

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00163

December, 2016

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 : 10
 - (a) Circulation Area
 - (b) Floor Area
 - (c) Cube Rate Estimate
 - (d) Schedule of Rates

2. Explain the general rules for measurement of works. Also write down the units of measurement for the following works : 10
 - (a) Dismantalling of electric wiring
 - (b) Sawing of timber

- (c) Damp proof course
- (d) Plastering on walls
- (e) Lettering
- (f) Roofing with G.I. sheet
- (g) Kerb stone laying

3. Describe the purpose of rate analysis. Also discuss various factors affecting rate analysis. 10
4. What are the various types of estimates ? Discuss them briefly. 10
5. A three-storied building is standing on a plot of land measuring 800 sq.m. The plinth area of each storey is 400 sq.m. The building is of R.C.C. framed structure. Service life may be taken as 70 years. The building is fetching a gross rent of ₹ 1,500 per month. Work out the capitalized value of the property on the basis of 6% net yield. For sinking fund, 30% compound interest may be assumed. Cost of land may be taken as ₹ 40 per sq.m. 10

6. Estimate the cost of earthwork for a portion of 200 m length from the following data :

Chainage RL of ground RL of formation gradient

Chainage (m)	G.L. (m)
0	101.50
20	100.90
40	101.50
60	102.00
80	102.85
100	101.65
120	101.95
140	100.70
160	100.75
180	99.90
200	100.60

The formation width of road is 12 m. Side slopes are 2 : 1 in banking. Draw the longitudinal section of the road and a typical cross-section at chainage 100 m and prepare an estimate of the earthwork for the road at the rate of ₹ 235 per cubic metre.

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7. (a) What is Current Schedule of Rates (CSR) ?
On what factors does it depend ? 5
- (b) Define prime cost and supplementary cost. 5
8. Differentiate between the following : 10
- (a) Capitalized value and Annualized value
- (b) Market value and Monopoly value
- (c) Scrap value and Salvage value
- (d) Building Lease and Occupational Lease
- (e) Depreciation and Purpose of valuation of immovable property
9. Describe in brief, the general specifications for a 2nd class building with a 3-storey R.C.C. frame structure. 10
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