# DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL SCHEME OF STUDIES & EXAMINATION FOR

# MASTER OF PLANNING (URBAN & REGIONAL PLANNING) (TWO YEAR FULL TIME)

(Choice Based Credit scheme w.e.f. 2018-19)

# Program Outcomes (POs):

After completion of the program graduates will be able to

- 1. Apply the knowledge of Urban & Regional Planning ,science, mathematics, architectural, engineering and management principles for developing problem solving attitude.
- 2. Identify, formulate and solve problems in the domain of Urban & Regional Planning field.
- 3. Use different software tools for Analysis and planning in Urban & Regional Planning domain.
- 4. Design and conduct experiments, analyse and interpret data, for development of simulation experiments.
- 5. Function as a member of a multidisciplinary team with sense of ethics, integrity and social responsibility.

	UNIVERSITY OF SCIENCE		DEENBANDHU CHHOTU R						, MURTH	AL, SONE	PAT		
	D CHHOTE			CHEM	E OF S	TUDIES 8	& EXAMIN	ATIONS					
	ENBANDH HIMIN YO			MASTER OF PLANNING (URBAN & REGIONAL PLANNING)									
	2006		CI	noice B	ased C	redit Sch	neme w.e.	f. 2018-19					
			I SEMESTER (TW	O YEA	R FULL	. TIME)							
S.No.	Course No.	Categor	Course Title		Teaching		Exam Marks		Total	Credit	Durat		
		у		Sched	dule	of			mark		ion of		
						Class			s		Exam		
				work		work							
				L	Р		Theory	Portfolio					
1	MPLAN-601C	PC	Planning History and Theory	3	-	50	50	-	100	3	3		
2	MPLAN -603C	PC	Socio-economic basis for Planning	3	-	50	50	-	100	3	3		
3	MPLAN -605C	PC	Planning Techniques	3	-	50	50	-	100	3	3		
4	MPLAN -607C	PC	Infrastructure & Transport Planning	3	-	50	50	-	100	3	3		
5	MPLAN 609C	PEI	Housing and Community Development	3	-	50	50	-	100	3	3		
6	MPLAN -611C		Habitat and Environment studies										
7	MPLAN -613C		Demography and Planning										
8	MPLAN -615C	EEC	Planning Studio-I		6	100	-	100	200	6	3		
9	MPLAN -617C	MLC	Research Methods & Communication Skills	3	-	50	50	-	100	3	3		
			Audit 1	2	-	25	75		100	0	3		
	L	ı	Total	20	6	425	375	100	900	24	-		

# The courses are categorized as follows:

- i) Programme Core (PC) courses include the core courses relevant to the field of specialization
- ii) Programme Elective (PE) courses include the elective courses relevant to the the specialization.
- iii) Open Elective (OE) courses include the elective courses offered by the other department
- iv) Employability Enhancement Courses (EEC) include Design/Studio courses, dissertation, thesis, practical training
- v) Mandatory Learning Courses (MLC)

#### Note

For Audit Courses & Open Electives, provisions in ordinance of Common M.Tech Programme shall be followed



# DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL, SONEPAT SCHEME OF STUDIES & EXAMINATIONS

# MASTER OF PLANNING (URBAN & REGIONAL PLANNING) Choice Based Credit Scheme w.e.f. 2018-19

# II SEMESTER (TWO YEAR FULL TIME)

(TWO TEACT OFF TIME)											
Course No.	Category	Course Title	Teach	ning	Marks of	Exam Mar	ks	Total	Credit	Durat	
			Sched	dule	Class work			marks		ion of	
			L	P/	Sessionals	Theory	Portfolio			Exam	
				Studio							
MPLAN -602C	PC	City and Metropolitan	3	-	50	50	-	100	3	3	
		Planning									
MPLAN -604C	PC	Urban & Regional	3	-	50	50	-	100	3	3	
		Project Planning and									
		Management									
MPLAN -606C	PC	Advanced Planning	3	-	50	50	-	100	3	3	
		Techniques									
MPLAN -608C	PE - II	Inclusive Urban	3	-	50	50	-	100	3	3	
		Planning									
MPLAN -610C		Planning for Tourism									
MPLAN -612C		Urban Heritage									
		Conservation &Urban									
		Renewal									
MPLAN -614C	EEC	Planning Studio II		6	100	-	100	200	6	3	
MPLAN -616C	EEC	Practical Training	0	-	60		40	100	2		
		Audit-2	2	-	25	75		100	0	3	
		Total	14	6	385	275	140	800	20	-	
	MPLAN -602C  MPLAN -604C  MPLAN -606C  MPLAN -608C  MPLAN -610C  MPLAN -612C	MPLAN -602C PC  MPLAN -604C PC  MPLAN -606C PC  MPLAN -608C PE - II  MPLAN -610C  MPLAN -612C  MPLAN -614C EEC	MPLAN -602C PC City and Metropolitan Planning  MPLAN -604C PC Urban & Regional Project Planning and Management  MPLAN -606C PC Advanced Planning Techniques  MPLAN -608C PE - II Inclusive Urban Planning  MPLAN -610C Planning for Tourism  MPLAN -612C Urban Heritage Conservation & Urban Renewal  MPLAN -614C EEC Planning Studio II  MPLAN -616C EEC Practical Training  Audit-2	Course No.  Category  Course Title  Teach Sched  L  MPLAN -602C  PC  City and Metropolitan Planning  MPLAN -604C  PC  Urban & Regional Project Planning and Management  MPLAN -606C  MPLAN -606C  MPLAN -608C  MPLAN -610C  MPLAN -610C  MPLAN -612C  MPLAN -612C  MPLAN -614C  MPLAN -614C  EEC  Planning Studio II  MPLAN -616C  Audit-2  Audit-2	Course No.         Category         Course Title         Teaching Schedule           MPLAN -602C         PC         City and Metropolitan Planning         3         -           MPLAN -604C         PC         Urban & Regional Project Planning and Management         3         -           MPLAN -606C         PC         Advanced Planning Techniques         3         -           MPLAN -608C         PE - II         Inclusive Urban Planning         3         -           MPLAN -610C         Planning for Tourism         Urban Heritage Conservation & Urban Renewal         4         -           MPLAN -614C         EEC         Planning Studio II         6           MPLAN -616C         EEC         Practical Training         0         -           Audit-2         2         -	Course No.         Category         Course Title         Teaching Schedule         Marks of Class work           MPLAN -602C         PC         City and Metropolitan Planning         3         -         50           MPLAN -604C         PC         Urban & Regional Project Planning and Management         3         -         50           MPLAN -606C         PC         Advanced Planning Techniques         3         -         50           MPLAN -608C         PE - II         Inclusive Urban Planning         3         -         50           MPLAN -610C         Urban Heritage Conservation & Urban Renewal         Urban Heritage Conservation & Urban Renewal         6         100           MPLAN -614C         EEC         Planning Studio II         6         100           MPLAN -616C         EEC         Practical Training         0         -         60           Audit-2         2         -         25	Course No.         Category         Course Title         Teaching Schedule         Marks of Class work         Exam Mark Schedule           MPLAN -602C         PC         City and Metropolitan Planning         3         -         50         50           MPLAN -604C         PC         Urban & Regional Project Planning and Management         3         -         50         50           MPLAN -606C         PC         Advanced Planning Techniques         3         -         50         50           MPLAN -608C         PE - II         Inclusive Urban Planning         3         -         50         50           MPLAN -610C         Urban Heritage Conservation & Urban Renewal         Urban Heritage Conservation & Urban Renewal         6         100         -           MPLAN -614C         EEC         Planning Studio II         6         100         -           MPLAN -616C         EEC         Practical Training         0         -         60	Course No.         Category         Course Title         Teaching Schedule         Marks of Class work         Exam Marks           MPLAN -602C         PC         City and Metropolitan Planning         3         -         50         50         -           MPLAN -604C         PC         Urban & Regional Project Planning and Management         3         -         50         50         -           MPLAN -606C         PC         Advanced Planning Techniques         3         -         50         50         -           MPLAN -608C         PE - II         Inclusive Urban Planning         3         -         50         50         -           MPLAN -610C         Urban Heritage Conservation & Urban Renewal         Urban Heritage Conservation & Urban Renewal         6         100         -         100           MPLAN -614C         EEC         Planning Studio II         6         100         -         100           MPLAN -616C         EEC         Practical Training         0         -         60         40	Course No.         Category         Course Title         Teaching Schedule         Marks of Class work         Exam Marks         Total marks           MPLAN -602C         PC         City and Metropolitan Planning         3         -         50         50         -         100           MPLAN -604C         PC         Urban & Regional Project Planning and Management         3         -         50         50         -         100           MPLAN -606C         PC         Advanced Planning Techniques         3         -         50         50         -         100           MPLAN -608C         PE - II         Inclusive Urban Planning Planning Techniques         3         -         50         50         -         100           MPLAN -610C         PE naming for Tourism Urban Renewal         Urban Heritage Conservation & Urban Renewal         -         50         50         -         100         200           MPLAN -614C         EEC         Planning Studio II         6         100         -         100         200           MPLAN -616C         EEC         Practical Training         0         -         60         40         100	Course No.   Category   Course Title   Teaching Schedule   Class work   Exam Marks of Class work   Class w	

# Audit course 1 & 2

AUD531C	English for Research Paper Writing	HUM Dept
AUD533C	Disaster Management	Civil Engg Dept
AUD535C	Sanskrit for Technical Knowledge	HUM Dept
AUD537C	Value Education	HUM Dept
AUD539C	Constitution of India	HUM Dept
AUD541C	Pedagogy Studies	HUM Dept
AUD543C	Stress Management by Yoga	HUM Dept
AUD545C	Personality Development through Life Enlightenment Skills	HUM Dept

#### Note

1. For Audit Courses & Open Electives, provisions in ordinance of Common M.Tech Programme shall be followed

 $<sup>1^{</sup>st}$  Year Syllabus was approved in  $13^{th}$  Meeting of Academic Council held on 18.06.2018 and  $2^{nd}$  Year Syllabus was approved in  $14^{th}$  Meeting of Academic Council held on 11.06.2019. Applicable to all students admitted in 2018 and onwards.



# DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL, SONEPAT

# **SCHEME OF STUDIES & EXAMINATIONS**

# MASTER OF PLANNING (URBAN & REGIONAL PLANNING) Choice Based Credit Scheme w.e.f. 2019-20

# III SEMESTER (TWO YEAR FULL TIME)

			(TV	NO YE	AR FULL TIN	ſΕ)					
S.No	Course No.	Category	Course Title	Teacl Sche	•	Marks of Class	Exam M	arks	Total mark s	Credit	Durat ion of Exa
						work					m
				L	P/Studio		Theory	Portfolio			
1	MPLAN -701C	PC	Regional Planning and Development	3	-	50	50	-	100	3	3
3	MPLAN -705C	PC	Rural Development and Infrastructural Planning	3	-	50	50	-	100	3	3
4	MPLAN -707C	PE-III	Regional, Urban & Rural Governance	3	-	50	50	-	100	3	3
	MPLAN -709C	1	Smart Cities								
	MPLAN -711C		Urban & Regional								
			Development and								
			Finance Management								
5.	MTOE551C	Open	Business Analytics	3	-	25	75	-	100	3	3
	MTOE553C	Elective	2. Industrial Safety								
	MTOE555C		3. Operations								
			Research								
	MTOE557C		4. Cost Management of Engineering								
			Projects								
	MTOE559C		5. Composite  Materials								
	MTOE561C		6. Waste to Energy								
	MTOE563C		7. Sustainable Development and Climate Change								
6	MPLAN -713C	EEC	Planning Studio III		6	100	-	100	200	6	3
7	MPLAN -715C	EEC	Dissertation Phase I		3	50	-	50	100	3	3
			Total	12	9	325	225	150	700	21	-

### Note:

- 2. Students will be allowed to use Non-Programmable Scientific Calculator. However, sharing of calculator will not be permitted in the examination.
- 3. The choice of students for any elective shall not be binding on the department.

 $<sup>1^{</sup>st}$  Year Syllabus was approved in  $13^{th}$  Meeting of Academic Council held on 18.06.2018 and  $2^{nd}$  Year Syllabus was approved in  $14^{th}$  Meeting of Academic Council held on 11.06.2019. Applicable to all students admitted in 2018 and onwards.

- 4. Dissertation coordinator will be assigned the load of 1 hrs per week excluding his/her own supervising load. However, the dissertation supervisor teacher will be assigned a load of one hour per candidate per week subject to the maximum of two periods of teaching load irrespective of number of students/groups under him/her.
- 5. For Audit Courses & Open Electives, provisions in ordinance of Common M.Tech Programme shall be followed

SO SCHEME OF STUD MASTER OF PLANNING							ERSITY OF SCIENCE & TECHNOLOGY, MURTHAL, SONEPAT STUDIES & EXAMINATIONS NNING (URBAN & REGIONAL PLANNING) Credit Scheme w.e.f. 2019-20					
				EMEST O YEAR		TIME)						
S.No	Course No.	Category	Course Title	Teach Sched	•	Marks of Class work	Exam Marks		Total mark s	Credit	Durat ion of Exa m	
				L	Р		Theory	Portfolio				
1	MPLAN-702C	EEC	Dissertation Phase II/ Thesis	-	16	150	-	150	300	16		
2	MPLAN-704C	MLC	Legal Issues and Professional Practice	3	-	50	50	-	100	3	3	
				3	16	200	50	150	400	19		

#### Note:

1. Thesis coordinator will be assigned the load of 3 hrs per week excluding his/her own supervising load. However, the thesis supervisor teacher will be assigned a load of one hour per candidate per week subject to the maximum of two periods of teaching load irrespective of number of students/groups under him/her.

# SEMESTER III

#### MPLAN-701C

### REGIONAL PLANNING AND DEVELOPMENT

Teaching Schedule		Marks of Sessional work			Total marks	Credits	Duration of Examination (h)
L	Р		Theory	Portfolio			
3	-	50	50	-	100	3	3

#### **UNIT I: CONCEPT OF REGIONAL PLANNING**

Nature, objectives, levels and aims; Concept of a region, types, and regionalization.

