

13. (a) Write the detailed specification for RCC work proportion 1:2:4.  
Or  
(b) Explain the important particulars in tender documents.
14. (a) Define a contract. Explain the different types of contract adopted in construction sector.  
Or  
(b) What are the information should a contract document contains? Explain.
15. (a) (i) Write the necessity of valuation. (7)  
(ii) Describe the following : (6)  
(1) Year's purchase  
(2) Sinking fund

Or

- (b) Explain the methods of calculating depreciation.

**PART C — (1 × 15 = 15 marks)**

16. (a) Prepare a detailed estimate for a septic tank shown in figure.

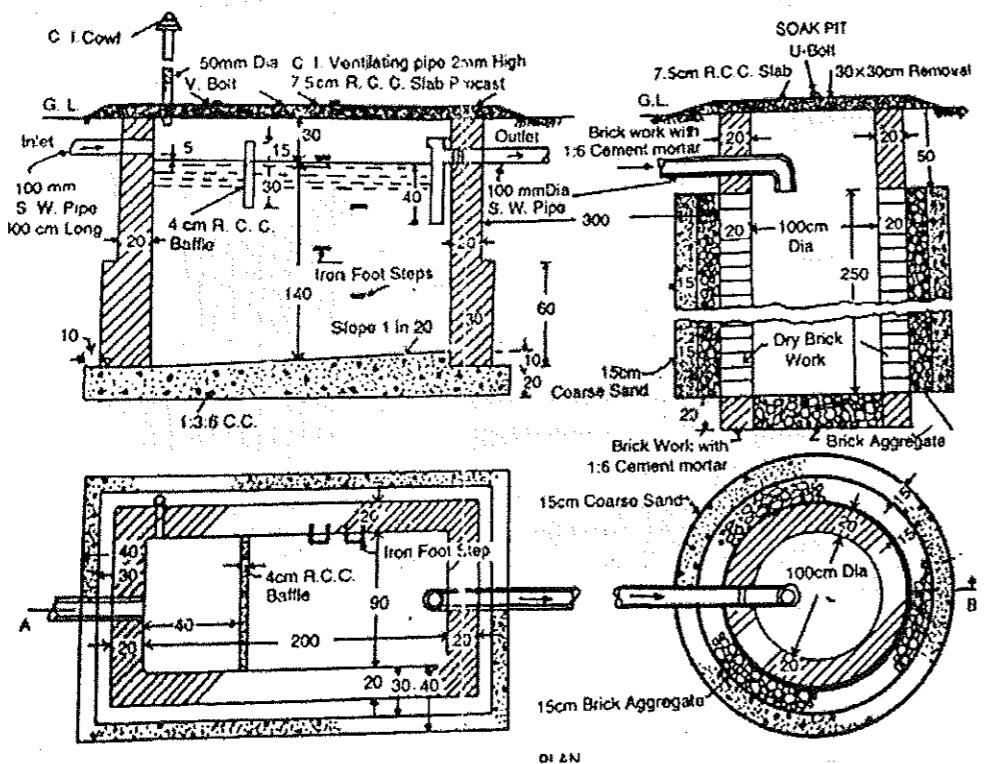


Fig. 16(a)

Or

- (b) Discuss the reports on estimate for the construction of a residential building.

Reg. No. :

## Question Paper Code : 50349

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2023.

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)**

- What is an estimate?
- Give the units of measurement for
  - Weathering course
  - R.C.C 1:2:4 in roof
- Define an aqueduct.
- What is meant by analysis of rates?
- Define specification.
- Define e-Tendering.
- What contract is important?
- List types of contract.
- Define valuation.
- What is Capitalized value?

PART B — (5 × 13 = 65 marks)

11. (a) Estimate the following quantity for the plan of a single room building of 5 m × 4 m and sections represents the cross sections of the walls with foundation. (i) Earthwork in excavation in foundation, (ii) cement concrete in foundation, (iii) Brickwork in foundation and plinth.

