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MANIPAL ACADEMY OF HIGHER EDUCATION
FIFTH SEMESTER B. ARCH. DEGREE EXAMINATION – NOVEMBER 2019
SUBJECT: ARC-14-301: ARCHITECTURAL DESIGN & DETAILING - V
(2014 SCHEME)

Thursday, November 21; Friday, November 22 and Saturday, November 23, 2019
(Thursday 10:00 – 16:00; Friday (10:00 – 13:00 & 14:00 – 17:00); Saturday (10:00 – 13:00 & 14:00 – 17:00))

Time: 18 Hrs. (in three days)

Max. Marks : 50

- ✍ The first setting 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.
- ✍ 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.

EXHIBITION PAVILION AT MANIPAL

As a part of the 60th anniversary celebrations of the formation of State of Karnataka, Udupi Municipal Corporation has decided to construct a pavilion for organizing state level expo every year. The proposed pavilion has to define the following themes of such as Swachh Bharat/Digital India/Make in India. The Exhibition Spaces are intended as a combination of indoor and open-air exhibition spaces in order to create a strong connection between Built form and open spaces. In this reference the Udupi Municipal Corporation has chosen a site with an area of approximately 2 acres (i.e. 7504 sq.m.) next to the Manipal Lake with a buffer of 12 mts. from the lake. The approach road leading to the site is 6.5mts. in width, therefore a separate area for parking approximately 100 cars has to be allocated within the site area. In a public space a special care has to be taken to provide means of egress in case of fire accidents.

Zoning regulations: Max. site coverage is 50%, FAR is 1.5, setback is minimum 5m around the site, maximum permissible height is 15 m. Assume site to be free of natural contours and existing vegetation.

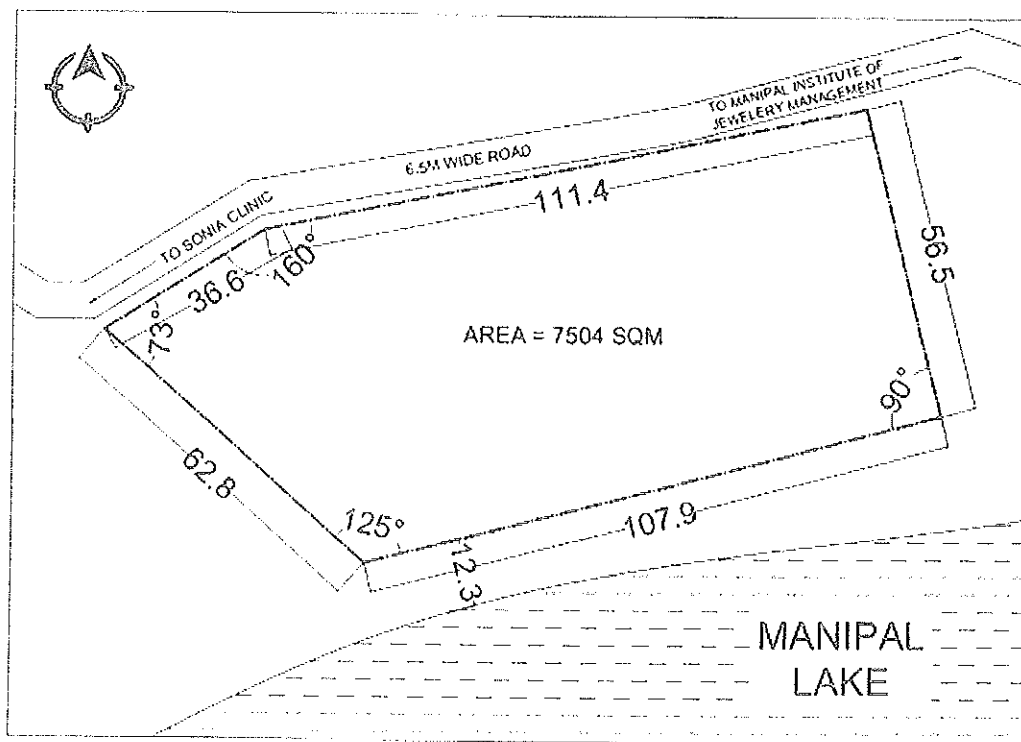
Note:

1. Design shall be barrier free
2. Materials, structural systems, and services shall be an integral part of design
3. Parking Areas and Toilet nos. as per the standards

Minimum Design Requirements:

- Expo comprising of 1200 sqm, including the following sections:
 - Registration desk/ entrance/exit-Queue Management - 100 sqm
 - Emergency Response Centre/Medical Centre - 100 sqm
 - Covered exhibition spaces - 400 sqm
- Semi - Open exhibition Spaces - 300 sqm
- Workshops /knowledge dissemination spaces for 70 users - 150 sqm
- Kiosk Areas/Commercial spaces - 100 sqm
- Art/Cultural spaces - 50 sqm
- Restaurant or Food kiosk facility - for 100 users
- Administration areas - 150 sqm
- Ancillary Spaces, Storage, Toilets as required

Note: The given areas are minimum requirements and indicative. Assume any other data required with valid reasoning and state the same. It is expected that the sustainable built environment features are highlighted and given due importance while designing and providing exhibit areas.



Focus: Design process, design development, and use of sketches to explain design scheme

1. FIRST DAY SUBMISSION

Stage 1: Design Programme:

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

Stage 2: Site Analysis and Zoning:

- i) Context (accessibility, site features, site surroundings, etc.)
- ii) Climate
- iii) Building rules and regulations (if applicable)
- iv) Zoning showing major uses and circulation along with reasoning for the same
- v) Site structure plan
- vi) Bubble diagrams on site, Horizontal and vertical zoning (if applicable)

(10 marks)

Stage 3: Concept Development:

- i) Statement / sketches of concept (related to function, form, structural systems, technologies, materials, environment, aesthetics, philosophy, theme, details, character, heritage, culture, local influences, etc.)
- ii) Sketches showing initial design ideas / experience levels based on the concept
- iii) On site volume/ form development with schematic sections based on function and user experiences, skyline and relationship of built – unbuilt spaces.

(5 marks)

2. FINAL SUBMISSION (DETAILED DESIGN)

Stage 4: Design Development:

- i) Conceptual design(s)
- ii) Finalization of design - Complete with reasons/ logics 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 spaces, 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

(5+5+2+4+4 = 20 marks)

- 3. BLOCK MODEL** using thermocol / white ivory card sheets/ white foam sheet shall be made at any of the stages 3, 4, or 5.

(5 marks)

