SCHEME & SYLLABUS

Master of Planning

Specialisation- Housing

(2013)
# University of Kerala

## Scheme of Studies for Master of Planning

**Stream:** Housing  
**Semester 1**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Name of Subject</th>
<th>Credits</th>
<th>Hrs/week</th>
<th>End Sem Exam (Hours)</th>
<th>Internal Continuous Assessment</th>
<th>End Semester Exam</th>
<th>Total</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>APM 1001</td>
<td>Statistics</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
<td>Of the 40 marks of internal assessment, 25 marks for test and 15 marks for assignment End-of-Semester Exam by University</td>
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<tr>
<td>APC 1001</td>
<td>Planning – History, Theory and Practice</td>
<td>3</td>
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<td>3</td>
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<tr>
<td>APC 1002</td>
<td>Regional Planning</td>
<td>3</td>
<td>3</td>
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<td>-do-</td>
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<tr>
<td>APC 1003</td>
<td>Cities and Metropolitan Planning</td>
<td>3</td>
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<td>-do-</td>
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<tr>
<td>APC 1101</td>
<td>Planning &amp; Design Studio-I</td>
<td>7</td>
<td>14</td>
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<td>200</td>
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<td>Of the 200 marks of internal assessment, 30 marks for seminar and 170 marks for studio work. End semester Jury</td>
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**TOTAL:** 19 26 360 340 700
### University of Kerala
Scheme of Studies for Master of Planning

**Stream**: Housing  
**Semester 2**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Name of Subject</th>
<th>Credits</th>
<th>Hrs/week</th>
<th>End Sem Exam (Hours)</th>
<th>Internal Continuous Assessment</th>
<th>End Semester Exam</th>
<th>Total</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>APC 2001</td>
<td>Housing Policies, Programmes and Legislation</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>40</td>
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<td>Of the 40 marks of internal assessment, 25 marks for test and 15 marks for assignment. End-of-Semester Exam by University</td>
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<tr>
<td>*</td>
<td>Elective 1(Stream Elective-1)</td>
<td>3</td>
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<tr>
<td>*</td>
<td>Elective 2 (Departmental Elective)</td>
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<tr>
<td>ACC 2000</td>
<td>Research Methodology</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
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<tr>
<td>APC 2101</td>
<td>Planning &amp; Design Studio – II</td>
<td>8</td>
<td>16</td>
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<td><strong>TOTAL</strong></td>
<td></td>
<td>19</td>
<td>27</td>
<td>360</td>
<td>340</td>
<td>700</td>
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Electives for semester 2:

**Stream Electives 1**

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Code No.</th>
<th>Subject</th>
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<tbody>
<tr>
<td>1</td>
<td>APE2001</td>
<td>Housing Project Formulation and Implementation</td>
</tr>
<tr>
<td>2</td>
<td>APE2002</td>
<td>Housing &amp; Community Development</td>
</tr>
<tr>
<td>3</td>
<td>APE2003</td>
<td>Traffic &amp; Transportation Planning</td>
</tr>
<tr>
<td>4</td>
<td>APE2004</td>
<td>Climatology &amp; Habitat Planning</td>
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</tbody>
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**Departmental Electives**

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Code No.</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ADE 2001</td>
<td>Sustainable Settlement Planning</td>
</tr>
<tr>
<td>2</td>
<td>ADE 2002</td>
<td>Planning for Tourism</td>
</tr>
<tr>
<td>3</td>
<td>ADE 2003</td>
<td>Real Estate Development</td>
</tr>
<tr>
<td>4</td>
<td>ADE 2004</td>
<td>Urban Sociology</td>
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</tbody>
</table>

* Students can choose Elective 1 and Elective 2 from the lists of *Stream Electives* and *Departmental Electives*, respectively.
## University of Kerala
### Scheme of Studies for Master of Planning

**Stream:** Housing
**Semester 3**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Name of Subject</th>
<th>Credits</th>
<th>Hrs/week</th>
<th>End Sem Exam (Hours)</th>
<th>Internal Continuous Assessment Marks</th>
<th>End Semester Exam Marks</th>
<th>Total Marks</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>APC 3001</td>
<td>Housing Finance and Management</td>
<td>3</td>
<td>3</td>
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<td>Of the 40 marks of internal assessment, 25 marks for test and 15 marks for assignment. End-of-Semester Exam by Institution</td>
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<td>*</td>
<td>Elective 3 (Stream Elective-2)</td>
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<tr>
<td>**</td>
<td>Elective 4 (Non Department Elective)</td>
<td>3</td>
<td>3</td>
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<tr>
<td>APC 3101</td>
<td>Planning &amp; Design Studio – III</td>
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<tr>
<td>APC 3102</td>
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<td>No End-of-semester exam</td>
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<tr>
<td>APC 3103</td>
<td>Practical Training</td>
<td>2</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>22</strong></td>
<td><strong>28</strong></td>
<td><strong>420</strong></td>
<td><strong>280</strong></td>
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**Electives for Semester 3:**

