

**Code: 5G682**

IV B.Tech. II Semester Supplementary Examinations Nov/Dec 2019

**Estimation, Costing and Valuation**

( Civil Engineering )

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit ( 5 x 14 = 70 Marks )

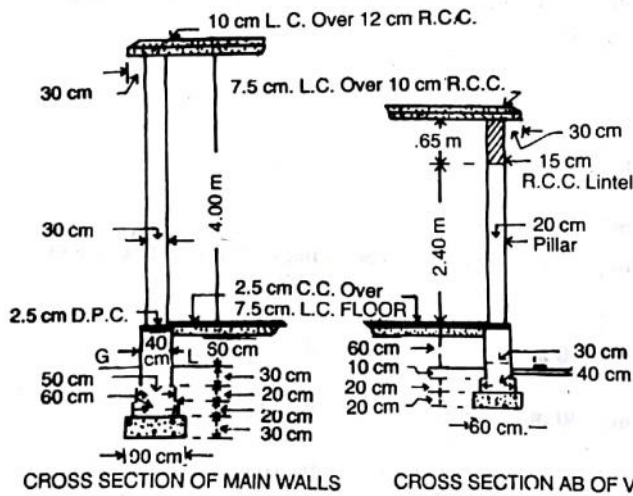
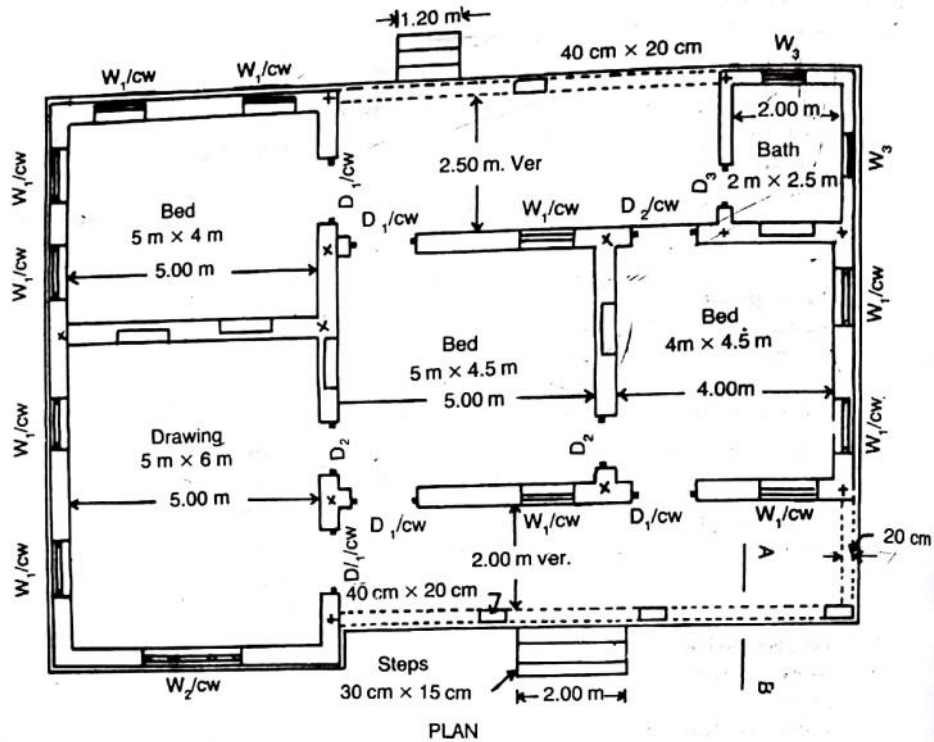
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**UNIT-I**

1. Estimate the quantities for following items of a Residential building as shown in Fig. by using Centre line method. a) Earthwork in excavation b) Concrete in foundation c) 1st class brickwork in superstructure d) Plastering in 1:4 Cement Mortar

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**ESTIMATING AND COSTING  
RESIDENTIAL BUILDING**



**Doors:-**  
 D<sub>1</sub> - 120 cm × 210 cm (1.20 m × 2.10 m)  
 D<sub>2</sub> - 100 cm × 200 cm (1.00 m × 2.00 m)  
 D<sub>3</sub> - 75 cm × 180 cm (.75 m × 1.80 m).

**Windows:-**  
 W<sub>1</sub> - 100 cm × 150 cm (1.00 m × 1.50 m)  
 W<sub>2</sub> - 200 cm × 150 cm (2.00 m × 1.50 m)  
 W<sub>3</sub> - 75 cm × 120 cm (.75 m × 1.20 m)  
 C.W. - 75 cm × 60 cm (.75 m × .60 m).

