and ease of use
 - Range of services provided
 - Security features
 - Customer reviews and ratings
 4. Benefits and Challenges:
 - Identify the benefits of digital banking for customers and banks (e.g., convenience, cost reduction, enhanced customer experience).
 - Discuss potential challenges and risks associated with digital banking (e.g., cybersecurity threats, digital divide).
 5. Case Studies:
 - Analyze case studies of successful digital banking initiatives by Indian banks.
 - Discuss the impact of these initiatives on customer satisfaction and bank performance.
 6. Report:
 - Prepare a report summarizing the findings of the digital banking service comparison and analysis.
 - Include recommendations for improving digital banking services based on the analysis.

Practical Session 3: Role-Playing Bank Branch Operations

Objectives:

- To understand the day-to-day operations of a bank branch.
- To simulate customer interactions and banking transactions.

Materials:

- Role-play scripts and scenarios.
- Bank forms and documents (account opening forms, loan application forms, deposit slips).
- Props to simulate a bank branch (tables, chairs, name tags).

Procedure:

1. Preparation:
 - Create role-play scripts and scenarios that cover common bank branch operations (e.g., account opening, loan processing, customer inquiries).
 2. Role Assignment:
 - Assign roles to students, such as bank tellers, loan officers, branch manager, and customers.
 3. Role-Playing Scenarios:
 - Conduct role-playing exercises where students simulate various banking transactions and customer interactions.
 - Scenarios may include:
 - A customer opening a new savings account
 - A customer applying for a personal loan
 - A customer inquiring about investment options
 - Handling customer complaints and resolving issues
 4. Report:
 - Prepare a brief report summarizing the role-playing activities and key learnings.
 - Include suggestions for improving bank branch operations and customer service.
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Semester-IV**MNV 3B: FUNDAMENTALS OF INSURANCE**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

The main objectives of this course are to:

1. Impart theoretical base on fundamental principles of the insurance business
2. Learn the procedure to become an insurance agent
3. Learn the functions of insurance agent
4. Equip with the practices of the insurance industry
5. Impart knowledge of the types and principles of insurance

Course Learning Outcomes:

On the successful completion of the course, students will be able to:

1. Acquire knowledge of the basics of insurance
2. Explain the procedures to be the agent
3. Summarize the various functions of Insurance agent
4. Understand the policies of the insurance company
5. Demonstrate the types of insurance

Course Content:**Unit:1 Introduction to Insurance**

Introduction to insurance: Purpose and need of insurance: Insurance as a social security tool; insurance and economic development.

Unit:2 Insurance Agent – Introduction

Procedures for Becoming an Agent: Pre-requisite for obtaining a license: Duration of license; Cancellation of license; Revocation or suspension/termination of agent appointment; Code of conduct; Unfair practices.

Unit:3 Insurance Agent – Functions

Functions of the Agent: Proposal form and other forms for grant of cover; Financial and medical underwriting; Material information; Nomination and assignment; Procedure regarding settlement of policy claims.

Unit:4 Strategies of Insurance Company

Company Profile: Organizational set-up of the company; Promotion strategy; Market share; Important activities; Structure; Product; Actuarial profession; Product pricing - actuarial aspects; Distribution channels.

Unit:5 Types of Insurance

Fundamental/Principles of life Insurance/Marine/Fire/Medical/General Insurance: Contract of various kinds; Insurance Interest.

Unit:6 Contemporary Issues

Expert lectures, - webinars

Reference Books

1. Mishra M.N: Insurance Principles and practice; S. Chand and co, New Delhi.
 2. Insurance principles and practice - Moorthy. A, Margham publications, Chennai.
 3. Fundamentals of Insurance- Dr. Periyasamy, Himalaya Publishing Pvt Ltd, Mumbai
 4. Insurance Regulatory Development Act 1999
 5. Life Insurance Corporation Act 1956.
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MNV 3B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Practical Session 1: Analyzing Insurance Policies**

Objectives:

- To understand the structure and components of different types of insurance policies.
- To analyze the terms, conditions, and coverage of various insurance policies.

Materials:

- Sample insurance policies (e.g., life insurance, health insurance, auto insurance, home insurance).
- Policy analysis templates.
- Calculators.
- Access to insurance company websites for policy information.

1. Preparation:

- Collect sample insurance policies from various insurance companies.
- Prepare policy analysis templates for students to use.

2. Understanding Policy Components:

- Review the common components of insurance policies, including declarations, insuring agreements, exclusions, conditions, and endorsements.

3. Policy Analysis:

- Divide students into groups and assign each group a different type of insurance policy.
- Have each group analyze their assigned policy using the provided templates, focusing on:
 - Coverage details
 - Premiums and deductibles
 - Policy limits
 - Exclusions and conditions
 - Claims process

4. Presentation and Discussion:

- Each group presents their analysis to the class.
- Discuss the differences and similarities between various types of insurance policies.
- Highlight important aspects to consider when selecting an insurance policy.

5. Report:

- Prepare a report summarizing the key findings from the policy analysis.
- Include recommendations for selecting appropriate insurance coverage based on individual needs.

Practical Session 2: Simulating Insurance Claims Process

Objectives:

- To understand the insurance claims process from initiation to settlement.
- To simulate the filing and processing of an insurance claim.

Materials:

- Sample claim forms for different types of insurance (e.g., auto, health, property).
- Role-play scenarios and scripts.
- Access to digital tools for submitting claims (if available).

1. Preparation:

- Create role-play scenarios involving different types of insurance claims (e.g., car accident, health emergency, property damage).

2. Role Assignment:

- Assign roles to students, such as policyholder, insurance agent, claims adjuster, and service provider.
3. Role-Playing Scenarios:
 - Conduct role-playing exercises where students simulate filing and processing insurance claims.
 - Scenarios may include:
 - A policyholder reporting an auto accident and filing a claim.
 - A policyholder submitting a health insurance claim for a medical procedure.
 - A policyholder claiming damages for property loss due to a natural disaster.
 4. Claims Process Simulation:
 - Guide students through the steps of the claims process, including:
 - Completing and submitting claim forms
 - Providing necessary documentation and evidence
 - Communication with the insurance agent and claims adjuster
 - Evaluation and settlement of the claim

Practical Session 3: Risk Assessment and Premium Calculation

Objectives:

- To understand the factors influencing risk assessment and premium calculation in insurance.
- To simulate the process of assessing risk and calculating insurance premiums.

Materials:

- Case studies involving different risk scenarios (e.g., health, property, auto).
- Risk assessment templates.
- Premium calculation formulas and tools.
- Access to online premium calculators (if available).

1. Preparation:

- Prepare case studies with varying levels of risk for different types of insurance.

2. Understanding Risk Assessment:

- Review the factors that influence risk assessment in insurance, such as age, health status, occupation, location, and asset value.
- Discuss how insurers use these factors to determine the likelihood and potential cost of claims.

3. Risk Assessment Simulation:

- Divide students into groups and assign each group a different case study.
- Have each group assess the risk associated with their case study using the provided templates.
- Consider factors such as the probability of an event occurring and the potential financial impact.

4. Premium Calculation:

- Introduce the basic formulas and methods used to calculate insurance premiums.
- Guide students in calculating the premium for their assigned case study based on the assessed risk.
- Use online premium calculators for additional practice and comparison.

5. Report:

- Prepare a report summarizing the risk assessment and premium calculation for each case study.
 - Include reflections on the factors influencing premium rates and the importance of accurate risk assessment.
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Semester-VI**MNV 3C: ENTREPRENEURSHIP**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

The main objectives of this course are:

1. To learn the competency required for entrepreneurs
2. To have an idea about the role of small-scale industries
3. To learn about the preparation of the project
4. To know the preparation of the business plan
5. To understand the services and functions of financial institutions supporting entrepreneurs

Course Learning Outcomes:

1. On the successful completion of the course, students will be able to:
2. Acquire knowledge on entrepreneurship and the requirements for entrepreneur
3. Explain the role of Small Scale industries in India and their governing policies
4. Elaborate the steps to be followed to start up a new business venture
5. Design a Business plan and avoid common pitfalls
6. Summarize the various financial and non-financial assistance providers

Course Content:**Unit:1 Introduction to Entrepreneurship**

Entrepreneurship: Introduction to Entrepreneur, Entrepreneurship, and Enterprise, Importance and Relevance of the Entrepreneur, Factors influencing entrepreneurship, Pros and Cons of being an Entrepreneur, Women Entrepreneurs, problems and Promotion, Types of Entrepreneurs, Characteristics of a successful entrepreneur, Competency requirement for entrepreneurs, Awareness of self-competency and its development

Unit:2 Small Scale Industries

Small Scale Industries, Small scale industries/ Tiny industries/Ancillary industries/ Cottage Industries, definition, meaning, product range, capital investment, ownership patterns, Importance and role played by SSI in the development of the Indian economy, Problems faced by SSI-s and the steps taken to solve the problems, Policies governing SSI-s.

Unit:3 Business venture

Starting a Small Industry. To understand what constitutes a business Opportunity, scanning the environment for opportunities, evaluating alternatives, and selecting based on personal competencies., An overview of the steps involved in starting a business venture, location, clearances, and permits required, formalities, licensing and registration procedures, and Assessment of the market for the proposed project. To understand the importance of the financial, technical, and social feasibility of the project.

Unit:4 Preparing the Business Plan

Preparing the Business Plan (BP), Typical BP format- Financial aspects of the BP- Marketing aspects of the BP- Human Resource aspects of the BP- Technical aspects of the BP- Social aspects of the BP, Preparation of BP, Common pitfalls to be avoided in preparation of a BP

Unit:5 Implementation of the project

Implementation of the project, Financial assistance through SFC-s, SIDBI, Commercial Banks, KSIDC, KSSIC, IFCI, Non-financial assistance from DIC, SISI, EDI, SIDO, AWAKE, TCO, TECKSOK, KVIC, Financial incentives for SSI-s, and Tax Concessions, Assistance for obtaining raw material, machinery, land and building and technical assistance, Industrial estates, V role and types

Unit 6 Contemporary issues

Expert lectures and seminars

Reference Books

1. Mark. J. Dollinger, Entrepreneurship -V Strategies and Resources, Pearson Edition.
2. Udai Pareek and T.V. Rao, Developing Entrepreneurship
3. S.V.S. Sharma, Developing Entrepreneurship, Issues and Problems
4. Srivastava, A Practical Guide to Industrial Entrepreneurs
5. Government of India, Report of the committee on Development of small and medium entrepreneurs, 1975

MNV 3C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Practical Session 1: Idea Generation and Validation****Objectives:**

- To develop skills in generating and evaluating business ideas.
- To understand the process of validating business ideas through market research.

Materials:

- Whiteboard or flip chart.
- Sticky notes and markers.
- Laptops or mobile devices for online research.
- Sample business idea evaluation criteria.

Procedure:

1. **Idea Generation:**
 - Brainstorm a list of potential business ideas as a class or in small groups.
 - Use techniques like mind mapping or SWOT analysis to explore different aspects of each idea.
2. **Idea Evaluation:**
 - Discuss criteria for evaluating business ideas, such as market demand, competition, feasibility, and personal interest.
 - Have students individually or in groups evaluate each idea against these criteria and select one idea to develop further.
3. **Market Research:**
 - Introduce basic market research methods, including surveys, interviews, and online research.
 - Assign students to conduct market research to validate their chosen business idea.
 - Use the findings to refine and validate the business idea.
4. **Presentation:**
 - Have students present their selected business idea, the evaluation process, and the results of their market research to the class.
 - Facilitate a discussion on the importance of idea validation and the role of market research in entrepreneurship.

Practical Session 2: Business Model Canvas Development**Objectives:**

- To understand the components of a business model canvas.
- To develop a business model canvas for a startup idea.

Materials:

- Business model canvas templates.
- Sample business model examples.
- Whiteboard or flip chart.

Procedure:

1. Introduction to Business Model Canvas:
 - Explain the nine building blocks of a business model canvas, including customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure.
2. Group Activity:
 - Divide students into groups and assign each group a startup idea.
 - Have each group develop a business model canvas for their assigned idea, filling in each of the nine building blocks.
3. Canvas Presentation:
 - Ask each group to present their business model canvas to the class, explaining their choices and rationale for each building block.
 - Encourage feedback and discussion on the strengths and weaknesses of each canvas.
4. Reflection:
 - Facilitate a reflection session where students discuss what they learned from developing the business model canvas.
 - Discuss how the canvas can help entrepreneurs refine their business ideas and communicate their vision to stakeholders.

Expected Outcomes:

- Ability to create a comprehensive business model canvas for a startup idea.
- Understanding of how a business model canvas can help entrepreneurs visualize and refine their business concepts.
- Enhanced teamwork and collaboration skills through group activities.

Practical Session 3: Pitching and Networking**Objectives:**

- To develop skills in pitching business ideas to potential investors or partners.
- To practice networking skills in a professional setting.

Materials:

- Pitch deck templates.
- Timer or stopwatch.
- Name tags for networking.

Procedure:

1. Pitch Preparation:
 - Introduce the key elements of a successful pitch, including a compelling story, market analysis, unique value proposition, and financial projections.
 - Provide pitch deck templates and guidelines for students to create their pitch decks.
 2. Pitch Practice:
 - Organize a pitch competition where students present their business ideas to a panel of judges or the class.
 - Set a time limit for each pitch (e.g., 5-10 minutes) followed by a Q&A session.
 3. Networking Session:
 - Arrange a networking event where students can practice their networking skills.
 - Provide tips on effective networking, such as introducing oneself, asking open-ended questions, and active listening.
 4. Feedback and Reflection:
 - After the pitch competition and networking session, facilitate a feedback session where students can receive feedback from peers and instructors.
 - Encourage students to reflect on their pitching and networking experiences and identify areas for improvement.
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Semester-VIII**MNV 3D: BANKING LAW AND PRACTICE**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

The main objectives of this course are:

1. To familiarize the students with the basic concepts and practice of banking and the principles of the Banking Regulation Act.
2. To learn about the types of customers in a bank
3. To have an idea about the relationship between a banker and a customer
4. To have an understanding of the instruments involved in banks
5. To learn about paying banker

Course Learning Outcomes:

1. On the successful completion of the course, students will be able to:
2. Gain knowledge of Laws related to Banking
3. Acquire knowledge of Types of customers
4. Understand the relationship between a bank and the customer
5. Recall the various instruments and their types dealt with banks
6. Enumerate the Paying bank and its functions.

Course Content:**Unit:1 Banking Laws**

Banking Laws - Meaning, Nature, and Scope

Unit:2 Bank and Bank Customers

Bank and Bank Customers - Meaning, Types of Customers, Types of Accounts

Unit:3 Bank -Customer Relationship

Bank -Customer Relationship: General relationship, Special Relationship concerning Rights and Obligations

Unit:4 Negotiable Instruments

Negotiable Instruments - Meaning, Types, Cheque, Bills of Exchange and Promissory Notes, Features of Negotiable Instruments. Crossing and Endorsement - Meaning and types

Unit:5 Paying Bank

Paying Bank: Meaning, Payment and Paying Banker, Obligations and Protection to paying banker - Bank Loans and Advances - Principles of loans and advances, charge - Meaning, Nature and Methods.

Unit 6 Contemporary issues

Expert lectures and seminars

Reference Books

1. Banking Law and Practice by M.L. Tannan
2. Principles of Banking Law by Ross Cranston
3. Modern Banking: Theory and Practice by Shelagh Heffernan
4. Banking Theory, Law and Practice by Gordon and Natarajan
5. Banking and Financial Services Law by Michael P. Malloy
6. Banking Law: Private Transactions and Regulatory Frameworks by Andreas Kokkinis
7. Principles of Banking by G. Jayaprakash Reddy
8. Law Relating to Banking Services by P.N. Varshney
9. The Law and Practice of International Banking by Charles Proctor
10. Banking Law and Practice in India by H.R. Suneja

MNV 3D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:**Practical Session 1: Case Study Analysis of Banking Regulations****Objectives:**

- To understand the application of banking laws and regulations in real-world scenarios.
- To analyze and interpret banking regulations through case studies.

Materials:

- Case studies involving banking law violations or regulatory challenges.
- Copies of relevant banking laws and regulations.
- Whiteboard or flip chart for group discussions.

Procedure:1. Case Study Selection:

- Select case studies that highlight different aspects of banking laws and regulations, such as compliance issues, regulatory breaches, or legal disputes.

2. Group Analysis:

- Divide students into groups and assign each group a different case study.
- Have students analyze the case study, identify the relevant banking laws and regulations, and discuss the implications of the case.

3. Discussion and Presentation:

- Conduct a group discussion where each group presents their analysis of the case study.
- Facilitate a debate on the interpretation of banking laws and regulations in each case.

4. Reflection:

- Encourage students to reflect on the complexities of banking regulations and the challenges faced by banks in complying with them.
- Discuss the role of regulatory bodies in enforcing banking laws and maintaining financial stability.

Expected Outcomes:

- Improved understanding of banking laws and regulations through practical application.
- Ability to analyze and interpret legal issues in banking using real-world case studies.
- Enhanced critical thinking and problem-solving skills in the context of banking regulation.

Practical Session 2: Mock Legal Proceedings in Banking**Objectives:**

- To simulate legal proceedings related to banking law violations.
- To develop skills in legal research, argumentation, and advocacy.

Materials:

- Mock courtrooms or meeting rooms for the simulation.
- Legal documents related to banking law violations (e.g., complaints, pleadings, evidence).
- Role-play scripts for different stakeholders (e.g., plaintiffs, defendants, lawyers, judges).

Procedure:1. Case Selection:

- Choose a hypothetical case involving a banking law violation or regulatory issue.
- Prepare legal documents and case materials for the simulation.

2. Role Assignment:

- Assign roles to students, such as plaintiffs, defendants, lawyers, and judges.
- Provide role-play scripts and guidelines for each role.

3. Mock Trial:
 - Conduct the mock trial, following the procedures of a legal proceeding.
 - Allow students to present their arguments, examine witnesses, and cross-examine the opposing party.
4. Debriefing:
 - After the mock trial, facilitate a debriefing session where students can reflect on their performance and discuss the legal issues raised in the case.
 - Discuss the challenges and strategies involved in representing clients in legal proceedings related to banking law.

Practical Session 3: Compliance Audit and Report Writing

Objectives:

- To understand the importance of compliance audits in banking.
- To develop skills in conducting compliance audits and writing audit reports.

Materials:

- Compliance audit checklist for banking institutions.
- Sample compliance audit reports.
- Computers for research and report writing.

Procedure:

1. Introduction to Compliance Audits:
 - Explain the purpose and process of compliance audits in banking.
 - Introduce the key areas of focus in a compliance audit, such as anti-money laundering (AML) regulations, consumer protection laws, and risk management practices.
 2. Audit Preparation:
 - Divide students into groups and assign each group a different aspect of banking compliance to audit.
 - Provide the groups with the compliance audit checklist and relevant banking regulations for their area of focus.
 3. Audit Conduct:
 - Have students conduct the compliance audit, reviewing the bank's policies, procedures, and practices against the regulatory requirements.
 - Encourage students to document their findings and observations during the audit process.
 4. Report Writing:
 - Guide students in preparing a compliance audit report based on their findings.
 - Emphasize the importance of clear and concise reporting, including recommendations for addressing any compliance issues identified.
 5. Presentation:
 - Have each group present their audit findings and recommendations to the class.
 - Facilitate a discussion on the challenges and best practices in compliance auditing in banking.
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VOCATIONAL COURSE - IV
“TEXTILE DESIGN & TAILORING”

Semester-II

MNV 4A: HISTORY OF ART & DESIGN

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To provide a strong foundation of Design through the knowledge on History of Art, Culture, Civilization, and Fashion
2. To expose students to an Inward & Outward approach to looking at prehistoric & historic works of Art so far as Indian Art is concerned.

Course Learning Outcomes:

1. Students will be able to understand the nature & evolution of Indian art and design and different civilisation flourished in the BC & AD periods
2. Students will be able to understand about art and designs of the ancient civilisation of the Western world and their nature, and importance and need in the present timeline.
3. Students will acquire a clear knowledge of the various types of art forms in history and its features.

Course Content:**UNIT 1: Indian Art: BC**

Indus Valley Art – Burial Art & other rituals
Iron Age & Vedic Art Forms – Special mention of various religious scriptures.
Mauryan Art – Stupa, Chaitya & Vihara. Influence of Buddhism.
Middle Kingdoms & Satavhana Art.

UNIT 2: Indian Art: AD

Gupta Period – Golden Age of Indian Art.
Mathura & Gandhara School of Art.
Islamic Art – Sultanate & Mughal schools.
Paintings – Pahari & Rajasthani schools.
British Indian Art.

UNIT 3: Western Art 1

Pre- historic cave paintings.
Mesopotamian Art.
Persian Art. Egyptian Art.
Classical Art, Greek, Roman.
Medieval Art, Byzantine Art
Romanesque Art, Gothic Art

UNIT 4: Western Art 2

Renaissance
-From Gothic to the Renaissance
-Early Renaissance
-High Renaissance
-Northern Renaissance
Mannerism, Baroque and Rococo
Neoclassicism, Romanticism, Academism and Realism
Modern Art, Contemporary art and postmodern art

Reference Books

1. Ancient Indian Costumes Vol. I & II, Roshen Alkazi, National Book Trust, New Delhi, India, 2010
 2. A History of Western Art – 5th Edition, Laura Adams, Mc-Graw Hill, New Delhi, 2010.
 3. Indian Art & Aesthetics: Endeavour & Entrepreneurial by Kamal Giri & Nandan Tiwari. Aryan Books Edition 2004.
 4. History of Fashion – Manmeet Sodhia, Kalyani Publishers, New Delhi, 2009
 5. Indian Art & Aesthetics: Endeavour in Interpretation. Maruti Nandan Tiwari, Publisher Aryan Books International, New Delhi, 2003.
 6. Indian Art, Partha Mitter, Oxford University Press, 2001
 7. Suvasas-The beautiful costumes Vishu Arora, Abhishek Publications, New Delhi, 2008
 8. The greenwood encyclopedia of clothing through world history Jill Condra Greenwood Press, Westport, USA, 2008
 9. Costumes, Textiles and Jewelry of India Vandana Bhandari, Popular Prakash books, Mumbai, 2004
 10. Costumes and Textiles of Royal India, Ritu Kumar, Antique Collectors' Club, California, 2006
 11. Traditional Indian Costumes and Textiles Parul Bhatnagar Abhishek Publication, New Delhi 2004
 12. Indian Costumes Anamika Pathak, Roli Books, New Delhi, 2008
 13. Indian Costumes – Ghurria G.S. Popular Prakasan, Mumbai, 1966
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MNV 4A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Historical Textile Techniques**

Objective: To explore traditional textile techniques from various cultures and historical periods.

Activities:

- 1. Introduction and Lecture:**
 - a. Overview of historical textile techniques such as weaving, embroidery, block printing, and dyeing.
 - b. Discuss the cultural and historical significance of these techniques in different regions (e.g., Indian block printing, Japanese Shibori, European tapestry weaving).
- 2. Hands-On Workshop:**
 - a. Demonstration of a traditional textile technique (e.g., basic weaving on a small loom, block printing on fabric).
 - b. Students practice the technique under guidance.
- 3. Cultural Context Discussion:**
 - a. Group discussion on how these textile techniques reflect the cultural, social, and economic contexts of their time.
 - b. Encourage students to share any personal experiences or knowledge of traditional textile practices from their own cultures.
- 4. Reflection and Documentation:**
 - a. Students document their process and results in a journal, including reflections on what they learned about the historical technique and its cultural context.

Materials Needed:

- Small looms and weaving supplies
- Block printing blocks and fabric
- Embroidery kits
- Dyeing materials (for Shibori or tie-dye)
- Journals for documentation

Session 2: Iconic Textile Designs Through History

Objective: To analyze and interpret iconic textile designs from various historical periods.

Activities:

- 1. Introduction to Textile Design History:**
 - a. Overview of significant textile designs and patterns from different eras and regions (e.g., Persian carpets, Medieval tapestries, Victorian chintz, Art Deco fabrics).
 - b. Discuss the stylistic elements and historical context of each design.
- 2. Design Analysis Exercise:**
 - a. Provide high-quality reproductions of iconic textile designs.
 - b. Students work in pairs to analyze the design elements, techniques used, and cultural significance.
 - c. Research the historical context and write a brief report.
- 3. Presentation and Discussion:**
 - a. Each pair presents their analysis to the class.
 - b. Facilitate a discussion on the evolution of textile design and its impact on contemporary textile practices.
- 4. Practical Design Recreation:**

- Students choose a historical design and attempt to recreate a small section using drawing or digital design tools.
- Focus on understanding the techniques and styles used in the original design.

Materials Needed:

- Reproductions of iconic textile designs
- Drawing or digital design tools
- Reference books or access to online resources

Session 3: Modern Applications of Historical Textile Designs

Objective: To explore how historical textile designs influence contemporary fashion and interior design.

Activities:

1. Lecture on Modern Applications:

- a. Overview of how historical textile designs are adapted and used in modern fashion and interior design.
- b. Discuss examples of contemporary designers and brands that draw inspiration from historical textiles.

2. Case Study Analysis:

- a. Present case studies of modern fashion collections or interior design projects influenced by historical textiles (e.g., a modern fashion line using Victorian lace patterns, contemporary home décor featuring Ottoman textiles).
- b. Students analyze the case studies and identify the historical elements used.

3. Design Workshop:

- a. Students create their modern design project inspired by a historical textile design (e.g., a fashion garment, or a piece of home décor).
- b. Provide materials such as fabric, sewing supplies, design software, and craft supplies.

4. Showcase and Critique:

- a. Students present their modern design projects to the class.
- b. Peer critique focusing on how well they integrated historical elements into their modern designs.

5. Reflection and Discussion:

- a. Group discussion on the importance of historical knowledge in modern textile design practice.
- b. Individual reflection on how the exercise enhanced their understanding of design evolution and contemporary applications.

Materials Needed:

- Case study materials
- Fabric and sewing supplies
- Design software (if available)
- Craft supplies for home décor projects

These sessions combine theoretical knowledge with hands-on activities to engage students and deepen their understanding of the History of Art & Textile Design.

