



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management
Paper-18.A (New) & 17.A (Old)
Project Management

Dec 2012

DATE: 15.12.2012

MAX. MARKS: 100

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

Duration : 03 hrs.

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

(1 x32 = 32 marks)

Q. 1 Expand the following

1. PACE
2. PLC
- 3 . CPM
4. NPV
- 5 . LOB
6. WBS
7. ARR
8. CADD

Q. 2 Fill in the blanks

1. PERT stands for Program evaluation and Review -----
2. ----- is statistical analytical method to monitor the performance of a group of people working on a project
3. The demands for a product generally tends to follow a predictable pattern called the -----
4. Total Cost of the project is sum of ----- and Indirect Cost
5. The various stages in Product Life Cycle are Introduction, -----, Maturity and Decline.

6. The only drawback of ----- Chart is inter dependency of various activities cannot be shown fully
7. ----- is the spare of time (length of time) with which the investment made will be recovered by the net returns of the projects
8. Matrix Organization is a combination of the Line and the ----- Organization

Q. 3 Match the following

- | | |
|----------------------------------|---|
| 1) Team Synergy- | a) "Right people on right problem" |
| 2) Focus Team aspect | b) Technique of reducing project duration by allocating resources |
| 3) Project Crashing | c) one plus one is always greater than two |
| 4) Functional Organization | d) Ishikawa Diagram |
| 5) ROI | e) Detailed Project Report |
| 6) Cause and Effect diagram | f) Return on Investment |
| 7) DPR | g) ISO 14001 |
| 8) Environment Friendly Standard | h) Hierarchical Organization |

Q. 4 Find True or False of the following

1. A project is a task or a group of tasks, consisting of complex non-routine activities that must be completed with given set of resources and within a given time limit
2. The line organization represents the structure in a direct horizontal relationship through which authorities flows
3. Expected Time (te) in PERT is $te = (to + 4tm + tp) \div 6$
4. ISO 14040 is a standard for Specifications and Guidelines for EMS
5. In GROWTH stage of product Lifecycle, the manufacturers introduce new models or adopt new technique for production of products
6. Line of balance is an extension of Gantt chart
7. Functional Organization is also called as Matrix Organization
8. Contract planning has to be done at the project schedule stage

PART B (ANY THREE)

(16 X3 = 48 marks)

- Q. 5** a) Describe the relationship between Project Management and Line Management
b) Discuss the different types of project organizations with their merits?

Q. 6 Write short notes on (any two)

1. a) LOB
b) CPM
2. a) Network Diagram
b) ISO 14001 Standards
3. a) Decision Tree
b) Cause Effect Analysis
4. a) Benchmarking in Project Management.
b) Quality Circle

- Q.7** a) Describe the important phases of Product Life Cycle
b) What are the different problem-solving technique and explain any one in detail

- Q. 8** A project involving the installation of a computer system consists of eight activities.
The immediate predecessor and activity time in weeks are shown below:

Activity	Immediate Predecessor	Time (weeks)
A	-	3
B	-	6
C	A	2
D	B,C	5
E	D	4
F	E	3
G	B,C	9
H	F,G	3

- a. Draw the PERT/CPM network for this project.
- b. What are the critical path activities?
- c. What is the expected project completion time?

Q. 9 Distinguish between

- a) ISO versus ISI Marking
- b) PERT versus CPM

PART C

(20 marks)

Q. 10

Refer the given table and answer the following questions:

Activity	Dependencies	Duration
A	-	2
B	-	2
C	-	4
D	-	8
E	A,F	3
F	B	4
G	C,D,E	3
H	D,G	2
I	E	7
J	G	6

- A) What is the minimum time required to complete the project?
- B) What is the Critical Path for this project?
- C) What is the Early Start (ES) date for activity E?
- D) What is the Late Start (LS) date for activity A?
- E) What is the Late Finish (LF) date for activity F?
- F) What is the Total Float / Slack for activity H?
- G) What is the Free Float / Slack between activities D & G?
