Reg. No.										

MANIPAL UNIVERSITY

SIXTH SEMESTER B. ARCH. DEGREE EXAMINATION – MAY 2016

SUBJECT: ARCHITECTURAL DESIGN VI (ARC-302)

Friday, May 27; Saturday, May 28 and Sunday, May 29, 2016

(Friday 10:00-16:00; Saturday 10:00-13:00 and 14:00-17:00; Sunday 10:00-13:00 and 14:00-17:00)

Time: 18 Hrs. (in three days) Max. Marks: 50

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

- **The first sitting of six 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 accepted.**
- **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 SOS Childrens' Village

Introduction

Starting off as an International NGO in the 1940s in Austria, SOS Children's Villages have spread globally with the main purpose to provide orphaned and destitute children a "permanent family" set up till they are old to fend for themselves by providing constant care and accommodation. The children are also given education and skills in order to lead an independent life in future. In the SOS Villages, the children live with their SOS Mother and brothers and sisters (6 to 12 boys and girls of different ages) in their own house. Natural siblings are not encouraged to be separated. The entire SOS village facility is managed by a qualified Village Director who, together with the SOS Aunts and the educational staff, gives support and advise the SOS Mothers. The village community forms an extension to the SOS family and serves as a link with the community. A typical family set up in the developing world will comprise of ten children dwelling within a house under an SOS mother. Ten to forty of such houses are grouped together to make up a "Village" with shared facilities. Family groups once formed are kept together as a priority.

DESIGN BRIEF

The design for the proposed SOS Children's Village is at Alevoor Road, Manipal, as there is much potential for the orphaned and destitute children from the nearby villages in need of care and basic education.

Building Programme:

10-12 Family Houses each accommodating 10 children and an SOS mother
1 SOS Village Director's House

1 Community Area (SOS Aunt's House, Guest House, Child Day Care & Kindergarten, Medical Clinic and Dining Hall)
1 Village Facility (Administration, Multipurpose Building, Workshop with Garage, 1-3 Co-Workers' Residences)
Outdoor Spaces
Play Areas
Sports Fields

Area Programme:

1. FAMILY HOUSES (10 to 12 nos.) _____ 130 sq. m max.
   Room Programme:
   1 Living/Dining area
   1 Kitchen with store
   1 SOS Mother's room
   2-3 Children's rooms
   1 Bathroom area (2 toilets, 2 showers, wash basin)
   Store Room

2. SOS VILLAGE DIRECTOR'S HOUSE _____ 100 sq. m max.
   Room Programme:
   1 Living/Dining Area
   1 Kitchen with store
   3 Bedrooms
   2 Bathrooms (1 toilet, 1 shower, wash basin)
   COMMUNITY AREA

3. SOS AUNT'S HOUSE _____ 100 to 140 sq. m max.
   Room Programme:
   1 Living area with kitchenette
   3-5 SOS Aunts' rooms
   1 Guest toilet
   Sanitary unit with 2 showers and 2 toilets
   Storeroom

4. GUEST HOUSE _____ 60 to 80 sq. m max.
   (To accommodate two to three guests)
   Room Programme:
   1 Living area with kitchenette
   2-3 Guest rooms (with own small sanitary area each)

5. MEDICAL CLINIC _____ 60 to 80 sq. m max.
   Room Programme:
   1 Consultation Room
   1 Treatment Room
   1 Nurses' Room
   1 Store Room
   1 Isolation Ward (3 beds)
   Toilets

6. CHILD DAY CARE CENTRE & KINDERGARTEN _____ 150 sq. m max.
(For infants and children from 0 to 6 years) most of the time for the whole day.
Room Programme:
Day Care Area (for infants from 0 to 4 years old):
1 Play area (1.2 sq. m per infant) (for 20 infants)
1 Sleeping Area (1.5 sq. m per infant) (for 20 infants)
1 Pantry
Toilets and baby changing area
Kindergarten (for children 4 to 6 years old):
2 Classrooms (each for 20 children)
1 Teachers' room (for 2 teachers)
Supervised Play Area
Toilets (boys and girls)
Store Room

7. DINING HALL _____ 90 sq. m max.
1 Dining Hall (for 50 children)
1 Kitchen with store
Toilets and wash

VILLAGE FACILITIES

8. ADMINISTRATION CENTRE _____ 130 sq. m max.
Offices for the running of the village (Village Director, management, accounts) should be in there. A facility should be included where SOS Aunts, staff and guests can eat and spend time together.
Room Programme:
4 Offices
1 Archive Room
1 Meeting room
1 Bathroom area (2 toilets, washbasin)
1 Kitchen
1 Dining room (for approximately 10 people)
1 Library/Study Area (25 sq. m max.)