Semester-IV**MNV 4B: FASHION & TEXTILE**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. To understand the nature of fashion business, elements and challenges associated with Fashion Industry.
2. To understand different areas of Fashion Business with its comprehensive study of Fashion terminologies to create awareness about overall nature of fashion.
3. To acquire the knowledge regarding environment and movement of fashion so that to understand the various aspects of Fashion.

Course Learning Outcomes:

1. Students will be able to understand the nature & evolution of the fashion business, fashion adoption, and economic importance of the fashion business. They acquired a clear knowledge of the different aspects and levels of fashion & Principles of fashion as per the International Fashion Centre.
2. Students will be able to understand fashion Market segmentation and the economic & social Environment. They get to know about the functioning of the Indian Fashion Industry, its history and developments, features and structures.
3. Students will acquire a clear knowledge of small and medium-scale enterprises like design studios, boutiques, etc.

Course Content:

UNIT 1: Business of Fashion- Importance of Fashion - Economic importance of Fashion Business Four levels of Fashion (Primary level, Secondary level, the Retail level & Auxiliary level)

UNIT 2: Nature of Fashion- Definition of Fashion - Evolution of Fashion - Terminology of Fashion Principles of Fashion movement - Theory of Clothing Origin - Fashion Cycle - Theories of Fashion Adoption - Principles of Fashion - International Fashion Centers

UNIT 3: Environment of Fashion- - Market segmentation (Demographics, Geographic, Psychographics & Behavioral), - Economic Environment - Social Environment

UNIT 4: Fashion Categories- Men's wear, Women's Wear, Kid's wear

UNIT 5: Indian Fashion Industry, origin, present scenario and future scope. Overview of global and Indian apparel industry, History and its development in recent years, Size and nature of the industry, Regional features and structure of the industry, Small and medium scale enterprises- design studios, boutiques, organized sector

UNIT 6: Different materials used in fashion. Basic sourcing of different fabrics, Trims like buttons, zippers, eyelets, elastic

Reference Books

1. Fashion from Concept to Consumer, Fringes, G. S., Prentice Hall, 9th Edition, 2007.
 2. The Business of Fashion, Leslie Davis Burns and, Nancy O. Bryant, Fairchild Publication, 2002
 3. Clothing Technology, Heberly Berger, Verlag Europa Leher Mittel, 2010
 4. The Dynamics of Fashion, Elaine Stone, Fairchild Publication, 2008
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MNV 4B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):***

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

- Craft fairs
 - Garment fairs
 - Trade fairs
 - Fashion shows
 - Retail stores
 - Textile Research Association
 - Production UNITS – textile and apparel
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Semester-VI**MNV 4C: ELEMENTS & PRINCIPLES OF DESIGN**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To enable the students to develop skills of visualization & communication to Design.
2. To develop a strong sense of composition of Design in a two-dimensional format.
3. To develop skills in drawing Design of a three-dimensional format.
4. To develop an understanding of Non-tangible & Tangible aspects of Design.
5. To develop an understanding of the Elements of Design.
6. To develop an understanding & articulation of aesthetic principles.
7. To develop an understanding of the attributes of 3D forms.

Course Learning Outcomes:

1. Students' creativeness demonstrates visual problem-solving through an understanding of the elements and principles of design.
2. Students demonstrate an ability to make strong sense of the composition of Design in two and three-dimensional formats to draw.
3. Understanding the Elements of Design, the Students can create innovative designs and also understand the process of applying this in product design and development.

Course Content:**UNIT 1**

Introduction to art media and its applications, different art media-like pencils, color pencils, crayons, posters, erasers, acrylic, rendering, and shading skills.

UNIT 2

Introduction to basic sketching techniques, drawing with different sketching techniques, free hand sketching of objects of day-to-day life.

UNIT 3

Types of Design- structural and decorative. Design elements-form, shape, space, line, colour, and texture. Elements of art & design – point, line, form, shape, space, size texture, and color.

UNIT 4

Functions of Lines. Silhouettes. Different types of lines & their characteristics. Use of line in clothing according to body shapes. Optical illusions created by various combinations of lines. Gestalt Principle

UNIT 5

Color, dimension of color, hue, value, intensity, and colour scheme its importance & application. Colour theory- Prang colour system & Munsell. Colour wheel- primary, secondary and tertiary. Colour Dimensions-Hue, Value and Chroma, Tint, tone, shade, Colour harmony- Related & contrasting colour harmonies & its subdivisions.

Reference Books

1. Basic Principle of Design – Manfred Maier, Van Nostrand Reinhold, 1977.
 2. Shape & Form: Design Elements, (Elements of Design) by Albert A Porter, Davis Publications Inc., U.S. 1974
 3. Exploring Visual Design: The Elements and Principles, by Albert A Porter, Davis Publications Inc., U.S. 1974
 4. Experiments in Form. Peter Pearce & Susan Pearce, Van Nostrand Reinhold Co, 1980.
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MNV 4C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Understanding the Elements of Design in Textiles**

Objective: To explore and apply the fundamental elements of design—line, shape, color, texture, space, and form—in textile management.

Activities:

1. **Introduction and Lecture:**
 - a. Overview of the elements of design: line, shape, color, texture, space, and form.
 - b. Discuss how each element is used in textile design and management, with examples from various textile products.
2. **Interactive Exploration:**
 - a. Divide students into small groups, assigning each group an element of design.
 - b. Provide materials such as fabric swatches, yarn, color charts, and texture samples.
 - c. Each group creates a mood board showcasing their assigned element in textile design, including fabric samples, sketches, and descriptions.
3. **Group Presentations:**
 - a. Each group presents their mood board to the class, explaining how their assigned element is used in textile design.
 - b. Facilitate a discussion on how these elements can be combined to create cohesive and aesthetically pleasing textile designs.
4. **Hands-On Application:**
 - a. Students individually create a small textile sample (e.g., a fabric swatch or a simple design) incorporating at least two elements of design.
 - b. Encourage creativity and experimentation with different materials and techniques.

Materials Needed:

- Fabric swatches
- Yarn and threads
- Color charts
- Texture samples
- Mood board materials (poster boards, markers, glue, etc.)

Session 2: Applying the Principles of Design in Textiles

Objective: To understand and apply the principles of design—balance, contrast, emphasis, movement, pattern, rhythm, and unity—in textile management.

Activities:

1. **Introduction and Lecture:**
 - a. Overview of the principles of design: balance, contrast, emphasis, movement, pattern, rhythm, and unity.
 - b. Discuss how these principles guide the creation and evaluation of textile designs, with visual examples.
2. **Principle-Based Analysis:**
 - a. Provide students with various textile samples (e.g., printed fabrics, woven textiles, knitted garments).
 - b. Students analyze the samples in pairs, identifying and discussing how different principles of design are applied.
 - c. Write a brief report summarizing their findings.

3. Design Exercise:
 - a. Students create a design concept for a textile product (e.g., a garment, a piece of home décor) that incorporates at least three principles of design.
 - b. Provide sketching tools, design software (if available), and fabric samples for inspiration.
4. Presentation and Peer Review:
 - a. Students present their design concepts to the class.
 - b. Peer review and constructive feedback on how effectively they applied the principles of design.

Materials Needed:

- Textile samples
- Sketching tools or design software
- Fabric samples
- Report writing materials

Session 3: Integrating Elements and Principles in Textile Product Development

Objective: To integrate both elements and principles of design in the development of a textile product, focusing on practical application in textile management.

Activities:

1. Introduction to Product Development:
 - a. Overview of the textile product development process, from concept to production.
 - b. Discuss the importance of integrating elements and principles of design throughout this process.
2. Concept Development Workshop:
 - a. Students work individually or in pairs to develop a concept for a new textile product (e.g., a fashion item, a home textile, an accessory).
 - b. Use sketching tools, design software, and fabric samples to create detailed concept boards, including design elements, principles, and intended market.
3. Prototype Creation:
 - a. Students create a prototype or detailed sample of their textile product concept.
 - b. Provide materials such as fabric, sewing supplies, and basic tools for assembling their prototypes.
4. Showcase and Critique:
 - a. Students present their prototypes to the class, explaining how they incorporated the elements and principles of design.
 - b. Class discussion and critique focusing on the strengths and areas for improvement in each prototype.
5. Reflection and Documentation:
 - a. Individual written reflection on the product development process and what they learned about integrating design elements and principles.
 - b. Document the process, including concept sketches, prototype images, and reflections, in a project portfolio.

Materials Needed:

- Sketching tools or design software
- Fabric and sewing supplies
- Prototype materials (e.g., buttons, zippers, embellishments)
- Project portfolio materials (binders, pages, etc.)

These sessions combine theoretical knowledge with practical application, enabling students to understand and apply the elements and principles of design in textile management effectively.

Semester-VIII**MNV 4D: TEXTILE SCIENCE**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. To impart knowledge on the weaving preparatory process, weaving looms, knitting, and non-woven fabrics.

Course Learning Outcomes:

1. Students will be able to understand the weaving preparatory process like winding, warping etc.
2. Students will be able to understand the different types of loom used to weave fabric and its processes
3. Students will acquire basic knowledge about various types of knitted and non-woven fabrics and their end uses.

Course Content:**UNIT 1: WEAVING PREPARATORY**

Introduction to warp and weft preparatory processes. Objective and principle of winding, warping, pirn winding, Direct and sectional warping.

UNIT 2: SIZING

Objects, various sizing ingredients, drawing in, and gaiting. Objectives and flow of materials

UNIT 3: WEAVING

Basic concepts of looms. Types of Looms – handloom – power loom – Automatic looms. Primary, secondary, and auxiliary motions of a loom. General passage of material through the loom. Basic Principles of Tappet Looms, Fabric Defects

UNIT 4: KNITTING: Principles of knitting, warp and weft knitting, basic knitting elements, types of needles – knitting cycle.

UNIT 5: NON-WOVENS: Definition, classification, types of non-wovens, and applications of non-wovens.

Reference Books

1. Spun Yarn Technology by Eric Oxtoby, Butterworth-Heinemann, London, 1987
 2. Weaving Mechanism, N N Banerjee, Textile Book House, Berhampore, 1993
 3. Essentials of Textiles, M.L. Joseph, Wadsworth Publishing; 4th edition, 1988.
 4. Weaving, machines, mechanisms and management, Talukdar M K, Sriramulu P K and Ajaonkar D B, Mahajan Publishers Pvt. Ltd., Ahmedabad, 1998
 5. Hand Book of Weaving, W.S. Murphy, Abhishek Publications, 2001.
 6. Weaving: Conversion of Yarn to Fabric, Lord P R and Mohamed M H , Merrow Publishing Co. Ltd, UK, 1998
 7. Textiles: Fibre to Fabric, Corbmann B P, McGraw Inc 6th Edn, New York, 1983
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MNV 4D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:**Session 1: Fiber Identification and Analysis**

Objective: To identify and analyze different types of textile fibers, understanding their properties and applications.

Activities:

1. Introduction and Lecture:
 - a. Overview of natural and synthetic fibers, including cotton, wool, silk, polyester, nylon, and acrylic.
 - b. Discuss the properties of each fiber, such as strength, elasticity, moisture absorption, and thermal properties.
2. Fiber Identification Lab:
 - a. Provide samples of various fibers to the students.
 - b. Demonstrate different fiber identification techniques such as visual inspection, burn tests, and solubility tests.
 - c. Students perform these tests on unknown fiber samples to identify them, recording their observations and conclusions.
3. Microscopic Analysis:
 - a. Use microscopes to examine the microstructure of different fibers.
 - b. Students prepare slides of fiber samples and observe them under the microscope, noting the differences in structure.
 - c. Compare and contrast the microscopic images of natural versus synthetic fibers.
4. Discussion and Reflection:
 - a. Group discussion on the importance of fiber identification in textile management.
 - b. Students write a brief reflection on their findings and the practical applications of fiber analysis in the textile industry.

Materials Needed:

- Fiber samples (natural and synthetic)
- Burn test equipment (tweezers, flame source, metal tray)
- Solubility test chemicals
- Microscopes and slides
- Lab notebooks

Session 2: Fabric Construction and Properties

Objective: To understand different fabric construction techniques and analyze their impact on fabric properties.

Activities:

1. Introduction and Lecture:
 - a. Overview of fabric construction methods: weaving, knitting, non-woven fabrics.
 - b. Discuss how different construction techniques affect fabric properties such as durability, elasticity, and drapability.
2. Weaving and Knitting Workshop:
 - a. Demonstrate basic weaving and knitting techniques using small looms and knitting needles.
 - b. Students practice these techniques, creating small woven and knitted samples.
 - c. Discuss the differences in texture, stretch, and strength between woven and knitted fabrics.
3. Fabric Property Testing:
 - a. Provide samples of woven, knitted, and non-woven fabrics.

- b. Students perform tests to measure fabric properties such as tensile strength, elasticity, and moisture absorption.
 - c. Record and analyze the test results, comparing the properties of different fabric types.
4. Group Discussion and Report:
- a. Group discussion on how fabric construction techniques are chosen based on the desired properties and end-use of the fabric.
 - Students write a report summarizing their findings and the practical applications of fabric property testing in textile management.

Materials Needed:

- Small looms and knitting needles
- Yarn and fabric samples (woven, knitted, non-woven)
- Testing equipment (tensile tester, moisture meter)
- Lab notebooks

Session 3: Textile Finishing Processes

Objective: To explore various textile finishing processes and understand their impact on fabric performance and aesthetics.

Activities:

1. Introduction and Lecture:
 - a. Overview of common textile finishing processes such as dyeing, printing, finishing treatments (e.g., waterproofing, flame retardant), and mechanical finishes (e.g., brushing, calendaring).
 - b. Discuss the purposes and effects of these finishes on fabric performance and aesthetics.
2. Dyeing and Printing Workshop:
 - a. Demonstrate basic dyeing techniques (e.g., immersion dyeing, tie dye) and printing methods (e.g., block printing, screen printing).
 - b. Students practice these techniques on fabric samples, creating their own dyed and printed textiles.
 - c. Discuss the impact of different dyes and printing methods on fabric colorfastness and texture.
3. Finishing Treatments Lab:
 - a. Provide fabric samples and materials for applying various finishing treatments (e.g., waterproof sprays, and flame retardant coatings).
 - b. Students apply these treatments to the samples and test their effectiveness using appropriate methods (e.g., water repellency tests, flame tests).
 - c. Record and analyze the results, noting any changes in fabric properties.
4. Presentation and Reflection:
 - a. Students present their dyed, printed, and treated fabric samples to the class.
 - b. Group discussion on the importance of finishing processes in enhancing fabric performance and marketability.
 - c. Individual reflection on what they learned about textile finishing and its practical applications in textile management.

Materials Needed:

- Dyeing materials (dyes, fixatives, containers)
- Printing tools (blocks, screens, inks)
- Finishing treatment materials (waterproof sprays, flame retardant coatings)
- Testing equipment (water repellency tester, flame tester)
- Fabric samples
- Lab notebooks

These sessions combine theoretical knowledge with hands-on activities, enabling students to gain practical insights into Textile Science and its applications in textile management.

VOCATIONAL COURSE – V
“EVENT MANAGEMENT”

Semester-II

MNV 5A: INTRODUCTION TO EVENT MANAGEMENT

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. Understanding Event Planning Fundamentals: Students will be able to explain the key principles and processes involved in event planning, including event design, site selection, logistics, and budgeting.
2. Event Coordination Skills: Students will demonstrate the ability to coordinate various aspects of event management, such as vendor negotiations, event marketing, attendee registration, and on-site event execution.

Course Content:

UNIT- I: Defining & Understanding the Events

Need & Framework of Events, Typology of Events, Historical Contexts and Precedents, Special Characteristics of Events, Code of Ethics, Size & Scope of Events Market, Determinants & Motivations, Requirement of Event Manager

UNIT- II: Event Objective, Structure of Demand

Fragmentary Nature of Event Business, Various Service Providers / Organizations / Stakeholders, social, economic, political and developmental implications of running events,

UNIT- III: Initial Planning, Visualisation, Monitoring the Budget

Critical Path, Function sheets, Timings, Checklist, getting everyone on board, assigning tasks, deadlines, Site Selection, Location Requirements, Contracts, Transportation, Guest Arrival, Registrations, Arrival checklist

UNIT- IV: Room Requirements

Staging, Audiovisual, Lighting, Venue and Event Suppliers Checklist, Guest Demographics, The Guest List, Invitations, Food & Beverages Considerations, Entertainment, Photographers, Videographers, Staff, Work permits, Event Risk Assessment

Reference Books for all Semesters:

1. "Event Management: A Professional and Developmental Approach" by Glenn Bowdin, Johnny Allen, William O'Toole, Rob Harris, and Ian McDonnell
2. Comprehensive guide covering all aspects of event management.
3. "Events Management: Principles and Practice" by Razaq Raj, Paul Walters, and Tahir Rashid
4. Focuses on the core principles and practical applications in event management.
5. "Event Management for Dummies" by Laura Capell
6. A practical guide with straightforward advice on planning and managing events.
7. "Event Planning: The Ultimate Guide to Successful Meetings, Corporate Events, Fundraising Galas, Conferences, Conventions, Incentives, and Other Special Events" by Judy Allen
8. Covers a wide range of event types with practical planning strategies.
9. "The Complete Guide to Successful Event Planning" by Shannon Kilkenny
10. Step-by-step guide to planning, organizing, and executing successful events.
11. "Event Marketing: How to Successfully Promote Events, Festivals, Conventions, and Expositions" by Leonard H. Hoyle
12. Focuses on marketing strategies specific to the event industry.
13. "Special Events: Creating and Sustaining a New World for Celebration" by Joe Goldblatt
14. Discusses the creative and logistical aspects of planning special events.
15. "Events Management: An Introduction" by Charles Bladen, James Kennell, Emma Abson, and Nick Wilde
16. An introductory text covering the fundamental principles of event management.

17. "Sustainable Event Management: A Practical Guide" by Meegan Jones
18. Provides guidelines for organizing environmentally sustainable events.
19. "The Event Manager's Bible: The Complete Guide to Planning and Organising a Voluntary or Public Event" by Des Conway
20. A practical manual for event managers, especially those working in the voluntary sector.
21. "Event Management and Event Tourism" by Donald Getz
22. Explores the relationship between event management and tourism, with practical insights.
23. "Event Planning Ethics and Etiquette: A Principled Approach to the Business of Special Event Management" by Judy Allen
24. Focuses on the ethical considerations and professional etiquette in event planning.
25. "Risk Management for Meetings and Events" by Julia Rutherford Silvers
26. Discusses risk management strategies specific to the event industry.
27. "The Business of Event Planning: Behind-the-Scenes Secrets of Successful Special Events" by Judy Allen
28. Offers behind-the-scenes insights into the business aspects of event planning.
29. "Managing Events: Real Challenges, Real Solutions" by Tony Rogers
30. Real-world case studies and solutions for common challenges in event management.

MNV 5A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

Session 1: Event Planning and Proposal Development

Objective: To understand the fundamentals of event planning and develop a comprehensive event proposal.

Activities:

1. Lecture on Event Planning: Provide an overview of the key elements of event planning, including goal setting, budgeting, logistics, marketing, and risk management.
2. Group Activity: Divide students into small groups and assign each group a different type of event (e.g., corporate conference, wedding, charity fundraiser, music festival). Each group will develop a detailed event proposal, including the event concept, objectives, budget, timeline, venue selection, and marketing plan.
3. Presentation and Feedback: Groups will present their event proposals to the class, followed by a feedback session where peers and the instructor provide constructive critiques and suggestions for improvement.

Materials Needed:

- Event planning templates
- Budgeting tools
- Presentation tools (e.g., projector, whiteboard)

Session 2: On-Site Event Management and Coordination

Objective: To practice on-site event management and coordination skills.

Activities:

1. Introduction to On-Site Management: Provide a lecture on the roles and responsibilities of on-site event managers, including setup, coordination, troubleshooting, and post-event evaluation.

2. **Simulation Exercise:** Set up a mock event environment in the classroom. Assign students different roles (e.g., event manager, vendor, attendee) and present them with various scenarios and challenges that might occur during an event (e.g., technical difficulties, late arrivals, emergency situations).
3. **Debrief and Discussion:** After the simulation, conduct a debriefing session where students reflect on their experiences, discuss how they handled the challenges, and share insights on effective on-site management strategies.

Materials Needed:

- Scenario scripts for the simulation
- Role assignment cards
- Event setup materials (e.g., tables, chairs, AV equipment)

Session 3: Marketing and Promoting Events

Objective: To explore effective strategies for marketing and promoting events.

Activities:

1. **Lecture on Event Marketing:** Provide an overview of event marketing strategies, including branding, social media promotion, email marketing, influencer partnerships, and public relations.
2. **Workshop on Marketing Plan Development:** Students will work individually or in pairs to develop a marketing plan for a hypothetical event. They should outline their target audience, marketing channels, promotional tactics, timeline, and budget.
3. **Marketing Plan Pitch:** Each student or pair will pitch their marketing plan to the class as if they were presenting to a potential client or sponsor. The class and instructor will provide feedback on the feasibility, creativity, and effectiveness of the proposed marketing strategies.

Materials Needed:

- Marketing plan templates
- Examples of successful event marketing campaigns
- Presentation tools

These practical sessions are designed to provide hands-on experience in key areas of event management, equipping graduate students with the skills and knowledge needed to plan, manage, and promote successful events.

Semester-IV**MNV 5B: COMMUNICATION, PR & PRESENTATION SKILLS FOR EVENTS**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. Effective Communication Techniques: Students will learn and apply effective verbal and non-verbal communication techniques to engage and interact with various stakeholders, including clients, vendors, and attendees.
2. Public Relations Strategies: Students will develop the ability to create and implement strategic public relations campaigns tailored to promote events, enhance public image, and manage media relations effectively.

Course Learning Outcomes:

1. Enhanced Communication Skills: Students will demonstrate improved abilities to communicate effectively in various event-related contexts, such as pitching event concepts, negotiating with stakeholders, and managing client relationships.
2. Strategic Public Relations Competence: Students will be able to develop and implement strategic public relations plans tailored to the needs of different events, effectively managing media relations and promoting positive event visibility.

Course Content:**UNIT- I: Introduction to communication**

Meaning, importance & objectives, principles of communication, forms of communication, communication process, barriers of effective communication, techniques of effective communication. Nonverbal communication - body language, gestures, postures, facial expressions, dress codes. The cross-cultural dimensions of business communication. Listening & speaking, techniques of electing response, probing questions, observation. Business and social etiquette.

UNIT- II: Group communication

Importance, meetings - group discussions. Video conferencing. Reports - types of business reports - format, choice of vocabulary, coherence and cohesion, paragraph writing, organization reports by individual, the report by the committee. The communication process - the communication process, communication fundamentals.

UNIT- III: Presentation as an effective communication tool

Know your subject matter, know your audience, develop a theme, prepare your script: the opening, the body, the summary, the closing, select the proper visual aids, prepare a storyboard, produce the visuals, rehearse-rehearse-rehearse, presentation day, follow up: kiss, slide use tips, mathematics on slides, rehearsing, answering questions, some deadly sins of visual presentation: the illegible image, the useless image, the overly complex image, ransom note design, calico or crazy quilt graphics, mixed visual metaphors, networking-communication

UNIT- IV: Use of celebrities & use of media in communication

The use of celebrities, endorsements, testimonials, placements, dramatizations, representatives, identification, and various media in communication television, radio, radio and TV similarities, radio differs from TV, classifications of magazines, newspaper classifications, newspaper characteristics, unique newspaper features, internet communications objectives.

UNIT- V: Writing press releases and reports

The approach, speaking up for your special event whom to contact, sample letter for contacting local organizations, invitations and programs, your invitation should fit the occasion, designing elements, addressing invitations, every invitation or program must include after the invitations are mailed. Media relations - in dealing with the print or broadcast media person, new press advisory, follow-up, skeleton of a press release, sample skeleton of a press release, headline for the press release.

MNV 5B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for**End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Effective Communication and Networking**

Objective: To develop effective communication and networking skills essential for event management.

Activities:

1. Lecture on Communication Skills: Provide an overview of effective communication techniques, including verbal and non-verbal communication, active listening, and emotional intelligence. Emphasize the importance of clear and concise communication in event management.
2. Networking Simulation: Set up a networking event simulation where students practice introducing themselves, discussing their event ideas, and making connections. Each student will receive a role card with specific objectives (e.g., find a sponsor, or collaborate with a vendor).
3. Debrief and Feedback: After the simulation, conduct a debriefing session where students share their experiences and discuss what strategies worked well. Provide feedback on their communication styles and suggest improvements.

Materials Needed:

- Role cards for networking simulation
- Name tags
- Note-taking materials

Session 2: Crafting and Delivering Event Presentations

Objective: To learn how to craft and deliver compelling presentations for various stakeholders in event management.

Activities:

1. Lecture on Presentation Skills: Cover the key elements of a successful presentation, including structure, content, visual aids, and delivery techniques. Discuss how to tailor presentations for different audiences, such as clients, sponsors, and attendees.
2. Presentation Workshop: Students will work individually or in small groups to create a presentation for a hypothetical event. They should focus on clearly communicating the event concept, objectives, and key details using engaging visuals and persuasive language.
3. Presentation Practice: Each student or group will deliver their presentation to the class. After each presentation, the class and instructor will provide constructive feedback on both the content and delivery, focusing on strengths and areas for improvement.

Materials Needed:

- Presentation templates
- Visual aid tools (e.g., PowerPoint, Prezi)
- Feedback forms

Session 3: Crisis Communication and Handling Difficult Situations

Objective: To develop skills for effectively communicating during crises and handling difficult situations at events.

Activities:

1. **Lecture on Crisis Communication:** Provide an overview of crisis communication principles, including the importance of transparency, empathy, and maintaining control during a crisis. Discuss common crises in event management and how to prepare for them.
2. **Crisis Simulation:** Present students with a series of crisis scenarios that might occur during an event (e.g., weather emergency, technical failure, guest misconduct). Students will work in teams to develop and deliver a crisis communication plan for each scenario, including key messages, communication channels, and roles.
3. **Role-Playing Exercise:** Conduct role-playing exercises where students practice handling difficult situations with attendees, vendors, or team members. Each team will present their response to the class, followed by a discussion on the effectiveness of their approach and possible improvements.

