BICE-010

B.Tech. CIVIL ENGINEERING (BTCLEVI)
Term-End Examination

00037   **June, 2017**

BICE-010 : QUANTITY SURVEYING AND COSTING

Time : 3 hours   *Maximum Marks : 70*

Note : *Answer any* **seven** *questions. All questions carry equal marks. Use of scientific calculator is allowed.*

1. Write short notes on the following : $4 \times 2\frac{1}{2} = 10$

    (a) Plinth Area

    (b) Prime Cost

    (c) Floor Area

    (d) Carpet Area

2. Explain the general rule for measurement of work. Also, write down the various modes and their units for measurement.   *10*

3. (a) Discuss the various factors which affect the Rate Analysis.   *5*

    (b) Analyse the rate of the following item of work, (assume suitable data, e.g. rates of material and labour), for "first class brick work in 1 : 4 cement sand mortar".   *5*

4. Discuss about the various types of building estimates.   *10*

5. Write detailed specifications for RCC work for a three storey office building.   *10*

6. A coloniser intends to purchase a land of 1,00,000 sq.m. area located in the suburbs of a big city to develop it into plots of 700 sq.m. each after providing necessary roads and parks and other amenties. The current sale price of small plots in neighbourhood is ₹ 350·00 per sq.m. The coloniser wants a net profit of 20%. Work out the maximum price of land at which the coloniser may purchase the land.   *10*

7. Prepare a detailed estimate for earth work for a portion of road from the following data :

Dist. (m)	RL of Ground
0	114·50
100	114·75
200	115·25
300	115·20
400	116·85
500	118·00
600	118·25
700	118·10
800	117·80
900	117·75
1000	117·90
1100	117·92
1200	119·50

RL of formation = 115, upward gradient 1 in 200 upto 600 m, downward gradient 1 in 400. Formation width of road is 10 metres, side slopes 2 : 1 in banking and $1\frac{1}{2}$: 1 in cutting. Adopt suitable rates.   *10*

8. Explain the general specifications of a first class building and modern roads with rigid pavement . *10*

9. Write short notes on the following : $4\times2\frac{1}{2}=10$

(a) Depreciation

(b) Annuity

(c) Development Method of Valuation

(d) Rent Fixation of Buildings

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