**Stream Elective 2**

<table>
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<tbody>
<tr>
<td>1</td>
<td>APE3001</td>
<td>Environmental Planning</td>
</tr>
<tr>
<td>2</td>
<td>APE3002</td>
<td>Planning Institutions and Governance</td>
</tr>
<tr>
<td>3</td>
<td>APE3003</td>
<td>Housing for Special Areas and Groups</td>
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<tr>
<td>4</td>
<td>APE3004</td>
<td>Rural Planning and Development</td>
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</table>

**Inter-disciplinary Electives:**

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Code No.</th>
<th>Subject</th>
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<tbody>
<tr>
<td>1</td>
<td>ADI3001</td>
<td>Sustainable Development and Architecture</td>
</tr>
<tr>
<td>2</td>
<td>ADI3002</td>
<td>Sustainable Infrastructure &amp; Technology</td>
</tr>
<tr>
<td>3</td>
<td>ADI3003</td>
<td>Earthquake Resistant Design and Management</td>
</tr>
<tr>
<td>4</td>
<td>ADI3004</td>
<td>Climatology and Built Environment</td>
</tr>
<tr>
<td>5</td>
<td>ADI3005</td>
<td>Urban Design-Theories and Principles</td>
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</tbody>
</table>

* Students can choose Elective 3 from the lists of Stream Electives 2 as advised by the course coordinator.

** Non-departmental electives should be selected from the list of inter-disciplinary electives offered by other departments, as advised by the course coordinator.
# University of Kerala

## Scheme of Studies for Master of Planning

**Stream:** Housing  
**Semester 4**

Note: 4 to 6 hours per week is for department assistance

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Name of Subject</th>
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<tr>
<td></td>
<td>Sessional</td>
<td>Guide</td>
<td>Thesi s</td>
<td>Viva Voce</td>
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<tr>
<td>APC 4001</td>
<td>Development Management and Housing strategies</td>
<td>3</td>
<td>3</td>
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<td>100</td>
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<tr>
<td></td>
<td>(Continuous assessment)</td>
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<tr>
<td></td>
<td>60 (End Semester Exam)</td>
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<tr>
<td>APC 4101</td>
<td>Thesis</td>
<td>12</td>
<td>24</td>
<td>75</td>
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<td>250</td>
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<tr>
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<td>Viva Voce by University</td>
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</table>

**Remarks:**
- Of the 40 marks of internal assessment, 25 marks for test and 15 marks for assignment.
- End-of-Semester Exam by Institution
- Viva Voce by University

**TOTAL** 15 27 115 75 110 50 350
SEMESTER 1

APM 1001        STATISTICS
    (Common with AUM 1001)

Structure of the course:
    Credits: 3
    Lecture: 3 Hours/ week
    Internal Continuous Assessment: 40 marks
    End Semester Examination: 60 marks

Course Objective: The course in statistics helps the student tackle problems in decision making.
The student is introduced into data modeling techniques.

Module I
Linear Correlation, regression - lines of regression - Multiple Correlation and regression.
Sampling:
Sampling Techniques, Random sampling, stratified sampling, cluster or area sampling, system sampling.

Module II
Probability distributions: Discrete and Continuous Probability distribution- Mean and Variance-
Binomial, Poisson and Normal Distributions.
Statistical Inference: Internal Estimation – Confidence limits for the mean and proportion of a
normal population in large and small samples.
Testing of Hypothesis: Testing the mean and proportion of a population. Chi-square test for goodness
of fit.
Analysis of variance- One way and two way classifications.

Module III
Linear Programming Problems
General LPP- Basic Feasible Solution (BFS) – Optimal Solution- Solution by Simplex Method-
Artificial Variable (Big M) Technique- Assignment Problem – Formulation- Hungarian Method-
Transportation problems- Formulation – Initial BFS by Vogel’s approximation – Optimal Solution
by MODI Method.
**Reference:**
2. Miller and Freunds- Probability and Statistics for Engineers
3. Walpole Myers- Probability and Statistics for Engineers and Scientists.
5. Elhance- Statistics

**Structure of the Question Paper**

For the End Semester Examination the question paper will consist of at least 60% analytical problems. There will be three questions (with sub-divisions) from each module out of which two questions are to be answered.
APC 1001 PLANNING- HISTORY, THEORY AND PRACTICE

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective:
This course is an introduction to the history and theories of the planning profession. The focus is on the practice of planning.

Module I: Planning- History
Town planning history – Ancient Egypt, Mesopotamia and Indus valley, Greece and Rome, Medieval, Renaissance, Industrial and post industrial age, Colonial cities. Town planning in India.
Contribution of individuals to city planning: Patrick Geddes, Lewis Mumford, Le-Corbusier, C.A. Doxiadis, Clarence Stein, Peter Hall etc.

Module II: Theories of City planning
Theories of city development including Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory and other latest theories; Ebenezer Howard’s Garden City Concept; and Green Belt Concept; City as an organism: a physical, social, economic and political entity; Emerging Concepts: global city, inclusive city, safe city, etc.; City of the future and future of the city; Shadow cities, divided cities; Models of planning

Module III- Planning Practice and Process
Planning system in India, Master plan, Structure plan, Detailed development plans, Comparison of planning systems in UK & USA with that of India.
Planning Surveys, Different types used for data identification for plan preparation, areal photography and remote sensing techniques in planning

References
1. Aurther J. Gallion – Urban Pattern
2. AEJ Morris – History of Urban Form from Pre-history to Renaissance.
3. Le Corbusier – The City of Tomorrow
4. Peter Hall – Urban & Regional Planning
5. Ebenezer Howard – Garden Cities
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Structure of the Course:
Credits: 3
Lecture: 3 Hours/week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objectives: The course intends to make the student understand the concept of regional planning. This will make them skillful in applying methods and techniques of regional planning.