Materials Needed:

- Crisis scenario scripts
- Role-playing guidelines
- Communication plan templates

These practical sessions aim to equip graduate students with the essential communication and presentation skills needed for successful event management, preparing them to effectively engage with stakeholders and handle various situations with confidence.

Semester-VI**MNV 5C: EVENT PLANNING, SPONSORSHIP & BUDGETING**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. Develop Event Planning Skills: Students will be able to plan various types of events, including corporate meetings, weddings, and cultural events, by understanding the key components of event planning such as venue selection, logistics management, and timeline creation.
2. Master Sponsorship Acquisition: Students will learn how to identify potential sponsors, create compelling sponsorship proposals, and negotiate sponsorship deals, enabling them to secure funding and support for events.
3. Budgeting Proficiency: Students will acquire skills in budget creation and management for events, including cost estimation, revenue forecasting, and financial tracking, ensuring that events are executed within budgetary constraints.

Course Content:**UNIT- I:**

Common Planning for most of the Events, Job of an Event Planner, Defining Goals & Objectives, Financial Goals - ROI, Planning Session - High-level Goal Questions, Scheduling, Assigning Roles, Creating Checklists, Outsourcing, Making a Budget, Streamlining Income and Expenses, Sponsorship.

UNIT- II:

Planning logistics, selecting dates & times, selecting a destination, choosing a site, creating a detailed list of the requirements of a potential site, site inspection, outdoor site, choosing talent - speaker, lecturer, instructor, entertainer, signing a contract, room design, registration & ticket sales area, internet access & Wi-Fi, technical support.

UNIT- III:

Event sponsorship – understand sponsorship, understand – event organizer, event partners, event associates, event sponsor, the importance of sponsorship – for the event organizer, for a sponsor, type of sponsorship, making sponsorship database, making sponsorship proposal, closing a sponsorship, research of sponsorship, converting sponsorship into partnership

UNIT- IV:

Fixed cost, variable cost, additional expenses, indirect costs, making of a cost statement and profit calculations, managing cash flows, understanding contribution, calculating break-even points and target income, cost-volume-profit analysis, sensitivity analysis, B.E.P. analysis as applied to event management and tactical decisions

UNIT- V:

Allocating costs to an event, the basis of allocation, allocating cost of support departments, cost control, direct & indirect variances, and event-based costing, preparing the budget, developing system to track expenses, list of expense
Categories, bifurcating actual expenses, monitoring expenses. Retention.

MNV 5C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter forEnd Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Comprehensive Event Planning**

Objective: To understand the key components of event planning and create a detailed event plan.

Activities:

1. Lecture on Event Planning Fundamentals: Provide an overview of the event planning process, including defining objectives, selecting venues, designing programs, managing logistics, and creating timelines. Emphasize the importance of contingency planning.
2. Group Activity - Event Plan Development: Divide students into small groups and assign each group a different type of event (e.g., corporate seminar, music festival, charity gala). Each group will develop a comprehensive event plan, including objectives, target audience, venue selection, program schedule, logistics, and risk management strategies.
3. Presentation and Feedback: Groups will present their event plans to the class. After each presentation, peers and the instructor will provide feedback, focusing on the plans' feasibility, creativity, and thoroughness.

Materials Needed:

- Event planning templates
- Example event plans
- Presentation tools (e.g., projector, whiteboard)

Session 2: Securing Sponsorships

Objective: To learn strategies for identifying potential sponsors, creating compelling sponsorship proposals, and negotiating sponsorship agreements.

Activities:

1. Lecture on Sponsorship Acquisition: Provide an overview of sponsorship in event management, including identifying potential sponsors, understanding sponsor needs, creating sponsorship packages, and negotiation techniques.
2. Workshop on Sponsorship Proposals: Students will work individually or in pairs to create a sponsorship proposal for a hypothetical event. They should identify potential sponsors, design appealing sponsorship packages, and craft a persuasive proposal letter.
3. Role-Playing Negotiation: Conduct role-playing exercises where students take on the roles of event organizers and potential sponsors. Each pair will practice presenting their sponsorship proposal and negotiating terms. After the exercise, students will share their experiences and discuss effective negotiation strategies.

Materials Needed:

- Sponsorship proposal templates
- Example sponsorship packages
- Role-playing scenarios

Session 3: Budgeting and Financial Management

Objective: To develop skills in creating and managing event budgets.

Activities:

1. **Lecture on Event Budgeting:** Provide an overview of budgeting principles, including estimating costs, projecting revenues, tracking expenses, and financial reporting. Discuss common budget categories such as venue, catering, entertainment, marketing, and contingency funds.
2. **Budget Creation Exercise:** Students will be given a case study of a specific event with a set of requirements and constraints. Individually or in groups, they will create a detailed budget for the event, ensuring all necessary expenses are accounted for and balanced with projected revenues.
3. **Budget Review and Analysis:** Students will present their budgets to the class, explaining their financial decisions and justifying their allocations. The class will review and analyze each budget, providing feedback on accuracy, completeness, and financial viability.

Materials Needed:

- Budget templates
- Case study materials
- Financial planning tools (e.g., spreadsheets)

These practical sessions aim to provide hands-on experience in key areas of event planning, sponsorship acquisition, and budgeting, equipping graduate students with the necessary skills to manage events effectively and efficiently.

Semester-VIII**MNV 5D: EVENT TEAM & CREW MANAGEMENT**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. Team management and organisational behaviour will be discussed.
2. Risk Management and Safety: Students will be able to identify potential risks associated with events and develop comprehensive risk management plans to ensure safety and compliance with legal and regulatory requirements.

Course Learning Outcomes:

1. Presentation and Public Speaking Skills: Students will gain proficiency in designing and delivering compelling presentations, mastering public speaking skills, and using visual aids to communicate event concepts and objectives persuasively.

Course Content:**UNIT- I:**

Organisation manager & the team during the event, simplified event structure, organisational effectiveness, volunteer staffing, the framework for an event organization's performance.

UNIT- II:

Volunteer management, factors influencing the number and type of staff, itemizing your needs, creating job descriptions, paid staff, and typical event organisation communication tools.

UNIT- III:

Finding staff, job description form, staffing an event, running the event on the day, organisation and briefing of staff on the day, creating a resume and writing the cover letter, effective interviewing, interview etiquette, after the interview, designations.

UNIT- IV:

Workforce employment issues, personnel management, circular model of human resource management, orientation sessions, instructions, manuals & handbooks, training programs, scheduling & assignments, motivation, recognition & retention.

UNIT- V:

Monitoring and evaluating performances, checkpoints and coaching, evaluation criteria, performance reviews, data mining through evaluations, conflict resolution strategies, disciplinary measures & termination procedures

MNV 5D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Building and Leading an Effective Event Team**

Objective: To understand the principles of team building and leadership in the context of event management.

Activities:

1. Lecture on Team Building and Leadership: Provide an overview of team dynamics, roles and responsibilities, leadership styles, and effective team-building strategies. Discuss the importance of clear communication, motivation, and conflict resolution.
2. Team-Building Exercise: Conduct a team-building activity such as a problem-solving challenge or a trust-building exercise. Students will work in small groups to complete the activity, focusing on communication, collaboration, and leadership skills.
3. Reflection and Discussion: After the exercise, students will reflect on their experiences and discuss the dynamics within their groups. They will share what worked well and what challenges they faced, and the instructor will provide feedback on their team-building and leadership approaches.

Materials Needed:

- Team-building activity materials
- Reflection questions
- Note-taking materials

Session 2: Crew Management and Delegation

Objective: To develop skills in managing event crews and delegating tasks effectively.

Activities:

1. Lecture on Crew Management and Delegation: Provide an overview of crew management, including selecting and training crew members, task delegation, monitoring performance, and maintaining morale. Discuss the importance of clear instructions, accountability, and feedback.
2. Simulation Exercise: Create a simulation of an event setup where students take on the roles of event managers and crew members. The event managers will delegate tasks and oversee the setup, ensuring that all aspects of the event are prepared according to plan.
3. Debrief and Feedback: After the simulation, conduct a debriefing session where students discuss their experiences in managing and being part of the crew. The class will provide feedback on the effectiveness of task delegation, communication, and overall crew management.

Materials Needed:

- Simulation scenario and task lists
- Role assignment cards
- Event setup materials

Session 3: Managing On-Site Operations and Problem Solving

Objective: To practice managing on-site event operations and addressing real-time issues.

Activities:

1. Lecture on On-Site Management and Problem Solving: Provide an overview of on-site event operations, including setup, coordination, real-time monitoring, and troubleshooting. Discuss common problems that can arise during events and strategies for effective problem solving.
2. Crisis Management Simulation: Present students with a series of on-site event scenarios that require immediate attention (e.g., technical issues, staff shortages, safety concerns). Students will work in teams to develop and implement solutions to these problems.

3. **Role-Playing Exercise:** Conduct a role-playing exercise where students practice handling specific on-site issues. Assign roles such as event manager, crew member, vendor, and attendee to simulate real event scenarios. Each team will present their approach to resolving the issues and receive feedback from peers and the instructor.

Materials Needed:

- Crisis scenario scripts
- Role-playing guidelines
- Note-taking materials

These practical sessions aim to provide students with hands-on experience in building and leading effective event teams, managing event crews, and handling on-site operations and problem-solving.

VOCATIONAL COURSE - VI
"FORESTRY"

Semester-II

MNV 6A: INTRODUCTION TO FORESTRY

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. Understanding of Forest Ecosystems: Students will gain a comprehensive understanding of forest ecosystems, including the types of forests, their characteristics, and the ecological processes that occur within them.
2. Students will learn about various forestry management practices, including sustainable forest management, conservation strategies, and the role of forestry in biodiversity conservation.
3. Students will develop skills in conducting forest inventory and assessment, including measuring tree growth, estimating forest biomass, and assessing the health of forest ecosystems.

Course Content:

UNIT- I:

Introduction and definition of forestry; Forest and plantation; Concept of forestry education; Brief history of forestry; Branches of forestry; Legal classification of forests: Reserved forest, protected forest, un-classified forest, village forest, and community forest (van panchayat); Forest area and forest cover in the state, country and world; Category of forest based on origin: Primary forest and secondary forest; Forest acts and policies; Importance of forests for community, environment, climate change and sustainable development.

UNIT- II:

Forest composition; Basis of forest classification; Basic principles of silviculture: Introduction, definitions, objects, scope and importance; Regeneration of forests: Afforestation and reforestation; Methods of regeneration; Relation of silviculture with other branches of forestry; Tree morphology, different forms and growth of trees, stem, root and other parts; mycorrhiza, lignotubers and root nodules; High forest, coppice forest, closed forest, open forest, normal forest and abnormal forest.

UNIT- III:

Introduction and definitions of forest mensuration; Principles of tree measurement: Height, diameter, circumference, basal area and volume; Measuring instruments in forestry: Christian's hypsometer, tree calliper, Ravi multimeter, Abney's level, Haga altimeter, meter tape, Gunter chain, wedge prism, weighing machine and Pressler's increment borer.

UNIT- IV:

Basic principles of forest management; Introduction, definition and scope of forest management; Participatory forest management and joint forest management (JFM); Forest products: Important timber and non-timber products; Forest protection; Introduction and definition; Important insect: Pests and diseases; Shifting cultivation; Encroachment; Illegal felling; Grazing and Forest fire.

Reference Books

1. Ecology and Environment by P. D. Sharma
2. Principles and Practices of Silviculture by L.S. Khanna
3. A text Book of Silviculture by A.P. Dwivedi
4. Forest Management by Ram Prakash
5. Forest Mensuration, A.N. Chaturvedi
6. Theory and Practices of Silviculture by L.S. Khanna
7. Forest of Himalaya by JS Singh and SP Singh

MNV 6A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for**End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Field visit in different forest sites.
 2. Identification of tree species and their local and botanical name.
 3. Introduction about instruments used in forestry (Christian's Hypsometer, tree calliper, Ravi multimeter, Abney's level, Haga altimeter, meter tape, Gunter chain, wedge prism, weighing machine, Pressler's increment borer, soil pH meter, soil thermometer, Swedish bark gauge, seed germinator, oven, balance etc.).
 4. Measurement of tree height, diameter, basal area, circumference.
 5. Nursery development, preparation of nursery layout, nursery beds, uses of different container, planting material seeds and vegetative parts, raising of plants of different tree species.
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Semester-IV**MNV 6B: FOREST ECOLOGY**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. to help the subordinate to improve and become more effective in future.

Course Learning Outcomes:

4. They will know the need of Appraisal and Counselling in uplifting the overall ambiance of an organisation.

Course Content:**UNIT- I:**

Introduction and definition of ecology; Types of ecology; Forest ecology: Definition and its importance in forest ecosystem management; Introduction, structure and components of ecosystem; Types of ecosystem: Forest, grassland, desert and aquatic ecosystem; Ecological concept of ecosystem: Tropic structure, ecological pyramids, food chain, food web, and energy flow.

UNIT- II:

Introduction, definition, scope and importance of biodiversity; Threats and conservation methods of biodiversity; Species composition, species diversity, forest population and forest community; Niche; Methods of forest vegetation analysis, biomass, productivity, litter fall, forest floor biomass (standing state biomass), major nutrients (C, N, P, K), litter decomposition, nutrient cycling and nutrient use efficiency.

UNIT- III:

Climatic factors: Light, atmospheric temperature, moisture, wind and their effects; Topographic factors: Altitude, slope, aspects and exposure and their effects; Edaphic factors: Soil, its formation, soil profile, physico-chemical properties of soil and their effects; Soil organic matter; C:N ratio; Mycorrhiza and its types; Soil microorganism; Biotic factors: Relation between plant and plant, plant and animal, plant and man and their influences; Competition, symbiotic association, parasites, epiphytes, climbers and weeds.

UNIT- IV:

Forest composition, distribution and major forest type in India and world; Classification of forests (Champion and Seth, 1968); Forest area, forest cover, growing stock and carbon stock of forests in India (as per forest survey of India); Succession: Introduction, definition, causes and mechanism of succession; Types of succession and concept of climax.

Reference Books

1. Ecology, Environmental Science and Conservation by J.S. Singh, S.P. Singh and S. R. Gupta
 2. Ecology and Environment by P. D. Sharma
 3. Fundamental of Ecology by E.P. Odum
 4. Concept of Ecology by E.J. Kormondy
 5. Ecology by M.P. Arora
 6. Ecology by S.N. Jha
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MNV 6B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. To determine the minimum size of quadrates.
 2. To determine density of tree species in forest.
 3. To determine frequency of tree species in forest.
 4. To determine abundance and A/F ratio of tree species in forest.
 5. To determine relative density, relative frequency and relative dominance and Important Value Index (IVI) of tree species in forest.
 6. To determine basal area of tree species in forest.
 7. To draw the population structure of tree species in forest.
 8. To determine species diversity in forest by Shannon-Weiner Index.
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Semester-VI**MNV 6C: ECOTOURISM**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

3. To sensitize the students on cultural construction of masculinity and femininity'

Course Content:**UNIT- I:**

Major ecosystems of the world; Eco-tourism: History of tourism, identify various forms of tourism and evolution of ecotourism; Dimensions of tourism and essential conditions for tourism; Differences between tourism components mass tourism versus ecotourism.

UNIT- II:

Understand dimensions of ecotourism and the criteria to qualify for ecotourism; Ecotourism indicators and conceptual differences between developing and developed countries; Organized tours and free independent travellers.

UNIT- III:

Ecotourism in practices in an important protected area: Corbett National Park, Nanda Devi Biosphere Reserve, Kanha National Park, Kaziranga National Park, Gir National Park, Rajaji National Park.

UNIT- IV:

Participation of local people in ecotourism; Limitations and problems; World Tourism Organization; Problems with definition of ecotourism and criticisms; International organizations and NGOs promoting ecotourism; Sociological implications of ecotourism.

Reference Books

1. Indian forestry by K. Manikandan
 2. Eco-tourism and livelihood by A.K Bhattacharya
 3. Tourism, Environment and Man: Sustainable Tourism by Brigadier, B.P.S Khati
 4. Tourism in India Challenges and Opportunities by Ruchi Ramesh and Sudhir Kumar Singh
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MNV 6C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:**Experiment = 15 marks**Practical record notebook = 05 marks**Viva-voce = 05 marks***Practicals:**

1. Make a list of nearby eco-tourism place.
 2. Visit the nearby eco- tourism sites.
 3. Visit Corbett National Park, Nanda Devi Biosphere Reserve, Kanha National Park, Kaziranga National Park, Gir National Park, Rajaji National Park.
 4. Visit nearby wild life Sanctuaries.
 5. Visit nearby birds' sanctuaries.
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Semester-VIII**MNV 6D: PLANTATION FORESTRY**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The main objective of introducing Income Tax is to aware the students to the importance of Income Tax and its

Course Learning Outcomes:

4. The student will know the provisions of Income Tax in India.

Course Content:**UNIT- I:**

Introduction and definitions of forest and plantation, objectives, concept, scope and importance; Types of forest plantations: Commercial, industrial, production, protection, social forestry and agroforestry; Introduction, definition, importance of nursery; Types of nursery; Nursery bed preparation; Containers and its types; Seedlings development; Planting stock (seedlings with naked roots, and seedling with ball of earth); Planting and pattern of planting; Stump planting; Beating up; Singling; Season of planting (monsoon, pre monsoon, winter and spring).

UNIT- II:

Plantation organization and structure; Nursery and plantation site development; Nursery and plantation layout; Planting materials; Seeds and vegetative parts and their collections from different provenances/ sites/ agencies/ forest research institutes/ centres; Seed source and seed orchards; Storage techniques of seeds and other vegetative parts.

UNIT- III:

Preparation of land in plantation sites; Pit digging and its types; Plantation techniques of tree species from seeds, seedlings, ETPs and other vegetative parts i.e. cuttings/stumps/roots; Uses of FYM; Organic manure; Vermicompost and inorganic fertilizers; Insecticides and fungicides; Tending Operations (weeding, cleaning, thinning, girdling, pruning, bud pruning and climber cutting); Nurse crop, cover crop and mulching; Fencing and types of fencing; Soil and water conservation measures; Bio-fuels and Energy plantations.

UNIT- IV:

Important forest tree species: Indigenous tree species: Teak (*Tectona grandis*), Mulberry (*Morus alba*), Bhimal (*Grewia optiva*), Bamboo (*Dendrocalamus strictus*), Sevan (*Gmelina arborea*), Surai (*Cupressus torulosa*) and Van Peepal (*Populus ciliata*), Exotics tree species: Eucalypt (*Eucalyptus tereticornis*), Poplar (*Populus deltoides*), European nettle tree (*Celtis australis*) and exotic pine species; Afforestation techniques of tree species in problematic sites: Saline, alkaline, drought prone, waterlogged, sandy soil, marshy land and mining sites/areas; Success of tree plantations; Reasons of failure of plantations and their remedial techniques.

Reference Books

1. Plantation Forestry by R. K Luna
2. Plantation Trees by R.K. Luna
3. Principles and practices of Silviculture by L.S. Khanna
4. Propagation Practice of Tree Improvement Indian Trees By Ram Prakash, D.C. Chaudhary and S.S. Negi
5. Plantation Forestry in Tropics by J. Evans
6. Forestry in India by A.P. Dwivedi
7. A text book of Silviculture by A.P. Dwivedi

MNV 6D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Selection of important fast-growing, short rotational, and multipurpose tree species: Indigenous (conifers and broad-leaved- Chir-pine, Deodar, Cupress and Quercus species) and exotic species (Poplar and Eucalypt).
 2. Collection and storage techniques of tree seeds/vegetative parts.
 3. Preparation techniques of seedlings for above tree species.
 4. Spacing and number of plants in a unit area.
 5. Pit digging techniques and mulching methods.
 6. Tree species used for energy/fuel wood.
 7. Tree species in paper, plywood and match industries.
 8. Selection of tress species planted in different problematic sites.
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VOCATIONAL COURSE - VII
“EDUCATION”

Semester-II

MNV 7A: INTRODUCTION TO EDUCATION

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To understand the meaning, nature, scope, and aims of education.
2. To explain the factors of education and their interrelationship.
3. To become aware of different agencies of education that influence education.
4. To be acquainted with the concept of child-centrism and play-way in education

Course Content:

Unit- I: Concept of Education

Narrow and broader concept of education
Meaning, nature, and scope of education.
Aims of education – individual, social, vocational, and democratic.
Aims of modern education with special reference to Delor’s Commission.

Unit- 2: Factors of Education

Child/learner: influence of heredity and environment on the learner
Teacher: qualities and duties of a good teacher.
Curriculum- concept and types.
Co-curricular activities: meaning, values, and significance.
Educational institutions: informal, formal, and non-formal, their interrelation.

Unit- 3: Agencies of Education

Home
School
State
Mass media- television, radio, cinema, and newspaper

Unit- 4: Child Centrism and Play-way in Education

Concept of child centrism in education
Characteristics and Significance of Child Centrism in Education
Concept of play and work.
Characteristics of play way in Education, Kindergarten, Montessori, Project method.

Reference Books

1. Foundations of Education by Allan C. Ornstein and Daniel U. Levine
 2. Educational Psychology: Developing Learners by Jeanne Ellis Ormrod
 3. Introduction to Teaching: Becoming a Professional by Donald Kauchak and Paul Eggen
 4. Understanding Education Research: A Guide to Critical Reading by Gary Shank
 5. Philosophy of Education: An Anthology by Randall Curren
 6. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by John W. Creswell and Sharon L. Plano Clark
 7. Theories of Developmental Psychology by Patricia H. Miller
 8. Multicultural Education: Issues and Perspectives by James A. Banks
 9. Classroom Management: Models, Applications, and Cases by M. Lee Manning and Katherine T. Bucher
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MNV 7A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Classroom Observation and Reflection**

Objective: To understand the dynamics of a real classroom environment and reflect on teaching practices.

Activities:

1. Classroom Visit: Arrange for students to observe a live classroom session in a local school. They should take detailed notes on the teaching methods, classroom management techniques, and student engagement.
2. Reflection Paper: After the visit, students will write a reflection paper discussing their observations. They should highlight effective teaching strategies, challenges faced by the teacher, and their overall impression of the classroom environment.
3. Group Discussion: In the next class, students will discuss their observations in small groups and share key insights with the entire class.

Materials Needed:

- Observation guidelines
- Note-taking materials
- Access to a local school for observation

Session 2: Lesson Planning Workshop

Objective: To develop skills in creating effective and engaging lesson plans.

Activities:

1. Introduction to Lesson Planning: Provide a brief lecture on the components of a good lesson plan, including objectives, materials, activities, assessments, and differentiation strategies.
2. Group Activity: Divide students into small groups and assign each group a specific topic or grade level. Each group will create a detailed lesson plan for their assigned topic.
3. Presentation and Feedback: Groups will present their lesson plans to the class, followed by a feedback session where peers and the instructor provide constructive critiques.

Materials Needed:

- Lesson plan templates
- Examples of effective lesson plans
- Presentation tools (e.g., whiteboard, projector)

Session 3: Technology Integration in Education

Objective: To explore the use of technology in enhancing teaching and learning experiences.

Activities:

1. Tech Tool Demonstrations: Introduce various educational technologies (e.g., interactive whiteboards, educational apps, online resources) and demonstrate how they can be used in the classroom.
2. Hands-on Practice: Students will work in pairs to create a mini-lesson using one of the demonstrated tech tools. They should focus on how the tool can enhance student engagement and understanding.
3. Showcase and Discussion: Each pair will showcase their mini-lesson and explain the benefits of the chosen technology. A class discussion will follow to address any challenges and share additional ideas for tech integration.

Materials Needed:

- Access to educational technology tools
- Computers/tablets
- Internet access

Session 4: Understanding Student Diversity

Objective: To gain insights into the diverse backgrounds and needs of students and how to create an inclusive classroom environment.

Activities:

1. Guest Speaker: Invite a guest speaker (e.g., a special education teacher, diversity coordinator) to discuss the importance of understanding and addressing student diversity in education.
2. Case Studies: Provide students with case studies that depict various aspects of student diversity (e.g., cultural, linguistic, socioeconomic, learning abilities). Students will analyze the case studies in small groups and propose strategies to address the needs of each student.
3. Role-Playing: Conduct a role-playing activity where students take on the roles of different stakeholders (e.g., teacher, student, parent) in a diverse classroom scenario. This will help them practice empathy and problem-solving skills.

Materials Needed:

- Case study handouts
- Role-playing scenarios
- Guest speaker arrangements

These sessions aim to provide hands-on, practical experience in key areas of education, preparing graduate students to become effective and reflective educators.

Semester-IV**MNV 7B: PSYCHOLOGICAL FOUNDATION OF EDUCATION**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. To understand the meaning of Psychology and be acquainted with its different aspects.
2. To know the patterns of different aspects of human development and relate this knowledge with education.
3. To be acquainted with the cognitive approach of development and thus to understand the process and factors of cognition.

Course Content:**Unit 1: Relation between Psychology and Education**

Meaning and definition of Psychology

Meaning and definition of Education

Relation between Psychology and education

Nature, scope and significance of educational psychology.

Unit 2: Stages and types of human development and their educational significance.

