

Syllabus

FIRST YEAR, SEMESTER - II

C.2.1. Design of Human Settlements

Module I: Introduction

Nature of urban design, Role of urban design in the planning process. Social choices and values in design options. Ecological determinants in urban settlement design. Principles of structuring urban spaces, locational criteria of activities and urban uses.

Module II: Settlement Design

Imageability of the city, Determinants of urban patterns and forms, density and networks, impact of technology on infrastructure, standards and implications of regulatory control on urban form and design, in relation to renewal and re-development of central areas.

Module III: Town Design

Issues related to changing practices of planning human settlements as applied to spatial design. Urban design projects, identification, scope and relationship with development plan-case studies. Planning and design parameters for new towns, selected case studies.

Module IV: Future of Urban design

Issues in urban design, Efficient environments, Segregation and integration of activities and people, Creativity in city planning

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C.2.2. Regional Planning and Development

Module I: Basics and concepts

Spatial planning in the regional context. Concepts and theories of marginality, growth and development. Issues in regional development, dualism and dependency, efficiency, equity and environmental goals, theories of Spatial Organization, polarised growth, spread and backwash, centre and periphery.

Module II: Regional Planning framework

National planning framework and general approach in India. Philosophy and status of regional planning in the planning process, sectoral, multi-level and integrated approach to planning, national policies on income distribution and provision of minimum basic needs.

Module III: Regional Analysis

Regional analysis techniques to understand regional spatial structure, regional economy, planning styles in developing countries and contemporary approaches to regional development, structural and functional aspects, agropolis and its applicability to India.

Module IV: Strategies of regional development

Development strategies in the regional context in regional to urban/rural area, people prosperity, growth pole and growth centre strategies, small and medium towns, industrial region, special area strategies for metropolitan region, Techniques of target fixation in regional development inter-sectoral co-ordination. Formulation phasing and implementation of integrated area development plans and development plan for regions.

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C.2.3. Transportation Planning

Module – I:

Urban form, network and transport patterns: Types of urban forms and structure; Land use – transport interaction, Impact of urban structure on travel patterns; urban road network classification, hierarchy and cross sectional elements; concept of accessibility.

Transport systems: Types and attributes of Urban and Regional transport systems, Mass transit systems, Non- Motorized Transport systems; regional transport systems planning.

Module – II:

Transport surveys and studies: study area definitions, zoning, surveys and their types, survey techniques, sampling methods, analysis and interpretation of traffic studies; urban traffic and travel characteristics.

Analytical techniques: Techniques for urban structure analysis; four stage urban transport planning process; land use- transport models; application of graph theory in rural road network planning.

Module – III:

Transport and environment: Traffic noise, air pollution, Transport Dependent Greenhouse Gas (GHG) Emissions; air and noise pollution abatement measures.

Traffic safety and Mobility: accident reporting and recording systems, factors affecting road safety; Mobility requirements for transport disadvantaged groups- children, aged, women, poor and physically challenged.

Module – IV:

Economic evaluation: Pricing of transport service and systems, economic appraisal of transport projects, Techniques for estimating road user costs and benefits, value of travel time.

Management of transport systems: Traffic management and Transport System management (TSM) measures; Existing organizational and legal framework for management of Transport systems; Transport sector budgets and outlays; Transport Policy.

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C.2.4. Statistics and Population Studies

Module I: Sampling methods

Theory of probability, random variables and distribution of sample statistics. Some important sampling distributions,

Module II: Projection

Statistical inference: Estimation of population parameters, testing of hypotheses.

Elementary association models: Chi-square test; simple linear regression and correlation. Time-series Analysis. Index Numbers. Statistics available for spatial analysis: An appraisal.

Module III: Basics of Population Studies

Introduction, Scope, method, subject matter and relevance for spatial planning, sources of demographic data. Interrelations: Population change, socioeconomic dimension of development and pattern of human settlements.

Module IV: Population and spatial distribution

Population, composition and spatial distribution; population structure and composition, spatial distribution causes and implications of spatial differentiation. Analysis of labour force, mortality and fertility, Life table technique, relevance for spatial planning.

Theory models and measurement of internal migration, Internal migration and urban growth. Population estimation and projection techniques relevant for regions and settlements. Indian population census data an appraisal.

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C.2.5. Planning Portfolio – II: City Level Planning

Primary objective of Planning Portfolio – II is to obtain comprehensive understanding of planning of an urban settlement. A master plan of a selected city will be examined with a specific focus on two land uses. An evaluation will be carried out based on the following considerations:

- Identity and explain the objectives of the plan as contained in the master plan pointing out contradictors among objectives, if any.
- Enumerate surveys required for the preparation of the plan and identify major conclusions of each survey. Give your comments on the reliability of these surveys.
- Identify the direction of growth (physical) and growth potentials (socioeconomic) pointed out in the plan.
- (d) Take any two land uses and evaluate policies, planning considerations, implementation procedures and development controls regarding these land uses.
- Submission of drawings, presentation sheets (A-1) and written report (A-3) is required to be submitted for examination.

