

M. Tech. – I Semester - I

Subject Name: Innovations in Town Planning

Subject Code: MTTC14103

Type of course: PE-I

Prerequisite: Basic understanding on innovation and work of some famous town planners in India and abroad

Rationale: To understand the innovation process and also to familiarise with the recent innovative trends in town planning and how the same are changing the scenario of conventional practices.

Teaching and Examination Scheme:

TEACHING SCHEME				Theory Marks			Practical Marks		Total
L	T	P	C	TEE	CA1	CA2	TEP	CA3	150
03	00	02	04	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 in %
1.	Introduction – Fundamental concepts in town planning, History of town planning in ancient and post independence India, Contribution of famous town planners, Practices of town planning around the world, Basic understanding of innovation process, Tools of innovation, Strategy, tactics, decision making, goal setting and benchmarking, Imagination and the role in innovation	08	18
2.	Housing, India and Abroad - Fundamentals of housing, Scenario of housing in India, Innovative practices in housing in India and abroad, Macro and micro housing, Use of new materials in housing, Role of transportation in town planning, Innovations in transportation	15	33

	planning, Mass transportation v/s private mode, Innovations in modes of transportation, Innovative land use planning, Innovations in land uses, Ideal land use pattern for an urban area, Innovations in land use planning in India and abroad		
3.	Urban Governance - Understanding the main challenges of innovative urban governance, Financial, economic and social aspects, E governance, IoT, Relevant technological innovations, Linkages of public participation and changes in conventional town planning practices, Spatial planning, Spatial multicriteria assessment, Investments in effective land use planning	12	26
4.	Sustainable Development - Introduction to the concept of sustainable development, Agenda 21, Brief history sustainable development practices in India and abroad, Innovations and methodologies for ensuring Sustainability, Linkages of environment protection and planning, Responsibilities of a planner towards environment	10	23

Suggested Specification table with Marks (Theory/Practical):

% Distribution of Marks					
R Level	U Level	A Level	N Level	E Level	C Level
15	30	25	10	10	10

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
01	Central Park: The History of New York City's Most Unique Landmark	by Charles River Editors (Author)	CreateSpace Independent Publishing Platform		

			(February 4, 2015) 978-1507843499		
02	Green Escapes: The Guide to Secret Urban Gardens Hardcover –	18 May 2018 by Toby Musgrave (Author)	Phaidon Press (18 May 2018) 978-0714876122		
03	Regional Planning for Open Space (RTPI Library Series Book 18) 1st Edition, Kindle Edition	by VALK. ARNOLD VANDER (Author), DIJK. TERRY VAN (Author), Arnold van der Valk (Editor), & 1 More	Routledge; 1st edition (24 June 2009) ASIN : B002F53M6C		
04	The Power of Neighbourhood Planning	by Peter Edwards (Author)	Bath Publishing Ltd; 1st edition (31 May 2020) 978-916431546		
05	Neighborhood Planning and Community-Based Development: The Potential and Limits of Grassroots Action	Author: William Peterman	Publisher: SAGE Publications, Inc		
06	Handbook of Research on Emerging Innovations in Rail Transportation Engineering (Advances in Civil and Industrial Engineering)	by <u>B. Umesh Rai</u> (Editor)	IGI Global; Illustrated edition (30 June 2016) 978-1522500841		
07	Toward an Architecture	by L Corbusier (Author)	Getty Publications; Illustrated edition (4 March 2016)		

			978-0892368228		
08	The City of Tomorrow and Its Planning	by Le Corbusier (Author)	Dover Publications Inc.; 8th ed. edition (1 February 2000) 978-0486253329		

Course Outcome:

Sr. No.	CO Statement After learning this subject, students will be able to	Marks % weightage
CO-1	.....able to understand the fundamental aspects of town and country planning. (Level R, U ,A)	10
CO-2	.....understand and analyse the housing scenario of country. (Level R, U ,A, N)	20
CO-3	.....understand and analyse the scenario of urban governance in country . (Level R, U ,A, N)	25
CO-4	.....understand the fundamentals of sustainable development and agenda 21, and it's context to planning. (Level R, U ,A)	20
CO-5	.....suggest the policies to improve the scenario of housing and urban governance in country. (Level N, E, C)	25
CO-6	(-Cognitive level)	

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

Reference Text Books:

Sr. No.	Title of book /article	Author(s)	Publisher and details like ISBN	Year of publication	Publication Edition

Major Equipment:

1.

List of Open Source/learning website:

- <https://vlab.amrita.edu/?sub=2>
 - Detail of coverage as per syllabus
- <https://https://nptel.ac.in/courses/104/101/104101090/>
 - Detail of coverage as per syllabus
- <https://nptel.ac.in/courses/105/104/105104102/>
 - Detail of coverage as per syllabus
- <https://nptel.ac.in/courses/113/104/113104082/>
 - Detail of coverage as per syllabus
- <https://nptel.ac.in/courses/104/105/104105124/>
 - Detail of coverage as per syllabus
- <https://nptel.ac.in/courses/104/106/104106122/>
 - Detail of coverage as per syllabus

List of Open Source Software: