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10CV73

Seventh Semester B.E. Degree Examination, Aug./Sept.2020

**Estimation and Valuation**

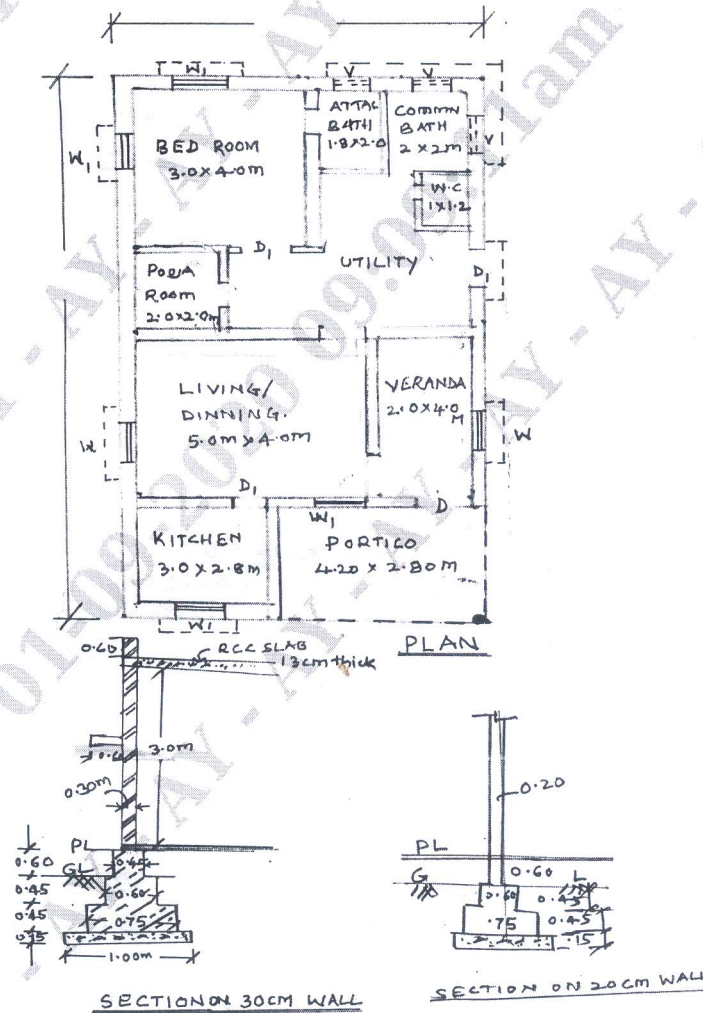
Time: 3 hrs.

Max. Marks:100

Note: Q.No.1 is compulsory and answer any FOUR full questions from the remaining.

