

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

August 2024 Semester End Main Examinations

Programme: B.E.

Branch: Civil Engineering

Course Code: 22CV4PCBPD

Course: Building Planning and Drawing

Semester: IV

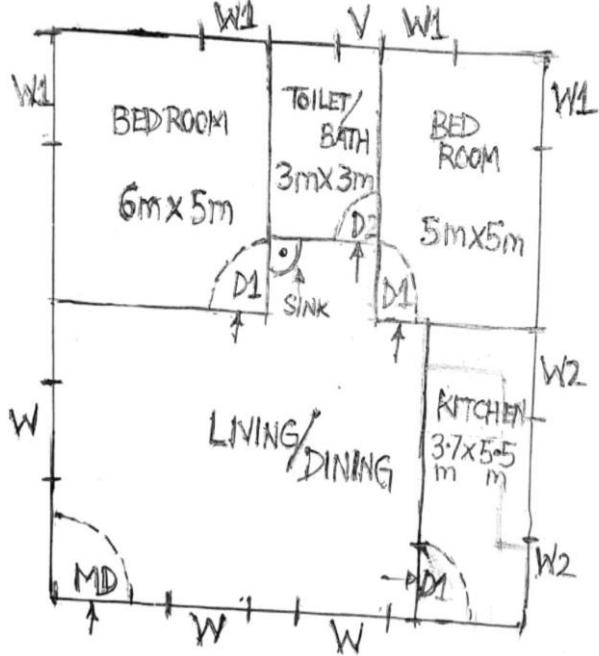
Duration: 4 hrs.

Max Marks: 100

Instructions: 1. Answer any three full questions.
2. Missing data, if any, may be suitably assumed.

UNIT – I			CO	PO	Marks
1	a)	Neatly draw the interconnectivity of different portions in a typical school building adopting a bubble diagram. Also, draw to a suitable scale only the line diagram of the health centre indicating the different portions in it considering standard dimensions.	<i>CO 1</i>	<i>PO2</i>	12
	b)	Explain: (i) plinth area (ii) sital area, (iii) buildup area, (iv) lintel level, (v) waist slab, (vi) mid landing level, (vii) partition wall, (viii) parapet wall	<i>CO 1</i>	<i>PO2</i>	08
UNIT – II					
2	a)	Draft to a suitable scale a single shuttered single paneled wooden door having an opening size of 1.2m x 2.1m. The frame has a cross sectional dimensions of 85mmx 85mm. The top and bottom rails have a depth of 85mm and are 40mm thick. Assume other missing details.	<i>CO 2</i>	<i>PO3</i>	09
	b)	Draft to a suitable scale, the detailed section of a stepped wall footing for a 230mm thick load bearing wall. The load bearing wall is built out of 1 st class burnt bricks. The concrete flooring is 100mm thick. The DPC course is 100mm thick. Bed concrete thickness is 100mm, PCC- 1:3:6. Depth of the excavation pit is 1000mm with respect to the ground level. Width of the foundation pit is 1200mm. Consider three courses of size stone masonry in the excavation pit depth of 1000mm including the thickness of bed concrete. Consider a course of size stone masonry above the ground level. Consider the distance between the ground level upto the concrete flooring surface / DPC course to be 450mm. Consider other details appropriately.	<i>CO 2</i>	<i>PO3</i>	11
OR					

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
Revealing of identification, appeal to evaluator will be treated as malpractice.

3		<p>Draft to a suitable scale a plan and section of an R.C.C. dog stair case for a staircase room having clear inner dimensions of 3200 mm x 5500mm. Width of each flight is 1600mm, waist slab thickness is 150mm. The clear floor to roof height (head room) is 3.6m. Riser height is 150 mm. Tread width is 300 mm . Assume other missing details.</p>	CO 2	PO3	20
		UNIT - III			
4		<p>Based on the line diagram draft the plan , elevation, section to a suitable scale for a single storey residential building shown in Fig1 below. Include schedule of openings. Main wall thickness is 230mm and partition wall thickness 115mm. Floor to roof height is 3.6m. The roof slab is 150mm thick. Include the schedule of openings, carpet area , super built area and floor area ratio. Consider other relevant details appropriately.</p>  <p>Fig1</p> <p>MD - 1.2m x 2.1m D1 - 1m x 2.1m D2 - 0.75m x 2.1m W - 1.6m x 1.5m W1 - 1.6m x 1.2m W2 - 1.2m x 1m V - 0.7m x 0.7m</p>	CO 3	PO3	60