Piaget's cognitive development theory

Erikson's psycho-social development theory

Kohlberg's moral development theory

Vygotsky's social development theory and Bandura's Social Learning Theory

Unit 3: Learning: concept and theories

Concept and characteristics of learning

Theories: Connectionism (Trial and error, classical, operant conditioning)

Insightful learning

Memorization and Forgetting: Process of memorization, causes of forgetting and economical ways of improving memorization

Unit 4: Intelligence

Concept of intelligence

Theories of Intelligence by Spearman, Thorndike and Guilford

Types and uses of intelligence tests

Concept of Emotional Intelligence and E.Q

Reference Books

1. "Educational Psychology: Developing Learners" by Jeanne Ellis Ormrod
2. "Educational Psychology" by John W. Santrock
3. "Psychology of Learning for Instruction" by Marcy P. Driscoll
4. "Human Learning" by Jeanne Ellis Ormrod
5. "Educational Psychology: Theory and Practice" by Robert E. Slavin
6. "Psychology Applied to Teaching" by Jack Snowman and Rick McCown
7. "Principles of Educational Psychology" by Donald P. Kauchak and Paul D. Eggen
8. "How Children Learn" by John Holt
9. "Theories of Human Learning: What the Professor Said" by Guy R. Lefrancois
10. "Introduction to Educational Psychology: Theory, Research, and Applications" by Jeanne Ellis Ormrod and Eric M. Anderman

MNV 7B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Understanding Cognitive Development**

Objective: To explore the stages of cognitive development and their implications for teaching and learning.

Activities:

1. Introduction to Cognitive Development Theories: Provide a brief lecture on Piaget's stages of cognitive development and Vygotsky's sociocultural theory.
2. Case Study Analysis: Distribute case studies that illustrate different stages of cognitive development. In small groups, students will analyze these cases and identify the cognitive stage and characteristics of the learners.
3. Application Activity: Each group will create a mini-lesson plan tailored to a specific stage of cognitive development, ensuring the activities and materials are age-appropriate.

Materials Needed:

- Case study handouts
- Lesson plan templates
- Examples of age-appropriate educational materials

Session 2: Behavioral Theories in Classroom Management

Objective: To apply behavioral theories to classroom management techniques.

Activities:

1. Overview of Behavioral Theories: Provide a lecture on key behavioral theories (e.g., Skinner's operant conditioning, Bandura's social learning theory).
2. Role-Playing: Students will participate in role-playing exercises where they act out different classroom scenarios. They will practice applying behavioral techniques such as positive reinforcement, negative reinforcement, and modeling.
3. Behavior Management Plan: Each student will develop a comprehensive behavior management plan for a hypothetical classroom, incorporating principles from behavioral theories.

Materials Needed:

- Scenario scripts for role-playing
- Behavior management plan templates
- Examples of reinforcement strategies

Session 3: Motivation in Education

Objective: To understand different types of motivation and how to enhance student motivation in the classroom.

Activities:

1. Lecture on Motivation Theories: Discuss intrinsic and extrinsic motivation, and introduce theories such as Maslow's hierarchy of needs and Deci and Ryan's self-determination theory.
2. Motivation Assessment: Students will complete a motivation assessment questionnaire to reflect on their own motivations and how these insights can be applied to teaching.
3. Strategy Development: In pairs, students will develop strategies to increase both intrinsic and extrinsic motivation among students. They will present their strategies and receive feedback from peers and the instructor.

Materials Needed:

- Motivation assessment questionnaires
- Strategy development templates

- Presentation tools

Session 4: Individual Differences and Learning Styles

Objective: To explore individual differences in learning and how to accommodate diverse learning styles in the classroom.

Activities:

1. Introduction to Learning Styles: Provide an overview of different learning styles (e.g., visual, auditory, kinesthetic) and Gardner's multiple intelligences theory.
2. Learning Style Inventory: Students will complete a learning style inventory to identify their own preferred learning styles.
3. Instructional Design Activity: In small groups, students will design a lesson that incorporates activities for multiple learning styles. They will then teach a segment of their lesson to the class, demonstrating how they cater to different learners.

Materials Needed:

- Learning style inventory handouts
- Instructional design templates
- Classroom materials for various learning activities

These practical sessions aim to deepen students' understanding of the psychological foundations of education through hands-on activities and real-world applications.

Semester-VI**MNV 7C: SOCIOLOGICAL FOUNDATION OF EDUCATION**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To understand the relation between Sociology and Education. nature, and scope of Sociology of education.
2. To explain the concept of Social Groups and Socialization process.
3. To enable the students to understand the concept of Social change and Social interaction in education
4. To become aware of social Communication in Education

Course Content:**Unit I: Introductory Concept of Sociology of Education**

Meaning and Definition of Sociology of Education

Relation between Sociology and Education

Nature of Sociology of Education

Scope of Sociology of Education

Unit 2: Social Groups

Social Groups: meaning and definition

Types of Social groups – Primary, Secondary and Tertiary

Socialization Process: Concept

Role of the family and school in the Socialization process

Unit 3: Social Change and Education

Concept of Social Change

Interrelation between Social Change and Education

Social stratification and Social Mobility.

Social interaction Process

Unit 4: Social Communication in Education

Social Communication: Concept

Informal agencies of social communication

Interrelation between Culture, religion and Education.

Interrelation between Technology, Economy and Education.

Reference Books

1. "Sociology of Education: A Critical Reader" edited by Alan R. Sadovnik
 2. "Education and Society: An Introduction to the Sociology of Education" by Thurston Domina, Andrew M. Penner, and Emily K. Penner
 3. "Sociology of Education" by Jeanne H. Ballantine, Joan Z. Spade, and Jenny M. Stuber
 4. "School and Society: Historical and Contemporary Perspectives" by Walter Feinberg and Jonas F. Soltis
 5. "The Schooled Society: The Educational Transformation of Global Culture" by David P. Baker
 6. "Education and Social Change: Contours in the History of American Schooling" by John L. Rury
 7. "Foundations of Education" by Allan C. Ornstein, Daniel U. Levine, and Gerry Gutek
 8. "Social Foundations of Education: A Reader" edited by Susan F. Semel and Alan R. Sadovnik
 9. "Education and Society in a Changing World" by Martin Richards
 10. "Handbook of the Sociology of Education" edited by Maureen T. Hallinan
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MNV 7C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Analyzing Educational Inequality**

Objective: To understand the factors contributing to educational inequality and explore strategies to address them.

Activities:

1. Lecture on Educational Inequality: Provide an overview of the sociological theories related to educational inequality, focusing on factors such as socioeconomic status, race, and gender.
2. Case Study Analysis: Distribute case studies illustrating different aspects of educational inequality. Students will work in small groups to analyze these cases and identify the key issues.
3. Group Presentation: Each group will present their findings and propose strategies to address the inequalities identified in their case studies.

Materials Needed:

- Case study handouts
- Presentation tools (e.g., whiteboard, projector)

Session 2: The Role of Education in Socialization

Objective: To explore how education contributes to the socialization process and the development of social norms and values.

Activities:

1. Lecture on Socialization: Provide a lecture on the role of education in socialization, covering key concepts such as social norms, values, and the hidden curriculum.
2. Observation Activity: Students will visit a local school to observe and take notes on socialization practices within the school environment, such as morning assemblies, classroom interactions, and extracurricular activities.
3. Reflection and Discussion: Back in the classroom, students will write a reflection on their observations and discuss how these practices contribute to socialization. A group discussion will follow to compare observations and insights.

Materials Needed:

- Observation guidelines
- Note-taking materials

Session 3: Education and Social Change

Objective: To understand the role of education in promoting social change and addressing social issues.

Activities:

1. Lecture on Education and Social Change: Provide an overview of how education can be a tool for social change, including historical examples and contemporary issues.
2. Project-Based Learning: Students will work in small groups to design a project that uses education to address a specific social issue (e.g., environmental awareness, gender equality, health education).
3. Project Presentation: Each group will present their project plan to the class, explaining the social issue they are addressing, their educational approach, and expected outcomes.

Materials Needed:

- Project planning templates
- Presentation tools

Session 4: Understanding the School as a Social System

Objective: To analyze the school as a social system and understand the roles and interactions of its various components.

Activities:

1. Lecture on School as a Social System: Provide an overview of the school as a social system, including the roles of teachers, students, administrators, and parents.
2. Role-Playing Activity: Students will participate in a role-playing exercise where they take on different roles within a school system (e.g., teacher, student, principal, parent) to explore how these roles interact and influence the school environment.
3. Debrief and Discussion: After the role-playing activity, students will debrief in small groups to discuss their experiences and insights. A class discussion will follow to highlight key learnings about the dynamics within a school system.

Materials Needed:

- Role-playing scenario scripts
- Debriefing questions
- Note-taking materials

These practical sessions aim to provide hands-on experience in understanding the sociological foundations of education, helping graduate students apply sociological concepts to real-world educational contexts.

Semester-VIII**MNV 7D: GUIDANCE AND COUNSELLING**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. To know the concept of guidance
2. To know various types of Guidance
3. To Know the basic concept of Counselling
4. To find out the basic data necessary for Guidance

Course Content:**Unit I: Guidance – Meaning, Functions, Need**

Guidance – Meaning, Definitions and Functions

Individual Guidance – Meaning, advantages and disadvantages

Group Guidance – Meaning and Advantages and Disadvantages

Need for guidance in secondary schools and requisites of a good school guidance programme.

Unit 2: Guidance - Educational, Vocational, Personal

Educational Guidance- Meaning, Function at different stages of Education

Vocational Guidance- Meaning, Function at different stages of Education

Personal Guidance- Meaning, Importance for the Adolescents

Unit 3: Counselling – Meaning, Techniques, Types

Counselling - – Meaning, importance and Scope

Techniques of Counselling- Directive, Non-Directive, Eclectic

Individual and Group Counselling –Meaning, Importance

Unit 4: Basic Data Necessary for Guidance

Tools for collecting information on pupils: Intelligence: Concept and Test, Personality: Concept and Test,

Aptitude: Concept and Test

Cumulative Record Card

Anecdotal Record Card

Reference Books

1. "Introduction to Counseling: Voices from the Field" by Jeffrey A. Kottler and David D. Chen
2. "Theories of Counseling and Psychotherapy: A Multicultural Perspective" by Allen E. Ivey, Michael J. D'Andrea, and Mary Bradford Ivey
3. "Counseling and Psychotherapy: Theories and Interventions" by David Capuzzi and Mark D. Stauffer
4. "Career Counseling: A Holistic Approach" by Vernon G. Zunker
5. "Developing Your Theoretical Orientation in Counseling and Psychotherapy" by Duane A. Halbur and Kimberly Vess Halbur
6. "Counseling Skills and Theory" by Margaret Hough
7. "Guidance and Counseling in Schools: A Response to Change" by Patrick M. Hughes
8. "Practical Counselling and Helping Skills: Text and Activities for the Lifeskills Counselling Model" by Richard Nelson-Jones
9. "Group Counseling: Strategies and Skills" by Ed E. Jacobs, Christine J. Schimmel, and Robert L. Masson
10. "The Counseling Practicum and Internship Manual: A Resource for Graduate Counseling Students" by Shannon Hodges

MNV 7D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Session 1: Building Rapport and Effective Communication Skills**

Objective: To develop essential skills for building rapport and effective communication in a counseling context.

Activities:

1. Lecture on Communication Skills: Provide an overview of key communication skills in counseling, such as active listening, empathy, and non-verbal communication.
2. Role-Playing Exercise: Students will pair up and take turns playing the roles of counselor and client. They will practice using active listening and empathy techniques while discussing a non-sensitive topic.
3. Feedback Session: Each pair will provide feedback to one another on their communication skills, focusing on strengths and areas for improvement.

Materials Needed:

- Role-playing scenarios
- Feedback forms
- Note-taking materials

Session 2: Assessing Student Needs and Developing Counseling Plans

Objective: To learn how to assess student needs and develop effective counseling plans.

Activities:

1. Introduction to Assessment Tools: Provide a lecture on various assessment tools and techniques used in educational counseling, such as interviews, questionnaires, and observation.
2. Case Study Analysis: Distribute case studies of students with different needs (e.g., academic difficulties, social issues, career guidance). Students will work in small groups to assess the needs of their assigned case study using the provided tools.
3. Counseling Plan Development: Each group will develop a comprehensive counseling plan for their case study, outlining goals, strategies, and resources to support the student.

Materials Needed:

- Case study handouts
- Assessment tools and templates
- Counseling plan templates

Session 3: Techniques for Career Counseling

Objective: To explore various techniques and strategies for effective career counseling.

Activities:

1. Lecture on Career Counseling Techniques: Provide an overview of career counseling theories and techniques, such as interest inventories, career assessments, and decision-making models.
2. Career Assessment Exercise: Students will complete a career interest inventory themselves to gain firsthand experience with the tool. They will then discuss their results and reflect on how such assessments can guide career counseling.
3. Mock Career Counseling Session: In pairs, students will conduct a mock career counseling session using the career interest inventory results. One student will act as the counselor and the other as the client, discussing career options and planning next steps.

Materials Needed:

- Career interest inventory handouts
- Career assessment tools

- Mock counseling session scripts

Session 4: Addressing Behavioral and Emotional Issues

Objective: To develop strategies for addressing behavioral and emotional issues in students through counseling.

Activities:

1. Lecture on Behavioral and Emotional Counseling: Provide an overview of common behavioral and emotional issues in students and counseling approaches to address them, such as cognitive-behavioral therapy (CBT) techniques and mindfulness strategies.
2. Group Discussion: Divide students into small groups to discuss common behavioral and emotional issues they have observed or experienced in educational settings. Groups will brainstorm potential counseling strategies to address these issues.
3. Simulation Activity: Students will participate in a simulation activity where they respond to a hypothetical student presenting with a behavioral or emotional issue. They will practice applying the discussed counseling techniques and receive feedback from peers and the instructor.

Materials Needed:

- Behavioral and emotional issue scenarios
- Simulation activity guidelines
- Feedback forms

These practical sessions aim to equip graduate students with the necessary skills and techniques for effective guidance and counseling in educational settings.

VOCATIONAL COURSE – VIII
“LIBRARY & INFORMATION SCIENCE”

Semester-II

MNV 8A: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

(Credits: Theory-03)

Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. At the end students will able to know the foundational aspects of library and information science (LIS).
2. Students will know the aspects related with LIS like history, significant developments, major themes, organizations and institutions.
3. They will also learn to examine major conceptual frameworks for LIS practice and theory.

Course Content:

Unit-1: Foundational Approach: Foundational approach: Concept of a Library; Library as a Social Institution; Library Development & Movement in India, U.K., U.S.A.; socio-cultural, intellectual, and historical foundations of library as an institution. Types of libraries: characteristics, collections, services, staff, objectives, structure, and functions. Growth and development of libraries with special reference to India. Library and information science education in India: as a discipline and subject, history, level- degree and institution, accreditation. Role of libraries & Information Centres in formal and informal education, & in society.

Unit-2: Laws of Library and Information Science & Extension Activities: Five laws of Library Science of S R Ranganathan. Implications of five laws: general and digital environment. Extension Activities & Public Relation works.

Unit-3: Library Legislation, Acts and Professional Issues: Library legislation: concept, need and essential features. Library legislations in India: history, and features. Intellectual Property Rights (IPRs): The Indian Copyright Act, 1957- original writings and creativity, history, and infringement. Delivery of Books (Public Libraries) Act 1954. Profession: attributes; librarianship as a profession, ethics

Unit-4: Professional Associations and Organizations: Library associations: National and International associations, need and role in promotional activities. National associations: Indian Library Association (ILA) & Indian Association of Special Libraries and Information Centres (IASLIC), Jharkhand Information & Library Association (JILA) - history, structure, membership, functions & activities. International associations: American Library Association (ALA); Chartered Institute of Library and Information Professionals (CILIP); International Federation of Library Associations and Institutions (IFLA)- history, structure, membership, functions & activities. National level promoters: Raja Ram Mohan Roy Library Foundation, Kolkata (Role, objectives, functions & activities, types of grants). International level promoters: UNESCO – Role, Objectives, functions & activities, specialties, types of book promotion activities such as, International Book Day, International Book Fair etc.

Reference Books

1. Bawden, David & Robinson, Lyn (2012). Introduction to information science. London: Facet.
2. Crowley, Bill (Ed). (2012). Defending professionalism: a resource for librarians, information specialists, knowledge managers, and archivists. Santa Barbara: Libraries Unlimited.
3. Khanna, J. K. (1987). Library and society. Kurukshetra: Research Publications Krishan Kumar. (1993). Library organization. New Delhi: Vikas.
4. Liu, Yan Quan & Cheng, Xiaojun (Eds.) (2008). International and comparative studies in information and library science: Lanham; Maryland: Scarecrow Press.

5. Ranganathan, S. R. (1969). Five laws of library science. 5th ed. Bangalore: Sarada Ranganathan Endowment for Library Science, 2006
 6. Rubin, Richard E. (2010). Foundations of library and information science. 3rd ed. New York: Neal Schuman.
 7. Green, Roger C., Grover, Robert J., Fowler, Susan J. (2013). Introduction to library and information professions. Santa Barbara: Libraries Unlimited.
 8. Leckie, Gloria J., Given, Lisa M. & Buschman, John E. (Eds.). (2010). Critical theory for library and information science: exploring the social from across the discipline. Santa Barbara: Libraries Unlimited.
 9. Venkatappaiah, Velage & Madhusudan, M. (2006). Public library legislation in the new millennium: New model public library acts for the union, states and union territories. Delhi: Bookwell.
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MNV 8A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Practical Session 1: Library Tour and Orientation**

- Objective: To familiarize students with the layout and resources of the library.
- Activities: Guided tour of different sections of the library (e.g., circulation desk, reference section, stacks), introduction to library staff and their roles, demonstration of library catalog and online resources.
- Outcome: Students gain a better understanding of the library's organization and resources, which will help them navigate the library more effectively.

Practical Session 2: Library Extension Activities Exercise

- Objective: To introduce students to basic principles of library extension activities.
- Activities: Practice library extension activities.
- Outcome: Students gain practical skills in organizing library extension activities.

Practical Session 3: Library User Education & Information Literacy

- Objective: To provide students with hands-on experience in providing library user education & information literacy.
 - Activities: Role-playing scenarios where students act as both librarians and patrons, asking and answering information queries.
 - Outcome: Students develop communication and problem-solving skills, as well as an understanding of the importance of library user education & information literacy.
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Semester-IV**MNV 8B: KNOWLEDGE ORGANIZATION: THE CLASSIFICATION & CATALOGUING**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

At the end students will be able to know:

1. Why and how to develop knowledge organization systems;
2. the implications of knowledge organization systems and approaches;
3. the theory and practices involved in library classification & cataloguing;
4. the library classification & cataloguing schemes and the trends in classification cataloguing; and
5. how to prepare students for work in libraries, information centres, and other organizations that organize large bodies of recorded information.

Course Content:**PART – 1: Library Classification****UNIT-1: Library Classification**

Library classification: definition, need, and purpose

Theories of classification: Static and dynamic

Postulational approach: postulates, facet analysis, fundamental categories, phase analysis, principles of helpful sequence, and facet sequence

Notation and call number: number building process

Devices in library classification

UNIT-2: Universe of Knowledge and Subjects

Universe of subjects: definitions and purpose

Development of subjects: structure and attributes

Modes of formation of subjects

Mapping of subjects: Colon Classification (main classes);

Dewey Decimal Classification (2nd level classes)

UNIT-3: Schemes of Classification

Species of library classification: enumerative & faceted

Classification schemes: design, methodology

Standard schemes of classification and their features: CC, DDC, UDC

UNIT-4: Recent Trends

Recent trends in classification

Thesaurus based: The Saurofacet, Classaurus

Automatic classification, Classification in online systems, Web Dewey

Role of major organizations: DRTC, CRG, OCLC

Ontology-based classification

PART – 2: Library Cataloguing**UNIT – I: Fundamental Concepts and Historical Developments:** Library Catalogue: Definition, Objectives, Purposes and Functions; History and Development of Library Catalogue Codes; Physical & Inner Forms of Catalogues including OPAC; Types of Catalogues & Similar other Tools: Bibliographies, Indexes, Accession Lists and Shelf List, Normative Principles of Cataloguing: Laws, Principles & Canons.**UNIT – II: Types of Catalogue Entries:** Kinds of Entries in Classified Catalogue Code (CCC) & Anglo-American Cataloguing Rules-2 (AACR-2): Main Entry & Added Entries; Data Elements in Different Types of Entries; Filing of Entries in Classified and Alphabetical Catalogues, such as CCC & ALA etc.; Comparative

study of CCC with Additional Rules for Dictionary Catalogue Code and AACR-2 (North American Text) (Excluding Composite Works, Periodicals & Special Materials),

UNIT – III: Choice and Rendering of Headings: Personal Authors: Western and Indic Names; Corporate Authors; Pseudonymous, Anonymous Works and Uniform Titles; Non-Print Resources

UNIT – IV: Subject Cataloguing: Subject Cataloguing: Concept, Need, Purpose, Function and Problems; Chain Indexing & Procedure; Subject Headings- Principles, & Lists: Library of Congress List of Subject Heading (LCSH), & Sear's List of Subject Heading (SLSH)

UNIT –V: Trends in Library Cataloguing: Centralized and Cooperative Cataloguing; Bibliographic Standards: ISBD, MARC, CCF, etc. ISBN and ISSN, Cataloguing of Special Materials

Reference Books

1. Broughton, Vanda (2015). Essential classification (2nd ed). London: Facet.
 2. Chaudhary, G. G. & Chaudhary, Sudatta (2007). Organizing information: From the shelf to the web. London: Facet.
 3. Dhyani, Pushpa. (2000). Theory of library classification. Delhi: Vishwa Prakashan. Foskett, A. C. (1990). Subject approach to information (5thed.). London: Clive Bingley.
 4. Krishan Kumar. (2000). Theory of classification (4th rev ed.) New Delhi: Vikas Publications.
 5. Ranganathan, S. R. (1967). Prolegomena to library classification (3rd ed.). Bangalore: Sarada Ranganathan Endowment for Library Science.
 6. Stuart, David (2016). Practical ontologies for information professionals. London: Facet.
 7. Dewey, Melvil (1979). Dewey Decimal Classification & Relative Index (19th Ed.). Albany, New York: Forest Press.
 8. Ranganathan, S.R. (1960). Colon Classification. (6th Ed.). Bangalore: Sarada Ranganathan Endowment for Library Science.
 9. American Library Association, Et Al. Anglo-American Cataloguing Rules. Rev. Ed. 1998. Library Association, London.
 10. Bowman (J H). Essential cataloguing. 2003. Facet Publishing, London.
 11. Hunter (E J) And Bakewell (K G B). Advanced cataloguing. 1989. Clive Bingley, London.
 12. Kumar (G) And Kumar (K). Theory of cataloguing. Rev. Ed.5. 1993. South Asia Books, New Delhi.
 13. Miller (J), Ed. Sears list of subject headings. Ed. 15. 1994. Wilson, New York.
 14. Ranganathan (S R). Classified catalogue code with additional rules for dictionary catalogue code. Ed. 5 (with amendments). 1989. Sarada Ranganathan Endowment for Library Science, Bangalore.
 15. Read (J). Cataloguing without tears: managing knowledge in the information society. 2003. Chandos Publishing, Oxford.
 16. Taylor (A G) And Miller (David P). Wynar's introduction to cataloging and classification. Ed.10. 2006. Libraries Unlimited, London.
 17. Girija Kumar & Krishan Kumar. Suchikaran ke Siddhant. 1976. Vikas, Delhi.
 18. Agarwal (S S). Granthalaya Suchikaran. 1980. M.P. Hindi Grantha Academy, Bhopal.
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MNV 8B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Practical Session 1: Library Classification & Cataloguing System Exploration**

1. Objective: To familiarize students with different classification & cataloguing systems used in libraries.
2. Activities: Introduce students to major classification systems such as Dewey Decimal Classification (DDC), & Colon Classification (CC), and major cataloguing schemes such as AACR-2 & CCC. Compare and contrast the systems, highlighting their strengths and weaknesses.
3. Outcome: Students gain a broad understanding of classification & cataloguing systems and their application in organizing library materials.

Practical Session 2: Library Classification & Cataloguing Exercise

- Objective: To give students hands-on experience in applying classification theory to library materials.
- Activities: Provide students with a set of library materials (books, articles, etc.) and ask them to classify them using a chosen classification system (DDC 19 & CC 6) & to catalogue using cataloguing schemes (AACR-2 & CCC). Students should justify their classification & cataloguing decisions based on the principles of the system.
- Outcome: Students develop practical skills in applying classification & cataloguing theory, reinforcing their understanding of how classification & cataloguing systems work.

Practical Session 3: Library Classification & Cataloguing System Design

- Objective: To encourage students to critically evaluate existing classification & cataloguing systems and propose improvements or design new systems.
 - Activities: Divide students into groups and assign each group a specific area of knowledge (e.g., biology, literature). Ask them to design a classification system for organizing materials in that area, taking into account the specific characteristics and needs of the subject; and ask them design a cataloguing scheme for documents in various subjects.
 - Outcome: Students gain a deeper understanding of the complexities involved in classification & cataloguing system design and develop critical thinking skills in evaluating and proposing improvements to existing systems.
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Semester-VI**MNV 8C: INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTS) BASICS**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Outcomes:**

1. At the end students will be able to know
2. The basic knowledge about ICT concepts in terms of hardware, software, and operating systems;
3. the possibilities of ICTs in designing library services;
4. the use of communication and networking technologies in developing library systems and services;
5. the current trends in library networks operational in India.

Course Content:**Unit 1: Computer Hardware and Software**

Information Technology: definition, need, scope, objectives, and components

Computers and computing technology: historical development, generation, classification, and components.

Software: meaning, concept, types – system, and application software

Operating systems: Types – single and multi-user; basic features of MS-DOS, MS-Windows, and LINUX

Unit 2: Computer Applications to Library and Information Services

Role of computers in libraries

Application of computers in library activities: general– MS Word, MS Excel, MS PowerPoint; professional – housekeeping

Library automation: definition, need, purpose & objectives

Library management software: features, modules, selection, recency

Basic features of Koha, SOUL and Libsys etc.

Unit 3: Communication Technologies and their Applications

Telecommunications: need, purpose, and objectives

Modes – Simplex, half duplex, full duplex, and media–guided, unguided

Communication tools and techniques: e-mail, teleconferencing/video conferencing, voice mail, social networking

Unit 4: Internet and Library Networks

Network – concept, need and purpose, types – LAN, MAN, WAN, Topologies

Library networks: need, purpose, objectives & resource sharing

National library networks: DELNET, INFLIBNET, NKN

Internet: concept, definition, origin, need, purpose & services

Search Strategies – Boolean operator, Wild card, Truncation, etc.

