

Reg. No.

MANIPAL UNIVERSITY

EIGHTH SEMESTER B. ARCH. DEGREE EXAMINATION – MAY 2016

SUBJECT: ELECTIVE II – TRADITIONAL ARCHITECTURE (ARC-408.4)

Monday, May 30, 2016

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

- ✍ Answer any FIVE FULL questions.
✍ Give neat sketches wherever relevant. Assume any missing data appropriately.

- 1A. Explain the basic units and measurements in traditional architecture.
1B. A plot of 15m × 18m has its short side abutting a 6m wide road on the east. Demarcate the mandala and analyze the plot for a minimum side clearance of 1.5m. Indicate the plinth area of a house that can be put up following the principle of *veethi* system.

(5+5 = 10 marks)

- 2A. What is the purpose of 'yoni' computation? A building has a perimeter of 40.56m. What direction should it face as per yoni computation?
2B. What are various plan lay-outs of 'Mandapa' buildings?
2C. Draw a cross section of typical 'Mandapa' and mark the parts.

(3+4+3 = 10 marks)

3. A 'Ekashala' of area 100m (approximate) is to be planned. How do you arrive at the appropriate perimeter and orientation if access road is on the northern side and the building is to be of '*simha yoni*'. Explain the procedure. (Take 1 pada = 24cm)

(10 marks)

4. Explain with example, how traditionally evolved roof-forms solved the problems posed by climate with appropriate technology and local materials.

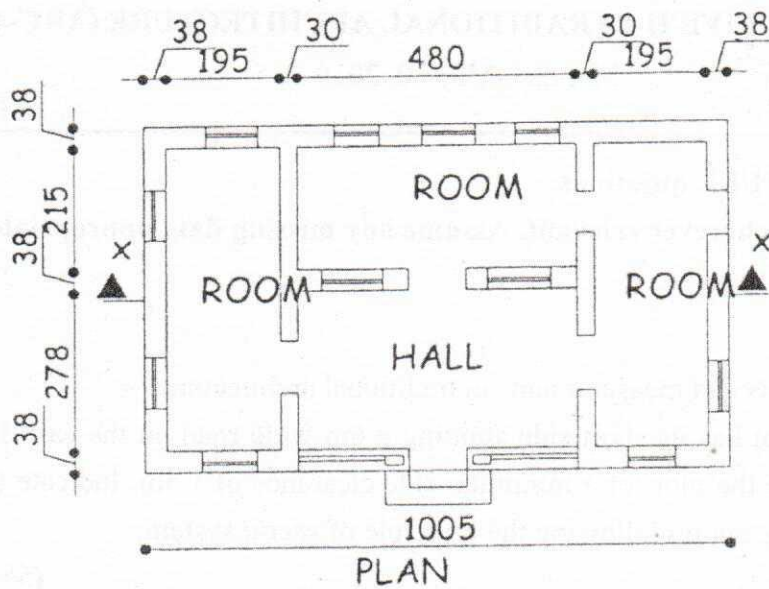
(10 marks)

5. Explain the following with sketches:

- 5A. *Adhishthaana* for *madapa*
5B. Timber structure of a pyramidal roof
5C. Traditional wooden door
5D. *Vastumandala*

(2½ marks × 4 = 10 marks)

- 6A. What is "gamana"? What is its construction significance?
- 6B. Check the building plan given below for its possible orientation as per *yonis* system of orientation. Compare orientation for the overall building plan as well as for the room behind the hall. Given measurements are in cm (Take 1 *pada* = 24 cm)



(3+7 = 10 marks)

