

Architecture

Syllabus & Model Question Paper Syllabus

History of Architecture: Significant phases of Indian architecture [Eg: Indus valley, Vedic, Buddhist, Indo Aryan, Dravidian, Mughal, colonial and post colonial], significant phases in western architecture [Eg: River valley civilization, classical, medieval, renaissance].

Architectural Theory: Principles and qualities of composition (Eg: unity, balance, hierarchy, proportion, scale, rhythm, repose, vitality, axis rhythm datum); understanding of art and architecture (Eg: types of art and its significance); perception (Eg: phenomenology, memory, meaning, symbolism); balance of color and form.

Theoretical premises in architecture and works of major architects (Eg: rationalism, empiricism); design logic; ideas on style, ornament; criticism in architecture.

Urban Design: Architecture in an urban content, place making, public space, urban form, focal point vista, visual survey.

Contemporary Architecture: Industrial revolution and its impact, modernism, post-modernism (works of national and international architects).

Landscape Design and Environmental Planning: Natural and manmade landscapes, elements of landscape design, hard and soft landscapes, site analysis, site planning and environmental design, ecology and ecosystem analysis, regional landscape planning concepts, landscape management - conservation and restoration, natural resource management, energy efficient landscapes, landscape elements, material and lighting, contemporary landscape practices.. Landscape examples: Formal, informal, free style & contemporary designs.

Planning Theory & Techniques: Planning process, comprehensive planning, land use and density in residential and non-residential area, central place theory, rank - size rule, settlement pattern, land utilization and district level planning, study of city form, key urban planners and their theory and work.

Application of GIS in urban and regional planning surveys, methods of preparation of urban and regional developments plans, structure plans, strategy plans etc; and site planning principles and design, town planning scheme, survey types.

Housing: Concept of shelter, housing design and policies, role of government agencies, finance and management, vernacular architecture and settlement pattern. Principles & examples of neighborhood, housing typology, slums - redevelopment.

City Planning: Historical development of city planning, principals of city planning new towns, survey method, site planning and planning regulations and building bye laws. Conservation of historic & inner city areas, adaptive reuse, world heritage legislation and sites.

Types of Plan - Master plan, Regional plan, City development plan, Zonal plan.

Emerging concepts of cities - Eco city, Smart city, Transit oriented development.

Note: The questions may be of multiple choices, objectives type pertaining to the syllabus.

PART - I

Each question carries One Mark
Marks

50 x 1 = 50

- 1) 'House Form and Culture' is the title of a noted book authored by
 - a) Geoffrey Broadbent
 - b) Christopher Alexander
 - c) Jon Lang
 - d) Amos Rapoport

- 2) The origin of the Deconstruction Movement in architecture can be traced to
 - a) Bernard Tschumi
 - b) Frank Gehry
 - c) Jacques Derrida
 - d) Peter Eisenman

- 3) Christopher Alexander's 'Pattern Language' deals with
 - a) devising patterns to create a building or a town
 - b) recognition of styles and patterns of languages
 - c) communication & public participation using sign language
 - d) patterns found in European languages

- 4) According to Central place theory, the tributary around central places are flattened into
 - a) octagons
 - b) hexagons
 - c) heptagons
 - d) decagons

- 5). For the purpose of calculating the net residential density for a residential area, the land included in the density calculation consists of
 - a) house plots only
 - b) house plots and residential roads
 - c) house plots, residential roads and incidental open spaces
 - d) house plots, and incidental open spaces

PART – II

Each question carries two marks

25 x 2 = 50

Marks

1) Match the architects with the buildings designed by them

P	Richard Meier	1	Piazza d'Italia
Q	Ricardo Bofil	2	Smith House
R	Norman Foster	3	Xanadu Apartments
S	Charles Moore	4	Hong Kong & Shanghai Bank Headquarters
		5	Jewish Museum Extension

a) P-2, Q-3, R-4, S-1

b) P-2, Q-5, R-4, S-3

c) P-1, Q-3, R-4, S-5

d) P-2, Q-3, R-5, S-1

2) A sector has a gross area of 200 hectares and a residential area of 150 hectares. If net residential density is 400 pph, what is the gross density of the sector?

a) 300 pph

b) 200 pph

c) 250 pph

d) 150 pph

4) Select the most appropriate sequence of the components of a Orissan temple, in elevation

a) bada → pista → chhapra → beki → amla

b) pista → bada → chhapra → beki → amla

c) pista → chhapra → bada → beki → amla

d) pista → chhapra → bada → amla → beki

5) The most appropriate hierarchical sequence of plans is

a) National plan → Regional plan → Master plan → Area plan

b) National plan → Master plan → Regional plan → Area plan

c) Regional plan → National plan → Master plan → Area plan

d) National plan → Master plan → Area plan → Regional plan

6) In a residential community of 12,000, 20% are Higher Secondary School going children. The expected enrolment is 75% and per capita gross floor space required is 3.0 sqm. The ground coverage permissibility is 30%. Indicate the land area required, for the High Secondary School building, assuming it is single storeyed and ground coverage permitted is fully utilized.

a) 0.8 hectare

b) 2.8 hectare

c) 1.8 hectare

d) 18 hectares