



# University of Science & Technology Meghalaya

## Department of Rural Development

### Lesson Plan

Session: 2021-2022(Odd Semester)

Program: M. A. Semester: Third

Name of the Course: **M. A. Rural Development**. Course Code: **MRD 301**

Name of the Faculty: **Dr. Papiya Dutta**

Name of the Paper: **Research Methods**

### Details Plan

Unit 1	Topic	Targeted No. of classes	Tentative Schedule Unit wise (DoC-DoE)	Tentative Pedagogy	Unit Allotted for Sessional Test	
<b>Unit 1</b>	<b>Introduction to Research Methodology</b>					
1.1	Meaning and History of Social science Research	5	05.10.21 – 09.10.21	Classroom Teaching	Test-I (8 <sup>th</sup> – 15 <sup>th</sup> November)	
1.2	Importance of Social Research	5	11.10.21 – 15.10.21			
1.3	Research temperament and qualities of a good researcher	4	16.10.21 - 20.10.21			
<b>Unit 2</b>	<b>Research Design</b>					
2.1	Research Process and Design	5	21.10.21 – 26.10.21		Unit 1 & Unit 2	
2.2	Use of Concepts, Variables, and Hypotheses	4	27.10.21 – 30.10.21			
2.3	Setting Research Objectives / Questions	6	01.11.21 – 06.11.21		Test-II (8 <sup>th</sup> – 15 <sup>th</sup> December)	
2.4	Reviewing Relevant Literature	4	16.11.21 – 19.11.21		Unit 3	
<b>Unit 3</b>	<b>Methods of data collection</b>					
3.1	Research Design: Meaning and Types	4	20.11.21 – 24.11.21			
3.2	Meaning and Types of Sampling	3	25.11.21 – 27.11.21			
3.3	Collection of Primary Data: Questionnaires, Interview Schedules, Observation Method, Case Studies, Content Analysis and Survey Methods	12	29.11.21 – 11.12.21			

3.4	Collection of Secondary Data: Historical Documents, Archival Material, Published Sources, Journals, Internet Sources, Census, NSS and Statistical Reports.	6	13.12.21 – 18.12.31		Test-III (4 <sup>th</sup> – 11 <sup>th</sup> January)
<b>Unit 4</b>	<b>Interpretation of statistical data &amp; Research Report</b>				Unit 4
4.1	Meaning and significance of interpretation	5	20.12.21 – 24.12.21		
4.2	Pre-requisites of interpretation, Sources of errors in interpretation	5	27.12.21 – 31.12.21		
4.3	Misuse of statistical concepts	3	01.01.21 – 03.12.21		
4.4	Writing Research Proposal and Report	7	12.01.21 – 19.01.21		

**Suggested Books/Reference Books:**

1. Kothari, C.R, Research Methodology, New Age Publications
2. Best J.W.andJ.V.Kahn, "Research in Education", New Delhi: Prentice Hall of India PVT Ltd. 1989
3. Kerlinger F.N. "Foundations of Behavioural Research" New Delhi, Surjeet Publications 1978
- 4.Festinger, L and D. Katz, "Research methods in the Behavioural Sciences, New York the Dryden Press 1976

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# University of Science & Technology Meghalaya

## Department of Rural Development

### Lesson Plan

Session: 2021-2022(Odd Semester)

Program: M. A.

Semester: Third

Name of the Course: M. A. Rural Development.

Course Code:MRD 302

Name of the Faculty: SaikatMajumdar

Name of the Paper: Introduction to Crop Production

### Details Plan

Unit 1	Topic	Targeted No. of classes	Tentative Schedule Unit wise (DoC-DoE)	Tentative Pedagogy	Unit Allotted for Sessional Test
<b>Unit 1</b>	<b>Introduction to Crop Production</b>				
1.1	Introduction of crops	3	05.10.21 – 07.10.21	Classroom Teaching & Demonstration	Test-I (8 <sup>th</sup> – 15 <sup>th</sup> November)  Unit 1
1.2	Classification of crops	6	08.10.21 – 14.10.21		
1.3	General Principles of crop Production: Climate, soil preparation & Tillage, Seed sowing & seed treatment	10	15.10.21 - 26.10.21		
1.4	General principles of seed production: Characteristics of good quality seed, seed certification, hybrid seed production, seed storage	8	27.10.21 – 04.11.21		
<b>Unit 2</b>	<b>Principles of crop production</b>				
2.1	Crop rotation, mixed cropping, relay cropping, inter cropping, multiple cropping	12	05.11.21 – 18.11.21	Classroom Teaching	
2.2	Basic concept of soil, classification, soil formation, soil components, soil texture, structure	6	19.11.21 – 25.11.21		

