CBCS SCHEME

USN | | | | | | | | | |

15CT73

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

Time: 3 hrs. Max. Marks: 80

Note: **1.** ***Answer any THREE questions by selecting any TWO full question from PART-A and ONE from PART-C each.***
2. ***PART- B (Q.NO.5) is compulsory.***
3. ***Missing data, if any may be suitably assumed.***

PART - A

1 a. What is an estimate? Briefly explain different types of estimate. **(08 Marks)**

b. Explain briefly:
(i) Security deposit and EMD
(ii) Tender and quotation **(08 Marks)**

2 a. Explain briefly contract and different types of contract. **(08 Marks)**

b. Explain briefly:
(i) Administrative approval and technical sanction
(ii) Measurement book and schedule of rates **(08 Marks)**

3 Write specification for any four of the following:
a. BBM in CM 1:6
b. Earthwork excavation
c. Cement concrete 1:2:4 for foundation
d. Painting work
e. Plastering work **(16 Marks)**

4 Carry out the rate analysis for any four of the following:
a. I class BM for superstructure in CM 1:4
b. 12 mm thick plastering for walls with CM 1:6.
c. CC of 1:2:4 for bed in foundation
d. 6 mm thick cement plastering 1:3 to RCC ceiling
e. BBM for superstructure in CM 1:6 **(16 Marks)**

PART - B

5 The plan and cross section of walls of residential building are as shown in Fig.Q5. Workout the quantities and prepare the cost abstract of the following items of work.
(i) Earthwork in excavation for foundation in ordinary soil @ Rs.250 cum.
(ii) Plinth concrete of DPC 1:2:4 @ the rate of Rs.4200/cum
(iii) 1st class brickwork in CM 1:6 for superstructure at rate of Rs.3500/cum
(iv) Ceiling plastering at rate of Rs.189/sqm

$D_1 = 1.0 \times 2.2$ m $D_2 = 0.8 \times 2.2$ m $W_1 = 2.0 \times 1.5$ m
$W_2 = 1.2 \times 1.5$m $V = 0.8 \times 0.5$ Almariah = 1.0 m × 2.2 m **(32 Marks)**

