



Ref. No./SU/BOS/Humanities/122

Date :22/04/2026

The Director,
Yashwantrao Chavan School of Rural Development
Shivaji University, Kolhapur

Subject: Regarding syllabi of Master of Rural Studies (M.R.S.) Part – II
Semester III & IV programme under the Faculty of Humanities.

Sir/Madam,

With reference to above, I am directed to inform you that the university authorities have accepted and granted approval to the revised syllabi and nature of question paper of Master of Rural Studies (M.R.S.) Part – II Semester III & IV under the Faculty of Humanities, as per National Education Policy 2020.

This syllabi shall be implemented from the academic year 2026-27 onwards. A soft copy containing the syllabus is attached herewith and it is also made available on university website www.unishivaji.ac.in (Online Syllabus).

The question paper on the pre-revised syllabi of above mentioned course will be set for the examinations to be held in October/November 2026 & March/April, 2027. These chances are available for repeater students, if any.

You are therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Yours faithfully



Dy. Registrar

Encl: As above

Copy to,

For Information and necessary action.

The Dean, Faculty of Humanities.	Distance Education Section.
The Chairman, Economics Board of Studies.	Eligibility Section.
The Director, Board of Examinations & Evaluation	P. G. Seminar Section.
Appointment A & B Section	P. G. Admission Section.
Internal Quality Assurance Cell	Affiliation Section (T. 1 & T 2)
O. E. 2 Exam. Section.	Computer Center/I. T. Cell.

SHIVAJI UNIVERSITY, KOLHAPUR



Established: 1962

A⁺⁺ Accredited by NAAC (2021) With CGPA 3.52

New Syllabus For Master of Rural Studies (M.R.S)

UNDER

Faculty of Humanities

M.R.S. Part-II (Semester- III and IV)

STRUCTURE AND SYLLABUS IN ACCORDANCE WITH
NATIONAL EDUCATION POLICY - 2020 HAVING
CHOICE BASED CREDIT SYSTEM

WITH MULTIPLE ENTRY AND MULTIPLE EXIT OPTIONS

(TO BE IMPLEMENTED FROM ACADEMIC YEAR 2026-27 ON WARDS)

INDEX

Sr. No.	Content	Page No
1	YEAR OF IMPLEMENTATION	03
2	PREAMBLE	03
3	PROGRAMME LEARNING OUTCOMES (PO)	03
4	COURSE OUTCOMES (CO)	03
5	OBJECTIVES PROGRAMME	07
6	DURATION OF THE COURSE	07
7	MEDIUM OF INSTRUCTION	07
8	ELIGIBILITY FOR ADMISSION	07
9	SCHEME OF TEACHING AND EXAMINATION PATTERN (Theory/Practical/Internal)	08
10	COURSE CODE TABLE	09
11	EQUIVALENCE OF THE PAPERS	10
12	STRUCTURE OF PROGRAMME	11
13	STANDARD OF PASSING AND DETERMINATION OF CGPA, GRADING AND AND DECLARATION OF RESULTS	12
14	NATURE OF QUESTION PAPER AND SCHEME OF MARKING	14
15	SYLLABUS: COURSE TITLE, CODE, CREDITS, VERTICALS NAME, REFERENCES etc.	16

1. YEAR OF IMPLEMENTATION

The Master of Rural Studies (M.R.S.) programme shall be implemented from the Academic Year 2026–2027, commencing from June 2026, at the Shivaji University. The programme will be conducted in accordance with the curriculum framework, credit system, and examination regulations approved by the University and other competent statutory authorities from time to time.

2. PREAMBLE:

Rural development needs an integration of all areas of knowledge. It needs multi-disciplinary approach towards the rural development ideology. The school is committed to empower the youth for rural development by catering to the needs of the rural development. It will integrate all local institutions, industries and organizations in the vicinity for the universal coordination of knowledge for overall rural development. The school has established in the Shivaji University campus as one of the autonomous (proposed phase) schools for conducting academic, research, training and extension activities associated with the rural development and rural management. It is a multi-disciplinary school covering all disciplines of science, technology, social sciences, agricultural sciences, trade and managerial subjects.

3. PROGRAMME LEARNING OUTCOMES (PO)

- Critically understand the social system, ideologies, methodologies, and rural development in various settings, along with values, ethical principles, and evidence-based practices of rural development.
- To strengthen the theoretical understanding, expand knowledge-base, inculcate relevant values, attitudes and skills required for rural development through the theory and practical component of the Academic Programme.
- Develop interdisciplinary and specialized professional outlook, uphold the dignity and esteem of the rural development and achieve self-actualization.
- Employ participatory, action and evidence-based practices in the field settings.
- Engage the system through collective action and demand-driven approach to ensure social justice and equity to the marginalized, vulnerable and weaker-sections of society.
- Understand and design effective strategies to evaluate and monitor progress over time in development and change action that are appropriate for specificity inventions and for various target groups.
- To acquire skills to work in rural industries, State and Central Government Departments, rural development sponsored research and action - oriented projects undertaken by National and International Agencies.

4. COURSE OUTCOME (CO):

MM9: Social Welfare Administration

- Understand about the nature, scope, features, principles and importance of Development administration
- Know the good governance and its importance in rural development.
- Understand the decentralized administration and its amendments.
- Explain different kinds of rural development institution and its administration

MM10: Banking and Rural Finance

- Analyze the New Trends in Banking.
- Organize the awareness activities of Financial Literacy through NGOs in rural area.
- Critically evaluate the credit by different agencies in rural area.
- Compare the role agricultural credit and agricultural development.

MM11: Machine Learning for Rural and Agricultural Development

- Understand the basic concepts, objectives, and significance of Machine Learning.
- Identify applications of Machine Learning in agriculture and allied rural sectors.
- Recognize the role of Machine Learning in improving rural services, infrastructure, and governance.
- Interpret real-life case studies based on Government data and suggest context-specific solutions for rural development.

MM12: Microfinance

- Assess the need of microfinance.
- Know the various models of microfinance.
- Analyze the role of microfinance in rural development.
- Examine the nature and extent of financial inclusion

ME1: Agribusiness and FPOs

- Understand the basic principles of agribusiness management.
- Develop and inculcate the skills necessary for effective agribusiness management.
- Understand the formation and financing of Farmer Producer Organizations (FPOs).
- Examine existing FPOs and analyze their issues and challenges.

ME2: Optimization Techniques for Rural Development

- Understand basic concepts of optimization and operations research in rural development.
- Formulate real-life rural problems as optimization models.
- Apply linear programming techniques to solve rural planning and resource allocation problems.
- Interpret optimization results and present decision-oriented conclusions for rural administration.

ME3: Economy of Maharashtra

- Understand the basic features of the economy of Maharashtra.
- Assess the present position of agriculture, industry, and the service sector in Maharashtra.
- Examine the problems faced by the economy of Maharashtra.
- Assess the realities of Human Development Index (HDI), infrastructure, and public finance in Maharashtra.

ME4: Rural Project Management

- Acquaint themselves with the basic concepts of rural project management.
- Gain deeper insight into the components of project planning.
- Develop skills related to project monitoring and evaluation.
- Link project design with results, monitoring, and evaluation of rural development projects.

RP: Research Project/Field Work -II

- Identify research problems and formulate appropriate research objectives.
- Choose appropriate research methodology with proper tools and techniques.
- Analyze and interpret data collected from different sources.
- Make informed decisions and draw valid conclusions based on data analysis.

MM13: Artificial Intelligence in Rural Governance and Development

- Understand the basic concept and scope of AI in simple terms.
- Recognize how AI supports better governance in rural areas.
- Identify applications of AI in farming, weather, and rural economy.
- Discuss the challenges and future scope of using AI in rural development.

MM14: Cooperatives and Rural Development

- Compare the successful practices of co-operation across the countries.
- Extend co-operative principles in governance and administration of co-operative organization.
- Analyze the functioning of different types Credit and Non-Credit Co-operative Societies.
- Demonstrate the importance of co-operative institutions.

MM15: Indian Rural Livelihoods

- Develop innovative livelihood models in Agriculture, Horticulture, Floriculture, Sericulture and Forestry.
- Illustrate the rural labour market and their problems.
- Demonstrate the rural marketing pros and cons.
- Evaluate the importance of rural infrastructure in rural development.

ME1: Environment and Sustainable Development

- Understand the concept of environment.
- Get acquainted with the terms ecosystems and ecology.
- Comprehend the complexity, various forms, and dimensions of development and environmental issues.
- Understand the basic concept of sustainable development and its environmental, social, and economic dimensions.

ME2: Rural Innovations and Start ups

- Understand innovations in rural technologies and services.
- Identify different perspectives on sectoral innovations.
- Critically evaluate ideas, creativity, and analyze problems using design thinking.
- Identify rural start up opportunities and initiate business startups.

ME3: Rural Analytics

- Understand the concept and importance of analytics in rural development.
- Identify data sources and indicators used for rural planning and governance.
- Apply basic analytical thinking to interpret rural socio-economic data.
- Use analytics for evidence-based decision-making in rural development programmes.

ME4: NGO Management and CSR

- Explain basic knowledge of NGOs and their programmes with developmental perspectives.
- Understand the process of NGO registration and manage the functioning of NGOs.
- Understand the perspective and legal framework of Corporate Social Responsibility (CSR).
- Explain the role of CSR in social development.

RP: Research Project/Field Work -III

- Identify research problems and formulate objectives.
- Choose appropriate methodology with proper tools and techniques.
- Analyse and interpret data collected from different sources.
- Make decisions or draw conclusions based on data analysis.

5. OBJECTIVES PROGRAMME:

- To nurture rural entrepreneurs capable of driving sustainable rural transformation.
- To develop analytical skills to identify rural issues and design practical, evidence-based solutions.
- To equip students with competencies in planning, implementation, and evaluation of rural development programmes.
- To build capacity in policy analysis, research, and stakeholder engagement.
- To foster leadership qualities, professional ethics, and overall personality development.