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E.2.1. Urban Conservation and Heritage Management

Module – I: Planning for heritage areas – conceptual & legal framework

Evolution of concept of integrated conservation and development, planning for areas of heritage significance; Value based approach to heritage management and urban conservation; International obligations and National Policy and Legislation for heritage conservation and management.

Module – II: Heritage areas in India – resource significance & potential

Types of heritage areas in India and their significance and potential today; Responsibilities of the urban local bodies and relevance of the 74th Amendment 12th schedule for heritage conservation, interface with district planning & metropolitan area planning; participatory heritage management; financing of heritage conservation heritage values; economic imperatives and implications for heritage management, heritage tourism.

Module – III: Integrated urban conservation & heritage management process

Identification, delineation and designation of heritage areas; Listing, documentation and heritage resource database development; Conservation and development guidelines for heritage areas; Integration of heritage conservation zones into master plans; Preparation of City Development Plans and DPR's in the heritage management and conservation sector under the JNNURM programme, Heritage Toolkit; Disaster preparedness for urban heritage areas; Methods for 'Heritage Impact Assessment' and 'Archaeological Impact Assessment'.

Module - IV: Comprehensive conservation plans & heritage management plans

Holistic approach to conservation and management of urban and rural heritage, cultural landscapes and cultural regions; Goals and objectives of comprehensive conservation plans and heritage management plans; Plan implementation and capacity building for heritage management.

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E.2.2. Development Management

Module I: Development and Management Aspects

National goals and political-economic system effecting it. Development management and development process. System of local government in India. Development administration at National, State, District and Local level and the process of decision making, development and management.

Module II: Local Government

Functions, powers, structure and resources of local governments and their performance. Identifications of other non-government developmental organisations and their relationship with local governments. Possibilities of qualitative improvement in plan administration. Public relation and citizen participation.

Module III: Manpower Management

Personal management, Manpower planning, performance, appraisal, motivation, and morale, Organizational behaviour-organization theory, authority and conflict, administration communication, leadership in administration, organizational changes, organizational structure and plan implementing agencies. Local financial system in India-local taxation and fees, state and local fiscal relations, financing local services, local services, local expenditure, capital budgeting and performance budgeting. Financial resource mobilization. Policies and programmes of related financial institutions, administrative aspects of investment.

Module IV: Land Management

Land Management practices and policies. Classical persuasive and non-persuasive strategies and techniques, New techniques of management by objective (MBO), integrated reporting system, flow diagrams, bar charts, mile stones, networks (CPM & PERT), line of balance (LOB), Techniques of monitoring of development works, standard oriented costs control, turn keys system, vertical production method, inventory cost control technique, unified status index technique.

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E.2.3. Public Participation in Planning

Module – I: Understanding Participation

Defining participation, and related concepts, political and social context of participation, objectives of participation, types of participation, conditions affecting participation.

Module – II: Public Participation in Planning

Arenas of participation in planning, mandated participation in planning, other legal and organizational mechanisms for participation, Current trends in participatory planning in India, case examples of public participation in planning

Module – III: Methods and Techniques of Participation

Understanding reasons and nature of public involvement at different stages in planning, skills required for undertaking participatory planning,, methods and techniques of organizing participation.

Module – IV: Participation and Empowerment

Understanding concept of power and process of empowerment, case examples of empowering and exclusionary participatory processes in planning.

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E.2.4. Governance and Management in Planning

Module – I:

Public governance in India, concepts and principles, emergence of the good governance paradigm, overview of urban governance structure in India, governance for town planning, national goals and political system affecting development management, emerging concepts of decentralization and privatization, role of government, elected representatives, executive and judiciary, industry, citizens, communities and non-governmental organizations, democracy and participatory processes in plan making, Constitutional provisions and amendments.

Module – II:

Definition and concepts in organization, factors affecting organizational structure administrative context of town planning organizations in India, organizational theories and their effectiveness, planning organizations in India at national, state and local level, powers, functions and role of ULBs, improvement trusts, town planning departments, development authorities and para-statal organizations.

Module – III:

Basic elements of management, planning, organization, staffing, coordination and monitoring and its relevance of town planning sector, importance of leadership development, communication and motivation for good management, need for modernization of management processes in town planning, e-governance mechanisms, citizen's charter, etc., emerging contours of the reform agenda, concept of 'new public management'.

Module – IV:

Role of private sector, public – private partnerships, joint ventures, organizational reforms and privatization, outsourcing and contracts, role of financing agencies and linkages with other agencies (domestic and international).