



## Seventh Semester B.E. Degree Examination, Dec.2018/Jan.2019 Estimation and Valuation

Time: 3 hrs. Max. Marks: 100

Note: 1. Part – A Q.No. 1 which is compulsory, Answer any FOUR questions by Selecting any TWO from part B and TWO from part C each.

2. Missing data, if any, may be suitably assumed.

## PART - A

- Prepare a detailed estimate residential building in Fig.Q1(Refer page no.2) for the following items of work. Prepare on abstract of estimated cost.
  - a. Earth work excavation for foundation in hand soil at Rs. 125/m<sup>3</sup>
  - b. CC 1:4:8 for foundation at rate Rs. 2800/m<sup>3</sup>
  - c. Size stone masonry for foundation in cm 1:8 and basement in cm 1:6 at rate
  - d. BBM for superstructure in cm 1:6 at the rate of Rs
  - e. Internal plastering in cm 1:6 for walls at rate of Rs.

(40 Marks)

## PART - B

- Prepare a detailed estimate of a manhole from the given drawing Fig.Q2(Refer page no.3), work out the quantities and cost of the following terms of work.
  - a. Earth work excavation for foundation at the rate of Rs.200/m<sup>3</sup>
  - b. CC 1:4:8 for foundation at rate Rs
  - c. First class brick work in cm 1: 4 at rate of Rs.

(15 Marks)

- Write detailed specification of any three of following:
  - a. Size stone masonry for foundation in cm 1:8
  - b. BBM for super structure in cm 1:6
  - c. 12mm ceiling plastering
  - d. Cement concrete 1:2:4 for plinth.

(15 Marks)

- 4 a. Enumerate various types of estimate. Explain any two in brief. (10 Marks)
  - b. "Estimate is never the actual cost but it is approximate cost" Explain briefly.

(05 Marks)

## PART - C

- Workout form first principle, the rate analysis for any three of the following:
  - a. Cement concrete 1:4:8 for foundation
  - b. BBM for super structure in cm 1:6
  - c. Size stone random rubble masonry for foundation in cm 1:8
  - c. CC 1:  $1\frac{1}{2}$ : 3 for beams with 2% steel.

(15 Marks)



- 6 Prepare the cost of earth work for a portion of road for 400 meter length from the following data:
  - a. Formation width of road is 10mt
  - b. Side slopes are 2:1 in banking and  $1\frac{1}{2}$ :1 m cutting
  - c. The cost of filling is Rs. 250/m<sup>3</sup> and cutting is Rs. 160/m<sup>3</sup>.

(15 Marks)

Station	Distance in mt	RL of ground	RL of formation
20	1000	51.00	52.00
21	1040	50.90	
22	1080	50.50	
23	1120	50.80	A 6
24	1160	50.60	Downward gradient
25	1200	50.70	of
26	1240	51.20	1 in 200
27	1280	51.40	
28	1320	51.30	
29	1360	51.00	
30	1400	50.60	<b>+</b>

- 7 Explain any three of the following:
  - a. EMD
  - b. Security deposited
  - c. NMR
  - d. Measurement Book
  - e. Sinking Fund.

(15 Marks)

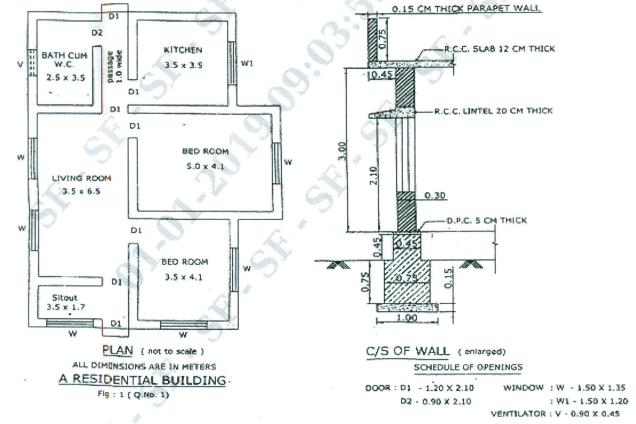


Fig.Q1 2 of 3

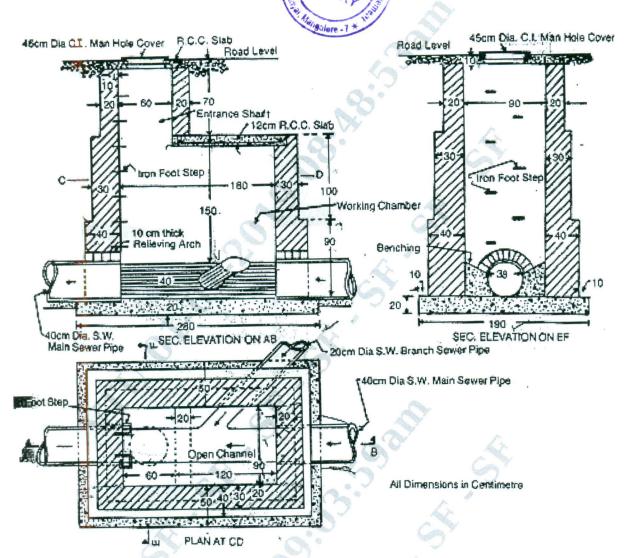


Fig.Q2