Module I
Aims, objectives, relevance and scope of regional planning, concept and classification of regions, characteristics of a planning region, delineation of regions, regional development plans: planning process and implementation, methods and techniques of regional analysis and development planning

Module II
Theories of spatial structure, regional imbalances and growth models, regional analysis techniques: Central Place Theory, Agricultural land use model, Weber’s theory of location, Rank size rule, Input Output analysis, Growth pole model, Misra’s growth foci approach, Core periphery model, Cumulative causation theory.

Module III
Regional Planning in India: Evolution of regional planning, Institutional framework from national planning level to regional development plans, relevant policies and programmes, Regional disparities, their causes and alleviation measures, Integrated rural-urban development Case studies from other developing and developed nations.

References:
4. Hamilton F,(eds) industrialisation in Developing and Peripheral Regions, Croom Helm,1983

Structure of the Question Paper
For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Structure of the course:

Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: This course gives the opportunity to understand the socio-cultural process that drives the city. The student is focused to the issues of Urban Poverty.

Module I
Understanding the city as an organism, the socio-political and technological forces and their consequences on human settlements and their planning, inner city issues and problems, approach to development, urban development and renewal.

Module II
Definition and process of Urbanisation, Urban- Rural Relationship, hierarchy of cities- urban growth and system of cities, growth of metropolitan cities and mega cities and its impact on natural development, with focus on the issues in metropolitan management and governance and possible alternative strategies to metropolitan growth control – development of new towns, and small and medium town development.

Module III
Urban poverty- dimensions, determinants and anti poverty measures. Growth and characteristics of the informal sector, the formal- informal sector linkages and their effect on urban development. Demography: Demography concepts and deformations – population problem in India – source of demographic data in India (Population census, Civil Registration systems, Sample registration systems etc). Population structure – Composition, vital rates like fertility, mortality, birth and death rates.- population forecasts and projections.

References:
1. AEJ Morris – History of Urban Form from Pre-history to Renaissance.
3. Aidan Southall – The City Time and Space.
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
APC 1101  PLANNING AND DESIGN STUDIO-I

Structure of the course:

Credits: 7
Studio: 14 Hours/ week
Internal Continuous Assessment: 200 marks
End Semester Jury Examination: 100 marks

The Planning and Design Studio I intends to expose the student to development of communication skills, Learn various surveys and to prepare plans for micro-level units.

1. Development of communication skills – Map preparation, Report writing and presentation skills
2. Understanding of various Surveys relating to preparation of plans for Urban and Rural Settlements
3. Preparation of Plans for micro-level units
   a. Study at Village level – Structure of Village, Problems, Current rural improvement programmes and Structure of Administration.
   b. Study on Urban Land uses
      Land use Zones – Land use activities-Their functional and spatial; characteristics-issues related to functions, spaces and infrastructure
   c. Planning at Layout Level

Review of Literature, Site analysis, Study of Existing Layouts, Design criteria’s- Existing act and Byelaws, Alternative designs, Finalization of Designs, Cost of the projects and Model.
SEMESTER II

APC 2001   HOUSING POLICIES, PROGRAMMES AND LEGISLATION

Structure of the course:

Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: To Equip Learners to develop suitable context specific policies, programmes and legislation sensitive to socio economic condition of a region, state or a city in accordance internationally accepted UN resolutions

Module I:

Housing Policies
Housing situation at National, Regional and Local levels The Housing process-Need for a housing policy-its aim and objectives
United Nations Policies relevant to Housing and Planning, Habitat Agenda, Millennium Development Goals
Elements of housing policy, macro and micro economic view of housing policy
History of Housing and Planning Policies in India, Five Year Plans, National housing Policy
Housing policy problems in rural settlements, preparation and implementation of feasible rural housing programs as part of rural developments strategy
Formulation of Housing Policies at National, State and Local levels
Role of Governments, and other organisations in implementing housing policies

Module II

Housing Programmes
• Relevant Housing Programmes of Central, state and Local authorities, MNREGS, IAY, RAY, VAMBAY,
• A comparative study of housing policies and programs of developing and developed countries

Module III

HOUSING LEGISLATION
Meaning of terms of law, legislation, ordinance, bill, act, regulation and bye-laws –
Significance of law and its relationship to urban planning - Benefits of statutory backing of schemes
- Law of eminent domain and police powers - Evolution of planning legislation –
A brief History of Planning Legislation in India and Abroad
Significance of land development controls – Zoning, subdivision regulations, building regulation and bye-laws.
References:
1. Reading Material on Housing – ITPI New Delhi
3. Girish K. Misra, PSN Rao - Housing Legislation on India
4. Harjinder Singh, Leslie Kilmartin – Housing in the Third World
6. National Housing and Habitat Policy 1998 – Akalank Publication

Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
ACC 2000 Research Methodology 2-0-0-2

Structure of the Course
Lecture : 2 hrs/ Week Credits : 2
Internal Continuous Assessment : 40 Marks
End Semester Examination : 60 Marks

Course Objective:
To formulate a viable research question
To distinguish probabilistic from deterministic explanations
To analyze the benefits and drawbacks of different methodologies
To understand how to prepare and execute a feasible research project

Outcome
Students are exposed to the research concepts in terms of identifying the research problem, collecting relevant data pertaining to the problem, to carry out the research and writing research papers/thesis/dissertation.

