

Roll No.

Total No. of Pages : 03

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M.Tech. (CTM) (Sem.-2)
BUILDING COST AND QUALITY MANAGEMENT
Subject Code : CT-508
M.Code : 72664

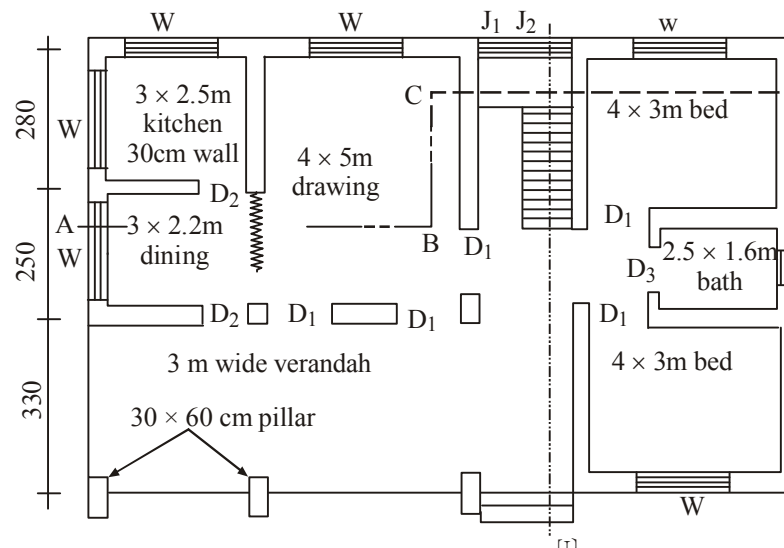
Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions
2. Each question carries EQUAL marks.

1. Given below is the plan of a two storeyed residential building in Amritsar. The Building is to be designed as an RCC framed structure. Assume the soil characteristics and specify the foundation details. Select building materials and prepare a detailed estimate of quantities of (i) earth work, (ii) RCC work (iii) brick work for walls and (iv) wood work, (assume and mention suitable dimensions appropriately)



GROUND AND FIRST FLOOR PLAN

2. Make the analysis of rate of white washing for two coats, including the supply of materials, labour and T&P etc. for completion of work for the building.
3. Explain the laboratory tests which are performed to assess the quality of :
 - (i) Steel
 - (ii) Cement concrete. Also, indicate standards as per relevant IS code.

4. Write a cash book of Executive Engineer of Major Division XYZ for the month of March 2019. Close the cash book giving details of the closing balance:

1-3-19	Opening balance	Rs.
	Cash in Chest	89
	Revenue Stamps	21
	Self Cheque dated 27-2-09	300
	Imprest with SDO (A)	300
2-3-19	Self Cheque dated 27-2-09 encashed	
5-3-19	Paid to SDO (B) temporary advance by cheque	500
6-3-19	Rent received from an occupant of Rest House	105
11-3-19	Issued cheque No. PQ/2 in lieu of expired cheque No AB/1 dated 2-9-08 to contractor	1,200
16-3-19	Sale proceeds of old furniture received from Shri Babu Ram by cheque and the cheque was remitted to bank	800
17-3-19	Temporary advance account rendered by SDO (B): labour charges paid for repair of Mandi Building	1050
	Amount kept under objection	50
19-3-19	Paid to contractor on account bill for construction of connecting rural road as per the following details :	
	Deductions :	
	Security Deposit	700
	Income tax	140
	Fine for delay in completion of work	160
	Net amount paid by cheque	7,000
25-3-19	Repairs for the Jeep, by cash	800
	Hire charges of Tent for camp office, by cash	5200
26-3-19	Purchased :	
	Service stamps	100
	Revenue stamps	50
27-3-19	Received a cheque on account of hire charges of T & P from a contractor which is to be adjusted by Div (C)	1500
	The cheque was remitted into the bank for collection. A cheque issued in favour of Div. (C) for the same amount	

5. Plan and sketch a public toilet block for a bus station (toilet measurement may be taken as $6\text{ m} \times 10\text{ m}$). The toilet block contains of
- a) 20 units of bowl type urinals along the walls
 - b) 6 toilets 3 Indian type and 3 European type
 - c) 5 wash basins.
- Estimate and make the cost analysis of the facility.
6. Explain the following :
- a) Arbitration
 - b) Running account bill
7. What are the procedures to be observed in issuing completion report of a project? Explain the specific entries which need to be made on completion report.
8. Write notes on the following :
- a) Types of payments
 - b) Schedule of rates
 - c) Specifications of works
 - d) Imprest Account

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.