

Syllabus for Ph.D. admission Test 2021-22

Syllabus for Entrance Test of PhD Admission 2021

Department of Architecture
Jadavpur University

The syllabus for entrance test of PhD Admission 2021 consists of two parts namely Part 1: Research methodology and Part 2: Architecture and allied subjects. The detailed syllabus for each part is as follows:

Part 1: Research Methodology

- 5 slides showing research works from UG/ PG Thesis through online presentation (25 marks)
- Objective questions from the following items (25 marks):
 - Types of research
 - Criteria of good research
 - Research method and research methodology
 - Research ethics
 - Research thinking and research design ▫ Research writing – proposals, final report etc.
 - Data collection
 - Data analysis and interpretation
 - Data representation – Tables, Graphs, Charts etc.
 - Basic statistics – Sampling, Distribution, Normality, Probability, MeanMedian-Mode, Correlation, Regression, Variance, Co-variance etc.

Part 2: Architecture and allied subjects

- 5 slides showing previous academic works from the following items through online presentation (25 marks)
- Objective questions from the following items (25 marks):
 - Architecture and Structure**
 - Wood, Steel, RCC & other building materials; High rise & long span structures; Gravity & Lateral load; Disaster resilient structures **Architecture and Services**
 - Illumination and acoustics
 - Electrical systems – supply, transformer, wiring, AC etc.

- Electro-mechanical systems – HVAC, pumps, lifts etc.
- Environmental engineering – water supply, drainage, sewerage systems, plumbing, solid waste management etc.

Architecture as system and design

- Architectural theory: sociological, cultural, anthropological, demographical, formal and others
- History and contemporary architecture
- Materials and methods of architectural construction
- Ecology & environment – climatology, pollution, environmental considerations in design
- Estimation, costing, specification, project management, professional practice
- Architectural standards, anthropometrics
- Graphics, 2D, 3D forms, geometry and construction
- Computer graphics – CAD, BIM, 3D modelling and architectural rendition
- Architectural design, building types, circulation, site planning
- Architectural and building regulations, codes, relevant legislative frameworks

Architecture and specializations

- Planning – regional, urban, environmental, transport, housing
- Urban design
- Architectural conservation
- Landscape architecture
- Interior design
- Industrial design
- Sustainability, sustainable architecture & design – resource efficiency in buildings, Green building, energy efficiency
- Building science