

PEOPLE'S UNIVERSITY, BHOPAL**(Applicable for Admitted from Academic Session 2019-20 onwards)**Programme: **Master of Technology****Specialization:** Urban Planning**Semester –I**

Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External (70)	Internal (30)	Total (100) Min: 40 (D Grade)	External (Nil)	Internal (Nil)	Total (Nil)
MT1101	Research Methodology & IPR	3	1	-						

Duration of Theory (Externals): 3 Hours

Theory Internal- Max Marks: 30	Best of Two Mid Semester Test - Max Marks: 15	Assignment/Quiz/Attendance - Max. Marks: 15
Practical Internal Max Marks: Nil	Lab work & Sessional - Max Marks: Nil	Assignment/Quiz/Attendance- Max. Marks: Nil

Pre-Requisite	Nil
Course Outcome	1. Students will be able to understand research problem formulation. 2. Able to analyze research related information and follow research ethics. 3. Understand the importance of IPR and its protection for further research work.

Unit	Contents (Theory)	Marks Weightage
I	Research Methodology: Meaning, Objective & its types, Research approaches, Significance of research, Research methods vs. methodology, Research process, Criteria of good research, Meaning of research problem, Sources of research problem, Errors in selecting a research problem, Scope and objectives of research problem, Effective literature studies approaches, Plagiarism, Research ethics, Problems encountered by researchers in India.	14
II	Concept and Importance in Research: Features of a good research design, Exploratory research design, Concept types and uses, Descriptive research designs, Concept, Types and uses, Experimental design, Concept of independent & dependent variables, Interpretation, Meaning & technique, Precaution in interpretation, Significance of report writing; layout of the research report, Types of reports, Precautions for writing research reports, Effective technical writing, Role of computer software in report writing.	14
III	Data Collection: Collection of primary data, Observation method, Interview method, Collection of data through questionnaires, Collection of data through schedules, Difference between questionnaires and schedules, Collection of secondary data.	14
IV	Hypothesis: Null hypothesis & alternative hypothesis, Basic concepts concerning testing of hypotheses (Chi square Test), Procedure for hypothesis testing, Flow diagram for hypothesis testing, Qualities of a good hypothesis.	14
V	Nature of Intellectual Property: Patents, Designs, Trade and copyright, Process of patenting and development, Technological research, Innovation, Patenting; Development, International scenario, International cooperation on intellectual property, Procedure for grants of patents, Patenting under pct, patent rights, scope, licensing and transfer of technology, Patent information and databases, Geographical indications, New developments in IPR, Administration of patent system, IPR of biological systems.	14

Text Book/References Books/ Websites:-

1. C . R. Kothari; Research Methodology; New Age Publication.
2. Wayne Goddard and Stuart Melville; Research Methodology: An Introduction.
3. Ranjit Kumar; 2nd Edition ; Research Methodology: A Step by Step Guide for beginners.
4. Robert P. Merges; Peter S. Menell; Mark A. Lemley; Intellectual Property in New Technological Age.
5. T. Ramappa; Intellectual Property Rights Under WTO ; S. Chand; 2008.

Suggested List of Laboratory Experiments :- (Expandable): Nil

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Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External (70)	Internal (30)	Total (100) Min: 40 (D Grade)	External (Nil)	Internal (Nil)	Total (Nil)
MTUP1102	History & Theory of Urban Planning	3	1	-						

Duration of Theory (Externals): 3 Hours

Theory Internal- Max Marks: 30	Best of Two Mid Semester Test - Max Marks: 15	Assignment/Quiz/Attendance - Max. Marks: 15
Practical Internal Max Marks: Nil	Lab work & Sessional - Max Marks: Nil	Assignment/Quiz/Attendance- Max. Marks: Nil

Pre-Requisite	Nil
Course Outcome	1. Student should able to know brief history of human settlements.
	2. Student should able to know settlements and physical form, Town plans.
	3. Student should able to know the form of the modern city in the age of automobile.

