

### LIST OF DISCIPLINE SPECIFIC CORE COURSES OFFERED IN GEOGRAPHY FOR SEMESTERS VII and VIII

**Note:** Discipline Specific Core courses comprise courses essential to develop an understanding of the discipline and its core areas. DSC 19 will be offered in Sem VII, DSC 20 will be offered in Semester VIII

### DISCIPLINE SPECIFIC CORE COURSE – TECHNIQUES OF REGIONAL PLANNING AND DEVELOPMENT (DSC 19- PRACTICAL)

Course title & Code	Credits	Duration (Hrs per week)			Eligibility Criteria	Prerequisite
		Lecture	Tutorial	Practical/ Practice		
TECHNIQUES OF REGIONAL PLANNING AND DEVELOPMENT (DSC 19- PRACTICAL)	4	01	0	03	NIL	NIL

**Learning Objectives:** The course addresses SDG 1, 8, 9, 10 and 11

The learning objectives of this course are as follows:

- Understanding the basic concepts related to regional planning and development
- Detailed analysis about the different types of regional planning and delineation methods
- Evaluating multiple dimensions of development through use of AI and ML

#### Learning Outcomes:

- The course aims to provide an in depth understanding about levels of regional development occurring at different scales
- This course aims to equip students with hands-on skills and techniques for analyzing regional development patterns and planning strategies.
- Emphasis will be placed on integrating statistical tools, geospatial technologies, and policy frameworks for understanding practical applications in regional planning.

#### Course Outline:

##### Unit 1: Concept of Region, Regional Planning and Regionalization ( Theory -15 hours):

Concept of Region, Type and Characteristics of Region; Objective and Principles of Regional Planning, Types of Regional

Plans and their significance; Theories and Models of Regional Planning- Myrdal, Rostow, Hirschman, and Friedmann; Concepts of Development; Underdevelopment and Inequality; Efficiency-Equity Debate; Human Development

**Unit 2: Measuring Regional Development (Practical- Lab component- 30 hours)** Calculating and mapping indices of HDI, GDI, PQLI at different spatial scales; Measuring regional disparity using Sopher's Disparity index; Measurement of inequality using Gini Coefficient, Lorenz Curve and Location Quotient

**Unit 3: Regional Planning in Practice (Practical- Lab component- 30 hours):** Delineation of formal regions by Weighted Index Technique / Weavers Technique from available data base; Delineation of functional regions by Breaking Point Analysis/ Gravity Analysis/ Transport Network Analysis from available database, GIS Techniques for demarcating planning and development regions using available GIS software.

**Unit 4: Designing Development: Use of AI and ML (Practical- Lab component- 30 hours):** SWOT Analysis, 3 D Regional developmentscape visualisation, Site Suitability Analysis/Nearest Neighbour Analysis using available database and software

**Practical Record:** Five Practical Exercises to be completed in the Practical File from units 2, 3 and 4

### Readings:

#### Essential Readings:

1. Bhargava, G. 2001. Development of India's Urban, Rural, and Regional Planning in 21st Century: Policy Perspective, Gyan Publishing House.
2. Chand, M., Puri, V.K. 2000. Regional Planning In India, Allied Publishers Ltd. Chandana,
3. Chandna, R. C. (2000): Regional Planning: A Comprehensive Text. Kalyani Publishers., New Delhi.
4. Chaudhuri, J. R. (2001): An Introduction to Development and Regional Planning with special reference to India. Orient Longman, Hyderabad.
5. Cowen, M.P. and Shenton, R.W. (1996): Doctrines of Development, Routledge, London.
6. Doyle, T. and McEachern, D. (1998): Environment and Politics. Routledge, London.
7. Friedmann, J. (1992): Empowerment: The Politics of Alternative Development. Blackwell, Cambridge MA and Oxford.
8. Glasson, J. 2017. Contemporary Issues in Regional Planning, Routledge.
9. Gore, C. 2011. Regions in Question: Space, Development Theory, and Regional Policy, Routledge.