9. LANDSCAPING AND PLAY AREAS
Outdoor Spaces (To allow Supervision and Visual Control)
Semi-Open and Open Play Areas
Sports Field/ Ground

RULES AND REGULATIONS:

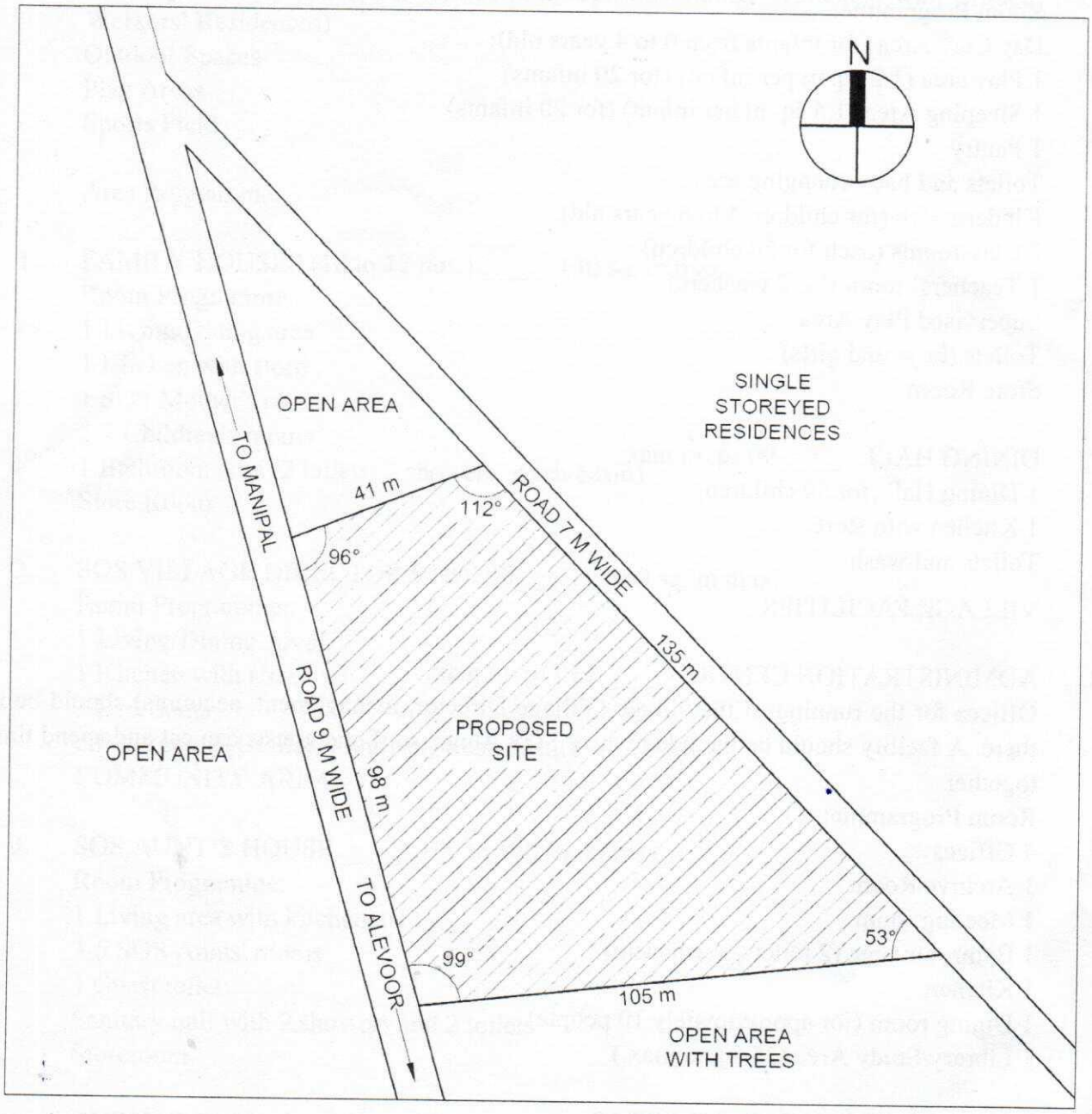
i) Site area: 1.5 acres
ii) Site Coverage: 50%
iii) F.A.R: 1.5 maximum & Setbacks: 2 m in the Front side and 1 m on all other sides.
iv) Toilet requirements shall be as per NBC

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*

PROPOSED SITE:

Site area: 1.88 acres



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

A. FIRST DAY SUBMISSION

Stage 1: Design Programme:

- ☐ Users and activities
- ☐ Space and area requirement (facilitation, ambience, etc.)
- ☐ Design issues
- ☐ Design guidelines

(5 marks)

Stage 2: Site Analysis & Zoning:

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

(10 marks)

Stage 3: Concept Development:

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

(5 marks)

B. FINAL SUBMISSION (DETAILED DESIGN)

Stage 4: Design Development:

- ☐ Conceptual design(s)
- ☐ Finalization of design - Complete with reasons/logics for design decisions
- ☐ Refinement of final design

(5 marks)

Stage 5: Design Scheme:

- Master plan with all details (access, road network, circulations, open and built spaces, parking and other important features) - 1: 200
- Floor plans with furniture layout - 1: 100
- Prominent elevation - 1: 100
- Detailed major section - 1: 100
- Views

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

C. 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)