2.3	Crop protection	4	26.11.21 – 30.11.21		Test-II (8 <sup>th</sup> – 15 <sup>th</sup> December)	
2.4	Common medicinal plants & their uses	4	01.12.21 – 04.12.21			
<b>Unit 3</b>	<b>Types of farming</b>				Classroom Teaching & Demonstration	Unit 2
3.1	Organic farming, Concept, principles and methodology	8	06.12.21 – 14.12.21			
3.2	Package & practices for horticultural crops	4	15.12.21 – 18.12.21			
3.3	Techniques for horticultural plant propagation through cutting, budding, grafting, layering	8	20.12.21 – 28.12.21			
3.4	Different types of low cost inputs	6	29.12.21 – 04.01.22			Test-III (4 <sup>th</sup> – 11 <sup>th</sup> January)
<b>Unit 4</b>	<b>Practice</b>				Demonstration	Unit 3
4.1	Identification of seed, crops, fertilizers	5	05.01.22 – 10.01.22			
4.2	Preparation of organic farming	3	11.01.22 – 13.01.22			
4.3	Practices of techniques for horticultural plant, propagation in different types of plants	4	17.01.22 – 20.01.22			
4.4	Visit to any seed production farm/ Agricultural farm/ KVKs	4	21.01.22 – 25.01.22			

**Suggested Books/Reference Books:**

1. Hand Book of Agriculture, ICAR
2. Hand Book of Horticulture, ICAR

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## Department of Rural Development

### Lesson Plan

Session: 2021-2022(Odd Semester)

Program: M. A.

Semester: Third

Name of the Course: M. A. Rural Development.

Course Code:MRD 303 (a)

Name of the Faculty: Dr. Sanjib Kumar Dutta

Name of the Paper: Population and Development

### Details Plan

Unit 1	Topic	Targeted No. of classes	Tentative Schedule Unit wise (DoC-DoE)	Tentative Pedagogy	Unit Allotted for Sessional Test
Unit 1	<b>Concept of Demography</b>				
1.1	Meaning and scope of demography	3	05.10.21 – 07.10.21	Classroom Teaching	Test-I (8 <sup>th</sup> – 15 <sup>th</sup> November)  Unit 1 & Unit 2
1.2	Components of population growth and their interdependence	5	08.10.21 – 13.10.21		
1.3	Measures of population change; Structure, distribution and sources of population data	6	14.10.21 - 20.10.21		
1.4	Population and development	6	21.10.21 – 27.10.21		
Unit 2	<b>Theories of Demography</b>				
2.1	Theories of population – Malthus	3	28.10.21 – 30.10.21		
2.2	Optimum theory of population	5	01.11.21 –		

			05.11.21		
2.3	Theory of demographic transition – Views of Meadows	6	06.11.21 – 12.11.21	Classroom Teaching	Test-II (8 <sup>th</sup> – 15 <sup>th</sup> December)
2.4	Enke and Simon	2	13.11.21 – 15.11.21		
<b>Unit 3</b>	<b>Population &amp; Resource</b>				
3.1	Importance of study of fertility: TFR, GRR and NRR	8	16.11.21 – 24.11.21	Classroom Teaching	Unit 3
3.2	Levels and trends of fertility in more and less developed countries	5	25.11.21 – 30.11.21		
3.3	Factors affecting fertility	3	01.12.21 – 03.12.21		
3.4	Nuptiality – Concept and analysis of marital status, single mean age at marriage	6	06.12.21 – 11.12.21		
3.5	Synthetic cohort methods, Trends in age at marriage	5	13.12.21 – 17.12.21		
<b>Unit 4</b>	<b>Life Table</b>				
4.1	Mortality – Death rates, crude and age-specific, Mortality at birth and infant mortality rate; levels and trends in more and less developed countries	12	18.12.21 – 03.01.22	Classroom Teaching	Unit 4
4.2	Life table – Construction and uses	4	04.01.22 – 07.01.22		
4.3	Concepts of stable population	3	08.01.22 – 11.01.22		
4.4	Methods of population projection: Concept and types – Temporary, internal and international	6	12.01.22 – 18.01.22		

**Suggested Books/Reference Books:**

1. Agarwala, S.N, (1977), “India’s Population Problem”, Tata McGraw Hill
2. Boguc, D.J. (1969), “Principles of Demography”, Wiley

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Kumar Dutta

Sanjib

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## University of Science & Technology Meghalaya

Department of Rural Development

### Lesson Plan

Session: 2021-2022(Odd Semester)

Program: M. A.

