U.S.N.										

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

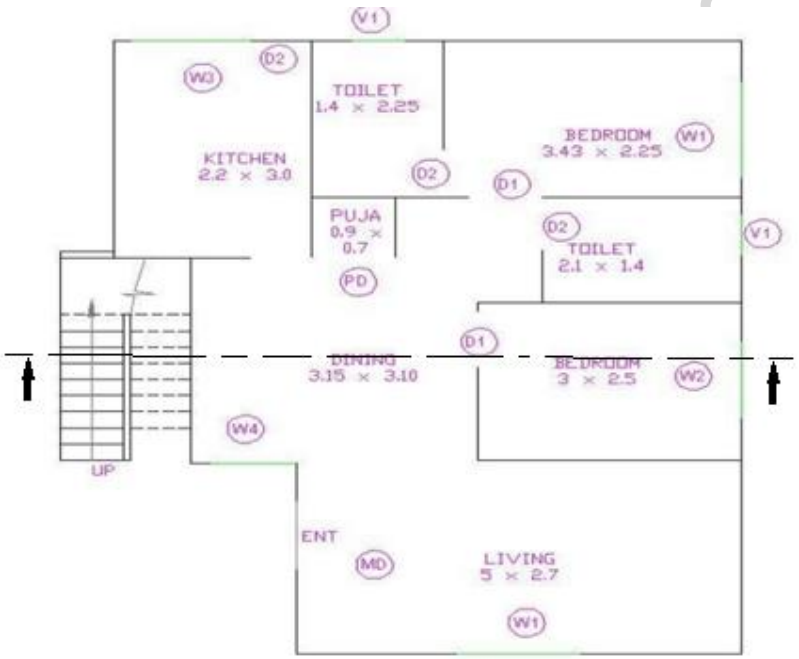
Autonomous Institute Affiliated to VTU

October 2024 Supplementary Examinations

Programme: B.E. **Semester: IV**
Branch: Civil Engineering **Duration: 4 hrs.**
Course Code: 23CV4ESBDC **Max Marks: 100**
Course: Building Drawing and CAD

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

			CO	PO	Marks
		UNIT – I			
1		Prepare a bubble diagram (connectivity diagrams) and develop line diagram for school buildings, with following facilities. • Classrooms • Library • Administration Offices • Auditorium • Gymnasium • Cafeteria • Laboratories (Science and Computer) • Any other	*CO* 1	*PO2*	**20**
		UNIT – II			
2		Prepare a working drawing for an isolated rectangular RCC column and footing has the following details: Column size: (400 x 600) mm. Size of footing: 2m x 3m of uniform thickness 450mm. Depth of foundation below GL = 1.5m, Height of column to be shown above GL = 1.0m, Thickness of PCC bed in 1:3:6 = 75mm, Details of reinforcement: Column: #8 - 16φ as main bars with 2L - 8φ @ 150 c/c lateral ties, Footing: Longer direction steel- 12φ @ 130 c/c, Shorter direction steel - 12φ @ 220 c/c.	*CO* 2	*PO3*	**20**
		OR			

	3		Draw the plan, elevation and vertical section of six paneled double leaf door with overall size of 1.2m x2.1m. The frame members have a section of 70mmx100mm and the stiles have a section of 30mmx100mm. The top rail, bottom rail and lock rail have widths of 100mm, 250mm and 20mm respectively. The thickness of the panels is 20mm.	***CO*** 2	***PO3***	**20**
			UNIT - III			
	4		The line diagram of a residential building is given in Figure - 1 below. Draw to a suitable scale i) Plan at sill of windows ii) Cross section on AB iii) Front elevation iv) Schedule of doors and windows  Figure1. Data: Depth of foundation 1.2m Height of Basement 0.6m Foundation SSM in CM 1:6 Superstructure BBM in CM (1:6) 300mm thick Height of RCC roof 3.65m Assume suitable size of openings	***CO*** 3	***PO3***	**60**

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