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BAR-053

BACHELOR OF ARCHITECTURE (B.Arch.)

Term-End Examination

00380

June, 2016

BAR-053 : ESTIMATING AND COSTING

Time : 3 hours *Maximum Marks : 70*

Note : *Question no. **1** is **compulsory**. Attempt any **four** questions from the remaining. All questions carry equal marks.*

1. (a) While carrying out rate analysis of construction works 10% amount is taken as *7×2=14*

(i) Earnest money

(ii) Engineer's fee

(iii) Contractor's profit

(iv) All of the above

(b) The small work up to ₹ 10,000 may be carried out by

(i) Tender notice

(ii) Contract

(iii) Work order

(iv) None of the above

(c) The number of bricks per m^3 is taken as

(i) 100

(ii) 300

(iii) 500

(iv) 700

(d) A 3 tonnes truck can carry bricks of

(i) 500 nos.

(ii) 1000 nos.

(iii) 1500 nos.

(iv) 3000 nos.

(e) The carpet area of an office building may be _____ of the plinth area of the building.

(i) 50%

(ii) 60%

(iii) 80%

(iv) 100%

(f) Which of the following is ***not*** a method of valuation ?

(i) Rental method

(ii) Development method

(iii) Depreciation method

(iv) Lump sum method

(g) A muster roll refers to

(i) materials consumed

(ii) labour employed

(iii) time taken to complete the work

(iv) All of the above

2. (a) Write down the general specification for wooden flooring. 7

(b) Describe the general specification regarding glazed doors and windows. 7

3. (a) Write a note on the estimation of brick masonry in arches. 7

(b) A road in cutting has formation width of 4 m, side slope 1 : 2, distance between two chainage points is 300 m, h_1 = 1·5 m and h_2 = 1·1 m. Using trapezoidal formula, find the volume of earthwork in cutting. 7

4. Write down short notes on any ***four*** of the following : $4 \times 3\frac{1}{2} = 14$

(a) Lump sum contract

(b) Item rate contract

(c) MAS account

(d) Permanent imprest

(e) Contract document

(f) Conditions of contract

5. (a) Explain how bar bending schedule is prepared. 7

(b) Discuss the quantification of lime concrete in a building. 7

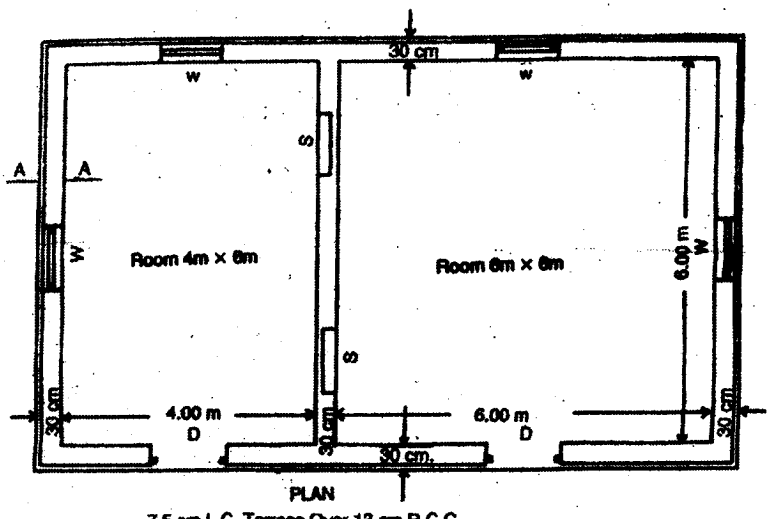
6. Estimate the quantities of the following items of a two-roomed building from the given plan and section : 14

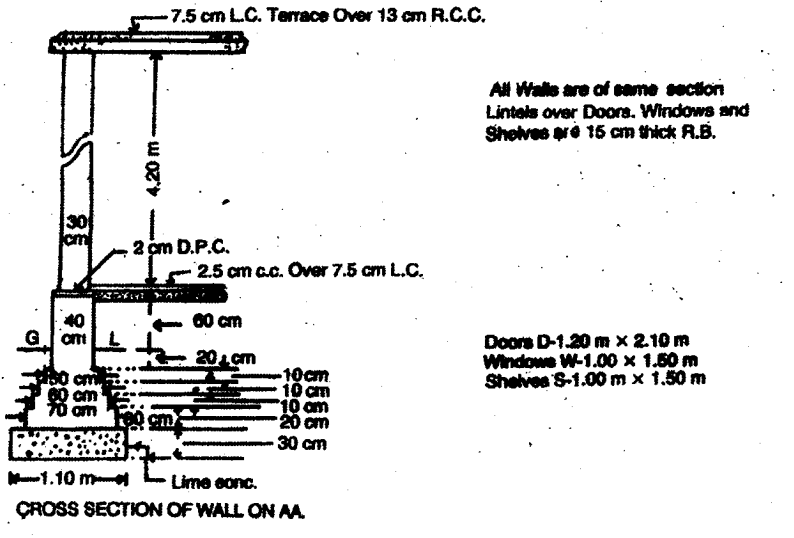
(a) Earthwork in excavation in foundation

(b) Lime concrete in foundation

(c) First class brick-work in cement mortar 1 : 6 in foundation and plinth.

***Note :** Assume any missing data, if necessary.*





All Walls are of same section
Lintels over Doors, Windows and Shelves are 15 cm thick R.B.

Doors D-1.20 m × 2.10 m
Windows W-1.00 × 1.50 m
Shelves S-1.00 m × 1.50 m