

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VI EXAMINATION – WINTER 2025

Subject Code:3161303

Date:19-11-2025

Subject Name:Estimation , Specifications and Project Management

Time:02:30 PM TO 05:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		Marks
Q.1	(a) Estimate the quantity for Excavation from Figure 1.	03
	(b) Estimate the quantity for R.C.C. work from Figure 1.	04
	(c) Estimate the quantity for P.C.C. work, Brick masonry work and Plaster work from Figure 1.	07
Q.2	(a) Explain the factors affecting Rate analysis.	03
	(b) Enlist various type of masonry and explain any one in detail.	04
	(c) Write Specifications of Brick work I Class in cm (1:6).	07
	OR	
	(c) Write Specifications of 20 mm sand faced cement plaster.	07
Q.3	(a) Analyze the essential qualities of a good estimator.	03
	(b) Create Rate analysis for the Excavation.	04
	(c) Create Rate analysis for PCC (1:4:8) below column footing in foundation.	07
	OR	
Q.3	(a) Enlist the types of cost estimates.	03
	(b) Analyze the factors affecting to the Rate analysis.	04
	(c) Create Rate analysis for 1 st class brickwork in cm (1:6).	07
Q.4	(a) Describe item rate contract.	03
	(b) What is unbalanced tender?	04
	(c) Describe Lump sum contract along with its advantages and disadvantages.	07
	OR	
Q.4	(a) Explain security deposit in the tender.	03
	(b) What are general provisions of condition of contract?	04
	(c) Classify the types of tender and give example of them.	07
Q.5	(a) Define (1) head Event (2) Tail Event (3) Dual Event	03
	(b) Define (1) Parallel activity (2) Serial Activity (3) Preceding Activity (4) Successor Activity	04
	(c) Explain the basic functions of Project Planning.	07
	OR	
Q.5	(a) Explain about PERT for Project Management.	03
	(b) Explain about CPM for Project Management.	04
	(c) Create critical path for the project completion time using CPM from fig 2.	07

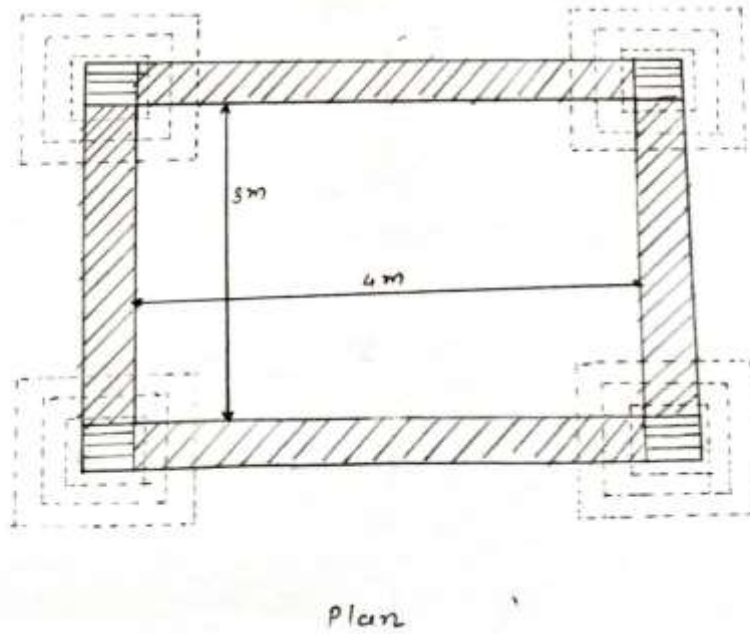
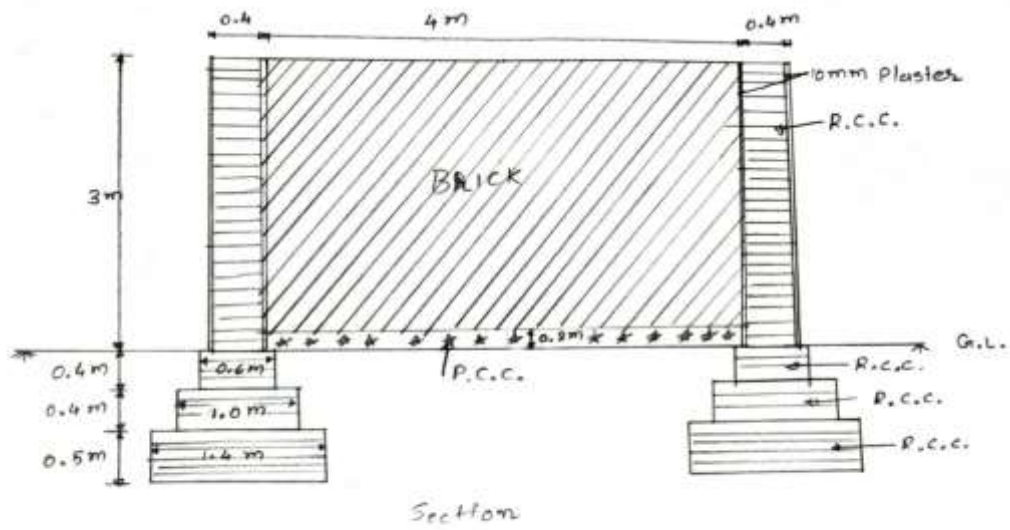


Figure 1: Section and Plan view of Water Tank

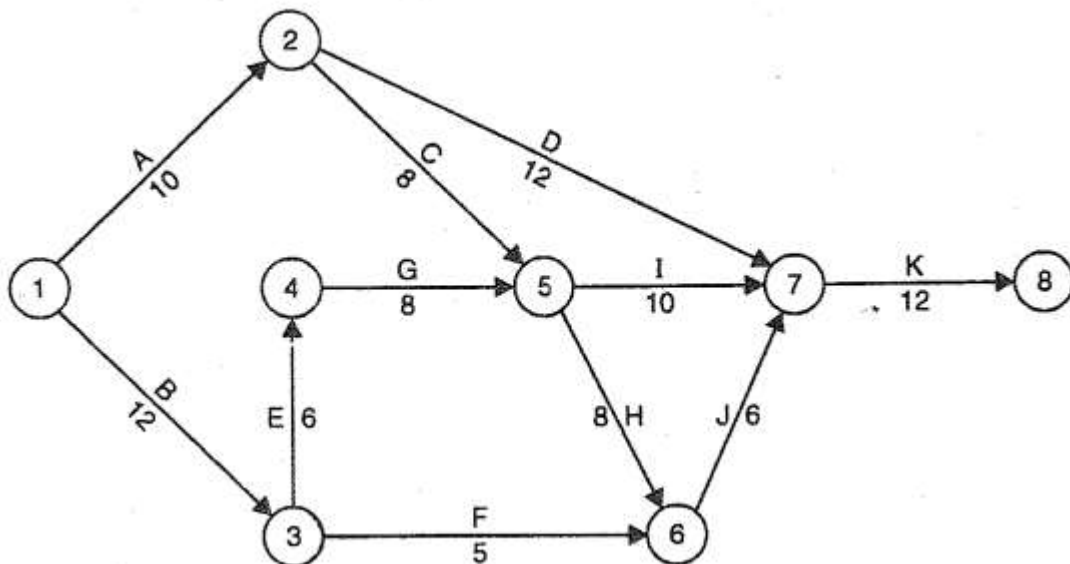


Figure 2: Project Activity Path

*****All the Best*****