## B.Tech IV Year I Semester (R13) Supplementary Examinations June 2018 ESTIMATION, COSTING \& VALUATION

Time: 3 hours
Max. Marks: 70


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.


Contd. in page 2

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.


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
Explain the contract system and the types of contracts in detail.
UNIT - V

List and explain general specifications of a second class building.
OR
Write detailed specifications of cement concrete (1:2: 4) for M20.

