

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, NOVEMBER - 2024**

**QUANTITY SURVEYING - II**

[Maximum marks: 100]

[Time: 3 Hours]

- [Notes:- 1. Assume any missing data suitably.  
2. Quantities to be worked out in standard form.  
3. Sketches are accompanied.]

**PART – A**

**Maximum marks: 10**

**I.** (Answer *all* the questions in one or two sentences. Each question carries **2** marks)

1. Name two different types of sloping roof.
2. Write the length of a common rafter in terms of Eave Span, when the rise of the roof is  $\frac{1}{3}$  span.
3. Write the purpose of providing a retaining wall.
4. Write the total length of straight bar hooked at both ends.
5. Define Valuation. **(5 x 2 = 10)**

**PART – B**

**Maximum marks: 30**

**II.** (Answer any *five* of the following questions. Each question carries **6** marks)

1. Work out the quantity of Earthwork excavation in septic tank and soak pit shown in Fig.I.
2. Calculate the quantity of Cement Concrete 1:3:6 in foundation for slab culvert in Fig.II.
3. Work out the quantity of R.C.C for the retaining wall of 30m length shown in Fig.III.
4. Calculate the quantity of RCC work 1:2:4 excluding steel and its bending for the RCC beam of 8 m span and 75 cm x 40 cm in section as shown in Fig. IV.
5. Write the detailed specifications of Pointing.
6. Define (a) Annuity (b) Obsolescence (c) Years Purchase
7. List different purposes of valuation. **(5 x 6= 30)**

**PART – C**

**Maximum marks: 60**

(Answer *one full* question from each unit. Each full question carries **15** marks)

**UNIT – I**

- III.** A shed of inside dimensions 9.9 x 5.4m is provided with hip roof. Wall thickness is 20 cm, eaves projection 60 cm, rise  $\frac{1}{3}$  span. Calculate
- (a) The quantity of wall plate if size of wall plate is 120 x 150mm. (5)
  - (b) The quantity of ridge piece if size of ridge is 120x150mm. (5)
  - (c) The quantity of Common rafter assuming the spacing between Common rafter as 50cm where size of Common rafter is 50 x 125 mm. (5)

**OR**

- IV.** Calculate the quantity of following items of septic tank and soak pit shown in Fig.I
- (a) First class brickwork in 1:4 CM in Septic tank. (8)
  - (b) Second class brickwork in 1:6 CM in Soak pit. (4)
  - (c) Pre cast R.C work. (3)

**UNIT – II**

- V.** Work out the quantity of following items of a slab culvert shown in Fig.II.
- (a) Earthwork excavation in foundation. (4)
  - (b) R.C.C work 1:2:4 in slab. (2)
  - (c) First class brickwork in 1:4 CM. (9)

**OR**

- VI.** Compute the quantity of following items of RCC retaining wall shown in Fig.III.
- (a) Steel bars in reinforcement for stem. (9)
  - (b) Steel bars in reinforcement for base slab. (6)

**UNIT - III**

- VII.** Write the detailed specifications of:
- (a) Reinforced Cement Concrete. (8)
  - (b) Earthwork excavation in foundation. (7)