6. DURATION OF THE COURSE:

The Master of Rural Studies programme shall be a Full Time Course of Two Years

-Four Semesters Duration with 22 Credits per Semester. (Total Credits=88)

7. MEDIUM OF INSTRUCTION:

The medium of instruction shall be in English. However, the student's will have an option to write answer- scripts in English and Marathi.

8. ELIGIBILITY FOR ADMISSION:

Any Graduate from Recognized University/HEI is eligible for admission for this course. The criteria for admission is as per the rules and regulations set from time to time by concerned departments, HEIs, university, government and other relevant statutory authorities.

9. SCHEME OF TEACHING AND EXAMINATION PATTERN:

The pattern of examination will be Semester with Credit and Continuous Internal Assessment/Evaluation.

M.R.S. Programmed Structure for Semesters III and IV

Semester-III												
Teaching Scheme						Examination Scheme						
Sr. No.	Theory (TH)				Practical (PR)		Semester-end Examination (SEE)			Internal Assessment (IA)		
	Course Type	No. of Lectures per Week	Hours	Credits	Hrs	Credits	Paper Hours	Max	Min	Internal	Max	Min
1	MM9	4	4	4	--	--	2	60	24	--	40	16
2	MM10	4	4	4			2	60	24	--	40	16
3	MM11	4	4	4			2	60	24	--	40	16
4	MM12	2	2	2			1	30	12	--	20	08
5	ME--	4	4	4			2	60	24	--	40	16
6	RP/ FW-II	-	-	-	8	4	Certified Submission of Dissertation/ Project Report	60	24	--	40	16
Total		18	18	18	8	4		330	132	--	220	88
										SEE+ IA: 330+220= 550		

Semester-IV												
Teaching Scheme						Examination Scheme						
Sr. No.	Theory (TH)				Practical (PR)		Semester-end Examination (SEE)			Internal Assessment (IA)		
	Course Type	No. of Lectures	Hours	Credits	Hrs.	Credits	Paper Hours	Max	Min	Internal	Max	Min
1	MM13	4	4	4	--	--	2	60	24	--	40	16
2	MM14	4	4	4			2	60	24	--	40	16
3	MM15	4	4	4			2	60	24	--	40	16
4	ME--	4	4	4			2	60	24	--	40	16
5	RP/ FW-III	-	-	-	12	6	Certified Submission of Dissertation/ Project Work	90	36	Viva- Voce/ Present action	60	24
Total		16	16	16	12	6		330	132		220	88
										SEE+ IA: 330+220= 550		
Semester III and IV		34	34	34	20	10		660	-	SEE+ IA: 660+440= 1100		
Total credit required for completing M.R.S. Part -II:44credits												

MM: Major Mandatory-There will be FOUR mandatory courses for each semester.

ME: Major Elective (Student should opt for ANYONE course from the group of elective courses/basket).

RP/FW-II&III: Research Project/Field Work-II&III- It are mandatory courses.

Research Projects/Field Work-II&III: It are a mandatory course. **It should be completed during the period from the end of the third semester to the end of the fourth semester.**

NOTE: Separate passing's mandatory for both, Semester End Examination & Internal Evaluation /Assessment.

10. COURSE CODE TABLE:**M.R.S. Part I, Semester-III and IV**

Semester	Course Code	Title of New Course
III	NMRSU0325MML532I1	Social Welfare Administration
III	NMRSU0325MML532I2	Banking and Rural Finance
III	NMRSU0325MML532I3	Machine Learning for Rural and Agricultural Development
III	NMRSU0325MML532I4	Microfinance
III	NMRSU0325MEL532I1	Agribusiness and FPOs
III	NMRSU0325MEL532I2	Optimization Techniques for Rural Development
III	NMRSU0325MEL532I3	Economy of Maharashtra
III	NMRSU0325MEL532I4	Rural Project Management
III	NMRSU0325RML532I	Research Project
III	NMRSU0325FWP532I	Field Work-II
IV	NMRSU0325MML532J1	Artificial Intelligence in Rural Governance and Development
IV	NMRSU0325MML532J2	Cooperatives and Rural Development
IV	NMRSU0325MML532J3	Indian Rural Livelihoods
IV	NMRSU0325MEL532J1	Environment and Sustainable Development
IV	NMRSU0325MEL532J2	Rural Innovations and Startup
IV	NMRSU0325MEL532J3	Rural Analytics
IV	NMRSU0325MEL532J4	NGO Management and CSR
IV	NMRSU0325FPL532J	Research Project
IV	NMRSU0325FWP532J	Field Work-III

11. EQUIVALENCE OF THE PAPERS:

M.R.S. Part I, Semester-III and IV

Sem. No.	Course Code	Title of Old Course	Credit	Sem. No.	Course Code	Title of New Course	Credit
III	MRSU0325MML532I1	Social Welfare Administration	4	III	NMRSU0325MML532I1	Social Welfare Administration	4
III	MRSU0325MML532I2	Banking and Rural Finance	4	III	NMRSU0325MML532I2	Banking and Rural Finance	4
III	MRSU0325MML532I3	Economy of Maharashtra	4	III	NMRSU0325MEL532I3	Economy of Maharashtra	4
III	MRSU0325MML532I4	Microfinance	2	III	NMRSU0325MML532I4	Microfinance	2
III	MRSU0325MEL532I1	Agribusiness and FPOs	4	III	NMRSU0325MEL532I1	Agribusiness and FPOs	4
III	MRSU0325MEL532I2	Agro-processing and Allied Industries	4	III	NMRSU0325MEL532I1	Agribusiness and FPOs	4
III	MRSU0325MEL532I3	Entrepreneurship Development	4	II	NMRSU0325MEL528H4	Rural Industrialization and Entrepreneurship	4
III	MRSU0325MEL532I4	Rural Project Management	4	III	NMRSU0325MEL532I4	Rural Project Management	4
III	MRSU0325RML532I	Research Project	4	III	NMRSU0325RML532I	Research Project	4
IV	MRSU0325MML532J1	NGO Management and CSR	4	IV	NMRSU0325MEL532J4	NGO Management and CSR	4
IV	MRSU0325MML532J2	Global Business Environment	4	IV	NMRSU0325MEL532J1	Environment and Sustainable Development	4
IV	MRSU0325MML532J3	Indian Rural Livelihoods	4	IV	NMRSU0325MML532J3	Indian Rural Livelihoods	4
IV	MRSU0325MEL532J1	Environment and Sustainable Development	4	IV	NMRSU0325MEL532J1	Environment and Sustainable Development	4
IV	MRSU0325MEL532J2	Rural Innovations and Startup	4	IV	NMRSU0325MEL532J2	Rural Innovations and Startup	4
IV	MRSU0325MEL532J3	Tourism for Rural Development	4	IV	NMRSU0325MML532J2	Cooperatives and Rural Development	4
IV	MRSU0325MEL532J4	Rural Marketing	4	IV	NMRSU0325MEL532J2	Rural Innovations and Startup	4
IV	MRSU0325FPL532J	Research Project	4	IV	NMRSU0325FPL532J	Research Project	4

12. STRUCTURE OF THE PROGRAMME:

Credit Distribution Structure for with Multiple Entry and Exit Options M.R.S.-II in Rural Studies (NEP)

Year	Level	Sem	Major with Course Code (Credits)		RM	RP	Total Credits	Degree
			Mandatory	Electives (Choose ONE elective)				
I	7.0	Sem III	Course Code: NMRSU0325MML532I1 Social Welfare Administration (4) Course Code: MRSU0325MML532I2 Banking and Rural Finance (4) Course Code: NMRSU0325MML532I3 Machine Learning for Rural and Agricultural Development (4) Course Code: NMRSU0325MML532I4 Microfinance (2)	Course Code: NMRSU0325MEL532I1 Agribusiness and FPOs (4) Course Code: NMRSU0325MEL532I2 Optimization Techniques for Rural Development (4) Course Code: MRSU0325MEL532I3 Economy of Maharashtra (4) Course Code: NMRSU0325MEL532I4 Rural Project Management (4)	--	Course Code: NMRSU0325RML532I Research Project (4)/ Field Work-II NMRSU0325FWP532I (4)	22	PG Degree
		Sem IV	Course Code: MRSU0325MML532J1 Artificial Intelligence in Rural Governance and Development (4) Course Code: NMRSU0325MML532J2 Cooperatives and Rural Development (4) Course Code: MRSU0325MML532J3 Indian Rural Livelihoods (4)	Course Code: MRSU0325MEL532J1 Environment and Sustainable Development (4) Course Code: MRSU0325MEL532J2 Rural Innovations and Startup (4) Course Code: MRSU0325MEL532J3 Rural Analytics (4) Course Code: MRSU0325MEL532J4 NGO Management and CSR(4)	--	Course Code: NMRSU0325FPL532J Research Project (6)/ Field Work-III NMRSU0325FWP532J (6)	22	
Cumulative Credits for PG Diploma			26	8	--	10	44	

13. STANDARD OF PASSING AND DETERMINATION OF CGPA, GRADING, AND DECLARATION OF RESULTS:

Shivaji University has adopted 10-point Grading System as follows:

- In each semester, marks obtained in each course (Paper) are converted to grade points:
 - If the total mark of the courses are 100 and the passing criteria is 40%, then use the following Table 1 for the conversion.
 - If the total marks of any of the courses are different than 100 (e.g. 50) and the passing criterion is 40%, then marks obtained are converted to marks out of 100 as below:

$$\text{Marks out of 100} = \frac{\text{Marks obtained by student in that course}}{\text{Total marks of that course}} \times 100$$

And then grade points are computed using Marks out of 100 as per Table 1.