Semester: Third

Name of the Course: M. A. Rural Development.

Course Code:MRD 303 (b)

Name of the Faculty: Dr. ShwetaPriyamvada

Name of the Paper: Land Resource Management

### Details Plan

Unit 1	Topic	Targeted No. of classes	Tentative Schedule Unit wise (DoC-DoE)	Tentative Pedagogy	Unit Allotted for Sessional Test
Unit 1	<b>Land &amp; its Uses</b>				
1.1	Land Use Pattern, Changes in Land Use Pattern	5	05.10.21 – 09.10.21	Classroom Teaching	Test-I (8 <sup>th</sup> – 15 <sup>th</sup> November)
1.2	Factors Responsible for Changes in Land Use Pattern	4	11.10.21 – 14.10.21		Unit 1 and Unit
1.3	Soils, Types of Soils, Carrying Capacity of Soils.	10	15.10.21 - 26.10.21		
1.4	Indigenous Knowledge Systems in Land Management	9	27.10.21 – 05.11.21		

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ShwetaPriyamvada

Approved by HoD Signature of the Faculty

*V. Saikia*

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Department of Rural Development

### Lesson Plan

Session: 2021-2022(Odd Semester)

Program: M. A.

Semester: Third

Name of the Course: M. A. Rural Development.

Course Code:MRD 304

Name of the Faculty: Gayatri Saikia

Name of the Paper: Rural Technology

### Details Plan

Unit 1	Topic	Targeted No. of classes	Tentative Schedule Unit wise (DoC-DoE)	Tentative Pedagogy	Unit Allotted for Sessional Test
Unit 1	<b>Research &amp; Development</b>				
1.1	Role of Science and Technology	4	05.10.21 –		Test-I



	in Rural Development		08.10.21		(8 <sup>th</sup> – 15 <sup>th</sup> November)
1.2	Rural Technology and Poverty Eradication	2	09.10.21 – 11.10.21	Classroom Teaching	Unit 1 and Unit 2
1.3	Rural Business Hubs & Technology in improving rural infrastructure	3	12.10.21 - 14.10.21		
1.4	Various organization related to innovation: CAPART, Honeybee, NIF	4	15.10.21 – 19.10.21		
<b>Unit 2</b>	<b>Rural technologies for livelihood improvement-I</b>				
2.1	Mushroom Cultivation- History of Mushroom in India and abroad	8	20.11.21 – 28.11.21	Classroom Teaching & Demonstration	Test-II (8 <sup>th</sup> – 15 <sup>th</sup> December)
2.2	Types & Nutritional value of Mushroom, Mushroom production technique, Storage and marketing problem in Mushroom, Future prospect of Mushroom production in India.	12	29.11.21 – 11.12.21		
2.3	Vermiculture- Production technique	8	12.11.21 – 20.11.21		
2.4	Factors affecting the production of vermin culture	3	22.11.21 – 24.11.21		
<b>Unit 3</b>	<b>Rural technologies for livelihood improvement-II</b>				Unit 3
3.1	Apiculture: Classification, Scope, Origin and history of Apiculture industries in India	10	25.11.21 – 06.12.21	Classroom Teaching & Demonstration	
3.2	Production techniques of honey, Diseases and pest management in apiculture	7	07.12.21 – 14.12.21		
3.3	Pisciculture- Economic values of fishes, Construction, fish preservation and processing	13	15.12.21 – 31.12.21		
3.4	Aquatic weeds and their control	4	01.01.22 – 05.01.22		Test-III (4 <sup>th</sup> – 11 <sup>th</sup> January)
<b>Unit 4</b>	<b>Advances in Rural Energy Resources &amp; MAPs</b>				Unit 4
4.1	Energy: Definition, Types of alternative sources	5	06.01.22 – 10.01.22	Classroom Teaching & Demonstration	
4.2	Solar & Wind energy- Collection, Storage and Uses, Maintenance of wind turbines	5	11.01.22 – 15.01.22		
4.3	Biomass & Biogas- Recycling, Management & Utilization	4	16.01.22 – 20.01.22		
4.4	Indigenous medicinal and Aromatic plants found in North	3	21.01.22 – 24.01.22		

East India.				
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**Suggested Books/Reference Books:**

1. S.B. Prabhath, (2012), "Technology and Rural India", Serials Publications
2. CABI, (2005), "Innovations in Rural Extension: Case Studies from Bangladesh", CABI Publishing

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Gayatri Saikia

*G. Saikia*  
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