**OR**

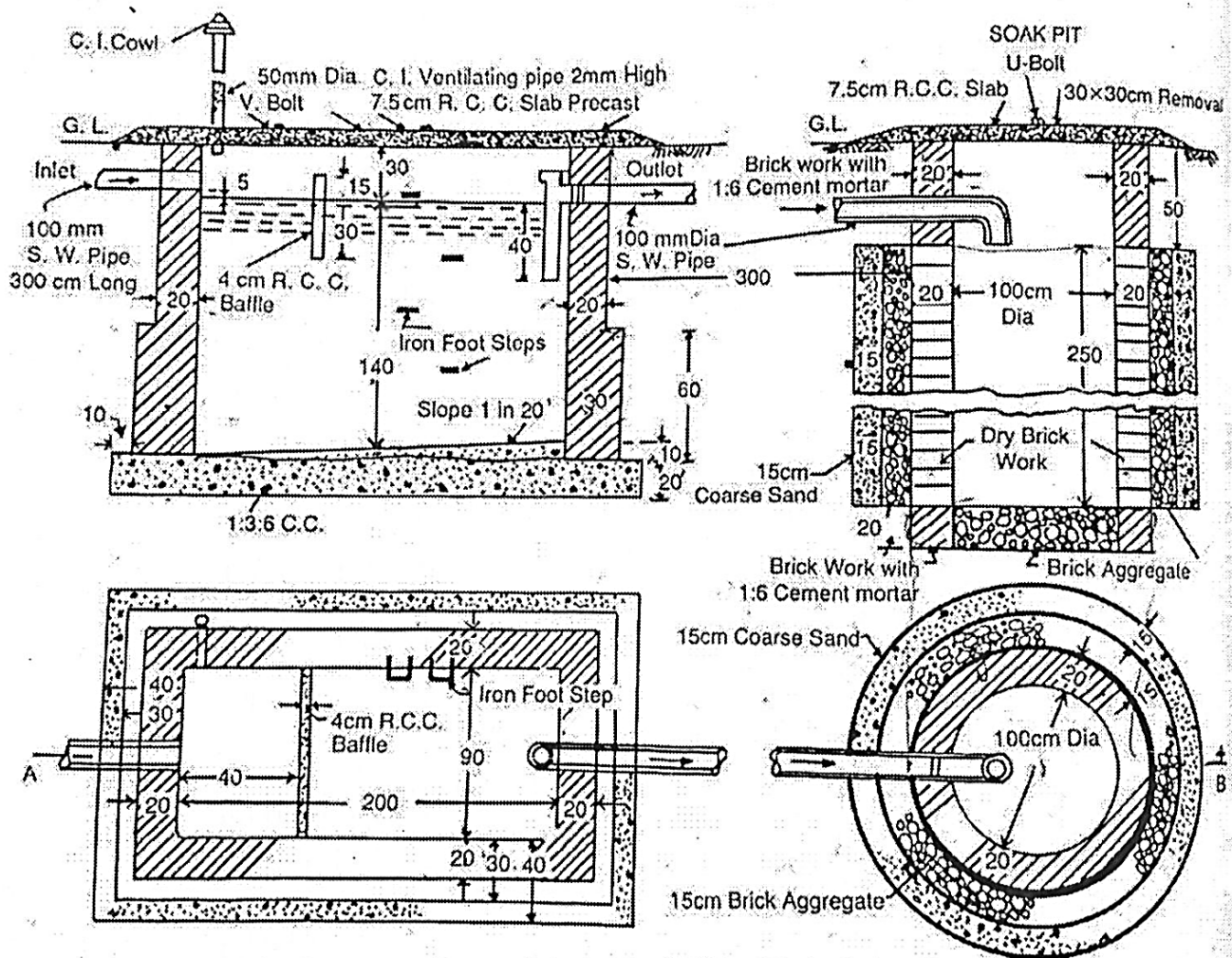
- VIII.** Prepare bar bending schedule for a RCC beam of 8m clear span and 75 cm x 40 cm in section from given drawings. (Fig.IV) (15)

## UNIT – IV

- IX. (a) Define Sinking Fund. Write the equation to calculate Sinking Fund. (4)  
 (b) Define depreciation. List different methods to find out depreciation. (4)  
 (c) Explain any two methods of valuation. (7)

OR

- X. (a) Write short notes on  
 (i) Scrap Value (ii) Salvage Value (iii) Book Value  
 (iv) Market Value (iii) Annuity (10)
- (b) The sinking fund amount of a building is estimated to be Rs. 75,000 whose future life is 25 years. Find out the yearly instalment of sinking fund, which should be set aside at 6%. (5)



