

# MANIPAL ACADEMY OF HIGHER EDUCATION

SEVENTH SEMESTER B. ARCH. DEGREE EXAMINATION – DEC 2019/JAN 2020

SUBJECT: ARC-14-401 - URBAN CONTEXT STUDIO (2014 SCHEME)

Monday, December 30, Tuesday December 31; 2019, and Wednesday, January 01, 2020  
(Monday 10:00 – 16:00; Tuesday (10:00 – 13:00 & 14:00 – 17:00); Wednesday (10:00 – 13:00 & 14:00 – 17:00))

Time: 18 Hrs. (in three days)

Max. Marks : 50

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY.**

- ✍ The first sitting of six hours is continuous at the end of which the candidate shall submit the drawings as indicated. This submission will not be returned to the candidates, so they are advised to keep a copy of the first day's submission.
- ✍ No sheets will be allowed to be taken out of or into the examination hall.
- ✍ Major deviations from the design developed and submitted in the "first day's work" will not be accepted.
- ✍ The medium of presentation, i.e., pencil, ink etc. is left to the choice of the candidates.
- ✍ All drawings must be in proportion to the mentioned scales.
- ✍ The Base Map provided is schematic. Assume suitable data wherever not given and state the same.
- ✍ Only one Graph paper shall be provided at the beginning of the exam which should be used only to trace.

## URBAN DESIGN PROJECT

The urban stretch for the design to be considered is Mosque Road in Udupi, starting from White Lotus Hotel junction to Sairam Textorium junction. The area is urban context with varied activities and functions. The growth has been steady over the years thereby changing the character, making the precinct a major landmark in the city. But, the rate of the upgradation of physical infrastructure for the same is unable to cater the needs of the current scenario.

Therefore, the context needs to be studied for its criticality on various aspects leading to a suitable solution based on choice of theme for the issue identified. Stake holders for the respective issues to be addressed have to be considered and used in the design project brief.

**The following are the characteristic data of the street:**

**Location:** Mosque Road in Udupi, (From White Lotus Hotel junction to Sairam Textorium junction).

**Typology of Road:** Sub-arterial

**Building Typology:** Commercial (Hotel, Restaurant, Grocery Shop, etc.); Public & Semi-Public (Bank, Temple, Mosque, School, etc.)

**Street length:** 390 m approximately.

2 Way, 2 Lane	7 Meters carriage way
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## CVC COUNT

Classified Volume Count during Peak Hour													
Passenger Vehicle								Good Vehicle			Service Vehicle		
Public transport				Private transport		Non - motorized		Heavy	Light				
Mini Bus	Bus	Taxi	Auto Rickshaw	Automobile 2- Wheeler	Cars	Cycles	Pedestrians	Truck	Trallers	LCV	Ambulance	Fire Trucks	Police Vehicles
20	12	20	200	788	300	0	196	4	0	20	0	0	0

## PASSENGER CAR EQUIVALENCY FACTORS

Sr. No.	Vehicle Type	Equivalency Factor
1	Passenger car, Tempo, Auto - Rickshaw, Jeep, Van or Agricultural Tractor	1.0
2	Truck, Bus, or Agricultural Tractor - Trailer	3.0
3	Motor - cycle, Scooter, and cycle	0.5
4	Cycle - Rickshaw	1.5
5	Horse-drawn vehicle	4.0
6	Bullock - cart	8.0*
7	Hand-cart	6.0

\*For smaller bullock-cart, a value of 6.0 will be appropriate.

## TENTATIVE CAPACITIES OF URBAN ROADS BETWEEN INTERSECTIONS

No. of traffic lanes and widths	Traffic flow	Capacity in PCUs per hour for various traffic conditions		
		Road with no frontage access, no standing vehicles, very little cross traffic	Road with frontage access, but no standing vehicles and high capacity intersections	Road with free frontage access, parked vehicles and heavy cross traffic
2- Lane (7-7.5m)	One way	2400	1500	1200
	Two way	1500	1200	750
3- Lane (10.5m)	One way	3600	2500	2000
	Two way	4800	3000	2400
4- Lane (14m)	One way	4800	3000	2400
	Two way	4000	2500	2000
6- Lane (21m)	One way*	3600	2500	2200
	Two way	6000	4200	3600

\*For three lanes in predominant direction of flow.