**Shelves:-**  
 S - 100 cm × 150 cm (1.00 m × 1.50 m)  
 Lintel Over Doors, Windows Etc.  
 15 cm R.B.

All walls of Drawing Rooms and Bed Rooms have same section      Bath Room walls have similar section.  
**Note—No beam has been shown in the plan.**

Fig. 2-7

OR

2. a) What is the difference between preliminary estimate, detailed estimate supplementary estimate and revised estimate? Under what circumstances each one is prepared? 7M
- b) Prepare a preliminary estimate for civil works required for establishing a college building required a total carpet area of 6000 sq. m. This includes actual total area required for classroom, labs, store office etc. Suitable extra provision as 12 % of the carpet area is made for walls verandah, toilet, staircase etc. The plinth area rate is Rs 900/sq.m Suitable extra provision as 8% of building cost for water supply,10% for electric fittings,6% for other services,1.5% for special architectural treatment, of the building cost is also to be calculated. 7M

**UNIT-II**

3. Prepare a detailed estimate for earth work for a portion of a road from the following data. The formation level at starting point is 120m. Formation width of road is 7.5m and side slopes of banking and cutting are 2:1. The road is in downward gradient of 1 in 160 up to 200m and then the gradient changes to 1 in 120 downward.

Distance in m	0	40	80	120	160	200	240	280	320	360	400
R.L. of Ground	116	116.3	116.8	117	117.3	117.6	117	118	118.2	118.3	117.3

14M

**OR**

4. Explain the various methods used for estimating the quantity of earth work in irrigation channels? 14M

**UNIT-III**

5. Do analysis rate for 70sqm of cement and plaster 15mm thick, the ratio of cement & sand is 1:4 the labor for 100 sqm plaster is  
Mason =10 no, mazdoor=10 no, Bhisti =2no  
material rates- Cement @ Rs. 320 bag, Sand Rs.800 rupees cubic metre & course aggregate Rs.900 per cubic metre. 14M

**OR**

6. a) What is meant by Rate analysis? Mention its purpose in building estimation. 7M
- b) Enumerate the factors affecting Rate Analysis. 7M

**UNIT-IV**

7. a) Write the powers of different officers for accepting the tender. 7M
- b) Explain in detail the various legal aspects of construction contractors 7M

**OR**

8. What is meant by Arbitration? Write down the procedure of settlement of dispute. 7M

**UNIT-V**

9. a) A First-class building is situated on the main road of the city, having plot area 600 square metre. The covered area is 50% of the plot. All immunity such as water supply, sanitary and electricity are provided. The age of building is 20 years. The assumed unit plinth area rate at the time of construction was rupees 250 per square metre. Assuming life of building as 100 years and cost of the land as 70 rupees per square metre find out total value of the property. 10M
- b) What do you understand by the standard range and how it is calculated? 4M

**OR**

10. Explain in detail about the specifications of I<sup>st</sup> class brickwork. 14M

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Hall Ticket Number :

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**R-15**

**Code: 5G681**

IV B.Tech. II Semester Supplementary Examinations Nov/Dec 2019

**Design and Drawing of Irrigation Structures**

( Civil Engineering )

Max. Marks: 70

Time: 3 Hours

Answer any one question from the following ( 1 x 70 = 70 Marks )

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1. Design and draw a sluice taking off from a tank irrigating 600 hectares at 3000 duty. The tank bund through which the sluice is taking off has a top width of 2 m with 2:1 side slopes. The top level of bank is +40.20 and the ground level at site is +34.50. Good hard soil for foundation is available at +33.50. The sill of the sluice at off-take is +34.00. The maximum water level in tank is +38.00. The full tank level is +37.00. Average low water level of the tank is +35.00. The details of the channel below the sluice are as under. Bed level +34.00, FSL +34.50, Bed width 1.25 m and side slopes are 1½ to 1 with top of bank at +35.50.

**OR**

2. Design and draw Trapezoidal notch fall with the following hydraulic particulars.

Description	Upstream	Downstream
Full supply discharge	6 Cumec	6 Cumec
Bed width	6 m	6 m
Bed level	+10	+8
Full Supply depth	2.00 m	2.00 m
Full Supply level	+12.50	+10.00
Tank bund level	+13.5	+11.00
Half supply depth	1.25 m	

Top width of bank is 2.00 m. Ground level at the site of work is +10.50. Good soil is available for foundations at +8.50

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Hall Ticket Number :

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**R-15**

**Code: 5GA82**

IV B.Tech. II Semester Supplementary Examinations Nov/Dec 2019

**Human Resource Management**

( Common to All Branches )

Max. Marks: 70

Time: 3 Hours

Answer *all five* units by choosing one question from each unit ( 5 x 14 = 70 Marks )

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**UNIT-I**

1. "There are two sets of Human Resource Management functions – Managerial and Operative" - Discuss 14M

**OR**

2. Outline the scope of Human Resource Management in the light of ongoing changes in management thought. 14M

**UNIT-II**

3. What do you understand by HRP? Explain the chief characteristics of Human Resource Planning? 14M

**OR**

4. "Human Resource Planning is a prerequisite for effective management of Human Resource", in the light of this statement, analyze the significance of Human Resource Planning. 14M

**UNIT-III**

5. What are the various sources of recruitment? Discuss their relative merits and demerits? 14M

**OR**

6. What do you understand by Selection? Explain in brief the selection procedure? 14M

**UNIT-IV**

7. What are the objectives of Training? Explain the need for training in an industrial organization? 14M

**OR**

8. Define Executive Development? What are its objectives? Discuss? 14M

**UNIT-V**

9. What do you mean by Performance Appraisal? Discuss the three purposes performance appraisal can meet? 14M

**OR**

10. What are the different methods of Performance Appraisal – Discuss in detail? 14M

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