Max. Marks: 100

Third Semester B.E. Degree Examination, June/July 2023 (CIVIL ENGINEERING)

COMPUTER AIDED BUILDING PLANNING AND DRAWING

Time: 3 Hours

NOTE:

1. Answer any TWO full questions from PART A and any ONE full question from PART B.

2. Assume any missing data suitably.

PART A

Draw a cross section of a S.S. Masonry foundation to be provided for a load bearing wall 300mm Q1 thick in Burnt Brick Masonry in superstructure of a residential building. Use following data: i. Width of foundation = 1.20m ii. Depth of foundation below GL = 1.20m iii. Width of PCC = 1.20m iv. Thickness of PCC in 1:3:6 = 75mm. v. Width of first footing above PCC = 1.05m vi. Depth of first footing above PCC = 0.375m vii. Width of second footing = 0.90m viii. Depth of second footing = 0.375m ix. Width of third footing = 0.75m x. Depth of third footing = 0.375m xi. Width of plinth wall = 0.45m xii. Depth of plinth wall = 0.60m xiii. Thickness of DPC in 1:2:4 = 100mm. (25 Marks) Draw a layout plan of rainwater harvesting and recharging system for a (8 x 12)m area residential Q2 building leaving setback of 1.20m on all four sides as per bye laws. Show a cross section details for (25 Marks) recharging pit. Draw two consecutive courses for corner joints of the following walls in English bond. 03 (a) One brick thick wall i.e., 200 x 200 (b) One and half thick wall i.e., 300 x 300mm(25 Marks) 04 Sketch the cross section of a rigid pavement in heavy rainfall area having the following particulars: Width of carriage way = 3.75 mCamber ((2%) = 38mm Width of Shoulder = 1.5 mGranular sub-base (GSB) = 250mm thick Dry lean concrete sub-base = 150mm thick Paving Quality Concrete layer = 250mm thick Total thickness of the pavement = 650mm (25 Marks)

PART B

Q5	Line diagram of Single Storey residential building is given in Fig. Q5. Draw to sca	le the following:
	a) Plan at sill	
	b) Front elevation	
	c) Section along AA.	
	d) Schedule of Openings	(50 Marks)
Q6	Line diagram of Hostel building is given in Fig. Q6. Draw to scale the following:	
	a) Plan at sill	
	b) Front elevation	
	c) Section along XX.	
	d) Schedule of Openings	(50 Marks)
	V	
3		

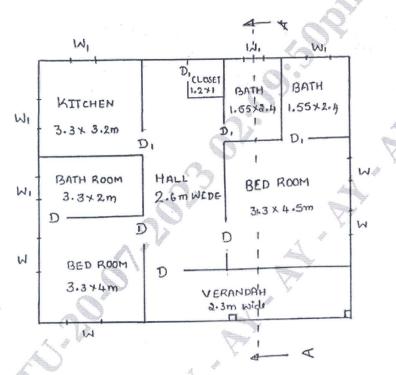


Fig. O5

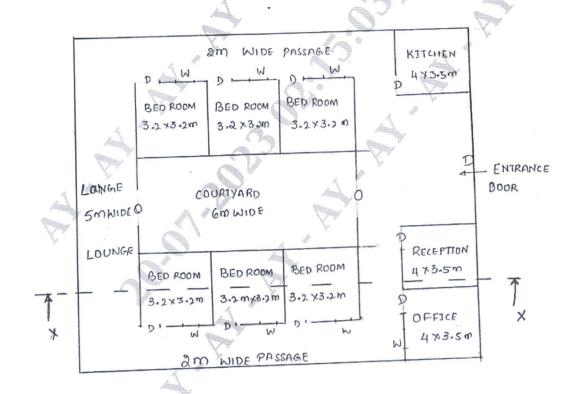


Fig. Q6

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