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10CV/CT73

Seventh Semester B.E. Degree Examination, Feb./Mar.2022
Estimation and Valuation

Time: 3 hrs. Max. Marks:100

Note: 1. ***Question No. 1 compulsory.***
2. ***Answer any four full questions selecting at least two questions each from Part B and Part C.***
3. ***Assume any missing data suitably.***

PART – A

1 The plan and cross section of the wall of a proposed "Residential Building" is shown in Fig. Q1. Work out following quantities and cost of following items of work thickness of wall is 30 cm. Height of ceiling is 4.0 mts.

a. Earthwork in excavation for foundation at Rs.2500 /m^3
b. Plain cement concrete for foundation at Rs.6000/ m^3.
c. Size stone masonary in C.M 1 : 4 for foundation and plinth at Rs.5000/m^3.
d. First class brick-work in super structure in CM 1 : 6 at Rs.7000/m^3. **(40 Marks)**

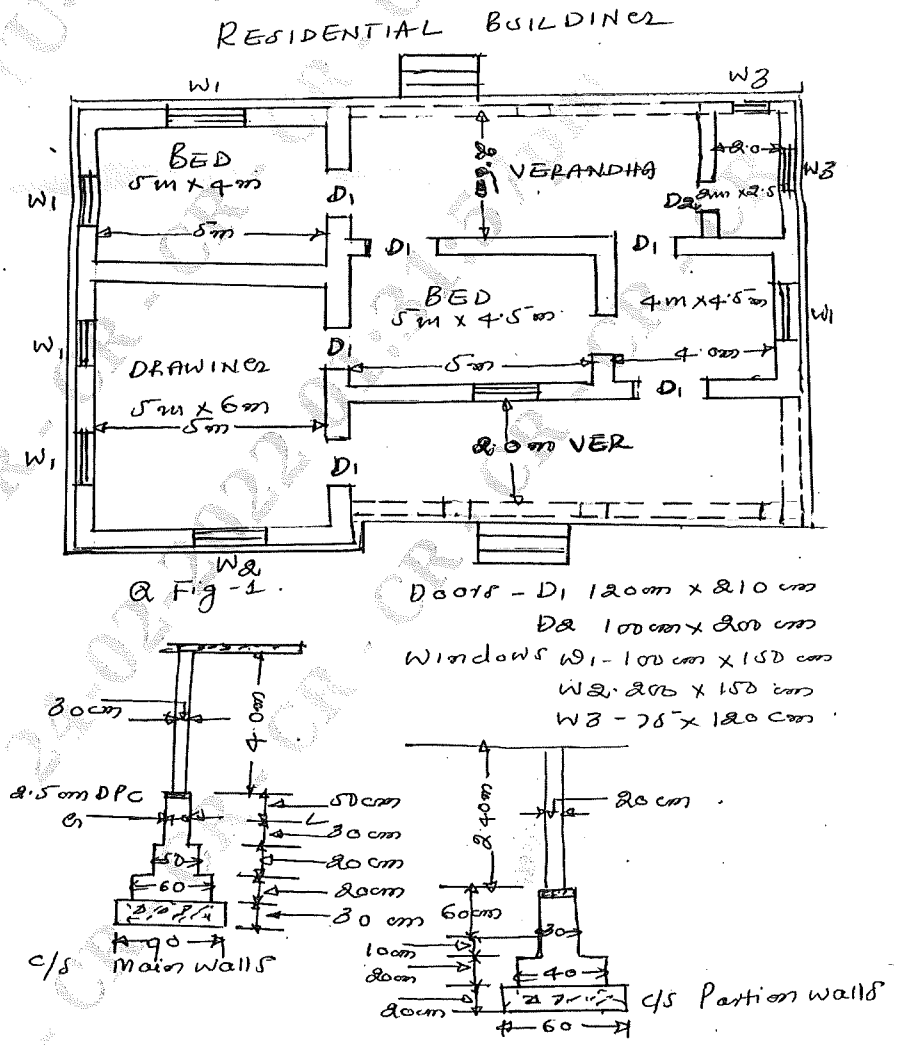

Fig. Q1

PART – B

2 The plan and section of a 'Septic tank' is given in Fig. Q2. Work out quantities and cost of following items of work.

a. Earthwork excavation in foundation at Rs.300/m^3.
b. First class brick work in CM 1 : 3 at Rs.8000/m^3 in septic tank.
c. Second class brick-work in 1 : 6 cement mortar in soak pit at Rs.6000/m^3. **(15 Marks)**

