Reg. No. ☐☐☐☐☐☐☐☐☐☐

MANIPAL ACADEMY OF HIGHER EDUCATION

SEVENTH SEMESTER B. ARCH. DEGREE EXAMINATION – NOVEMBER 2019
SUBJECT: ARC-14-411.1 – VASTUVIDYA
(2014 SCHEME)
Thursday, November 14, 2019

Time: 14:00 – 17:00 Hrs.　　　　　　　　　　　　　　　　Max. Marks : 50

☑　Answer any FIVE FULL questions.

☑　Give neat sketches wherever relevant. Assume any missing data appropriately.

1A. What was the construction significance of perimeter description systems of buildings in traditional architecture?

1B. How did "*veethi*" system effectively control ground coverage in traditional planning?

1C. Explain the anthropometric measurement system in *Vastuvidya*.

(2+4+4 = 10 marks)

2A. How was cardinal directions determined in traditional method?

2B. Explain how the orientation of buildings and their perimeters are made to hold a relation.

(5+5 = 10 marks)

3A. What are the different options of orientation in traditional system, for a house in a corner plot with roads of same status on two adjacent sides? Mention their yoni requirement.

3B. Sketch and explain the components of a traditional timber roof-frame.

(5+5 = 10 marks)

4. Explain the logic of built-form evolution as a response to climate and availability of materials with an example from any region.

(10 marks)

5. **Explain the following with sketches:**

5A. *Gamana*

5B. kooTam
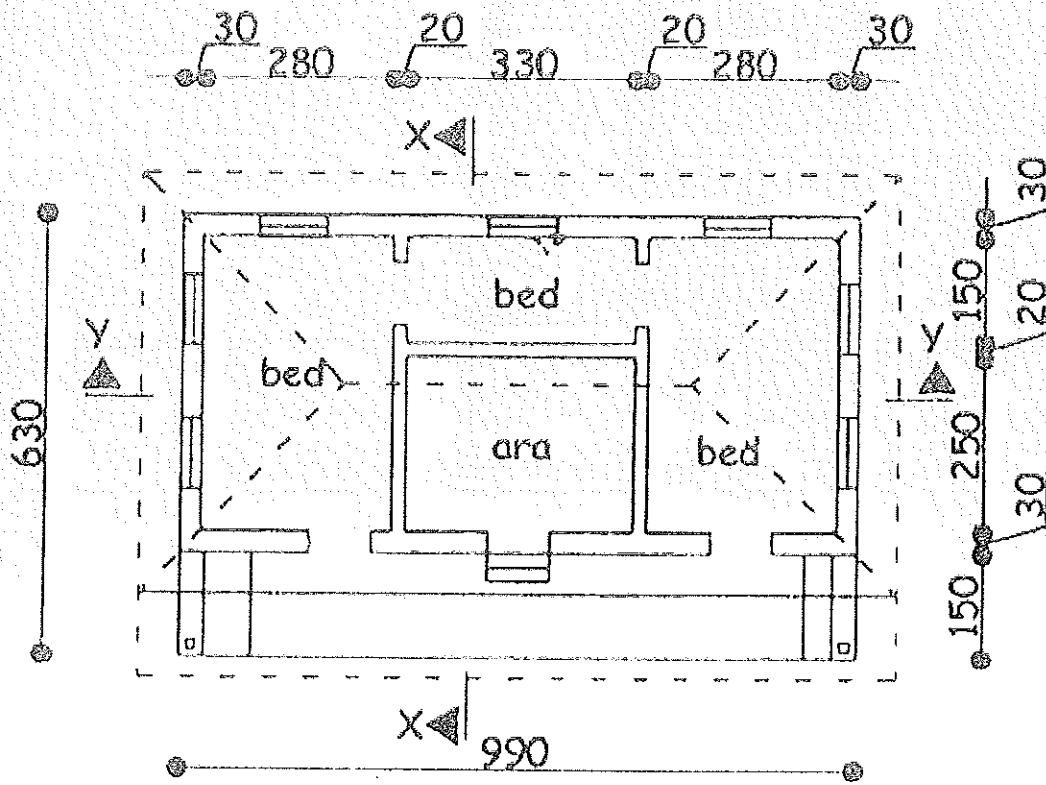
5C. Roof profile of a Mandapa

5D. Traditional door

(2½ marks × 4 = 10 marks)

6A. Explain different types of "shala". How are they described?

6B. Analyse the building plan given below for yoni system of orientation. Compare orientation for the overall building plan as well as for a bed room. (Take 1*pada* = 24 cm)

(5+5 = 10 marks)

Top dimensions (left to right): 30 · 280 · 20 · 330 · 20 · 280 · 30

Right side dimensions (top to bottom): 30 · 150 · 20 · 250 · 30 · 150

Left side dimension: 630

Bottom dimension: 990

Room labels: bed, bed, ara, bed

Section markers: X, Y

PLAN