Unit	Contents (Theory)	Marks Weightage
I	Brief History: Brief history of human settlements from stone age and milestones in prehistoric to historic period, Evolution of physical forms as a result of geographical, Geological, Climatic, Social, Economic, Political, and technological aspects of human settlements, Ancient river valley civilizations (Egyptian, Mesopotamian, Indus valley and Chinese).	14
II	History of Indian Town Planning : Settlements in prehistoric, Vedic, Harappa, Types of plans described in vedic scripts, Settlements and their physical forms during various dynasties up to 18th century and during colonization (Case studies- Jaipur, New Delhi etc.), Town planning after independence (Case studies- Chandigarh, Gandhinagar etc.), Human settlements and physical form town plans, During Sumerian, Egyptian.	14
III	Town Planning in 18th Century: Industrial revolution, Transition to the industrial city. Evolution of towns as per the functions of the towns, Constraints on city form, Elements of urban structure - Networks, Buildings, Open spaces etc, The form of the modern city in the age of automobile - Inner city & Suburban area, Utopian concepts and contribution of planners, (Case studies - Garden Cities, Satellite Towns, First generation towns and new towns).	14
IV	Theory of Urban Planning: Scope, Purpose and methods of planning, The nature and purpose of town and country planning at national, Regional and local levels ,The physical planning process and the relation between surveys and plan, Land-use planning, Economic base of the city, Various surveys for physical planning and techniques of analysis realization of the plan, Site layout and development, Zoning and density control.	14
V	Spatial Aspects: Rural and urban settlements in their regional setting hinterlands. Towns and cities their geographical characteristics, Urban concentrations historical, Administrative, location, Economic, Socio-economic consequences, Morphological aspects in town planning, Geological factors affecting urban development, Urban geological factors governing the growth of ancient cities. Urban Models: Urban models, Classification of towns by form, Function, The city and its region, Dickson, Smailes, Location, Christaller theory etc.	14

PEOPLE'S UNIVERSITY, BHOPAL

(Applicable for Admitted from Academic Session 2019-20 onwards)

Programme: **Master of Technology**

Specialization: Urban Planning

Semester –I

Text Book/References Books/ Websites

1. B. Gallion, S. Eisner ;The Urban Pattern;Van Nostrand Reinhold Company.
2. G. Peter Hall;Urban and Regional Planning;Routledge publisher.
3. F. S. Hudson; Geography of Settlements; And Evans Ltd. Estover, Plymouth PL 6 7 PZ UK

Suggested List of Laboratory Experiments :- (Expandable): Nil

Approved from Academic Council

PEOPLE'S UNIVERSITY, BHOPAL***(Applicable for Admitted from Academic Session 2019-20 onwards)***Programme: **Master of Technology****Specialization:** Urban Planning**Semester –I**

Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External (70)	Internal (30)	Total (100) Min: 40 (D Grade)	External (Nil)	Internal (Nil)	Total (Nil)
MTUP1103	Housing and Community Planning	3	1	-						

Duration of Theory (Externals): 3 Hours

Theory Internal- Max Marks: 30	Best of Two Mid Semester Test - Max Marks: 15	Assignment/Quiz/Attendance - Max. Marks: 15
Practical Internal Max Marks: Nil	Lab work & Sessional - Max Marks: Nil	Assignment/Quiz/Attendance- Max. Marks: Nil

Pre-Requisite	Nil
Course Outcome	1.Student should be able to know housing as integral component of comprehensive urban.
	2.Student should be able to know housing situation in India in quantitative and qualitative terms.
	3.Student should be able to know basic considerations for the formulation of viable housing policy.

Unit	Contents (Theory)	Marks Weightage
I	Definition of housing and community: Housing as integral component of comprehensive urban and regional development, Housing and community form as shaped by physical, Technological, Socio-economic, Demographic and political factors, Role of housing in social and economic development, Housing as an index for social welfare, Housing in relation to stages of development particularly as related to developing economy.	14
II	Micro and Macro Economic View of The Housing Sector: Housing situation in India in quantitative and qualitative terms, Housing statistics, Obstacles to provision of housing in India and emerging issues and priorities in urban and rural housing.	14
III	Basic considerations: Basic considerations for the formulation of viable housing policy and programmers in consonance with availability of resources and feasibility of implementation and management, Housing policy options in developing communities.	14
IV	Housing Programmes in Five Year Plans of India: Social housing programmes, Role of private and corporate sectors in housing, Housing in the informal sector, Problems of slums and squatting.	14
V	Public Housing Programmes: Site and services and slums up gradation approach, The concept of housing standards and issues involved in formulation of standards, Housing and its relation to non- residential components of settlement, Socio cultural perspective of housing, Housing and family life, Principles of community organization, Social sources of residential satisfaction, Community participation in design and implementation of housing programmes, Public housing agencies in India at National, State and settlement level, Their functions and programmes.	14

