



Reg. No. : [ ]

**Question Paper Code : 50308**

**B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2017**  
**Seventh Semester**  
**Civil Engineering**  
**CE 6704 – ESTIMATION AND QUANTITY SURVEYING**  
**(Regulations 2013)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A**

**(10×2=20 Marks)**

1. What is centre line method ?
2. List out the various types of paneled and glazed doors.
3. Define mid-sectional area method.
4. Write down the various parts of an aqueduct.
5. State the importance of rate analysis.
6. What is over head cost ?
7. List the advantages of E-tender.
8. Write short notes on sinking fund.
9. Give any four principles of report preparation.
10. Write a simple note on report preparation for a water supply scheme.

PART - B

(5×16=80 Marks)

11. a) Estimate the quantities of the following items of work of a building. The plan and sectional elevation of a building are given in fig. (1).

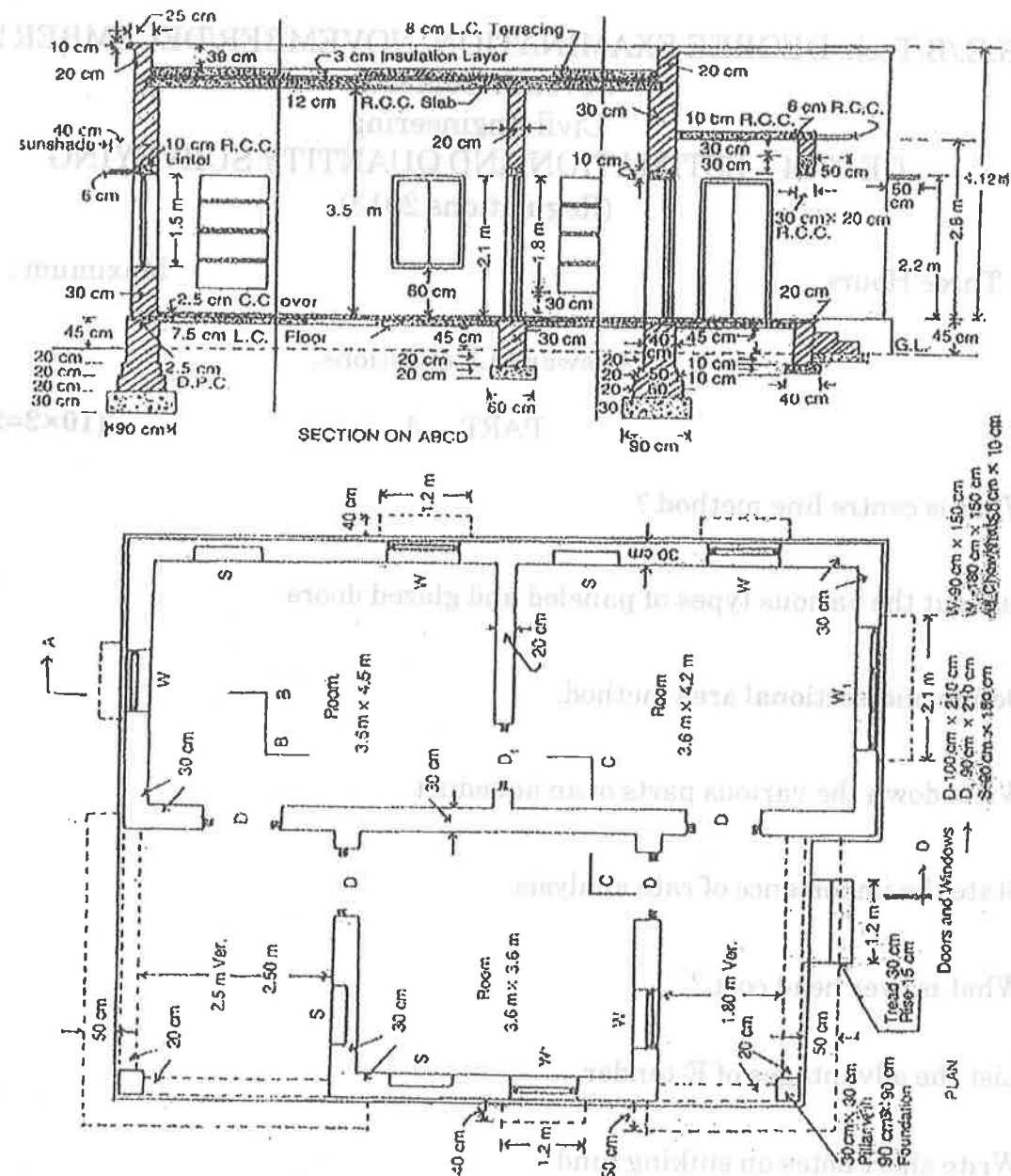


Fig. (1)

- i) 1<sup>st</sup> class brick work in CM 1 : 6 in superstructure including parapet. (5)
- ii) 12mm thick cement plastering 1:5 in walls. (5)
- iii) White washing 3 coats for ceiling. (3)
- iv) Steel reinforcement bars in R.C.C. at 1%. (3)

(OR)

b) Estimate the quantities of the following items of work from the given drawing Fig. 2 of a building having arches over doors, windows and verandah opening and roof jack arches.