Table1: Conversion of Marks out of 100 to grade point

Sr. No.	Marks Range out of 100	Grade point	Letter grade
1	80-100	10	O: Outstanding
2	70-79	9	A+: Excellent
3	60-69	8	A: Very Good
4	55-59	7	B+: Good
5	50-54	6	B: Above Average
6	45-49	5	C: Average
7	40-44	4	P: Pass
8	0-39	0	F: Fail
9	Absent	0	Ab: Absent

Table2: Conversion of Marks out of 50 to grade points (Passing: 20)

Sr. No.	Marks Range out of 50	Grade point	Letter grade
1	40-50	10	O: Outstanding
2	35-39	9	A+: Excellent
3	30-34	8	A: Very Good
4	28-29	7	B+: Good
5	25-27	6	B: Above Average
6	23-24	5	C: Average
7	20-22	4	P: Pass
8	0-19	0	F: Fail
9	Absent	0	Ab: Absent

➤ **Computation of Semester Grade Point Average (SGPA):**

Based on the grade points earned in each course in each semester, Semester *Grade Point Average (SGPA)* is computed as follows:

The SGPA is the ratio of the sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student in that semester and the sum of the number of credits of all the courses undergone by a student in that semester. The SGPA of the i^{th} semester is denoted by S_i . The formula is given by

$$SGPA \text{ of semester } i = S_i = \frac{\sum_{j=1}^k c_j \times G_j}{\sum_{j=1}^k c_j}$$

Where c_j is the number of credits of j^{th} course, G_j is the grade points earned in the j^{th} course and k be the number of courses in i^{th} semesters.

➤ **Computation of Semester Grade Point Average (SGPA):**

Based on the SGPA of each semester, Cumulative Grade Point Average (CGPA) is computed as follows:

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programmed,

$$CGPA = \frac{\sum_{i=1}^m C_i \times S_i}{\sum_{i=1}^m C_i}$$

Where C_i is the total number of credits in i^{th} semester, S_i is the SGPA of i^{th} semester and m is the number of semesters in the programme.

➤ **Based on CGPA, final letter grade is assigned as below:**

Table3: Final Cumulative Grade Point Average (CGPA) and Final Grade for course

Sr. No.	CGPA Range	Grade	Grade Descriptions
1	9.50-10.00	O	Outstanding
2	8.86-9.49	A+	Excellent
3	7.86-8.85	A	Very Good
4	6.86-7.85	B+	Good
5	5.86-6.85	B	Above Average
6	4.86-5.85	C	Average
7	4.00-4.85	P	Pass
8	0.00-3.99	F	Fail
9	Nil	AB	Absent

Remarks:

1. B+ is equivalent to 55% marks and B is equivalent to 50% marks. The final after grade is based on the grade points in each course of entire programme and not on marks obtained each course of entire programme.
2. The SGPA and CGPA shall be round off to two decimal points.

14. NATURE OF QUESTION PAPER AND SCHEME OF MARKING:

Four Credits: Written Examination (60) + Internal Assessment (40) = Total (100 Marks)

Two Credits: Written Examination (30) + Internal Assessment (20) = Total (50 Marks)

A) FOR FOUR CREDITS: Total Marks:60 (Written Examination)

Q.1:Multiple choice questions (10MCQs) (01 marks each) (10X1) 10 Marks

Q.2:Short Notes (Any four out of six) (5X4) 20 Marks

Q.3:Long Answer Questions (Any Two out of Four) (10X2) 20 Marks

Q.4:Answer the Following (Any One out of Two) (10X1) 10 Marks

Note: Question Paper should cover all the units in the syllabus.

A) FOR TWO CREDITS: Total Marks:30 (Written Examination)

Q.1:Multiple choice questions (FIVE) (01 marks each) (5X1) 05 Marks

Q.2:Short Notes (Any Two out of Four) (05X2) 10 Marks

Q.3:Long Answer Question(Any One out of Two) (10X1) 10 Marks

Q.4:Answer the Following (Any One out of Two) (5X1) 05 Marks

Note: Question Paper should cover all the units in the syllabus.

Internal Evaluation for PG Level (40%)

Level	Semester	Programme	Marks	
			4 Credit	2 Credit
6.0 M.R.S.I	I and II	1) Seminar	10	5
		2) Case Study/Problem Solving	10	5
		3) Book Review/Poster Presentation	10	5
		4) Mid-Term Test	10	5
6.5 M.R.S.II	III and IV	1) Group Discussion	10	5
		2) Research Paper Review	10	5
		3) Open Book Examination	10	5
		4) Mid-Term Test	10	5

Note: Book Review (Only from reference book)

DURATION OF EXAMINATION

- 1. Duration of Examination for 60 marks–2Hours**
- 2. Duration of Examination for 30 marks–1Hour**
- 3. Duration of Practical Examination for 50 marks – 2 Hour**

15. SYLLABUS:

M.R.S. Part-II, Semester-III

Course Name	: Social Welfare Administration
Course Type	: Major Mandatory
Course Number	: MM9
Course Code	: NMRSU0325MML532I1
Course Credits	: 4
Marks	: Semester End: 60 InternalAssessment:40 TotalMarks:100

Course Learning Outcomes: After completion of this course, students will be able to;

- Understand about the nature, scope, features, principles and importance of Development administration
- Know the good governance and its importance in rural development.
- Understand the decentralized administration and its amendments.
- Explain different kinds of rural development institution sand its administration

Module 1: Conceptual Understanding of Social Welfare Administration (Hours: 15, Credits: 1)

1.1 Meaning and concept of social welfare administration

1.2 Functions, scope, and principles of social welfare administration

1.3 History, composition, objectives, and activities of the Central Social Welfare Board and State Social Welfare Advisory Board

1.4 Areas of application of social welfare administration

1.5 Practical applications: related case studies and reports

Module 2: Good Governance (Hours: 15, Credits: 1)

2.1 Concept and criteria of good administration

2.2 Accountability and transparency in administration

2.3 Fund-raising activities and methods of resource mobilization, including Corporate Social Responsibility (CSR)

2.4 Components of monthly, quarterly, half-yearly, and annual reports

2.5 Participation in fund-raising activities of any organization

Module 3: Local Administration

(Hours: 15, Credits: 1)

3.1 Panchayati Raj Institutions and decentralization: structure, principles, and functions of PRIs

3.2 Functions of Gram Sabha and Gram Panchayat Development Plan (GPDP)

3.3 73rd and 74th Constitutional Amendments

3.4 Role of PRIs in rural development and progress of PRIs in India

3.5 Practical applications: related case studies and reports

Module 4: Administrative Processes and Human Resource Management

(Hours: 15, Credits: 1)

4.1 Administrative processes: Planning, Organizing, Staffing, Directing, Coordinating, Reporting, and Budgeting (POSDCORB)

4.2 Recruitment and selection

4.3 Induction: organizational induction and role induction

4.4 Allocation of responsibility, team building, morale and motivation, goal setting, capacity recognition, and support

4.5 Practical applications: related case studies and reports

LIST FOR READING:

1. Batra, Nitin. (2004). Administration of Social Welfare in India. Jaipur: Raj Publishing House.
2. Choudhary, Paul. (1993). Handbook on Social Welfare. New Delhi: Atma Ram & Sons.
3. Dubey, S. N. (1973). Administration of Social Welfare Programmes in India. Bombay: Somaiya Publications.
4. Encyclopedia of Social Work in India (Vol. I & III). (1987). New Delhi: Ministry of Welfare, Government of India.
5. Goel, S. L. (2010). Social Welfare Administration. New Delhi: Deep & Deep Publications.
6. Goel, S. L. (2003). Public Administration: Theory and Practice. New Delhi: Deep & Deep Publications Pvt. Ltd.
7. Kohli, A. S., & Sharma, S. R. (1998). Encyclopedia of Social Welfare and Administration. New Delhi: Anmol Publications.
8. Patel, N. Vinod, & Rana, K. Girish. (2007). Personnel Management. Jaipur: Oxford Book Company.
9. Jha, S. M. (2002). Social Marketing. Bangalore: Himalaya Publishing House.
10. Jain, S. C. Community Development and Panchayati Raj.

M. R. S. Part-II, Semester- III

Course Name	: Banking and Rural Finance		
Course Type	: Major Mandatory		
Course Number	: MM10		
Course Code	: NMRSU0325MML532I2		
Course Credits	: 4		
Marks	: Semester End: 60	Internal Assessment: 40	Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to;

- Analyze the New Trends in Banking.
- Organize the awareness activities of Financial Literacy through NGOs in rural area.
- Critically evaluate the credit by different agencies in rural area.
- Compare the role agricultural credit and agricultural development.

Module 1: Introduction to Banking:

(Hours - 15, Credit - 1)

1.1 Bank: Functions, Credit Creation, Balance Sheet, Portfolio Management, Non-Performing Assets (NPAs).

1.2 New Trends in Banking: Investment banking, Personal Banking, E-Banking, Core Banking, Retail Banking, Green Banking.

1.3 Central Bank: Functions, Credit control policy.

1.4 Non-Banking Financial Intermediaries (NBFIs): Definition, Types and Growth in India.

1.5 Practical and Applications- Related Case Studies and Reports.

Module 2: Rural Economy:

(Hours - 15, Credit - 1)

2.1 Role of credit in rural development, Rural savings and capital formation, Characteristics and structure of rural credit – institutional and non-institutional.

2.2 Financial Literacy: Concept, Importance, Causes of financial illiteracy.

2.3 Rural Indebtedness: Extent, Causes, Consequences and measures.

2.4 Reports: All India rural credit survey, All India debt and investment survey.

2.5 Practical and Applications- Related Case Studies and Reports.

Module 3: Rural Credit:**(Hours - 15, Credit - 1)**

3.1 Commercial Banks: Agricultural Credit, Priority Sector lending: Targets and Sub-targets, Corporate Social Responsibility (CSR) and Rural Development.

3.2 Lead Bank Scheme, District Credit Plan, Service Area Approach, Differential rate of interest Approach.

3.3 Co-operative Banks: Rural Co-operatives Credit Structure, Functions Problems and remedies.

3.4 Regional Rural Banks: Objectives, Functions, Problems and remedies. Micro finance, Role of NABARD, Finance to Khadi and Village Industries Commission (KVIC).