Text Book/References Books/ Websites

1. P. K. Guha ;Housing an Indian Perspective; New Central Book agency Pvt. Ltd. Calcutta.
2. Charles Correa; Urban Landscape; Hatje Cantz Publisher.

Suggested List of Laboratory Experiments :- (Expandable): Nil

PEOPLE'S UNIVERSITY, BHOPAL***(Applicable for Admitted from Academic Session 2019-20 onwards)***Programme: **Master of Technology****Specialization:** Urban Planning**Semester –I**

Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External (70)	Internal (30)	Total (100) Min: 40 (D Grade)	External (Nil)	Internal (Nil)	Total (Nil)
MTUP1104	Traffic and Transportation Planning	3	1	-						

Duration of Theory (Externals): 3 Hours

Theory Internal- Max Marks: 30	Best of Two Mid Semester Test - Max Marks: 15	Assignment/Quiz/Attendance - Max. Marks: 15
Practical Internal Max Marks: Nil	Lab work & Sessional - Max Marks: Nil	Assignment/Quiz/Attendance- Max. Marks: Nil

Pre-Requisite	Nil
Course Outcome	1.Student should able to know design of urban roads in relation to different types of traffic.
	2.Student should able to know traffic management, principles, methods.
	3.Student should able to know concepts of basic needs, formation of objectives.

Unit	Contents (Theory)	Marks Weightage
I	Transportation Systems: National, Regional and local requirements for transport by road, Rail, Water and air both for passengers and goods, Traffic Engineering, Urban road hierarchy, Road geometric and cross-sectional elements of urban roads, Traffic surveys and their interpretation, Traffic capacity, level of service concept, Traffic regulation and control, Requirements of different types of traffic moving and stationary.	14
II	Design of Urban Roads: Design of urban road in relation to different types of traffic, Segregation of traffic, Canalization, Parking needs, On and off street parking, Estimation of short term and long term parking demand and planning including planning of terminals, Planning, Engineering and management criteria for road junction.	14
III	Traffic management: Principles, Methods, Traffic operation plan, Its scope and objective, Non- Motorise transportation, Transport and environment, Detrimental effects of traffic on human life, Traffic noise, noise abatement measures, Analytical transport planning, The quantitative transport planning process, Surveys, Zoning and network building, Transport model, Prediction of future use of transportation systems, Transport policy and evaluation.	14
IV	Planning for Urban Infrastructure: Concepts of basic needs, Formation of objectives, Norms and standards, Data requirements for program planning of urban networks and services, Feasibility planning studies for structuring the infrastructure systems.	14
V	Utility services: Solid waste disposal, Site selection and management, Other services – planning for fire protection services and space standards, Space standards for electricity networks, Space standards for burial around cemetery etc, Urban Energy systems, Energy management, Energy requirement, Non conventional energy systems, Management of solar energy, Wind energy, Tidal energy, biomass energy, Energy from waste, Energy economics, Impact of energy utilization on environment, Energy efficient housing.	14

PEOPLE'S UNIVERSITY, BHOPAL***(Applicable for Admitted from Academic Session 2019-20 onwards)***Programme: **Master of Technology****Specialization:** Urban Planning**Semester –I****Text Book/References Books/ Websites**

1. L. R. Kadiyali ;Traffic Engineering and Transport Planning; Khanna publication.
2. B. G. Hutchinson ; Principals of Urban Transport Systems Planning; Khanna publication.
3. B. J. Bruton ;Introduction to Transport Planning; B. J. Bruton publication.
4. Indian Road Congress ;Space Standards for Roads in Urban Areas by IRC 69-1977.
5. Indian Road Congress ;Guidelines on Regulations and Control of Mixed Traffic in Urban Areas by IRC 70-1977.
6. Indian Road Congress ;Geometric Design Standards for Urban Roads in Plain by IRC 86-1983.