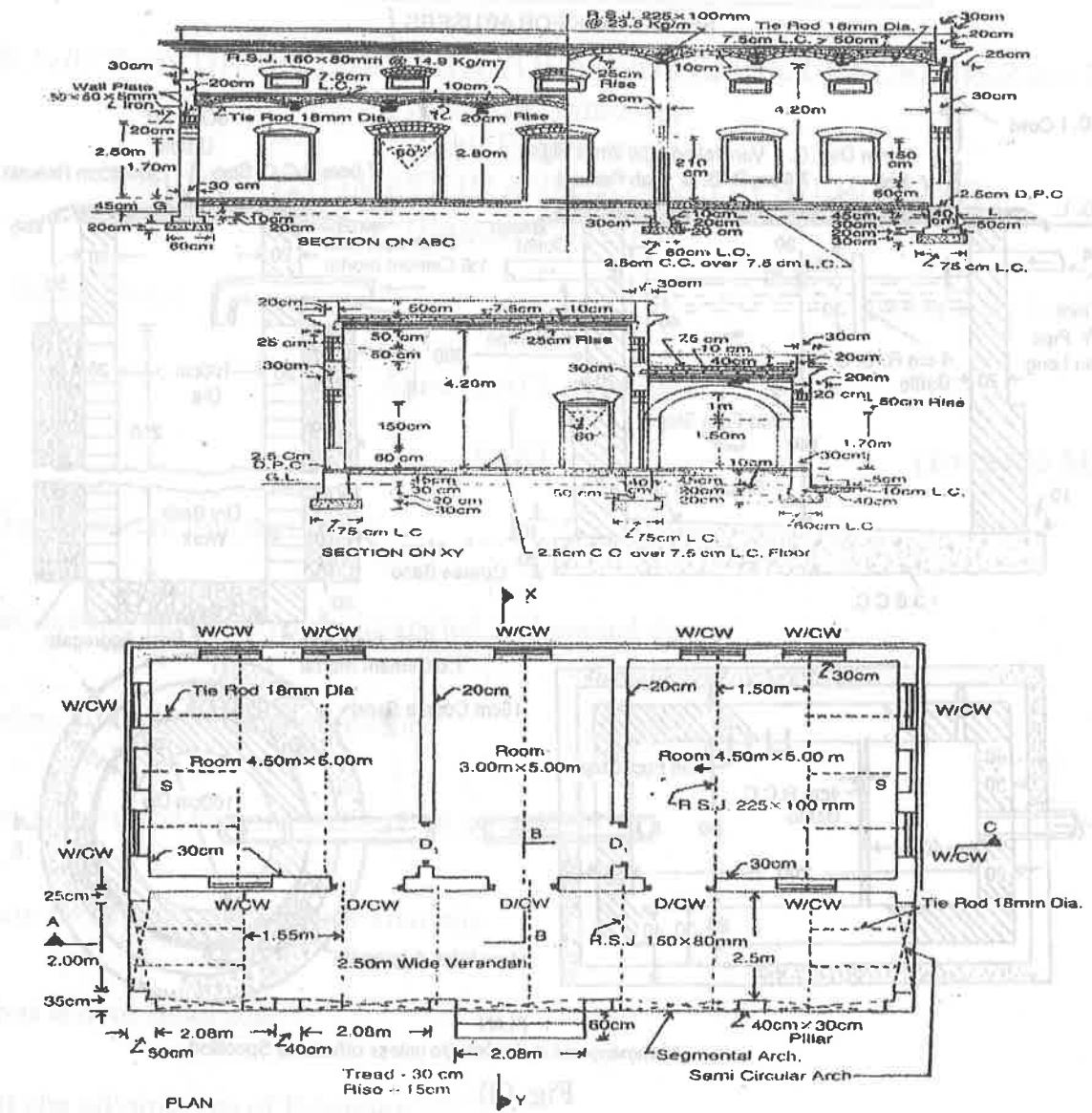


Fig. (2)

- i) 1<sup>st</sup> class brick work in arches in 1 : 4 cement mortar - door and windows 25 cm thickness (4)
- ii) 2.5 cm damp proof course of 1 : 1.5:3 c.c. (3)
- iii) 1<sup>st</sup> class brick work in jack arches 1 : 4 cement mortar - rooms. (4)
- iv) 12 mm plastering in walls with 1 : 1 : 6 cement : lime: sand mortar in walls inside. (5)



12. a) Prepare a detailed estimate of a septic tank with soak pit for 40 users from the given drawings Fig. 3.

