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**Seventh Semester B.E. Degree Examination, June/July 2019**  
**Estimation and Valuation**

Time: 3 hrs.

Max. Marks:100

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

**PART - A**

- 1 Prepare a detailed estimate for a residential building shown in Fig.Q1 for the following items of work:
- (i) Centre line calculations (05 Marks)
  - (ii) Earthwork in excavation for foundation @ Rs. 150/m<sup>3</sup> (06 Marks)
  - (iii) Size stone masonry in C.M 1:6 for foundation and basement @ Rs. 3250/m<sup>3</sup>. (09 Marks)
  - (iv) R.C.C. floor slab in C.C. 1 : 2 : 4 @ Rs. 6300/m<sup>3</sup>. (06 Marks)
  - (v) Plastering in C.M 1:4 for wall inside @ Rs. 200/m<sup>2</sup> (09 Marks)
  - (iv) Total cost abstract of above items. (05 Marks)

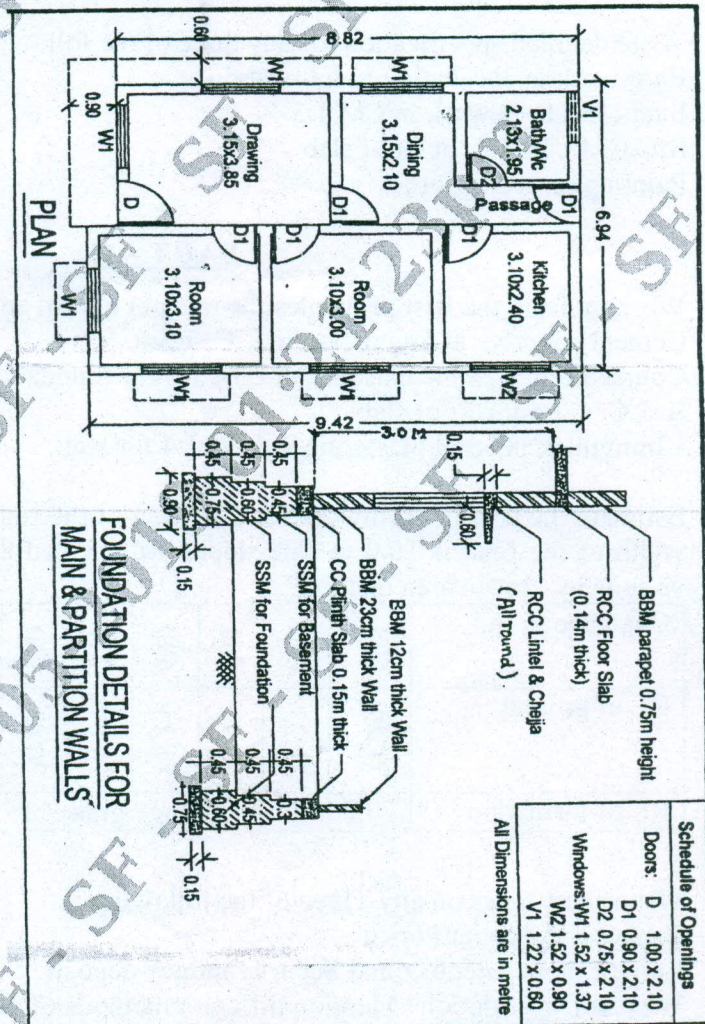


Fig.Q1

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 The details of a septic tank are given in Fig.Q2. Find the quantities of the following items.
- Earthwork in excavation for foundation in hard soil
  - BBM in CM 1:4 for side walls
  - P.C.C. 1:2:4 for cover slab
- (15 Marks)

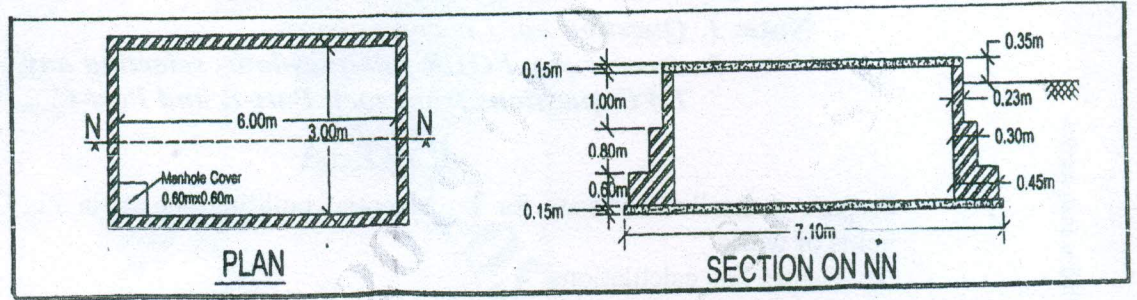


Fig.Q2

- 3
- What is an estimate? Explain the different types of estimate. (08 Marks)
  - Briefly explain different types of Area considered in estimation. (07 Marks)
- 4 Write detailed specification for any three of the following :
- Earthwork in excavation in foundation
  - First class brickwork in CM 1:5
  - R.C.C. 1 : 1½ : 3 for Roof slab
  - Painting on woodwork.
- (15 Marks)

**PART - C**

- 5 Workout from the first principles the rate per unit of any three of the following :
- Cement concrete in foundation in C.C. 1:3:6.
  - Coursed rubble stone masonry in C.M 1:6 for foundation
  - R.C.C. 1:2:4 for Roof slab
  - 12mm thick internal plastering in C.M 1:4 for wall.
- (15 Marks)
- 6 Estimate the cost of earthwork for a portion of the road from the following data. Formation width of the road is 10.0 m side slopes are 2:1 in filling and 1.5:1 in cutting compute the volume by "Mean area method".

|                 |       |                                 |      |       |       |       |       |       |       |       |       |
|-----------------|-------|---------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Chainage in 'm' | 600   | 630                             | 660  | 690   | 720   | 750   | 780   | 810   | 840   | 870   | 900   |
| RL of ground    | 71.20 | 71.25                           | 70.9 | 71.25 | 70.80 | 70.45 | 70.20 | 70.35 | 69.10 | 69.45 | 69.70 |
| RL of formation | 70.0  | ← Rising gradient of 1 in 200 → |      |       |       |       |       |       |       |       |       |

(15 Marks)

- 7 Write short notes on any Three of the following :
- Tender and Tender notice
  - Earnest money deposit and Security money deposit
  - What is Depreciation? Mention different methods of determining depreciation.
  - What is contract? Explain different types.
- (15 Marks)

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