Reference Books

1. Ackermann, Ernest. (1995). Learning to use the internet: An introduction with examples and experiences. New Delhi: BPB.
2. Bharihoke, Deepak. (2002). Fundamentals of IT (2nd ed). New Delhi: Excel Books.
3. Chowdhury, G. G. and Chowdhury, Sudatta. (2000). Searching CD-ROM and Online Information Sources. London: Library Association.
4. Chowdhury, G. G. and Chowdhury, Sudatta. (2007). Organizing information: From the shelf to the Web. London: Facet.
5. Cox, Joyce, Lambert, Joan and Frye, Curtis. (2010). Microsoft Office Professional 2010 Step by Step. USA: Microsoft Press.
6. Negus, Christopher. (2005). Linux Bible. New York: John Wiley.
7. Pandian, M. Paul and Jambhekar, Ashok (2001). Internet for libraries and information centres. New Delhi: Tata-McGraw-Hill.
8. Rajaraman. (2001). Fundamentals of computers (3rd ed). New Delhi: Prentice Hall of India. Rowley, Jennifer. (1993). Computers for Libraries. (3rd ed). London: Library Association.

MNV 8C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:**Practical Session 1: Introduction to ICT in Libraries**

- Objective: To familiarize students with the basic concepts and uses of ICT in libraries.
- Activities: Demonstration of ICT tools commonly used in libraries such as library management systems, online catalogs, and digital repositories. Hands-on practice with basic ICT skills like using a computer, searching the internet, and using library software.
- Outcome: Students gain a foundational understanding of how ICT is applied in library settings and develop basic ICT skills necessary for library work.

Practical Session 2: Digital Resources and Services

- Objective: To explore digital resources and services available in libraries.
- Activities: Introduction to e-books, e-journals, and online databases commonly used in libraries. Hands-on practice with accessing and searching digital resources. Discussion on the benefits and challenges of digital resources in libraries.
- Outcome: Students become familiar with digital resources and services, enabling them to assist library users in accessing and utilizing these resources effectively.

Practical Session 3: ICT for Library Outreach

- Objective: To demonstrate how ICT can be used for library outreach and promotion.
 - Activities: Exploration of social media platforms and online communication tools used for library promotion. Hands-on practice with creating social media posts, designing promotional materials, and engaging with library users online. Discussion on the role of ICT in expanding library reach and increasing user engagement.
 - Outcome: Students learn how ICT can be leveraged for library outreach activities, enabling them to effectively promote library services and resources to a wider audience.
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Semester-VIII**MNV 8D: MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. At the end students will be able to:
2. describe the terminology of management with its related terminology as applied to libraries and information centres;
3. orient the students with different schools of thought;
4. identify the fundamental components of management, planning, organizing, staffing, directing and control;
5. identify the main approaches to the study of the management of an organization;
6. equip with the skills of managing resources, money, people and time, change and demonstrate management skill in libraries and information centres.

Course Content:**Unit-1: Management Basics**

Management: concept, definition, function, and scope

Principles of management

Schools of thought: classical- scientific and process management; neo-classical- human relation, behavioural; modern management era- empirical, social system, decision theory, and contingency.

Change Management: concept, problems of inducing change, and techniques

Tool and techniques: total quality management-definition, concepts, and elements; project management- PERT, CPM

Unit-2: Man and Materials Management

Human Resource (HR): Human Resource Management (HRM): Human Resource Development (HRD)

Human Resource Planning (HRP): concept and components

Jobs: Analysis, description, and requirement

Recruitment: advertisement, screening, selection methods, induction, orientation, performance & evaluation

Motivation: concept, theories- Maslow's and Hertzberg's

Library committees: purpose and types

Materials management: Library infrastructure, Library building construction, provision, lighting floor management, and future considerations

Unit-3: Library Financial Management

Financial management: concept, scope, and objectives

Library budget and budgetary methods: line item or incremental budget, formula budget, control programme budget, performance budget, planning programming budgeting system (PPBS), zero- based budgeting (ZBB)

Cost analysis: concept and methods-cost benefit, cost-effectiveness

Outsourcing: concept, definition, need and purpose

Unit-4: Library Collection and Service Management

Functions: resources development section- selection principles, collection development & selection tools; policies - print and e-resources; processing; serial control & management; maintenance- conservation, preservation, stock verification & weeding; circulation- charging, discharging, reservation, renewal, overdue and fines; administrative- grant, funding, gift & audit

Library services: nature, significance and characteristics, factors influencing the growth of services

Library rules: membership, timing, circulation, and user behaviour

Reports: contents, style & annual reports

Library statistics: records, data

Reference Books

1. Evans, G. Edward, Ward, Patricia Layzell, & Rugaas, Bendik (2000). Management basics for information professionals. New York, Neal-Schuman
2. Krishan Kumar. (2007). Library management in electronic environment. New Delhi: Har- Anand Publications.
3. Mittal, R. L. (2007). Library administration: Theory and practice. 5 ed. New Delhi: Ess Ess.
4. Panwar, B. S. & Vyas, S. D. (1986). Library management. Delhi: R. R. Publishing. Ranganathan, S. R. (2006). Library administration. 2nd ed. New Delhi: Ess Ess.
5. Singh, M. (1983). Library and information management: Theory and practice. Delhi: IBT.
6. Singh, R. S. P. (1990). Fundamentals of library administration and management. Delhi: Prabhat Publications. Stuart, R. D. & Moran, B. B. (2013). Libraries and information center management. 8th ed. London: Libraries Unlimited.
7. Bryson, J. (1998). Effective library and information centre management, Ashgate, London. pp 1-3

MNV 8D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) 30 Hours***Instruction to Question Setter for******End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:*

<i>Experiment</i>	<i>= 15 marks</i>
<i>Practical record notebook</i>	<i>= 05 marks</i>
<i>Viva-voce</i>	<i>= 05 marks</i>

Practicals:**Practical Session 1: Library Management Software (LMS)**

- Objective: To familiarize students with the use of Library Management Software (LMS) for efficient library operations.
- Activities: Hands-on practice with popular LMS systems such as Koha or any other standard LMS. Tasks may include cataloging new materials, managing circulation, generating reports, and configuring system settings.
- Outcome: Students gain practical experience in using LMS software, which is essential for managing modern libraries effectively.

Practical Session 2: Collection Development and Management

- Objective: To provide students with practical skills in collection development and management.
- Activities: Develop a collection development policy for a fictional library based on budget constraints and user needs. Practice selection, acquisition, and deselection of library materials. Conduct a collection assessment and create a plan for collection maintenance.
- Outcome: Students learn the practical aspects of managing library collections, including policy development, selection criteria, and maintenance strategies.

Practical Session 3: User Services and Outreach

- Objective: To develop students' skills in providing user services and conducting outreach activities.
- Activities: Plan and conduct a library program or event, such as a book club meeting, workshop, or community outreach activity. Create promotional materials and engage with library users to assess their needs and preferences.
- Outcome: Students gain experience in planning and implementing user-focused library services and outreach initiatives, enhancing their ability to engage with the community and meet user needs.

VOCATIONAL COURSE – IX
“DIGITAL MARKETING”

Semester-II

MNV 9A: INTRODUCTION TO DIGITAL MARKETING

(Credits: Theory-03)

Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To understand the basic concepts of Digital marketing and the road map for successful Digital Marketing Fundamentals, strategies & Tools.

Course Learning Outcomes:

2. Understanding Digital Marketing Fundamentals: Students will gain a comprehensive understanding of digital marketing concepts, including SEO, SEM, social media marketing, email marketing, and content marketing.
3. Developing Digital Marketing Strategies: Students will learn how to develop effective digital marketing strategies tailored to different target audiences and business objectives.
4. Practical Application of Digital Marketing Tools: Students will gain hands-on experience with various digital marketing tools and platforms, such as Google Analytics, Facebook Ads Manager, and email marketing software, to implement and track digital marketing campaigns.

Course Content:

UNIT-I: Fundamentals of Marketing, Fundamentals of Digital Marketing & Its Significance, Traditional marketing vs. Digital Marketing, Evolution of Digital Marketing, Digital Marketing Landscape, Key Drivers, Digital Consumer & Communities, Gen Y & Netizen's expectation & influence w.r.t. Digital Marketing.

UNIT-II: The Digital users in India, Digital Marketing Strategy- Consumer Decision journey, POEM Framework, Segmenting & Customizing messages, Digital Advertising Market in India, Skills in Digital Marketing, Digital Marketing Plan.

UNIT-III: Terminology used in Digital Marketing, PPC and online marketing through social media, Social Media Marketing, SEO techniques, Keyword advertising, Google webmaster and analytics overview, Affiliate Marketing, Email Marketing, Mobile Marketing

UNIT-IV: Display advertising, Buying Models, different types of ad tools, Display advertising terminology, types of display ads, different ad formats, Ad placement techniques, Important ad terminology, Programmatic Digital Advertising.

Reference Books

1. Digital Marketing –Kamat and Kamat-Himalaya
 2. Marketing Strategies for Engaging the Digital Generation, D. Ryan,
 3. Digital Marketing, V. Ahuja, Oxford University Press
 4. Digital Marketing, S. Gupta, McGraw-Hill
 5. Quick win Digital Marketing, H. Annmarie, A. Joanna, Paperback edition
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MNV 9A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:**Practical Session 1: Introduction to Digital Marketing**

Objective: Understand the basic concepts and scope of digital marketing.

Activities:

Discuss the evolution of marketing in the digital age.

Introduce key digital marketing channels (e.g., social media, email, SEO, SEM).

Analyze case studies of successful digital marketing campaigns.

Outcome: Students gain a foundational understanding of digital marketing principles.

Practical Session 2: Website Optimization

Objective: Learn how to optimize a website for better visibility and user experience.

Activities:

Conduct a website audit to identify areas for improvement.

Discuss strategies for on-page and off-page SEO.

Implement basic SEO techniques (e.g., keyword optimization, meta tags).

Outcome: Students understand the importance of website optimization for digital marketing success.

Practical Session 3: Pay-Per-Click (PPC) Advertising

Objective: Understand the basics of PPC advertising and its role in digital marketing.

Activities:

Set up a Google Ads account and create a sample campaign.

Explore keyword research and ad targeting strategies.

Monitor campaign performance and adjust settings based on data.

Outcome: Students learn how to create and manage PPC campaigns effectively.

Practical Session 4: Email Marketing

Objective: Learn how to use email marketing as a tool for customer engagement and conversion.

Activities:

Design and send an email marketing campaign using a platform like MailChimp.

Segment the email list based on audience demographics or behavior.

Analyze email performance metrics (e.g., open rate, click-through rate).

Outcome: Students understand the principles of effective email marketing and its role in the digital marketing ecosystem.

Semester-IV**MNV 9B: SOCIAL MEDIA MARKETING**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. To know the importance of Social Media Platforms importance in Digital Marketing

Course Learning Outcomes:

1. Social Media Strategy Development: Students will be able to develop comprehensive social media marketing strategies, including content planning, audience engagement tactics, and platform selection, to achieve specific marketing goals.
2. Community Management Skills: Students will acquire skills in managing online communities, including responding to comments and messages, handling customer feedback, and building relationships with followers to enhance brand loyalty.
3. Analytical and Reporting Abilities: Students will learn how to analyze social media metrics, such as engagement rates, reach, and conversions, and use this data to evaluate the effectiveness of social media campaigns and make informed decisions for future strategies.

Course Content:

UNIT-I: Fundamentals of Social Media Marketing & its significance, Necessity of Social media Marketing, Building a Successful strategy: Goal Setting, Implementation.

UNIT-II: Facebook Marketing: Facebook for Business, Facebook Insight, Different types of Ad formats, setting up Facebook Advertising Account, Facebook audience & types, Designing Facebook Advertising campaigns, Facebook Avatar, Apps, Live, Hashtags

UNIT-III: LinkedIn Marketing: Importance of LinkedIn presence, LinkedIn Strategy, Content Strategy, LinkedIn analysis, Targeting, Ad Campaign

UNIT-IV: Twitter Marketing: Basics, Building a content strategy, Twitter usage, Twitter Ads, Twitter ad campaigns, Twitter Analytics, Twitter Tools and tips for managers. Instagram & Snapchat basics.

Reference Books

1. Digital Marketing –Kamat and Kamat-Himalaya
 2. Marketing Strategies for Engaging the Digital Generation, D. Ryan,
 3. Digital Marketing, V. Ahuja, Oxford University Press
 4. Digital Marketing, S. Gupta, McGraw-Hill
 5. Quick win Digital Marketing, H. Annmarie, A. Joanna, Paperback edition
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MNV 9B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:**Practical Session 1: Social Media Strategy Development**

Objective: Understand the fundamentals of creating a social media marketing strategy.

Activities:

Analyze case studies of successful social media campaigns.

Identify target audience demographics and psychographics.

Develop a social media strategy for a fictional business, including goals, content strategy, and platform selection.

Outcome: Students gain insight into the strategic aspects of social media marketing.

Practical Session 2: Content Creation and Curation

Objective: Learn how to create engaging content for social media platforms.

Activities:

Brainstorm content ideas based on audience interests and trends.

Create visual and written content for different platforms (e.g., Facebook, Instagram, LinkedIn).

Curate content from other sources and analyze its effectiveness.

Outcome: Students develop skills in content creation and curation for social media.

Practical Session 3: Social Media Advertising

Objective: Explore the different types of social media advertising and how to use them effectively.

Activities:

Set up and run a paid advertising campaign on a social media platform (e.g., Facebook Ads, Instagram Ads).

Target specific audience segments and monitor campaign performance.

Analyze advertising metrics (e.g., CPC, CTR) to optimize campaign effectiveness.

Outcome: Students gain practical experience in social media advertising.

Practical Session 4: Community Management and Engagement

Objective: Learn how to manage and engage with online communities on social media.

Activities:

Monitor and respond to comments, messages, and reviews on social media platforms.

Plan and execute a social media takeover or live event.

Measure the impact of community management efforts on brand reputation and customer loyalty.

Outcome: Students understand the importance of community management in social media marketing.

Practical Session 5: Social Media Analytics and Reporting

Objective: Understand how to measure and analyze social media performance metrics.

Activities:

Use social media analytics tools to track key metrics (e.g., reach, engagement, conversions).

Create a social media report summarizing campaign performance and key insights.

Make recommendations for improving future social media campaigns based on data analysis.

Outcome: Students learn how to use data to evaluate the effectiveness of social media marketing efforts.

Semester-VI**MNV 9C: SEARCH ENGINE OPTIMIZATION**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. To understand the technological importance of SEO Total

Course Learning Outcomes:

1. Understanding of SEO Principles: Students will gain a thorough understanding of the principles and techniques of search engine optimization, including keyword research, on-page optimization, and off-page optimization.
2. Ability to Implement SEO Strategies: Students will develop the skills to implement effective SEO strategies for websites, including optimizing website content, improving website structure, and building high-quality backlinks.
3. Monitoring and Analyzing SEO Performance: Students will learn how to monitor and analyze the performance of SEO campaigns using tools like Google Analytics and Search Console, and use data-driven insights to improve SEO strategies.

Course Content:

UNIT-I: Introduction to SEO, How Search engine works, SEO Phases, History Of SEO, How SEO Works, What is Googlebot (Google Crawler), Types Of SEO technique, Keywords, Keyword Planner tools

UNIT-II: On page Optimization, Technical Elements, HTML tags, Schema.org, RSS Feeds, Microsites, Yoast SEO Plug-in

UNIT-III: Off page Optimization- About Off page optimization, Authority & hubs, Backlink, Blog Posts, Press Release, Forums, Unnatural links.

UNIT-IV: Social media Reach- Video Creation & Submission, Maintenance- SEO tactics, Google search Engine, Other Suggested tools

Reference Books

1. Digital Marketing –Kamat and Kamat-Himalaya
 2. Marketing Strategies for Engaging the Digital Generation, D. Ryan,
 3. Digital Marketing, V. Ahuja, Oxford University Press
 4. Digital Marketing, S.Gupta, McGraw-Hill
 5. Quick win Digital Marketing, H. Annmarie , A. Joanna, Paperback edition
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MNV 9C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:**Experiment = 15 marks**Practical record notebook = 05 marks**Viva-voce = 05 marks***Practicals:****Practical Session 1: SEO Fundamentals**

Objective: Understand the basic principles and terminology of SEO.

Activities:

Discuss the importance of SEO in digital marketing.

Identify key elements of SEO, such as keywords, on-page optimization, and off-page optimization.

Analyze case studies of websites that have effectively implemented SEO strategies.

Outcome: Students gain a foundational understanding of SEO concepts.

Practical Session 2: Keyword Research and Analysis

Objective: Learn how to conduct keyword research for SEO purposes.

Activities:

Use keyword research tools (e.g., Google Keyword Planner, SEMrush) to identify relevant keywords for a specific niche.

Analyze keyword metrics such as search volume, competition, and relevance.

Develop a list of target keywords for a fictional website based on research findings.

Outcome: Students acquire skills in keyword research and selection.

Practical Session 3: On-Page Optimization

Objective: Understand how to optimize website content for better search engine visibility.

Activities:

Optimize a web page for a target keyword, including title tags, meta descriptions, headings, and body content.

Implement best practices for URL structure, internal linking, and image optimization.

Use SEO tools to analyze on-page optimization and make improvements based on recommendations.

Outcome: Students learn how to effectively optimize web pages for search engines.

Practical Session 4: Off-Page Optimization and Link Building

Objective: Explore strategies for building backlinks and improving off-page SEO.

Activities:

Identify high-quality websites for potential link building opportunities.

Develop a link building strategy, including outreach and relationship building with other websites.

Monitor backlink performance and analyze the impact on search engine rankings.

Outcome: Students understand the importance of off-page optimization and gain practical experience in link building.

Semester-VIII**MNV 9D: ADVERTISING TOOLS & ITS OPTIMIZATION**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. How to create effective Ad Words campaign & Advertising Positioning with respect to the Digital marketing

Course Learning Outcomes:

2. Understanding of Advertising Tools: Students will gain knowledge about various advertising tools and platforms available for digital marketing, including Google Ads, Facebook Ads, and Instagram Ads.
3. Optimizing Advertising Campaigns: Students will learn how to optimize advertising campaigns for better performance, including targeting the right audience, creating compelling ad copies, and managing budgets effectively.
4. Analyzing Advertising Performance: Students will develop skills in analyzing advertising performance metrics, such as click-through rates, conversion rates, and return on ad spend, and using this data to improve advertising strategies and achieve better results.

Course Content:

UNIT-I: Advertising & its importance, Digital Advertising, Different Digital Advertisement, Performance of Digital Advertising: Process & players, Display Advertising Media, Digital metrics

UNIT-II: Buying Models- CPC, CPM, CPL, CPA, fixed Cost/Sponsorship, targeting: - Contextual targeting, remarking, Demographics, Geographic & Language Targeting.

UNIT-III: Display advertising, different types of ad tools, Display advertising terminology, types of display ads, different ad formats, Ad placement techniques, Important ad terminology, ROI measurement techniques, AdWords & AdSense.

UNIT-IV: YouTube Advertising: YouTube Channels, YouTube Ads, Type of Videos, Buying Models, Targeting & optimization, Designing & monitoring Video Campaigns, Display Campaigns

Reference Books

1. Digital Marketing –Kamat and Kamat-Himalaya
 2. Marketing Strategies for Engaging the Digital Generation, D. Ryan,
 3. Digital Marketing, V. Ahuja, Oxford University Press
 4. Digital Marketing, S. Gupta, McGraw-Hill
 5. Quick win Digital Marketing, H. Annmarie, A. Joanna, Paperback edition
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MNV 9D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:**Practical Session 1: Introduction to Advertising Tools**

Objective: Understand the various digital advertising tools available for online campaigns.

Activities:

Introduce popular advertising platforms such as Google Ads, Facebook Ads, and LinkedIn Ads.

Demonstrate how to set up an advertising account on each platform.

Discuss the different types of campaigns and ad formats supported by each platform.

Outcome: Students gain a basic understanding of digital advertising tools and their functionalities.

Practical Session 2: Campaign Planning and Targeting

Objective: Learn how to plan and target an advertising campaign effectively.

Activities:

Define campaign objectives and key performance indicators (KPIs).

Identify target audience segments based on demographics, interests, and behaviors.

Create a campaign plan that includes budget allocation, ad scheduling, and targeting criteria.

Outcome: Students develop skills in campaign planning and audience targeting.

Practical Session 3: Ad Creation and Optimization

Objective: Understand how to create compelling ads and optimize them for better performance.

Activities:

Develop ad creatives (e.g., text, images, videos) that align with campaign objectives and target audience preferences.

A/B test different ad variations to determine the most effective messaging and design.

Monitor ad performance metrics (e.g., CTR, conversion rate) and make adjustments to improve campaign performance.

Outcome: Students learn how to create and optimize ads for maximum impact.

Practical Session 4: Campaign Monitoring and Analysis

Objective: Learn how to monitor and analyze advertising campaign performance.

Activities:

Use advertising analytics tools to track campaign metrics and performance trends.

Generate reports that summarize campaign performance and key insights.

Identify areas for optimization and develop recommendations for improving future campaigns.

Outcome: Students gain skills in campaign monitoring, analysis, and optimization.

VOCATIONAL COURSE - X
“AGRONOMY”

Semester-II

MNV 10A: SOIL FERTILITY AND NUTRIENT MANAGEMENT

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. To impart knowledge of fertilizers and manures as sources of plant nutrients and apprise about the integrated approach of plant nutrition and sustainability of soil fertility.

Course Content:

UNIT I:

Soil fertility and productivity - factors affecting; features of good soil management; problems of supply and availability of nutrients; relation between nutrient supply and crop growth; organic farming - basic concepts and definitions.

UNIT II:

Criteria of essentiality of nutrients; Essential plant nutrients – their functions, nutrient deficiency symptoms; transformation and dynamics of major plant nutrients.

UNIT III:

Preparation and use of farmyard manure, compost, green manures, vermicompost, biofertilizers and other organic concentrates and their composition, availability and crop responses; recycling of organic wastes and residue management.

UNIT IV:

Commercial fertilizers; composition, relative fertilizer value and cost; crop response to different nutrients, residual effects and fertilizer use efficiency, fertilizer mixtures and grades; agronomic, chemical and physiological methods of increasing fertilizer use efficiency; nutrient interactions.

UNIT V:

Time and methods of manures and fertilizers application; foliar application and its concept; relative performance of organic and inorganic manures; economics of fertilizer use; integrated nutrient management.

Reference Books

1. Brady NC & Weil R.R 2002. The Nature and Properties of Soils. 13th Ed. Pearson Edu.
 2. Fageria NK, Baligar VC & Jones CA. 1991. Growth and Mineral Nutrition of Field Crops.
 3. Marcel Dekker.
 4. Havlin JL, Beaton JD, Tisdale SL & Nelson WL. 2006. Soil Fertility and Fertilizers. 7th Ed. Prentice Hall.
 5. Prasad R & Power JF. 1997. Soil Fertility Management for Sustainable Agriculture. CRC Press. Yawalkar KS, Agrawal JP & Bokde S. 2000. Manures and Fertilizers. Agri-Horti Publ
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MNV 10A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):***

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Determination of soil pH, ECe, organic C, total N, available N, P, K and S in soils
 2. Determination of total N, P, K and S in plants
 3. Interpretation of interaction effects and computation of economic and yield optima
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Semester-IV**MNV 10B: PRINCIPLES AND PRACTICES OF WATER MANAGEMENT**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. To teach the principles of water management and practices to enhance water productivity.

Course Learning Outcomes:

1. Understanding of Water Management Principles: Students will gain a thorough understanding of the principles of water management, including water conservation, water quality management, and sustainable water use practices.
2. Skills in Water Resource Assessment: Students will develop skills in assessing water resources, including measuring water availability, analyzing water quality parameters, and identifying potential sources of water contamination.
3. Application of Water Management Practices: Students will learn how to apply various water management practices, such as rainwater harvesting, irrigation scheduling, and water recycling, to effectively manage water resources in different contexts.

Course Content:**UNIT I:**

Water and its role in plants; water resources of India, major irrigation projects, extent of area and crops irrigated in India and in different states.

UNIT II:

Soil water movement in soil and plants; transpiration; soil-water-plant relationships; water absorption by plants; plant response to water stress, crop plant adaptation to moisture stress condition.

UNIT III:

Soil, plant and meteorological factors determining water needs of crops; scheduling, depth and methods of irrigation; micro-irrigation system; fertigation; management of water in controlled environments and poly houses.

UNIT IV:

Water management of the crops and cropping systems; quality of irrigation water and management of saline water for irrigation; water use efficiency.

UNIT V:

Excess of soil water and plant growth; water management in problem soils; drainage requirement of crops and methods of field drainage, their layout and spacing.

Reference Books

1. Lenka D. 1999. Irrigation and Drainage. Kalyani
 2. Michael AM. 1978. Irrigation: Theory and Practice. Vikas Publ.
 3. Paliwal KV. 1972. Irrigation with Saline Water. IARI Monograph, New Delhi. Panda SC. 2003. Principles and Practices of Water Management. Agrobios.
 4. Prihar SS & Sandhu BS. 1987. Irrigation of Food Crops - Principles and Practices. ICAR. Reddy SR. 2000. Principles of Crop Production. Kalyani.
 5. Singh Pratap & Maliwal PL. 2005. Technologies for Food Security and Sustainable Agriculture. Agrotech Publ.
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MNV 10B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Measurement of soil water potential by using tensiometer, and pressure plate and membrane apparatus
 2. Soil-moisture characteristics curves
 3. Water flow measurements using different devices
 4. Determination of irrigation requirements
 5. Calculation of irrigation efficiency
 6. Determination of infiltration rate
 7. Determination of saturated/unsaturated hydraulic conductivity
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Semester-VI**MNV 10C: AGROMETEOROLOGY AND CROP WEATHER FORECASTING**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. To impart knowledge about agro-meteorology and crop weather forecasting to meet the challenges of aberrant weather conditions.

