## **Department of Architecture and Planning**

## **Syllabus for Recruitment of Academic Position 2023**

#### 1 Housing

Housing Typologies, Concepts, Principles and examples of Neighbourhood, Residential Densities, Theories and Approaches in Planning, Housing Design and Techniques, Affordable Housing, Real Estate Planning, Planning and Development of Informal Sector, Concept of Informal Sector, Policies and Programmes, Sustainable Housing, Slums, Squatters and Informal Housing.

## 2 Infrastructure planning

Infrastructure Planning, Concept, Components Principles and examples of Infrastructure, Public works Infrastructure, Sustainable Economic Development and Growth, Public services and support, Planning for water supply, Sewage, Electricity and Telecommunication, current and future environmental challenges in infrastructural Planning, Green Infrastructure.

## 3 Urban Planning/Regional Planning

Urban Planning and Regional Planning Basic Concept, History and Evolution, Techniques and Theories at Settlement level and Developmental perspective of City Planning, City structure forms and Morphologies, Planning Norms, Standards and their applications, Landuse Planning, Surveys, types of surveys. Delineation of region, Local Self Governance, Panchayat Raj System, Hierarchy of settlements, Types of Plans, Planning Approaches.

#### 4 Landscape

Principles of landscape design, Development of landscape Design through history, Planting Design, Public Open Spaces, Drainage and Slope Analysis, Grading, Site Planning, Plazas, Parking, Water Features, Urban landscapes.

# 5 BEM Construction Technology and Management

Basic concepts of Construction, Modern Methods of Construction, Volumetric construction, Hybrid construction, Panellised construction, BIM process tools and techniques, Computer modelling tools, Construction site survey, Design and engineering of large building project, Project management techniques, examples PERT, CPM, etc. Estimation and Specification, Professional Practice and Ethics, Form and Structural Principles and Design of Disaster Resistant Structures. Temporary structures for Rehabilitation.

## 6 Traffic and Transportation

Economic, political, and social significance, Various forms of transport, Transportation systems, and their types, design and operational characteristics, Problems and prospects, Public transport and Mass transport operation characteristics, Concept of PCU, Traffic and Travel Characteristics, Current trends in road development in India. Urban and Rural Road hierarchy, Road structure and characteristics, Surveys and their types, sampling methods & survey techniques. Programming and processing of travel data, traffic volume count survey, Origin and Destination survey, Speed and Delay, Parking and accidents surveys, Methods of conducting surveys, Analysis and Interpretation, Processing of Travel Data, Travel Demand Management, Traffic Management, Intelligent Transport System.