



**INDIAN INSTITUTE OF MATERIALS MANAGEMENT**  
**Post Graduate Diploma in Materials Management**  
**Paper-18.A Project Management**

**Dec 2018**

**DATE: 30.12.2018**  
**Time: 2.00 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.

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**PART A**  
(Compulsory)

(1 mark each Total = 32 )

**Q.1. Select the right answer form the multiple choices**

1. All are characteristics of a project except
  - a) One time activity
  - b) Low investments
  - c) Wide variety of skills
  - d) Time limit
2. Which of the following is not an element of LOB?
  - a) Objective chart
  - b) Plan of operation
  - c) Flow chart
  - d) Analysis of the progress chart
3. All are characteristics of PERT except
  - a) Probabilistic
  - b) Three time estimates
  - c) Event oriented
  - d) Developed by Du Pont
4. Which of the following is not a part of conversion process?
  - a) Risks
  - b) Inputs
  - c) Outputs
  - d) Feedback/controls
5. All are abilities of a project manager except
  - a) Manager & leader
  - b) Good communicator
  - c) Ability to escalate problems as it arises
  - d) Good trouble shooter
6. Risk management include all of the following except
  - a) Planning of risk
  - b) Identification of risks
  - c) Evaluation of risks
  - d) Control of risks
7. PDM stands for
  - a) Plan Do Monitor
  - b) Project Development Monitoring
  - c) Precedence Diagram Method
  - d) Project Decision Model
8. The three 'e's of matrix organization are
  - a) Evaluation, efficiency and effectiveness
  - b) Employee, efficiency and economy
  - c) Efficiency, effectiveness, and economy
  - d) Efficiency, effectiveness and empathy

**Q.2. Fill in the blanks. (Do not reproduce the sentence)**

- a) EIA is a process of determining the impacts of project on the \_\_\_\_\_ resources.
- b) The \_\_\_\_\_ approach is based on inter relationship and interdependency among organizational parts.
- c) \_\_\_\_\_ is the probability of failure to accomplish an objective.
- d) A \_\_\_\_\_ network is drawn to scale.
- e) The activities that are emerging from a node are called \_\_\_\_\_ activities.
- f) The law of \_\_\_\_\_ states that the output of a system is always more than the combined output of its parts.
- g) \_\_\_\_\_ costs are the resources that re expended on the project services.
- h) \_\_\_\_\_ is an off spring of disagreement between individuals..

**Q.3. State True or False (Do not reproduce the sentence)**

- a) A scalar process suggests that there is a single head who commands it.
- b) Projects are investment for future benefits.
- c) Activities consume resources.
- d) Three types of constraints that a project manager comes across during project implementation are classified as mandatory, discretionary, revolutionary.
- e) Cost plus contracts are used when there is some level of uncertainty in the project cost.
- f) S curve is produced using sigmoid formula.
- g) LCA stands for long activity automation.
- h) ISO 14040 is a standard for environment labeling.

**Q.4. Match A and B**

A	B
i. Risk	a) Monetary statement of a plan
ii. Fulkerson rule	b) Long term engagement
iii. Budget	c) Uncertain event
iv. Retainer contracts	d) Numbering of events
v. Auto desk	e) Activity
vi. Hurwitz criterion	f) task oriented
vii. Pure project structure	g) coefficient of optimism
viii. Float	h) CADD

**PART B**

**48 marks**

**(Answer any three. Each question carries 16 marks)**

- Q.5. a)** Define the term project. Substantiate project as a conversion process.  
**b)** Explain system approach to project management.

- Q.6. a)** What is the process of risk management?  
**b)** What are the objectives of cost estimation?

- Q.7. a)** What are the various project organizations?  
**b)** Explain various contract types with examples.

**Q.8.** Differentiate between

- a) Production management and project management
- b) Risk avoidance and risk acceptance
- c) CPM and PERT
- d) Environmental aspects and Environmental impacts

**Q.9.** Write short notes on any four

- a) Approaches to project control
- b) S curve
- c) Steps in project closure
- d) Selection criteria for consultants
- e) Project planning

**PART C (compulsory)**

**20 marks**

**Q.10. Data for a project consisting of 12 activities is given below.**

Activity	Predecessor	Time (in weeks)		
		a	b	c
A	-	6	7	8
B	A	4	4	4
C	A	5	6	8
D	B	8	10	10
E	B	7	10	15
F	C	9	9	13
G	C	7	7	7
H	D	4	6	8
I	E,F	6	9	11
J	G	8	9	10
K	H,I,J	3	5	6

**Questions:**

- a) Calculate expected time of all the activities
- b) Calculate the variance of all the activities
- c) Draw the network diagram
- d) Find the critical path and its duration
- e) Tabulate earliest start time, earliest finish time, latest start time, latest finish time and float of all activities.

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