Course Content:**UNIT I:**

Agro meteorology - aim, scope and development concerning crop environment; composition of atmosphere, distribution of atmospheric pressure and wind.

UNIT II:

Characteristics of solar radiation; energy balance of atmosphere system; radiation distribution in plant canopies, radiation utilization by field crops; photosynthesis and efficiency of radiation utilization by field crops; energy budget of plant canopies; environmental temperature: soil, air, and canopy temperature.

UNIT III:

Temperature profile in air, soil, crop canopies; soil and air temperature effects on plant processes; environmental moisture and evaporation: measures of atmospheric temperature, relative humidity, vapor pressure, and their relationships; evapotranspiration and meteorological factors determining evapotranspiration.

UNIT IV:

Modification of plant environment: artificial rain making, heat transfer, controlling heat load, heat-trapping and shading; protection from cold, sensible and latent heat flux, controlling soil moisture; monsoon and their origin, characteristics of monsoon; onset, progress and withdrawal of monsoon; weather hazards, drought monitoring and planning for mitigation.

UNIT V:

Weather forecasting in India – short, medium and long-range; aerospace science and weather forecasting; benefits of weather services to agriculture, remote sensing; application in agriculture and its present status in India; atmospheric pollution and its effect on climate and crop production; climate change and its impact on agriculture.

Reference Books

1. Chang Jan Hu 1968. Climate and Agriculture on Ecological Survey. Aldine Publ. Critchfield HJ.1995. General Climatology. Prentice Hall of India.
2. Das PK.1968. The Monsoons. National Book Trust Publ. Lal DS.1998. Climatology. Sharda Pustak Bhawan.
3. Lenka D.1998. Climate, Weather and Crops in India. Kalyani. Mavi H.S.1994. Introduction to Agro-meteorology. Oxford & IBH.
4. Mavi HS & Tupper GJ. 2004. Agrometeorology: Principles and Application of Climate Studies in Agriculture. Haworth Press.
5. Menon PA.1991. Our Weather. National Book Trust Publ.
6. Sahu DD. Agrometeorology and Remote Sensing: Principles and Practices. Agrobios. Variraju R & Krishnamurty 1995. Practical Manual on Agricultural Meteorology. Kalyani. Varshneya MC & Balakrishana Pillai P. 2003. Textbook of Agricultural Meteorology. ICAR.

MNV 10C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Visit to agro-meteorological observatory and to record sun-shine hours, wind velocity, wind direction, relative humidity, soil and air temperature, evaporation, precipitation and atmospheric pressure
 2. Measurement of solar radiation outside and within plant canopy
 3. Measurement/estimation of evapo-transpiration by various methods
 4. Measurement/estimation of soil water balance
 5. Rainfall variability analysis
 6. Determination of heat-unit requirement for different crops
 7. Measurement of crop canopy temperature
 8. Measurement of soil temperatures at different depths
 9. Remote sensing and familiarization with agro-advisory service bulletins • Study of synoptic charts and weather reports, working principle of automatic weather station
 10. Visit to solar observatory
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Semester-VIII**MNV 10D: AGRONOMY OF CEREAL CROP (RICE)**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. To teach the crop husbandry of rice crop

Course Learning Outcomes:

1. Understanding of Rice Cultivation Practices: Students will gain a comprehensive understanding of the agronomic practices involved in rice cultivation, including land preparation, seed selection, planting techniques, and crop maintenance.
2. Knowledge of Rice Crop Management: Students will learn how to manage rice crops effectively, including nutrient management, water management, pest and disease control, and weed management, to ensure optimal crop growth and yield.
3. Skills in Harvesting and Post-Harvest Management: Students will develop skills in harvesting rice crops at the right time, post-harvest handling, storage techniques, and quality preservation practices to maintain the quality of rice grains and minimize losses.

Course Content:**UNIT-I:**

Origin, antiquity of rice, area and production, distribution, classification, description and varietal improvement.

UNIT-II:

Adaptability, Agro-climatic different zones of rice in India, growth of rice, effect of temperature on growth, nutrition and yield of rice, fertilizer-soil interaction in relation to nutrition and yield of rice, cultural practices including integrated weed management for rice.

UNIT-III:

Water & fertilizer management practices for rice. Rice culture in problematic soil conditions.
Rice-based cropping systems.

UNIT-IV:

Yield gap analysis concept and package of practices of hybrid rice. Post-harvest Technology and crop quality. Handling and processing of the produce for maximum production of rice.

Reference Books

1. Das NR. 2007. Introduction to Crops of India. Scientific Publ.
 2. Hunsigi G & Krishna KR. 1998. Science of Field Crop Production. Oxford & IBH. Khare D & Bhale MS. 2000. Seed Technology. Scientific Publ.
 3. Pal M, Deka J & Rai RK. 1996. Fundamentals of Cereal Crop Production. Tata McGraw Hill. Prasad, Rajendra. 2002. Text Book of Field Crop Production. ICAR.
 4. Singh C, Singh P & Singh R. 2003. Modern Techniques of Raising Field Crops. Oxford & IBH. Singh, SS. 1998. Crop Management. Kalyani.
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MNV 10D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Phenological studies at different growth stages of crop
 2. Estimation of crop yield on the basis of yield attributes
 3. Formulation of cropping schemes for various farm sizes and calculation of cropping and rotational intensities
 4. Working out growth indices (CER, CGR, RGR, NAR, LAD), aggressiveness, relative crowding coefficient, monetary yield advantage and ATER of prominent intercropping systems of different crops
 5. Planning and layout of field experiments
 6. Judging of physiological maturity in different crops
 7. Intercultural operations in different crops
 8. Determination of cost of cultivation of different crops
 9. Working out harvest index of various crops
 10. Study of seed production techniques in various crops
 11. Visit of field experiments on cultural, fertilizer, weed control and water management aspects
 12. Visit to nearby villages for identification of constraints in crop production
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VOCATIONAL COURSE – XI
“COMMUNICATION SKILL”

Semester-II

MNV 11A: FOUNDATIONS OF COMMUNICATION

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. The course aims to equip graduate students with the necessary communication skills to excel in their academic, professional, and personal endeavours.
2. Through a comprehensive curriculum spanning four semesters, students will develop proficiency in various aspects of communication, including written, verbal, non-verbal, and intercultural communication.

Course Content:

Unit 1: Introduction to Communication

Understanding the Communication Process
Models of Communication
Verbal and Non-verbal Communication

Unit 2: Effective Writing Skills

Principles of Effective Writing
Structure and Organization of Written Communication
Grammar and Punctuation

Unit 3: Interpersonal Communication

Building Positive Relationships
Active Listening and Feedback
Conflict Resolution and Negotiation Skills

Unit 4: Public Speaking

Overcoming Public Speaking Anxiety
Speech Preparation and Organization
Delivery Techniques and Body Language

Unit 5: Intercultural Communication

Understanding Cultural Differences
Cultural Sensitivity and Awareness
Cross-Cultural Communication Strategies

Unit 6: Communication Technology

Email Etiquette and Professional Correspondence
Social Media and Online Communication
Virtual Meetings and Collaboration Tools

Reference Books

1. "How to Win Friends and Influence People" by Dale Carnegie;
2. "Crucial Conversations: Tools for Talking When Stakes Are High" by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler;
3. "The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change" by Stephen R. Covey

4. "Communication Skills for Dummies" by Elizabeth Kuhnke
 5. "Talk Like TED: The 9 Public-Speaking Secrets of the World's Top Minds" by Carmine Gallo
 6. "Nonviolent Communication: A Language of Life" by Marshall B. Rosenberg
 7. "Difficult Conversations: How to Discuss What Matters Most" by Douglas Stone, Bruce Patton, and Sheila Heen
 8. "The Art of Communicating" by Thich Nhat Hanh
 9. "Simply Said: Communicating Better at Work and Beyond" by Jay Sullivan
 10. "Everyone Communicates, Few Connect: What the Most Effective People Do Differently" by John C. Maxwell:
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MNV 11A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. What are the key components of the communication process, and how do they interact with each other?
 2. Explain the difference between verbal and non-verbal communication, providing examples of each.
 3. How do communication models such as the Shannon-Weaver model and the Transactional model help us understand the communication process?
 4. Discuss the importance of effective listening in interpersonal communication. What are some strategies for improving listening skills?
 5. Describe the role of feedback in communication and its significance in ensuring message clarity and understanding.
 6. How can cultural differences impact communication? Provide examples of cultural variables that may influence communication styles.
 7. Explain the concept of emotional intelligence (EQ) and its relevance to effective communication.
 8. Discuss the significance of self-awareness and self-disclosure in building interpersonal relationships.
 9. What are the barriers to effective communication, and how can they be overcome?
 10. How does communication competence contribute to personal and professional success? Provide examples of communication skills that are valued in various contexts.
 11. Analyze the role of power dynamics in communication. How can power imbalances affect the communication process?
 12. Describe the impact of technology on interpersonal communication. How has the rise of digital communication platforms changed the way we interact with others?
 13. Discuss the ethical considerations in communication, such as honesty, respect, and privacy. How do ethical principles guide our communication behaviors?
 14. How does gender influence communication patterns and styles? Are there differences in how men and women typically communicate?
 15. Reflect on a personal experience where effective communication played a crucial role. What strategies did you use to ensure successful communication in that situation?
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Semester-IV**MNV 11B: ADVANCED COMMUNICATION SKILLS**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. Develop advanced proficiency in various forms of communication, including written, verbal, non-verbal, and intercultural communication, to effectively convey complex ideas and messages.
2. Refining Writing Skills, Mastering Persuasion, Fostering Collaboration, Polishing Presentation Techniques, Navigating Negotiation and Conflict situations with confidence by mastering negotiation strategies, mediation techniques, and conflict resolution skills to achieve mutually beneficial outcomes.
3. Cultivating Cross-Cultural Competence, Adapting to Professional Contexts including business communication, leadership communication, marketing and sales communication, technical communication, healthcare communication, and media and public relations.

Course Learning Outcomes:

1. Enhanced Verbal Communication: Students will develop advanced skills in verbal communication, including clarity, conciseness, and persuasive language, enabling them to effectively convey complex ideas and information.
2. Mastering Nonverbal Communication: Students will learn to interpret and use nonverbal cues such as body language, facial expressions, and tone of voice to enhance their communication and understand others more effectively.
3. Cultural Sensitivity and Diversity Awareness: Students will gain an understanding of cultural differences in communication styles and develop the ability to communicate respectfully and effectively in diverse cultural and social contexts.

Course Content:**Unit I: Professional Writing**

Business Correspondence and Reports
Proposal Writing and Grant Applications
Technical Writing and Documentation

Unit II: Persuasive Communication

Principles of Persuasion
Developing Effective Arguments
Ethical Persuasion and Influence Strategies

Unit III: Group Communication

Team Dynamics and Group Decision Making
Facilitation and Leadership Skills
Managing Group Conflicts and Consensus Building

Unit IV: Presentation Skills

Advanced Presentation Techniques
Visual Aids and Multimedia Integration
Handling Q&A Sessions and Audience Engagement

Unit V: Negotiation and Conflict Resolution

Negotiation Strategies and Tactics
Mediation and Alternative Dispute Resolution
Managing Difficult Conversations

Unit VI: Cross-Cultural Competence

Cultural Intelligence and Adaptability
Global Communication Challenges
Developing Intercultural Competence

Reference Books

1. Advanced Communication Skills by Eric Garner
 2. The Art of Communicating by Thich Nhat Hanh
 3. Crucial Conversations: Tools for Talking When Stakes Are High by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler
 4. Difficult Conversations: How to Discuss What Matters Most by Douglas Stone, Bruce Patton, and Sheila Heen
 5. Nonviolent Communication: A Language of Life by Marshall B. Rosenberg
 6. The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively by Helio Fred Garcia
 7. Communicating for Results: A Guide for Business and the Professions by Cheryl Hamilton
 8. The Lost Art of Listening: How Learning to Listen Can Improve Relationships by Michael P. Nichols
 9. Everyone Communicates, Few Connect: What the Most Effective People Do Differently by John C. Maxwell
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MNV 11B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. How can you tailor your written communication for different professional contexts, such as business correspondence, technical reports, and academic research papers?
 2. Discuss the principles of persuasive communication and provide examples of how you would construct a persuasive argument in a professional setting.
 3. In what ways can effective non-verbal communication enhance your verbal message during a presentation or public speaking engagement?
 4. Reflect on a time when you successfully resolved a conflict within a group setting. What communication strategies did you employ, and what was the outcome?
 5. How would you approach negotiating a complex agreement with multiple stakeholders, considering both competitive and collaborative negotiation strategies?
 6. Describe a situation where you had to communicate with individuals from different cultural backgrounds. What challenges did you face, and how did you adapt your communication style?
 7. Discuss the role of empathy in effective communication and provide examples of how you have demonstrated empathy in your interactions with others.
 8. How do you utilize technology to enhance your communication practices, such as virtual meetings, collaborative platforms, and multimedia presentations?
 9. Reflect on a leadership role you have held and discuss the communication techniques you used to inspire and motivate your team members.
 10. How do you maintain professionalism in written communication, considering factors such as tone, language, and etiquette, especially in high-stakes situations?
 11. Describe a time when you had to deliver a persuasive presentation. How did you structure your presentation to engage the audience and convey your message effectively?
 12. Discuss the importance of active listening in effective communication and provide strategies for improving your listening skills in both personal and professional contexts.
 13. How would you navigate a communication challenge, such as delivering negative feedback or addressing a sensitive issue, with tact and diplomacy?
 14. Reflect on a cross-cultural misunderstanding you have experienced and discuss what you learned from the experience in terms of cultural competence and communication effectiveness.
 15. In what ways do you plan to continue developing your communication skills beyond this course, and how do you envision applying them in your future academic and professional endeavors?
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Semester-VI**MNV 11C: SPECIALIZED COMMUNICATION SKILLS**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. Develop advanced proficiency in specialized areas of communication relevant to specific industries and professional contexts, including business, leadership, marketing, technical, healthcare, and media communication.
2. Tailored Communication Strategies, Professional Writing Excellence, Strategic Persuasion and Influence, Collaborative Engagement, Client and Stakeholder Relations, Subject Matter Expertise, Innovative Marketing and Sales Communication, Empathetic Healthcare Communication are to be expertise.
3. Students demonstrate empathetic and patient-centered communication skills in healthcare settings, fostering trust, collaboration, and shared decision-making with patients, families, and interdisciplinary care teams.

Course Content:**Unit I: Business Communication**

Professional Networking and Relationship Building
Business Etiquette and Protocol
Crisis Communication and Reputation Management

Unit II: Leadership Communication

Communicating Vision and Goals
Inspirational Leadership Communication
Leading Effective Meetings and Teams

Unit III: Marketing and Sales Communication

Brand Messaging and Positioning
Customer Relationship Management
Sales Presentations and Negotiations

Unit IV: Technical Communication

Communicating Technical Information to Non-Technical Audiences
User Manuals and Documentation
Communicating Research Findings

Unit V: Healthcare Communication

Patient-Centered Communication Skills
Interprofessional Collaboration
Health Education and Promotion

Unit VI: Media and Public Relations

Media Relations and Crisis Communication
Press Releases and Media Interviews
Strategic Public Relations Planning

Reference Books

1. "Technical Communication" by Mike Markel
2. "Business Communication Essentials" by Courtland Bovee and John Thill
3. "Medical Communication Skills and Law" by Mike Frayn
4. "Legal Writing in Plain English: A Text with Exercises" by Bryan A. Garner
5. "Public Relations Writing: Principles in Practice" by Donald Treadwell and Jill B. Treadwell
6. "Intercultural Communication in the Global Workplace" by Iris Varner and Linda Beamer
7. "Communication Skills for Engineers" by C. Muralikrishna and V. Sreekumar

8. "Communication for Nurses: How to Prevent Harmful Events and Promote Patient Safety" by Lisa Kennedy Sheldon
9. "Technical Communication: A Reader-Centered Approach" by Paul V. Anderson
10. "Communication Skills for the Healthcare Professional: Concepts, Practice, and Evidence" by Gwen van Servellen

MNV 11C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. How would you tailor your communication approach when writing a business proposal compared to composing a technical report or a marketing brochure?
2. Discuss the importance of industry-specific terminology and language conventions in effectively communicating with stakeholders and clients within your specialized field.
3. Can you provide examples of persuasive communication techniques commonly used in your specialized field to influence decision-making or garner support for initiatives?
4. Reflect on a team project you participated in within your specialized field. How did effective team communication contribute to the success of the project?
5. Describe how you would effectively communicate technical or complex information to a non-technical audience in your specialized field, ensuring clarity and understanding.
6. How do you maintain positive relationships with clients or stakeholders in your specialized field through effective communication and client service excellence?
7. Discuss the role of empathetic communication in healthcare settings and provide examples of how empathetic communication can improve patient outcomes and satisfaction.
8. Can you outline a strategic media and public relations plan for managing a crisis situation within your specialized field, including communication strategies and key messaging points?
9. Describe how you would use data-driven insights and customer-centric approaches to innovate marketing and sales communication strategies within your specialized field.
10. Reflect on a situation where you had to communicate technical expertise or research findings to a non-expert audience. How did you make the information accessible and engaging?
11. Discuss the communication strategies you would employ to inspire and motivate your team members towards achieving shared goals and objectives in your specialized field.
12. Reflect on an ethical dilemma you encountered in your specialized field and discuss how you navigated it while upholding ethical and professional standards.
13. How do you stay informed about industry trends, emerging technologies, and best practices within your specialized field to remain competitive and relevant in your profession?
14. Can you provide examples of cultural considerations or cross-cultural communication challenges you have encountered within your specialized field, and how you addressed them?
15. Reflect on your continuous learning journey within your specialized field. What steps do you take to enhance your communication skills and adapt to evolving professional landscapes?

Semester-VIII**MNV 11D: CAPSTONE PROJECT AND PROFESSIONAL DEVELOPMENT**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. Integration of Knowledge, Applied Research and Analysis leading to analytical techniques, and critical thinking skills to conduct in-depth analysis, gather relevant data, and generate insights that inform decision-making and problem-solving in the capstone project.
2. Project Management Proficiency, Communication Excellence, Professional Networking and Collaboration, Ethical and Responsible Conduct, Innovation and Creativity, Reflective Practice and Self-Assessment, Career Planning and Goal Setting, Presentation and Interview Skills.

Course Learning Outcomes:

1. Project Planning and Execution: Students will demonstrate the ability to plan, execute, and manage a substantial project from start to finish, including defining project goals, creating a timeline, and allocating resources effectively.
2. Professional Communication Skills: Students will develop and enhance their professional communication skills, including written and oral communication, interpersonal skills, and the ability to present complex ideas clearly and persuasively.
3. Critical Thinking and Problem-Solving: Students will cultivate their critical thinking and problem-solving skills by identifying, analyzing, and proposing solutions to real-world problems relevant to their field of study.

Course Content:**Unit I: Capstone Project**

Project Proposal Development
Research and Data Collection
Presentation of Findings and Recommendations

Unit II: Career Development

Resume Writing and Job Search Strategies
Interview Skills and Professional Networking
Personal Branding and Online Presence

Unit III: Professional Ethics and Etiquette

Ethical Decision-Making in Communication
Professional Conduct and Integrity
Etiquette in Professional Settings

Unit IV: Lifelong Learning and Continuing Education

Continuing Education Opportunities
Self-Assessment and Professional Development Planning
Strategies for Lifelong Learning and Growth

Unit V: Graduation and Transition to the Workplace

Reflection on Learning and Growth
Career Planning and Goal Setting
Strategies for Success in the Workplace

Reference Books

1. "The Elements of Style" by William Strunk Jr. and E.B. White
2. "Designing Your Life: How to Build a Well-Lived, Joyful Life" by Bill Burnett and Dave Evans
3. "The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses" by Eric Ries
4. "The Creative Habit: Learn It and Use It for Life" by Twyla Tharp

5. "Drive: The Surprising Truth About What Motivates Us" by Daniel H. Pink
6. "Crucial Conversations: Tools for Talking When Stakes Are High" by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler
7. "How to Win Friends and Influence People" by Dale Carnegie
8. "The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change" by Stephen R. Covey
9. "Mindset: The New Psychology of Success" by Carol S. Dweck
10. "Emotional Intelligence 2.0" by Travis Bradberry and Jean Greaves

MNV 1DC PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) **30 Hours**

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

<i>Experiment</i>	<i>= 15 marks</i>
<i>Practical record notebook</i>	<i>= 05 marks</i>
<i>Viva-voce</i>	<i>= 05 marks</i>

Practicals:

1. How did you select the topic for your capstone project, and what factors influenced your decision-making process?
2. Describe the research methodologies and data collection techniques you employed in your capstone project. How did you ensure the validity and reliability of your findings?
3. Reflect on the challenges you encountered during the execution of your capstone project. How did you overcome these challenges, and what lessons did you learn from them?
4. How did you manage your time and resources effectively to meet the milestones and deadlines of your capstone project?
5. Discuss the ethical considerations you addressed in conducting your capstone project, such as confidentiality, privacy, and informed consent.
6. Reflect on the collaboration and teamwork involved in your capstone project. How did you leverage the expertise and perspectives of others to enhance the quality of your work?
7. Describe the process of presenting your capstone project findings to your peers, faculty members, or industry professionals. What feedback did you receive, and how did you incorporate it into your project?
8. How did your capstone project contribute to your professional development and career aspirations? Did it confirm or alter your career goals?
9. Reflect on your networking experiences during your capstone project. How did you establish professional connections and leverage them for support and opportunities?
10. Discuss the role of self-reflection in your capstone project experience. How did you assess your strengths, weaknesses, and areas for growth throughout the process?
11. Describe your strategies for maintaining motivation and momentum during the challenging phases of your capstone project.
12. Reflect on the impact of your capstone project on the community or industry it addresses. How do you envision your project contributing to positive change or innovation?
13. Discuss the lessons learned from your capstone project that you plan to apply in future professional endeavors or academic pursuits.
14. Reflect on your experience of presenting your capstone project during job interviews or professional networking events. How did you effectively communicate the value of your project and your contributions to potential employers or collaborators?
15. Describe your plans for continued professional development beyond your capstone project. How do you intend to build on the skills and experiences gained during this process to further your career goals?

VOCATIONAL COURSE - XII
“STOCK MARKET”

Semester-II

MNV 12A: FINANCIAL MARKETS AND INSTITUTIONS

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75	Pass Marks: Th (ESE) = 30
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Course Learning Outcomes:

1. This course is intended to provide students with an understanding of the structure, organization and working of financial markets and institutions in India.
2. It helps to explore the connection between the Financial Institutions, Instruments and Markets in the business environment and their role played in the Indian economy.
3. It throws light on the Financial Innovations on new financial instruments for smooth and profitable investment decisions.

Course Content:

UNIT I: Financial System and Services: Nature and role of financial structure - Financial system and financial markets - Financial system and economic development -Indian financial system: an overview; Investment alternatives and evaluation; Reforms in financial system, Investment banking; Credit Rating; Factoring and Forfaiting; Housing Finance; Leasing and hire purchase; Financial inclusion and Microfinance

UNIT II: Financial Markets: Capital Markets- primary and secondary markets, Components of Financial Markets, fundamentals of Capital Market, Money market- meaning, constituents & function; Money market instruments – call money, treasury bills, and certificate of deposits, Commercial bills, and trade bills, Acceptance Houses, Discount Houses; Capital markets – primary and secondary market; Government securities markets; Role of SEBI - an overview and recent developments. Role of RBI, SEBI, DFHI, SHCI in Financial Markets.

UNIT III: Financial Institutions: Reserve bank of India – organization, management, and function; Commercial banks - meaning, functions and investment policies; Development banks – concept, objectives, and function; Insurance companies – objectives, role, and investment practices, -IRDS; UNIT Trust of India – objective, function, and schemes; role and functions of non-banking financial institutions; Merchant banking-functions and role.

UNIT IV: Financial Instruments: Sources of finance – Financial Instruments – Types, Features, and advantages – Equity and special types of equity, ADRs & GDRs; Preferred stock - Equity derivatives – Credit derivatives Asset-backed securities - Convertibles and warrants - Types of Bonds and debentures – Non- Marketable Financial Assets - Options instruments - securitization

UNIT V: Mutual Funds: Concept and performance of Mutual funds; Regulation of Mutual funds (with special reference to SEBI guidelines); Designing and marketing of mutual fund schemes; Latest mutual funds schemes in India – an overview; Mutual Fund Evaluation and Tax aspects of Mutual Fund Investments.

Reference Books

1. Prasanna Chandra, “Investment Analysis and Portfolio management”, Tata McGraw Hill, 3rd Edn., 2008
2. Julian Walmsley, “New Financial Instruments”, John Wiley & Sons, 2nd edition, Inc 1998.
3. Bharati V. Pathak, “The Indian Financial System: Markets, Institutions and Services”, Pearson Edu, 3rd Edn.
4. Bhole I. M.: “Financial Markets and Institutional”: Tata McGraw Hill, New Delhi.
5. Chandler M. V. and Goldfeld S. M: Economics of Money and Banking: Harper and Row, New York.

MNV 12A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter forEnd Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. How do financial markets facilitate the allocation of capital in an economy? Provide examples.
 2. Explain the role of financial institutions in the economy and their significance in the functioning of financial markets.
 3. Compare and contrast primary and secondary financial markets. How do they differ in terms of their functions and operations?
 4. Discuss the impact of interest rates on financial markets and institutions. How do changes in interest rates affect borrowing and lending activities?
 5. Analyze the role of central banks in regulating financial markets and institutions.
 6. What are the key tools and mechanisms they use to influence the economy?
 7. Evaluate the importance of financial regulation in ensuring stability and efficiency in 8. financial markets. Provide examples of regulatory measures and their impact.
 8. How do financial innovations such as derivatives and securitization influence the behavior of financial markets and institutions? Discuss the benefits and risks associated with these innovations.
 9. Explain the concept of market efficiency and its implications for investors and market participants. How do efficient markets contribute to the allocation of resources?
 10. Discuss the role of credit rating agencies in financial markets. How do they assess the creditworthiness of issuers and securities?
 11. Analyze the impact of globalization on financial markets and institutions. How does increased interconnectedness affect risk management and market stability?
 12. Describe the process of financial intermediation and its significance in channeling funds from savers to borrowers. What are the different types of financial intermediaries?
 13. Discuss the role of government intervention in financial markets during times of crisis. How do policymakers respond to systemic risks and market failures?
 14. Evaluate the relationship between financial markets and the real economy. How do fluctuations in financial markets impact economic growth and employment?
 15. Explain the concept of moral hazard in the context of financial markets and institutions.
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Semester-IV**MNV 12B: STOCK MARKET OPERATIONS**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. This course aims at giving a comprehensive understanding on the stock market.
2. Deals with operations in terms of its structure, trading, settlement procedures, processes and related components.
3. Awareness towards the regulations, emerging challenges in the Indian Stock market.

