

GOPALAN COLLEGE OF ENGINEERING AND MANAGEMENT

Department of Civil Engineering

Academic Year: **2016-17**

Semester: **EVEN**

COURSE PLAN

Semester: **VIII**

Subject Code& Name: **10CV843 & Urban Transport Planning**

Name of Subject Teacher: **CHANDAN M R**

Name of Subject Expert (Reviewer): **SHREYAS H.C.**

For the Period: From: 30-01-17 to -05-17

Details of Book to be referred:

Text Books	T1. Traffic Engineering and Transport Planning- L.R. Kadiyali - Khanna Publishers. T2. Introduction to transportation engineering- Jotin Kristey and Kentlal - PHI, New Delhi.
Reference Books	R1. Urban Transport planning- Black John - Croom Helm ltd, London. R2. Urban and Regional models in geography and planning- Hutchison B G - John Wiley and sons London. R3. Entropy in urban and regional modeling- Wilson A G - Pion ltd, London.

Lecture NO	Topic Planned	Practical Applications & Brief objectives	Book referred with No.	Planned Date	Executed Date	Deviation Reasons thereof	How Made Good / Reciprocate arrangement	Remarks by HOD
1.	Unit-1: INTRODUCTION: Introduction.	Objective: To study the dependency of land and traffic, system approaching for the developing urban transportation. To know about plans	T1: 635	8/2/2017				
2.	Scope of Urban transport planning.		T1: 635	9/2/2017				

3.	Inter dependency of land use.	of urban roads Application: constructing good urban roads. Transportation planning helps to build well planned urban areas. OUTCOME: Understanding the basic methods of urban planning and enhancing its features by constructing urban roads	T1: 636	9/2/2017				
4.	Inter dependency of traffic.		T1: 636	13/2/2017				
5.	System Approach to urban planning.		T1: 637-639	13/2/2017				
6.	System Approach to urban planning.		T1: 640-644	15/2/2017				
7.	Revision / Unit Test		VTU question paper		16/2/2017			
8.	UNIT-2: STAGES IN URBAN TRANSPORT PLANNING: Introduction.		Objective: To understand the reason behind the trip making behavior and trip distribution, assigning the trips and separating person –trips by mode of travel. Application: preparing the trip generation sheet , distributing the trips and splitting the trips without making the faults OUTCOME: Understanding the steps of trip generation and trip	T1: 663	16/2/2017			
9.	Trip generation.			T1: 664-668	20/2/2017			
10.	Trip production.	T1: 670		20/2/2017				
11.	Trip distribution.	T1: 673-678		22/2/2017				
12.	Modal split.	T1: 714-719		23/2/2017				
13.	Trip assignment.	T1: 703-708		23/2/2017				

14.	Revision / Unit Test	distribution, production for smooth travel planning	VTU question paper	27/2/2017				
15.	Unit-3: URBAN TRANSPORT SURVEY: Introduction.	Objective: To know about study area and types of surveying and zoning , transport facilities Application: transport planning is easier by doing survey of an area. Area will be subdivided into smaller areas for proper planning OUTCOME: Understanding the different methods of surveying and zoning. Identifying the deficiency in present situation and extent which they need to be improved	T1: 646	27/2/2017				
16.	Definition of study area.		T1: 646-647	1/3/2017				
17.	Zoning.		T1: 647-648	2/3/2017				
18.	Types of Surveys.		T1: 649-659	2/3/2017				
19.	Inventory of transportation facilities.		T1: 659-660	6/3/2017				
20.	Inventory of transportation facilities.		T1: 661-662	6/3/2017				
21.	Expansion of data from sample.		T1: 662	8/3/2017				
22.	Expansion of data from sample.		T1: 662	13/3/2017				
23.	Revision / Unit Test		VTU question paper	13/3/2017				
24.	Unit-4: TRIP GENERATION: Introduction.	Objective: understand the reason behind the trip making behaviour, trip making pattern on the basis of observed trips Application: generating the trips	T1: 663	15/3/2017				
25.	Trip purpose.		T1: 664	16/3/2017				
26.	Factors governing trip and attraction		T1: 665-666	16/3/2017				