#### UNIT II: ELEMENTS OF SETTLEMENT SYSTEM

Size, function, spacing, linkage, input tributary and output tributary, settlement patterns and factors responsible thereof. Theories of Regional Planning

# **UNIT III: REGIONALINEQUALITIES- REGIONAL INTERACTION**

Growth, density and spatial inequalities of population distribution, spatial patterns and characteristics of occupational types, - Measurement of distribution of settlements, size and class of settlements, cluster and agglomeration studies, functional at tributes and spacing of settlements, potentialities and centrality of settlements.

#### **UNIT IV: REGIONALPLANNINGPROCESSES:**

Identification of plan objectives; collection, classification and analysis of data; Norms and standards for regional planning; Formulation of alternative plan proposals with respect to population distribution, location of new regional economic activities, infrastructure and plan implementation. Sub Regional Concept, Sub Regional Plans of participating States Selected case studies in regional development in the Indian Context viz NCR

# NOTE:

The subject teacher would make detailed teaching programme along with extensive reading and circulate to the students at the commencement of the semester.

I	Sessional evaluation	Weightage
	Minor Test – I	20%
	Minor Test – II	20%
	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
II	Theory examination	100%

- 1. Exam shall be of 3 hours duration and of maximum marks: 50. (minimum passing marks:20)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 10 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions with 2 subparts.

#### MPLAN-705C

# RURAL DEVELOPMENT AND INFRASTRUCTURE PLANNING

Teaching Schedule		Marks of Sessional work	Marks of Ex	amination	Total marks	Credits	Duration of Examination (h)
L	P		Theory	Portfolio			
3	-	50	50	-	100	3	3

#### CONTENT:

### **UNIT I: Rural Development Problems and issues**

Changing Profile of the Rural areas of India: Consumption pattern, land utilization, cropping pattern, holding size, living standard, asset ownership – its implication in the planning process; Rural settlement, typology, structure, spatial significance; Rural Settlement Analysis: Types, activity, environment and economic interface in rural habitat, technology in rural settlement; Land Utilization: Types of land utilization and its relevance to planning; Land conversions and its regulation

/ facilitation in peri-urban areas; Land utilization analysis; Common property and its use, tenancy and ownership, holding size and its relevance, Land records and land values; Sources of information for land information; Technology in Rural Development: ICT in rural development, Rural Information system, Weather forecasting, disaster minimization, market information, etc. E-Panchayats, energy efficient technologies and alternative technologies; Inclusive Development: Special Component Plan - Tribal Sub Plan and WeakerSector.

# **UNIT II: Rural Development pattern**

Meaning and Scope and overview of rural development: Historical perspective – Rural Development Programmes in India. Problem / perception and identification; Rural Area Planning – Programmes / Policies / Schemes for rural development, their coverage and outcomes; Plan allocation, implementation, monitoring and evaluation; Models and theories, policies and practices at global level, provisions in national and state five year plans and city master plans etc. Action programme initiated at national and global level. Housing agencies and co-operative feasibility and implementation of existing policies and action programmes, Projections and forecasting, planning principles for village and community norms. Rural Infrastructure Development: Bharat Nirman – A business plan for rural infrastructure, Rural Building Centers, PMGSY, IAY, Rajiv Gandhi Technology Mission, Central Rural Sanitation Programme, PURA. Rural Employment Schemes: Mahatma Gandhi National Rural Employment Guarantee Act, 2005, Sampoorna Grameen Yojana, National Food for work programme, Swarna Jayanti Gram Swarozgar yojana, National Social Assistance Programme. Programmes: Command Area Programme, Drought Prone Area Programme, Backward Area DevelopmentProgramme. PMAGY, SPAGY, UBA, Adarsh Grams, Smart Villages, Shyama Prasad Rurban Mission,

## **UNIT III: Rural Infrastructure Planning**

Equity, Access, level and efficiency, Quality of Service, Paying Capacity, Pricing of Infrastructure Services; Ownership and Control models in infrastructure provision for rural areas, Corporate Social Responsibility (CSR). Infrastructure Policy: Regulatory and Facilitative, Investment Requirement at various levels and actual investments in Infrastructure; Role of Infrastructure in rural development, Critical Infrastructure in rural development, and Indicators of infrastructure development in defining rural development, standards and bench marks for infrastructure provision and delivery at various levels; basic need and rural sanitation, water supply, hygiene and drainage, technology transfer and options.

### **UNIT IV: Rural Development**

Decentralized Planning in India – Historical perspective: Current Scenario – Recent Development in decentralized district level planning. 73rd and 74th Constitution Amendment Acts, Role of Planning Commission and Finance Commissions in rural reconstruction, Block level development planning and implementation, public participation in rural development process, role of voluntaryorganizations.

**NOTE:** The subject teacher would make detailed teaching programme along with extensive reading and circulate to the students at the commencement of the semester.