3.5 Practical and Applications- Related Case Studies and Reports.

Module 4: Agricultural Credit:**(Hours - 15, Credit - 1)**

4.1 Overview of Financing to Agriculture sector in India.

4.2 Demand side and supply side of Agricultural Finance, Challenges in improving Agricultural Finance.

4.3 Crop loan, interest subvention scheme, Kisan Credit Card, Agricultural Insurance

4.4 Financing for Entrepreneurship

4.5 Practical and Applications- Related Case Studies and Reports.

LIST FOR READING:

1. Indian Institute of Banking and Finance (2007): Rural Banking. Macmillan Education,
2. Banking theory and practice- K.C. Shekhar and Lekshmy shekar (2009) Vikas Publishing house.
3. Durgadas Roy (2008): Rural Banking and Agricultural Finance in India.
4. K.Subramaniam and T.K. Velayudham, Banking reforms in India, Tata Mcgraw-Hill publishing Co. New Delhi.
5. Maehiraju H.R. (2002) Indian –Financial System Vikas Publishing House.
6. R.B.I Bulletin - Mumbai
7. R.B.I Report on currency and Finance R.B.I Trends and progress of Banking in India.
8. Rais Ahmed, Rural banking and economic development, Mittal publications, New Delhi.
9. Sen, S. N., central Banking in Underdeveloped Money Markets
10. Tushaar Shah, Catalyzing cooperation: design of self-governing organization, Sage publications.
11. Vasant Deswai (2003) Indian Himalaya Publishing House Mumbai.
12. Veerashekharaappa, Institutional finance for rural development, Rawat publishing, Jaipur and Delhi.

M. R. S. Part-II, Semester- III

Course Name	: Machine Learning for Rural and Agricultural Development		
Course Type	: Major Mandatory		
Course Number	: MM11		
Course Code	: NMRSU0325MML532I3		
Course Credits	: 4		
Marks	: Semester End: 60	Internal Assessment: 40	Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to;

- Understand the basic concepts, objectives, and significance of Machine Learning.
- Identify applications of Machine Learning in agriculture and allied rural sectors.
- Recognize the role of Machine Learning in improving rural services, infrastructure, and governance.
- Interpret real-life case studies based on Government data and suggest context-specific solutions for rural development.

Module 1: Introduction to Machine Learning

(Hours - 15, Credit - 1)

1.1 Meaning, nature, and importance of Machine Learning (ML).

1.2 Differences between traditional rule-based programming and Machine Learning.

1.3 Common uses of Machine Learning in everyday life: recommendation systems, digital services, automation.

1.4 Role and relevance of Machine Learning in agriculture and rural systems.

1.5 Practical and Applications- Related Case studies and Reports.

Module 2: Key Concepts of Machine Learning

(Hours - 15, Credit - 1)

2.1 Data: meaning, types, sources, and importance with reference to rural and agricultural data.

2.2 Types of Machine Learning: supervised and unsupervised learning with simple illustrations.

2.3 Features and labels: understanding input and output in Machine Learning models.

2.4 Introduction to basic Machine Learning tools and platforms (conceptual overview without coding).

2.5 Practical and Applications- Related Case studies and Reports.

Module 3: Applications of Machine Learning in Agriculture

(Hours-15, Credit - 1)

3.1 Crop yield prediction and productivity analysis using historical agricultural data.

3.2 Pest and disease detection using images and agricultural datasets.

3.3 Soil health monitoring and irrigation planning using data from the Soil Health Card Scheme and related portals.

3.4 Weather forecasting and climate-resilient farming using India Meteorological Department data and Agromet Advisory Services.

3.5 Practical and Applications- Related Case studies and Reports.

Module 4: Applications of Machine Learning in Rural Development (Hours - 15, Credit - 1)

4.1 ML applications in rural health services using public datasets.

4.2 ML applications in rural market forecasting, price prediction, and supply chain planning using AGMARKNET, e-NAM, and Minimum Support Price data.

4.3 Smart village planning using datasets from Census of India, MOSPI, and NITI Aayog dashboards.

4.4 Success stories and real-life examples of ML: based governance and rural development initiatives in India and abroad.

4.5 Practical and Applications- Related Case studies and Reports.

Indicative Government Data Sources

- Open Government Data Platform – **data.gov.in**
- Agricultural Census – Ministry of Agriculture & Farmers Welfare, Soil Health Card Portal, India Meteorological Department
- AGMARKNET and e-NAM
- Census of India, MOSPI, NITI Aayog Rural Development Dashboards

LIST FOR READING:

1. Alpaydin, E. (2013). Introduction to machine learning (2nd edition). PHI Learning.
2. Flach, P. (2012). Machine learning: The art and science of algorithms that make sense of data. Cambridge University Press.
3. Hastie, T., Tibshirani, R., & Friedman, J. (2012). The elements of statistical learning: Data mining, inference, and prediction (2nd edition). Springer.
4. Mitchell, T. M. (1997). Machine learning. McGraw-Hill.
5. Bishop, C. M. (2013). Pattern recognition and machine learning. Springer.
6. Witten, I. H., Frank, E., & Hall, M. A. (2011). Data mining: Practical machine learning tools and techniques (3rd edition). Elsevier.
7. Murphy, K. P. (2012). Machine learning: A probabilistic perspective. MIT Press.
8. Kulkarni, P. (2012). Reinforcement and systematic machine learning for decision making. Wiley–IEEE Press.
9. Shalev-Shwartz, S., & Ben-David, S. (2014). Understanding machine learning: From theory to algorithms. Cambridge University Press.

M. R. S. Part-II, Semester- III

Course Name	: Microfinance		
Course Type	: Major Mandatory		
Course Number	: MM12		
Course Code	: NMRSU0325MML532I4		
Course Credits	: 2		
Marks	: Semester End: 30	Internal Assessment: 20	Total Marks: 50

Course Learning Outcomes: After completion of this course, student will be able to;

- Assess the need of microfinance.
- Know the various models of microfinance.
- Analyze the role of microfinance in rural development.
- Examine the nature and extent of financial inclusion.

Module 1: Introduction to Microfinance:

(Hours - 15, Credit - 1)

- 1.1 Microfinance: History, Meaning, Scope, Characteristics, Principles, Importance and Assumptions.
- 1.2 Microfinance Products and Services
- 1.3 Microfinance through SHGs: SHGs; Concept, Characteristics, Functions, Formation and Development, Meetings.
- 1.4 Capacity Building of SHGs and Financial Management in SHGs.
- 1.5 Practical and Applications- Related Case Studies and Reports.

Module 2: Financial Inclusion:

(Hours - 15, Credit - 1)

- 2.1 Introduction: Overview, Nature and Extent of Exclusion.
- 2.2 State intervention for Financial Inclusion in India.
- 2.3 Demand Side Causes and Solutions for Financial Inclusion.
- 2.4 Financial Inclusion Index
- 2.5 Practical and Applications- Related Case Studies and Reports.

LIST FOR READING:

1. Beatriz Armendáriz de Aghion, Beatriz Armendáriz, Jonathan Morduch, "The Economics of Microfinance" MIT Press, 2007
2. David Hulme, Thankom Arun, "Microfinance: A Reader" Routledge, 13-Jan-2009
3. <https://www.sidbi.in/files/Rangarajan-Committee-report-on-Financial-Inclusion.pdf>
4. http://planningcommission.nic.in/reports/genrep/pov_rep0707.pdf

5. Hulme, D. (2000). "Impact assessment methodologies for microfinance: Theory, experience and better practice." *World Development* 28(1): 79-98
6. Joanna Ledgerwood, "Transforming Microfinance Institutions: Providing Full Financial Services to the Poor", World Bank, 01-Jan-2006
7. Joanna Ledgerwood, Julie Earne, Candace Nelson, "The New Microfinance Handbook: A Financial Market System Perspective" World Bank Publications, 12-Feb-2013
8. Microfinance, V. Neelamegam, Vrinda Publication 2014
9. Morduch, J., (1999) "The role of subsidies in microfinance: evidence from the Grameen Bank," *Journal of Development Economics* (60)1, pp. 229-248
10. Stuart, G. "Microfinance Sustainability and Public Value," In *Search of Public Value: Beyond Private Choice*, eds. John Bennington and Mark Moore, Palgrave MacMillan, Forthcoming

M.R.S. Part-II, Semester-III

Course Name	: Agribusiness and FPOs
Course Type	: Major Elective
Course Number	: ME1
Course Code	: MRSU0325MEL532I1
Course Credits	: 4
Marks	: Semester End: 60 Internal Assessment: 40 Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to:

- Understand the basic principles of agribusiness management.
- Develop and inculcate the skills necessary for effective agribusiness management.
- Understand the formation and financing of Farmer Producer Organizations (FPOs).
- Examine existing FPOs and analyze their issues and challenges.

Module 1: Introduction to Agribusiness

(Hours: 15, Credits: 1)

1.1 Agribusiness: concept, nature, scope, and importance.

1.2 Types of agribusiness sectors; difference between farm and non-farm sectors.

1.3 Structure of agribusiness: linkages among sub-sectors of the agribusiness sector.

1.4 Agribusiness management: meaning, nature, scope, and functions; components of agribusiness management.

1.5 Practical applications: related case studies and reports.

Module 2: Agricultural Marketing

(Hours: 15, Credits: 1)

2.1 Agricultural marketing: concepts, scope, importance, and structure; marketing functions—grading, storage, transport, packaging, and value addition of agricultural products.

2.2 Marketing institutions in agribusiness: commodity boards, Directorate of Marketing and Inspection, and export agencies.

2.3 Planning and organizing business; information technology in agribusiness; ITC e-Choupal.

2.4 Value of farm products: farm prices and quality; price determination; cost of production—fixed and variable costs.

2.5 Practical applications: related case studies and reports.

Module 3: Farmers Producer Organization (FPO)

(Hours: 15, Credits: 1)

- 3.1 Farmers Producer Organization (FPO): concept, scope, role, and importance.
- 3.2 National and state policies for the promotion of FPOs: scope and coverage; role of central government institutions; role of state governments; policy initiatives in Maharashtra.
- 3.3 Sources of finance for FPOs: NABARD, NABKISAN, Producer Organization Development Fund (PODF), and other sources.
- 3.4 Schemes for FPOs: Venture Capital Assistance Scheme, Rashtriya Krishi Vikas Yojana (RKVY–RAFTAAR), revamped National Food Security Mission (NFSM), and e-NAM (National Agriculture Market).
- 3.5 Practical applications: related case studies and reports.