Course contents:

UNIT – 1: Capital Markets in India - An overview of Indian Securities Market, Meaning, Functions, Intermediaries, Role of Primary Market – Methods of floatation of capital – Problems of New Issues Market – IPO's – Investor protection in primary market – Recent trends in primary market – SEBI measures for primary market.

UNIT – 2: Stock exchanges and its Functions: Meaning, Nature, Functions of Secondary Market – Organisation and Regulatory framework for stock exchanges in India – SEBI: functions and measures for secondary market – Overview of major stock exchanges in India - Listing of Securities: Meaning – Merits and Demerits – Listing requirements, procedure, fee – Listing of rights issue, bonus issue, further issue – Listing conditions of BSE and NSE – Delisting

UNIT - 3: Trading, settlement and Surveillance System In Stock Exchanges: Different trading systems – BSE - BOLT System – Different types of settlements - Pay-in and Pay-out – Bad Delivery – Short delivery – Auction – NSE – NEAT system options – Market types, Order types and books – De-mat settlement – Physical settlement – Institutional segment – Funds settlement – Valuation debit – Valuation price – Bad and short delivery Risk management system in BSE & NSE – Margins – Exposure limits – Surveillance system in BSE & NSE – Circuit breakers

UNIT - 4: Stock Market Indices: Meaning, Purpose, and Construction in developing index – Methods (Weighted Aggregate Value method, Weighted Average of Price Relatives method, Free-Float method) – Stock market indices in India – BSE Sensex - Scrip selection criteria – Other BSE indices (briefly) – NSE indices – S&P CNX Nifty – Scrip selection criteria – Construction – Stock market indices in foreign countries (Overview).

UNIT – 5: Commodity and Currency Markets: Commodity exchanges: evolution and history – role in globalizing economy – governing regulations – price –risk management – commodity exposure – hedge accounting – currency futures – managing exchange rate – carbon markets – weather derivatives – ETFs – Purpose, Importance, types, construction

Reference Books

1. PUNITHAVATHY Pandian, "Security Analysis and Portfolio Management", Vikas Publishing House Pvt. Ltd.
2. Prasanna Chandra, "Investment Analysis and Portfolio management", Tata McGraw Hill, 3rd Edn., 2008
3. V. A. Avadhani, Investment and Securities Market in India, Himalaya Publishing House.
4. Sanjeev Agarwal, A Guide to Indian Capital Market, Bharat Publishers
5. Ravi Puliani and Mahesh Puliani, Manual of SEBI, Bharat Publication

MNV 12B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for**End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. How are stocks traded on stock exchanges? Describe the order types and execution mechanisms used in stock market operations.
2. Discuss the role of market makers and specialists in facilitating liquidity and price discovery in stock markets.
3. Compare and contrast the primary and secondary markets for stocks. What are the differences in their functions and participants?
4. Analyze the impact of market microstructure factors such as bid-ask spreads and order flow on stock market operations.
5. Evaluate the efficiency of different trading strategies employed by institutional investors in stock markets. How do factors like algorithmic trading and high-frequency trading influence market dynamics?
6. Explain the concept of market impact and its significance in executing large stock orders. How do traders manage market impact risk?
7. Discuss the role of stock market regulations in ensuring fair and orderly trading. What are the key regulations governing stock market operations?
8. Describe the process of initial public offerings (IPOs) and seasoned equity offerings (SEOs) in stock markets. What are the considerations for companies going public or raising additional capital?
9. Analyze the factors influencing stock price movements and volatility in stock markets. How do macroeconomic indicators and company-specific news affect stock prices?
10. Evaluate the role of stock exchanges in providing listing services and maintaining market integrity. How do exchanges regulate listing requirements and monitor compliance?
11. Discuss the impact of corporate actions such as dividends, stock splits, and mergers on stock market operations. How do investors adjust their strategies in response to corporate events?
12. Explain the concept of market liquidity and its importance for investors and market participants. How do liquidity providers contribute to market efficiency?
13. Analyze the role of stock market indices in tracking market performance and benchmarking investment returns. What are the criteria for constructing and rebalancing stock market indices?
14. Discuss the challenges and opportunities associated with cross-border trading and international stock market operations. How do regulatory differences and exchange rate fluctuations affect global investors?
15. Evaluate the impact of technological advancements on stock market operations. What are the implications of electronic trading platforms and blockchain technology for market infrastructure and settlement processes?

Semester-VI**MNV 12C: TECHNICAL ANALYSIS**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Outcomes:**

1. It enables to understand the techniques any investor or trader looking for profits in the competitive, dynamic world of trading.
2. How to take advantage of patterns, managing trades, psychology in trading and planning, technical, utilizing charts and classic patterns.

Course Content:

UNIT -1: Technical Analysis: Meaning – Purpose - History – Importance - assumptions - News and Your Trading - Managing a Trade - Dealing with Disaster - Reward to Risk Ratio -Psychology in Trading and Planning - using Public Fear as a Trading Tool - Analysis of a Losing Trade – support vs resistance – Intraday trend – trading gaps

UNIT–2: Charting Techniques: Trend-Determining Techniques - The Market Cycle Model Financial Markets and the Business Cycle - Dow Theory - Typical Parameters for Intermediate Trends –Eliot Wave theory - Price Patterns - Smaller Price Patterns - One and Two Bar Price Patterns - Trend lines – charts- types – swing trading strategies

UNIT-3: Technical Indicators: Moving Averages - Momentum Principles - Individual Momentum Oscillators: RSI vs Stochastic, MACD, TRIX, Volume indicators, volatility indicators – Bollinger Bands - - Chalkin Volatility Indicator - Sentiment Indicators

UNIT-4: Candle stick patterns: Constructing The Candlestick Lines - Drawing The Candle Lines - Reversal Patterns – Stars - Continuation Patterns - Doji

UNIT-5: Evaluation of Technical analysis: Cluster Of Candles, Candles With Trend Lines, Springs and Upthrusts, The Change of Polarity Principle, Candles With Retracement Levels, Candles With Moving Averages - The Simple Moving Average, The Weighted Moving Average, The Exponential Moving Average, Using Moving Averages, Candles With Oscillators, The power of convergence

Reference Books

1. Pring, Martin J. “Technical Analysis Explained” 4th Edition, McGraw Hill
2. Nison, Steve; Nison, Nison, “Japanese Candlestick Charting Techniques, 2nd Edition, PHP
3. Prasanna Chandra, “Investment Analysis and Portfolio Management”, Tata McGraw Hill, 3rd Edn., 2008
4. D., Schwager, Jack; Mark, Schwager, Jack D. & Etkorn,,” Getting Started in Technical Analysis”, John Wiley & Sons, 1999
5. Velez, Oliver, L, “Strategies for Profiting on Every Trade”, Marketplace Books, 2007

MNV 12C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter for**End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. How does technical analysis differ from fundamental analysis in evaluating stock market investments? Discuss the strengths and limitations of each approach.
2. Explain the concept of chart patterns in technical analysis. How do patterns such as head and shoulders, triangles, and flags help traders identify potential price movements?
3. Describe the significance of support and resistance levels in technical analysis. How do traders use these levels to make trading decisions and manage risk?
4. Discuss the role of moving averages in trend analysis. How do different types of moving averages (e.g., simple, exponential) help traders identify trends and reversals?
5. Analyze the use of technical indicators such as relative strength index (RSI), moving average convergence divergence (MACD), and stochastic oscillator in stock market analysis. How do these indicators provide signals for buying and selling opportunities?
6. Evaluate the effectiveness of momentum indicators in assessing the strength and direction of price trends. How do traders interpret signals from indicators like the Average Directional Index (ADX) and the Rate of Change (ROC)?
7. Discuss the concept of volume analysis in technical analysis. How do changes in trading volume confirm or diverge from price movements, and what implications does this have for traders?
8. Explain the principles of Dow Theory and how they form the basis for modern technical analysis. What are the key tenets of Dow Theory, and how are they applied in analyzing stock market trends?
9. Describe the use of Japanese candlestick patterns in technical analysis. How do candlestick patterns such as doji, hammer, and engulfing patterns provide insights into market sentiment and price action?
10. Analyze the application of Fibonacci retracements and extensions in identifying potential support and resistance levels. How do traders use Fibonacci ratios to predict price targets and reversals?
11. Discuss the concept of market breadth indicators in technical analysis. How do measures such as advance-decline lines and new highs-new lows ratios provide insights into the overall health of the stock market?
12. Evaluate the role of behavioral finance in understanding the efficacy of technical analysis. How do cognitive biases and investor sentiment influence the interpretation of chart patterns and indicators?
13. Explain the concept of trend following and countertrend trading strategies in technical analysis. What are the key principles and risk management techniques associated with each approach?
14. Discuss the challenges and limitations of technical analysis in predicting stock market movements. How do factors such as market efficiency and algorithmic trading impact the effectiveness of technical strategies?
15. Analyze the integration of technical analysis with other forms of market analysis, such as fundamental analysis and sentiment analysis. How do interdisciplinary approaches enhance decision-making for investors and traders?

Semester-VIII**MNV 12D: EQUITY RESEARCH**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The course aims to decide whether to stay invested in a company or sell the shares and come out.
2. Equity research helps to study the companies, analyze financials, and look at quantitative and qualitative aspects mainly for decision-making purposes.

Course Content:

UNIT I: Risk and Return: Meaning: Return and Risk - types of risk -systematic and unsystematic risk – Measuring expected return and risk - minimizing risk exposure – risk measurement methods – Time value of money – financial ratios – Du Pont analysis – Forecasting bankruptcy (Altman's Z score).

UNIT II: Stock valuation and Valuation of Financial Assets: stock return and valuations – discounted cash flow valuation- constant growth model – two-stage growth and three-phase model – P/E ratio valuation - preferred stock valuation – Bond return and valuation – time value and present value concepts – YTM – Bond value theorems

UNIT III: Fundamental Analysis: Economic analysis, Industry analysis and Company analysis. Financial Statement Analysis: shareholder's equity- balance sheet and Income statement –cash flow – analysis of growth and sustainable earnings, Financial and Valuation Modeling: price-earnings ratio – anchoring value on earnings – reverse engineering the model for active investing

UNIT IV: Behavioral Finance: Irrational influences – heuristic driven biases – Frame dependence Emotional and social influences - Efficient market theory - basic concepts - Forms of EMH – Random Walk Theory – Market Inefficiencies – Strategies for overcoming psychological biases

UNIT V: Portfolio Management: Portfolio construction - approaches –selection of portfolio- Simple diversification – Markowitz model – Markowitz efficient frontier – Single Index model - Sharpe Index model – optimal portfolio – CAPM and APT - Portfolio Evaluation Measures – Portfolio revision: passive and active strategies – Formula plans – variable ratio plan

Reference Books

1. Punithavathy Pandian, "Security Analysis and Portfolio Management", Vikas Publishing House Pvt. Ltd.
2. Fisher & Jordan, "Security Analysis and Portfolio Management", PHI, Delhi
3. Prasanna Chandra, "Investment Analysis and Portfolio management", Tata McGraw Hill, 3rd Edn., 2008
4. Stephen H Penman, "Financial Statement Analysis and Security Valuation", Tata McGraw Hill publishing Ltd, Delhi, 2007
5. Amudha R & Anbalagan M, "Heuristic Behavioral Factors", Global Research Publications, Delhi, 2011

MNV 12D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for**End Semester Examination (ESE):*There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:*

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. How does equity research differ from other forms of financial analysis, such as technical analysis and fundamental analysis? Discuss the primary objectives and methodologies of equity research.
2. Explain the role of equity analysts in the investment decision-making process. What skills and competencies are required to perform effective equity research?
3. Discuss the importance of financial statement analysis in equity research. What are the key financial metrics and ratios analysts use to evaluate a company's performance and financial health?
4. Describe the process of conducting industry analysis in equity research. How do analysts assess industry dynamics, competitive forces, and growth prospects?
5. Analyze the impact of macroeconomic factors on equity research. How do changes in interest rates, inflation, and GDP growth affect industry sectors and individual companies?
6. Evaluate the significance of qualitative factors in equity research. How do factors such as management quality, corporate governance, and industry trends influence investment decisions?
7. Discuss the role of valuation techniques in equity research. What are the different approaches to valuing stocks, and how do analysts determine fair value estimates?
8. Explain the concept of relative valuation and its application in equity research. How do analysts compare the valuation multiples of a target company with those of its peers and industry benchmarks?
9. Analyze the use of discounted cash flow (DCF) analysis in equity research. What are the key assumptions and inputs in a DCF model, and how do analysts assess the sensitivity of valuation results?
10. Discuss the challenges and limitations of forecasting financial performance in equity research. How do analysts mitigate risks associated with forecasting errors and uncertainty?
11. Describe the role of equity research reports in communicating investment recommendations to clients and stakeholders. What are the components of a typical equity research report, and how do analysts present their findings?
12. Evaluate the ethical considerations in equity research, such as conflicts of interest and insider trading regulations. How do analysts maintain integrity and transparency in their research practices?
13. Discuss the impact of technological advancements on equity research. How do tools such as data analytics, machine learning, and alternative data sources enhance the analytical capabilities of equity analysts?
14. Analyze the role of regulatory reforms in shaping the landscape of equity research. How have regulations such as MiFID II and Regulation Fair Disclosure (Reg FD) impacted the industry?
15. Discuss the career opportunities and pathways in equity research. What skills and experiences are valued by employers, and how can graduate students prepare for a career in equity research?

VOCATIONAL COURSE – XIII
“APICULTURE”

Semester-II

MNV 13A: FOUNDATIONS OF BEE KEEPING

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. Appliances in the modern method of Apiculture open a new Era for Cottage industry in India
2. This study would enable students to know about different species of Honey bees and their life cycle.
3. With Such a foundation they could – go for the startups in this cottage industry.

Course Content:

UNIT I:

1. Apiculture: Introduction and importance
2. History of bee keeping: When and how Bee keeping started in the world and India
3. Methods of Apiculture: Indigenous and Modern methods, their drawbacks and advantages.

UNIT II:

1. Identification of Queen, Drone and Worker bees.
2. Honey bee species types and their identification. Origin, systematics and distribution of honey bee species.
3. Social organization in honey bees: Their development and Societal roles as Queen, drone, and worker including Callow bee
4. Composition of Royal jelly and role of pheromones
5. Bees wax and sting apparatus of honey bee

UNIT II:

1. Study of appliances of modern method: ‘Movable hive’ (Longtroths hive)
2. Building & division of comb-cell cups and colony development
3. Management of a hygienic hive by control of diseases.
4. Criteria for establishment of Mating stations and maintenance of Drone colonies

Reference Books

1. A comprehensive guide to Bee keeping by Dharam P. Abrol (Available at Amazon)
 2. Understanding Apiculture by Ashok kumar, Bookswagon
 3. A text book on Apiculture by M. Tamilselvi and Abdul Jaffar Ali
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MNV 13A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Identification of Honey Bee Species morphologically.
2. Castes of Honey Bees
3. Study of Life Cycle of Honeybees in field
4. Assembling a Bee hive appliance from bottom to top

Reference Books

1. Honey bees and their management by Withhead. S.B, Meri pustak publisher.
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Semester-IV**MNV 13B: BEE CULTURE & TOOLS**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The main objective of this course is to equip the learners about the appliances of a modern bee hive.
2. Making learners aware of the pre-requisites of bee colony development
3. To make them aware of the criteria for establishment of mating station
4. Making them aware of different training institutes in india and the current trends in bee keeping and business

Course Learning Outcomes:

1. The student will be able to analyze the trends in Bee keeping sector / sub-sector and identify Business OpportUNITies.
2. The students will be able to give shape to Apiculture as cottage industry

Course Content:**UNIT I:**

1. Understand Role of a Bee Keeper
2. Identification of flora and forage availability in Jharkhand.
3. Understand the requirement of different bee species and preparing flowering calendar
4. Selection of bee species & races
5. Knowing different layers of Modern Bee boxes including cleaning of Boxes and various tools and equipment used in Bee keeping
6. Understand the importance of health and hygiene in Bee keeping.

UNIT II:

1. Study of the relation between nutrients and the development of different castes of bees, building of different cell cups and transfer of Queen cell in the comb or colony.
2. Role of different members of bee society in social organization and the relation of pheromones and the egg laying capacity of queen bee and honey production
3. How to Clean & Maintain Bee Boxes
4. How to protect the bee hives from foulbrood, Nosema, Chalkbrood, Chronic brood paralysis, Black queen- cell virus disease and Varroa infested disease

UNIT III:

1. Maintenance pf Drones colony
2. Criteria for evaluation of successful mating
3. Criteria for evaluation of disease free broods
4. Understanding the economic importance of honey and wax
5. Discussion on marketing strategies based on local challenges

Reference Book

1. Guide on Good Beekeeping Practices for Sustainable Quality Honey Production By Devvrat Sharma
 2. The practical Bee keeper by Michel Bush
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MNV 13B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Beekeeping Equipments
2. Lighting a Smoker
3. Catching a Stray Swarm from a Post of Tree
4. Installing Packaged Bee Colony
5. Transferring Nucleus to Hive Box
6. Beekeeping UNIT – Handling of frames with colonies
7. Identification of queen cells, drone cells & brood
8. Sugar feeding of colonies during floral dearth period
9. Methods of multiplication of bee colonies

Reference Books

1. Practical bee keeping and honey production by D.T Macfie, Vintage Homestead Publisher.
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Semester-VI**MNV 13C: HONEY PRODUCTION & HYGIENE**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To sensitize the students on the medicinal aspects of Honey.
2. Students will know about the value added honey products.
3. Significance of Bee as pollinators and how to improve the quality of honey.
4. Learn maintenance of honey comb and the value of honey
5. Bee enemies and diseases will be known.

Course Content:**UNIT I:**

1. Production of Honey by honeybee within its crop using plant nectar.
2. Honey - its chemical composition. Its medicinal properties - application in various fields.
3. Value added honey products, its types and its properties, acid content and flavour effects.

UNIT II:

1. Bee as pollinators and crop yield
2. Crop improvement: Quality and yield through honeybee pollination

UNIT III:

1. Collection and preservation of honey
2. Prepare month wise calendar of operations in bee keeping
3. Colony Management and diseases
4. Bee enemies and diseases: Introduction, Enemies of honeybees – Wax Moth, Ants, Wasps, Microbes, Pests; Diagnosis and identification.
5. Bacterial, viral, fungal and protozoan diseases; Mites attacking honeybees.

Reference Books

1. Take care of your bee hive: A guide on how u can care for and maintain your bee hive, Book available on Amazon
 2. Honey, the natures gold by Daniel Andrew
 3. Honey: the power of natural products by Rosemary
 4. Historical notes on causes of bee diseases by E.F Phillips
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MNV 13C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Steps for strengthening of colonies – Requeening technique
2. Identification of bee flora through palynological analysis of honey samples, propagation of bee plants; preparation of floral calendar

Reference Books

1. Update publishing house [https://update publishing.com](https://updatepublishing.com)
 2. Intech Open <https://www.intechopen.com>
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Semester-VIII**MNV 13D: HONEY & BUSINESS**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The main objective of this course is to equip the learners about the know-how of harvesting of honey.
2. The learners should be updated about the processing and marketing of honey and the products

Course Learning Outcomes:

1. They would now think for their own start-ups.
2. They would be skilled to carry on their own business of honey and its products processing and marketing.

Course Content:**UNIT I:**

1. Harvesting of honey from the combs and the general precautions taken care of.
2. Processing of honey
3. Preservation of honey
4. Marketing of honey

UNIT II:

1. Honey extraction & handling - Quality control standards - Honey testing kit
2. Processing of honey and their valuable products of taste and medicinal uses.
3. Bee venom & Royal jelly extraction.

UNIT III:

1. Business Opportunity Identification
2. Challenges in marketing and solutions.

UNIT II:

1. Economics of small scale and large scale bee keeping. Scope of Bee keeping business in India and abroad.
2. How to prepare a project on Bee keeping on small scale as well large scale? Knowing the Funding agencies for beekeeping projects.

Reference Books

1. A complete book on Bee keeping and Honey processing, Publisher NIIR project consultancy service
 2. The Bee keepers Hand book by Diana sammataro
 3. Bee conservation -Evidence for the effects of interventions
 4. Complete technology book on honey processing and formulations by Himadri panda
 5. Honey processing and quality in hospitality by Atieno joyce Akulu
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MNV 13D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Extraction of honey using honey extractor, packing and storing of honey.
2. Management of different hive products

Reference Books

1. Complete technology Book on Beekeeping and Honey Products with Project PROFILES
 2. Honey Marketing by Friedrich W. Bauer
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VOCATIONAL COURSE – XIV
“FISH AND FISHERIES”

Semester-II

MNV 14A: FISH BIOLOGY

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

1. The student will be aware of the bodily organisation of a fish.
2. The student will be having complete knowledge of nutritive value of fish.
3. Also be aware of the Economic value of Fish.
4. Able to identify Indigenous, Exotic and Ornamental Fish.

Course Content:

UNIT – I

Common characteristics of fish related to their aquatic mode of life.
Difference between chondrichthyes and Osteichthyes.

UNIT – II

Introduction to families Cyprinidae, Cobitidae and Siluridae.

UNIT – III

Scale types – Placoid, Cycloid, Ctenoid and Ganoid etc.

UNIT – IV

Structure of the Fin: Fin spines, Soft rays, Spinous rays, Median Fins, and Caudal fin.

UNIT – V

Nutrient value of fish flesh, important fresh water, and marine food fish.

UNIT – VI

Fish by-products:
Fish meal, fish oil, Fish manure and Guano, Fish Silage, Fish glue, Fish isinglass, Fish leather, Fish sausage and soup, Fish flour, and biscuits, Fish insulin, and Fish pearl.

UNIT – VII

Native and Exotic Fish, Larvivorous Fish, Decorative Fish (Ornamental Fish), and Poisonous Fish.

Reference Books

1. Fish Biology and Fisheries by S.S. Khanna and H.R. Singh.
 2. Classification and identification by C.J. Haware.
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MNV 14A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

1. Museum Specimen – 1 (5 marks)
2. Permanent slide – 1 (5 marks)
3. One larvivorous Fish (½ marks)
4. One Ornamental Fish (½ marks)
5. Practical Record (5 marks)
6. Viva (5 marks)

Content:

- i. Museum specimen of Bony and Cartilaginous Fish.
- ii. *Labeo rohita* of family Cyprinidae.
- iii. *Scoliodon* of family Carcharhinidae.
- iv. Study of permanent slides of Cycloid, placoid and Ctenoid scales.
- v. Study of one larvivorous and one Ornamental Fish by visiting Shalimar Fish farm.

Reference Books

1. Fish Biology and Fisheries by S.S. Khanna and H.R. Singh.
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Semester-IV**MNV 14B: FISH GROWTH**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. To become a successful Fish farmer it is pertinent to be aware of different niche of food to fish in water body.
2. To know about the types of natural and artificial food for fish.
3. To be aware about the reproduction and malnutrition and the factors affecting them.
4. To know how to measure growth rate.
5. To be aware about the different factors controlling growth of fish.

Course content –**UNIT – I****Types of fish based on feeding habits and niche:** Surface feeders, column feeders and bottom feeders.**UNIT – II**

Natural and Artificial feed of fish.

UNIT – III**Reproductive organs:** Histology of Testis and Ovary of fish, maturation and spawning, Mono-spawner, poly spawner fish, seasonal spawner, synchronism, partial synchronism and Asynchronism.**UNIT – IV**

Factors controlling spawning – temperature, currents, dissolved oxygen, photoperiod and turbidity.

UNIT – VFecundity: Volumetric method and Gravimetric method ($F = \frac{S \times OW}{100}$)**UNIT – VI**

Based on site of spawning – Lithophils, Phytophils, Psammophils, Pelagophils and Ostracophils.

UNIT – VII

Practical utility of determining age and growth.

Growth and age of fish – Factors influencing growth of a fish – Temperature, Photoperiod, Quality and quantity of food, dissolved oxygen, Ammonia, Salinity, Age, the state of maturity and the population density.

Reference Book –

1. CBL Srivastava: Fish Biology
2. Fish Biology and Fisheries by S.S. Khanna and Neera Kapoor

MNV 14B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

1. Study of age and growth line over a scale (5 marks)
2. Determination of different parameters of a culture pond water (5 marks)
3. Comment on permanent slides – 2 (2½ x 2 = 5 marks)
4. Practical Record (5 marks)
5. Viva (5 marks)

Course content –

1. Assessment of water quality of any culture pond measuring PH, turbidity, Alkalinity, DO₂, Nitrate and Nitrite.
2. Study of age and growth lines present over a scale.
3. Study of permanent histological slides of testes, ovary of a bony fish.

Reference Book –

1. Fishery survey of India – Wikipedia.
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Semester-VI**MNV 14C: 1. CHONDRICHTHYES ECOLOGY**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course objective:

1. To have vocation in Coastal area fisheries, the student must have knowledge about Marine fisheries and Estuarine Fisheries.
2. Large scale fishing requires the knowledge of Fish preservation and processing.
3. To be aware of Fish poisoning.

Course content:**UNIT - I**

Chondrichthyes – Characters of Sharks and Rays, *Pristis* and *Rhinobatus granulosus*.

UNIT - II

Marine Fisheries: Coastal fishery, offshore fishery and Deep sea fishery.

