

[Total No. of Questions - 9] [Total No. of Printed Pages - 3]

Dec.-23-0546

CE-702 (Quantity Surveying and Valuation)

B.Tech, 7th (CBCS)

Time : 3 Hours

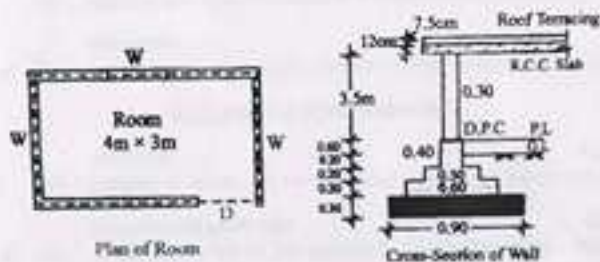
Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt one question each from Sections-I, II, III and IV. Section-V is compulsory. Assume missing data suitably, if any.

SECTION - I

- (a) What is the principle of estimation? Classify estimates with examples. (6)
(b) Write the general items of work for residential building construction. (4)
- Calculate the details of measurement and quantity of one room as given in the figure below. Size of door (b) is $1.2\text{ m} \times 2.1\text{ m}$ and size of each window (W) is $0.9\text{ m} \times 1.2\text{ m}$. (10)



2

CE-702

SECTION - II

- (a) What is analysis of rates and its importance in construction projects? Find the rate analysis for 100 m^2 of DPC with 2 cm thickness and concrete mix 1:2:4. (5)
(b) Determine the cost of preparing, casting and curing of 1 m^3 of cement concrete (1:2:4) with 40-mm size stone ballast, and coarse sand. Assume suitable rates of labour and materials. (5)
- Write the rate analysis of: (i) 1 m^3 of RCC work in column (2% reinforcement and 1:1.5:3 concrete mix), and (ii) 100 m^2 of 2.5-cm thick bituminous macadam road. Make suitable assumptions wherever necessary. (10)

SECTION - III

- (a) What do you understand by tender? What are the various features that are essential for a tender? (5)
(b) Describe different types of penalties imposed on a contract, and why such penalties are imposed? (5)
- (a) Explain the general specifications of second-class buildings. (5)
(b) Write the detailed specifications of RCC slab to be constructed with concrete of ratio of 1:2:4. (5)

SECTION - IV

- (a) What is valuation? Explain its principle. What are different methods of valuation? (5)
(b) How is depreciation calculated? List different methods of depreciation's determination. Explain any one method in detail. (5)

[P.T.O.]

8. (a) Write short note on the following: (i) Earnest money, and (ii) First and Final bills. (6)
- (b) Explain in detail the rental-return method of performing valuation. (4)

SECTION - V (Compulsory)

9. (i) Distinguish between revised and supplementary estimates.
- (ii) What is the retention money and the security money?
- (iii) List any six important quantities estimated for building construction and also give their units of measurement.
- (iv) How is design and drafting of specifications done? Explain briefly.
- (v) What is the sinking fund method? How is it performed? Explain in brief.
- (vi) Enlist the important items of work included in estimation of sewerage pipe lines.
- (vii) Under what conditions, it is better to use the centerline method than the long-wall-short-wall method?
- (viii) Differentiate between the processes of tendering and bidding.
- (ix) How is a free-hold property different from lease-hold property?
- (x) Are the schedule of rates and analysis of rates same? Comment. (10×2=20)