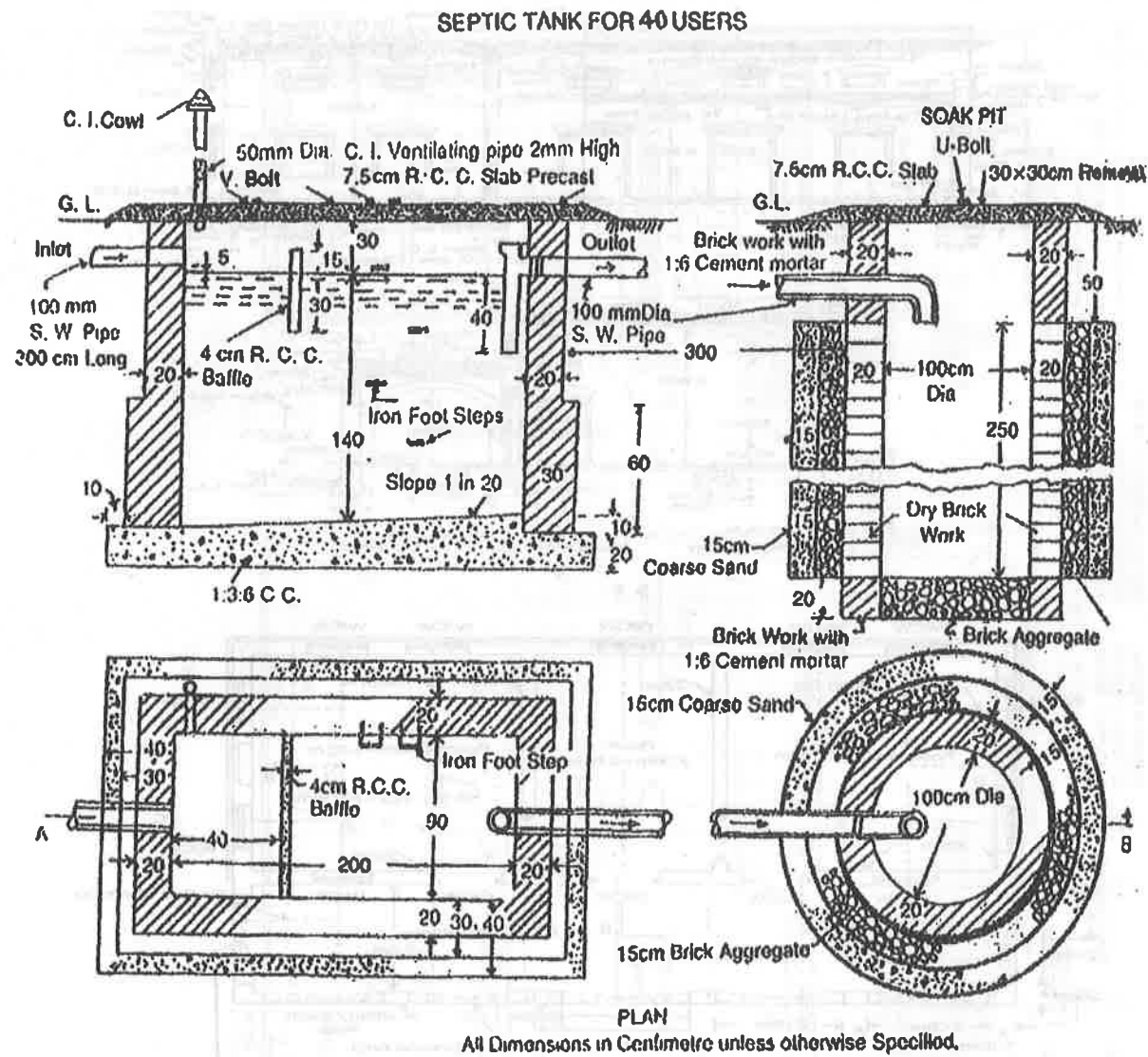


Fig. (3)

- i) Earth work excavation. (4)
- ii) Cement concrete 1 : 3 : 6. (4)
- iii) First class brick work in 1 : 4 cm in septic tank. (4)
- iv) 100 mm dia S.W. pipe. (4)

(OR)



b) Prepare a detailed estimate of as R.C.C. Retaining wall of 30 meters in length whose cross section is given in Fig. 4. Steel bars in reinforcing shall have to be taken separately. (16)