Total site area	42548 SQ.M.	
Street Length	390 Meters	
Land cover distribution		
Type	Area (SQ.M.)	Percentage
Built-up	21256	50%
Road carriageway	3510	8%
Other hard Surfaces	6653	16%
Open space without tree cover	8242	19%
Open space with tree cover	2887	7%
Total Hard cover	31419 SQ.M.	
Total Soft cover	11129	sq. m

**Road type and Condition:** Tar and maintained  
**Road width:** Average 12 m (ROW)  
**Shoulders:** Partially present and encroached  
**Footpath:** 0.6 m wide, quality can be improved.  
**Drainage:** Closed  
**Street lights:** Not Present  
**Traffic flow direction:** 2 way  
**Garbage collection:** Not provided  
**Parking facility:** On street and encroached  
**Topography-** 1:250 (Sloping towards White Lotus Hotel)  
**Vegetation on road :** Not Present

Building roof-type distribution	
Roof Type	Percentage
Flat	77%
Sloped	23%

#### Informality Data:

Legend	Mobile/None Mobile	Commodity	Count
A	Non-Mobile (vendor)	Flower	1
B	Mobile (hawker)	Coconut	2

#### Run off coefficient of materials:

Concrete Pavements/Asphalt: 0.75  
 Brick Paving: 0.7  
 Roof of Buildings: 0.8  
 Grass covered soil (Slope less than 2%): Absent.

#### SUBMISSION REQUIREMENTS:

##### 1. DAY 1:

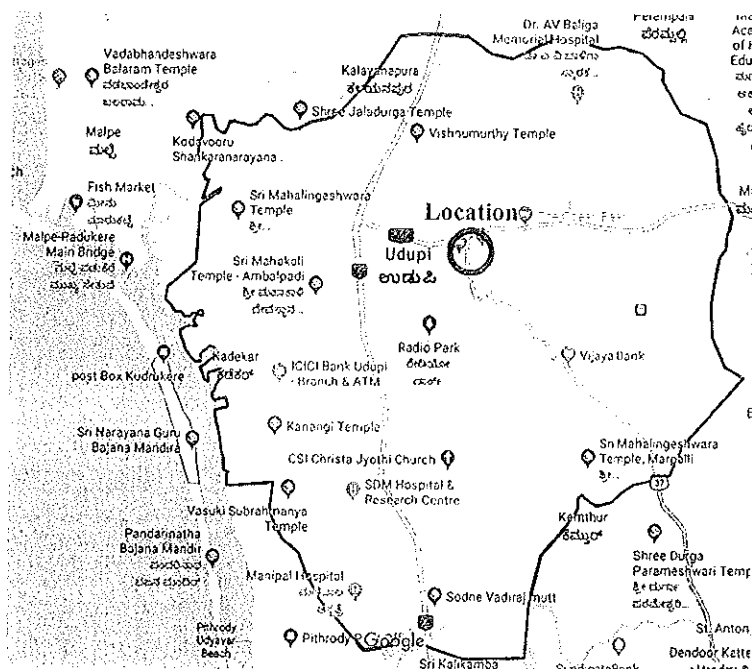
- 1A. Issue Identification/ Potential of Development (Based on the data provided).
- 1B. Stake Holder Identification; Integration of Critical Stake-holder and Critical Issue.
- 1C. Development of the Project brief.
- 1D. Analysis of the Data.

(5 marks × 4 = 20 marks)

##### 2. DAY 2 & DAY 3:

- 2A. Derivation of Concept(s) from Analysis of the Data.
- 2B. Concept Master Plan – Identification of proposals (1:1000 or 1:500).
- 2C. Character & Volume - Sections, Elevations (1:1000 or 1:500), Views.
- 2D. Detail Drawings of Proposals/ Solutions

(5+10+10+5 = 30 marks)



Location Map  
Not to Scale

Title:- MOSQUE ROAD, UDUPI