Module 4: Policy and Process for FPOs

(Hours: 15, Credits: 1)

- 4.1 Farmer Producer Company: concept, legal procedures, formation, issues, and challenges.
- 4.2 Role of central and state government institutions in supporting FPOs.
- 4.3 Process guidelines for promotion of Farmer Producer Organizations (FPOs); capacity building of members of FPOs/FPCs.
- 4.4 Success stories of Farmer Producer Companies; business plan of an FPO—business models and components, identifying potential businesses, basics of risk-taking, and solutions.
- 4.5 Practical applications: related case studies and reports.

List of Readings / References

1. Bhave, S. W. *Agribusiness Management in India*.
2. Broadway, A. C., & Broadway, A. A. *Textbook of Agribusiness Management*.
3. Matoria, C. B. *Problems of Agriculture in India*. Himalaya Publishing House, Mumbai & Delhi.
4. Small Farmers' Agribusiness Consortium (SFAC). *FPOs*. <http://sfacindia.com/FPOS.aspx>
5. Tamil Nadu Agricultural University. *FPO Policy*. https://agritech.tnau.ac.in/farm_association/pdf/FPO%20Policy.pdf
6. National Agriculture Market (e-NAM). <https://enam.gov.in/web/stakeholders-Involved/fpos>
7. Press Information Bureau. <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1696547>
8. National Institute of Agricultural Extension Management (MANAGE). <https://www.manage.gov.in/publications/edigest/jun2018.pdf>
9. National Association of Farmer Producer Organisations (NAFPO). <https://www.nafpo.in/>
10. Upton, M., & Anlloi, B. O. *Farming as a Business*. Oxford University Press, New York.
11. Meena, R. K., & Yadav, J. S. (2001). *Horticulture Marketing and Post-Harvest Management*. Pointer Publications, Jaipur.
12. Soni, R. N. *Leading Issues in Agricultural Economics*.
13. Misra, S. K., & Puri, V. K. *Indian Economy*. Himalaya Publishing House, Mumbai.

M.R. S. Part-II, Semester-III

Course Name	: Optimization Techniques for Rural Development		
Course Type	: Major Mandatory		
Course Number	: ME2		
Course Code	: NMRSU0325MEL532I2		
Course Credits	: 4		
Marks	: Semester End: 60	Internal Assessment: 40	Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to;

- Understand basic concepts of optimization and operations research in rural development.
- Formulate real-life rural problems as optimization models.
- Apply linear programming techniques to solve rural planning and resource allocation problems.
- Interpret optimization results and present decision-oriented conclusions for rural administration.

Module 1: Optimization and Linear Programming in Rural Context (Hours – 15, Credit – 1)

1.1 Meaning and scope of Operations Research; relevance to rural development planning, agriculture, logistics, and governance

1.2 Concept of optimization; constraints, objective functions, and decision variables in rural problems

1.3 Linear Programming Problem (LPP): assumptions, formulation of rural planning problems (land use, irrigation, labour allocation)

1.4 Graphical solution of LPP and interpretation of results for rural decision-making

1.5 Introduction to Simplex method and Duality, Illustrative examples

Module 2: Assignment Models for Rural Service Delivery (Hours – 15, Credit – 1)

2.1 Assignment problem: concept and relevance in rural administration

2.2 Mathematical formulation of assignment problems

2.3 Balanced and unbalanced assignment problems

2.4 Hungarian method for minimization and maximization problems

2.5 Travelling Salesman Problem (TSP), Illustrative numerical examples

Module 3: Transportation Models in Rural Infrastructure

(Hours – 15, Credit – 1)

- 3.1 Transportation problem: concept and importance in rural logistics and agriculture marketing
- 3.2 LPP formulation of transportation
- 3.3 Initial feasible solutions: North-West Corner Rule, Least Cost Method, Vogel's Approximation Method
- 3.4 Optimality test using MODI method
- 3.5 Illustrative numerical examples

Module 4: Decision Theory and Game Theory

(Hours – 15, Credit – 1)

- 4.1 Decision Theory: decision-making process and types of decisions in rural development
- 4.2 Decision Theory: decision-making under certainty, risk, and uncertainty; EMV and EOL
- 4.3 Game Theory: basic concepts, players, strategies, and pay-off matrix
- 4.4 Game Theory: simple two-person games and applications in rural development
- 4.5 Numerical / Illustrative examples based on decision theory and game theory

LIST FOR READING:

1. Hillier, F. S., & Lieberman, G. J. (2015). Introduction to operations research (10th ed.). Tata McGraw Hill.
2. Swarup, K., Gupta, P. K., & Mohan, M. (2014). Operations research (1st ed.). Sultan Chand & Sons.
3. Natarajan, A. M., & Balasubramani, P. (2016). Operations research (1st ed.). Pearson Education.
4. Paneerselvam, R. (2012). Operations research (1st ed.). PHI Learning.
5. Ravindran, A., Phillips, D. T., & Solberg, J. J. (2007). Operations research: Principles and practice (2nd ed.). John Wiley & Sons.
6. Sharma, J. K. (2018). Operations research: Theory and applications (6th ed.). Laxmi Publications.
7. Taha, H. A. (2017). Operations research: An introduction (10th ed.). Prentice Hall.

M.R.S. Part-II, Semester-III

Course Name	:Economy of Maharashtra		
Course Type	:Major Mandatory		
Course Number	:ME3		
Course Code	:NMRSU0325MEL532I3		
Course Credits	: 4		
Marks	:Semester End: 60	Internal Assessment :40	Total Marks: 100

Course Learning Outcomes (CLOs): After completion of this course, students will be able to:

- Understand the basic features of the economy of Maharashtra.
- Assess the present position of agriculture, industry, and the service sector in Maharashtra.
- Examine the problems faced by the economy of Maharashtra.
- Assess the realities of Human Development Index (HDI), infrastructure, and public finance in Maharashtra.

Module 1: Introduction to the Economy of Maharashtra

(Hours: 15, Credits: 1)

1.1 Basic features of the economy of Maharashtra: location, structure, land, forests, environment, and mineral resources.

1.2 Demography of Maharashtra: size, growth rate, literacy rate, sex ratio, urban and rural population, and migration.

1.3 Growth and structural changes in State Gross Domestic Product (SGDP) since 1991.

1.4 Place of Maharashtra in the economic development of India.

1.5 Practical applications.

Module 2: Agricultural Development of Maharashtra

(Hours: 15, Credits: 1)

2.1 Significance of agriculture in the economy of Maharashtra: contribution to SGDP, land use and cropping pattern, production and productivity, horticulture, fisheries, and livestock.

2.2 Agricultural finance: credit provided by banks and financial institutions, crop insurance, agriculture in the Maharashtra state budget.

2.3 Irrigation in Maharashtra: watershed development programmes, Jalyukt Shivar Abhiyan, and the Pani Foundation movement.

2.4 Agrarian distress in Maharashtra and agricultural policy of Maharashtra.

2.5 Practical applications.

Module 3: Industry and Service Sector of Maharashtra

(Hours: 15, Credits: 1)

3.1 Role of MIDC, SICOM, and MSFC in industrial development.

3.2 Strategies for industrial development in Maharashtra: Special Economic Zones (SEZs) and Foreign Direct Investment (FDI).

3.3 Role of the service sector in economic development and government initiatives for service sector development.

3.4 Regional disparities in Maharashtra: causes and remedies.

3.5 Practical applications.

Module 4: HDI, Infrastructure, and Public Finance

(Hours: 15, Credits: 1)

4.1 Human development in Maharashtra.

4.2 Infrastructure in the economy of Maharashtra.

4.3 Revenue and expenditure: growth and composition.

4.4 Public debt: growth and composition; trends in fiscal deficit.

4.5 Practical applications.

List of Readings / References

1. Government of Maharashtra. *Economic Survey of Maharashtra*. Various issues.
2. Government of Maharashtra. *Yojana Magazine*. Various issues.
3. Kurulkar, R. P. (1997). *Maharashtrachi Arthvyavastha* (Marathi). Vidya Prakashan, Ruikar Marg, Nagpur.
4. Maharashtra Rajya Niyojan Mandal. (2002). *Manav Vikas Ahawal*, Maharashtra.
5. Mungekar, Bhalchandra. (2003). *The Economy of Maharashtra: Changing Structure and Emerging Issues*. Dr. Ambedkar Institute of Social and Economic Change, Mumbai.
6. Pansare, Govind. (2012). *Maharashtrachi Arthik Pahani: Paryayi Drushtikon*.
7. Patil, J. F. (2010). *Suvarna Mahotsavi Maharashtrachi Badalati Arthvyavastha* (Marathi). Abhijit Pratap Pawar, Sakal Papers Ltd., Pune.
8. Reserve Bank of India. *Handbook of Statistics on the Indian Economy*.
9. World Bank. (2002). *India: Maharashtra – Reorienting Government to Facilitate Growth and Reduce Poverty*.

M.R.S. Part-II, Semester-III

Course Name	:Rural Project Management
Course Type	:Major Elective
Course Number	:ME4
Course Code	:NMRSU0325MEL532I4
Course Credits	: 4
Marks	:Semester End:60 Internal Assessment:40 Total Marks: 100

Course Learning Outcomes (CLOs): After completion of this course, students will be able to:

- Acquaint themselves with the basic concepts of rural project management.
- Gain deeper insight into the components of project planning.
- Develop skills related to project monitoring and evaluation.
- Link project design with results, monitoring, and evaluation of rural development projects.

Module 1: Introduction to Rural Project Management (Hours: 15, Credits: 1)

- 1.1 Concept of plan, project, and programme.
- 1.2 Interrelationship between plan, programme, project, and activities.
- 1.3 Importance of project management and characteristics of a project.
- 1.4 Skills, role, and responsibilities of a project manager; characteristics of a successful project manager.
- 1.5 Practical applications: related case studies and reports.

Module 2: Project Proposals (Hours: 15, Credits: 1)

- 2.1 Basic and supportive information required for a project.
- 2.2 Rules governing the preparation of a project proposal.
- 2.3 Common format of a project proposal.
- 2.4 Preparing a concept note and writing a detailed project proposal; developing a fund-raising proposal and modes of approaching funding sources.
- 2.5 Practical applications: related case studies and reports.