Module 1
Introduction to Research Methodology - Objectives and types of research: Motivation towards research - Research methods vs. Methodology. Type of research: Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, and Conceptual vs. Empirical.
Research Formulation - Defining and formulating the research problem - Selecting the problem - Necessity of defining the problem - Importance of literature review in defining a problem. Literature review: Primary and secondary sources - reviews, treatise, monographs, patents. Web as a source: searching the web. Critical literature review - Identifying gap areas from literature review - Development of working hypothesis.

Module 2

Module 3
Reporting and thesis writing - Structure and components of scientific reports - Types of report - Technical reports and thesis - Significance - Different steps in the preparation, Layout, structure and Language of typical reports, Illustrations and tables, Bibliography, referencing and footnotes. Presentation; Oral presentation - Planning - Preparation - Practice - Making presentation - Use of audio-visual aids - Importance of effective communication.

Application of results of research outcome: Environmental impacts – Professional ethics - Ethical issues - ethical committees. Commercialization of the work - Copy right - royalty - Intellectual property rights and patent law - Trade Related aspects of Intellectual Property Rights - Reproduction of published material - Plagiarism - Citation and acknowledgment - Reproducibility and accountability.
References:
1. C.R Kothari, Research Methodology, Sultan Chand & Sons, New Delhi, 1990
Structure of the course:
Credits: 8
Studio: 16 Hours/ week
Internal Continuous Assessment: 200 marks
End Semester Jury Examination: 100 marks

Course Objective: The objective of this studio is to evolve comprehensive housing development strategy.

The housing strategy for the selected city can be developed by studying city level and housing subsystem level aspects and estimating housing shortage; projecting housing need and demand and preparing alternative scenario’s 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.

A study of the physical form of housing as determined by socio-economic and environmental factors and activity patterns.

Provision and use of space, facilities and services in existing housing area - Design of a shelter and a housing cluster based on local conditions and user requirements and preferences – Preparation of layout for EWS, LIG, MIG, HIG etc. – Preparation of layout for cluster housing – High rise housing etc.

Assessment degree of residential satisfaction in existing housing area.

Primary surveys of inhabitants to compare the indented, actual and desired space use pattern at various levels as related to socio-economic and demographic profiles of households.
SEMESTER III

APC 3001    HOUSING FINANCE AND MANAGEMENT

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: The course aims to address the characteristics of housing finance, The financing institutions and issues related to housing finance.

Module I

Module II

Module III
Housing finance requirements of economically weaker sections. Conventional and non-conventional practices and methods for financing housing in developing countries – the role of micro financing and non institutional financing etc. Saving and credit unions, traditional and informal ways of finance.

References
1. Robert Euburter – Housing Finance in Developing Economy
2. Bakshi D. Sinha – Housing in India
3. Burns – Housing of Nations
4. Sri. K. Thomas Paulose – Reading Material on Housing – Published of All India Institute of Town Planners.
5. Smith – Housing : the Social & Economic Elements
6. S.K. Sharma, Hudco – An overview of Housing Finance Systems in India
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with sub-divisions) from each module out of which two questions are to be answered.
APC 3101  PLANNING AND DESIGN STUDIO-III

Structure of the course:

Credits: 8
Studio: 16 Hours/ week
Internal Continuous Assessment: 200 marks
End Semester Jury Examination: 100 marks

Course Objectives:
The planning and design Studio-III is aimed to equip students in formulating housing projects.

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.

Housing programme evaluation. Approach to programme evaluation, formulating questions and standards, needs assessment, setting objectives, managing staff and preparing time schedules, designing evaluation and attitudes, analyzing information, writing and reporting.

Housing Strategy formulation

Collecting city level and sector level information. Estimating Housing shortage, projecting housing need and demand, assessing financial requirements and preparing alternative scenarios for housing development.

Determinants of Strategy formulation, use of computers or alternative generation, Bertaud model, housing stress impact assessment.
Structure of the course:
  Credits: 3
  Lecture: 3 Hours/ week
  Internal Continuous Assessment: 50 marks

Dissertation is a format report written systematically on particular topics as related to town and country planning. This exercise is taken up as to widen and enrich the literature pertaining to a topic of research. It may focus upon cross section of literature of a topic with or without research hypothesis. The material written systematically may be useful in fourth semester when the same topic with literature reviewed systematically be confined as a part of thesis.
Structure of the course:
   Credits: 2
   Internal Continuous Assessment: 50 mark

Objective: To acquaint the student of real time practices in Planning and Housing related projects. The students are encouraged to get hands on training in planning techniques employed by planning boards and practicing planners.

The practical Training is of two week duration that can be extended up to a month. On the completion of training period the students should submit a report on the works carried out by them.
SEMESTER IV

APC 4001 DEVELOPMENT MANAGEMENT AND HOUSING STRATEGIES

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Objective: To familiarise the students with the administration and financing of urban/rural housing and other infrastructure development and management strategies adopted for their implementation and monitoring.

