

MANIPAL UNIVERSITY**FIFTH SEMESTER B. ARCH. DEGREE EXAMINATION – NOVEMBER 2017****SUBJECT: ARC-14-301 : ARCHITECTURAL DESIGN & DETAILING - V
(2014 SCHEME)**

Monday, November 06; Tuesday, November 07 and Wednesday, November 08, 2017
(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

- ✗ The first setting of 6 hours is continuous at the end of which the candidate shall submit the drawings as indicated under “First day submission”. This submission will not be returned to the candidates. Thus candidates are requested to retain all the necessary information and a copy of the first day’s submission.
- ✗ Major deviations in the design developed and submitted on the “first day submission” will not be acceptable.
- ✗ No sheet shall be taken out or brought into the examination hall.
- ✗ Assume suitable data wherever necessary and logically state the same.
- ✗ Candidate can choose the appropriate medium of presentation.
- ✗ The design has to fulfill the requirements that are requested in terms of areas or the number of users.

DESIGN OF A CONVENTION CENTRE AT MANIPAL**General Introduction:**

Situated amidst the Heritage Village, Dr TMA Pai planetarium, a church and a temple, there is a lake in Manipal popularly known as Manipal Lake or Mannapalla. Till date it has been known only for its natural beauty but it will not remain the same anymore. A comprehensive project is under progress for the development and beautification of the Manipal Lake and its surrounding areas, to develop it as a tourist spot.

Udupi municipality is taking efforts to promote this area by planning various commercial and public activities around lake side. Around five acres of land in one corner of the region will be exploited commercially and the profits will be used for further development of the lake. A beautiful Convention Centre along with Banquet hall will serve the purpose of those who seek place for organizing seminars, reception, birthday parties or any other kind of conferences and functions at a nominal rate. This project is mainly focusing users from surrounding towns and cities to take advantage of natural beauty!

This gives clear indication that the Manipal Lake area will quickly develop in to a perfect destination for the users who care for the nature and their health. Manipal is certainly going to be a hot spot for tourism if the project is realized as per plans.

Design Brief

There is a proposal for a Convention Centre in Manipal near Manipal Lake, Udupi District, Karnataka to promote tourism. Proposed site of around 2 Acres is facing the lake.

Objectives for this project are twofold:

- 1) Design a Convention Centre to attract people from nearby localities.
- 2) To enhance the natural beauty of the lake and its surrounding areas by designing a Convention Centre.

Following facilities are to be provided in the proposed Convention Center:

1. Entrance

- Lobby (area: 150 sq. m)
- Entrance vestibule (area: up to 25 sq. m)
- Retail Shop (area: 20 sq. m)

2. Main Auditorium

- Seating - capacity 300 seats (area: Approx. 350 sq. m)
- Stage Area (area: 75-100 sq. m)
- Back stage & Green rooms- 2 Nos. (Area: 50 sq. m total)
- Projection/ Sound Control room (area: 10 sq. m)

3. Conference Centre

- Meeting Rooms 2 nos. (Area: 35 & 50 sq. m for 15 & 25 people each)
- Pre Functional lobby area / Waiting space (Area: 25 sq. m)

4. Banquet Hall

- Capacity 600 people, with 3 partitions (area: per person area required is 1.5 sq. m)
- Kitchen (area: 150 sq. m)
- Storage (area: 40 sq. m)
- Restaurant- capacity 100 people (area: per person area required is 2 sq. m)

5. Administrative office (Area: 150sqm)

- Reception
- Manager's room
- Space for 3 staff with furniture
- Other ancillary facilities

6. Services (area: As per requirements)

- AC Plant Room
- Electric Room
- DG Set
- UG water Tank + Pump Room
- Other required services

