

## Annexure - I

### PGCET - Syllabus (Master of Architecture)

#### Common Entrance Test (CET) (MCQ type Question - OMR based) (100 Marks)

The detail syllabus for Common Entrance (CET) is as under:

##### **(1) Architecture, Planning and Design**

Architectural Graphics and principles of design; Visual composition in 2D and 3D; projection of geometrical forms and representation; architectural and building representation through 2 dimensional and three dimensional drawings; Computer application in Architecture; Anthropometrics; Organization of space; Space Standards; Circulation- horizontal and vertical; Universal design; Building byelaws; Codes and standards.

##### **(2) Building Materials, Construction and Management**

Behavioral characteristics and applications of different building materials viz. mud, timber, bamboo, brick, concrete, steel, glass, FRP, AAC, different polymers, composites, etc. ; Alternative building materials; Building construction techniques, methods and details; Building systems and prefabrication of building elements; Principles of Modular Coordination; Estimation, specification, valuation; Construction planning and equipments; Project management techniques e.g. PERT, CPM etc.

##### **(3) Structural Design and Systems**

Loads and structural systems; Types of structural elements with Foundations; concepts in analysis of structure; Principles of strength of materials; structural concepts and behavior of structural elements- load bearing structures, framed structures, composite systems, steel structures.

##### **(4) Building Services, Infrastructure and Environment**

The elements of climate and human comfort in built environments ; Natural and Mechanical ventilation in buildings; Air-Conditioning systems; Water supply and distribution system; Sewerage and drainage systems; Sanitary fittings and fixtures; Plumbing systems; Principles of internal and external drainage system; Principles of electrification of buildings; Elevators and Escalators-standards and uses;

Water harvesting systems; Sewage disposal methods; Methods of solid waste management ; Recycling and Reuse of solid waste; Hierarchy of roads and level of service; intersections, grade separators and parking areas; modes of transportation;

Sustainable development, goals and strategies; Climate change and built environment; Climate responsive design; Basics of Green Building-Concepts and Rating, ECBC- Energy Conservation Building Code; Ecological principles; Environmental considerations in Planning and design; Environmental pollution- types, causes and controls.

##### **(5) Urban Design and Planning and landscape**

Historical and modern examples of urban design; Concepts and theories of urban design; Principles, tools and techniques of urban design; Public spaces, character, spatial qualities and Sense of Place; Development controls – FAR, densities and building byelaws; Development guidelines such as URDPFI; Various planning concepts in urban and regional level development plans in the context of India; Types and elements of Landscape design.

**(6) Housing**

Housing in the Indian Context; Various agencies involved in the production of housing ; Various schemes and policies of the government in the housing sector; Standards and guidelines for housing; Housing design typologies and the processes involves in housing project development; Concepts, principles and examples of neighborhood; Residential densities; Affordable Housing; Real estate valuation.

**(7) 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; Works of renowned national and international architects.

**(8) Architectural Professional Practice**

Professional Practice- the role of professional bodies and statutory bodies; Code of Conduct and ethics in professional practice and the mandatory provisions of the Architects Act 1972; Building bye-laws, Important legislations which have a bearing on the practice of architecture; Arbitration and other legal aspects; Project Management- tender and contract; Current affairs related to Architecture; Authors & books of architecture.

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