



অসম লোকসেৱা আয়োগ

ASSAM PUBLIC SERVICE COMMISSION

Jawaharnagar, Khanapara, Guwahati-781022.

SYLLABUS

OMR based screening test (MCQ) for recruitment to the post of **Assistant Architect under Public Works (Building & NH) Department, Assam.** (Advt. No.02/2025 dated 18.01.2025)

Paper-I

Subject: General Studies

(HSLC Standard)

Full marks: 100.

Time: 2 Hours

1. Current Events of National & International importance
2. History Of Indian & History of Assam
3. World Geography Including India & Assam.
4. Indian Economy, Indian National Movement.
5. Mental Ability.
6. Role and impact of Science & Technology in India.
7. Indian Polity, Political System of India.
8. Indian Culture.

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13/12/25

Principal Controller of Examination,
Assam Public Service Commission
Jawaharnagar, Khanapara, Guwahati-22



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OMR based screening test (MCQ) for recruitment to the post of **Assistant Architect under Public Works (Building & NH) Department, Assam.** (Advt. No.02/2025 dated 18.01.2025)

Paper-II

Subject: Architecture

(Bachelor Degree Standard)

Full marks: 100

Time: 2 Hours

1. THEORIES OF ARCHITECTURE/DESIGN PRINCIPLES

- Definition of Architecture, Architectural design – an Integration of aesthetic and function, Aesthetic components- Proportion, Scale, balance, rhythm, symmetry, hierarchy, pattern and axis.
- Functional aspects of architecture – site, structure, skin, circulation etc.
- Effect of colour – colour symbolism, Impact on interiors, exteriors and at city level.
- Elements of Architecture and their relationships.

2. HISTORY OF ARCHITECTURE

- Factors influencing Architecture of an era.
- Architectural character of Egypt, West Asia, Greece, Rome, Italy, France and England from 3rd Century B.C. to 18th Century A.D. and Modern Architecture.
- Outstanding examples of these periods with salient architectural features.
- Evolution of Hindu Temple and Architectural contributions of Dravidian, Pallavas, Chola, Pandya and Indo-Aryan periods- Outstanding examples of these periods.
- Development of Islamic Architecture and contributions during the rule of Humayun, Akbar, Jahangir, Shahjahan in India.
- Development of Indo-Saracenic architecture – Design of New Delhi by Edwin Lutyens - Contributions by Le Corbusier and Louis Kahn in India.
- Contribution by B.V. Doshi, Charles Correa, Kanvinde and Nari Gandhi to India Architecture- Examples and philosophies.

3. MATERIALS AND CONSTRUCTION TECHNIQUES

- Advantages and disadvantages of concrete as a building material - properties - types and variety.
- Ferrous metals – uses of cast iron, wrought iron and steel in buildings – structural steel – stainless steel – steel alloys – steel as a roofing material.
- Thermal Insulation – Blanket, poured and reflective insulation – properties and uses of spun glass, foamed glass, cork, vegetable fibers, mineral fibers, foamed plastics, vermiculite and glass fibers.
- Timber- Quality of timber used in buildings, defects, seasoning and preservation of timber Types--- Natural, hard and softwood.

4. BUILDING SYSTEM AND SERVICES

- Fundamentals of Sanitary waste and sewerage system --- Basic principles of sanitation and disposal of waste matter from buildings, various sewerage disposal and their principles. Intercepting chambers, inspection chambers --- their location and ventilation of sewers. Alignment of storm water drains in housing, layout and cities, collection, conveyance and disposal of town refuse. Rural Sanitation.
- Water distribution systems – Water distribution systems in small towns, Criteria to assess daily water requirements, Testing for water hardness, piping systems for residential and multi storied buildings.
- Types of pumps --- Reciprocating, centrifugal, deepwell, submersible automatic pumps, sewerage pump, compressors vacuum pump.
- Elevators --- size, capacity, speed, mechanical safety method. Types of elevators --- Electric, hydraulic passenger, hospital, capsule, freight, etc. Dumb waiters, Parallel and criss cross escalators, horizontal belt.
- Conveyors, horizontal moving walkways, physically handicapped mechanical safety systems.
- Electrical services --- Types of wires, wiring systems and their choice, Planning electrical wiring for building, Types of earthing, Main and distribution boards.
- Refrigeration and Air Conditioning --- Window type and packaged air conditioners, chilled water plant, fan coil systems, Air conditioning systems for different types of buildings.
- Fire safety --- Fire detection system, Fire alarm system, Fire fighting systems, Dry and wet risers, Automatic Sprinklers.