7. Design Requirements

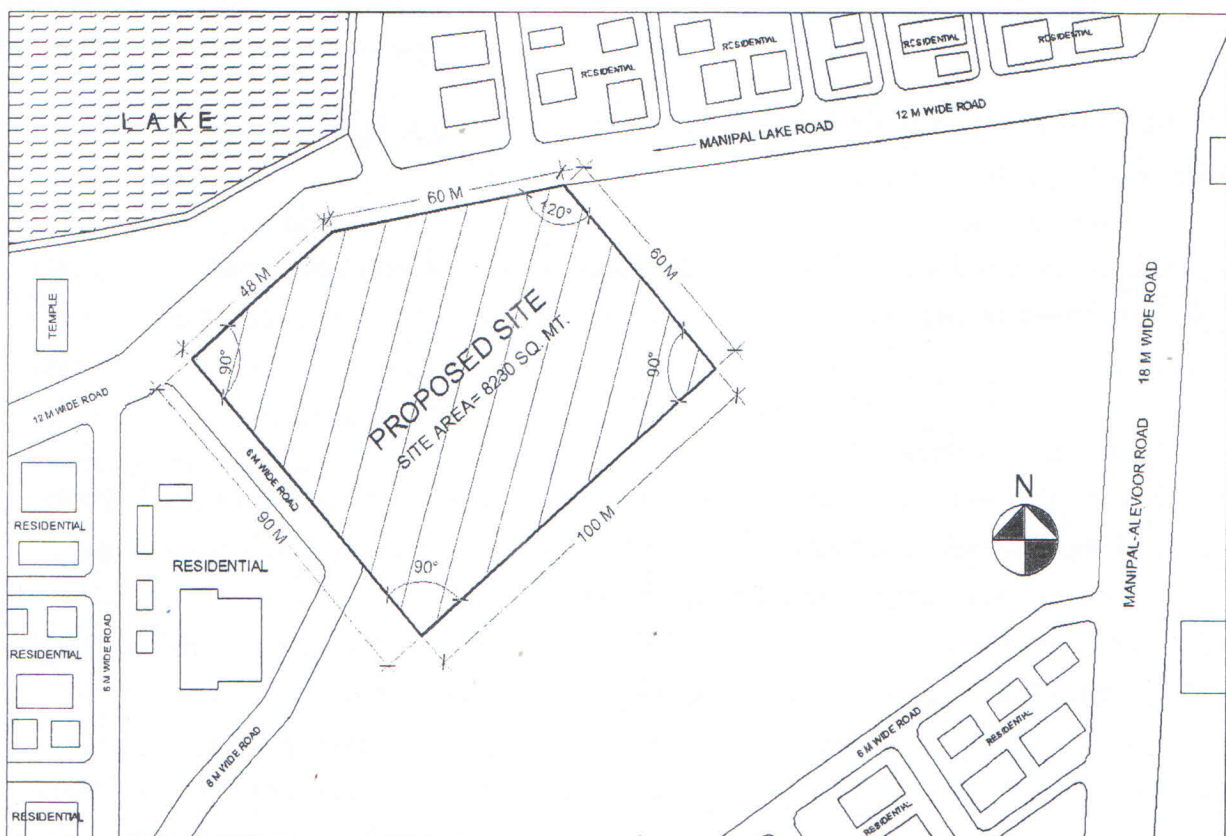
- Landscaped forefront
- Gate with security cabin for stipulating entry and exit.
- Parking (as per by laws)
- Public Toilets wherever necessary. (Area: As per requirements)
- Public spaces

RULES AND REGULATIONS:

- i) Site area: 2 acres
- ii) Site Coverage: 50%
- iii) F.A.R: 1:1 maximum
- iv) Setbacks: 6 mts in the Front side and Rest all sides 3 mts.

Note: Assume site to be free of natural contours and existing vegetation. The given areas are minimum requirements and indicative. Assume any other data required with valid reasoning and state the same.

1. Design shall be barrier free
2. Materials, structural systems, and services shall be an integral part of design



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

1. FIRST DAY SUBMISSION

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 & 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)

