

# MASTER OF PLANNING (HOUSING)

# SCHEME OF EXAMINATION

1 <sup>st</sup> YEAR - SEMESTER II												
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Marks			Duration of (Theory) Exam
									Internal Assessment	External Examination	Total	
Core	H 2.01	Urban & Rural Housing Policies	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 2.02	Housing Standards, Design and Projects	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 2.03	Urban Land Management	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 2.04	Housing Finance and Project Formulation	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
Studio	H 2.05	Housing Strategy	12		0	10	12	Jury	200	200	500	-
	H 2.06	GIS Applications in Housing - I		2	0	0			50	50		
Department Elective	H 2.07	Materials and Technology	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 2.08	Infrastructure										
Audit Credit	H 2.09	Internship	6 Weeks	0	0	0	NC	-	-	-	-	-
<b>TOTAL</b>			<b>22</b>				<b>22</b>		<b>500</b>	<b>500</b>	<b>1000</b>	

**List of Abbreviations**

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

2 <sup>nd</sup> YEAR - SEMESTER III												
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Marks			Duration of (Theory) Exam
									Internal Assessment	External Examination	Total	
Core	H 3.01	Real Estate and Housing Markets	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 3.02	Informal Housing, Slums & Poverty	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 3.03	Disasters & Settlements	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
Studio	H 3.04	Housing Project Formulation	12	0	0	10	12	Jury	200	200	500	-
	H 3.05	GIS Applications in Housing - II		2	0	0			50	50		
Department Elective	H 3.06	Inclusion and Community Participation	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 3.07	Housing for Special Areas and Groups										
Institute Elective	H 3.08	Elective from Another Department	2	2	0	0	2	Internal Only	100	0	100	-
<b>TOTAL</b>			<b>22</b>				<b>22</b>		<b>550</b>	<b>450</b>	<b>1000</b>	

**List of Abbreviations**

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

2 <sup>nd</sup> YEAR - SEMESTER IV												
Classification of Course	Code	Course	Hours/ Week	L	T	S	Credits	External Exam Type	Marks			Duration of (Theory) Exam
									Internal Assessment	External Examination	Total	
Core	H 4.01	Housing Legislation & Governance	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
	H 4.02	Global Perspective on Housing	2	2	0	0	2	Written-Exam	50	50	100	2 hrs.
Studio	H 4.03	Housing Studio: Thesis	10	0	0	10	10	Jury	350	350	700	-
Institute Elective	H 4.04	Elective from Other Department	2	2	0	0	2	Internal Only	100	0	100	-
<b>TOTAL</b>			<b>16</b>				<b>16</b>		<b>550</b>	<b>450</b>	<b>1000</b>	
<b>GRAND TOTAL OF ALL SEMESTERS</b>			<b>86</b>				<b>84</b>		<b>2150</b>	<b>1850</b>	<b>4000</b>	

**List of Abbreviations**

L = Lecture; T = Tutorial/ Seminar/ Research/ Lab; S = Studio; NC = Non-Credit

*Institutional Elective offered by the Department of Housing: students from other PG departments can join these courses along with the students of the Department of Housing (Not more than 10 PG students, on first come first served basis, can be extended to a greater number of students, depending on availability of classroom facilities/ size).*

# SYLLABUS

## FIRST YEAR: SEMESTER II

### H2.01: Urban & Rural Housing Policies

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course content

- Urban and Rural Housing Policies and its role in national development,
- Objectives of policy in relation to settlement planning,
- basic components of housing policy and programmes formulation in urban and rural areas
- housing policies in India and abroad, its impact and consequences on housing development
- Housing policy and their focus in different developing and developed countries, their significance in provision of housing programmes for low-income groups.
- Their formulation implementation and evaluation role of international and national funding agencies in housing programmes special housing programmes in different countries.
- Socio-economic profile of rural India and rural housing conditions-types of traditional building materials and construction methods, house types, rural housing norms, standards and design, access to infrastructure, improvement in quality of life in rural areas, rural health and sanitation, environmental improvement in villages, concept of integrated rural housing development, rural housing schemes, impact of large development projects and community development in rural areas, special needs for housing for tribal.
- Various urban and rural housing programmes including JNNURM, RAY, Bharat Nirman, PURA, RURBAN, PMAY, Smart Cities Mission, Swachh Bharat Mission, AMRUT, HRIDAY, etc.

