

Syllabus for Qualifying Entrance Examination

PG Direct Admissions in Masters in Architecture with specialisation in Landscape Architecture / Sustainable Architecture / Architectural Conservation OR in Masters in Urban Design

(Academic Year 2023-24)

SPA Vijayawada

General information:

- Question Paper shall be of 50 marks, Total Duration of time is 1 (ONE) Hour.
- There would be 40 objective type questions or MCQs of One Mark each, and 2 Descriptive Type Questions, carrying 5 marks each
- Questions shall be from any portions of the syllabus as below

Syllabus:

1. Architecture, Graphics and Design

Architectural Graphics; Visual composition in 2D and 3D; Computer application in Architecture and Planning; Anthropometrics; Organization of space; Circulation- horizontal and vertical; Space Standards; Universal design; Building bye-laws; Codes and standards.

2. Building Sustainability and Services

Solar architecture; Thermal, visual and acoustic comfort in built environments; Natural and Mechanical ventilation in buildings; Air-Conditioning systems; Sustainable building strategies; Climate responsive design; Energy-Efficient architecture. Building Performance Simulation and Evaluation; Intelligent Buildings; Water supply; Sewerage and drainage systems; Sanitary fittings and fixtures; Plumbing systems; Principles of internal and external drainage system; Principles of electrification of buildings; Fire fighting Systems; Building Safety and Security systems; Building Management Systems, Elevators and Escalators - standards and uses; Methods of solid waste management - collection, transportation and disposal; Recycling and Reuse of solid waste.

3. History and Contemporary Architecture

Principles of Art and Architecture; World History of Architecture: Egyptian, Greco-Roman classical period, Byzantine, Gothic, Renaissance, Baroque-Rococo, etc.; Recent trends in Contemporary Architecture: Art Nouveau, Art Deco, Eclecticism, International styles, Post Modernism, Deconstruction in architecture, etc.; Influence of Modern art and Design in Architecture; Indian vernacular and traditional Architecture: Islamic, Buddhist and Hindu Periods, Oriental Architecture ; Works of renowned national and international architects.

4. Building Materials, Building Construction and Structural Systems

Primary and Secondary Building Materials, Building construction techniques, methods and details; Building systems and prefabrication of building elements; Principles of Modular Coordination; Construction planning and equipment; Building material characteristics and applications; Principles

of strength of materials; Alternative building materials; Foundations; Design of structural elements with different materials; Elastic and Limit State design; Structural systems; Principles of Prestressing/Post-Tensioning, etc; High Rise and Long Span structures, gravity and lateral load resisting systems.

5. Estimation-Costing, Professional Practice

Project management techniques e.g. PERT, CPM etc. ; Estimation and Specification; Professional practice and ethics; Form and Structure; Principles and design of disaster resistant structures; Temporary structures for rehabilitation.

6. Urban Design, Landscape and Heritage Conservation

Historical and modern examples of urban design; Elements of urban built environment – urban form, spaces, structure, pattern, fabric, texture, grain etc.; Concepts and theories of urban design; Principles, tools and techniques of urban design; Public spaces, character, spatial qualities and Sense of Place; Urban design interventions for sustainable development and transportation; Development controls – FAR, densities and building bye-laws. ; Urban renewal and conservation; heritage conservation; historical public spaces and gardens; Landscape design; Site planning, Landscape Conservation Policies.

7. Housing and Town Planning Basics

Housing typologies; Concepts, principles and examples of neighbourhood; Affordable Housing; Real estate valuation, Concepts of Land-Use, Ancient Indian Town Planning Concepts, Ekistics, Garden City Concept.