

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

M.Tech-I Semester (CE-Construction Management)

COURSE CODE (CREDITS): 10M11CE112 (3)

MAX. MARKS: 15

COURSE NAME: ESTIMATING and COSTING

COURSE INSTRUCTORS: Dr. KAUSHAL KUMAR

MAX. TIME: 1 Hour

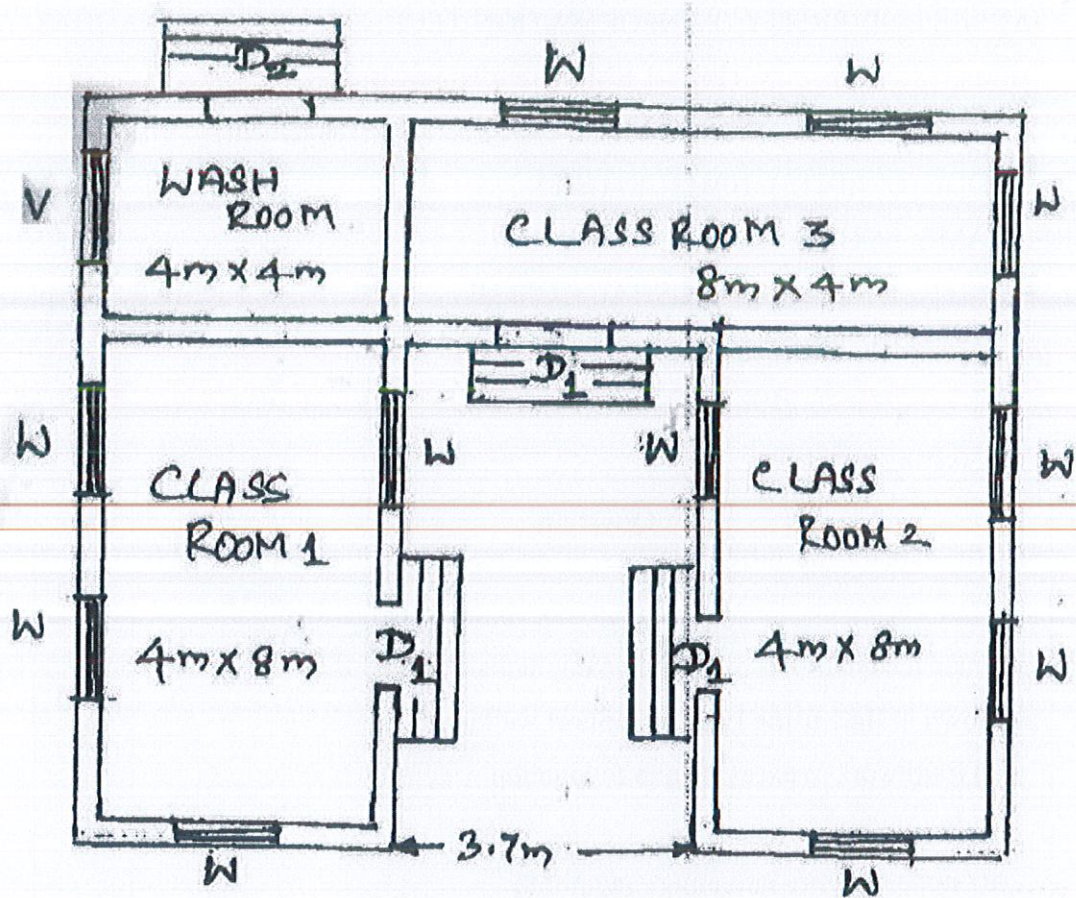
**Note:** (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	Briefly explain the different types of estimates and discuss at which situation each type is preferred by giving appropriate justification.	1	4
Q2	Estimate the quantities of the following items of works for the building as shown in fig.1 using Long wall Short wall method. i) Earthwork in excavation in foundation ii) Pcc in foundation iii) stone masonry in footings and plinth iv) material in Damp proof course of 2.5 cm thickness	1	6
Q3.	Work out quantity of 8 mm, 10 mm and 16 mm dia. reinforcement bars for a rectangular beam of size 300 x 450 mm. The beam is reinforced with 2 Nos.- 10 mm dia. bars at top, 2 Nos. of 16mm dia. bar at bottom, and 2 Nos. -16 mm dia. bent up , 8 mm dia., two legged stirrups are provides at 130mm c/c throughout the length , length of beam is 5.0 m. Assume cover to be 25 mm.	2	5

Figure 1 in the next page...





Assume  
 $D_1 = 1.5\text{m} \times 2.1\text{m}$   
 $D_2 = 1.0\text{m} \times 2.1\text{m}$   
 $W = 1.5\text{m} \times 1.8\text{m}$   
 $V = 1.5\text{m} \times 0.5\text{m}$

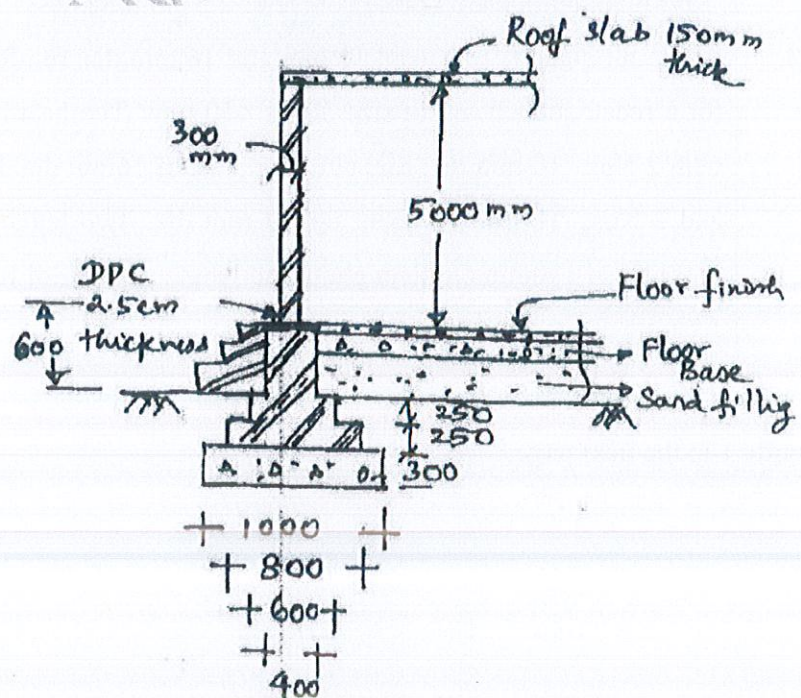


Fig. 1- Plan and elevation of the room (All dimensions are in mm)