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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -3 EXAMINATION- Oct 2019
M-Tech(CM) 1st Semester

COURSE CODE: 10M11CE112 MAX. MARKS:35
COURSE NAME: Estimation and Costing
COURSE CREDITS: 3 MAX. TIME: 2 Hr

Note: *All questions are compulsory. Carrying of mobile phone or sharing of materials during examinations will be treated as case of unfair means.*

Q 1. Define Estimating? Method of Estimation? Explain with examples? **[4 Marks]**

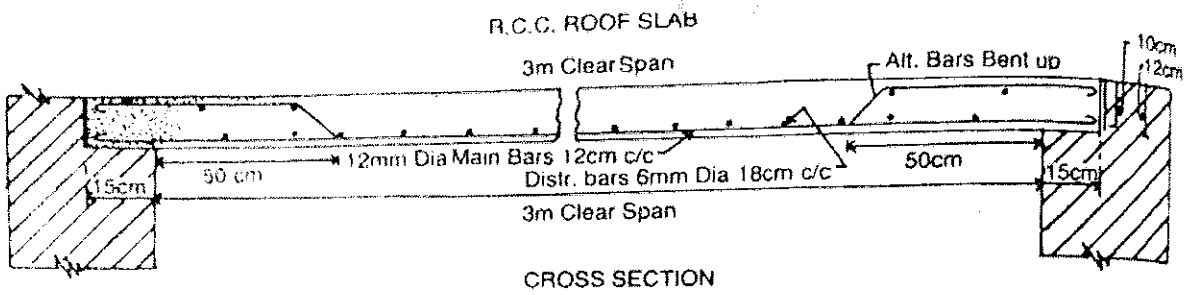
Q 2. The formation width of a road embankment is 9.0m. The side slopes are 2.5:1. The depths along the centre line of road at 50.0m intervals are 1.2, 1.1, 1.4, 1.2, 0.9, 1.5 and 1.0.m. It is required to calculate the quantity of earthwork by

(a) Prismoidal rule.

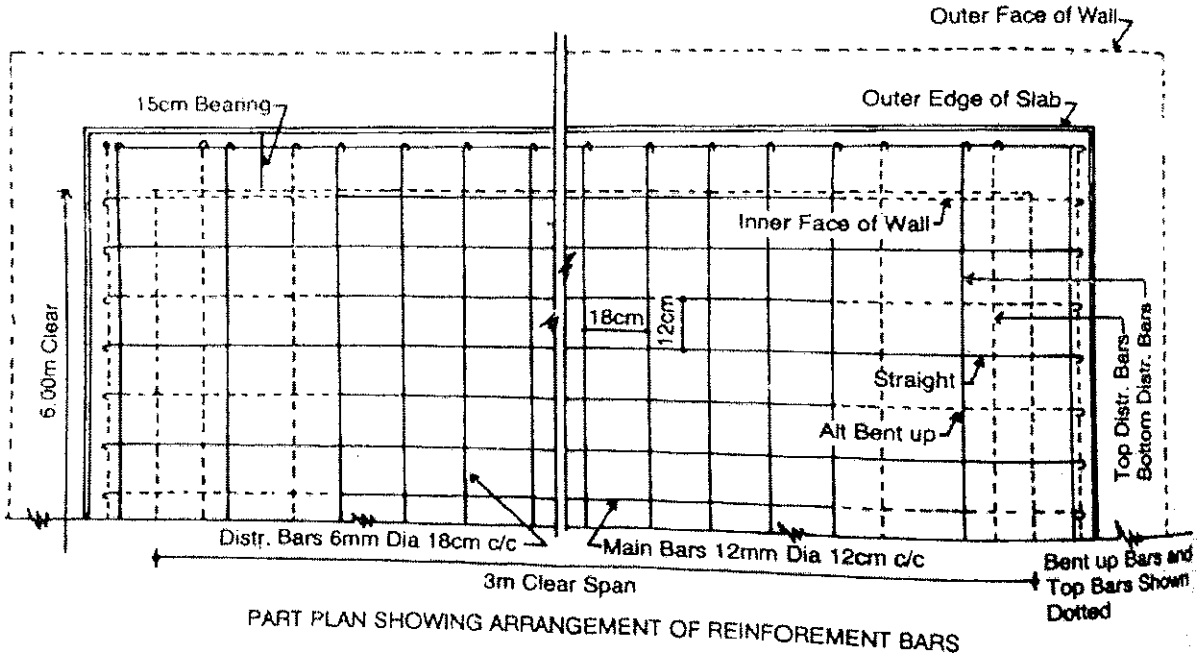
(b) Trapezoidal rule. **[3+3 = 6 Marks]**

Q3. Prepare the detail estimate of R.C.C roof slab of clear span 3 meters and 6 meters long as given in the figure below. RCC work including Centering and Shuttering and steel reinforcement in detail shall be taken separately. Also Prepare a Schedule for the bars.