I	Sessional evaluation	Weightage
	Minor Test – I	20%
	Minor Test – II	20%
	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
II	Theory examination	100%

- 1. Exam shall be of 3 hours duration and of maximum marks: 50. (minimum passing marks:20)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 10 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions with 2 subparts.

Teaching Schedule		Marks	o f	Marks of Examination		Total marks	Credits	Durationof
		Sessional work						Examination (h)
L	P			Theory	Portfolio			
3	-	50		50	-	100	3	3

MPLANC 707C

**REGIONAL, URBAN & RURAL GOVERNANCE** 

# UNIT I: Overview of Urban & Rural Governance, Concept of Regional Governance

Definition, concepts, components, government and governance, hierarchy and structure, forms of governance, process of inclusion and exclusion, Regional Governance

# **UNIT II: Legislations pertaining to Urban & Rural Governance**

Institutional frame and mechanism for urban governance as envisaged in the 73rd and 74th Constitution Amendment Acts.

# **UNIT III: Institutions and Organizations**

Differences between institutions and organizations; approaches to understanding organizations; types, structure and functions, their interface and conflicts, reach, and their effectiveness; Methods, process and evaluation; Present organizations and involved in urban governance. Role of Town and Country Planning Departments, Development Authorities, Municipal Bodies, Improvement Trusts, Housing boards, State Infrastructure and Industrial Development Corporations and other Distt., State & Central Govt. Institutions related to Urban and Rural Planning, Panchayaty Raj institutions, Rural Development Institutions,

**UNIT IV: Urban Local Governance, Village Panchayats and Participatory Processes at Regional level** System, structure, functions, powers, process and resource, performance, interface with NGO's, other agencies. Stakeholders' participation, roles and responsibilities, access to government by various stakeholders. 73rd & 74th Constitutional amendment Act for Comprehensive Urban. Rural. District & Regional development

#### NOTE

The subject teacher would make detailed teaching programme along with extensive reading and circulate to the students at the commencement of the semester.

I	Sessional evaluation	Weightage
	Minor Test – I	20%
	Minor Test – II	20%
	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
II	Theory examination	100%

- 1. Exam shall be of 3 hours duration and of maximum marks: 50. (minimum passing marks:20)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 10 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions with 2 subparts.

MPLAN- 709C SMART CITIES

Teaching Schedule		Marks of Sessional work	Marks of Examination		Total marks	Credits	Durationof Examination (h)
L	Р		Theory	Portfolio			
3	-	50	50	-	100	4	3

#### CONTENT:

#### **UNIT I: Introduction to Smart Cities**

Definitions, concepts, features & Characteristics of Smart cities , Case studies of well known Smart cities of the world , International bench marking of Smart Cities , Concepts of Livable Cities , Green Cities , Vibrant Cities , Compact & Sustainable Cities, Safe cities ,Smart Urban Planning , Electronic Technologies for preparation of Urban and Regional Plans, Cities for Sustainable Environment , Concept of mixed landuse & Integrated Townships

# **UNIT II: Smart Cities: Infrastructure-I**

Smart Water Management in Cities, Smart Liquid & Solid Waste Management in Cities, Smart Drainage sysytem, Smart Energy technologies & Management, Smart Electric Grids& maximizing usage of renewable energy, Smart technologies for Safety and Security in Cities, Smart technologies for Disaster Management

#### UNIT II: Smart Cities: Infrastructure-II

Smart of Innovative Technologies in City Mobility, Management of traffic and transportation planning & development and management, Smart Urban Governance, Smart Communications, Smart City Greens & landscapes, Smart Data Management, Smart technologies in Social & Community Infrastructure, Smart Citizens

#### Unit IV: Smart Cities: Government of India Initiatives

Smart City mission & Policies, bench marking in Indian Context prescribed by Government of India, criteria of selecting smart city proposals, funding pattern, case studies of Smart City Proposals of selected cities, Smart Cities Finance & Investment Planning, issues and impediments, Strategies & Challenges, Integration of Smart City strategies & Master Plan. Models of Area-based Smart City Development:

# NOTE:

The subject teacher would make detailed teaching programme along with extensive reading and circulate to the students at the commencement of the semester.

I	Sessional evaluation	Weightage
	Minor Test – I	20%
	Minor Test – II	20%
	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
II	Theory examination	100%

- 1. Exam shall be of 3 hours duration and of maximum marks: 50. (minimum passing marks:20)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 10 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions with 2 subparts.

# URBAN& REGIONAL DEVELOPMENT AND FINANCE MANAGEMENT

# **MPLAN-711C**

Teaching Schedule		Marks of Sessional work	Marks of Examination		Total marks	Credits	Durationof Examination (h)
L	Р		Theory	Portfolio			
3	-	50	50	-	100	4	3

#### CONTENT:

# **UNIT I: Introduction to Development Management**

Concept, approaches, components, interface with national goals and political economic system.