Module 3: Project Planning

(Hours: 15, Credits: 1)

- 3.1 Project planning and project planning matrix.
- 3.2 Types of projects.
- 3.3 Project life cycle.
- 3.4 Project planning and scheduling techniques; tools for project planning.
- 3.5 Practical applications: related case studies and reports.

Module 4: Project Monitoring and Evaluation

(Hours: 15, Credits: 1)

- 4.1 Concept, differences, types, objectives, and basis of monitoring and evaluation.
- 4.2 Results-based monitoring.
- 4.3 Results-based evaluation.
- 4.4 Monitoring and evaluation: objectives, methods, and tools of monitoring and evaluation.
- 4.5 Practical applications: related case studies and reports.

List of Readings / References

1. Patel, Bhavesh M. (2000). *Project Management*. New Delhi: Vikas Publishing House Pvt. Ltd.
2. IFAD. (2002). *A Guide for Project Monitoring and Evaluation: Managing for Impact in Rural Development*. Rome: International Fund for Agricultural Development.
3. Nagarajan, K. (2001). *Project Management*. New Delhi: New Age International (P) Ltd.
4. Chandra, Prasanna. (2020). *Projects: Planning, Analysis, Financing, Implementation and Review*. New Delhi: Tata McGraw-Hill Publishing Company Ltd.
5. Project Management Institute. (2017). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (6th Edition).
6. Shaghil, M., & Mushtaque, M. (1993). *Project Formulation: Concepts and Approaches*. Jaipur: Printwell.
7. Laurence, S., John, M., & Susie, T. (2011). *Project Planning and Management*. London: Centre for Development, Environment and Policy.
8. RPRLGSP. (2009). *Manual on Project Cycle Management: Guidelines on Identification, Design, and Implementation of Successful Local Authority Projects*.
9. UNDP. (2011). *National Implementation by the Government of UNDP-Supported Projects: Guidelines and Procedures*. United Nations Development Programme.
10. Desai, Vasant. (1997). *Project Management*. Mumbai: Himalaya Publishing House.

M.R.S. Part-II, Semester-III

Course Name	:Research Project/Field Work -II		
Course Type	:Research Project/Field Work -II		
Course Number	:RP		
Course Code	:NMRSU0325RML532I		
Course Credits	: 4		
Marks	:Semester End:60	Internal Assessment:40	Total Marks: 100

Course Learning Outcomes (CLOs) after successful completion of this course / field project, students will be able to:

- Identify research problems and formulate appropriate research objectives.
- Choose appropriate research methodology with proper tools and techniques.
- Analyze and interpret data collected from different sources.
- Make informed decisions and draw valid conclusions based on data analysis.

Instructions for Teachers and Students While Conducting the Research Project

1. The selection of the research project shall be related to the courses in the concerned subject.
2. A separate research project shall be formally assigned (in written form) by the concerned teacher to each student. Common or group projects are not permitted.
3. Students shall prepare the research report based on fieldwork and the study of current trends in economics, under the guidance of the allotted project guide.
4. Submission of the Research Project Report, duly signed and certified by the concerned teacher/guide, is a prerequisite for appearing for the Viva-Voce examination.
5. Two bound copies of the Research Project Report shall be submitted before the Viva-Voce examination. One copy shall be retained by the department, and the remaining copy shall be returned to the student.

Important Notes for Teachers

1. Prepare an appropriate Permission Letter format to be issued to students for undertaking the Research Project under the guidance of the concerned teacher.
2. Prepare a standardized Research Report Writing Format. Ensure that the Title Page and Certificate Page are common for all students. Uniformity should be maintained in the remaining sections of the report.

Format of the Research Project Report

Chapter I: Introduction and Research Methodology

Chapter II: Review of Literature / Theoretical Background / Conceptual Framework

Chapter III: Profile of the Organization / Study Area

Chapter IV: Analysis and Interpretation of Data

Chapter V: Conclusion (including observations, findings, suggestions, and conclusions)

M.R.S. Part-II, Semester-IV

Course Name	: Artificial Intelligence in Rural Governance and Development		
Course Type	: Major Mandatory		
Course Number	: MM13		
Course Code	: NMRSU0325MML532J1		
Course Credits	: 4		
Marks	: Semester End: 60	Internal Assessment: 40	Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to;

- Understand the basic concept and scope of AI in simple terms.
- Recognize how AI supports better governance in rural areas.
- Identify applications of AI in farming, weather, and rural economy.
- Discuss the challenges and future scope of using AI in rural development.

Module 1: Introduction to Artificial Intelligence (Hours - 15, Credit - 1)

- 1.1 Meaning, history and basic concept of Artificial Intelligence (AI) explained in simple terms.
- 1.2 Basic differences between Artificial Intelligence, Machine Learning, and Automation.
- 1.3 Role and presence of Artificial Intelligence in daily life and digital services.
- 1.4 Importance of Artificial Intelligence in rural governance, administration, and service delivery.
- 1.5 Practical and Applications – review of case studies and reports related to AI use in rural contexts.

Module 2: Key Concepts of Artificial Intelligence (Hours – 15, Credit – 1)

- 2.1 Data and information: meaning, types, and importance for AI-based rural governance and development.
- 2.2 Automation, intelligence, and artificial intelligence: basic concepts and differences with reference to rural services.
- 2.3 Algorithms and decision rules: step-by-step logic used in AI systems for governance and administration.
- 2.4 AI systems and decision-support tools: role of AI in planning, monitoring, and service delivery in rural areas.
- 2.5 Practical and Applications – related case studies and reports on AI-enabled rural governance initiatives.

Module 3: Artificial Intelligence in Agriculture and Rural Economy

(Hours – 15, Credit – 1)

- 3.1** Crop monitoring and disease detection using AI-based tools and digital images in agriculture.
- 3.2** Weather forecasting and smart irrigation systems supported by AI for efficient resource management.
- 3.3** AI-based price forecasting, market intelligence, and digital market linkages for rural producers.
- 3.4** Case studies on the application of AI in agriculture and rural economy from India and other countries.
- 3.5** Practical and Applications – review of reports and real-life examples of AI use in agriculture and rural markets.

Module 4: Ethical Use, Challenges, and Future Scope of Artificial Intelligence (Hours – 15, Credit – 1)

- 4.1** Benefits and potential risks of using AI in rural governance and development.
- 4.2** Issues of data privacy, data ownership, and social inclusion in AI-based rural systems.
- 4.3** Challenges related to the rural–urban digital divide and unequal access to AI technologies.
- 4.4** Future scope of AI for social good, inclusive development, and smart village initiatives.
- 4.5** Practical and Applications – discussion of policy reports, ethical guidelines, and future-oriented AI initiatives.

LIST FOR READING:

1. Goswami, S., Das, A. K., & Chakrabarti, A. (2024). *AI for everyone: A beginner's handbook for artificial intelligence*. Pearson.
2. Mausam. (n.d.). *An introduction to artificial intelligence [Lecture notes]*. Department of Computer Science and Engineering, Indian Institute of Technology Delhi.
3. Rich, E., Knight, K., & Nair, S. B. (n.d.). *Artificial intelligence*. McGraw Hill Education.
4. Russell, S., & Norvig, P. (2023). *Artificial intelligence: A modern approach (4th ed.)*. Pearson Education.
5. Taulli, T. (n.d.). *Prompt engineering for generative AI: ChatGPT, LLMs, and beyond*. Apress.
6. Thareja, R. (2023). *Artificial intelligence: Beyond classical AI*. Pearson Education.

M.R.S. Part-II, Semester-IV

Course Name	: Cooperatives and Rural Development
Course Type	: Major Mandatory
Course Number	: MM14
Course Code	: NMRSU0325MML532J2
Course Credits	: 4
Marks	: Semester End: 60 Internal Assessment: 40 Total Marks: 100

Course Learning Outcomes: After completion of this course, student will be able to;

- Compare the successful practices of co-operation across the countries.
- Extend co-operative principles in governance and administration of co-operative organization.
- Analyze the functioning of different types Credit and Non-Credit Co-operative Societies.
- Demonstrate the importance of co-operative institutions.

Module 1: Principles and Practices of Co-operation

(Hours - 15, Credit - 1)

1.1 Co-operation: Definition, Nature, Scope, Features, Co-operation and Capitalism, Co-operation and Socialism.

1.2 Co-operative Principles-Scheultze Delitsche and Raiffeisen, ICA Principles.

1.3 Co-operative Thinkers - Robert Owen, Charles Fourier, Paul Lambert, Frederick Nicholson, D. R. Gadgil and Vaikunthbhai Mehta, Yashwantrao Chavan.

1.4 Practices of Co-operation in other countries - Germany, Britain, Denmark, Israel.

1.5 Practical and Applications- Related Case studies and Reports.

Module 2: Co-operative Governance (Hours - 15, Credit - 1)

2.1 Origin and History of cooperative Movement in India and Maharashtra.

2.2 Henry Fayol's General Principles of Management, Theories of Leadership, Qualities of Good Leadership.

2.3 Powers, Functions and Role of Secretary/Managing Director, Board of Directors and Registrar

2.4 Professionalization of Co-operative Management, Types and procedure of General Body Meetings, Cooperative Education and Training.

2.5 Practical and Applications- Related Case studies and Reports.

Module 3: Credit and Non-Credit Co-operative Societies

(Hours - 15, Credit - 1)

3.1 Structure and Functions of Short Term and Long Term Co-operative Credit Societies - SCB's, DCCB's, PAC's, SCARDB's and PCARDB's.

3.2 Urban Co-operative Banks- Organization, Functions and Problems.

3.3 Organization, Functions and Problems of Agricultural Co-operatives - Co-operative Processing, Co-operative Marketing, Co-Farming.

3.4 Organization, Functions and Problems of Non-Agricultural Co-operatives - Consumer Co-operatives, Housing Co-operatives, Labour Co-operatives, Fisheries Cooperatives.

