

IAPNU PG Entrance Test : 13th August 2024

Institute of Architecture and Planning, Nirma University has scheduled an entrance test on 13th August 2024. The eligibility criteria and syllabus are as follows which is based on the CoA guidelines and prescribed format:

Questions & Marks of entrance Test(s)

The IAPNU PG Test may comprise questions of only Multiple-Choice Questions:

- The medium of test will be English.
- The duration of Test will be three hours. (180 Minutes)
- There will be 75 MCQs for 100 marks.
- The institute may conduct the second round of entrance examination.

Eligibility Criteria for PG Entrance Test

Candidates fulfilling the below criteria can appear for IAPNU 2024:

1. Passed Bachelor's Degree in Architecture or equivalent with at least 50 percent aggregate marks or equivalent CGPI.
2. The Final year Architecture students in Architecture can also participate in the Entrance Test.
3. There is no upper age limit.

Syllabus of M. Arch. Entrance Test at IAPNU

Module I - ARCHITECTURE AND DESIGN (48 questions)

1. Fundamentals of Architectural Design: Design Principles, Architectural Graphics, Architectural Anthropometrics and Ergonomics.
2. Theory of Design and Architecture: Importance of Theory; Form, Function and Aesthetics in Architecture, Space Planning and functionality, Scale and Proportion in Architectural Design, Visual composition: Rules and Principles, Study of practices and design principles of vernacular architecture and its application with contemporary architectural interventions. Structural System Alternatives; Building Materials and Finishes; Sustainable Building Practices.
3. History of Architecture: Elements, construction, architectural styles, and examples of different periods of Indian and Western History of Architecture, Oriental, Vernacular and Traditional architecture.
4. Site Planning: Site Analysis: Zoning and Regulations, National Building Code; Site access and Circulation- horizontal and vertical; Utilities and Infrastructure; Site Grading and Drainage; Landscaping and Green Space Design; Barrier-free design; Spatial Standards.
5. Understanding of Urban Scale Projects / Community Design Projects: Urban form and design, sustainable urban design principles, Knowledge of Institutional buildings; mass housing schemes; Amenities, and Community facilities. Involvement of stakeholders, participatory,

consultative design.

Module II - BUILDING SCIENCES & APPLIED ENGINEERING (10 questions)

1. Climate Responsive Architecture - Bioclimatic Approach, Elements of climate, Climatic Zones in India, Climatic analysis and Site Analysis, Passive Heating and Cooling Design Strategies, Passive Technologies, Solar Orientation and Control, Wind Effects and Airflow patterns, Thermal Comfort (Terminologies, Concept and strategies).
2. Building Construction and Structures – Building Materials and their properties (physical, chemical, thermal and Environmental properties), Load bearing and frame construction, Long-span structures, Structural steel, Materials in the building industry, Advanced structures (domes, vaults, folded plates), Pre-stressing Prefabricated structures, post-tensioning. (Concepts and Standards).
3. Building Services and Environmental System Management - Water and Wastewater Management (Supply, Treatment, Usage and Drainage, water balancing methods), Energy Management (Generation, Utilisation and Efficiency), Waste Management, Acoustics, Artificial and Day Lighting, Renewable Energy, ECBCS code, Sustainable and Green Building Strategies.

Module III - PROFESSIONAL ELECTIVES (05 questions)

1. History and Humanities - A) Vernacular Architecture - as a process and not a product; Determinants of vernacular form typologies, B) Architectural Conservation – Basic understanding and concepts in Conservation, examples and agencies involved.
2. Design - A) Interior Design- Vocabulary; various components and finishes; Interior lighting, Interior landscape, and furniture. B). Art Appreciation and Art in Architecture - Vocabulary and principles of art; Perception and representation; Contemporary Art from India and its appreciation. C). Graphic/ Furniture/ Product Design -elements, principles, and applications; Form to Materials and Processes of Manufacture., D). Contemporary processes in Architecture -Concepts E). Architectural Journalism - professional journalism; Fundamentals of writing, Technologies.
3. Construction –A). Disaster Mitigation and Management - Disasters, significance, and types; Basic concepts B). Architectural Design with Steel and Glass – Concepts and possibilities C). Earthquake resistant Architecture - Fundamentals and basic terminology.

Module IV - PROFESSIONAL ABILITY & SKILL ENHANCEMENT COURSES (12 questions)

1. Legal Framework and regulations – Architects Act 1972 – Definitions, Provisions, Code of Conduct, Ethics in Professional Practice, Fees, stages of payment, Arbitration, Competitions, National Building Code, Building legislations, Tender documents, Contracts.
2. Project Management – Concepts, Time, Cost and Quality, CPM and PERT, Cost Analysis.
3. Use of Computers in Architecture – types of software, 2D and 3D modelling.
4. Entrepreneurship Skills – Communication Skills, English language skills, various forms of writing.
5. Research in Architecture – Literature review, Methods of Data collection, Primary and secondary data, Analysis, Central Tendencies in Data, Data representation.

Question pattern

The question paper pattern will be based on the following framework:-

- Information Based Questions - 40%
- Experiential Based Questions - 20%
- Analytical Based Questions -20%
- Application Based Questions - 20%

Table 1: The distribution of questions will be as given in the table below:

Modules	Subjects	Information based	Experiential based	Analytical based	Application based	Total
1	Professional Core courses	25	10	3	10	48
2	Building Sciences and Applied Engineering	5	2	1	2	10
3	Elective Courses (PE and OE)	5	-	-	-	5
4	Professional Ability Enhancement courses	5	3	1	3	12
		40	15	5	15	75

Distribution of Marks

The marking distribution to be as follows:

1. Information level – 1 mark each, 40 questions
2. Experiential level – 1 mark each, 15 questions

3. Analytical level – 3 marks each, 5 questions
4. Application level – 2 marks each, 15 questions.

There will no negative marking.