PART - A

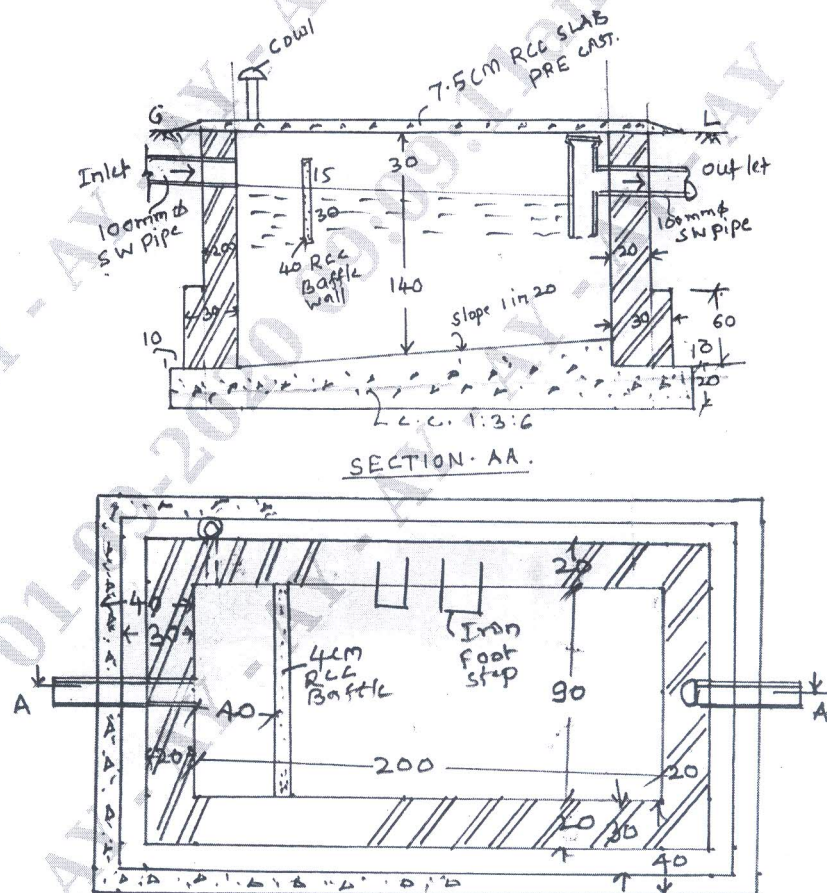
- 1 The details of a Residential buildings are shows in the accompanying as shown in Fig.Q1. Estimate the quantities and cost of the following:
  - a. Calculate the centre line to estimate the quantities. (08 Marks)
  - b. Earth work excavation for foundation in ordinary soil at Rs.115/m<sup>3</sup>. (05 Marks)
  - c. Cement concrete bed 1:4:8 for plinth walls at Rs.2850/m<sup>3</sup>. (05 Marks)
  - d. SSM (Size Stone Masonry) in CM 1:8 for footings and basement foundation at Rs.2300/m<sup>3</sup>. (05 Marks)
  - e. First class brick work for super structure in cement mortar C:M 1:6 at Rs.1750/m<sup>3</sup>. (10 Marks)
  - f. Determination of total cost abstract of estimate. (07 Marks)



Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

PART - B

- 2 Write the specification for any three of the following:
- Earth work excavation in foundation
  - Burnt brick masonry in CM 1:6
  - RCC 1:2:4 for roof slab
  - Plastering in CM 1:6 to interior surfaces
- (15 Marks)
- 3 Carry out the rate analysis for any three of the following:
- CC of 1:5:10 for Bed in foundation.
  - Random Rabble Masonry in CM 1:6 in foundation
  - Brick work in CM 1:6 for super structure.
  - 12 mm thick plastering in CM 1:3.
- (15 Marks)
- 4 Write short notes on any three of the following:
- Administrative sanction and Technical sanction
  - Earnest money deposit and security deposit
  - Lump-sum contract and item rate construct
  - Nominal master roll and measurement book
- (15 Marks)
- 5 Prepare a detailed estimate of a septic tank for the following items of works: (Refer Fig.Q5)
- Earth work in excavation
  - 1<sup>st</sup> class brick work
  - 12 mm thick CM plastering of walls



PLAN

Fig.Q5  
2 of 3

(15 Marks)

- 6 Estimate the quantity of earth work for a road of 12 m formation width the following data using mid section formula.

Chainage	14	15	16	17	18	19	20	21	22
RL of GL	108.60	109.25	109.40	108.85	108.50	107.25	106.80	107.15	107.20

The road formation is proposed at uniform following gradient 1 in 200 passing through GL at chainage 14. Length of one chain 30 mts. Side slope 1.5:1 in cutting and 2:1 in banking. The rate of earth work in filling and cutting are Rs.180/m<sup>3</sup> and Rs.120/m<sup>3</sup> respectively.

(15 Marks)

- 7 a. Define valuation and purpose of valuation.  
b. Explain the different types of valuation of building.

(07 Marks)

(08 Marks)

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