# UNIT II: Urban& Regional Development Management & Finance Mechanism

Strategies, Tools and Techniques; organizations involved, State Finance: Finance Commissions, functions, relationship between Central, State and Urban Local Government. Funding of Regional Projects, Financing management system of Regional Plans

### UNIT III: Land and Real Estate Development, Information System and Urban Reforms

Economic concepts of land, Land Pricing / valuation; Economic principles of land use; demand forecasting for land use: factors affecting land supply and demand; Land development methods, Supply Management, Demand side Management; Real estate markets, type of property development and its impact on supply and demand, method of development, environmental considerations. Spatial and Non - spatial information systems; Urban reforms and acts and policies. Regional Economics & development

# UNIT IV: Municipal, Panchayat, Integrated District Finance & Investment Planning

: Urban reform incentive fund, Sources of revenues; Equities; Loans; Debt financing; City challenge fund, Pooled finance development fund, National urban infrastructure fund, Municipal Bonds, Miscellaneous sources; Structure of finances, fiscal problems and issues of financial management, implications of 74th Constitution Amendment Act for municipal finance, expenditure pattern, Bilateral and multi-lateral lending intuitions mobilizing resources for a project - financial resources, land resources, project resources, and other resources

## NOTE:

The subject teacher would make detailed teaching programme along with extensive reading and circulate to the students at the commencement of the semester.

I	Sessional evaluation	Weightage
	Minor Test – I	20%
	Minor Test – II	20%
	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
II	Theory examination	100%

- 1. Exam shall be of 3 hours duration and of maximum marks: 50. (minimum passing marks:20)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 10 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions with 2 subparts.

# **OPEN ELECTIVE**

#### MTOE 563

#### SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

Teaching Schedule		Marks of Sessional work	Marks of Examination		Total marks	Credits	Duration of Examination (h)
L	Р		Theory	Portfolio			
3	-	25	75	-	100	3	3

#### INTENT:

The programme elective on Climate Change and Sustainable Development is to provide a general concept within the dimensions of climate changes and challenges to Sustainable Development.

It enables the learners with appropriate tools and techniques for interpreting the impacts of climate change, and evaluating & implementing measures that reduce vulnerability of systems.

It enables Skill-based education through empowering the learners with the mitigation and adaptation strategies against climate changes in future.

#### CONTENT:

The topics includes principles and approaches, Challenges and Choices, Policies and Programmes, Stories of Success

# **UNIT I: Principles and Approaches**

Global Climate System

Climate Change: Causes and Consequences

Sustainable Development: Scope and Emerging Trends Climate and Sustainable Development: An Interface

# **UNIT II: Climate Change: Challenges and Choices**

Climate Change and Water

Climate Change: Forest and Biodiversity Climate Change: Coastal Ecosystem

Climate Change: Agriculture and Food Security

# UNIT III: Climate Change and Sustainable Development: Policies and Programmes

Sustainable Development Goals: An overview

Climate Change and Sustainable Development: National and State Policies Achieving Sustainable Development Goals: Role of Various Stakeholders Building Partnership for Climate Change and Sustainable Development

# **UNIT IV: Climate Change and Sustainable Development: Stories of Success**

Cross Country Experiences National Experiences Regional Experiences Community led Experiences

### NOTE:

Detailed teaching programme to be made and circulated to the students at the commencement of the semester

		Weightage
I	Sessional evaluation	
	Minor Test – I	20%
	Minor Test – II	20%
	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
	Theory examination	100%

**READING LIST:** (to be amplified by the subject teacher)

- 1. Exam shall be of 3 hours duration and of maximum marks: 75. (minimum passing marks:30)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 15 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions

MPLAN 713C PLANNING STUDIO III

Teaching Schedule		Marks of Sessional work	Marks of Examination		Total marks	Credits	Duration of Examination (h)
L	P		Theory	Portfolio			
-	6	100	-	100	200	6	-

#### CONTENT:

**EXERCISE: Regional Plan** 

# Integrated Village / Block development plan & Development Plans of Urban Centers in a Region

Study of a cluster of villages and urban centers in a region with an objective to understand the location, spatial and economic linkages of the villages and cities in a region with focus on the social and physical infrastructure and also understand the availability and usage of local resources contextual to region.

Identify the problems and future possibilities for the development of management plans: villages, urban centers in a region and regional infrastructure, disaster risk, economic and social development etc.

Formulate projects, work out the appraisals and do the feasibility, viability and implementation mechanisms of the projects. Case study village/ block, and collect data and interact with village panchayats and stakeholders, along with city development plans leading to integrated District Plans & Regional Plans. Prepare a Detailed Project Report (DPR) for any component/s: Village, village cluster, Urban Centre as a component of Regional infrastructure. The scope of DPR shall be confined to cover all the stages of project preparation including:

- · Identification of activities.
- Activity event chart (Network chart).
- · Cost estimation.
- Time-cost chart (Gantt chart).
- · Cost recovery plan.

