

**5E3155****5E3155**

**B.Tech. (Sem.V) (Main/Back) Examination- Dec. 2012**  
**Civil Engineering**  
**5CE5 Quantity Surveying & Valuation**

Time : 3 Hours]

[Total Marks : 80  
[Min. Passing Marks : 24**Instructions to Candidates :**

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

**UNIT-I**

1. (a) Explain the data which are necessary to make out an estimate. (8)  
(b) Give units of measurement and payments for the following items :  
(i) Consolidation of sub grade with road roller. (ii) Wood work in frames and trusses.  
(iii) Lining of irrigation channels. (iv) Fabrication and hoisting of steel work.  
(v) Cement concrete flooring (vi) Supply of varnish, oil etc.  
(vii) Supply of GI sheets. (viii) Supply of bricks. (8)

**OR**

1. (a) State four principles on which unit of measurement for different item of works are fixed. (7)  
(b) Describe the circumstances under which following estimates are prepared :  
(i) Supplementary estimate  
(ii) Revised estimate  
(iii) Annual repair and Annual maintenance estimate (3×3=9)

**UNIT-II**

2. (a) Why do we need to prescribe specifications before awarding a contract? Describe essential features of specifications. (6)

- (b) Analyse the rate for the work "2.5 cm cement floor 1:2:4". Assume suitable rates of material and labour. (10)

OR

2. (a) Write a note on "Schedule of Rates". (4)  
 (b) Analyse the rate for the work : "Colour washing two coats over one coat of white washing". Assume suitable rates of material and labour. (12)

UNIT - III

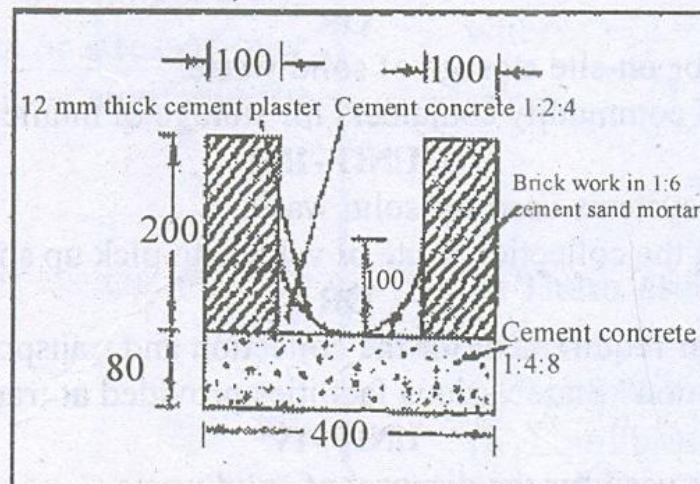
3. Estimate the cost of earthwork for a portion of road at the rate of Rs. 465.00 in banking and Rs. 365.00 in cutting for 400 m length from the following data :  
 Formation width of road is 10m. Side slopes are 2 : 1 in banking and 1.5 : 1 in cutting.

Station	Distance in Meters	R.L. of Ground	R.L. of Formation
25	1000	51.00	52.00
26	1040	50.90	Downward Gradient of 1 in 200
27	1080	50.50	
28	1120	50.80	
29	1160	50.60	
30	1200	50.70	
31	1240	51.20	
32	1280	51.40	
33	1320	51.30	
34	1360	51.00	
35	1400	50.60	

Draw the longitudinal section of road and a cross-section. (16)

OR

3. (a) Prepare an estimate of a surface drain for 10m length from the given drawing. (12)



- (b) State four important rules of deductions in case of plastering work. (4)

UNIT - IV

4. (a) Explain the rule for preparation of Muster Roll. (10)  
 (b) Discuss the classification of works according to their nature. (6)

OR

4. (a) What steps will you take to correctly maintain the Imprest Account? (8)  
 (b) Described procedure for advance payment to contractors for work done but not measured. (8)

UNIT - V

5. (a) A coloniser intends to purchase a land of 100000 sq. m area located in the suburb of a big city to develop it into plots of 700 sq. m each after providing necessary roads and parks and other amenities. The current sale price of small plots in neighborhood is Rs. 3000 per sq. m. The coloniser wants the net profit of 20%. Workout the maximum price of the land at which the coloniser may purchase the land. (12)  
 (b) When and how is the rent to be revised? (4)

OR

5. Explain different methods of valuation in detail. (16)