

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) EXAMINATION – WINTER 2022****Subject Code:3161303****Date:15-12-2022****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 RCC from Figure 1. | 04 |
| | (c) Estimate the quantity for Brick work and Plaster work from Figure 1. | 07 |
| Q.2 | (a) Estimate the quantity for PCC from Figure 1. | 03 |
| | (b) What is Estimation? What is importance of the Estimation? | 04 |
| | (c) Write Specifications of Brick work I Class in cm (1:6). | 07 |
| | OR | |
| | (c) Write Specifications of excavation. | 07 |
| Q.3 | (a) What is Tender? What is importance of the Tender? | 03 |
| | (b) Enlist various type of foundation and explain any one with neat sketch. | 04 |
| | (c) Explain various types of contract. | 07 |
| | OR | |
| Q.3 | (a) What is contract? What is importance of the contract? | 03 |
| | (b) Explain rubble masonry with neat sketch. | 04 |
| | (c) Explain various types of Tender. | 07 |
| Q.4 | (a) What do you mean by Activity and Event in the project management? | 03 |
| | (b) Write Rate analysis for the Sand filling in plinth. | 04 |
| | (c) Write Rate analysis for the BBCC (1:6:12). | 07 |
| | OR | |
| Q.4 | (a) What do you mean by dummy activity in the project management? | 03 |
| | (b) Write Rate analysis for the Excavation for foundation in ordinary soft soil. | 04 |
| | (c) Write Rate analysis for the 12 cm RCC slab (1:2:4) with steel reinforcement. | 07 |
| Q.5 | (a) Explain factors affecting Project planning. | 03 |
| | (b) Difference between PERT and CPM. | 04 |
| | (c) From the data of table 1, create critical path bar chart. | 07 |
| | OR | |
| Q.5 | (a) Explain four methods of project planning. | 03 |
| | (b) Differentiate between Milestone chart & Bar chart. | 04 |
| | (c) From the data of table 1, prepare the network diagram and create critical path. | 07 |

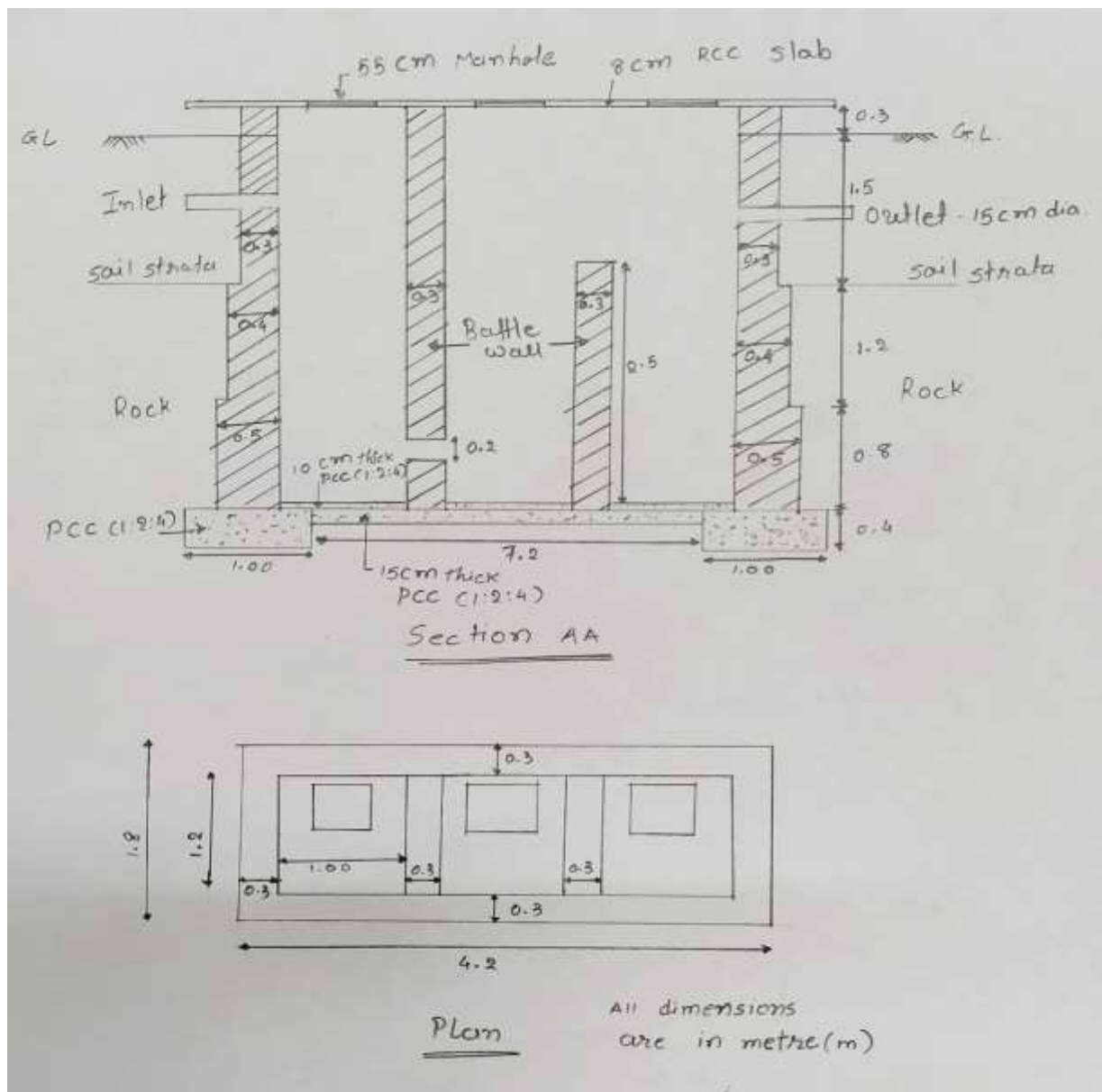


Figure 1: Section and Plan view of Septic tank with three compartments

Table 1: Data for Network diagram and Bar Chart

Activity	Duration in days	Preceding activity	Following activity
A	4	None	C, D
B	5	None	D
C	7	A	E, F
D	6	A, B	G
E	8	C	None
F	5	C	None
G	6	D	None

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