

BUILDING PLANNING & DRAWING

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

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

UNIT – I

- 1 Classify the buildings based on occupancy and type of construction.

OR

- 2 (a) Describe the objectives of Building bye-laws.
(b) On what considerations, the grouping of various units in residential buildings is made?

UNIT – II

- 3 Describe the important departments and facilities to be provided in the layout of a general hospital.

OR

- 4 What are the requirements to be considered in planning of Industrial building

UNIT – III

- 5 Explain the advantages and limitations of critical path method

OR

- 6 A project consists of 9 activities, the details are given below.

(i) Draw network diagram.

(ii) Find out the critical path and project duration.

(iii) Compute earliest occurrence time and finish time, latest occurrence and finish time. Also calculate total float, free float and independent float.

Activity	A	B	C	D	E	F	G	H	I
Predecessor	-	A	A	B,C	A	D,E	C	F,G	H
Duration(in days)	5	9	7	4	8	14	12	6	8

PART – B

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

UNIT – IV

- 7 Draw the plans of Flemish bond odd and even courses of one and half brick walls in thickness at the junction of a corner

OR

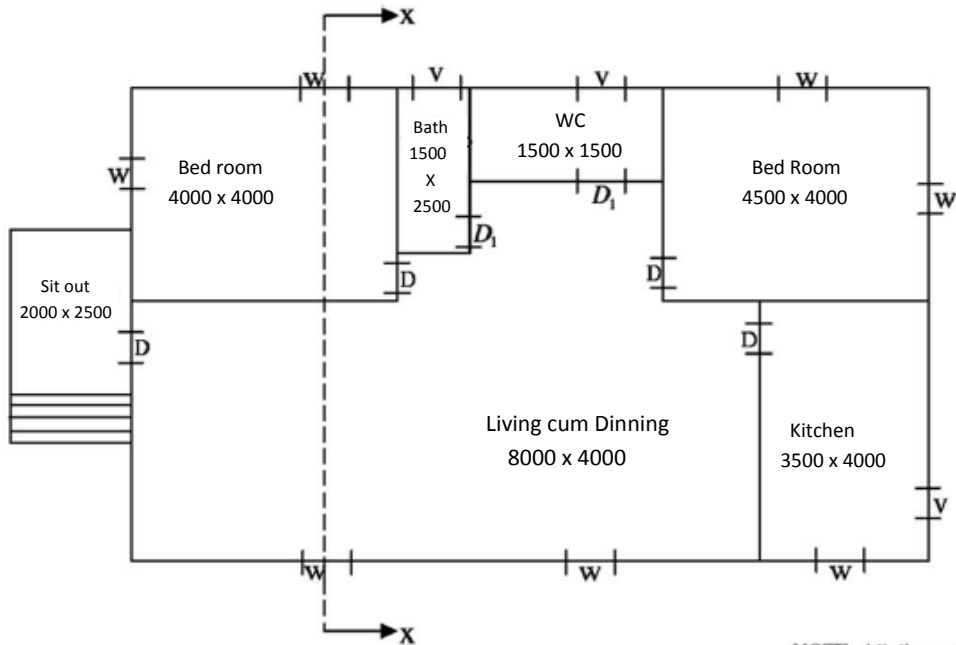
- 8 Draw the elevation of a glazed window of size 1000 mm x 1450 mm.

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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) A neat dimensioned plan.
 (b) 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.



OR

- 10 Following figure shows 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, 300 mm thick
 Roof: R.C.C slab 120 mm thick.
 Provide the details of doors, windows, ventilators and steps etc. as per standard dimensions.

