

SYMBIOSIS SKILLS & PROFESSIONAL UNIVERSITY
Syllabus for Entrance Examination – Doctoral Programme
(Academic Year 2025-26)

Ph.D. IN ARCHITECTURE
School of Architecture, Urban Development and Planning

SECTION A – APTITUDE & ARCHITECTURAL RESEARCH METHODS (20%)

A.1 Verbal & Analytical Ability

- Grammar & sentence correction
- Vocabulary: synonyms, antonyms, contextual usage
- Word groups, analogies
- Critical reasoning, argument flow
- Sequencing, verbal deductions
- Instruction-based reasoning

A.2 Numerical & Analytical Reasoning

- Basic arithmetic, percentages, ratios
- Numerical computation & estimation
- Coding–decoding, number & letter patterns
- Logical classification sequences
- Data interpretation: tables, charts, graphs

A.3 Architectural Research Methods

- Architectural inquiry & design research
- Case study methodology
- Spatial, morphological & typological analysis
- Visual, ethnographic & behavioural methods
- Simulation-based research (climate, energy, daylight)
- GIS, BIM, and digital research tools
- Analysis and synthesis frameworks

SECTION B – ARCHITECTURAL KNOWLEDGE + SKILL DEVELOPMENT (45%)

B.1 Architectural History, Theory & Conservation

- Indian architecture: ancient to contemporary
- Vernacular & indigenous architecture
- Global architecture: Egyptian, Greek, Roman, Gothic, Renaissance, Modernism, Postmodernism
- Architectural theory: phenomenology, structuralism, semiotics, critical regionalism
- Works of key Indian & international architects
- Principles of conservation
- Organisations: UNESCO, ICOMOS, INTACH, ASI

B.2 Building Construction & Materials

- Traditional materials: timber, brick, stone
- Modern materials: RCC, steel, glass, composites
- Alternative/sustainable materials: bamboo, mud, CSEB, ferrocement
- Construction techniques, detailing
- Building services integration

B.3 Sustainable Architecture & Environmental Design

- Climate-responsive design
- Passive design strategies: shading, ventilation, thermal mass

- Natural cooling & daylighting
- Green building standards: GRIHA, LEED, IGBC
- Environmental psychology: user comfort, behaviour

B.4 Urban Planning & Settlements

- Planning theories & urban form
- Land-use zoning, mobility, transportation planning
- Smart cities, TOD, sustainable urbanism
- Housing policies: PMAY, RAY; slum rehabilitation
- Urban governance: UDCPR, NBC, planning acts, DP norms

B.5 Landscape Architecture & Environmental Systems

- Principles of landscape design
- Ecology, ecosystems, biodiversity
- Watershed & stormwater management
- Environmental Impact Assessment (EIA)

B.6 Skill Development, Government Missions & Sectoral Frameworks

6.1 Skill Development Ecosystem

- Skill India Mission
- NSDC, NSQF
- Sector Skill Councils: Construction, Green Jobs, MEPSC

6.2 Government Schemes in the Built Environment

- Smart Cities Mission
- AMRUT
- PMAY – Housing for All
- HRIDAY – Heritage Cities
- Swachh Bharat Mission (Urban)
- Jal Jeevan Mission
- PM Gati Shakti – National Infrastructure Plan

6.3 Skill-Based Construction & Material Missions

- National Bamboo Mission (NBM)
- Bamboo & cane craft clusters
- GI-tagged building crafts
- Mud/earth construction skill programmes

6.4 Digital Construction Skills

- BIM, GIS, digital twins
- Simulation tools (climate, energy, CFD)
- Project management tools: Primavera, MSP

6.5 Entrepreneurship & Industry 4.0 in Built Environment

- Prefab & modular construction
- Material innovation labs
- Construction automation & robotics
- Start-ups in AEC (Architecture, Engineering, Construction) sector

SECTION C – READING COMPREHENSION & ANALYTICAL WRITING (35%)

C.1 Reading Comprehension (20%)

One passage based on:

- Architectural theory
- Urban policy or planning
- Sustainability & climate issues
- Government missions & societal impact
- Built environment technologies

C.2 Analytical Writing / Short Essay (15%)

Candidates must write **one** analytical response (approx. **200–250 words**).

Possible themes:

- Contemporary architectural issues
- Urban policy evaluation
- Traditional/modern architectural style review
- Critique of spatial design or housing strategy
- Commentary on sustainability, digital architecture, heritage
- Reflection on research/design methodology