

# TAMIL NADU PUBLIC SERVICE COMMISSION

## SYLLABUS

**CODE NO. 153**

### TOWN PLANNING (P.G. STANDARD)

#### **UNIT – I: 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. Aerial photo and remote sensing techniques in planning – Delphi, Trade off-game, simulation models, gravity analysis, Lowry model, Threshold analysis, Multivariate analysis – Optimization and economic analysis methods in project formulation and implementation, CPM, PERT, PBBS.

#### **UNIT – II: SCOPE AND CONTENT OF PLANNING - SETTLEMENT AND REGIONAL LEVELS**

Planning System in India, Introduction to Master Plan, Structure Plan, Detailed Development Plans, City Corporate Plan and Smart 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 – III: 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 – Sustainability and Environmental Carrying Capacity.

#### **UNIT – IV: URBAN INFRASTRUCTURE NET WORK PLANNING ISSUES**

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

## **UNIT – V: 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, Findings, Conclusions and Recommendations - 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 – VI: PLANNING LEGISLATION AND LEGAL FRAMEWORK**

The concept of law, Indian Constitution. National Goals. 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 Act 1854. Provisions in the above acts related to functions, powers, role and responsibilities of local bodies including elected representatives and officers - 73<sup>rd</sup> and 74<sup>th</sup> CAA and their implications on planning and development. Local Body finance, revenue, expenditure and resource mobilization - T & C Planning Act of Tamilnadu 1972, Urban Development Act - Implications of Land ceiling, betterment levy and development charges .Concept of arbitration.

## **UNIT – VII: ISSUES IN TRAFFIC AND TRANSPORTATION PLANNING**

Highway classification - Traffic characteristics – Horizontal and Vertical alignment, handuse & 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 – Analysis –Inferences - Different modes – Capacities – Limitations – Planning Aspects - Coordination – Para Transit modes – Private transport.

## **UNIT – VIII: G.I.S., G.P.S., WEB BASED THEORIES AND APPLICATIONS**

Classification of spatial and non-spatial data application of spatial data in urban and regional planning - Objectives and functions of GIS models in Urban and Regional Planning - Defining the objectives of a GIS Planning problems – Identification of required spatial data layers, Applications of GPS - Coding schemes – digitization of spatial data – editing spatial data usable for the given planning problem - Information need and the role of Web in Planning – Public participation – Information transparency – Current trends - Web sites and information sources in urban and regional Planning-virtual reality in planning applications.

## **UNIT – IX: 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 Tamilnadu with reference to settlements and population distribution.

## **UNIT – X: CURRENT TRENDS AND ISSUES IN PLANNING**

Concepts of sustainable urban development, sustainable Transportation, E- Governance, Institutional Development, and urban Governance – Business Plans, JNURM, National Rural Health Mission, Competitiveness, Globalization, Knowledge base of Towns and cities – Public private partnership, local bodies and urban finance.