3.5 Practical and Applications- Related Case Studies and Reports.

Module 4: Co-operative Institutions and Commissions

(Hours - 15, Credit - 1)

4.1 NABARD, NCUI, NCDC.

4.2 NCCF, NAFED, NDDB.

4.3 KVIC, IFFCO, KRIBHCO.

4.4 Important Committees on Cooperatives.

4.5 Practical and Applications- Related Case studies and Reports.

LIST FOR READING:

1. Bedi, R. D., "Theory, History and Practice of Co-operation with reference to Cooperation in Foreign countries".
2. Dr. R. C. Dwivedi, (1997), "Co-operative Identity, Concept and Reality", M/S
3. Govt. of Maharashtra, Cooperative Movement at a Glance (Latest Annual
4. Hajela T.N. (2007), "Co-operation Principles Problems and Practice of Cooperation" Ane Books Private Ltd., New Delhi.
5. Jugale, V. B., Koli, P. A., "Reasserting the Co-operative Movement", Serials
6. Kamat, G. S., "New Dimensions in Cooperatives", Himalaya Publishing House
7. Mathur B.S. (1999), "Cooperation in India", Sahitya Bhavan Publications, Agra. Paramount Publishing House, New Delhi
8. Patil, J. F. & Patil, V. S., "Problems and Prospects of Co-operative Movement", Publications, New Delhi, (2005)
9. Ramkishan.Y (2003), "Management of Cooperatives" Jaico Publishing House, Mumbai
10. Report of High Powered Committee on Cooperatives (2009).

M. R. S. Part-II, Semester- IV

Course Name	Indian Rural Livelihoods		
Course Type	Major Mandatory		
Course Number	MM15		
Course Code	NMRSU0325MML532J3		
Course Credits	4		
Marks	Semester End: 60	Internal Assessment: 40	Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to;

- Develop innovative livelihood models in Agriculture, Horticulture, Floriculture, Sericulture and Forestry.
- Illustrate the rural labour market and their problems.
- Demonstrate the rural marketing pros and cons.
- Evaluate the importance of rural infrastructure in rural development.

Module 1: Introduction to Rural Resources

(Hours - 15, Credit - 1)

1.1 Rural livelihood: Concept and Indicators, Rural Resources - land, soil, climate, water and forests.

1.2 Production Systems - Agriculture, Horticulture, Floriculture, Sericulture, Forestry;

1.3 Agriculture– Role, Nature and Cropping Pattern, Agricultural Production and Productivity, Agricultural Inputs and Green Revolution, Agricultural Prices.

1.4 Non-farm Activities – Traditional and innovative techniques.

1.5 Practical and Applications – Related Case studies and Reports.

Module 2: Rural Labour Market

(Hours - 15, Credit - 1)

2.1 Features of Demographic Dynamics of India.

2.2 Poverty and Inequality - types, measurement, nature and dimensions in India.

2.3 Employment and Unemployment in India, Labour Force Growth and Occupational Pattern.

2.4 Agricultural wages and its Disparities, Non-agricultural rural employment- trends and determinants.

2.5 Practical and Applications – Related Case studies and Reports.

Module 3: Rural Infrastructure

(Hours - 15, Credit - 1)

3.1 Concept and role of rural infrastructure, Social Infrastructure – Education and Health; Recent Trends and Policies.

3.2 Transport and Communication - Role in Economic Development.

3.3 Energy - Conventional and Non-Conventional sources of Energy.

3.4 Irrigation and Water Management – Policies and Programmes, Progress and Problems, Potable and non-potable Water.

3.5 Practical and Applications – Related Case studies and Reports.

Module 4: DAY-NRLM

(Hours - 15, Credit - 1)

4.1 DAY-NRLM - Genesis, Mission and Features

4.2 NRLM - Components

4.3 NRLPS - Objectives

4.4 Maharashtra State Rural Livelihood Mission

4.5 Practical and Applications – Related Case studies and Reports.

LIST FOR READING

1. Agarwal A.N. and Kundan K.L, “Agricultural Problems of India”, Vikas Publication House, New Delhi.
2. Datt and Sundaram (2008), “Indian Economy”, S. Chand & Company, New Delhi.
3. Hohn W. Penson, Oral Capps, C. Parr Rosson, (1999), “Introduction to Agricultural Economics”, Prentice Hall, New Jersey.
4. Khusro A.M. (1968), “Leading issues in Agricultural Development”, Allied Publishers, Bombay.
5. Mishra and Puri, (2008), “Indian Economy” Himalaya Publishing House, New Delhi.
6. Papola T.S. (1982), “Rural Industrialization in India”, Himalaya Pub. House, Delhi.
7. Vaidhanathan A. (1995), “The Indian Economy: Crisis, Response and Prospects”, Orient Lognmans, New Delhi.
8. Wanmali S, and C, Ramasamy (Edn) (1995), “Developing Rural Infrastructure”, McMillan, New Delhi.

M.R.S. Part-II, Semester-IV

Course Name	Environment and Sustainable Development		
Course Type	Major Elective		
Course Number	ME1		
Course Code	NMRSU0325MEL532J1		
Course Credits	4		
Marks	SemesterEnd:60	Internal Assessment:40	TotalMarks:100

Course Learning Outcomes (CLOs): After completion of this course, students will be able to:

- Understand the concept of environment.
- Get acquainted with the terms ecosystems and ecology.
- Comprehend the complexity, various forms, and dimensions of development and environmental issues.
- Understand the basic concept of sustainable development and its environmental, social, and economic dimensions.

Module 1: Ecosystems and Ecology

(Hours: 15, Credits: 1)

- 1.1 Ecosystem: meaning, types, and functions.
- 1.2 Components of ecosystem: producers, consumers, and decomposers.
- 1.3 Fundamentals of ecology.
- 1.4 Food chain, food web, and ecological pyramid.
- 1.5 Practical applications: related case studies and reports.

Module 2: Environmental Pollution and Its Management

(Hours: 15, Credits: 1)

- 2.1 Meaning, causes, effects, and control measures of:
(a) Air pollution, (b) Water pollution, (c) Soil pollution, (d) Noise pollution
- 2.2 Carbon credit.
- 2.3 Solid waste management: causes, effects, and control of wastes.
- 2.4 Disasters and their management: floods, earthquakes, cyclones, and landslides.
- 2.5 Practical applications: related case studies and reports.

Module 3: Sustainable Development

(Hours: 15, Credits: 1)

3.1 Concept of sustainable development.

3.2 Indicators and dimensions of sustainable development.

3.3 Sustainable Development Goals (SDGs).

3.4 Green Gross Domestic Product (Green GDP), sustainable agriculture, and green economy.

3.5 Practical applications: related case studies and reports.

Module 4: Environmental Issues and Remedies

(Hours: 15, Credits: 1)

4.1 Problems related to energy, water, rainwater harvesting, and watershed management.

4.2 Global warming, climate change, acid rain, and ozone layer depletion: causes, effects, and remedies.

4.3 Environmental audit, Environmental Impact Assessment (EIA), GIS, and remote sensing.

4.4 Environmental laws: Central Pollution Control Board and State Pollution Control Boards.

4.5 Practical applications: related case studies and reports.

List of Readings / References

1. Brunner, R. C. (1989). *Hazardous Waste Incineration*. McGraw-Hill Inc.
2. Dahiya, M. P. (2009). *Biodiversity Conservation*. Vedams Books (P) Ltd., New Delhi.
3. Fulekar, M. H., Pathak, B., & Kale, R. K. (2013). *Environment and Sustainable Development*. Springer.
4. Mahajan, S. P. (2009). *Air Pollution and Control*. The Energy and Resources Institute (TERI).
5. Rana, S. V. S. (2008). *Energy, Ecology and Environment*. I.K. International Publishing House Pvt. Ltd., New Delhi.
6. Singh, N. (2021). *Environment and Sustainable Development*. ANU Books.
7. Verma, M. K. (2021). *Environment and Sustainable Development: Perspectives and Issues*. Routledge India.
8. Kamble, P. S., & Ovhal, V. V. (2018). *Green Economy: Where India Stands in the World?* ABS Publication, Varanasi, UP.
9. Karpagam, M. (2007). *Environmental Economics: A Textbook*. Sterling Publishers Pvt. Ltd., New Delhi.
10. Hanley, N., Shogren, J., & White, B. (2006). *Environmental Economics in Theory and Practice*. Macmillan International.
11. Singh, G., & Shishodia, A. (2007). *Environmental Economics: Theory and Applications*. Sage Publications.
12. Santra, S. C. (2017). *Environmental Science*. New Central Book Agency.

M.R.S. Part-II, Semester-IV

Course Name	Rural Innovations and Startups		
Course Type	Major Elective		
Course Number	ME2		
Course Code	NMRSU0325MEL532J2		
Course Credits	4		
Marks	Semester End:60	Internal Assessment:40	Total Marks:100

Course Learning Outcomes (CLOs): After completion of this course, students will be able to:

- Understand innovations in rural technologies and services.
- Identify different perspectives on sectoral innovations.
- Critically evaluate ideas, creativity, and analyze problems using design thinking.
- Identify rural start up opportunities and initiate business startups.

Module 1: Fundamentals of Innovation

(Hours: 15, Credits: 1)

1.1 Fundamentals of innovation.

1.2 4 Cs of innovation: creativity, critical thinking, communication, and collaboration.

1.3 Creativity and problem solving; design thinking.

1.4 Sectoral innovations: rural innovation and frugal innovation.

1.5 Practical applications: related case studies and reports.

Module 2: Rural Innovations

(Hours: 15, Credits: 1)

2.1 Innovations in rural technologies.

2.2 Innovations in rural services.

2.3 Basics of intellectual property and business law.

2.4 Success rate of innovations.

2.5 Practical applications: related case studies and reports.

Module 3: Fundamentals of Entrepreneurship

(Hours: 15, Credits: 1)

3.1 Business plan: interviews, customer surveys, secondary research, idea generation, and commercialization of products and services.

