

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI EXAMINATION – SUMMER 2025

Subject Code: 3161303

Date: 26-05-2025

Subject Name: Estimation , Specifications and Project Management

Time: 10:30 AM TO 01:00 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

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|------------|-----|--|-----------|
| <b>Q.1</b> | (a) | Enlist types of shallow foundation and describe isolated sloped footing in detail.   | <b>03</b> |
|            | (b) | Differentiate between Long-wall Short-wall and Centre Line method.   | <b>04</b> |
|            | (c) | Illustrate different types of Rubble Masonry.  | <b>07</b> |
| <b>Q.2</b> | (a) | Give the market rates for following materials<br>i. Cement      ii. Steel      iii. Red Brick                                | <b>03</b> |
|            | (b) | A local municipal corporation wants to construct overhead water tank with 10,00,000 litter capacity. Prepared tender notice. | <b>04</b> |
|            | (c) | State the different types of contracts, explain any one in detail.   | <b>07</b> |
|            |     | <b>OR</b>  |           |
|            | (c) | State the factors affecting cot of project.  | <b>07</b> |
| <b>Q.3</b> | (a) | Write the essential requirement of Contract.   | <b>03</b> |
|            | (b) | State the objectives of estimation.  | <b>04</b> |
|            | (c) | Write the detail specification for 1 <sup>st</sup> class brick masonry work  | <b>07</b> |
|            |     | <b>OR</b>  |           |
| <b>Q.3</b> | (a) | Discuss the security deposit and earnest money deposit.  | <b>03</b> |
|            | (b) | Illustrate SOR.  | <b>04</b> |
|            | (c) | Write the detail specification for PCC work in 1:4:8 proportion.   | <b>07</b> |
| <b>Q.4</b> | (a) | Write short notes on Arbitration.  | <b>03</b> |
|            | (b) | Describe lump sum contract.  | <b>04</b> |
|            | (c) | Prepare the Rate Analysis for RCC work in 1:1.5:3 proportion.  | <b>07</b> |
|            |     | <b>OR</b>  |           |
| <b>Q.4</b> | (a) | Discuss work charge establishment.   | <b>03</b> |
|            | (b) | Describe unit rate contract.   | <b>04</b> |
|            | (c) | Prepare the Rate Analysis for single coat smooth plaster in 1:3 proportion.  | <b>07</b> |
| <b>Q.5</b> | (a) | State the importance of project scheduling.  | <b>03</b> |
|            | (b) | Illustrate project networking with example.  | <b>04</b> |
|            | (c) | Write short notes on Mile stone chart and Barr chart.  | <b>07</b> |
|            |     | <b>OR</b>  |           |
| <b>Q.5</b> | (a) | State the objectives of project planning.  | <b>03</b> |
|            | (b) | Illustrate dummy activity in project network.  | <b>04</b> |
|            | (c) | Write short notes on PERT and CPM.   | <b>07</b> |

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