27.	Category analysis.	sheets of travel plans and dividing the home based and non home based trips	T1: 667-668	20/3/2017				
28.	Numerical	OUTCOME: Understanding the steps of trip generation. Finding the origin and destination of trips. Time saved	T1: 668	20/3/2017				
29.	Revision / Unit Test		VTU question paper	22/3/2017				
30.	Unit-5: TRIP DISTRIBUTION: Introduction.	Objective: to determine the direction of travel and to estimate the trips and distributing the trips.	T1: 673	27/3/2017				
31.	Methods – Growth factors methods.	Application: proper trip distribution by using growth factor method and synthetic methods	T1: 674-675	27/3/2017				
32.	Synthetic Methods.	OUTCOME: Understanding the methods of trip distribution. The predicted number of trips originating in each origin zone	T1: 676-677	30/3/2017				
33.	Fractor and Furness method.		T1: 679-682	30/3/2017				
34.	Numerical		T1: 687-696	3/4/2017				
35.	Revision / Unit Test		VTU question paper	3/4/2017				
36.	Unit-6: MODAL SPLIT: Introduction.	Objective: to understand the characteristics of the trip, house hold ,zonal characteristics and network characteristics	T1: 714	5/4/2017				
37.	Factors affecting modal split.		T1: 715	6/4/2017				
38.	Characteristics of split.		T1: 716	6/4/2017				

39.	Model split in urban transport planning.	<p>Application: used in public transport planning. Zone to zone basis of splitting</p> <p>OUTCOME: understanding the purpose of modal split in urban transport planning. Knowing about the distribution modal splits</p>	T1: 717-720	10/4/2017				
40.	Numerical		T1: 721	10/4/2017				
41.	Numerical		T1: 721	12/4/2017				
42.	Revision / Unit Test		VTU question paper		13/4/2017			
43.	UNIT -7: TRIP ASSIGNMENT	<p>Objective: to understand the different assignment techniques and choice of route on basis of journey time, distance and comfort</p> <p>Application: Calculating the journey time easily and distance. Safety factors is the main factor</p> <p>OUTCOME: understanding the purpose of traffic assignment in urban transport planning. Knowing about the different techniques based on route selection.</p>	T1: 703	13/4/2017				
44.	Assignment Techniques.		T1: 705	20/4/2017				
45.	Traffic fore casting.		T1: 725	20/4/2017				
46.	Land use transport models.		T1: 726	24/4/2017				
47.	Lowry Model.		T1: 726-731	24/4/2017				
48.	Garin Lowry model.		T1: 732-734	26/4/2017				
49.	Garin Lowry model. (No problems on the above).		T1: 735-736	27/4/2017				
50.	Applications in India.		T1: 756-757	27/4/2017				

51.	Revision / Unit Test		VTU question paper	3/5/2017					
52.	Unit-8: URBAN TRANSPORT PLANNING FOR SMALL AND MEDIUM CITIES	<p>Objective: To understand the urban transport planning for various cities.</p> <p>Application: To consider the different case studies for the planning of cities based on size.</p> <p>OUTCOME: To understand the transport planning for the small, medium and large cities.</p>	T1: 759	4/5/2017					
53.	Introduction.		T1: 760	4/5/2017					
54.	Difficulties in transport planning.		T1: 761	8/5/2017					
55.	Transport planning for small cities.		T1: 762	8/5/2017					
56.	Transport planning for medium cities.		T1: 764	10/5/2017					
57.	Transport planning for large cities.		T1: 766	11/5/2017					
58.	Recent Case Studies.		T1: 767	11/5/2017					
59.	Recent Case Studies.		T1: 768	18/5/2017					
60.	Revision / Unit Test			VTU question paper	18/5/2017				

Prepared By: _____
(Faculty)

Reviewed by: _____
(Sub. expert)

Approved by: _____
(HOD)

Approved by: _____
(Principal/ Acad. Co)

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