INSTRUCTIONS:
1. From Part ‘A’, answer four questions (Compulsory). Each sub-question carries 01 mark. Total: 32 Marks
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.
5. Please read the instruction on the answer sheet.

PART A
(32 x1 = 32 marks)

Q. 1. Select the correct answer from the multiple choices.
   i) All are elements of Line of Balance except
      a) Objective chart             b) Plan of operation
      c) Measurement chart           d) Progress chart
   
      ii) Which of the following is not a part of project life cycle
            a) Pre-investment phase       b) Investment phase
            c) Monitoring phase           d) Termination

   iii) DPR stands for
         a) Planning                    b) Measurement
            c) Control                   d) Improvement

   iv) The LEAST preferred attribute for a project manager is
        c) Experienced and qualified   b) A good manager rather than a leader
        d) Good communicator           d) A good planner and a decision maker

   v) Critical path in a project network is
        a) Path having maximum duration of activities
        b) Path that contains maximum number of activities
        c) Path that consumes largest amount of resources
        d) Path for which the cost estimate is the maximum

   vi) From pricing point of view projects are grouped into all of the following except:
        a) Mega projects
        b) Major projects
c) Combo projects  

d) Medium projects

vii) Which of the following is not identified with IRR

a) Considers time value of money  

b) Based on accounting profit  

c) Measures efficiency of investment  

d) Measures wealth maximization capability of a project

viii) All are forms of project organization except

a) Functional organization  

b) Divisional organization  

c) Matrix organization  

d) Learning organization

Q.2. Fill in the blanks. (Please do not reproduce the statement)

a) The ____________ approach represents a balanced thinking on organization and management.

b) A plan expressed in terms of money is called ____________

c) A group tends to become a team when the degree of ____________ is high

d) Reducing project duration by allocating additional resources to various activities is known as ____________

e) Strategic investment decisions are guided by three criteria namely Profitability, ____________, and Growth.

f) A disagreement between two individuals leads to a ____________ in project.

g) A decision making under uncertainty that tries to maximize the minimum payoff is known as ____________ criterion.

h) Float in a network is related to ____________

Q.3. Please state True of False

a. Fulkerson rule is associated with cost estimation of projects.

b. Free Float is the difference between Latest start time and Early start time of an activity.

c. A squared network is drawn to scale

d. CPM model is activity oriented and probabilistic in nature.

e. Budget is prepared when the project moves to the execution phase

f. Environmental impact means the activities, services and products that interact with the environment.

g. Schedule variance is the difference between budgeted cost of work performed and the actual cost of work scheduled.

h. If cost variance is positive and schedule variance is positive, it means that the project is within budget and ahead of schedule.
Q.4. Expand the following
   a) EIA
   b) PACE
   c) GERT
   d) PBP
   e) RADR
   f) WDM
   g) CADD
   h) BCTW

PART-B

(Attempt any three. Each question carry 16 marks)

Q.5. Describe briefly the requirements of a project proposal highlighting the requirements of a bankable project.

Q.6. Discuss various methods for evaluating project profitability highlighting the advantages and disadvantages of each.

Q.7. a) Discuss the importance of audit and review in project management
     b) What is decision tree? How it helps in decision making.

Q.8. Distinguish between
     a) PERT & CPM
     b) Product life cycle and project life cycle
     c) Project management & production management
     d) Maximin rule and Minmax rule for decision making.

Q.9. Write short notes on any four
     a) Matrix organization
     b) Resource leveling
     c) Environment Management System
     d) Benchmarking
     e) Gantt charts
1. Q.10. The table below shows a project consisting of 9 activities along with its three time estimates.

<table>
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<th>2-3</th>
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<td>29</td>
<td>9</td>
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</tbody>
</table>

a) Draw the project network diagram. (5 marks)
b) Find the critical path and the time taken for completing the project. (3 marks)
c) Calculate early start time, early finish time, latest start time, latest finish time and float for all the activities. (7 marks)
d) What is the probability of completing the project in 40 days? (5 marks)

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