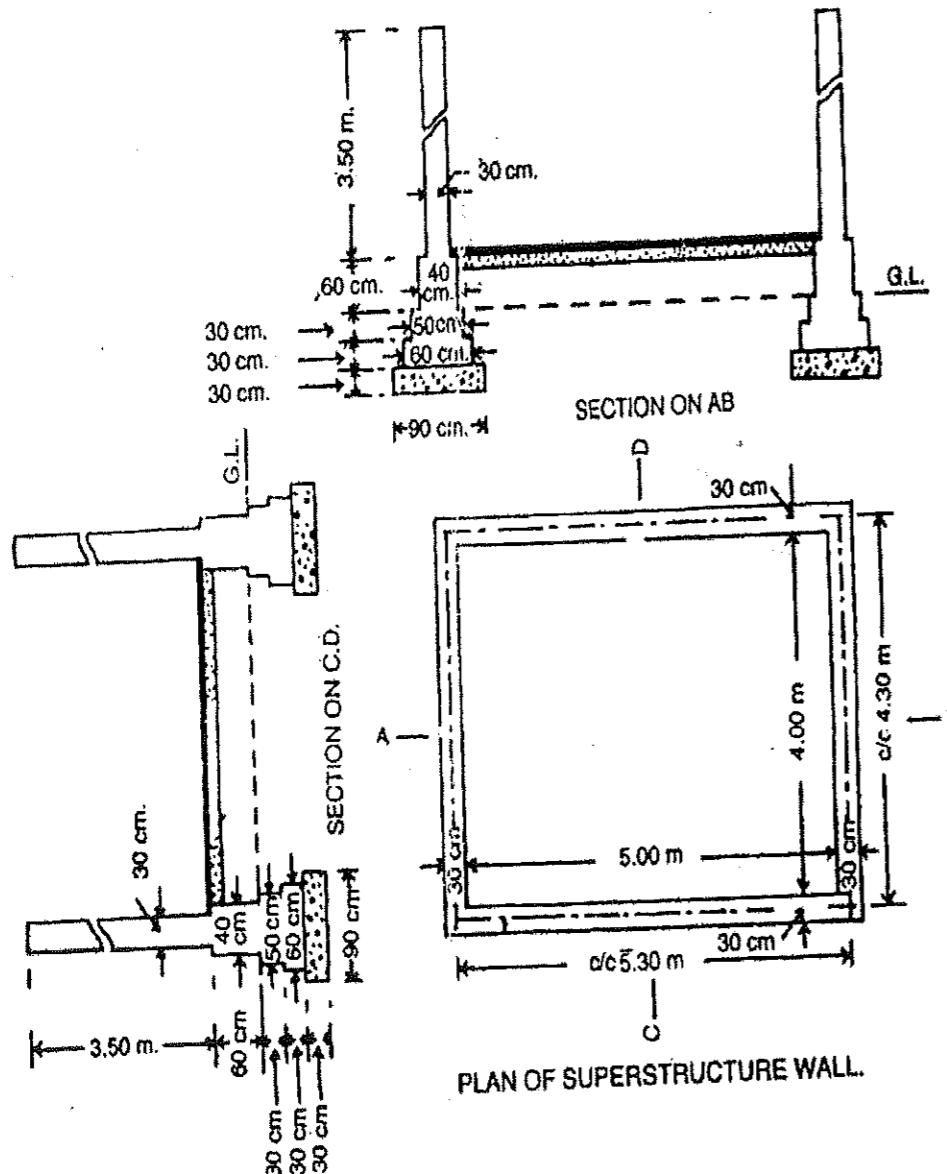


Fig. 11(a)

Or

- (b) Calculate the quantities of a R.C.C retaining wall of 25 m in length whose cross section is given below. Steel bars in reinforcement shall have to be taken separately.