The DPR so prepared shall be presented suitably in the form of maps, charts, diagrams, photographs, sketches supported by detailed report. Prepare Regional Development plan for integrating village /block level /District, Development Plans of Urban centers in region along with detailed report illustrated with drawing, sketches covering methodology, basis for requirements, norms and standards, used for providing infrastructure

The following planning issues at area level should be identified:

- Review of the existing Village/Block/Urban Development plan in relation to the selected Region /areas.
- Review of the existing Rural & Urban Development plan in relation to the selected areas/region.
- Integrated regional plan with integrating village, block/District & urban centers, leading to a Regional Plan,
- Appreciation / Analysis of ward level data.
- Perception of areas in terms of legal / illegal / authorized / unauthorized, Slums, Urban Aesthetics.
- Social Categorizations of people Type of population living, people's perception about area and its planning problems.
- Regional Land use including Agriculture land and land use conflicts, extent (%) of broad land use such as commercial, industrial, residential, institutional and recreational. General land tenure of the area different areas.
- Extent of formal / informal activities present in village, urban areas in a region including their location and conflicts.
- Major types of transport, type of roads, hierarchy of roads, type of transport modes used at village, Urban & Regional levels
- Regional Amenities: Location of Social and Physical infrastructure and their problems as perceived by local
  population. Look for specific infrastructure such as Water supply, drainage (water logging areas), waste collection
  and disposal system, sanitation, etc.
- Environmental Issues of Region: Open Spaces Availability and extent of open space to built-up area, garbage disposal, encroachment (through photographic evidences and sketches).

	Sessional evaluation	Weightage
	Seminar	20 %
	Programme formulation	20%
	Concept	20 %
	Preliminary Design	40%
II	Portfolio evaluation	
	Detail Design	100%

# NOTE:

Detailed teaching programme to be made and circulated to the students at the commencement of the semester. This exercise needs to be supported by frequent site visits & detailed case studies. There should be regular presentations of various internal stages.

## **MPLAN-715C**

Teaching Schedule		Marks of Sessional work	Marks of Examination		Total marks	Credits	Duration of Examination (h)	
L	P		Theory	Portfolio				
	3	50		50	100	3	-	

#### CONTENT:

The dissertation shall entail the following:

- · Identification of an appropriate and focused research topic reflecting social and technological needs of theday
- Formulate synopsis including objectives, scope of work, methodology of work, case studies to be undertaken, site
  selection culminating in broad functional requirements.
- An investigation of the topic using an analysis of existing literature, case studies and other data sources
- To develop understanding of the research topic.
- Drawing informed and scientific conclusions from the research
- (a) The dissertation shall be based on empirical study, field work, and textual analysis in the field of urban and rural planning. It should demonstrate candidate's capacity for analysis and judgment as also her/his ability to carry out independent viewpoint in interpretation. A dissertation may be supplemented by published work, ifany.
- (b) The dissertation shall present an orderly & critical exposition of existing knowledge of the subject or shall embody results of original interpretation and analysis & demonstrate the capacity of the candidate to do independent research work. While writing the dissertation, the candidate shall lay out clearly the work done by her/him independently and the sources from which she/he has obtained other information.
- (c) The dissertation shall be prepared as per guidelines given in the dissertation manual. Nevertheless, the typing shall be done on both sides of the paper, the font size should be 12 point Times New Roman in 1.5 (one and a half) space but the reference and bibliography should be typed in single space in Harvard style. The paper to be used should be A-4 size and orientation should be portrait.

The dissertation shall be well structured document of not more than 15000 words with clear objectives and well-argued and appropriate conclusions indicating an appropriate level of expertise. The submission format for all stages shall be print and digital. Seminars in related areas to the dissertation topic (conceptual, historical, analytical, and comparative or in any other area related to urban or rural development and planning) are required to be presented at all stages during the entire semester.

# NOTE:

Detailed teaching programme to be made and circulated to the students at the commencement of the semester.

I	Sessional evaluation	Weightage
	Synopsis	10%
	Midterm submission	50%
	Prefinal submission	40 %
II	Portfolio evaluation	100%

# **READING LIST:** (to be amplified by the subject teacher)

- 1. McMillan, K & Weyers, J (2007) How to write dissertations and project reports. Pearson PrenticeHall.
- 2. Watson,G(1987)Writingathesis:aguidetolongessaysanddissertations,London:Longman.Specialistbibliography according to the project.

