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## MANIPAL ACADEMY OF HIGHER EDUCATION

# THIRD SEMESTER B. ARCH. DEGREE EXAMINATION – JANUARY 2020 SUBJECT: ARC-14-201 – ARCHITECTURAL DESIGN AND DETAILING – III (2014 SCHEME)

Thursday, January 02 and Friday, January 03, 2020 (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 not given and state the same with justification.

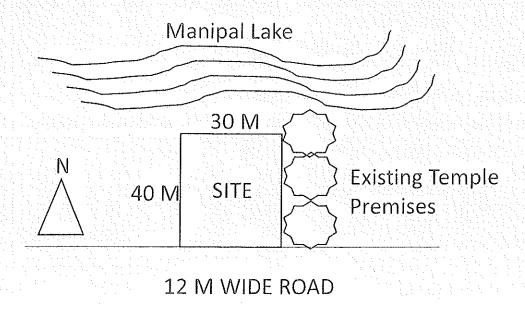
#### DESIGN OF LIBRARY FOR SENIOR CITIZENS AT MANIPAL

The Senior Citizen Society and Manipal Lake Development Authority have come up with a project of constructing a Library for senior citizens at the Manipal lake premises. The objective of this project is to provide a very cheerful and comfortable environment for the senior residents of the surroundings and create a healthy social environment.

#### SITE DETAILS:

The site is abutting the existing Temple on east with 12 meter road access from the south. The site is rectangular-  $(40m \times 30m)$  with shorter side facing the lake on North. Side and rear set backs are 3m and front setback 6m. There is a thick tree canopy forming buffer between the site and temple premise.

Maximum Plot Coverage – 50% Height restriction – G+1 Floor Total Built up Area not exceeding 400 Sq.M



#### PROJECT REQUIREMENTS:

Area can be flexible up to 10-15%

- Librarian cabin 15 Sq.M
- Admin area 30 Sq.M
- Supporting activity area 30 Sq.M
- Newspaper and magazine section 10 people 25 Sq.M
- Reading section 10 people 30 Sq.M
- Stacking section for books 40 Sq.M
- Audio visual room 20 people 40 Sq.M
- Cubicles 2 no.s -14 Sq.M
- Digital reading with 2 desktops Calculate
- Group discussion room 10 people 20 Sq.M
- Storage -10 Sq.M
- Support staff area 15 Sq.M
- Café with coffee vending machine and dry snacks Calculate
- Lounge -10 people -Calculate
- Adequate Toilets -Calculate
- Adequate parking area. as per standards
- Additional requirements can be provided with proper justification.

#### Note:

- a) Design should be barrier free.
- b) Design shall be equipped to fulfill the light and ventilation requirements of the spaces with more emphasis on natural features.
- c) Assume suitable data wherever necessary.
- d) Use sketches to explain design schemes with reasons.

### SUBMISSION REQUIREMENTS:

1. DAY -1: (Stages 1, 2, and 3)

### Stage 1: Design program

- i) Users and activities
- ii) Space and area requirement
- iii) Design issues
- iv) Design guidelines

(5 marks)

## Stage 2: site analysis and Zoning

- i) Context (accessibility, site surroundings, site features etc)
- ii) Climate analysis
- 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 and unbuilt spaces.

(10 marks)

(Stage 1, 2 and 3 can be submitted any time within the six hrs of Day -1 and thereby students may start with further stages)

2. DAY 2: (Stage – 4 & 5)

## Stage 4: Design Development

- i) Conceptual Design
- ii) Finalization of Design with reasoning
- 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 etc.) 1:200
- ii) Floor plans with furniture layout 1:100
- iii) Prominent Elevation 1:100
- iv) Detailed major Sections 1:100
- v) Views

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

#### **Model Submission**

Block models and/or final model using ivory sheets/card boards shall be made at any of the stages 3, 4, or 5.

(5 marks)



