#### GYANMANJARI INNOVATIVE UNIVERSITY

#### GYANMANAJARI INSTITUTE OF TECHNOLOGY



Course Syllabus Gyanmanjari Institute of Technology Semester-1

Subject: Regional Planning Techniques- METTC11504

Type of course: Minor stream

Prerequisite: NIL

Rationale: Regional planning techniques ensure balanced and sustainable development across regions by addressing economic, environmental, and social challenges. They help distribute resources and infrastructure equitably, preventing disparities between urban and rural areas. Techniques like land-use planning and environmental assessments protect natural resources, while transportation planning enhances connectivity and reduces inefficiencies. By guiding urbanization and mitigating risks, regional planning reduces the impact of disasters and promotes resilient communities. It also supports economic growth by identifying strategic areas for investment and fostering social equity through access to essential services and affordable housing. These techniques provide a long-term vision for regional development, ensuring that growth is organized, sustainable, and inclusive, benefiting all stakeholders.

# **Teaching and Examination Scheme:**

| Teachi | ng Scheme Credits |    |   | Examination Marks |         |    |              |     |                |
|--------|-------------------|----|---|-------------------|---------|----|--------------|-----|----------------|
| CI .   | Т                 | P  | С | Theor             | y Marks |    | tical<br>rks | CA  | Total<br>Marks |
|        |                   |    |   | ESE               | MSE     | V  | P            | ALA |                |
| 03     | 0                 | 02 | 4 | 60                | 30      | 10 | . 20         | 30  | 150            |

Legends: CI-Class Room Instructions; T – Tutorial; P - Practical; C – Credit; ESE - End Semester Examination; MSE- M

#### **Continuous Assessment:**

| Sr.<br>No | Active Learning Activities   | Marks |
|-----------|--|-------|
| 1         | Village Planning Faculty will assign an existing village to groups of students, who will study it in the context of various facilities. After their analysis, the students will propose a plan to establish the necessary facilities. And upload on GMIU Web Portal. | 10    |

Regional Planning Techniques- METTC11504



Page 1 of 4

### GYANMANJARI INNOVATIVE UNIVERSITY

| 2 | Regional Planning Faculty will assign a region to groups of students for study and analysis using various methods. Afterward, the students will provide their suggestions for modifications and upload them to the GMIU Web Portal. | 10 |
|---|---|----|
| 3 | Smart Village Faculty will assist students in visiting a smart village. Following the visit, students will prepare a proposal to transform their own village into a smart village and upload it to the GMIU Web Portal.             | 10 |
|   | Total   | 30 |

### **Course Content:**

| Sr.<br>No | Course content  | Hrs | %<br>Weightage |
|-----------|---|-----|----------------|
| 1         | Introduction to Village Planning Nature of rural communities-Structure and forms of rural settlements, National planning, and rural development. Rural economy- Planning for the rural economic base, Agriculture, and other primary sectors. Rural Local Governments and rural Institutions in development activities- 73 <sup>rd</sup> . Constitution Amendment Act and its impact on rural development. Evaluation of rural development programs of central and state governments like MGNREGA, PMGSY, NBA, PMAY, NRIDP, NRHM, AMRUT, PURA, Bharat Nirman, etc. Planning for rural infrastructure-Energy, roads, water supply, sanitation, and rural services—Agro services. Appropriate Technology for rural development like the use of local resources, Rain water Harvesting, water recharge, and soil conservation and waste land development. Village Industries and village trade and services. | 12  | 30             |
| 2         | Introduction to Regional Planning Aims and Objectives and need for regional planning- Concept, Types, and Classification of regions. Delineation of planning regions by various Techniques-Principal component method, Composite index, Ridge line technique, Gravity potential technique, Boundary girdle method. Regional Planning and Economic Development-Backward regions and Developed regions, Characteristics and reasons for backwardness. Case study of any regional plan, Introduction to regional analysis. Linear Programming, Input and Output Analysis- Growth Model, Core-periphery models. Application of Regional techniques in District Planning   | 12  | 30             |
| 3         | Theories of Regional Development Regional Development Theories-W. Christaller (Central Place theory), Von Thunen (Theory of agricultural location), Losch (General theory of location), A.Weber (Industrial location)   | 06  | 10             |



|   | theory), and W. Isard (Theory of location and space economy).  |    |     |
|---|--|----|-----|
| 4 | Levels of Planning Multilevel planning— Needs and methods of multi-level planning in India. Growth-Foci concept, regional planning as a tool to integrate rural and urban areas. District Planning: Integrated approach to district level planning (vertical and horizontal spatial integration); Rural-Urban spatial relationship. District Development Plans— Guidelines for District Planning: Content and context and methodologies. | 08 | 20  |
| 5 | Smart Village Understanding Concept of Smart Village, Issues of Smart Village, Smart Village Performance Benchmark, Smart Village Policy and Mission, Planning and Management of Smart Village- A Case study of smart Village "PUNSARI" along with economics, Financing Smart Villages, Renewable energy in smart village.   | 07 | 10  |
|   | Total  | 45 | 100 |

# Suggested Specification table with Marks (Theory): 60

|           |                 | Distribution of (Revised Bloom |                 | S           |              |               |
|-----------|-----------------|--------------------------------|-----------------|-------------|--------------|---------------|
| Level     | Remembrance (R) | Understanding (U)              | Application (A) | Analyze (N) | Evaluate (E) | Create<br>(C) |
| Weightage | 20%             | 30%                            | 30%             | 10%         | 10%          | NA            |

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

#### **Course Outcome:**

| After learning the course, the students should be able to: |   |  |  |  |  |
|--|---|--|--|--|--|
| CO1  | CO1 Have a better understanding of dynamics of Rural Planning           |  |  |  |  |
| CO2  | Evaluate the theories pertaining to regional development                |  |  |  |  |
| CO3  | CO3 Gain a better understanding of Regional Planning techniques         |  |  |  |  |
| CO4  | CO4 Understanding the norms and practices of Regional Planning in India |  |  |  |  |

### List of Assignment

Assignment and tutorial base on above mention topic.

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### **Instructional Method:**

The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of the tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, ecourses, Virtual Laboratory

The internal evaluation will be done on the basis of Active Learning Assignment

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

# Web links and Video Lectures (e-Resources):

- 1. The Geoecologist:
  - https://www.youtube.com/c/TheGeoecologist
- 2. IIT Roorkee:
  - https://www.youtube.com/playlist?list=PLLy\_2iUCG87AAaDRVrD02Y1z44OXt5shB

#### Reference Books:

- [1] Regional Planning: Concepts, Techniques, and case-studies, R.P.Misra, 1998, Concept Publishers, New Delhi.
- [2] Regional Planning in India, Chand Mahesh and V.K. Puri, 1983, Allied Publishers, New Delhi.
- [3] Urban and Regional Planning in India, K.V. Sundaram, 1984, Vikas Publishing House, New Delhi.
- [4] Regional Policy and Regional Integration, Hansen M. (Ed), 1996, Edward Edgar U.K.
- [5] Rural Area Development, K.V. Sundaram, Concept Publishers, New Delhi.