# SEMESTER IV

# MPLAN-702C

# DISSERTATION PHASE II / PLANNING THESIS

Teaching Schedule Marks Sessiona		Marks of Sessional work	Marks of Examination		Total marks	Credits	Duration of Examination (h)
L	Р		Theory	Portfolio			
	16	150	-	150	300	16	-

#### CONTENT:

The project will be independent and allow exploration of issues within the scope of the subject area and to achieve a recognizable level of expertise in the subject. The thesis will demonstrate an understanding of subject related to urban and rural planning through an appropriate use of scientific and social science research techniques applied to an area of research in the planning discipline.

The project shall entail the following

- Formulate of a focused thesis topic.
- Conduct an investigation of the thesis topic using an analysis of existing literature.
- Develop understanding of the thesis topic and methodology
- Draw informed and scientific conclusions from the research

Based on the conclusion design interventions shall be made to achieve thesis objectives. The thesis report shall be well structured document of not more than 25000 words with clear objectives and well-argued and appropriate conclusions and design intervention indicating an appropriate level of expertise. The thesis report shall include all drawings to appropriate scale.

# NOTE:

Detailed teaching programme to be made and circulated to the students at the commencement of the semester.

I	Sessional	Weightage			
1.	Programme formulation	30%			
2.	Concept	30%			
3.	Preliminary Design	40%			
II	Portfolio	100%			

# **READING LIST:** (to be amplified by the respective guide)

- 1. Evans, D & Gruba, P (2002) How to write a better thesis. 2nd Edition, Melbourne UniversityPress.
- 2. Murray, R (2006) How to write a thesis. 2nd Edition, Maidenhead: Open UniversityPress.
- 3. Turabian,K(2007)Amanualforwritersofresearchpapers,theses,anddissertations,7thEdition,Chicago:Universityof Chicago Press.
- 4. As appropriate for each individual thesis.

Teaching Schedule		Marks of Sessional work	Marks of Examination		Total marks	Credits	Duration of Examination (h)
L	Р		Theory	Portfolio			
3	-	50	50	-	100	3	3

#### CONTENT:

#### **UNIT I: Introduction**

Interface between policy and legislation pertaining to urban development. Evolution of Town Planning and development Laws in India, Interface between legislation and urban planning related to the Indian Constitution; Land acquisition rehabilitation and resettlement Act 2013: impact of land acquisition rehabilitation and resettlement act 2013 on industrialisation, urbanisation and infrastructure projects. National Highways Act 1956: land acquisition for National Highways.

#### **UNIT II: Understanding of Law**

Concepts, sources, terminologies, significance of law and its relationship to Urban Planning benefits of statutory backing for schemes - eminent domain and police powers; Indian Constitution: concept and contents; 73rd and 74th Constitution Amendment Act, provision regarding property rights.

# **UNIT II: Law and Policies Pertaining to Urbanisation**

Urban laws and Indian Constitution: Relevant Provisions from the Indian Constitution, 73rd and 74th Constitution Amendment Act, provision regarding property rights; Government plans and schemes for urbanisation: Urbanisation in Governmental Five Year Plans; Urban development policies in India: National & State Policies Pertaining to Urban Development; Inventory of Planning Rights in India.

# **UNIT III: Planning Legislation and Policy Formulation & Appraisal**

Evolution; An overview of legal tools connected with Urban Planning and Development, Town and Country Planning Act, Improvement Trust Act, Urban Planning and Development Authorities Act – objectives, contents, procedures for preparation and implementation of Regional Plans, Master Plans and Town Planning Schemes. Various Acts related to urban governance, planning and development organizations, land resources, environment protection, and public participation in statutory planning process; Approaches of formulation of policies, appraisal of policies.

## **UNIT IV: Professional Practice**

Aims and objectives of professional Institutes, sister bodies, professional role and responsibility of planning and Architecture consultants, professional ethics, code of conduct and scale of professional charges; Formulation of project proposal and outlines, consultancy agreements and contracts, managerial aspects; Role in inter disciplinary groups: Appreciation of the decision-making processes and the process in relation to varied consultancy assignments of planning.

#### NOTE:

The subject teacher would make detailed teaching programme along with extensive reading and circulate to the students at the commencement of the semester.

	I	Sessional evaluation	Weightage
		Minor Test – I	20%
Г		Minor Test – II	20%

 $<sup>1^{</sup>st}$  Year Syllabus was approved in  $13^{th}$  Meeting of Academic Council held on 18.06.2018 and  $2^{nd}$  Year Syllabus was approved in  $14^{th}$  Meeting of Academic Council held on 11.06.2019. Applicable to all students admitted in 2018 and onwards.

	Assignment / Mini Project / Term paper	30%
	Quiz/Tutorial/Class Test	30%
II	Theory examination	100%

- 1. Exam shall be of 3 hours duration and of maximum marks: 50. (minimum passing marks:20)
- 2. Total EIGHT questions are to be set (two questions from each unit), and candidate have to attempt any five questions selecting one from each unit, each question of 10 marks each.
- 3. The question paper should at least have one question with 3 subparts and three questions with 2 subparts.