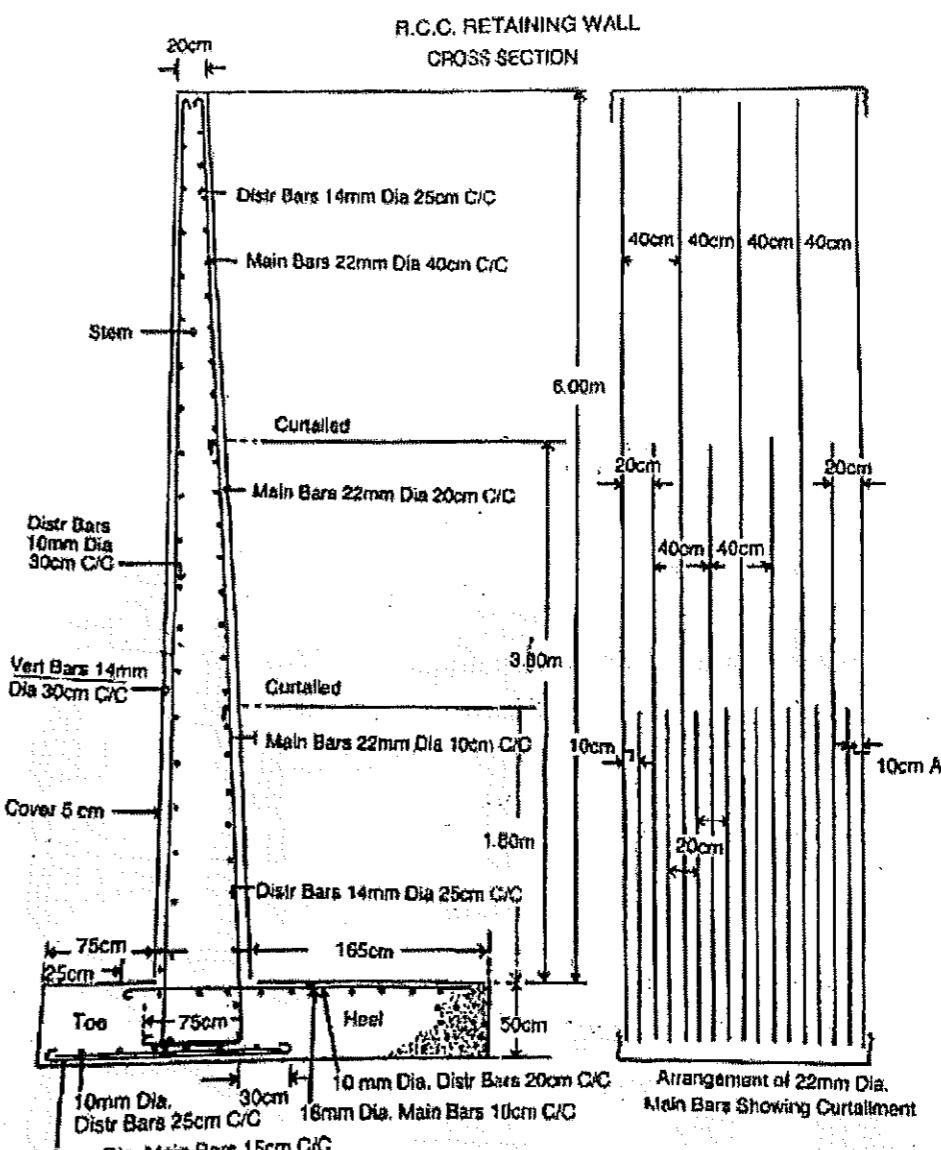


Fig. 11(b)

12. (a) Do the rate analysis of  
 (i) P.C.C. (1:4:8) below column footing in foundations.  
 (ii) First Class brick work in C.M. 1:8 upto plinth.  
 Or  
 (b) What is meant by schedule of rates? Explain.