INSTRUCTIONS:
1. From Part 'A', answer four questions (Compulsory). Each sub-question carries 01 mark. Total: Marks 32
2. From 'B', answer any 3 out of 5 questions. Each question carries 16 marks. Total Marks: 48
3. Part 'C', is a case study with sub questions (Compulsory) Total Marks: 20
4. Use of calculator and/or mathematical table is permitted. Graph sheet can be used wherever necessary.

PART A

Q. 1. Fill in the blanks. (Do not reproduce the sentence)

a) Projects are _______ for future benefits.
b) The output of a _______ is always more than the combined output of its parts.
c) The ultimate manageable units in a project are called __________.
d) A _______ activity does not consume time or resource.
e) Matrix organization is a combination of ____ and functional organization.
f) Resource _______ helps an organization to make effective use of available resources to the maximum.
g) The S curve is a graphical depiction of project ______.
h) Organization's activities, services and products that interact with environment are called environmental ______.

Q. 2. State True or False (Do not reproduce the sentence)

a. Project objectives are always social in nature.
b. The success of a project depends on the qualification of the project manager.
c. Insurance is a method of risk transfer.
d. Precedence diagram represents interdependency better than network.
e. CPM is event oriented whereas PERT is activity oriented.
f. Change control is a dynamic technique to control a project.
g. Functional structure organization is task-oriented & team oriented.
h. The object of project crashing is to reduce project duration while minimizing project cost.

Q. 3. Expand the following

a) PACE
b) PERT
c) TEFR
d) PDM
e) FOB
f) IRR
g) WBS
h) EMS
Q.4. Choose the correct answer from the multiple choices.

1. All are elements of a project except
   a) One time activity               b) defined start and ending date
   c) Involves large investments     d) Revenue generation from day one

2. Which is not a phase in project lifecycle
   a) Pre-investment               b) Investment
   c) Maturity                     d) Termination

3. All are generic risk control measures except
   a) Risk rejection                b) Risk avoidance
   c) Risk transfer                d) Risk acceptance

4. The project planning technique used to depict time and quantity relation is
   a) Network analysis             b) Line of balance
   c) Flow chart                   d) Gantt chart

5. DPR stands for
   a) Defined Project Rules        b) Draft Project Report
   c) Daily Project Return         d) Detailed Project Report

6. Which of the following is not a part of the 3e’s of matrix organization
   a) efficiency                 b) effectiveness
   b) economy                    d) empowerment

7. A technique that is not useful in project monitoring and control is
   a) S-curve                     b) Pie chart
   c) Milestone analysis          d) Earned value analysis

8. The decision model that gives equal opportunity to each strategic decision is
   a) Hurwiz criterion            b) Laplace criterion
   c) Maximax criterion          d) Minimax regret criterion

PART B

(Answer any three. Each question carries 16 marks)

Q.5. a) Explain in your own words the term project and project management. (8 marks)

b) The role of project consultant and contractors are critical for the success of a project. Elaborate your answer citing examples. (8 marks)

Q.6. a) What is project risk? What are its control methods? (8 marks)

b) Explain the three phases in project management (8 marks)
Q.7. a) Compare different types of project organizations. (8 marks)
   b) Explain resource leveling and the techniques used in resource leveling. (8 marks)

Q.8. a) Differentiate between S curve and Earned Value Analysis (8 marks)
   b) Discuss the steps involved in closing a project. (8 marks)

Q.9. Write short notes on any four (4x4 marks)
   a) Matrix organization
   b) Line of balance
   c) Project life cycle
   d) Network analysis
   e) Control of quality in project

PART C (compulsory) 20 marks

Q.10. Data for a project is given below.

<table>
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<th>Activity</th>
<th>Predecessor</th>
<th>Time (in weeks)</th>
<th>Cost (in Rs)</th>
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<td>Crash</td>
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<tr>
<td>I</td>
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</table>

Questions:
   a) Draw a project network diagram. (5 marks)
   b) Find the critical path and its duration. (4 marks)

For a deadline of 17 weeks completion of the project, find out
   c) The activities that will be crashed (4 marks)
   d) The additional costs incurred (4 marks)
   e) Critical activities after crashing (3 marks)

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