Suggested List of Laboratory Experiments :- (Expandable): Nil

Approved from Academic Council

PEOPLE'S UNIVERSITY, BHOPAL***(Applicable for Admitted from Academic Session 2019-20 onwards)***Programme: **Master of Technology****Specialization:** Urban Planning**Semester –I**

Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External (70)	Internal (30)	Total (100) Min: 40 (D Grade)	External (Nil)	Internal (Nil)	Total (Nil)
MTUP1105	Evolution and Planning Thought	3	1	-						

Duration of Theory (Externals): 3 Hours

Theory Internal- Max Marks: 30	Best of Two Mid Semester Test - Max Marks: 15	Assignment/Quiz/Attendance - Max. Marks: 15
Practical Internal Max Marks: Nil	Lab work & Sessional - Max Marks: Nil	Assignment/Quiz/Attendance- Max. Marks: Nil

Pre-Requisite	Nil
Course Outcome	1.Student should able to know development of planning thought and principles from ancient times. 2.Student should able to know city as a living spatial entity, Ekistics and the city. 3.Student should able to know aims and objectives of physical planning, levels of planning in India.

Unit	Contents (Theory)	Marks Weightage
I	Development of planning thought and principles from ancient times and its relevance in modern context, Historical determinants, Mobility, Socio –cultural beliefs, Climate, Technology, Political power, Geographical location etc, Settlement types and patterns, Ancient medieval renaissance and industrial age, Planning concept in India, Ancient, Pre independence and post independence development.	14
II	City as a living spatial entity, Ekistics and the city, Contribution of Ebenezer Howard, Geddes, Mumford and others in city planning.	14
III	Aims and objectives of physical planning, levels of planning in India and their interrelationships, Physical nature and characteristics of urban environment and its components, Land uses –physical structure and relationship of parts of the city, Models of urban structure.	14
IV	Models of planning process, Different strategies and approaches in planning like systems approach mixed scanning and approach to land use planning, Choice theory and advocacy planning and their relevance, Comprehensive planning.	14
V	Different types of urban plans at micro and macro level study , Development of any city.	14

Text Book/References Books/ Websites

1. Erich Jantsch; Design for Evaluation: Self Organization & Planning in The Life of Human System; George Braziller.
2. Mahesh Chand, V.K. Puri; Regional Planning in India; Allied Publisher Ltd.

Suggested List of Laboratory Experiments :- (Expandable): Nil

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Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External	Internal	Total	External	Internal	Total
MTUP1106	Planning Studio-I	-	-	2	(Nil)	(Nil)	(Nil)	(70)	(30)	(100)
										Min:40 (D Grade)

Duration of Theory (Externals): Nil

Theory Internal- Max Marks: Nil	Best of Two Mid Semester Test - Max Marks: Nil	Assignment/Quiz/Attendance - Max. Marks: Nil
Practical Internal Max Marks: 30	Lab work & Sessional - Max Marks: 15	Assignment/Quiz/Attendance- Max. Marks: 15

Pre-Requisite	Nil
Course Outcome	1. To understand the basic knowledge of preparation detailed layout plan with model.
	2. To be able to understand the detailed layout Plan with model for commercial.
	3. To get to know about the site visit to town planning scheme in Bhopal city.

Unit	Contents (Theory)	Marks Weightage
I	Detailed layout plan with for one of the followings: Residential, Commercial, Industrial, Site visit to town planning scheme in Bhopal city, Presentation on planner's contributions, Site visit: Neighborhood planning, Case study: Urban renewal/redevelopment project for an urban area including surveys, Analysis, Costing, Phasing and methodology of implementation.	100

Text Book/References Books/ Websites: Nil**Suggested List of Laboratory Experiments:-**

Student should prepare a detailed layout report or case study as per the topic assigned by subject faculty.

