# Diploma in Civil Engineering 

Term-End Examination<br>June, 2011

## BCE-042 : ESTIMATING \& QUANTITY SURVEYING-II

Time : 2 hours Maximum Marks : 70

Note : Attempt five questions in all. Use of calculator is allowed.
Assume suitable data wherever required.

1. Select the correct answer from the given choices.
(a) MES SSR 2004 Part II rates has : 7×2=14
(i) 18 sections
(ii) 21 sections
(iii) 42 sections
(iv) 21 section $+A p p x$ ' $A$ '
(b) The height of the sink of wash basin above floor level is kept :
(i) 60 cm
(ii) 70 cm
(iii) 75 cm
(iv) 60 to 90 cm
(c) Star rates are taken from :
(i) Standard schedule of rates
(ii) Detailed schedule of rates
(iii) Cost at site +overhead and profit
(iv) Market Rates
(d) For painting a Rolling shutter, the painting factor for each face of the shutter is taken as:
(i) 0.50 Time
(ii) 1.10 Times
(iii) 0.80 Time
(iv) 1.30 Times
(e) Pick up the item of work, which is not included in the plinth area estimate :
(i) Wall thickness
(ii) Verandah
(iii) Room area
(iv) Courtyard
(f) The excavation exceeding 1.50 m in width, 10 sqm in plan area, with a depth not exceeding 30 cm is termed as.
(i) Excavation
(ii) Cutting
(iii) Surface Dressing
(iv) Surface excess.
(g) Floor area includes the area of Balcony up to :
(i) $100 \%$
(ii) $50 \%$
(iii) $75 \%$
(iv) $25 \%$
2. (a) What do you understand by Term estimation? What is importance of it? $\mathbf{2 x 7 = 1 4}$
(b) What are the different forms of measurements ? Explain with examples.
3. A building with RCC flat roof has a terrace of size $11500 \times 8500 \mathrm{~mm}$ enclosed with parapet wall. Calculate following items.
(a) Number of C.C. Khurras assuming one rain water pipe can serve for drainage of 50 sqm area water.
(b) Qty. of 100 mm dia rain water pipes assuming 3.5 m length.
(c) Qty of C.C. Gola 1:2:4 of size $75 \times 75 \mathrm{~mm}$ along parapet wall.
(d) Water proofing treatment of roof.
4. Prepare analysis of rate for the following items:

$$
2 \times 7=14
$$

(a) Prorata analysis for 35 mm thick door shutter using following data :

Rates of 40 mm thick shutters -

$$
\text { Rs. } 1500.00 \text { per sqm }
$$

Rate of 30 mm thick shutters
Rs. 1200.00 per sqm.
(b) Cement concrete in foundations, filling and mass concrete with mix $1: 4: 8$ ( 40 mm graded stone aggregate). Assume suitable rates of labour and material etc.
5. From the given sketch of building, Calculate. $2 x 7=14$
(a) Plinth area of the building
(b) Cost of building taking plinth area rates Rs. 9800/- per sqm and building cost index @ $12.50 \%$


All dimensions are in mm.
6. Above building have RCC roof 1:2:4 of 120 mm thickness. Calculate : $2 \times 7=14$
(a) RCC in suspended floors with full bearing
(b) Centering shuttering for suspended floor.
7. (a) What are the principles for abstracting and billing ? Explain.
(b) In which condition requisitions are placed ? Mention typical requisition detail for repairs to roof covering.
8. Write short notes on any four of the following :
(a) Estimation on typical bay basis $\mathbf{4 \times 3 1 / 2}=14$
(b) Labour output
(c) Contractor profit and overhead
(d) Stages involved in Qty. Surveying
(e) Categories of labour
(f) Analysis of Rates

