

Total No. of Questions : 8]

SEAT No. :

P1418

[Total No. of Pages : 4

[6004]-467

B.E. (Civil)

QUANTITY SURVEYING CONTRACTS AND TENDERS

(2019 Pattern) (Semester - VIII) (401012)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Use of electronic pocket calculator is allowed.
- 5) Assume suitable data, if necessary.

Q1) a) Fig 1 (a) and (b) shows plan and section of residential building, Determine the quantities of following item. [8]

- i) Excavation in foundation
- ii) UCR masonry in CM (1 : 6) in foundation
- iii) Damp proof course

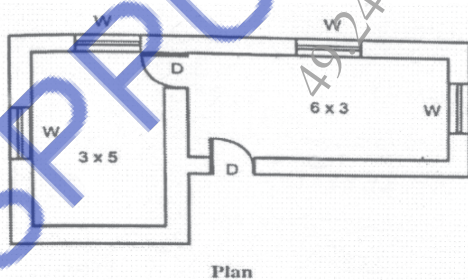


Fig 1 (a)

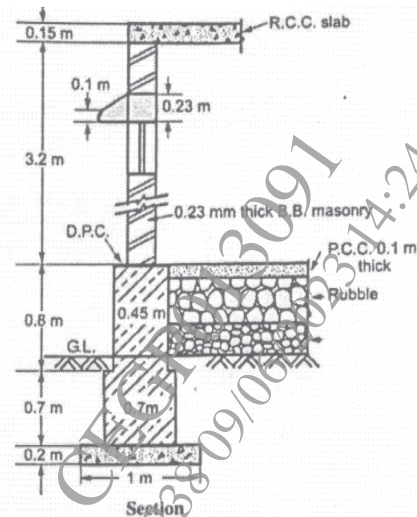


fig 1 (b)

P.T.O.

- b) Determine quantity to steel reinforcement in slab for both room from fig no 2 in 8 mm ϕ bar provided @ 120mm c/c along short and long span with alternate bar bent up at support. Determine the quantity of reinforcement. [9]

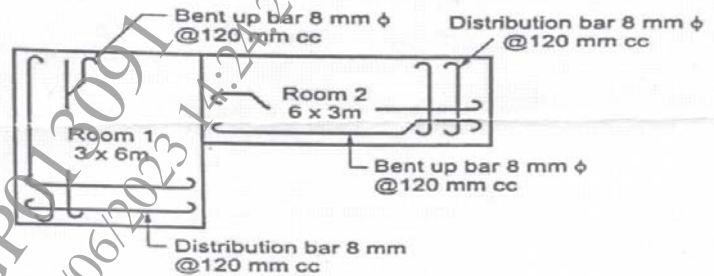


Fig no 2

OR

- Q2) a) Explain in detail concept of long wall short wall and Centre line method with the help of example. [8]
- b) The plan and elevation for the column footing for an R.C.C. framed structure is shown in Fig.3 (a) and (b). work out the quantities for the following item of works. [9]
- Earth work excavation for foundation
 - C.C.(1:2:4) for column footing.

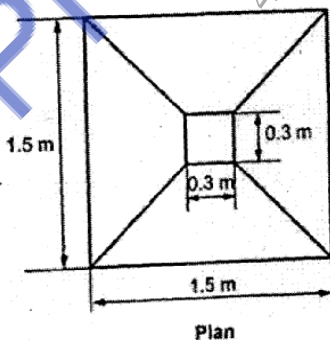


Fig 3 (a)

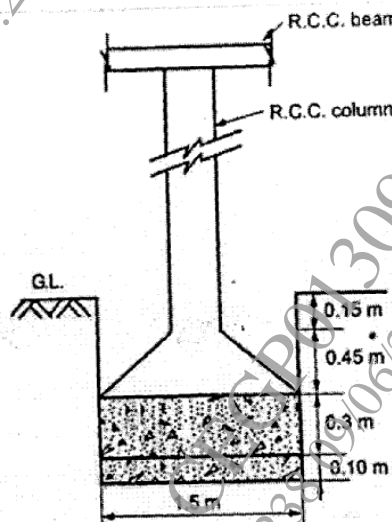


fig 3 (b)

- Q3)** a) Calculate for an embankment by mean area method, workout the quantities of earthwork for an embankment 100 m long and 10 m wide at a top. Side slope is 2:1 and depth of each 20 m and are 0.6, 1.2, 1.4, 1.6, 1.5m. [8]
- b) Prepare an estimate of a pipe culvert for following item as shown in Fig. 4 (a) and Fig. 4(b) [9]
- Excavation
 - Earth filling
 - Rubble soling
 - P.C.C. (1:4:8) for foundation and below pipes

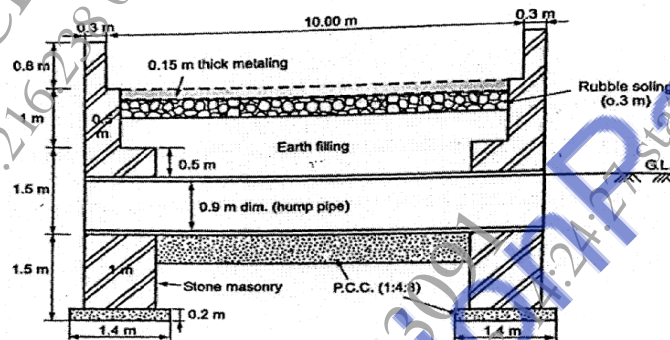


Fig 4(a)

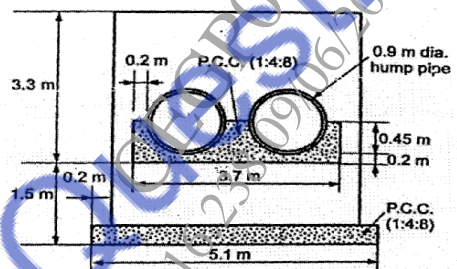


Fig 4(b)

OR

- Q4)** a) Calculate the quantities of earthwork for 200 m length for a portion of road in an uniform ground, the height of banks at two ends being 1.0m and 1.60m. The formation width is 10 m and side slope 2:1 (H:V). Assume that there is no transverse slope. [9]
- b) Explain different methods to workout quantity of earthwork for Road, canal, Railway embankment, dam. [8]

- Q5) a)** Briefly explain [9]
i) General or brief specification
ii) Detailed specification
b) Using the standard format, conduct the rate analysis for the following item of work. Brickwork in a cement mortar 1:6. (take brick size as 19cm×9cm×9cm) [9]

OR

- Q6) a)** Conduct the rate analysis for the following item of work. [9]
Cement concrete 1:2:4 for RCC Roof slab
b) Write a detailed specification for BBM in CM 1:6 for superstructure. [9]

- Q7) a)** Define valuation. Explain any one method of depreciation. [6]
b) A building is constructed at a cost of 5 lakhs. The life of building may be assumed to be 80 years and the scrap value of building to be 10% of building cost. Determine the depreciation in 40th year. Use straight line method, constant percentage method and sinking fund method assuming 8% compound interest. [6]
c) Differentiate between price, cost and value. [6]

OR

- Q8) a)** Explain the concept of free hold and lease hold property. What are the reasons under which the property is leased and what are the liabilities of leaser and lease? [6]
b) Explain with example: [6]
i) Obsolesce
ii) Years Purchase
iii) Earned Value
c) What is Depreciation? List different methods of calculating depreciation explain anyone. [6]

