

Paper-I
TOWN PLANNING
(Degree Standard)

CODE NO:104

UNIT– I: INTRODUCTION TO PLANNING – SCOPE AND CONTENT

Planning System in India, Introduction to Master Plan, Structure Plan, Detailed Development Plans, City Corporate Plan and Smart City Plan. New Town concepts, case studies in India & U.K. – Concept of Region, Types of Region, Regionalization – Evolution of Regional Planning. Institutional framework for Regional Planning – Regional disparities, Resources in Regional development. Multi-level Planning – Regional Planning in India, Regional Plan case Studies, USA, U.K., Japan.

UNIT–II: PLANNING THEORY AND TECHNIQUES

Process of evolution of human settlement planning - Principles in Planning – Rationality in Planning, Blueprint and Process mode, Disjointed Incremental mode of Planning, Normative versus Functional mode of Planning – Type of planning surveys, data identification for various plan preparation. Delphi, Trade off-game, Simulation models, Gravity analysis, Lowry model, Threshold analysis, Multivariate analysis – Optimization and economic analysis methods in project formulation and implementation, PBBS – URDPFI Guidelines.

UNIT–III: URBAN SOCIOLOGY, ECONOMICS, GEOGRAPHY: THEORIES AND APPLICATIONS

Socio-economic groups, structures and Institutions as related to urban and rural communities - Ecological processes and structures in Indian Cities - Social Change & Economic Development - Agglomeration economics - Economics of scale, Multiplier effect concept, scope, limitation - Basic and non-basic activities of economics base, methods of base identification - Land-use determinants, Locational Dynamics of urban Land-use - Spatial organization of Urban settlements - City-region, Urban Sprawl and Fringe - Urbanization in India and Tamil Nadu with reference to settlements and population distribution.

UNIT–IV: ENVIRONMENTAL ISSUES RELATED TO PLANNING

Components of Environment – Classification of Environmental Resources - Purpose and Objectives in Environmental Protection - Institutional and Legal Support in management of the Environment – Environmental Policies, and issues - Environmental Impact Assessment Practice in India - Types, Conceptual Approach and Phases of EIA – Impact Identification - Public Participation in the Process of Environmental Decision Making Process – Environmental Concepts – Sustainable Planning – Eco Cities, Compact Cities, Smart growth.

UNIT-V: URBAN INFRASTRUCTURE NETWORK PLANNING ISSUES

Obligatory and Discretionary Services, Implication of Urban Form and Size on Services, Norms and Standards, National Building Code, 2016. National and Local guidelines – Demand Strategy, Issues and Tasks, Operation and Management Aspects of each Service - Water Supply, Sewerage / Drainage, Solid Waste Management, Roads and Street Lighting - Priority, Placement Network Options, Effective System Analysis – Private and Public partnership and innovative concepts and practices in Infrastructure Development.

UNIT-VI: PROJECT FORMULATION AND IMPLEMENTATION

Types of Project, Project Cycle, Identification, Selection, Preparation - Capital Investment Programme, Internal Rate of Return, Net present Value – Cost Benefit & Analysis, Social Cost Benefit analysis, Budgeting, Tender procedures - Appraisal techniques – Project Proposal and objectives, Current base line conditions, Financial and Economical Appraisal, Socio cultural assessment - Process Monitoring – Key issues, Monitoring Schedule, Data collection, Design, strategy, CPM, PERT - Framework, Impact Evaluation – Approaches, Key issues, Alternative to large scale qualitative Evaluation designs.

UNIT-VII: PLANNING LEGISLATION AND LEGAL FRAME WORK

The concept of law, Indian Constitution. Rights of Ownership and development of property. Statutory control as a positive tool in plan preparation and implementation - Evolution, scope and Significance of Planning Legislation. History and survey of development of planning legislation in India - Panchayat Act, Municipality Act, Corporation Act, TNULB Act, Land Acquisition, Rehabilitation and Resettlement Act, 2013. Provisions in the above acts related to functions, powers, role and responsibilities of local bodies including elected representatives and officers- 73rd and 74th CAA and their implications on planning and development. Local Body finance, revenue, expenditure and resource mobilization - T & C Planning Act of Tamil Nadu 1971, Urban Development Act - Implications of Land ceiling, betterment levy and development charges. Concept of arbitration. The Tamil Nadu Real Estate (Regulation and Development) Act, 2016.

UNIT-VIII: ISSUES IN TRAFFIC AND TRANSPORTATION PLANNING

Highway classification - Traffic characteristics – Horizontal and Vertical alignment, Land use & Transportation relationships - Sight distance – Cross sectional elements– at grade and Grade separated intersections - Volume Count – Origin and Destination – Parking and Public Transport - Surveys – Inventory of Transport facilities – Methods of Survey – Different modes – Capacities–Limitations– Planning Aspects - Coordination – Para Transit modes – Private transport – Urban Transportation Planning Process – Trip Generation – Trip Distribution – Modal Split – Trip Assignment, Transit Oriented Development, Bus Rapid Transit System.

UNIT-IX: REMOTE SENSING AND G.I.S., IN PLANNING

Basics of Remote Sensing and GIS. - Classification of spatial and non-spatial data application of spatial data in urban and regional planning - Identification of required spatial data layers, Applications of GPS – Coding schemes – digitization of spatial data – editing spatial data usable for the given planning problem – Land use Suitability Analysis, Land use Modeling, Existing Land use Preparation using Mobiles, Use of Satellites, Aerial Photographs, Drones in Physical Planning.

UNIT-X: CURRENT TRENDS AND ISSUES IN PLANNING

Concepts of sustainable urban development, sustainable Transportation, E – Governance – City Development Plans - Business Plans, JNNURM, AMRUT, National Rural Health Mission, Public private partnership, local bodies and urban finance. Land Pooling concept, Transfer of Development Right, Accommodation Reservation, Formulation of Re-development and Urban Expansion Plans - Local Area Plans, Town Planning Schemes - Special Economic Zone, Value Capture Finance Policy Framework – Swiss Challenge Model.