



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management

June 2018

Paper-18.A PROJECT MANAGEMENT

DATE: 17.06.2018
Time: 2.00 p.m. to 5.00 p.m.

MAX. MARKS: 100
Duration : 03 hrs.

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

(1 mark each Total = 32 marks)

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) TEFM
- 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

48 marks

(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.

Activity	Predecessor	Time (in weeks)		Cost (in Rs)	
		Normal	Crash	Normal	Crash
A	-	3	2	18000	19000
B	-	8	6	600	1000
C	B	6	4	10000	12000
D	B	5	2	4000	10000
E	A	13	10	3000	9000
F	A	4	4	15000	15000
G	F	2	1	1200	1400
H	C,E,G	6	4	3500	4500
I	F	2	1	7000	8000

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)
