

MANIPAL ACADEMY OF HIGHER EDUCATION
THIRD SEMESTER B. ARCH. DEGREE EXAMINATION – JAN/FEB 2018
SUBJECT: ARC-14-201 – ARCHITECTURAL DESIGN AND DETAILING – III
(2014 SCHEME)

Wednesday, January 31 and Thursday, February 01, 2018
(Wednesday 10:00 – 16:00; Thursday (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 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.
- ✍ 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 not given and state the same with justification.

DESIGN A TOURIST CENTER AT UDUPI

Chandru was an NRI for a long time, to make himself and his family safe and secure financially. After long years of lonely life, he thought of leaving the job and settle in his home town, Udupi, with his family. At the same time he also planned to invest something on and for the people. Many ideas and thoughts came to his mind, worked a lot to fix one, and one day he decided to invest in providing a facility to help and guide the tourists along with certain common and basic amenities for the public. With further discussions and research, he decided finally to build a tourist center on his own land which is 2.5 to 3 kms away from the town. It is of a flat land where the longest side of the plot is abutting a 7m wide road, on to the northern side and a 4m road on the western side of the plot.

Chandru is now here in front of you as an architect with the details and requirements as follows:

SITE DETAILS:

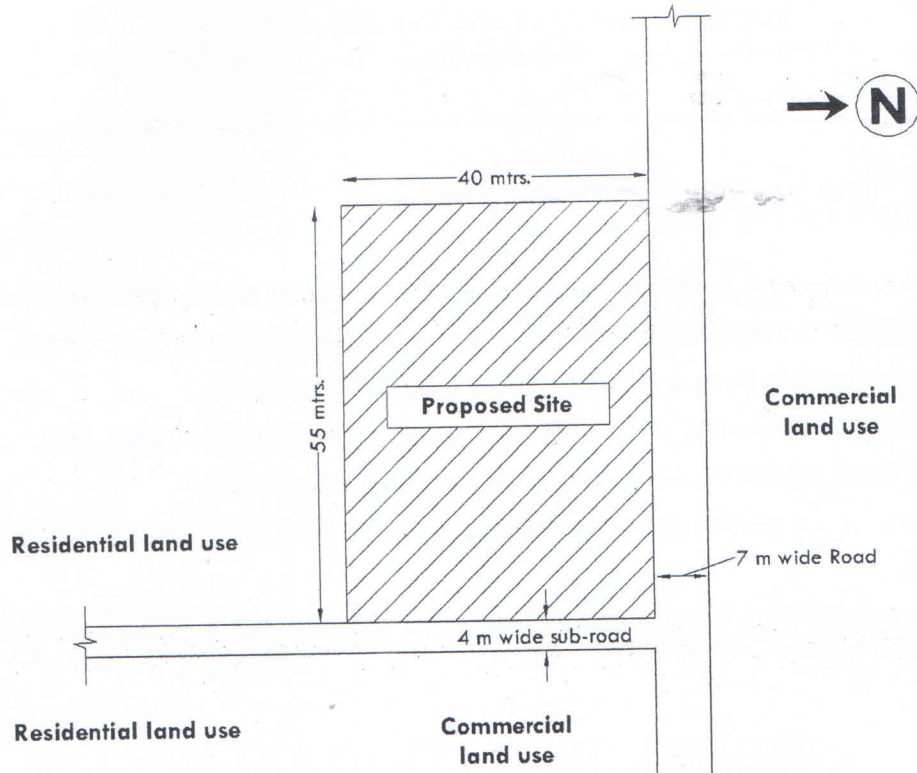
The site is approximately 0.5 acre property facing northern side with a road of 7m wide and a sub road of 4m wide on the western side where the land use is of commercial cum residential properties on other sides.

Site Extent – 0.5 Acres

Height restriction – 8 mtrs.

Setbacks – 10 mtrs. from the main road, 6 m from the sub-road and 4.5 mtrs. on the other two sides.

SITE MAP:



PROJECT REQUIREMENTS (600 sq. m.)

(Areas can be flexible up to 10-15%)

- Info desk, Care taker's/Maintenance office & Store (20 m²), Admin. Office (3 member Staff + 1 Senior Official) – 60 m²
- Cloak room/ Lockers – 50 m²
- Waiting Room/Areas – 120 m²
- Restrooms/ Public amenities (ATM etc.) – 50 m²
- 1Male and 1 Female Dormitory (Along with toilets/Shower) @ 80 m² each – 160 m²
- Café/ Restaurant (Including Kitchen, Indoors/ Semi-open Seating etc.) – 120 m²
- Convenience store – 40 m²
- Public Seating/Gathering/ Interaction/ Hanging out Areas for small events like drama auditions, advertisements etc
- Landscaping
- Adequate Parking Areas

Note:

1. Design shall be barrier free.
2. Design shall be equipped to fulfill the light and ventilation requirements of the spaces with emphasis on natural features.
3. Be creative with the form and spaces.
4. Block model using thermocol/white ivory sheets/white foam sheet shall be made at any of the stages 3, 4 or 5.
5. Assume suitable data wherever necessary.
6. Drawing requirements as given should be free hand on graph sheet/rice paper/drawing sheets or any appropriate sheets provided during exam.
7. *Use sketches to explain* design schemes with reasons. Proportionate (In Scale) sketches would suffice. Double lined drafted plans not necessary.

SUBMISSION REQUIREMENTS:

1. **DAY – 1: (Stages – 1, 2 & 3)**

Stage 1: Design Program

- i) Users and activities
- ii) Space and area requirement (facilitation, ambience etc.)
- iii) Design issues
- iv) Design guidelines

(5 marks)

Stage 2: Site Analysis and Zoning

- i) Context (Accessibility, site surroundings, site features etc.)
- ii) Climate
- iii) Zoning showing major uses and circulation along with reasoning
- iv) Bubble /Proximity diagrams

(10 marks)

Stage 3: Concept Development

- i) Project synopsis and statement of concept (related to form, function, structural systems, construction technologies, materials, environment, aesthetics, local influences etc.)
- ii) Sketches showing initial design ideas based on concept.
- iii) Form development on-site and built-unbuilt spaces.

(10 marks)

[Stage 1, 2 & 3 can be submitted any time within the six hours of Day -1 and thereby students may start with further stages]

2. **Day – 1 & 2: (Stage – 4 & 5)**

Stage 4: Design Development

- i) Conceptual design(s)
- ii) Finalization of design with reason for design decisions
- iii) Refinement of final design

(5 marks)

Stage 5: Design Scheme

- i) Master Plan with all details (access, road network, circulations, open and built, parking and other important features (1:200)
- ii) Floor Plans with furniture layout (1:100)
- iii) Prominent Elevation (1:100)
- iv) Detailed major section (1:100)
- v) Views

(3+5+2+3+2 = 15 marks)

Model Submission

Block models and/or final model using white ivory card-sheets/ thermocol/ white foam sheet shall be made at any of the stages 3, 4, or 5

(5 marks)