Module I
Development management concepts, definition, characteristics, objectives and scope
Development goals and processes, political – economic system’s effect on development management
Key issues in development management of urban/rural settlements, task force, committees and recommendations on development management
Need for housing management, basic elements of management planning and its relevance to the housing sector, national goals and management strategies for housing

Module II
Development administration: municipal administration system, rural administration system, urban development authorities, urban management agencies etc.
Housing administration in India, national, state and local level organisations, role of housing boards, development authorities, improvement trusts and boards, cooperatives, agencies, private sector, NGO’s etc in housing management
Development financing: resource mobilisation and intergovernmental fiscal relations, state grants and shared taxes of local bodies, municipal finance, property tax, institutional approaches, capital investments and other new initiatives for financing development

Module III
Development strategies: land management techniques for housing and infrastructure development, fiscal and organisational techniques for development management
Management, monitoring and evaluation techniques for development projects, participatory management processes, managing joint ventures, post occupancy management of housing and other development projects
Alternative development management strategies: persuasive strategies, non-persuasive strategies, measures of inducements and promotion of development etc.
References:
1. Prof. N S Saini, Reading Material on Development Management.
2. Jean Woodall, Management Development.
4. Panandiker, V A P, Development Administration in India.
5. Oberman J, Planning and Managing the Economy of the City.
9. Jain D K, Project Planning and Appraisal in Planned Economy in India.
10. MundanthuraBalakrishnan – Environmental Problems and Prospects in India – Oxford & IBH.

Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Structure of the course:
   Credits: 12
   Studio: 24 Hours/ week
   Internal Continuous Assessment: 150 marks
   End Semester Jury Examination: 100 marks

Course Objective: The main objectives of the thesis are to provide an opportunity to each student to do original and independent study and research on a subject concerning Housing.

The student is required to explore in depth and develop a subject of his/her own choice, which adds significantly to the body of knowledge existing in the field of housing and which uses the knowledge he has acquired from theory and design courses previously taken.

The topic of a thesis may be based on concept; comparative, or evaluative and should offer scope to adopt a fresh approach is formulating a concept to developing a methodology effective and useful in the field.
Electives
Stream elective 1

APE2001 HOUSING PROJECT FORMULATION AND IMPLEMENTATION

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objectives:
The course aims at introducing the techniques and procedures relevant for project planning and implementation especially in developing countries, including project identification feasibility studies, design & implementation. Also considers how to evaluate economic & social effects of completed/ongoing development projects.

Module 1
Introduction - Project formulation & appraisal- Methodology for project identification and formulation – preliminary studies, feasibility reports and detailed project reports. Various concepts of layout planning, row houses, detached, semi detached, multi storeyed housing.

Module II
Planning Analysis – Objectives – Identification of target population, affordability-
Identification of sites for new housing settlements
Phasing of the programme- infrastructure required
Definition of key tasks of job creation needed for the housing programme
Definition of existing urban areas requiring redevelopment with degrees of urgency.
Definition of areas suitable for upgrading- fixing priorities.
Selection of land for new settlements, redevelopment and upgrading.

Module 3
Standards and costs – Planning standards, construction standards, development standards, human resource standards.
Institutional frame work – Resource allocation, subsidy, Landvalue and acquisition
Housing Programme – Housing need- new households, upgrading of existing housing areas.
Finance and resources- Distribution of resources between income groups-
Upgrading projects, Site and services, new built low income projects-Cost Benefit Analysis –Social cost benefit analysis

References:
1. Shakland Cox Partnership – Third world urban housing, Aspirations-Resources Programmes and Projects
3. Reading material on housing –ITPI New Delhi
4. Karl Kramer – Housing Groups
5. Joseph de Charia – Housing and Residential Development

Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Stream elective I

APE2002        HOUSING & COMMUNITY DEVELOPMENT

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: To understand the concept, Philosophy & Principles of Rural & Urban Community Development and also to learn the programmes and services in the Governmental and Voluntary sector.

Module I
Definition, Scope, Objectives and socio-political context of community development – Role of community development in the context of enabling shelter strategies of government – Concept of community, identification of characteristics, resources an problems of community.

Module II

Module III
Community Development : Historical review of community development programmes since independence, Programmes for the development of SC/ST- Current rural and urban development programmes, Role of NGO’s- NGO in shelter strategies – their risk, role and scale of influence, communication , networking mediation and coordination by NGO – Relation between government and NGO problems faced by NGO – Case studies of NGO involvement in housing community based organisation (CBO) and NGO integration of other development inputs, shelters in community development project.

Analysis of social influences on community well being. Research organizing and planning methods for designing programmes and policies for Community Developments.
References:


2. Ralph Briady – Problem Solving.

3. K. Thomas Paulose – Reading Material on Housing – ITPI Reader


Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with sub-divisions) from each module out of which two questions are to be answered.
Stream elective 1
APE2003 TRAFFIC & TRANSPORTATION PLANNING

Structure of the course:
Credits: 3
Lecture: 3 Hours/week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: The course aims at imparting knowledge on understanding of urban transportation problems in planners’ perspective, definition of the problem, setting clear goals and objectives to serve as guiding factors in the planning process, identification of the causal factors influencing the demand for urban travel and development of relationship between the factors and the travel demand.