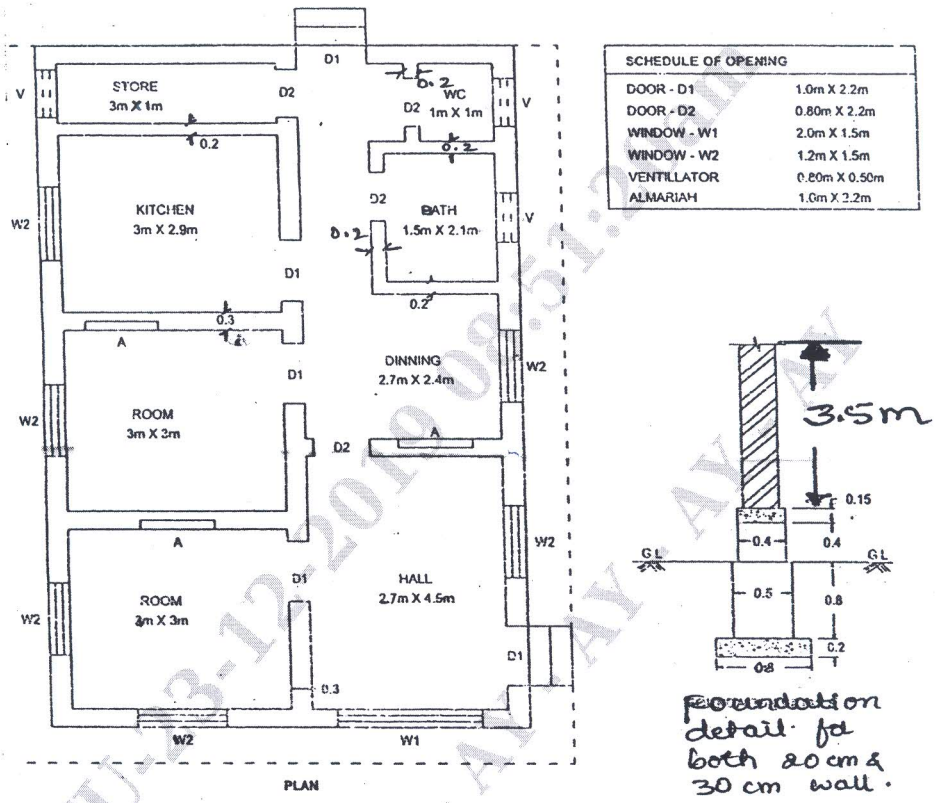

Fig.Q5

PART – C

6 Prepare a detailed estimate of a septic tank with soak pit in Fig.Q6 for the following items:

(i) Cement concrete 1 : 3 : 6 – floor and foundations sloping floor

(ii) First class brickwork 1:4 cement mortar

(iii) Precast RC work

(iv) 12 mm CM plaster 1:3 **(16 Marks)**

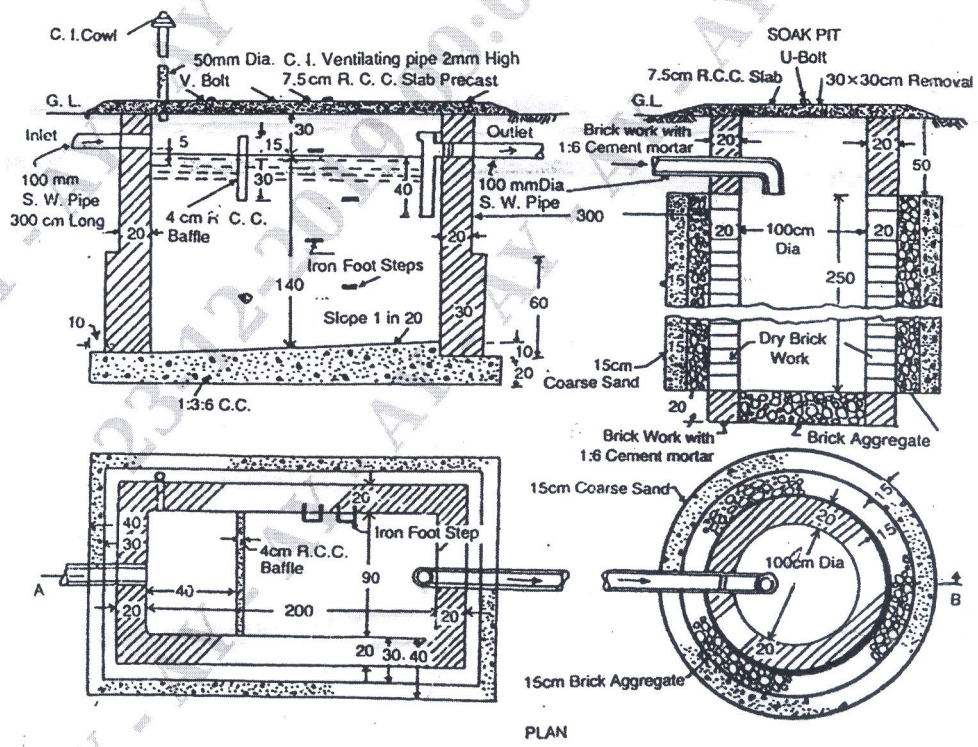

Fig.Q6

7 Determine the quantities of earth work in mid section method for the portion of a road between chainages 10-20 RL of ground along the centre line are given below. The formation level at the 10th chainage is 107 and formation width of road its 10 m and the side slope of banking are 2:1 length of the chain is 30 m. The road is downward gradient 1 in 150 up to chainage 14 and then the downward gradient changes to 1 in 100 and also prepare are an estimate of earth work at the rate of Rs.275/m^3.

Chainage	10	11	12	13	14	15	16	17	18	19	20
RL of ground	105	105.6	105.44	105.9	105.42	104.3	105	104.1	104.62	104.00	103.3
RL of formation level	107										
Gradient	Downward gradient 1 in 150				Downward gradient 1 in 100						

(16 Marks)

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