

Seventh Semester B.E. Degree Examination, Dec.2019/Jan.2020
Estimation and Valuation

Time: 3 hrs.

Max. Marks:100

- Note:** 1. Question No. 1 is compulsory.
 2. Answer any FOUR full questions, selecting atleast TWO questions from Part-B and Part-C.

PART – A

- 1 The details of a residential building are shown in Fig.Q1. Estimate the quantities of the following items of works and prepare the abstract of cost of these items.
- Earthwork in excavation for foundation ion hard soil at the rate of Rs. 186/m³. (08 Marks)
 - Earthwork in filling upto the plinth at the rate of Rs.150/m³. (08 Marks)
 - Size stone masonry in CM 1:6 in foundation and plinth at the rate of Rs. 3500/m³ and Bed concrete with 1 : 4 : 8 at Rs. 3800/m³ (08 Marks)
 - Plinth concrete in 1 : 2 : 4 at the rate of Rs. 4500/m³ (08 Marks)
 - Burnt brick masonry in CM 1 : 6 upto roof level at Rs. 4200/m³. (08 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.

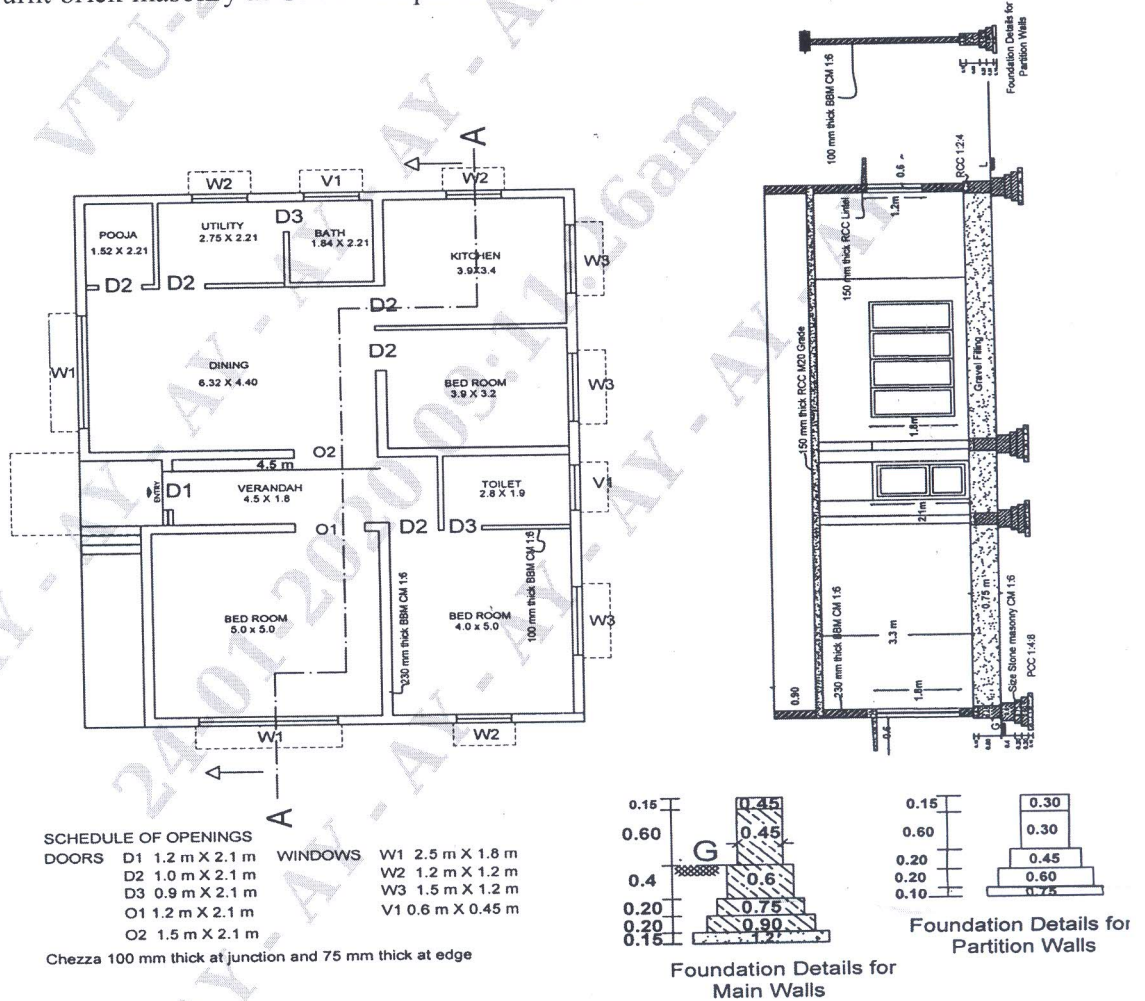


Fig.Q1

PART – B

- 2 Prepare the detailed estimate of a manhole shown in Fig.Q2 for the following items of work.
- Earthwork in excavation (at Rs. 186/m³)
 - Ist class brick work in CM 1 : 6 (at Rs. 4200/m³)
 - 20 mm thick cement plastering for walls (at Rs. 450/m²)
- (15 Marks)