Module I
Introduction:
Role and importance of traffic & transportation planning in national development, urban & regional transport systems – features of urban forms and network patterns – Historical overview of transport development. Transport and Socioeconomic Activities, Freight Transportation, Future Developments.
Transportation system and its framework of reference – technological characteristics of transport modes and systems – the nature of demand and supply of transportation modes – road user and the vehicle.

Urban Transportation System Planning - Conceptual Aspects:

Module II
Transportation process:
Geometric design of roads and intersections, road traffic safety – traffic signals, street lighting, and parking – Urban traffic problems – road capacity – Hierarchy of roads – Design of road layouts – traffic and travel characteristics – segregation of pedestrian and vehicular traffic.

Transportation Surveys:

Module III
Management of transport systems:
Norms and guidelines for highway landscape – street lighting types – standards and design considerations – National Transport Policy.
**Transport Economics:**
Economic evaluation – pricing and funding of transport service and systems – economic appraisal of highway projects, Traffic safety and solutions.

**References**


**Structure of the Question Paper**

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Stream elective 1
APE2004  CLIMATOLOGY AND HABITAT PLANNING

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objectives: To acquaint the students of the relevance of climate and climatic influences in planning. This would equip the students to develop sustainable approach to planning.

Module I
Introduction to climatology
Climate, Climatic variables and climatic zone – Climate and weather – micro and macro climate, temperature, humidity, precipitation and wind - tropical Climate – Climatic zones of India and their character – Solar movement and design for shading geometry of solar movement, solar chart-horizontal and vertical shadow angles- design of shading devices.
Wind movement in and around building – Natural ventilation — Design of openings- Built form and orientation- Design recommendations for various climatic zones in India.

Module II
Thermal comfort and lighting
Thermal comfort in buildings and the means of achieving them – Thermal insulation, heat flow through elements, convection, conduction, radiation.
Day light –Natural lighting in the interiors, windows, daylight penetration - Calculation of day light factors.

Module III
Climate and Habitat planning
Effects of micro climate, topography, vegetation, landscape etc. in habitat planning.
Climate and civilization, Climate and habitat - Study of human habitat in different climatic zones – Climate and building forms.

References
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.

Departmental elective
ADE2001  SUSTAINABLE SETTLEMENT PLANNING

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objectives: This course attempts to throw light on sustainability issues related to planning. The outcome would be to make the learner aware of sustainability issues in planning.

Module I:- Sustainable Development and Planning- Introduction
Concept of Sustainability- Energy use and Climate change- The concept of Sustainable Planning and its relevance- Eco villages – Villages, neighbourhood and community – Historical background of village – Influence of modernity and changes in locality based village forms

Module II:- Sustainable settlement planning
Eco neighbourhood – Case studies – Sustainable City Programme (SCP) of UNCHS – HABITAT & UNEP – The concepts and case studies – Environmental policies for sustainable city.

Module III: Community and sustainability
Community and sustainability – Changing nature of community – Community based initiation for sustainable development – Community governance – community basis shelter technology -energy consumption in settlements.

References
2. UNCHS, UNEP – Publications on SCP

Structure of the Question Paper
For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Departmental elective
ADE2002 PLANNING FOR TOURISM

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objectives: The course intends to look at planning aspects for tourism. The knowledge of the impacts and issues regarding tourism will equip the future planners to provide solutions for tourism planning.

Module 1: Introduction to tourism
Definitions, scope, nature, classification and dimension, tourism as an industry, tourism in developed and developing world.
Tourism and environment: Carrying capacity and Sustainable development. Ecotourism, environment and tourism, natural and man-made heritage and tourism development.

Module II- Tourism sector- Impacts
Tourism environment and Society, Tourism and natural environment, Mass tourism and environment.
Environmental impacts of tourism.-Impacts on ecosystems-Impacts on wild life, coastal areas, hill stations, backwaters, eco-sensitive areas heritage sites etc
Tourism impacts- Resource evaluation, Economic effects, socio cultural effects, Physical effects.

Module III: Planning for Tourism:
Nature and scope of a tourism plan- key issues and stages, data requirements, surveys, role of key players/stake holders in tourism policy and planning, sustainable tourism development planning; community planning and tourism; implementation and management, role of travel and tourism promoting agencies, monitoring the tourism development; Tourism marketing – concept, techniques and strategies.

References:

**Structure of the Question Paper**

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Departmental elective

ADE2003 REAL ESTATE DEVELOPMENT

Structure of the course:
- Credits: 3
- Lecture: 3 Hours/ week
- Internal Continuous Assessment: 40 marks
- End Semester Examination: 60 marks

Course Objective: To familiarise the students to real-estate market mechanisms and their implications on the processes of city development and resource mobilisation

Module I
- Introduction and history of real estate development
- Principles of real estate value concepts and methods of valuation
- Introduction to real property ownership, leasing, property succession, methods of sale/purchase, title search etc.