PLAN

All Dimensions in Centimetre unless otherwise Specified,

**Fig I**

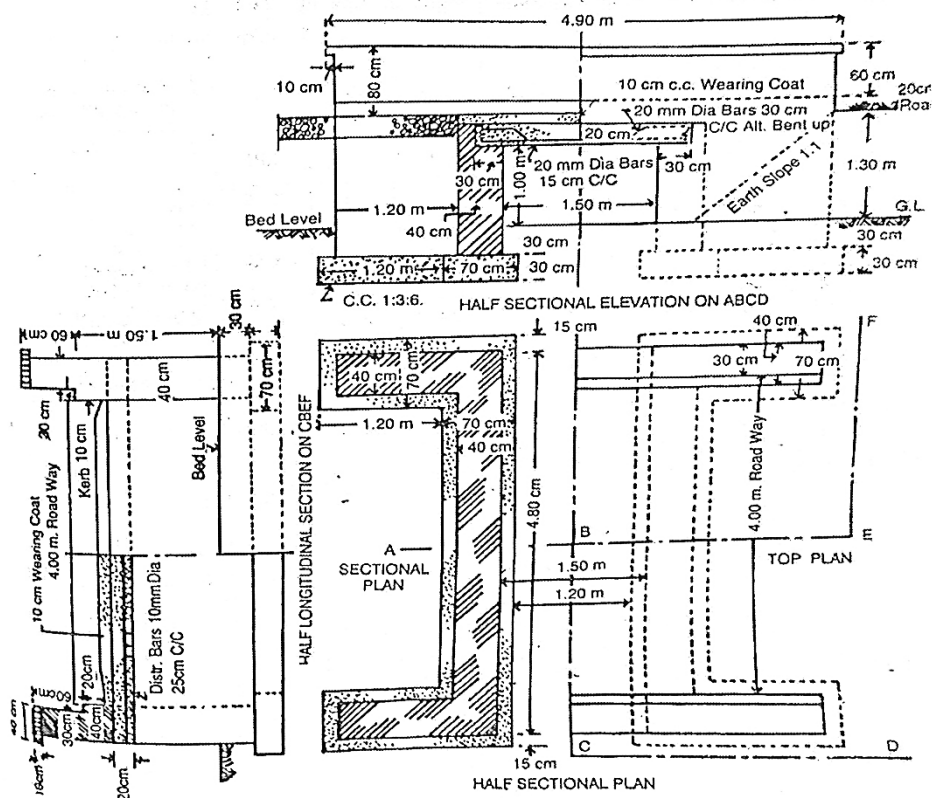


Fig II

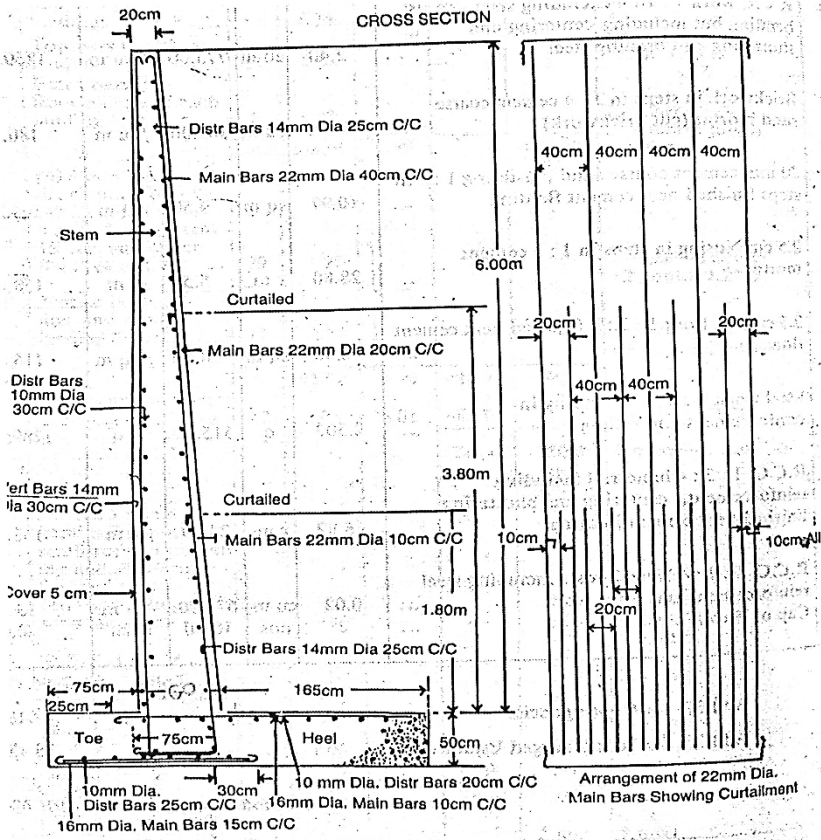
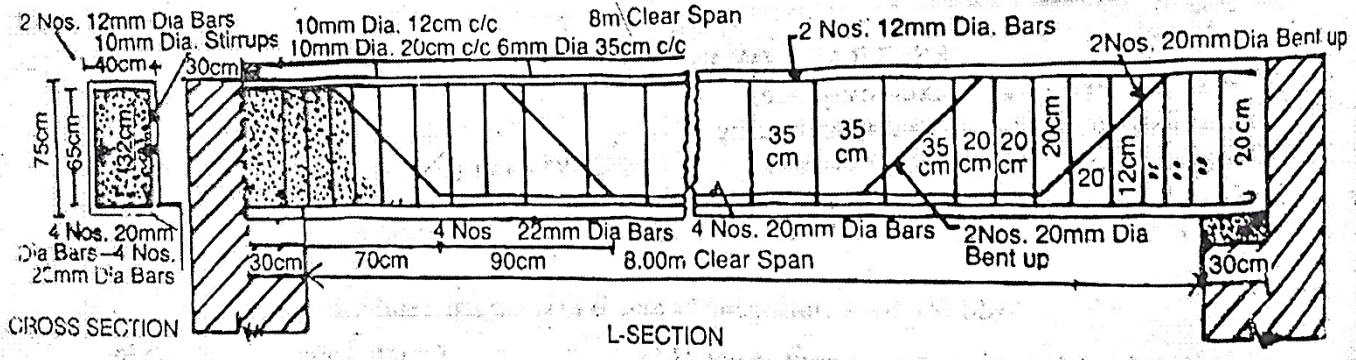


Fig III



**Fig IV**

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