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Question Paper Code : 40314

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2021.

Seventh Semester

Civil Engineering

CE 8701 — ESTIMATION, COSTING AND VALUATION ENGINEERING

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

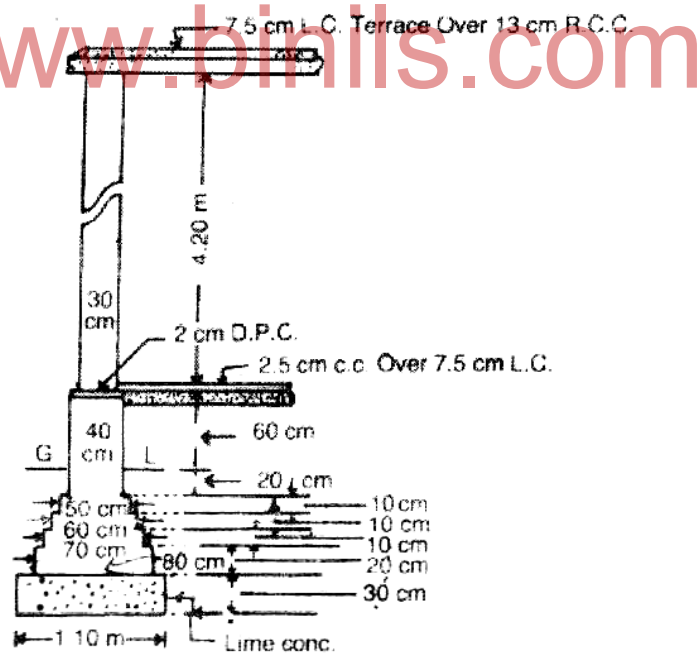
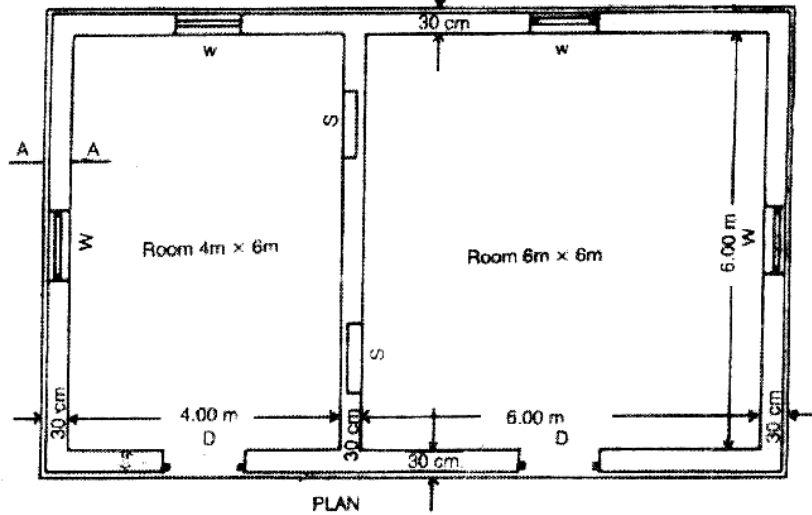
Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the units of measurement for the following?
 - (a) Weathering course
 - (b) Coping on the parapet
2. What are the components of a culvert?
3. What is rate analysis?
4. What is schedule of rates?
5. What is specification?
6. State the requirement of a report.
7. Define contract.
8. What is arbitration?
9. Define valuation.
10. What is escalation?

PART B — (5 × 13 = 65 marks)

11. (a) Estimate the quantities of the following items of work shown in figure 11(a)
- (i) Earth work Excavation in foundation
 - (ii) PCC in foundation
 - (iii) Brick work I foundation
 - (iv) Damp proof course 4 cm thick (1:2:4) (13)



Doors 1.2m x 1.2m
 Windows 1.0m x 1.5m
 Shelves 1.0m x 1.5m

Figure 11(a)
 Or

- (b) Prepare a detailed estimate of a septic tank with soak pit for 25 users from the given drawing Fig.11(b).