3.2 Start-ups: lean start-up approach.

3.3 Social entrepreneurship.

3.4 Start-up resilience.

3.5 Practical applications: related case studies and reports.

Module 4: Start-up Case Studies

(Hours: 15, Credits: 1)

4.1 Case studies on dairy technology, organic farming, agro-processing, and honey processing.

4.2 Start-up accelerators.

4.3 Corporate and government funding schemes for rural start-ups.

4.4 Rural start-up funding agencies: SIDBI.

4.5 Practical applications: related case studies and reports.

List of Readings / References

1. Fogler, H. S., & LeBlanc, S. E. *Strategies for Creative Problem Solving*. Prentice Hall.
2. Lumsdaine, E., & Lumsdaine, M. *Creative Problem Solving*. McGraw Hill.
3. Goldenberg, J., & Mazursky, D. (2002). *Creativity in Product Innovation*. Cambridge University Press.
4. Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. Harper Business.
5. Kelley, T., & Kelley, D. (2013). *Creative Confidence: Unleashing the Creative Potential Within Us All*. Crown Business.
6. Cross, N. *Design Thinking: Understanding How Designers Think and Work*. Bloomsbury.
7. Goldenberg, J., & Mazursky, D. (2002). *Creativity in Product Innovation*. Cambridge University Press.
8. Liedtka, J., & Ogilvie, T. (2014). *Designing for Growth Field Book*. Columbia Business School Publishing.
9. *HBR's 10 Must Reads on Design Thinking*. (2020). Harvard Business Review Press.
10. Burnett, B., & Evans, D. (2016). *Designing Your Life*. Knopf.

M.R.S. Part-II, Semester-IV

Course Name : Rural Analytics
Course Type : Major Mandatory
Course Number : ME3
Course Code : NMRSU0325MEL532J3
Course Credits : 4

Marks : Semester End: 60 Internal Assessment: 40 Total Marks: 100

Course Learning Outcomes: After completion of this course, students will be able to;

- Understand the concept and importance of analytics in rural development.
- Identify data sources and indicators used for rural planning and governance.
- Apply basic analytical thinking to interpret rural socio-economic data.
- Use analytics for evidence-based decision-making in rural development programmes.

Module 1: Introduction to Rural Analytics

(Hours – 15, Credit – 1)

- 1.1: Meaning and concept of rural analytics and its relevance to rural development.
- 1.2: Difference between data, information, analysis, and analytics in rural context.
- 1.3: Role of analytics in planning, monitoring, and evaluation of rural development programmes.
- 1.4: Importance of evidence-based policymaking in rural governance.
- 1.5: Practical and Applications – review of basic rural development reports and analytical dashboards.

Module 2: Data Sources and Indicators

(Hours – 15, Credit – 1)

- 2.1: Types of data used in rural analytics: demographic, economic, social, and environmental data.
- 2.2: Major data sources for rural analytics: Census of India, NSS/NFHS, MOSPI, and administrative records.
- 2.3: Key rural development indicators: poverty, employment, education, health, agriculture, and infrastructure.
- 2.4: Data quality issues: accuracy, timeliness, coverage, and limitations of rural data.
- 2.5: Practical and Applications – interpretation of selected rural datasets and indicators.

Module 3: Analytical Approaches in Rural Development

(Hours – 15, Credit – 1)

3.1: Descriptive analytics for understanding rural conditions and trends.

3.2: Comparative analysis of villages, blocks, and districts using indicators.

3.3: Use of charts, tables, maps, and dashboards for rural data presentation.

3.4: Role of analytics in identifying gaps, priorities, and vulnerable groups.

3.5: Practical and Applications – simple analysis of rural development data using published reports.

Module 4: Applications, Challenges, and Future Scope

(Hours – 15, Credit – 1)

4.1: Applications of rural analytics in agriculture, health, education, and livelihood programmes.

4.2: Use of analytics in monitoring schemes such as MGNREGA, PMAY-G, NRLM, and PMFBY.

4.3: Challenges in rural analytics: data gaps, digital divide, capacity constraints, and ethical issues.

4.4: Future scope of rural analytics: smart villages, data-driven governance, and integration with AI and ML.

4.5: Practical and Applications – case studies of analytics-driven rural development initiatives in India.

LIST FOR READING:

1. Bishnu, & Bhattacharjee, V. (n.d.). *Data analysis: Using statistics and probability with R language*. Publisher.
2. Flach, P. (2012). *Machine learning: The art and science of algorithms that make sense of data*. Cambridge University Press.
3. Hastie, T., Tibshirani, R., & Friedman, J. (2012). *The elements of statistical learning: Data mining, inference, and prediction* (2nd edition). Springer.
4. Dinov, I. D. (2023). *Data science and predictive analytics: Biomedical and health applications using R* (Latest ed.). Springer.
5. Kumar, D., Bassill, N. P., & Rani, K. (Eds.). (2026). *Data analytics and remote sensing-based analysis for sustainable development*. Springer Nature Switzerland. (Advances in Science, Technology & Innovation Series).
6. Salvati, L. (2026). *Rethinking rural: Data-driven approaches for sustainable development*. Elsevier Science.

M.R.S. Part-II, Semester-IV

Course Name	NGO Management and CSR		
Course Type	Major Mandatory		
Course Number	ME4		
Course Code	NMRSU0325MEL532J4		
Course Credits	4		
Marks	Semester End:60	Internal Assessment:40	Total Marks:100

Course Learning Outcomes (CLOs): After completion of this course, students will be able to:

- Explain basic knowledge of NGOs and their programmes with developmental perspectives.
- Understand the process of NGO registration and manage the functioning of NGOs.
- Understand the perspective and legal framework of Corporate Social Responsibility (CSR).
- Explain the role of CSR in social development.

Module 1: NGOs and Voluntary Organizations (VOs) in India

(Hours: 15, Credits: 1)

1.1 Nature, concept, and definitions of NGOs: role, importance, need, and scope of NGOs.

1.2 Concept of voluntary organizations, producer organizations (POs), community-based organizations (CBOs), and trusts.

1.3 Historical growth of voluntary organizations in India and recent trends in the voluntary sector with reference to rural development.

1.4 Changing scenario of NGOs in India.

1.5 Practical applications: visit NGOs working in different fields and submit a report.

Module 2: Registration and Management of NGOs

(Hours: 15, Credits: 1)

2.1 Preparation of documents: Memorandum of Association, bye-laws, governing body, and contents of affidavit.

2.2 The Societies Registration Act, 1860.

2.3 Preparation and maintenance of various office documents.

2.4 Foreign Contribution Regulation Act (FCRA): provisions and implications.

2.5 Financial sources and preparation of project proposals for financial assistance.

Module 3: Concept, Meaning, Evolution, and Approaches of CSR in India (Hours: 15, Credits: 1)

3.1 Concept, meaning, basic elements, characteristics, and scope of CSR.

3.2 Traditional corporate philanthropy and social responsibility models.

3.3 Emerging perspectives of CSR: Reputation capital: Eco-social perspective, Rights-based perspective, Human rights and CSR.

3.4 Millennium Development Goals (MDGs) and CSR.

3.5 Practical applications: related case studies and reports.

Module 4: CSR and Social Development (Hours: 15, Credits: 1)

4.1 Corporate governance and CSR: various models, CSR policy, and guidelines.

4.2 Companies Act, 2013: relevant provisions related to CSR.

4.3 CSR and social development issues and challenges.

4.4 Community development and social development through CSR.

4.5 Practical applications: related case studies and reports.

List of Readings / References

1. Lawani, B. T. (1999). *NGOs in Development*. Rawat Publications, Jaipur.
2. Chandra & Snehalata. (2001). *Non-Government Organisations*. Kanishka Publishers, New Delhi.
3. Lewis, D., & Tina, W. (2003). *Development NGOs and the Challenge of Change*. Rawat Publications, Jaipur.
4. Rana, K. (2001). *People's Participation and Voluntary Action*. Kanishka Publishers, New Delhi.
5. KPMG in India & ASSOCHAM. (2008). *CSR: Towards a Sustainable Future*. White Paper, International Summit, New Delhi.
6. Sujatha, B. (2006). *Social Audit: Concepts and Practices*. ICFAI University Press, Hyderabad.
7. Baxi, C. V., & Prasad, A. (2005). *Corporate Social Responsibility: Concepts and Cases – The Indian Experience*. Excel Books, New Delhi.
8. Crowther, D., & Jatana, R. (2005). *International Dimensions of CSR (Vol. I)*. ICFAI University Press, Hyderabad.

M.R.S. Part-II, Semester-IV

Course Name	Research Project/Field Work -III
Course Type	Research Project/Field Work -III
Course Number	RP
Course Code	NMRSU0325FPL532J
Course Credits	6
Marks	Field Project Report: 90 Internal Assessment (Viva Voce):60 Total Marks:150

Course Learning Outcomes (CLOs): After completion of this course, students will be able to:

- Identify research problems and formulate objectives.
- Choose appropriate methodology with proper tools and techniques.
- Analyse and interpret data collected from different sources.
- Make decisions or draw conclusions based on data analysis.

Instructions for Teachers and Students while doing Field Project

1. Selection of the research project should be related to the courses in the concerned subject.
2. A separate research project should be formally assigned (in written form) by the concerned teacher to every student. It should not be done collectively.
3. Students are required to prepare the research project report based on fieldwork and studying the current trends in economics, under the guidance of the project guide.
4. Submission of the Research Project Report, duly signed and certified by the concerned teacher/guide, is a prerequisite for appearing in the Viva-Voce examination.
5. Two copies of the Research Project Report in bound format should be submitted before the Viva-Voce. One copy will be retained by the department, and the remaining copy will be returned to the student.

Important Notes for Teachers

1. Prepare an appropriate format of Permission Letter to be given to the student to carry out the Field Project under the guidance of the concerned teacher.
2. Prepare an appropriate format for writing the Research Project Report. Ensure that the First Page and Certificate Page are common for all students. In the remaining part, try to maintain uniformity.

Suggested Format of Research Project Report

Chapter I: Introduction and Research Methodology

Chapter II: Review of Literature / Theoretical Background / Conceptual Framework

Chapter III: Profile of the Organization / Area

Chapter IV: Analysis and Interpretation of the Data

Chapter V: Conclusion – including observations, findings, suggestions, and conclusions