

Course Code	Course Name	Credits
26RD604	Rural Infrastructure and Technology Mangement	04

Course Objectives

- To enable the students to understand nature of Rural Infrastructure
- To make the students learn about Rural Infrastructure and rural technology

Learning Outcomes

Upon successful completion of this course it is intended that a student will be able to:

- Remember and understand the core concept and growth of rural infrastructure, the nature and importance of rural infrastructure.
- Examine the importance of developed rural infrastructural technology and its significance in improving the conditions of rural areas.
- Evaluate the infrastructural issues and challenges and support significant policies and innovative technologies accordingly.
- Plan and support innovative technologies for rural prosperity and livelihood improvement.

Unit 1 – Rural Infrastructure (12 hrs)

Concept, components, importance of rural infrastructure, growth of rural infrastructure, Infrastructure Policy; Rural transportation, Rural Communication and Rural Energy

Unit 2 – Social Infrastructure (11 hrs)

Concept, components of Social Infrastructure, Education, Health, Drinking Water - Sanitations -Issues, problems and Remedies

Unit 3 - Rural Technology (13 hrs)

Concept of Rural Technology, Science and technology for rural development, Rural Technology and Poverty Eradication, Rural Business Hubs and Technology in improving rural infrastructure

Unit 4 – Innovative technology for Rural Development (11 hrs)

Vermiculture-Production technique; Bio-composting; Organic farming; Greenhouse; Cold storage technology of fruits and vegetables

Unit 5 – Rural Technologies for Livelihood Improvement (13 hrs)

Mushroom Cultivation- Mushroom production technique; Apiculture- Production Technique of honey, diseases and pest management in Apiculture; Pisciculture- Economic values of fishes, construction, fish preservation and processing

Reference:

1. Dutt and Sundaram- Indian Economy, S. Chand Publications, New Delhi.
2. Vasant Desai: Rural Development in India, Himlaya Publishing House, Mumbai.
3. Mishra S.K and Puri V.K Economics of Development and Planning, Himalaya Publishing House, Mumbai, 2012.
4. Sukhadeo Thorat, Samita Sirohi- Rural Infrastructure, Volume.
5. P Adinarayana Reddy- Rural Infrastructure and Development.
6. Vermiculture and Organic farming, T.V. Sathe, Daya Publishing House, New Delhi.
7. A Handbook of Organic Farming: Arun K Sharma Agro Bios India, New Delhi.

COs and Bloom's Taxonomy Level (BTL) Mapping

COs and Bloom Taxonomy Mapping- 26RD604		
Course Outcomes	On successful completion of this course, students will be able to	BTL
CO1	Remember the meaning and basic components of rural social infrastructure and technology and understands how rural infrastructure supports economic activities and improves living standards in rural areas.	K1, K2
CO2	Apply knowledge of rural infrastructure and infrastructural policy to identify key components and their roles in rural development and to analyze strategies for improving rural infrastructure.	K3
CO3	Analyze the economic, environmental, and social benefits of adopting innovative technologies in rural development and the potential barriers and limitations to implementing greenhouse technology and low-cold storage in rural areas	K4
CO4	Evaluate the effectiveness of current infrastructure policies in addressing rural development challenges and the role of rural infrastructure in promoting inclusive growth and sustainable development and assess the potential of rural technologies like mushroom cultivation, pisciculture and apiculture in diversifying rural livelihoods.	K5
CO5	Create a proposal for a comprehensive rural infrastructure development plan, considering local needs and environmental sustainability and a comprehensive plan for enhancing social infrastructure in a specific rural community, focusing on sustainable solutions and community empowerment. Design a proposal for implementing rural technology solutions in a specific rural area, focusing on enhancing infrastructure and livelihood opportunities.	K6

BTL: K1 and K2- Remembering and Understanding, K3- Applying, K 4- Analyse, K5- Evaluate and K 6 – Create

Relationship Matrix-26RD604													
Course Outcomes	Programme Outcomes (POs)						Programme Specific Outcomes (PSOs)						Mean Score of COs
	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	
CO1	2	2	3	2	2	3	2	2	3	3	3	1	2.33
CO2	3	2	3	2	3	3	2	3	2	3	2	3	2.58
CO3	2	3	1	2	2	2	2	3	3	1	2	3	2.16
CO4	3	2	1	1	2	3	3	2	2	3	2	3	2.25
CO5	2	3	3	2	2	2	3	3	1	2	2	3	2.33
Total													2.33