Code: 13A01701

# B.Tech IV Year I Semester (R13) Supplementary Examinations June 2018

## **ESTIMATION, COSTING & VALUATION**

(Civil Engineering)

Time: 3 hours Max. Marks: 70

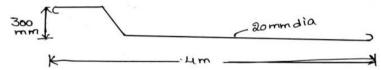
### PART - A

(Compulsory Question)

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1 Answer the following:  $(10 \times 02 = 20 \text{ Marks})$ 

- (a) What is estimating? State two objectives of preparing estimation
- (b) State the units of following items: (i) Brick masonry. (ii) Plastering. (iii) DPC. (iv) Doors, windows, ventilators.
- (c) Tabulate formats neatly of detailed estimate and abstract estimate separately.
- (d) A single room building is having 3.60 m x 6.00 m internal dimensions with 300 mm thick wall and height of room is 2.30 m. Calculate: (i) Plinth area. (ii) Brick work for single room without considering of deductions for super structure.
- (e) Explain the terms' Lead' and 'Lift' for the formation of roads and give the values initial lead and initial lift
- (f) Calculate the total length of the bar as shown in figure below.



- (g) List out the type of contracts.
- (h) What is salvage value?
- (i) Write short note on scrap value.
- (j) Define valuation of building and its purpose.

### PART - B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

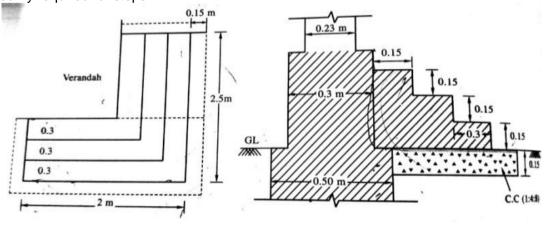
Write down specifications for: (i) Painting. (ii) Plastering. (iii) RCC works. (iv) White washing.

OR

What is an approximate estimate? State the different approximate methods of estimating civil engineering structures.

UNIT – II

- Work out the quantities for the following items for the figure shown below:
  - (a) Cement concrete (1:4:8) required for steps.
  - (b) Brick masonry required for steps.



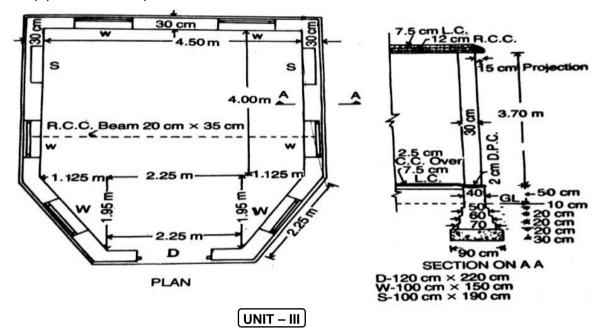
OR

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Code: 13A01701

7

- 5 Estimate the following quantities for the figure given below for following data:
  - (a) Earthwork in foundations.
  - (b) Concrete in foundations.
  - (c) Brick work in foundation and plinth in 1:6 cement mortar.
  - (d) 2 cm damp proof course at plinth level.



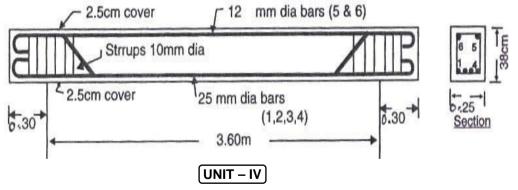
6 A road embankment has the following data:

Chainage in m	0	30	60	90	120
G.L in m	131.75	130.96	132.60	133.35	133.50

Calculate the volume of earth work required given that the formation level is 134.00 m at all chainages and side slopes of the embankment are 2:1 and the top width is 15 m.

#### OR

Workout the quantity of reinforcement by preparing bar requirement schedule of a beam as per the drawing given below. Side covers 50 mm.



What are the contents of a tender document? Enumerate the complete tendering procedure with illustrations.

## OR

9 Explain the contract system and the types of contracts in detail.

# [ UNIT - V ]

10 List and explain general specifications of a second class building.

#### OR

11 Write detailed specifications of cement concrete (1:2: 4) for M20.

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