

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2022****Subject Code:3171506****Date:16/06/2022****Subject Name: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) What is a project? Differentiate between project Management and general Management. | 03 |
| | (b) Explain the life cycle of project. | 04 |
| | (c) Explain project portfolio process. | 07 |
| Q.2 | (a) What are responsibilities of a project manager? | 03 |
| | (b) Write short note on project team. | 04 |
| | (c) Explain work breakdown structure of project. | 07 |
| | OR | |
| | (c) Explain the planning process in project execution. | 07 |
| Q.3 | (a) What are different budgeting methods? | 03 |
| | (b) Explain cost estimation in project. How one can improve it? | 04 |
| | (c) Explain budget uncertainties and risks associated with it. | 07 |
| | OR | |
| Q.3 | (a) What is auditing of project? | 03 |
| | (b) Explain evaluation of project. | 04 |
| | (c) Explain steps of simulation process. Write advantages and disadvantages of it. | 07 |
| Q.4 | (a) What is expected value of perfect information (EVPI)? | 03 |
| | (b) Write short note on FMEA. | 04 |
| | (c) Explain quantitative risk analysis. | 07 |
| | OR | |
| Q.4 | (a) What is AON and AOA diagrams? | 03 |
| | (b) Differentiate between CPM and PERT. | 04 |
| | (c) Explain with example Fulkerson's rule. | 07 |
| Q.5 | (a) What is Monte Carlo Simulation? | 03 |
| | (b) Explain the Gantt Chart. | 04 |
| | (c) Consider the following given data and based on that find out critical path for the given project: | 07 |

| Activity | Time (days) |
|----------|-------------|
| 1-2 | 6 |
| 1-3 | 9 |
| 2-4 | 3 |
| 3-4 | 4 |
| 3-5 | 8 |

| | |
|-----|----|
| 2-6 | 12 |
| 4-6 | 7 |
| 5-6 | 1 |

OR

- Q.5** (a) What are factors affecting resource loading? **03**
 (b) Explain different types of data collection. **04**
 (c) The duration for each activity and their immediate predecessors are shown below. **07**

| Activity | A | B | C | D | E | F |
|--|---|---|---|-----|---|-----|
| Predecessor | - | - | - | A,B | B | B,C |
| Duration (days) | 5 | 3 | 7 | 8 | 4 | 5 |
| Draw the Network and Find the critical path. | | | | | | |
