

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -3 EXAMINATION- DEC- 2018
M-Tech (CM) 1st Semester

COURSE CODE: 10M11CE112

MAX. MARKS:35

COURSE NAME: **Estimation and Costing**

COURSE CREDITS: 4

MAX. TIME: 2 Hrs

Note: Q1 is compulsory. Select One Question from Each Unit of Part B. Carrying of mobile phone or sharing of materials during examinations will be treated as case of unfair means.

PART A

- Q1.** (i) Define revised and supplementary estimate.
(ii) What is Bar Bending Schedule?
(iii) Name the type of specifications.
(iv) Enumerate any five general items of work and mention their units of measurement.
(v) How do you accounts for deductions for opening in the wall?
(vi) How is security money different from earnest money?
(vii) What is termination of contracts?
(viii) What do you understand by PWD work?
(ix) What is arbitration? What is the major advantage and disadvantage of it?
(x) Explain **Rental Capitalization method** of Valuation. (1.5 X 10 = 15)

PART B

UNIT I

- Q2.** Prepare a detail estimate of building (Figure-1, given in the last page) using any method for the given plan section and general specification given as (dimensions are in metre unless and until specified)
(i) Earth work in excavation.
(ii) Brick work below plinth.
(iii) 2.5 mm thick D.P.C.. (5)
- Q3.** Calculate the quantities of earth-work in cutting and banking for a portion road with following data. (5)
- Formation width of road is 12 m.
 - Formation level of starting chainage is 51.50 m.
 - The road surface shall be given a falling gradient of 1 in 200
 - Side slope are 1V : 2H in banking and 1V : 1.5H in cutting.

Chainage (in m.)	0	30	60	90	120	150	180
G.L.(in m.)	50.80	50.60	50.70	51.20	51.40	51.30	51.0

UNIT II

- Q4.** (a) What are general steps for preparation of analysis of rates?
(b) Write down unit of measurements, unit rate of payment and mode of measurement for following general items of work:
- Ballies
 - R.C.C.
 - D.P.C.
 - Plastering – Cement (2+3=5)

- Q5. Analyze the rate of the following items of the work. Assume suitable rate of material and labour. (5)
- R.C.C. work in column 1 : 1.5 : 3.
 - R.C.C. Brick work in Slabs etc. 1 : 3 mortar

UNIT III

- Q6. (a) Explain the general specification of First class Building? (2.5+2.5=5)
 (b) Describe different types of contracts.
- Q7. Explain the sequential procedure of opening of tenders. (5)

UNIT IV

- Q8. In a plot of land costing Rs 20,000.00, a building has been newly constructed at a total cost of Rs 80,000.00 including sanitary and water supply work, electrical installation, etc. The building consists of four flats for four tenants. The owner expects 8 per cent return on the cost of construction and 5 per cent return on cost of land. Calculate the standard rent for each flat of the building assuming:-
- The life of the building as 60 years and sinking fund will be created on 4 % interest basis.
 - Annual repair cost at 1 % of the cost of construction.
 - Other outgoings including taxes at 30 % of the net return of the building. (5)
- Q9. What is the purpose of maintaining muster roll? How pay bill is prepared using muster roll? (5)

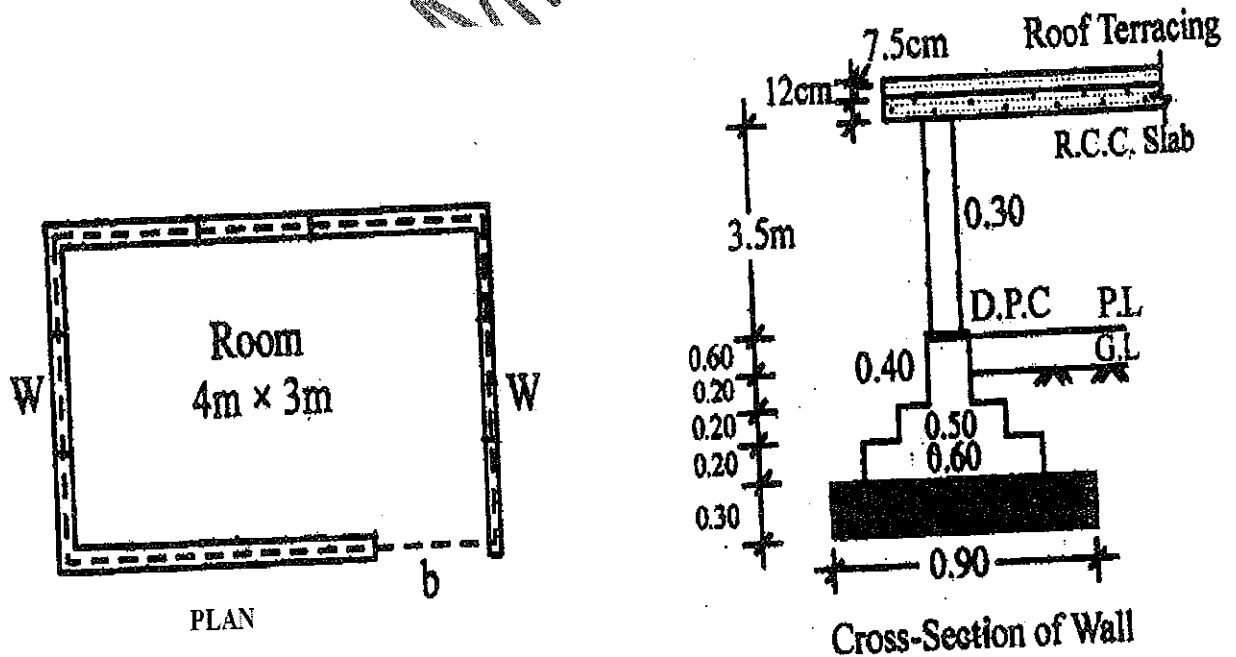


Figure 1

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