UNIT - III

Factors influencing Fish production along the West and East coast: Salinity, PH, Thermocline and upwelling, plankton and Mud Banks.

UNIT - IV

Principal capture fisheries: Hilsa fishery, Sardine Fishery, Mackerel Fishery, Bombay duck Fishery, Pomfret Fishery, Ribbon Fish Fishery, Sole Fish Fishery, Catfish Fishery, Shark and Rays, Polynemids and Eel Fishery.

UNIT - V

Characteristic of Estuarine water.
Hoogly estuary (Sundarban of Bay-of-Bengal)
Mahanadi Estuary – Cuttack and Puri (Orissa), Chilka Lake.

UNIT - VI

Spoilage of fish – Causes, Rigor-Mortis, Rancidity.
Preservation: Chilling, Freezing, Deep Freezing and Freez-drying, Sun drying, Salting, Smoking, Canning. Use of chemicals and Radiation, processing of fish.
Food poisoning by Fish to Man.

Reference Book:

1. Text book of Marine Fisheries by Upadhyay, Alok Kumar and B.C. Joshi.
 2. Sustaining Marine Fisheries – by Gideon Paxton.
 3. Fish Biology and Fisheries by S.S. Khanna and H.R. Singh.
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MNV 14C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

1. Museum specimens – 4 (4 x 2½ = 10 marks)
2. Planktons (Temporary slide) (5 marks)
3. Record (5 marks)
4. Viva (5 marks)

Practicals:

1. Fisheries Ecology
2. Aquatic Flora and Fauna
3. Fish Farming Technique and Hatchery Management
4. Fish Nutrition

Content:-

- Study of Museum specimens – Skates, Rays, Scoliodon (Shark)
- Study of Planktons.
- Study of dried fish sold in local market.

Reference Book:

1. Fisheries and aquaculture by Nilima Gupta.
 2. A case study on intensification for Fresh water Fish culture and Training by N.K. Bose and Shambudhir.
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Semester-VIII**MNV 14D: 3. REVERINE FISHERIES & MANAGEMENT**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Objectives:

After studying this course, the student will be able to know –

1. Riverine and Reservoir fishery.
2. Types of ponds and management.
3. Transport process of fish seeds and Fry and broods.
4. Latest technology of Fish culture.
5. Fish diseases and control.

Course content:**UNIT – I: General Awareness**

Inland Fisheries resources - Ganga River system, Brahmaputra River system, East-Coast River system – Fisheries of River Godavari, Cauvery.
West Coast River system – Indus River system.

UNIT – II: Reservoir Fisheries –

Mettur reservoir, Raila pratap sagar, Rihand Reservoir, Tilaiya and Konar, Gandhi Sagar, Tungbhadra, Nagarjun, Tehri Dam Reservoir.

UNIT – III: Trout culture and Mahseer culture –

Types of pond – Hatching pit, spawning pond, Nursery pond, Rearing pond, growing pond or stocking pond.

UNIT – IV: Sequential steps of Pond management –

Drying, weed eradication, preparation of nursery pond, eradication of predatory fish, fertilization of pond (Liming, manuring) and Stocking, post Stocking management by feeding, thinning and Harvesting.

UNIT – V:

Eggs collection, Fertilization of Eggs by stripping, Transport of Eggs, Fry and Broods.

UNIT – VI: Introductory -

Induced breeding, cage culture, RAS, Biofloc and Aquaponics technique of Fish culture.

UNIT – VII:

Fish diseases and control.

Reference Book:

1. Fresh water Fish pond culture and management by M. Chakraborty.
 2. Aquaculture and Fisheries by N. Arumugam.
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MNV 14D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Dissertation = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Contents:**Dissertation**

Visit to Reservoirs in Jharkhand to record the current Fishery (Catch/year).

Suggested Study material:

1. CMFRI Repository –
 2. A handbook of Fisheries and Aquaculture by ICAR.
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VOCATIONAL COURSE – XV
“BEAUTY & WELLNESS”

Semester-II

MNV 15A: ANATOMY AND PHYSIOLOGY

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. As a Beauty Wellness Consultant, it is important to have good understanding of Anatomy & Physiology, as many of our treatments aim to improve the particular functioning of systems of the body.
2. Upon completion of this course the student should be able to explain the gross morphology, structure and functions of various organs of the human body related to beauty sector.

Course Content:

UNIT 1: Introduction to Human Body

Anatomy and physiology related to Human body

UNIT 2: Skin

Understand the characteristics, basic structure and function of the skin,
Skin types, effect of the natural ageing process on skin and muscle tone,
Identify allergies, common skin problems,
Root causes of skin problems, pH, Sun Protecting Factor, secretion from skin.

UNIT 3: Hair

Hair Structure, function of hair, hair growth cycle, types of hair, common hair problems.

UNIT 4: Nail

Nail Structure, function, characteristics of nail and nail growth, nail diseases.

UNIT 5: Bones, Muscles and Circulatory System

Brief description about the bones, muscles and blood circulation related to the hand, foot, lower arm and lower leg.

Reference Books

1. Anatomy and Physiology, “Human Anatomy” by Alice Roberts
 2. Essential of Anatomy and Physiology Paperback by Saladin
 3. Beauty Therapy Level 2 Lorraine Nordmann
 4. Indian Pharmacopoeia
 5. British Pharmacopoeia
 6. N K Jain and S K Sharma, A Text Book of Pharmacy, latest edition
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MNV 15A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours*****Instruction to Question Setter for******End Semester Examination (ESE):***

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. To draw the human body and identify various parts,
 2. Anatomy and physiology of human skin and hair,
 3. Structure and function of nail with their disorders,
 4. Structure and function of facial muscles,
 5. Structure and function of circulatory system.
-

Semester-IV**MNV 15C: FUNDAMENTALS OF BEAUTY THERAPY**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Outcomes:**

1. The students will be able to understand a comprehensive understanding of fundamentals of Beauty therapy and its management.
2. Know the various types of beauty treatments and their importance.

Course Content:**Unit 1. Improve and maintain facial Skin Condition**

Basics of skin care, Skin types, Brief introduction to facial massage, skin analysis, Client Consultation, tools, equipment and Skin care products, materials and equipment required for beauty therapy treatments, Contra-indications, Preparing the client, Cleansing ,Toning, Exfoliation, Moisturising, Mask treatment, basic and deep cleansing, Facial, Skin Treatments – Acne treatment, Pigmentation treatment, Skin Brightening Treatment, Anti tanning treatment, under-eye dark circles treatment, Anti-wrinkle treatment contra-indications, Contra-actions, safety precautions, After care & advice.

Unit 2. Removal of Superfluous Hair (Threading, Tweezing, Waxing)

Superfluous hair, definition and methods of epilation and depilation, preparation of the work area, product knowledge, allergy test, procedure, safety precaution, Brief concept and application of Threading, tweezing & Waxing.

Unit 3. Bleaching

Brief concept and application of Bleaching types and methods, Contra-indications, product knowledge, Contra-actions, safety precautions, Allergy test, After care & advice.

UNIT 4. Manicure and Pedicure

Manicure and pedicure significance, tools, equipment & product knowledge, Consultation, Contra-indications, Preparing the client, Contra –action, safety precautions, After care & advice.

Unit 5. Hair

Client consultation, Hair care, Head massage, Shampooing, conditioning and deep conditioning, Hair Treatments, Knowledge of face shapes, sectioning, tools knowledge, hair cutting techniques: one length cut, U Cut, Step cut, flicks cut & perimeter, safety precautions, basics of blow dry, Knowledge of hair styling products.

Reference Books

1. Cosmetology - Pivot Point Academy. www.pivotpoint.edu/education/cosmetology
2. The Foundation Beauty Therapy Lorraine Nordmann Seventh Edition LEVEL 2
3. Milady's Standard Text Book Cosmetology
4. Shahnaz Husain- Beauty book
5. The beauty book by Dr.Bharti Taneja
6. Miladys hair removal techniques
7. The world of skin care by Dr John Gray
8. Start hairdressing by Pat Dixon
9. NVQ2 Hair Dressing

MNV 15C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. Demonstration of removal of superfluous hair and Practice in waxing-hot, cold and warm waxes.
 2. Demonstration of Threading, tweezing and bleaching, patch test procedure eyebrows, patch test procedure bleaching, After Care.
 3. Trolley setting, and use of tools and equipments, practice of Manicure and Pedicure
 4. Practice in different types of nail shapes, practice of Manicure and Pedicure, Nail Art techniques.
 5. Practice in facial with help of different equipments, Facials masks according to skin types, Skin treatments Acne treatment, Pigmentation treatment, Anti tanning treatment, under eye dark circles treatment, Anti wrinkles treatment, Case studies.
 6. Machine Usage-Ozone, Galvanic, Ultra sonic, Steamers.
 7. Procedure for Hair cutting & blowdry techniques, Thermal hair settings-Pressing, Crimping, Roller setting & tongs, Head massage, Hair Treatments – Dandruff, Hair fall, Dry and Damaged, Basic techniques of Hair styling.
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Semester-VI**MNV 15B: COSMETIC FORMULATION SCIENCE**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. The course enables the student to understand and appreciate the basic understanding of cosmetic products.

Course Content:**UNIT 1: Introduction**

Definition of cosmetics as per Indian and EU regulations, Principles of cosmetic evaluation, cosmetics for various body parts, provision of drugs and cosmetic act as applicable to cosmetic. Pharmacopoeias: Introduction to IP, Dosage forms: Introduction to dosage forms, classification and their uses

UNIT 2: Skincare and Products

Importance of cleansing, toning, bleaching and batch test.

Principles of formulation and designing of various skin care products: skin colorants (lipsticks), skin creams, Skin lotions, Skin Serum, Skin Gels, sunscreen preparations, face pack, lip balm

UNIT 3: Hair Cares and Products

Formulation and designing of Hair shampoo, hair tonics, hair oils, hair gel, hair dyes.

UNIT 4: Nail Cares and Products

Formulation and designing of nail cream, nail polish, nail lacquers and removers.

Reference Books

1. Cosmetic Science and Technology: Theoretical Principles and Applications Mar 2017 by Kazutami Sakamoto (Editor)
 2. Textbook of Cosmetics Paperback –2009 by Nema
 3. Cosmetic Formulation of Skin Care Products (Cosmetic Science and Technology Series Vol. 30) by Zoe Diana Draelos (Editor), Lauren A. Thaman (Editor)
 4. Harry's Cosmeticology, 8TH Edition
 5. Cosmetic Science and Technology: Theoretical Principles and Applications Mar 2017 by Kazutami Sakamoto (Editor)
 6. Textbook of Cosmetics Paperback –2009 by Nema (Author)
 7. Cosmetic Formulation of Skin Care Products (Cosmetic Science and Technology Series Vol. 30) by Zoe Diana Draelos (Editor), Lauren A. Thaman (Editor) Harry's Cosmeticology, 8TH Edition
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MNV 15B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks

Practical record notebook = 05 marks

Viva-voce = 05 marks

Practicals:

1. Preparation skin care products such as cold cream, vanishing cream, antiaging cream, lip balm, night cream, sunscreen preparation, calamine lotion, gel, skin serum, face pack and lipstick etc.
2. Preparation hair care products such as shampoo, tonics, gels, hair oil and hair dyes etc.
3. Preparation of nail care products such as nail cream, nail polish nail lacquers and removers etc.

Reference Books

1. "Harry's Cosmeticology" by Meyer R. Rosen (Editor)
 2. "Cosmetic Science and Technology: Theoretical Principles and Applications" by Kazutami Sakamoto, Robert Lochhead, Howard Maibach, Yuji Yamashita
 3. "Formulating, Packaging, and Marketing of Natural Cosmetic Products" by Nava Dayan and Lambros Kromidas
 4. "Cosmetic Formulation: Principles and Practice" by Heather A.E. Benson and Adam C. Watkinson
 5. "Practical Cosmetics: How to Make Skin Care Products" by Karl Lintner
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Semester-VIII**MNV 15D: ADVANCED BEAUTY TECHNIQUES**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. Develop proficiency in advanced beauty techniques, including makeup artistry, hair styling, and skincare treatments.
2. Understand various skin types and conditions to provide customized beauty treatments.
3. Master advanced makeup application techniques, including contouring, highlighting, and special effects makeup.
4. Perform advanced hair styling techniques, including updos, braiding, and the use of professional styling tools and products.

Course Learning Outcomes:

1. Demonstrate proficiency in advanced beauty techniques, including specialized makeup artistry, intricate hair styling, and advanced skincare treatments.
2. Analyze different skin types and conditions to recommend and apply tailored beauty treatments effectively.
3. Execute advanced makeup application techniques such as contouring, highlighting, and creating special effects makeup looks for various occasions.
4. Perform complex hair styling methods, including intricate updos, braiding styles, and the use of professional tools and products to achieve desired results.
5. Administer advanced skincare treatments like chemical peels, microdermabrasion, and facial massages, ensuring client safety and satisfaction.

Course Content:**UNIT 1: Advanced Skincare**Chemical Peels and Exfoliation Treatments, Anti-aging and Corrective Skincare
Advanced Skincare Devices and Technologies**UNIT 2: Artistry in Makeup**Specialized Makeup Techniques (e.g., Bridal, Editorial, Special Effects)
Color Theory and Customization, Makeup for Different Skin Tones and Ages**UNIT 3: Creative Hairstyling**Advanced Haircutting and Coloring Techniques
Updos, Braiding, and Editorial Hairstyling, Hair Extensions and Hairpiece Application**UNIT 4: Wellness Coaching and Counseling**Holistic Wellness Assessment and Goal Setting
Lifestyle Modification and Behavior Change, Stress Management and Relaxation Techniques**UNIT 5: Entrepreneurship in Beauty and Wellness**

Business Planning and Management, Marketing Strategies and Branding, Legal and Regulatory Considerations

Reference Books

1. "Advanced Face Painting Techniques" by Charlotte Verrecas
2. "Professional Beauty Therapy: The Official Guide to Level 3" by Lorraine Nordmann and Andrea Day
3. "The Complete Guide to Make-Up" by Suzanne Le Quesne
4. "The Art and Science of Professional Makeup" by Stanley T. Turecki and Sam Fine
5. "The Hair and Make-Up Artist Handbook: Techniques for Film, Television, Photography, and Theatre" by Beverley Braisdell and Jennifer Lenard
6. "Dermatologic Complications in Facial Plastic Surgery" by M. Peter Catalano
7. "The Science of Beauty Therapy" by Ruth Bennett and Mark Rubin
8. "Hair Styling: The Complete Guide to Professional Techniques" by Tracy Shelton

MNV 15D PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25

Pass Marks: Pr (ESE) = 10

(Credits: Practicals-01) 30 Hours

Instruction to Question Setter forEnd Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment	= 15 marks
Practical record notebook	= 05 marks
Viva-voce	= 05 marks

Practicals:

1. Advanced Skincare Treatments Demonstration: Host a session where students observe and learn advanced skincare treatments such as chemical peels, microdermabrasion, or dermaplaning, focusing on technique, safety protocols, and client consultation.
2. Specialized Makeup Techniques Workshop: Conduct hands-on workshops to teach specialized makeup techniques, such as high-fashion editorial looks, special effects makeup for film and television, or airbrush makeup application.
3. Creative Hairstyling Masterclass: Invite professional hairstylists to demonstrate creative hairstyling techniques, including avant-garde updos, intricate braiding styles, or advanced cutting and coloring methods.
4. Advanced Aesthetics Equipment Training: Provide training on the safe and effective use of advanced aesthetics equipment, such as lasers, microcurrent devices, or radiofrequency machines, emphasizing hands-on practice and safety precautions.
5. Holistic Wellness Integration Session: Integrate holistic wellness practices into beauty treatments by offering sessions on aromatherapy, meditation, or stress-relief techniques to enhance client relaxation and well-being during services.
6. Business and Entrepreneurship Workshop: Host a workshop on business and entrepreneurship skills tailored to the beauty industry, covering topics such as salon/spa management, marketing strategies, branding, and financial planning.
7. Client Case Studies and Consultation Practice: Facilitate group discussions and role-playing exercises where students analyze client case studies, develop treatment plans, and practice conducting comprehensive client consultations.
8. Professional Portfolio Development Session: Guide students in creating professional portfolios showcasing their work, including before-and-after photos, makeup looks, hairstyling designs, skincare treatments, and client testimonials.
9. Industry Trends and Product Knowledge Review: Organize sessions to review current industry trends, product innovations, and ingredient technology in skincare, makeup, and haircare, encouraging students to stay updated with the latest developments in the beauty field.
10. Career Development and Networking Event: Host a networking event where students can connect with industry professionals, potential employers, and alumni, providing opportunities for mentorship, internships, job placements, and career advancement.

Reference Books

1. "Milady Standard Esthetics: Advanced" by Milady
2. "Advanced Skin Analysis" by Florence Barrett-Hill
3. "The Art and Science of Professional Makeup" by Stanley K. Schoen
4. "Advanced Face and Body Treatments for the Spa" by Pamela Hill
5. "Permanent Makeup: Tips and Techniques" by Pamela Hill
6. These books provide practical, in-depth knowledge of advanced beauty techniques, making them valuable resources for undergraduate vocational students pursuing advanced skills in the beauty industry.

VOCATIONAL COURSE – XVI
“FUNCTIONAL ENGLISH”

Semester-II

MNV 16A: INTRODUCTION TO COMMUNICATION

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75	Pass Marks: Th (ESE) = 30
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Course Learning Outcomes:

1. The course aims to provide the students a comprehensive idea of different aspects of communication.
2. How an effective communication skill ensures success in today's life across cultures will be justified through inculcation of proper understanding among the students.

Course Learning Outcomes:

1. Students will know about the various aspects of communication and how to use these in developing communication skills.
2. The awareness about role of communication in a highly globalized set-up will be generated.

Course Content:**UNIT – I – Basics of Communication**

1. Communication and its Definition
2. Channels of Communication
3. Different Types of Communication

UNIT – II – Communication across Cultures

1. Intercultural Communication
2. Barriers to Intercultural Communication
3. Globalization and English Language

UNIT – III – Language Skills

1. Listening
2. Speaking
3. Reading
4. Writing

UNIT – IV – Dictionary Skills

1. Components of a Dictionary
2. How to use a Dictionary?
3. How to use a Thesaurus?

UNIT – V – Technology and Communication

1. Information and Communications Technology (ICT)
2. Computer Assisted Language Learning (CALL)
3. Mobile Assisted Language Learning (MALL)

Reference Books

1. V. C. Mahto & Sushmita Chakraborty, Basics of Communication: Opportunities and Challenges, Rudra Publishers and Distributors, New Delhi
 2. R. K. Sharma & Nidhi Singh, Essential English for Better Communication, Cambridge University Press
 3. Reader's Digest- How to Write and Speak Better
 4. Gangal & Dere- Developing Writing Skills in English
 5. N. Lal- New Style English Grammar and Composition
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MNV 16A PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Assignment/Project/Dissertation = 20 marks

Viva-voce = 05 marks

Practicals:

1. Hands-on experience in the use of language in varying contexts will be given. The students will participate in writing workshops. Language lab/ICT lab-based practices are necessary for this.
 2. The students will submit assignments/project/dissertation (soft copy and hard copy) given by the department.
 3. These assignments/dissertations/project work will be principally based on evaluating the writing skill of the students.
 4. The mid-sem exam of 25 marks will be distributed as 10 marks for dissertation/assignment/project (30 to 40 pages), 10 marks for PPT based on dissertation and 5 marks for viva/attendance.
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Semester-IV**MNV 16B: GRAMMATICAL SKILLS AND NON-PROFESSIONAL WRITING**

(Credits: Theory-03)

Theory: 45 Lectures**Marks: 75 (ESE: 3 Hrs) = 75****Pass Marks: Th (ESE) = 30****Course Learning Objectives:**

1. To enable the students, handle the grammatical issues and how these may be used in non-professional writings.
2. Keeping in view the fact that these days students are not good at grammar, this paper will intend to give a sound foundation in grammar.

Course Learning Outcomes:

1. Students will develop grammatical skill leading to the increase of their confidence in communication.

Course Content:**UNIT – I – Basics of Grammar – 1**

1. Parts of Speech
2. Subject, Verb, Object, Complement, Adjunct
3. Sentence and its types

UNIT – II – Basics of Grammar – 2

1. Subject – Verb Agreement
2. Time and Tense
3. Voice : Active and Passive
4. Transformation of Sentences

Unit – III – Non-Professional Writing – 1

1. Personal Letters
2. Expansion of an Idea
3. Precis, Paragraph and Essay Writing

UNIT – IV – Non-Professional Writing – 2

1. Process Writing and its Meaning
2. Writing Letters to the Newspaper Editors (for social causes)
3. Writing Letters to Government Authorities

Reference Books

1. R. K. Sharma & B. Singh – A Comprehensive English Grammar, Atlantic Publishers, New Delhi
 2. Reader's Digest- How to Write and Speak Better R. K. Sharma. Exploring English Syntax. Cambridge University Press
 3. Wren and Martin- High School English Grammar and Composition
 4. Gangal & Dere- Developing Writing Skills in English
 5. B. N. Lal- New Style English Grammar and Composition
 6. R.K.Sharma, Exploring English Syntax, Cambridge University Press
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MNV 16B PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Assignment/Project/Dissertation = 20 marks

Viva-voce = 05 marks

Practicals:

1. Different groups of the students will be formed for exercises under the supervision of a teacher, they will be given topics for discussion, contexts will be given to speak on to test the on spot ability.
 2. The students will submit assignments/project/dissertation (soft copy and hard copy) given by the department.
 3. 25 marks will be distributed as 10 marks for dissertation, 10 marks for PPT and 5 marks for viva/attendance.
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Semester-VI**MNV 16C: PROFESSIONAL SKILLS**

(Credits: Theory-03)
Theory: 45 Lectures

Marks: 75 (ESE: 3 Hrs) = 75

Pass Marks: Th (ESE) = 30

Course Learning Outcomes:

1. To enable the students become professional communicators, how to excel in profession-centric communication remains the main objective.

Course Learning Outcomes:

1. The Students become good communicators as per the requirement of a profession.
2. Exposure to the linguistic inputs from a variety of professions will help them prepare for better communication.

Course Content:**UNIT – I – Business Correspondence**

1. Format of Business Letters
2. Different Types of Business letters
3. Email Writing and Messaging
4. Memorandum of Understanding (MOU)

UNIT – II – Organizational Communications -1

1. Using Power Point Presentation (PPT)
2. Job Applications
3. Resume/CV writing

UNIT – III – Organizational Communications -2

1. Report Writing
2. Notice Writing
3. Agenda and Minutes of Meeting

UNIT – IV – Inter- personal Communication

1. Interview: Skills and Etiquette
2. Group Discussion
3. Debate
4. Speech

Reference Books

1. V. C. Mahto & Sushmita Chakraborty, Basics of Communication: Opportunities and Challenges, Rudra Publishers and Distributors, New Delhi
 2. R. K. Sharma & Nidhi Singh, Essential English for Better Communication, Cambridge University Press
 3. Reader's Digest- How to Write and Speak Better
 4. Gangal & Dere- Developing Writing Skills in English
 5. N. Lal- New Style English Grammar and Composition
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MNV 16C PRACTICAL:

Marks: Pr (ESE: 3Hrs) = 25	Pass Marks: Pr (ESE) = 10
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(Credits: Practicals-01) **30 Hours****Instruction to Question Setter for****End Semester Examination (ESE):**

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Assignment/Project/Dissertation = 20 marks

Viva-voce = 05 marks

Practicals:

1. Students will be given exposure to the requirements of effective communication in industrial establishments, government offices and public places. They will conduct a survey as a project work and submit the report in the department.
 2. Language lab/ICT lab-based practices are necessary for this.
 3. The students will submit assignments/project/dissertation (soft copy and hard copy) given by the department.
 4. 25 marks will be distributed as 10 marks for dissertation, 10 marks for PPT and 5 marks for viva/attendance.
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Semester-VIII**MNV 16D: SPEAKING SKILLS**(Credits: Theory-03)
Theory: 45 Lectures**Marks: 75+25 (ESE: 3 Hrs) = 100****Pass Marks: Th (ESE) = 40****DISSERTATION AND PPT PRESENTATION**

1. **There will not be a written exam either a mid-sem or an end-sem.**
2. **An External Examiner will be appointed by the University to evaluate the dissertation and conduct the viva voce.**

Instruction to Question Setter for***End Semester Examination (ESE):****There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:**Dissertation = 50 marks**PPT presentation = 15 marks**Viva-voce = 25 marks**Attendance = 05 marks***Course Learning Objectives:**

1. To enable the students, to pronounce better with globally intelligible accents, to prepare the students with reasonably good pronunciation skills.

Course Learning Outcomes:

1. Students will develop better pronunciation skills. They will be pretty aware of sounds in terms of accent, stress, rhythm, and intonation.

Course Content:**UNIT – I – Basics of Phonetics**

1. Speech Sounds and Symbols of English: Vowel Sounds, Consonant Sounds
2. Phonic Drill

UNIT – II – Pronunciation Skills

1. Distinction between Spelling (letters) and Pronunciation (sounds)
2. Syllable
3. Phonetic Transcription of words
4. Phonetic Transcription of Short Sentences

Unit – III – Suprasegmental Features

1. Accent and Word Stress
2. Intonation
3. Rhythm

Practicals:

1. Students will be given oral drills in language labs. They will be given exposure to native English speeches through ICT and youtube videos.
2. During classes, they will be asked to prepare audio-visuials.
3. Considerable exercises will be given to the students with a view to honing their pronunciation skills. Language lab/ICT-lab based practices are necessary for this.
4. Viva- Voce based on course contents.

Reference Books

1. S.S. Haider and R. K. Sharma: Introducing Phonetics. New Delhi: Atlantic Press,
2. T. Balasubramanian. A Textbook of English Phonetics for Indian Students.
3. Puspinder Syal and D.V. Jindal. An Introduction to Linguistics: Language, Grammar and Semantics.
4. D. Thakur. The Phonetics and Phonology of English: A Handbook
5. R.K. Sharma, Fundamentals of Linguistics, Atlantic Press, New Delhi