Code No: 07A40101 R07

B.Tech II Year II Semester Examinations, April/May-2012
BUILDING PLANNING AND DRAWING
(CIVIL ENGINEERING)

Time: 3 hours **Max. Marks: 80**

PART – A
Answer any THREE questions **3×16=48**

1.a) Explain the various principles of planning of a building.
b) Define the following terms:
i) Floor area ratio ii) Floor space index
iii) Plinth area iv) Carpet area. [8+8]

2. Discuss the requirements of the following rooms while planning a residential building?
a) Living Room b) Dinning Room
c) Kitchen d) Bedroom. [16]

3. A hostel building is to be planned for an engineering college to accommodate 500 students. Draw the line diagram of the hostel building. Briefly explain the principles of your planning. [16]

4.a) Explain the various stages of planning in construction management.
b) Differentiate between CPM and PERT. Explain the circumstances under which one is preferred over the other. [8+8]

5. Draw the network diagram for the following data and find the critical path using floats. Also find the project duration. [16]

Succeeding Activities	Preceding Activities	Activities	Duration (Days)
A & B	-	A	10
C	B	B	5
D	A	C	3
E	C	D	6
F	C	E	7
G	F	F	6
H	G	G	5
I	C	H	8
J	H & I	I	4
K	E,J & D	J	6
L	H & I	K	4
M	K & L	L	3
		M	2

PART – B

Answer any ONE question **1×32=32**

6.a) Draw the plan and isometric view of a right angle junction of one and half brick wall in English bond, showing atleast 4 consecution layers.

b) Draw to a suitable scale, the elevation and details of a queen post truss of a span 12 m. [16+16]

7. The line plan of a residential building is as shown in Fig.1. [32]

Specifications:

Foundation: Depth of foundation is 900 mm
The concrete base is 300mm thick, 800 mm wide.
The first footing over it is of first class brick masonry in C.M. 1:6, 600 mm wide, 400mm deep. The second footing is 500 mm wide, 300 mm deep.

Basement: First class brick masonry in C.M. 1:6, 600 mm high and 400 mm thick.

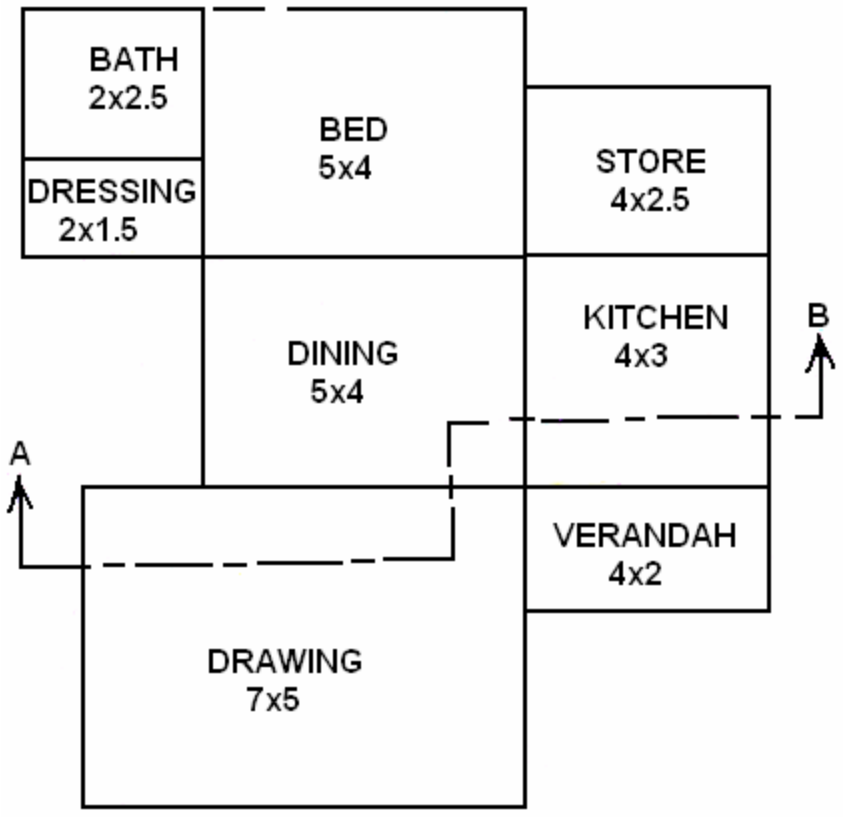
Super structure: All the main walls are 300mm thick brick walls in C.M. 1:6, and 3.5m high
The partition wall between toilet and dressing & toilet and bedroom are 100 mm thick.

Roofing: Roof is 100 mm thick 1:2:4 R.C.C slab
Provide flat tiles in l.m 1:1 in 2 layers as weathering coat.
Provide parapet wall 200 mm thick and 600 mm high.

Flooring: 100 mm thick C.C. 1:6:12 is laid over sand filling.
It is further finished with cuddapah slabs 20 mm thick.

Doors, windows and ventilators:-
Main doors are panelled doors of 1000 mm × 2000 mm.
Doors for toilet, dressing and store are 750 mm × 1800 mm and are also panelled.
Windows are glazed and of size 1000 mm × 1500 mm.
Ventilators are glazed and of size 1000 mm × 500 mm.

Draw (i) fully dimensioned plan
(ii) Sectional elevation along AB
(iii) Front Elevation.



All the dimensions are in m.

Fig. 1

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