## H2.02: Housing Standards, Design and Projects

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

### Course content

- Neighbourhood planning, design standards & their significance in housing process, socio-economic & aesthetic, environmental factors affecting layouts, various concepts of layout planning, row and multi storied housing, layout optimization techniques,

detailed analysis on water supply, sewerage, drainage solid waste disposal, electricity, roads and transportation and all community facilities, standards for physical and social infrastructure layouts, development controls & phasing, specific consideration, for plotted development & group housing site & services project

site planning- site analysis, visual design factors, consideration for infrastructure, organization of space, criteria for location of blocks and landscape elements, energy efficient design, methodology for formulation of housing projects, design considerations in housing projects, case studies of housing projects.

## H2.03: Urban Land Management

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

### Course content

Global population change and urbanization, Regional perspectives on population & urbanization with special reference to Asia and Pacific. Emergence of large cities. Impact of urbanization, globalization and economic policies. The status of land in the Constitution of India, peculiar nature of land markets.

Factors affecting supply and demand of land for housing. Role of Fiscal policies and development regulations of land market. Land policy objectives and policy options for public intervention. Land revenue systems, land records and traditional maps, techniques of land assembly and expropriation, development components and financing land development.

Institutional and political concerns in land management. Various approaches viz. land pooling/land readjustment, TP Schemes, Public Private Partnerships (PPP) for land assembly, role of the private sector in land assembly, land management thru' Township Policies of various state governments, international and domestic case studies.

## H2.04: Housing Finance and Project Formulation

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

### Course content

- Financial environment at the national level, financial system and regulation, Characteristics of housing finance, policy for housing finance in national plans, sources of finance, public – private sector investment in housing, finance in urban and rural sector implications of long-term & short term financing , fiscal aspects of subsidizing

public and private housing, housing finance requirements of economically weaker sections, methods of financing, specialized finance institutions, mortgage financing systems, non-institutional financing, present trend in housing finance in India and in other countries, fiscal incentives in annual budgets, direct and indirect tax proposals, role of HUDCO, NHB, HFIs,

- various international donor/financing agencies, micro finance institutions, rural housing finance.
- Project Formulation, Financial feasibility of projects, various financial instruments, concepts of IRR and NPV, basics of cash flow analysis, financial structuring of projects, preparation of DPR, EIA, etc.

## H2.05: Housing Strategy and H2.06: GIS Application in Housing- I

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
12	2	0	0	12	Jury	50	50	500	-
	0	0	10			200	200		-

### Course Content

#### GIS Applications in Housing-I

- Basic concepts: introduction to aerial photography, remote sensing, images geometry, image quality etc. date

acquisition aerial, false colour and thermal photography and other remote sensing applications. Applications in regional planning morphology, contour building, geological formation, social classifications, settlement patterns, regional landscape features, water bodies, forest reserves,

deforested areas, transport network-road, water irrigation systems, plantation areas, cropping patterns flora and fauna, sanctuary areas etc. interpretations and uses of aerial photography in locational analysis of regional networks, engineering works such as dams and reservoirs, terminal facilities

such as airports strategic and military installation, regional potential recreational areas and identification of urban expansion areas. Conceptual model of spatial & non-spatial information system, digital, editing and structuring of map data, spatial data analysis: raster & vector based, overview of GIS packages global positioning system.

### Housing Strategy

- The objective of this exercise is to evolve comprehensive housing development strategy for the selected city by studying city level and housing subsystem level aspects and estimating housing shortage, projecting housing need and demand

and preparing alternative scenarios for housing development. The studies need to be carried out mainly thorough secondary sources. A field visit to any town/city in India has to be made.

## H2.07: Materials and Technology

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

### Course Content

Building materials traditional and conventional, low cost materials, significance of technology for housing development, conventional technologies and modern technologies, appropriate technology, technology for housing in the context of housing development in India and the third world, concept of system building, various open and

closed systems, choice of various systems of building, concept of intelligent building. Organization of the construction industry in India - Significance of Housing construction industry, its characteristics and role of various actors involved. Small scale enterprises in the housing construction industry-building material manufacturers, sellers and small contractors. Significance of resources and manpower in housing construction, need

for imparting in housing building, concept of Nrimithi Kendra's. Cost reducing techniques, environmentally friendly technologies, role of technology in housing projects formulation-cost time and other implications, Emerging technological perspectives for house construction, infrastructure and housing area planning, 'green' housing. Role of BMTPC and other organizations in promotion of new and alternative technologies.

## H2.08: Infrastructure

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.



