

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

Autonomous Institute Affiliated to VTU

August 2024 Supplementary Examinations

Programme: B.E.

Branch: Civil Engineering

Course Code: 19CV4PCBPD

Course: BUILDING PLANNING & DRAWING

Semester: IV

Duration: 4 hrs.

Max Marks: 100

Instructions: 1. Answer compulsory question from unit 1 and two questions from remaining units by selecting at least one question from each unit.
2. Missing data, if any, may be suitably assumed and to be mentioned.

		UNIT - I	CO	PO	Marks
1	a)	<p>The line sketch of a residential building is shown in Fig-1. Draw the following to a suitable scale. Also provide the details of schedule of openings, plot coverage and FAR. Take load bearing walls are of 230 mm thick and internal walls are of 150 mm thick.</p> <p>i) Plan ii) Front elevation and iii) Section showing maximum details.</p>	CO 1	PO1,2	60

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.

Fig-1

		UNIT – II			
2	a)	Draw to a suitable scale the working drawing for an isolated footing for a column of size 250×450 mm reinforced with 6 numbers of 16mm dia HYSD bars together with 8mm dia stirrups at 200mm c/c, size of footing $1.50\text{m} \times 1.50\text{m}$ with the thickness of footing depth 400mm. The footing mat comprises of 12mm dia HYSD bars @ 140mm c/c both ways. Thickness of PCC is 100mm.	<i>CO 2</i>	<i>PO2,3</i>	20
		OR			
3	a)	The internal dimension of the stair case room is $3.5\text{m} \times 7.0\text{m}$. Draw the Plan and Sectional Elevation of the Dog-legged stair. Take floor to floor height as 3.3m & width of Stairs is 1.5m.	<i>CO 2</i>	<i>PO2,3</i>	20
		UNIT - III			
4	a)	Develop to a suitable scale the water supply and sanitary layout for the 2 BHK Single storied building shown in Fig-1.	<i>CO 3</i>	<i>PO1,2</i>	20
		OR			
5	a)	Prepare a bubble diagram for a proposed PWD office building with the following requirements; i. AEE room $4\text{m} \times 3\text{m}$ with attached toilet ($2.5\text{m} \times 1.4\text{m}$). ii. AE room $3\text{m} \times 3\text{m}$ with attached toilet ($2.5 \text{ m} \times 1.4 \text{ m}$). iii. Manager room $4\text{m} \times 3\text{m}$. iv. Technical staff room $4\text{m} \times 4\text{m}$. v. Drafting room $4\text{m} \times 6\text{m}$. vi. Clerical staff room $4\text{m} \times 3\text{m}$. vii. Accountant and related staff room $4\text{m} \times 3\text{m}$. viii. Store keeper and related staff room $6\text{m} \times 4\text{m}$. ix. Toilet block for men and women separately.	<i>CO 3</i>	<i>PO1,2</i>	20
