

B.Tech III Year I Semester (R13) Regular Examinations December 2015

BUILDING PLANNING & DRAWING
(Civil Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

(Answer the following: 03 X 10 = 30 Marks)

UNIT – I

- 1 (a) What are building bye laws? Explain them briefly.
(b) Write short notes on Floor Area Ratio (FAR), how it is related to height of the building. Explain.
- OR**
- 2 (a) Explain in detail the factors to be considered for selection of a site for a residential building?
(b) On what considerations, the grouping of various units in residential buildings is made?

UNIT – II

- 3 Explain the characteristics of various types of residential buildings, with sketches.
- OR**
- 4 (a) What are the minimum standards of various parts of Hospital and Dispensaries?
(b) Discuss the principles of planning of school building.

UNIT – III

- 5 Distinguish between PERT and CPM in detail.
- OR**
- 6 From the utility data for a network are given below. Determine the total, free, independent and interfering floats and identify the critical path.

Activity	0-1	1-2	1-3	2-4	2-5	3-4	3-6	4-7	5-7	6-7
Duration(in days)	2	8	10	6	3	3	7	5	2	8

PART – B

(Answer the following: 01 X 10 = 10 Marks)

UNIT – IV

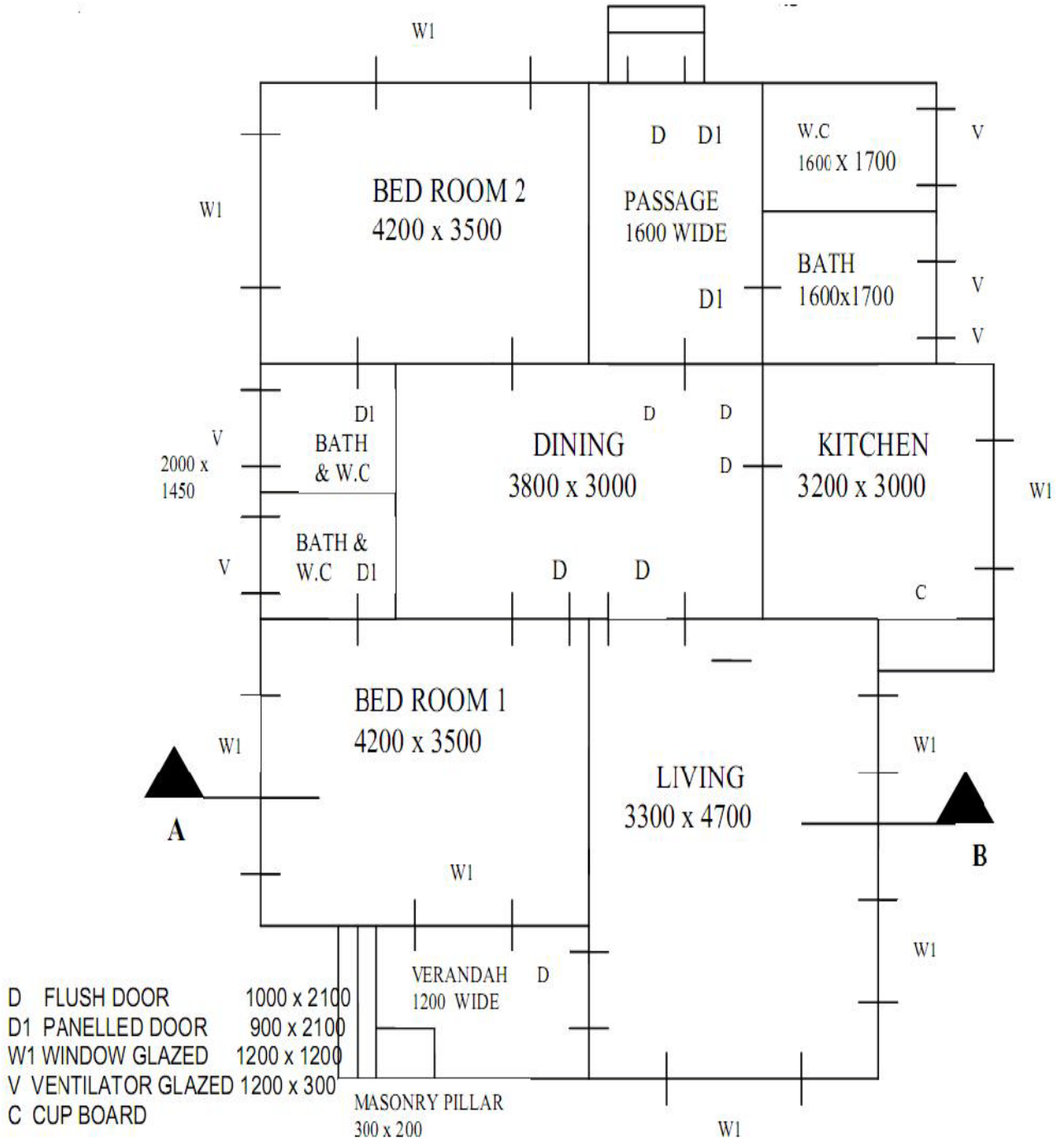
- 7 Draw to a suitable scale the front elevation of a King post truss indicating all details for a clear opening of 8000 mm.
- OR**
- 8 Draw conventional signs for the following materials:
(i) Brick. (ii) Concrete. (iii) Wood. (iv) Stone. (v) Earth.

Contd. in page 2

UNIT - V

(Answer the following: 01 X 30 = 30 Marks)

- 9 The line sketch of the plan of a residential building is shown in figure below. Draw:
- A neat dimensioned plan.
 - Sectional elevation along AB, to a suitable scale, using the following specification.
- Specifications: Foundations: C.C 1:4:8 800 mm wide and 300 mm thick.
Footings: Rubble stone masonry: 600 mm x 500 mm.
Basement: Coursed rubble masonry: 400 mm wide and 700 mm high.
Superstructure: Brickwork in C.M 1.5:300 mm wide and 300 mm high.
R.O.C roofing: 100mm thick.



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OR

- 10 Figure shown in below the line drawing of a residential building, draw to a scale of the following:
 (a) Plan.
 (b) Section along AB.
 (c) Front elevation.

The following specifications are to be adopted:

Foundation: Depth 1000 mm. C.C bed 1000 mm x 300 mm.

Two footings with an off set of 50 mm and 250 mm thickness each.

Basement: 600 mm high, thickness of wall at this level is 400 mm.

Walls : Brick masonry in C.M.1:6, 300mm thick

Roof: R.C.C slab 120mm thick.

Provide the details of doors, windows, ventilators and steps etc. as per standard dimensions.



SKETCH PLAN OF A THREE BEDROOM BUNGALOW

(Assume suitable dimensions where necessary)