[5+10 = 15 Marks]



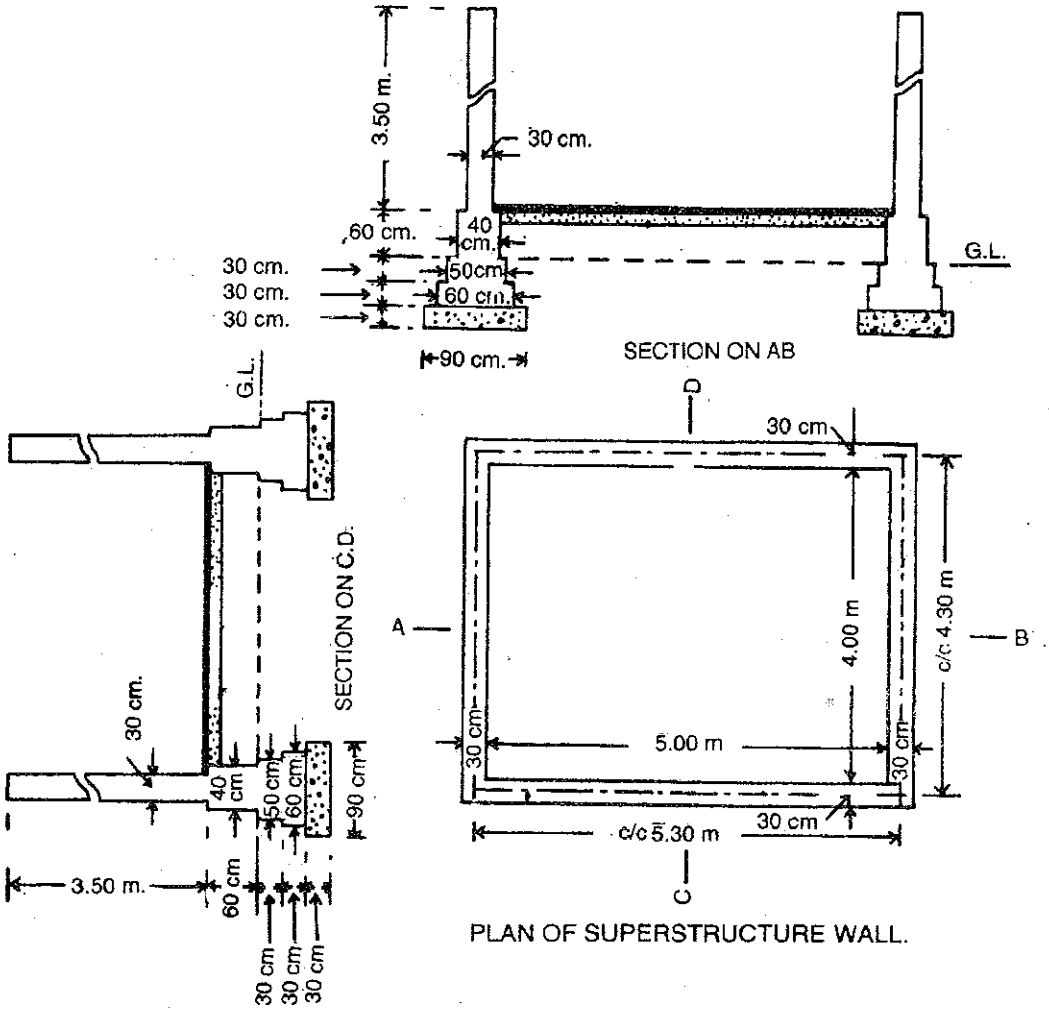
CROSS SECTION



PART PLAN SHOWING ARRANGEMENT OF REINFOREMENT BARS

Q 4. The plan represents the plan of a superstructure wall of a single room building of 5m x 4m, and Section represents the cross section of walls with foundation. Estimate the cost of quantities of -

a) Earthwork in excavation in foundation **b)** Concrete in foundation **c)** brickwork in foundation and plinth **d)** Brickwork in superstructure **[2.5*4 = 10 Marks]**



Cost of Earthwork per cubic centimeter – Rs. 01.00
Cost of laying concrete in foundation per cubic centimeter – Rs. 04.00
Brick work in foundation per brick – Rs 02.50
Brick work in superstructure per brick – Rs 03.00

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