

**MANIPAL UNIVERSITY****FIRST SEMESTER B. ARCH. DEGREE EXAMINATION – FEBRUARY 2016****SUBJECT: ARC 101 – ARCHITECTURAL DESIGN & DETAILING – I  
(2014 SCHEME)**

Thursday, February 25 and Friday, February 26, 2016  
(Thursday 10:00 – 16:00; Friday (10:00 – 13:00 & 14:00 – 17:00))

Time: 12 Hrs. (in two days)

Max. Marks: 50

**INSTRUCTIONS TO CANDIDATES:**

- ✍ The first sitting of 6 hours is continuous, at the end of which the candidate shall submit 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.
- ✍ Non- messy snacks are permitted to be taken by students during examination.
- ✍ Answers shall be drawn and written on drawing sheets only.
- ✍ The medium of presentation – pencil, crayon, ink, etc. is left to the choice of the candidate.
- ✍ Assume suitable data wherever necessary with justification.

**DESIGN OF A XEROX SHOP, MIT CAMPUS**

Manipal University is planning to design a 'Xerox shop' at MIT Campus. The proposed site of 100 sq.m is located near to the northern side entry of academic block five AB5. The shop is a double user space having functions such as Xerox, storage of documents/files and Waiting space for two people etc.

No.of staff working = 02 (Double user space)

Counter Space = 2 nos

Storage of documents and files

Visitor Waiting = 02

**Requirements For The Design Problem Are As Follows:**

Sl. No	Description of Spaces	
1.	Total site area	100 sq.m
2.	Maximum built-up area	20 to 30 % of total site area
3.	Waiting area	As per design
4.	Cash counter (02 user)	As per design
5.	Storage space	As per design



