

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN (ESTABLISHED BY GOVT. OF DELHI VIDE ACT 09 OF 2012) KASHMERE GATE, DELHI-110006.



SCHEME OF EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR IN ARCHITECTURE AND PLANNING M.PLAN IN IGDTUW, DELHI

With reference to the Recruitment Notice No. IGDTUW/Recruitment/2023/1, the Scheme of Examination for the post of Assistant Professor in Architecture and Planning (M. Plan) in IGDTUW, Delhi as under:

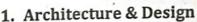
All the Questions are Objective Type (MCQ) and carry one mark each without any negative marking for wrong answer.

Duration:	2 Hours
Total Questions:	100
PART A Total Questions: (WRITTEN Maximum Marks TEST)	100 (1 Mark per Question) There is no negative marking for wrong answer.
	Total Questions:

SYLLABUS FOR WRITTEN TEST FOR PART A (40 Marks)

- (i) Research Aptitude
- (ii) Logical reasoning
- (iii) Analytical reasoning
- (iv) Numerical ability
- (v) Graphical representation and analysis
- (vi) Quantitative comparison
- (vii) Data interpretation: Qualitative and quantitative data
- (viii) Reading comprehension

SYLLABUS FOR WRITTEN TEST FOR PART B (60 Marks)



Principles of Art and architecture, Visual composition in 2D & 3D Organization of space, Computer Graphics, Architectural Graphics, Programming languages and automation. Planning and design considerations for different building types, anthropometrics, site planning, Barrier-free design, Circulation- horizontal and vertical, space Standards, National Building Code and Building Codes. Elements, architectural styles, construction and examples of different periods of Indian & Western-History

2. Building Materials, Construction & Management

Behavioural applications and characteristics of various building materials viz. Mud, bamboo, timber, brick, concrete, glass, steel, FRP, different polymers, AAC and composites. Building systems and prefabrication of building elements, Building construction techniques, methods and details,



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Principles of Modular Coordination, Estimation, valuation, specification, professional practice, Project management techniques, Construction planning and equipment e.g. CPM, PERT etc.

3. Building & Structures

Elastic and Limit State design, Principles of the strength of materials, Design of structural elements in steel, wood and RCC, Structural systems in RCC and Steel, Principles and design of disaster resistant structures, Form and Structure, Principles of Pre-stressing, gravity & lateral load resisting systems, High Rise & Long Span structures.

4. Environmental Planning & Design

Ecological principles, Concepts of Environmental Impact Analysis, Ecosystem natural and manmade ecosystem, Environmental considerations in planning and design, Principles of architectural acoustics; Green Building Concepts & Rating, ECBC, Principles of lighting and illumination, Climate responsive design, Thermal comfort, ventilation & air movement Solar architecture, Environmental pollution- types, causes, controls and abatement strategies, Building Performance Simulation and Evaluation, Ecosystem natural and man

5. Urban Design

Public Perception, Concepts and theories of urban design, Townscape, Urban design interventions for sustainable development and transportation, Public Realm, Historical and modern examples of urban design, Elements of urban built environment - urban form, structure, spaces, pattern, texture, fabric, grain etc, Site planning; Landscape design; Development controls—FAR, densities and building byelaws, Public spaces, spatial

Qualities, character and Sense of Place, Principles, tools & techniques of 6. Urban Planning & Housing, principles, concepts and examples of the neighbourhood, Affordable Housing, Housing for special areas and needs, Housing typologies, Slums, Residential densities, National Housing Policies, Standards for housing and community facilities, Programs & Schemes.

6. Urban Planning & Housing

Types of plans-City Development Plan, Master Plan, Structure Plan, Action Area Plan, Zonal Plan, Town Planning Scheme, Planning process, Regional Plan, Salient concepts, principles of urban planning Decision support system and Land Information System., Graphic presentation of spatial data, Tools and techniques of Surveys -Topographical, Physical, Land use and Socioeconomic Surveys, Methods of non-spatial & spatial data analysis, Application of G.I.S & Remote Sensing techniques in urban and regional planning;

7. Planning Techniques & Management

Social, environmental cost-benefit analysis and Economical, Urban Economics, Law of demand and



supply of land and its use in planning, Management of Infrastructure Urban Infrastructure–Water Supply, Transportation, Sewerage, Solid Waste Management, Drainage, Electricity & Communications. Building Services: Sewerage and drainage systems, Water supply, Sanitary fittings and fixtures, Principles of internal and external drainage system, plumbing systems, Principles of electrification of buildings, Elevators and Escalators – standards and uses, Intelligent Buildings, Air-Conditioning systems, Building Safety & Security systems and Firefighting Systems.

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