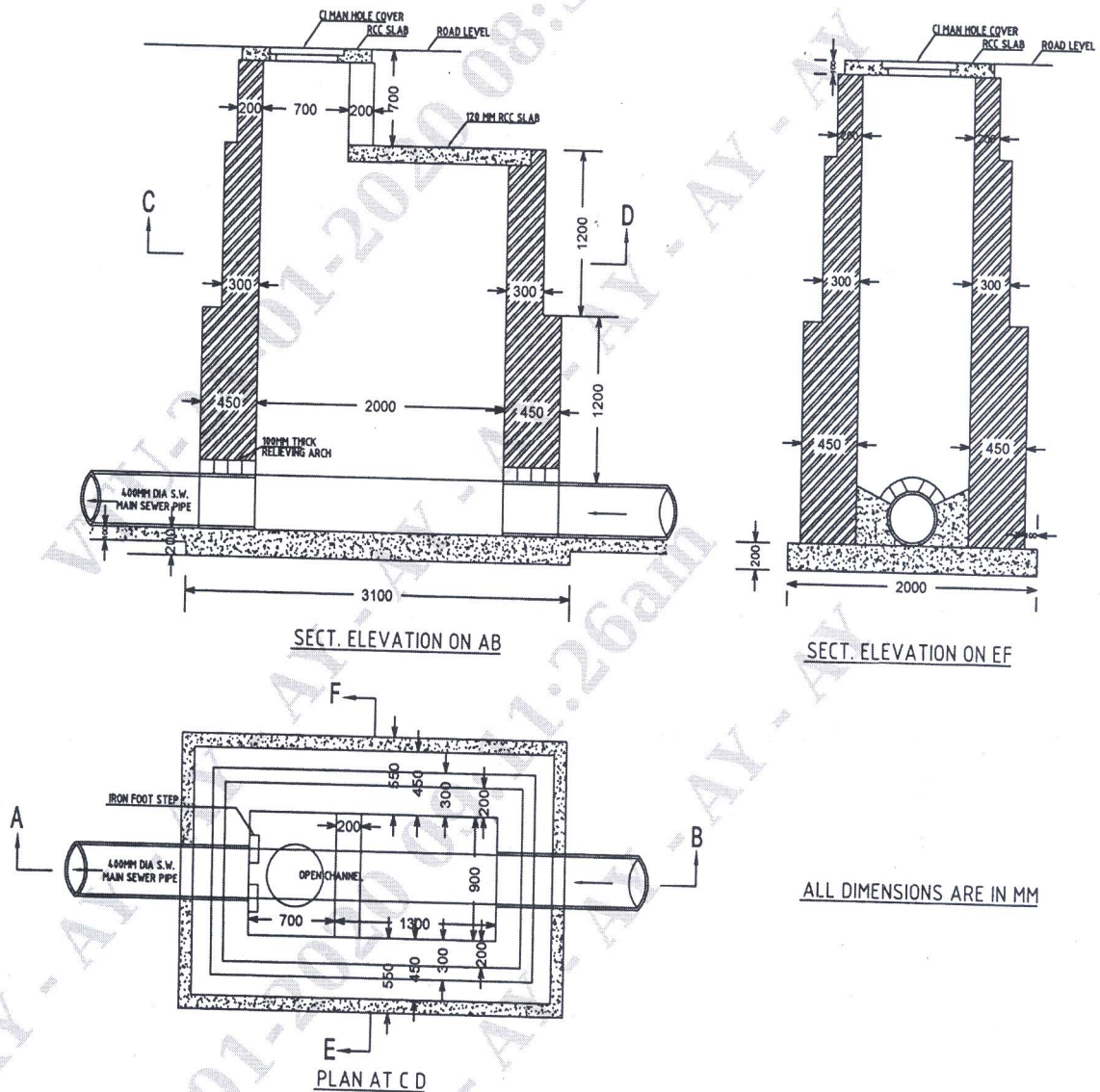


Fig.Q2

- Explain briefly the salient features of estimation and valuation. (08 Marks)
 - List and explain the essential requirements of a contract document. (07 Marks)
- Write the detailed specifications for any three of the following :
 - Bed concrete in C.C. 1 : 3 : 6
 - Ist class brick masonry in CM 1 : 6
 - Concrete flooring with red oxide finishing
 - Painting walls with two coats of emulsion paints over primer and cement based putty. (15 Marks)

PART – C

- 5 Work out from First principles the rate per unit of any three of the following :
- Size stone masonry in CM 1 : 6
 - Plain cement concrete with 20mm aggregate 1 : 2 : 4
 - Form work for R.C.C. slab.
 - Teakwood door (both frame and shutter)

(15 Marks)

- 6 The road has the following data:

Chainage	0	30	60	90	120	150	180
R.L.	20.80	21.20	21.80	22.40	23.00	23.10	23.20

The formation level at zero chainage is 22.0 and the road has upward gradient of 1 in 100 up to 60th chainage and downward gradient from 60m chainage afterwards. Calculate the earthwork The width of the road is 12.0m, and side slopes 1.5 : 1 both in banking and cutting.

(15 Marks)

- 7 Write short notes on any three of the following :
- Different methods of valuation
 - Tender, EMD and Security deposit
 - Schedule of rates
 - Measurement book.

(15 Marks)

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