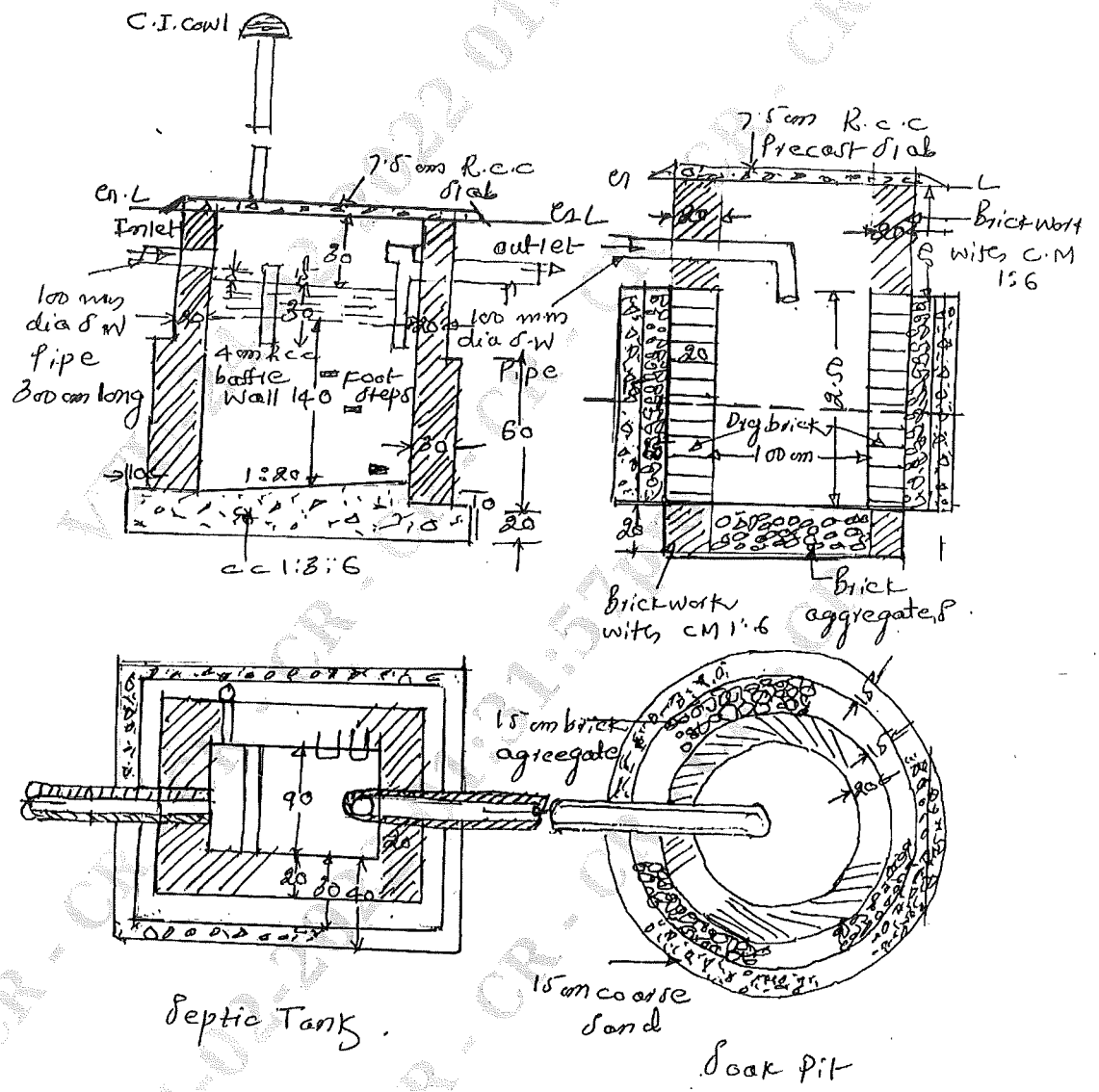

Fig. Q2

3 Write the detailed specification for following items of work.

a. Earthwork excavation in foundation.
b. Reinforced cement concrete.
c. Cement plastering. **(15 Marks)**

4 a. List various purpose of estimation.
b. What are types of estimates and explain any one of them? **(15 Marks)**

PART – C

5 a. Explain "Sinking Fund".
b. Briefly explain "The piece work agreement".
c. Mention the advantages and disadvantages of "Lum Sum contract". **(15 Marks)**

6 Prepare a detailed estimate for the earthwork for portion of a road from following data:

Distance in metres	0	100	200	300	400	500	600
R. L. of Ground :	114.50	114.75	115.25	115.20	116.10	116.85	118.00

Distance in metres :	700	800	900	1000	1100	1200
R. L. of Ground :	118.25	118.10	117.80	117.75	117.90	119.50

R.L. of formations – 115 upward gradient 1 in 200
Up to 600 mt →←Downward gradient 1 in 400
Formation width of road is 10 mts side slopes 2 : 1 in banking and 1.5 : 1 in cutting . Adopt suitable rates. **(15 Marks)**

7 Write short notes on the following:
a. Termination of contract. **(05 Marks)**
b. Measurement book. **(05 Marks)**
c. Nominal Muster Roll. **(05 Marks)**

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