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Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External	Internal	Total	External	Internal	Total
MTUP1107	Planning Studio Seminar- I	-	-	2	(Nil)	(Nil)	(Nil)	(70)	(30)	(100)
										Min:40 (D Grade)

Duration of Theory (Externals): Nil

Theory Internal- Max Marks: Nil	Best of Two Mid Semester Test - Max Marks: Nil	Assignment/Quiz/Attendance - Max. Marks: Nil
Practical Internal Max Marks: 30	Lab work & Sessional - Max Marks: 15	Assignment/Quiz/Attendance- Max. Marks: 15

Pre-Requisite	Nil
Course Outcome	1. To be able to understand the design and lay out for an industrial, commercial.
	2. To understand the design of dwelling units.
	3. To get to know about the study of planning proposals.

Unit	Contents (Theory)	Marks Weightage
I	<p>Minor Problem:- Design and lay out for an Industrial, Commercial, Institutional areas etc. on an existing site of about 10 hectares land .The items to be submitted may include: (I) Site analysis clearly indicating all physical features, potentials and problems as well as land suitable for buildings (II) Design of dwelling units-All plans and at least, two elevations and one section on 1:100 scale. (III) Layout of buildings and roads. (IV) Layout showing trunk sewer, main waterlines and refuse collection points. (V) Layout showing landscaping proposal along with buildings and roads all on 1:1000 scale (VI) Report not more than 25 double –spaced typed pages of A-4 size containing introduction site analysis, area calculation s etc. followed in design process.</p> <p>Major Problem:- Study of an existing Town for its Urban Development and Planning. The proposal may include (I) An existing land uses map indicating all its subcategories and extent and nature of use/ activity. (II) A map showing the future proposal as given in the development plan along with all facts and figures. (III) Analysis of standards adopted in the Development Plan regarding the various land uses, with suggestion of improvements and various techniques etc. (IV) A comprehensive report of not more then 75 double spaced typed pages of A-4 size containing introduction, reasons for selection of the Town and the planning alternatives with analysis, calculations, observations and recommendation etc.</p>	100

Text Book/References Books/ Websites: Nil**Suggested List of Laboratory Experiments:-**

Student should prepare a detailed layout report as per the topic assigned by subject faculty.

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Subject Code	Subject Title	Credit			Theory			Practical		
		L	T	P	External (35)	Internal (15)	Total (50) Min: 20 (D Grade)	External (Nil)	Internal (Nil)	Total (Nil)
MT1108	Audit Course - I (Value Education)	-	-	-						

Duration of Theory (Externals): 2 Hours

Theory Internal- Max Marks: 15	Best of Two Mid Semester Test – Max Marks: Nil	Assignment/Quiz/Attendance - Max. Marks: 15
Practical Internal Max Marks: Nil	Lab work & Sessional – Max Marks: Nil	Assignment/Quiz/Attendance - Max. Marks: Nil

Pre-Requisite	Nil
Course Outcome	1. Knowledge of self-development. 2. Learn the importance of human values. 3. Developing the overall personality.

Unit	Contents (Theory)	Marks Weightage
I	Values and self-development –Social values and individual attitudes, Work ethics, Indian vision of humanism, Moral and non- moral valuation, Standards and principles, Value judgments.	07
II	Importance of cultivation of values, Sense of duty, Devotion, Self-reliance, Confidence, Concentration, Truthfulness, Cleanliness, Honesty, Humanity, Power of faith, National Unity, Patriotism, Love for nature, Discipline.	07
III	Personality and Behavior Development - Soul and Scientific, attitude, Positive Thinking, Integrity and discipline, Punctuality, Love and Kindness, Avoid fault Thinking, Free from anger, Dignity of labour.	07
IV	Universal brotherhood and religious tolerance, True friendship, Happiness Vs suffering, love for truth, Aware of self-destructive habits, Association and Cooperation, Doing best for saving nature.	07
V	Character and Competence –Holy books vs Blind faith, Self-management and Good health, Science of reincarnation, Equality, Nonviolence, Humility, Role of Women, All religions and same message, Mind your Mind, Self-control, Honesty, Studying effectively.	07

Mandatory (Non Credit) subject according to AICTE. Non University Examination, End Sem marks not to be included in total marks and credit. Students must pass in this subject.

Text Book/References Books/ Websites

1. S.K. Chakroborty; Values and Ethics organizations Theory and practice; Oxford University Press, New Delhi.

Suggested List of Laboratory Experiments :- (Expandable): Nil