Module II
- Real estate laws and other legal framework
- Real estate markets, fluctuations and forecasting, economic cycles, demand and supply, values, assessment techniques, rental structure, speculations, risks, hedging etc. agents and access by different interest groups in real estate markets
- Real estate investments and packaging, government policies and industry organisation, international investments like FDI, public private participation and joint ventures, role of real estate development agencies, NRI’s and PIO’s in the investment market

Module III
- Real estate project formulation, development process, asset management, property insurance
- Real estate Investment analysis and risk assessment techniques, market surveys and research, portfolio management, marketing and brokerage, rating system in real estate markets etc.
- Infrastructure development and quality control, post development management and maintenance in real estate development
- Case studies of good practice in development of real estate

References:
1. Mike E Miles, Gale L Bereus, Mark J Eppli and Marc A Weiss, Real Estate Development Principles and Process
2. S P Peca, Real Estate Development and Investment: A Comprehensive Approach
3. Charles Long, Finance for Real Estate Development
4. Rajkumar S Adukia, Real Estate Law Practice and Procedures
5. John Ratcliffe, Mark Shepherd and Michael Stubbs, Urban Planning and Real Estate Development
6. StieveTiesdell and David Adams, Urban Design in Real Estate Development Process
7. Alex Wilson, Jenifer L Uncapher and Lisa McManigal, Green Development Integrating Ecology and Real Estate
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with sub-divisions) from each module out of which two questions are to be answered.
**Departmental elective**

ADE2004  
URBAN SOCIOLOGY

**Structure of the course:**
- Credits: 3
- Lecture: 3 Hours/week
- Internal Continuous Assessment: 40 marks
- End Semester Examination: 60 marks

**Course Objectives:** Physical environments shape and are shaped by social life. Urban space is being reconfigured every day. Spatial development has a great impact on urban politics, culture and relationship of cities to the environment. Spatial policy makers are to be aware of these far reaching impacts. This course introduces these to the learners.

**Learning Outcomes:**
To give an introduction to urban sociology and urban studies

**Module I**
Introduction, basic concepts: Culture, Norms, Values Statues, Role, Social Stratification, Race, Ethnicity, Gender, Caste, Class, Religion, Deviance, Social Control, Social Change
Urbanization, Definitions, urban Structure, Urban ways of life a global analysis of urbanization, Types of Cities, Theories of Urbanization
Historical development of urban form in relation to society, politics and culture; Preindustrial city, Industrial cities and suburbs, Post Industrial Era, Indian cities, Globalization
Urbanization in India, Urban rural migration

**Module II**
Urbanism: Urban culture and urban society, Models of social geography, European Perspectives, Chicago School of Sociology, Social Area Analysis, Factorial Ecology, Gentrification, Suburbanization Race, Class and Spatial Segregation, Inequality and Polarization urban Governance.

**Module III**
Community in Urban settings: Identity, Difference, Inequality and polarization Crime, Fear of crime, Apartheid
Urban Anomie Theory, Urban eco criticism, Eco Feminism
Social Psychology: Image of the city, mental maps, the production of space geography of gender in the city
Religion and caste in the Indian city

**References**
1. Rajendra Kumar Sharma- Urban Sociology.
2. N. Jayapalan - Urban Sociology.
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Stream elective2
APE3001 ENVIRONMENTAL PLANNING

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objectives: The course is structured to introduce the student into the concepts of environmental planning and issues related to it. This will enhance the ability of the student to develop an environmental approach to planning.

Module I: Concepts of Ecology, Ecosystem and Environmental Planning
History of Environmental Planning, Development of Habitat patterns, Settlement structure and form in response to environmental challenges; Concepts of Ecology and Ecosystem, Man’s impact on environment. Modification of natural environment – Current conditions of natural resources like land, water, air. Over exploitation of natural resources, agriculture, fishing, mineral resources, energy resource, forest wealth etc.

Module II: Environmental Issues and Strategies
Examination of critical issues underlying the current and future environmental problems- Global environmental problems : global warming, ozone layer depletion, oceans, fresh water, pollution, biological diversity etc.
Issues related to Environment & ecology like, de - forestation, soil erosion, water logging and soil salinization. Scarcity of natural resources and exploitation of them for development.
Planning for optimizing the use of natural resources, methods used like water harvesting, waste land management and minimizing use of fossil fuel etc.

Module III: Environmental Approach in Planning
Environmental Concepts – Sustainability and Environmental Carrying Capacity – Environmental Strategies in Land use, Transportation, Infrastructure Planning and Management - Legislative Requirements, Public Awareness and Community Participation – Environmental Management Options

References
5. Joseph M. Morgan – Introduction to Environmental Science
6. S.D. Maurya – Urbanization and Environmental Problems
7. B.D. Nag Chaudhuri – The Global Environmental Movements
9. Eldon D. Enger – Environmental Science
Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: This subject introduces the students to various institutions and organisations and the governance mechanisms involved in development planning, administration and management

Module I
Institutions in planning: types of institutions, structure and functions, role and relevance (legal, political, social, cultural and economic)
Differences between institutions and organisations, formal and Informal institutions, their interface, conflicts, reach and their effectiveness in planning process
Governance: definition, concepts and components, government and governance, salient provisions of the Constitution of India, public governance in India: its structure and system
Urban governance systems: evolution and processes, overview of urban and rural governance structure in India, decentralisation of powers, role of central, state and local institutions in the governance process

Module II
The Planning Commission, National Development Council, and their role in framing development policies, role of state in planning processes: facilitative, regulatory and other powers
Institutional framework for urban and rural development planning, TCPO and various national level committees and commissions on urbanisation, state level institutions like metropolitan/urban development authorities, regional planning and district level organisations
Professional bodies and their role in policy formulations and evaluation processes, Higher education institutions and their role in man power training and research
International funding agencies like World Bank, IMF, WHO etc. And their role in development planning.