## Course Content

Role and significance of Physical infrastructure in housing development, characteristics of various components of physical planning

and design of infrastructure viz. water supply, human excreta disposal, solid waste disposal, electrical networks, storm drainage, appropriate technology for infrastructure

development, rain-water harvesting, use of solar energy, wind energy and other appropriate technologies, sustainability, 'green' concepts, rating, GRIHA, LEED, etc.

### H2.09: Internship

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
6 weeks	0	0	0	Non-Credit	-	-	-	-	

## SECOND YEAR: SEMESTER III

### H3.01: Real Estate and Housing Markets

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course Content

Introduction to real estate, definition, principles of real estate value concepts, methods of valuation, introduction to real property ownership, leasing property succession, methods of sale/ purchase, title search, real estate investment analysis and portfolio management, foreign direct investment (FDI), role of NRIs and PIOs in the investment market, marketing and brokerage, introduction to various laws related to real

estate, real estate project formulation, real estate development process, asset management, property insurance, real estate case studies, taxation and fiscal incentives, government policies and industry organization, public-private partnerships and JV'S, rating, risk assessment. Concepts and definitions, housing market, area, the purpose and nature of housing market studies; factors affecting housing prices, housing market behaviour, estimation of housing need, housing demand

and identification of housing stress, factors affecting local housing market, housing demand & supply market process, housing search residential mobility and filtering causes & consequences, policy influence on housing market, the formal and informal housing markets and their impact on urban poor, public, Co-operative and private sector housing market, process and supply institutional framework, provisions and implications of Real Estate Regulatory Act.

### H3.02: Informal Housing, Slums and Poverty

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course Content

Emergence and growth of Informal Housing and formal regulatory framework, Diversity of housing needs of urban poor and informal

housing options pavement dwelling, squatting, illegal land-subdivision, inner-city organic housing, and urban villages. Causes of growth and perpetuation and impacts of illegality. Linkages of informal economy-

supportive policies of settlement upgrading and options of tenure security. Impacts and obstacles to regularization. Integrated, participatory improvement approaches. Role of NGO's and CBO's in the improvement

process. Process of slum formation, causes and consequences, approaches to tackle the challenge of slums, relocation, rehabilitation,

in-situ upgradation, etc. Dimensions of poverty and its manifestation in the housing sector, indicators, programmes specifically targeted

towards slums and the urban poor, shelter less population.

### H3.03: Disasters and Settlements

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course Content

Natural and man-made disasters, meaning, factors & significance, causes and effects, global and local disaster profile, typology of disasters in India, human behaviour and response, scope & objectives of disaster mitigation / preparedness and response / prerequisites for preparedness planning;

action plans and procedures, training issues and models, checklists/disaster response planning, roles & responsibilities of various agencies/emergency operations support and management, community participation, public awareness planning for disaster prone areas, disaster mapping, vulnerability analysis, vulnerability atlas, predictability, forecasting and warning, relief measures, reconstruction

and rehabilitation, disaster preparedness plan land use zoning for disaster management, infrastructure management skill assessment. Disaster resistant housing construction practices and codes, engineered and non-engineered structures, preparedness for climate change, role of specialized agencies for disaster management.

### H3.04: Housing Project Formulation and H3.05: GIS Application in Housing - II

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
12	2	0	0	12	Jury	50	50	500	-
	0	0	10			200	200		-

#### Course Content

##### GIS Applications in Housing - II

- Network analysis, digital elevation model

(DEM) & digital terrain model (DTM) Geospatial analysis, internet GIS, decision support system (DSS), automated mapping & facility management (AM/FM), open GIS

overview, customization of geo information. Inputs into and integration with housing project formulation and design studio exercise.

### Project Formulation and Design

- Site selection, site analysis, feasibility studies, to formulate the project and design of selected area, Greenfield or

redevelopment, which shall include development options concept for dwellings, plans and layout, costing, pricing, financing, phasing, implementation and management

and post occupancy estate management, financial feasibility.

### H3.06: Inclusion and Community Participation

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course Content

Importance of communication for town planners, role of effective communication in society, understanding concept of inclusion, community based organizations, NGOs, RWAs, SHGs, understanding participatory processes,

techniques of participation, methods of communication, written, oral and visual communication, objective of communication, developing a communication strategy, writing technical reports, social audit, community participation law, preparing maps and other documents, conducting communication with

small groups, stakeholders and the masses, organization of consultative meetings, managing community / participatory processes , role of elected representatives in participatory processes, community participation in project formulation, best practices and case studies.

### H3.07: Housing for Special Areas and Groups

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course Content

- Inner city Housing – Evolution & Historical Background, community, spatial Characteristics, housing transformation of core city, impact of transformation, Problems of inner cities, policies and

programmes

- Fringes / Peri-urban / Sub-urban Housing Rural urban linkages, characteristics of fringe areas, development process, various modes of land Supply in fringe area, case study with special emphasis on housing.

