

**Diploma in Civil Engineering**

**Term-End Examination**

**December, 2010**

01564

**BCE-042 : ESTIMATING & QUANTITY  
SURVEYING-II**

*Time : 2 hours*

*Maximum Marks : 70*

*Note : Attempt five questions in all. Assume suitable data wherever required.*

1. Select the correct answer from the given alternatives. **7x2=14**
- (a) As per MES practice, take off sheet column No.3 is used for :
- (i) Writing description of items
  - (ii) Recording dimensions
  - (iii) Timsing
  - (iv) Recording squaring Results, of dimensions
- (b) Expected out turn of 12mm thick plastering with cement mortar is :
- (i) 15 Sqm
  - (ii) 10 Sqm
  - (iii) 5 Sqm
  - (iv) 25 Sqm
- (c) Bhisti is a labour of category ;
- (i) Skilled
  - (ii) unskilled
  - (iii) semiskilled
  - (iv) None

(d) As per general condition of contract in MES, any single work Job or service ordered on a Term contract (TC) shall not exceed.

(i) Rs. 80,000                      (ii) 90,000

(iii) Rs.60,000                      (iv) 30,000

(e) The item of steel work which is measured in square meter is :

(i) Collapsible Gates

(ii) Rolling shutters

(iii) Steel doors

(iv) All of the above.

(f) The minimum width of septik tank is taken as :

(i) 60 cm                              (ii) 70 cm

(iii) 75 cm                              (iv) 90 cm

(g) Brick walls are measured in Square meters if the thickness of wall is :

(i) 10 cm                              (ii) 15 cm

(iii) 20 cm                              (iv) All

2. (a) What are the stages involved in quantity surveying ? Elaborate each stage in brief.

(b) What are the functions of each column of take off sheet ? Give example. 7x2=14

3. Plinth area of a Building is 1278 Sqm. The plinth area rate of similar building in the same area is Rs.9532.00 per Sqm.+7% Building cost index. Calculate the cost of the building. 14

4. A barrack 28.50 m long and 11.50 m wide has been plastered on both sides. It has following openings in 30 cm thick wall. 14

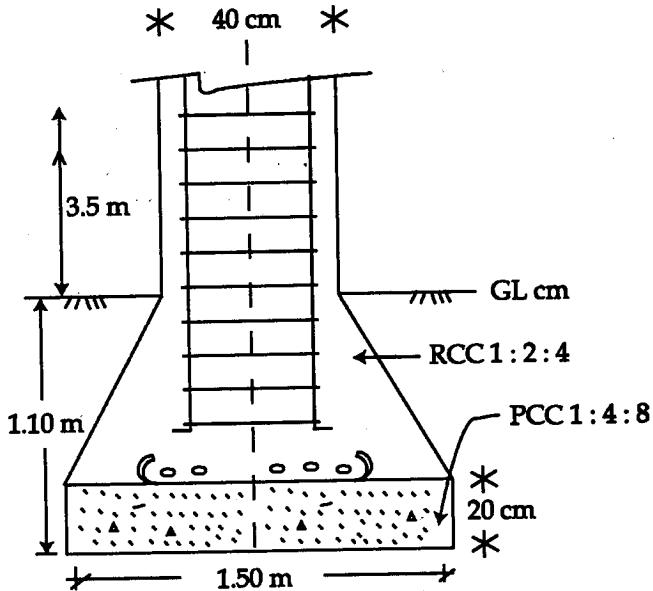
- (i) Ventilators - 600x450mm-20 Nos.
- (ii) Doors - 1200x2100mm-15 Nos
- (iii) Windows - 900x1200mm- 13 Nos
- (iv) Iron Gate - 2500x3000mm-01 No.

Calculate the quantity to be deducted from plastering area.

5. Prepare the analysis of rate for the following items  $4 \times 3\frac{1}{2} = 14$

- (a) Form work to sides of concrete to foundations, footings, beams of columns, raft and raft beams and similar works vertical or to batter.
- (b) Brickwork is well burnt old size bricks in super structure straight or curved on plan exceeding 6 m radius built in cement mortar (1:6).

6. Calculate the following items from the given figure for an RCC square column footing. 3<sup>1</sup>/<sub>2</sub>×4=14



- (i) Earth work is excavation in foundation
  - (ii) Cement concrete in foundation (1:4:8)
  - (iii) R.C.C. in super structure (1:2:4)
  - (iv) R.C.C. in foundation up to GLC (1:2:4)
7. Prepare a star rate for material and labour for an AC corrugated sheet roofing with 6 mm thick sheets fixed with 8 mm dia GI J bolts and washers. 14

8. Write short notes on *any four* of the following :

- (i) Procedure of Take off **4x3½=14**
  - (ii) Standard schedule of rates
  - (iii) Estimate on service unit basis
  - (iv) Work orders
  - (v) PRORATA analysis of items
  - (vi) Labour output and factors affecting it.
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