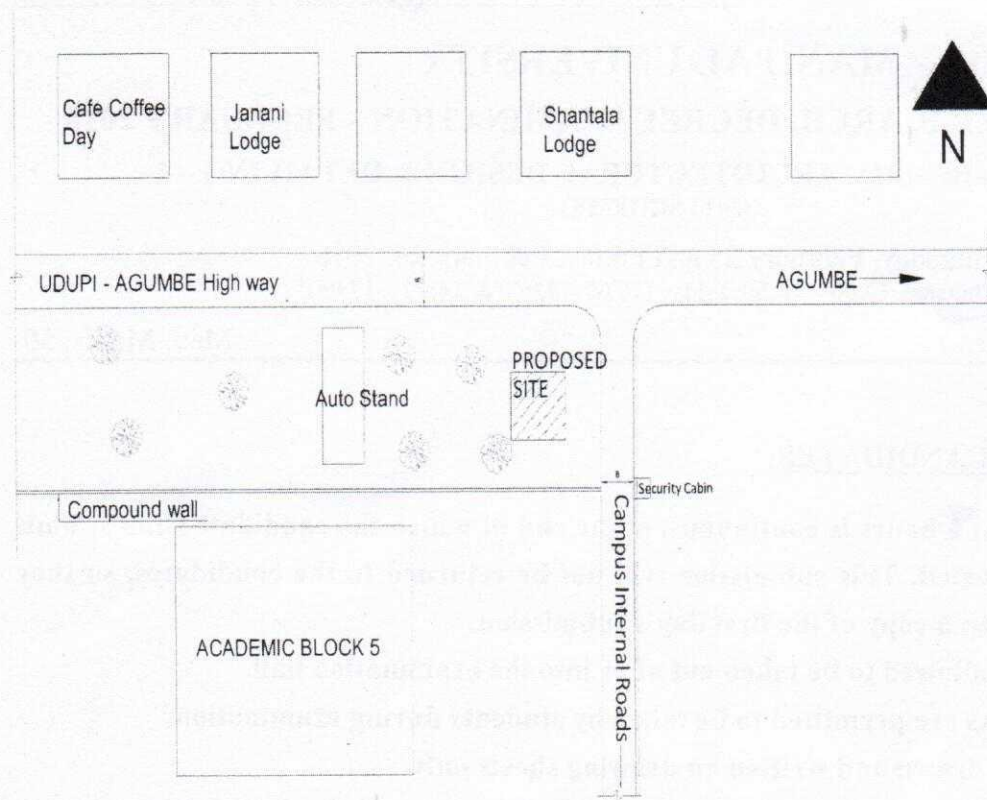


Figure 1: key plan of site

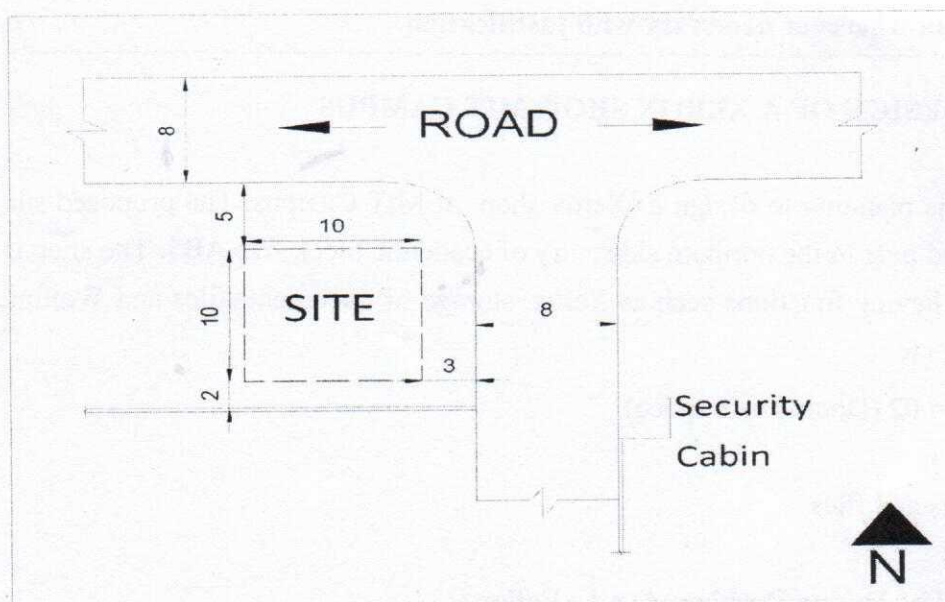


Figure 2: Site plan

NOTE: Site location Plan and Site Detail is not to scale

**Minimum Setbacks to be followed:**

Front = 1.5 m (15% of the depth of site)

Right side = 1.0 m (10% of the depth of site)

Rear = 1.0 m (10 % of the depth of site)

Left side = 1.0 m (10% of the depth of site)

## **GUIDELINES FOR DESIGN:**

1. Design should be barrier free.
2. Design shall be equipped to fulfill the light and ventilation requirements of the spaces with more emphasis on natural features.
3. Behavioral Science Materials, building components shall be an integral part of design.
4. Assume suitable data wherever necessary.
5. Use of sketches to explain design schemes with reasons.

### **Submission schedule is given below:**

#### **Day - One Submission:**

*(Use proportionate sketches to explain design schemes with reasons)*

1. Site analysis (climatic factors, site zoning)
2. Anthropometric study
3. Concept
4. Design Development

$(4+5+7\frac{1}{2}+7\frac{1}{2} = 24 \text{ marks})$

#### **Day - two submission:**

*(Following drawing shall be drafted neatly)*

1. Site Plan
2. Detailed Plan with furniture layout
3. Sections (minimum 2 nos.)
4. Elevations (minimum 1 nos.)
5. Interior view (minimum 1 no.)  
Exterior view (minimum 1 no.)
6. Model – Development/Final

$(4+5+5+3+4 +5 = 26 \text{ marks})$

#### **Scale to be considered**

- a) Site Plan shall be drafted in 1:50.
- b) Detailed Plan, Section and Elevation shall be drafted in 1:20.
- c) Model – 1:20

