

Mechanical/Automobile Q.P. Code : 727200

(3 Hours)

[Total Marks : 80

- N.B. : (1) Question No.1 is compulsory.
 (2) Attempt any Three questions out of remaining Five questions.
 (3) Figures to right indicate full marks.
 (4) Assume suitable data if necessary.
 (5) Notations carry usual meaning.

1. Write short note on the following (any Four) : 20
- (a) Project Management Information System
 - (b) Work break down structure
 - (c) Role of Project manager
 - (d) Risk Register
 - (e) Gantt chart

2. (a) Following are the manpower requirements for each activity in a project 10

| Activity | Normal Time | Man Power Required |
|----------|-------------|--------------------|
| 0 - 1 | 2 | 4 |
| 1 - 2 | 3 | 3 |
| 1 - 3 | 4 | 3 |
| 2 - 4 | 2 | 5 |
| 3 - 5 | 4 | 3 |
| 3 - 6 | 3 | 4 |
| 4 - 7 | 6 | 3 |
| 5 - 7 | 6 | 6 |
| 6 - 8 | 5 | 2 |
| 7 - 9 | 4 | 2 |
| 8 - 9 | 4 | 9 |

- (a) Draw the network diagram of the project activities
- (b) Rearrange the activities suitably for reducing the existing total man power requirement.
- (b) What are the Non-numeric models of project selection? Explain in brief. 5
- (c) How concurrent engineering approach is useful in Project Management? 5

3. (a) Explain project life cycle and phases. 10
(b) What is a Project Portfolio Process? Explain different steps involved in this. 10
4. (a) A consulting project has an actual cost of ₹35000, Scheduled cost ₹27000 and value of completed work of ₹31000. Find the Schedule and Cost Variance Also Find SPI and CPI. 5
(b) What are the different ways of Closing a Project? 5
(c) Explain how a project is controlled and also explain types of control processes. 10
5. (a) Explain Top down and Bottom Up Budgeting in project planning. 5
(b) Draw an Earned value chart and describe the three variances of it and explain their significance. 10
(c) Explain Planning - monitoring - controlling cycle for project execution. 5
6. (a) Explain project management template with a sample template sheet. 10
(b) What is a Risk breakdown structure? How the impact scales are defined for various project objectives? 10
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