Module III
Participatory governance, people’s participation, role of people’s participation in the planning process, other stakeholders like NGO’s, civil society, private sector, scientific network, international institutions etc. process of inclusion and exclusion in governance, access to government by various stakeholders
Post 73rd and 74th Constitution Amendment Act environment and the modified role and functions of local bodies, local authorities, district authorities and state level agencies, case examples.
Principles of good governance and practices, new forms of governance, effectiveness of E-governance mechanisms, role of advanced locality management, resident welfare associations and other such agencies in urban governance system
Best Practices – national and international on participatory governance and development planning.
References:
1. PaiPanadiker V A, Governmental Systems and Development
2. Viswambar Nath, Administration and Development Planning in India
3. Tyagi R Public Administration, Principles and Practices
4. Mario Pinto, Metropolitan City Governance in India
5. Jain R, B Public Administration in India, 21st Century Governance for Good Governance
6. Manoj Sharma, Local Government Rural and Urban

Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Stream elective 2
APE3003    HOUSING FOR SPECIAL AREAS AND GROUPS

Structure of the course:
  Credits: 3  
  Lecture: 3 Hours/ week  
  Internal Continuous Assessment: 40 marks  
  End Semester Examination: 60 marks

Course Objective: The course aims to sensitise the future planners to the needs of special groups and planning considerations required for special areas. This will help the planner to develop an integrated and inclusive planning strategy.

Module I
Introduction to housing for special groups and areas
Definition and concepts in organization, housing organizations in India at national, state and local level, role of improvement trusts, housing boards, development authorities, slum improvement boards & cooperatives, role of private sector and NGO's, role of financing agencies, public- private partnerships, organizational reforms and privatization.
Professional body and role of ethics: Aims and objectives of Institute of Town Planners, India
Need for housing management. Managing and monitoring housing projects. Participatory management processes and managing joint ventures. Post occupancy management of housing estates

Module II
Housing for special groups
Housing for Aged/ Differently abled- characteristics of aging population, profile & growth of elderly persons, planning and design considerations for elderly, case study with special reference to housing
Housing for Women/ Children- Importance of gender in housing, design considerations for urban and rural women, government schemes case study with special reference to housing
Housing for refugees/ outstees/ Shelterless- Concept of refugees, types of refugees, planning considerations for refugees, case study with reference to housing
Tribal housing – housing typology, housing schemes, policies &programmes for tribal upliftment, case study areas.
Module III
Housing for special areas

Inner city housing- evolution & historical background, community spatial characteristics, housing transformation of core city, impact of transformation, problems of inner cities, policies & programmes

Arid/ Coastal/ Hilly Region Housing- settlement & shelter characteristics, design standards, development policies & programmes

Fringes/ Peri-urban/Suburban Housing- Rural urban linkages, characteristics of fringe areas, development process, case study with special emphasis on housing

Housing in disaster prone/ Affected areas- vulnerability- vulnerable areas & groups. Hazard zoning maps. Shelter typology for different hazardous situations/ housing design & planning at pre and post disaster stages, retrofitting of unsafe buildings and construction of disaster resistant structures. Measures affecting design & performance. Low cost dwellings / temporary and emergency shelter design at post disaster stage.

References:

1. Hanbook on design and construction of housing for flood-prone rural areas of Bangladesh / [K. Iftekhar Ahmed].
2. K. Iftekhar Ahmed, Asian Disaster Preparedness Center, Bangladesh Disaster Preparedness Center
3. Housing in Disaster Prone Areas:
5. India. Development Group (Task-Force) on Housing in Disaster Prone Areas
7. Public Housing: Current Trends and Future Development by David Clapham, John English

Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.
Stream elective 2
APE3004    RURAL PLANNING AND DEVELOPMENT

Structure of the course:
Credits: 3
Lecture: 3 Hours/ week
Internal Continuous Assessment: 40 marks
End Semester Examination: 60 marks

Course Objective: The focus of this course is to understand and appreciate the importance of rural development in the national perspective and development, to expose the validity of the various programmes and problems faced in rural India, Rural Development as a pre–requisite for regional and national development and Quality of human life.

Module I
National Planning and Rural Development
Policies and Programme of rural development in India. Five year plans and Agricultural development
Agricultural Development

Module II
Rural Development Programmes
Rural development programmes in India. Past and present – performances and problems. Rural and urban development programmes in other developing nations. Development inputs and its impact on social; economic changes.

Module III
Rural Infrastructure Planning
Rural Institutions and Case Studies.
Rural institutions and Organizations, Rural banks, Co-operatives, Marketing Mass Media and Communication.Micro-finance, SHG and rural credit access.
References:


Structure of the Question Paper

For the End Semester Examination the question paper will have three questions (with subdivisions) from each module out of which two questions are to be answered.