5. TRADITIONAL AND CULTURAL STUDIES

- Traditional Site planning method --- Orientation of building, site, layout and settlement, positive and negative energies, importance of cardinal and ordinal directions.
- Vernacular Architecture --- Approaches and concepts to the study of Vernacular Architecture ---- Aesthetic, Anthropological, Architectural, Geographical, Historical, Spatial, Folkloristic. Colonial influences on the Traditional House & Bungalow.

6. URBAN STUDIES

- Definitions of Conservation, preservation, urban design and renewal, Need in the Indian Context. Land use structures of cities, impact of urbanization, development programs and social development.
- Urban design concepts --- Imageability, life between buildings, transit metropolis, sustainable cities, generic cities, heritage tourism, community participation in urban design.
- Urban open spaces and urban landscape, street landscaping.
- Post Independence Urban Design in India --- Influence of Chandigarh, Bhubaneswar and Gandhi Nagar.

7. ENVIRONMENT STUDIES

- Land resources --- Land as a resource, land degradation, landslides, soil erosion and desertification, waste land reclamation.
- Landscape and ecology --- Introduction to landscape architecture, ecology, ecological balance, landscape conservation, reclamation and landscaping of derelict lands.

- Site analysis --- Importance of site analysis, on site and off-site factors involved, topography, hydrology, soils, vegetation, climate, surface drainage, accessibility, infrastructure.
- Energy resources --- growing energy needs, renewable and non-renewable energy sources, alternate energy. Urban problems related to energy.
- Simple passive design considerations --- use of site conditions, orientation, plan form, envelope design, opening size and position to achieve solar passive architecture.
- Waste Management --- Solid waste recycling, such as composting, vermin composting and bio gas. Liquid waste recycling, Rain water harvesting, Biological and thermal energy options.

8. URBAN AND RURAL HOUSING

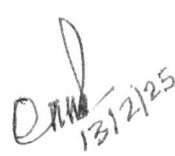
- Urban Housing --- Housing and its importance in architecture. Its relationship to neighborhood and city planning. Housing need and demand --- National Housing Policy - -- Housing Agencies and their role in housing development.
- Housing Design --- Housing typologies, integration of services parking, sustainable practices, Qualitative aspects of housing, prefabrication in housing.
- Rural housing --- influence of urbanization and changing life style. Uniqueness of rural housing ---- Mud as a building material --- Soil stabilization, Bamboo, Casuarina, Coconut, Palm, Hay – uses as building materials ---- fire retardant treatment, inspect proofing. Building stones --- types of masonry.

9. RULES, REGULATIONS AND LEGAL FRAM WORK

- Zonal regulations --- Zoning, Planned Unit Development, SEZ
- Development Control rules --- Significance, rules for various building types.
- National building code of India --- Fire safety, ventilation, Mechanical services such as lifts and escalators.
- Environmental Laws in India ---- protection of land, forest, water and air.
- Green Building concepts and regulations.

10. CURRENT TRENDS AND ISSUES

- Technology --- Computer oriented 2D and 3D drafting. Use of digital medium for designing and presentation.
- Use of GIS for regional planning and Urban Governance.
- Role of Information Technology in Environmental Protection and human health.
- Impact of GATT and WTO on Architecture on India.
- Significance of “Intellectual property rights” for architects in India.
- Use of “Right to information” as a powerful tool for architects.
- Mandatory rules to incorporate “Barrier free design”.


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