

**B.Tech-VIEP Civil Engineering. V Sem,**

**Term-End Examination**

**December, 2011**

**BICE-010 : QUANTITY SURVEYING AND  
COSTING**

*Time : 3 hours*

*Maximum Marks : 70*

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**Note :** (i) *All the questions are to be answered in English only.*  
(ii) *Attempt **any seven** questions out of **Ten**.*

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1. Discuss briefly, individual wall method and centre line Method of building estimate. **5+5**
2. (a) Describe purpose and importance of estimates for a project. **5**  
(b) What is measurement book ? Give the format of measurement book for recording work done. What are the main precautions in writing M.B. ? **1+2+2**
3. Describe different types of estimate and its importance. **10**
4. Write the units of measurement for the following items : **1x10**
  - (a) Earth filling in Trenches of foundation
  - (b) Earth work in plinth

- (c) D.P.C. (Thickness specified)
  - (d) Drip course, coping
  - (e) stone masonry
  - (f) Fabrication of steel work.
  - (g) steel doors and window
  - (h) RCC. / R.B. roof
  - (i) skirting (Thickness specified)
  - (j) 2.5 cm C.C. Floor.
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5. Prepare analysis of rate as per market rate for one cu.m. of R.C.C. 1 : 1½ : 3. (1 cement : 2 coarse sand : 4 stone ballast 20 mm nominal size). Assuming suitable date and rate for material and labour. 10
  
  6. Prepare Analysis of rate for plastering 1 : 6 (1 cement : 6 coarse sand). Calculate cost for an area of 1000 sqm. of plastering work. (Rate/shall be as per analysis of rate/sqm.) 10
  
  7. Calculate quantities of material for RCC (1 : 2 : 4) in roof slab having roof area of 5 m x 3.15 m with roof thickness of 140 mm and steel use @ 1%. (stone aggregate, sand, cement, steel). 10
  
  8. Describe Mid-sectional Area methods and Prismoidal formula method to calculate volume of the earth work of a road. 5+5

9. A building is situated beside of National Highway (NH) 40 Land area 700 sqm. The built up portion is 40% of land area. The building is having Grade A construction with water supply and sanitary, electric fittings. Age of building is 20 years work out the valuation of said property life 100 years.

10

- (a) Cost of Land @ Rs. 600 per sqm.
- (b) Plinth area rate @ Rs. 3500 per sqm. including water supply and other fittings.
- (c) Assume suitable date.

10. Write short notes *any two* :

5x2

- (a) Technically sanctioned estimate.
  - (b) Factor affecting cost of work.
  - (c) Difference between Preliminary estimate and detailed estimate.
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