BACHELOR OF ARCHITECTURE (B.Arch.)
Term-End Examination
December, 2016

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BAR-053 : ESTIMATING AND COSTING

Time : 3 hours   *Maximum Marks : 70*

Note : *Attempt any five questions. All questions carry equal marks.*

1. (a) Discuss, in detail, various types of estimates, with their uses. Also discuss the data required for framing an estimate. Discuss with example on the basis of rates for preparation of estimate for electrical works.   7

    (b) Discuss, in detail, the method of detailed estimation of a building on Item rate basis.   7

2. Calculate the quantities of the following items of a room having inner dimensions of 3000 × 5000 mm. The walls are 200 mm thick and the floor to floor height is 3300 mm. The thickness of slab including terracing is 300 mm and plinth level is 450 mm. The width of the foundation is 700 mm. There are two windows of 1500 × 1800 mm (height) and one door of 1000 × 2100 mm.
    Assume the size of the lintel and other required details etc. :

    (a) First class brick work in superstructure.   11

    (b) 40 mm thick D.P.C.   3

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3. (a) Write down the criterion for fixing the unit for an item. **4**

(b) Write down the units of measurements for the following items : **10**

(i) 300 mm thick brick wall

(ii) 100 mm thick honeycombed brick wall

(iii) Glazed tile in dado

(iv) Aluminium glazed partition

(v) Reinforcement steel

(vi) Pressed steel hollow section frame

(vii) 40 mm thick door shutters

(viii) Electric points

(ix) Sanitary fixtures

(x) 100 mm diameter rain water pipe

4. Work out the rates of the following items of work :

(a) Providing and laying M 25 concrete in R.C.C. slab. **7**

(b) Providing first class brick work in superstructure. **7**

5. Explain the following (in detail) :

(a) Muster Roll **10**

(b) Methods of quantity surveying **4**

6. Differentiate between the following :

    (a)   Interim and Final Certificates of Payments   7

    (b)   Scheduled items and Non-scheduled items   7

7. Write short notes on any *two* of the following : *2×7=14*

    (a)   Piece Work

    (b)   Percentage Tender

    (c)   Clerk of Works

    (d)   Contingencies

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