

# Faculty of Physical Planning and Architecture

## SYLLABUS

### FOR

## INTERDISCIPLINARY COURSE IN PHYSICAL PLANNING (UG)

**Examinations: 2019-20**



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# GURU NANAK DEV UNIVERSITY AMRITSAR

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SCHEMES:

**INTERDISCIPLINARY COURSE FOR ODD SEMESTER (UG)**

**SPL 001 - ELEMENTS OF HUMAN SETTLEMENTS**

**INTERDISCIPLINARY COURSE FOR EVEN SEMESTER (UG)**

**SPL 002- FUNDAMENTALS OF MAP PREPARATION**

ODD SEMESTER (Under Graduate)

## SPL 001 - ELEMENTS OF HUMAN SETTLEMENTS

**Credits: 04 (L=3, T=1, U=0)**

Time: 3Hrs.

**Total Marks: 100**

**Mid Semester Examination: 20% weightage (Marks:20)**

**End Semester Examination: 80 % weightage (Marks: 80)**

### **Instructions for the Paper Setters:**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

### **Section A**

Definition, types and pattern of urban and rural Settlements, Characteristics of Urban – Rural areas and the associated common issues. Census Classification of Towns, Standard Urban Areas, Urban Agglomeration.

### **Section B**

Urbanization Process: Characteristics, function, growth, size, migration, Social-Economic profile of a city, Major components of settlement, Stages of development and Evolution of City: Ancient town planning, Medieval City planning.

### **Section C**

Modern urban planning concepts: Sir Ebenezer Howard, Frank Lloyd Wright's broad acre city, Patrick Geddes, Le Corbusier, C.A. Doxiadis, Lewis Mumford. Theories of Urbanization – Concentric Zone theory, Sector theory and Multi nuclei theory.

### **Section D**

Content and components of different plans – Site Plan, Development Plan, Master Plan, Regional Plan. Community participation through site planning. Importance of planning of human settlement.

Suggested Readings:

1. Hall P (2002), "Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the 21<sup>st</sup> Century", Blackwell Publications, Oxford.
2. Hall P (1998), "Cities in Civilization; Culture, Technology and Urban Order", Weidenfield and Nicolson, London.
3. Nath R (1995), "Medieval Indian History and Architecture", APH Publishing Pvt Ltd, New Delhi.
4. Kopardekar & Diwan (1994), 'Urban and Regional Planning-Principles, Practice and Law' S.H. Kopardekar, Talegaon – dabhade.
5. Lynch K (1981), "A Theory of Good City Form", Cambridge Publications, London.
6. Keeble L. (1972), 'Principles & Practice of Town and Country Planning', the Estates Gazette Ltd., London.
7. Gallion A (1963), "The Urban pattern; City Planning and Design", D.V. Nostrand Company Inc, N.York.

EVEN SEMESTER (Under Graduate)

**SPL 002- FUNDAMENTALS OF MAP PREPARATION**

**Credits: 04 (L=3, T=1, U=0)**

Time: 3Hrs.

**Total Marks: 100**

**Mid Semester Examination: 20% weightage (Marks:20)**

**End Semester Examination: 80 % weightage (Marks: 80)**

**Instructions for the Paper Setters:**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**Section A**

Maps and its type. Basic elements and components of Maps. Conventional Symbols and sign for maps. Scales: types of scales; Topographical maps: Survey of India (SOI) specifications, grid formation, Interpretation of Topographical Maps.

**Section B**

Data Classification: Point, Line, Area. Representation of geographical data: Choropleth, proportional symbol, dot, pictographically, graphs, bars. Isolines, Types of Land Use in Urban and Rural Areas.

**Section C**

Concept of digital maps, Purposes of Digital Mapping, advantages and disadvantages of digital maps. Digital maps in GIS: basic concepts, definitions and terminology, Raster and Vector digital maps; supporting data management- spatial and attributes, linking of tables; data analysis and modeling-attribute analysis and spatial analysis- Buffering, Geo-processing, Map overlays etc. Demonstration of GIS applications in cities.

**Section D**

Role of remote sensing and satellite imagery in digital mapping. Setting up of a drawing in CAD– Coordinate system, Limits, Units, Precision, Point, Lines, Polygons; Concept of Layers. Demonstrative exercise may be shown.

**Suggested Readings:**

1. National Map Policy (2005), Survey of India, Dehradun.
2. Monkhouse and Willinson (1964). Maps and Diagrams, Methuen & Co., London.
3. Singh, R.L. and Rana, P.B. Singh (1998). Elements of Practical Geography, Kalyani Publishers, New Delhi.
4. Khullar, D.R. (1999). Essentials of Practical Geography, New Academic Publishing Co., Jalandhar.
5. ESRI (2015). ESRI MAP Book 2015. ESRI Press California.

6. Roger, F. (2009). Tomlinson Thinking about GIS: Geographic Information System Planning for Managers, ESRI Press California.
7. Tickoo, Sham (2008), "Understanding AutoCAD", Tata McGraw Hill, New Delhi.
8. Omura, George (2007), "Mastering AutoCAD", BPB Publications, New Delhi.