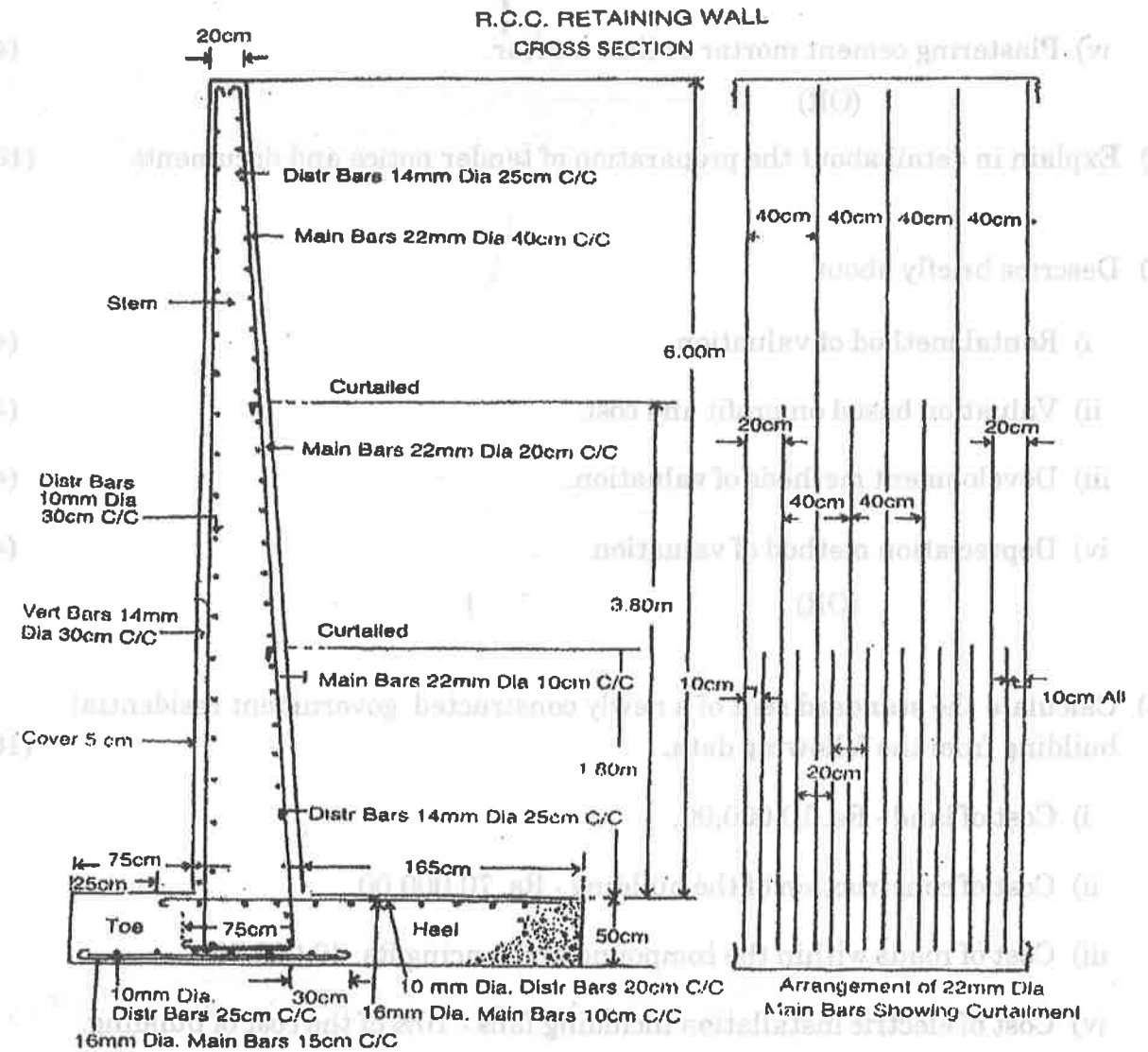


Fig. (4)



13. a) Describe the detailed specifications of various items of works for the following :

- i) Reinforced cement concrete. (8)
- ii) Colour washing. (2)
- iii) Brickwork I class. (2)
- iv) Plastering cement mortar or lime mortar. (4)

(OR)

b) Explain in detail about the preparation of tender notice and documents. (16)

14. a) Describe briefly about

- i) Rental method of valuation (4)
- ii) Valuation based on profit and cost. (4)
- iii) Development methods of valuation. (4)
- iv) Depreciation method of valuation. (4)

(OR)

b) Calculate the standard rent of a newly constructed government residential building from the following data. (16)

- i) Cost of land - Rs. 10,000.00,
- ii) Cost of construction of the building - Rs. 70,000.00
- iii) Cost of roads within the compound and fencing Rs. 40,000.00
- iv) Cost of electric installation including fans - 10% of the cost of building.
- v) Cost of water supply and sanitary - 15% of the cost of building.
- vi) Municipal House Tax - Rs. 1300.00 per annum.
- vii) Property tax - Rs. 660.00 per annum.



15. a) Discuss in detail about the report preparation for estimation of culvert and roads. (16)

(OR)

b) Describe the principles for the report preparation of tube well and open well. (16)