- Arid / Coastal / Hilly Region Housing-settlement & shelter characteristics, Materials & technology, design standards, climatic factors, danger of hazards, Settlement planning, development policies and programmes.

- Housing for Aged/Physically Challenged - concept & definition of old age characteristics of aging population, profile & growth of elderly persons, classification of elderly population, problems of elderly planning and design considerations for elderly, case study with special reference to housing.
- Housing for Women/Children – Importance of gender in housing, housing planning & design considerations with women perspective – hierarchy of spaces at macro and micro level, shelter for low income women, design considerations for urban and rural women, housing options for different categories for single women, government schemes, case study with special reference to housing.
- Housing for Refugees/Ousters – Concept of refugees, types of refugees, norms for treatment of refugees, refugees’ law, refugees and housing, problems of refugees, planning considerations for the refugees, case study areas with reference to housing.
- Shelter less - Shelter less in the context of urban poor, psychological & social implications of poverty on homeless, homeless in metropolis, problems of homelessness, various interventions, night shelters, case studies.
- Tribal Housing – Socio cultural & economic profile, settlement characteristics, housing typology, housing schemes, policies & programmes, for tribal upliftment, case study area.

**H3.08: Institutional Elective (choose from any other Department)**

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Internal Only	100	0	100	-

## SECOND YEAR: SEMESTER IV

### H4.01: Housing Legislation and Governance

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

#### Course Content

- Concept of law, legislation, ordinance, bill, Act Regulation and by-laws, provision regarding property rights, legal right, legislative competence of state and central Government to enact town planning legislation, concept of Eminent Domain and Policy Powers significance of law and its relationship to urban planning benefits of statutory backing of planning schemes, public participation in statutory planning process, evolution of planning legislation and overview of legal tools connected with urban planning and development aims and objectives of professional institute sister bodies professional role and responsibility of planning consultants, professional ethics code of conduct & scale of professional charges, formulation of project proposal and outlines, consultancy agreements & contracts, role in interdisciplinary groups, role in decision making processes

and the process in relation to varied consultancy assignment of planning. Land acquisition, land reforms, town planning acts, development authority acts, housing board acts, Improvement trust acts, Slum acts, Apartment acts, Rent control acts, Municipal acts, introduction to property law, property tax, assessment, lease, registration, etc. co-operative act.

- Principles of good governance, Public governance in India, overview of urban governance structure in India, governance for the housing sector. Definition and concepts in organization, factors affecting organizational structure administrative context of housing organization in India, organizational theories and their effectiveness, housing organizations in India at national, state and local level, role of improvement trusts, housing boards, development authorities and slum improvement boards & cooperatives.

Role of private sector and NGOs, role of financing agencies and linkages with other agencies, relationship between housing and non-housing organizations internal administrative problems of housing agencies public – private partnerships, joint ventures, organizational reforms and privatization, outsourcing and contracts. Need for housing management, basic elements of management, planning, organization, staffing, coordination and monitoring and its relevance of housing sector. Importance of leadership development, communication and motivation. National goals, political system affecting development management. Managing and monitoring housing projects. Participatory management processes and managing joint ventures, SPVs. Post occupancy management of housing estates.

## H4.02: Global Perspectives on Housing

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Written-Exam	50	50	100	2 hrs.

### Course Content

Housing as an integral part of national development policy in various countries in the world, housing situation, policy and programmes in North America, South America,

Africa, Europe, Asia and Australia. Specific examples from the USA, Canada, Mexico, Brazil, Russia, China, Japan, Bangladesh, Singapore, Hong Kong SAR and Sri Lanka. Special initiatives, financing mechanisms and roles of public and private sectors, Role of

international housing agencies, role of various bodies viz. World Bank, ADB, UN Habitat, UNCHS, DFID, GIZ, etc. in the housing sector, international housing design and construction practices.

## H4.03: Housing Studio - Thesis

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
10	0	0	10	10	Jury	350	350	700	-

### Course Content

Every student is required to prepare a thesis on a specific topic approved by the Faculty as per Guidelines issued from time to time.

**H4.04: Institutional Elective** (*Choose from any other Department*)

Hrs / Week	Lecture	Tutorial	Studio	Credits	External Exam Type	Marks			Duration of (Theory) Exam
						Internal Assessment	External Examination	Total	
2	2	0	0	2	Internal Only	100	0	100	-