

M. Tech. – I Semester – II

Subject Name: Urban Planning Techniques (Studio)

Subject Code: MTTC13202

Type of course: Core – IV

Prerequisite: This course intends to impart knowledge about URDPFI Guideline, GDCR TCPO Norms, GTPUD Act – 1976 and various land management models.

Rationale: To amalgamate planning techniques on the basis of qualitative & quantitative analysis of availed data for proper management & performance of urban planning.

Teaching and Examination Scheme:

TEACHING SCHEME				Theory Marks			Practical Marks		Total
L	T	P	C	TEE	CA1	CA2	TEP	CA3	150
3	0	2	4	60	25	15	30	20	

CA1: Continuous Assessment (assignments/projects/open book tests/closed book tests) **CA2:** Sincerity in attending classes/class tests/ timely submissions of assignments/self-learning attitude /solving advanced problems **TEE:** Term End Examination **TEP:** Term End Practical Exam (Performance and viva on practical skills learned in course) **CA3:** Regular submission of Lab work/Quality of work submitted/Active participation in lab sessions/viva on practical skills learned in course

Content:

Sr. No.	Topics	Teaching Hrs.	Module Weightage
1	Land use activities Population forecasting methods. Analysis and prediction of important land use activities.	6	10%
2	Spatial Standards UDPF/ URDPFI and TCPO guidelines, GDCR of a city for residential, industrial, commercial and recreational areas, standards for urban amenities, Provisions of Town Planning Act, zoning, subdivision practice and metro region concept.	8	10%
3	Analytical techniques Linear programming, threshold analysis	6	20%
4	Town development plan /town planning schemes Scope, contents and preparation. Land value and density pattern. A case study of development plan, preparation of Town Planning Schemes, activity areas, plan implementation – organizational legal and financial aspects, public participation in plan formulation and implementation, planning for urban poor, national renewal schemes and policies	12	20%
5	Urban decay and conservation Urban Decay causes and impacts, Urban renewal, Meaning, significance, scope and limitations, identification of renewal areas, renewal strategies. Urban conservation: Meaning, heritage, significance and techniques	10	20%

6	Concept of new towns Meaning Role and functions: Special planning and development considerations, scope and limitations of new town development, Indian and British experience of planning and development of new towns.	6	10%
7	Global trends Concept of International cities, issues and planning approaches, ranking of various cities on different aspects.	6	10%

Suggested Specification table with Marks (Theory/Practical):

% Distribution of Marks					
R Level	U Level	A Level	N Level	E Level	C Level
20%	20%	15%	15%	15%	15%

Legends: R: Remembrance, **U:** Understanding; **A:** Application, **N:** Analyze, **E:** Evaluate **C:** Create and above Levels (**Revised Bloom's Taxonomy**)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Reference Text Books:

Sr. No.	Title of book /article	Author(s)	Publisher and details like ISBN	Year of publication	Publication Edition
1	Urban Planning In India	Amiya Kumar Das	Rawat Publishers (ISBN: 8131600947)	2007	1 st
2	Town Planning Techniques	Margaret Roberts	Hutchinson Educational Publication (ISBN: 978-0091168902)	1974	1 st
3	Town and Country Planning and Housing	N. V. Modak And V.N. Ambedkar	Sangam Bks (ISBN: 978-0861252916)	1979	1 st
4	Planning and Development of Towns	R.G. Gupta	Oxford & IBH Publishing Company (ISBN: 0836412338, 9780836412338)	1983	1 st
5	Urban Land Markets: Improving Land Management for Successful Urbanization	Somik V. Lall, Mila Freire, Belinda Yuen, Robin Rajack, Jean-Jacques Helluin	Springer (ASIN : B007OVS2RG)	2009	1 st
6	Urban and Regional Planning	K. S. Ramegouda	Mysore University Publication ASIN : B0006CIMC0)	1972	1 st

7	Environmental Land use planning and Management	John Randolph	Island Press (ISBN: 978-1597267304)	2011	2 nd
8	Urban Land use Planning	Philip R. Berke	University of Illinois Press (ISBN-13 : 978-0252030796)	2006	5 th

Course Outcome:

Sr. No.	CO Statement After learning this subject, students will be able to	Marks % weightage
CO-1	Understand and attempt practicing management principle (R,U – Cognitive Level)	20%
CO-2	Understand process of analysis and predict future population by using different statistical methods (R,U,A – Cognitive Level)	15%
CO-3	To understand scopes, functions, limitations of new town development were made known, various policies and land development schemes pertaining to urban planning (U,A, N,E – Cognitive Level)	15%
CO-4	Understand the different parameters of T.P.Scheme. (U,A,N,E,C – Cognitive Level)	30%
CO-5	Explore the basic concept of urban decay and conservation. (R, U – Cognitive Level)	20%

LIST OF PRACTICALS: (Minimum ----- performed.)

To apply planning principle and land management through preparation of T. P. Schemes and develop skill of Land management Practice.

1. Concept of land management system.
2. Purpose and provision of town planning act
3. Explore - Land management tools
4. Understanding - Procedure of Town Planning Scheme
5. Selection of study area: Locational Features (city, zonal & aerial features)
6. Propose T. P. Scheme Alternatives
7. Modification of T. P. Scheme proposal
8. T. P. Scheme finalization
9. Comparative Feature Of Alternatives
10. Estimation
11. Report Generation

Major Equipment:

1. Computers/ Laptop with higher configuration and internet server.

List of Open Source/learning website:

- <https://townplanning.gujarat.gov.in/Documents/Gtpud%20amd1>.
 - GTPUDA Act,1976
- <http://tcpo.gov.in/guidelines>

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- TCPO Guidelines

List of Open Source Software:

- CAD Drafting tools; word processing tools, calculation sheets
- Google Earth
- Google SketchUp Pro
- ESRI City Engine (Transforms 2D GIS Data into 3D city models)