Septic tank shall be of I class brick work in 1:4 cement mortar; The foundation and floor shall be 1:3:6 cement concrete. Inside of septic tank shall be finished with 12 mm cement plaster and floor shall be finished with 20 mm cement plaster with 1:3 mortar mixed with water proofing compound. Upper and lower portion of soak pit shall be of II class brick work in 1:6 cement mortar and middle portion shall be of dry brick work. Roof cover slabs and baffle wall shall be of precast R.C.C. The length of the connecting pipe from latrine seat may be taken as 3 m. (13)

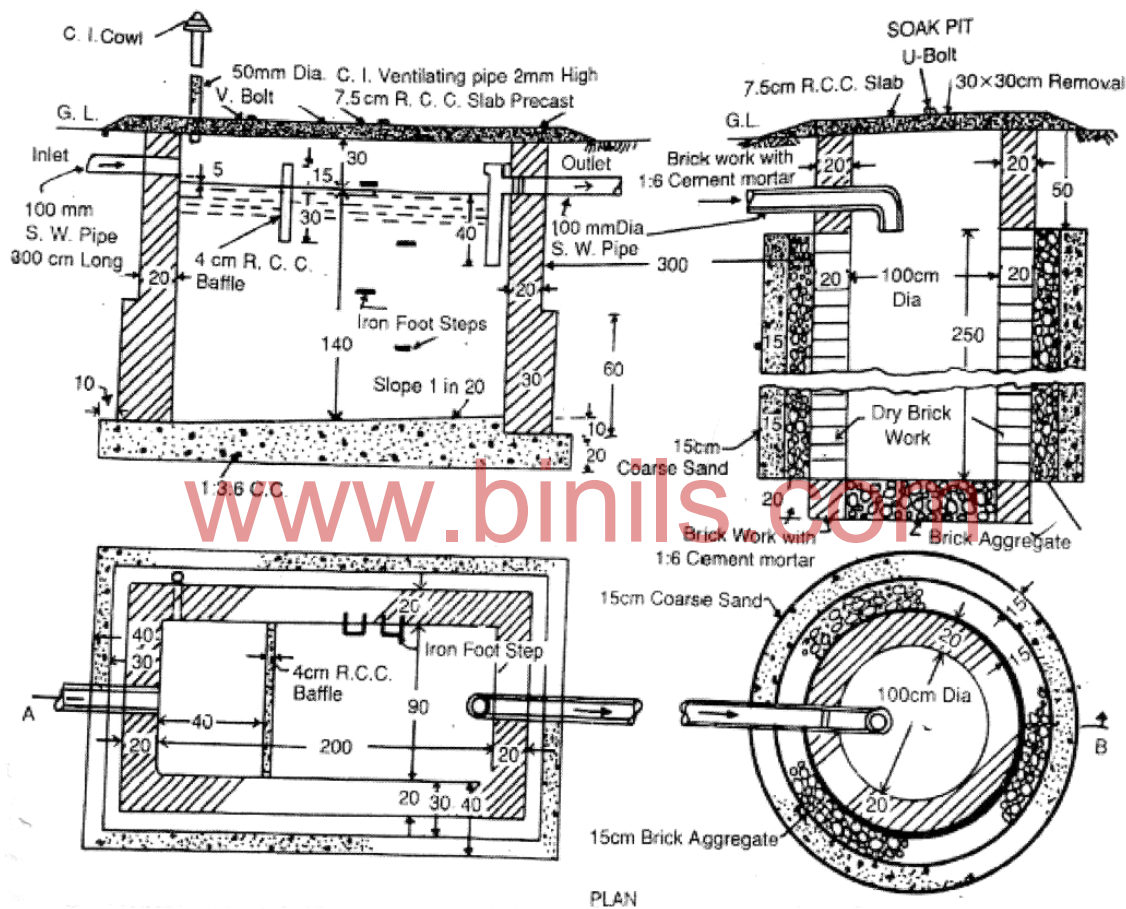


Fig.11(b)

12. (a) Analyse the rates for Cement concrete 1:4:8 in foundation. Assume your own rates suitably. Given Data: 1 mason, 13 labourers and 2 Bhistes can lay 10 cum of cement concrete in one day. (13)

Or

- (b) Analyse the rates of Cement plaster with 1 : 6 mix. Assume your own rates suitably. Given Data: 10 masons, 10 mazdoors and 2 Bhistes can finish 100 sq.m area in one day. (13)

13. (a) Explain the general specifications of first and second class buildings. (13)

Or

(b) What is tender? Explain the contents of tender. (13)

14. (a) What are the types of contract? Explain. (13)

Or

(b) Explain about the contract drafting based on IBRD/MORTH standard bidding documents. (13)

15. (a) Explain the various types of valuations. (13)

Or

(b) (i) Write the necessity of valuation. (6)

(ii) Describe the following : (7)

(1) Capitalised value

(2) Mortgage and lease

PART C — (1 × 15 = 15 marks)

16. (a) Write a report on estimates for the construction of residential building. (15)

Or

(b) Write about methods of calculating depreciation. (15)