



**INDIAN INSTITUTE OF MATERIALS MANAGEMENT**  
**Post Graduate Diploma in Materials Management -3 years**  
**Graduate Diploma in Materials Management**

**Dec 2019**

**PAPER No. 8**  
**Operations Management**

**Date: 24.12.2019**  
**Time: 10.00 a.m to 1.00 p.m**

**Max. Marks: 100**  
**Duration: 3 Hrs.**

**Instructions:**

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|--|-------------------------|
| 1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark.                         | <b>Total: 32 Marks</b>  |
| 2. From Part B – Answer any 3 questions. Each sub-question carries 16 marks.                                   | <b>Total : 48 Marks</b> |
| 3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions. | <b>Total: 20 Marks.</b> |

**Part – A**

**32 Marks**

**(Attempt all questions. Each sub question carries 1 mark)**

**Q. 1 Select the correct option:**

**(8 marks)**

- a. If an operator works with 100% efficiency then actual time will be equal to:
  1. Normal time.
  2. Standard time.
  3. Both of the above.
  4. None of the above.
- b. Which of the following is NOT associated with the work of Taylor?
  1. A one-best way of doing things.
  2. The hierarchal needs of labor.
  3. The scientific method.
  4. Clear distinctions between the responsibilities of labor and management.
- c. Under VED classification, 'V' stands for
  1. Vital.
  2. Value.
  3. Virtual.
  4. None of the above.
- d. Quality implies
  1. Conformance to specifications
  2. Fulfillment of customer needs
  3. Fitness for use
  4. Any of the above
- e. Fish-bone diagram is also known as
  1. Histograms
  2. Cause and effect diagrams
  3. Scatter diagrams
  4. Check sheets
- f. \_\_\_\_\_ is suitable for a narrow range of standardised products in high volumes.
  1. Job shop
  2. Batch processing
  3. Assembly line
  4. Any of the above.
- g. Under ABC classification, 'A' group comprises of items that constitute
  1. 10% of the inventory by volume, but cost 70%.
  2. 20% of the inventory by volume, and cost 20%.
  3. 70% of the inventory by volume, but cost 10%.
  4. None of the above.

h. Which of the following types of processes will be used to produce gasoline and petroleum products?

1. Job Shop
2. Batch
3. Assembly Line
4. Continuous Processing

**Q. 2 Match the following:**

**(8 marks)**

	Column "A"		Column "B"
a.	FSN classification	i.	Juran
b.	Capability to deliver what the customer wants within a lead time shorter than the competitors	ii.	Inventory control technique
c.	Pareto chart	iii.	Standardized products
d.	Product layout	iv.	External flexibility
e.	PERT	v.	Boredom of workers
f.	Services	vi.	Project management technique
g.	Dr. Karou Ishikawa	vii.	Low fixed cost
h.	Specialization	viii.	Cause-effect diagram

**Q.3 State True or False:**

**(8 marks)**

1. Services cannot be inventoried, products can be inventoried.
2. Availability of raw materials is one of the factors considered while taking location decision.
3. Jurán is considered father of Japanese Quality Management System.
4. Warehousing OM transformations are referred to as exchange transformations.
5. Assignable causes are those that occur due to random events that cannot be controlled.
6. In services, service production and consumption are often simultaneous.
7. Aggregate planning is not one of the responsibilities of a production manager.
8. Paints are produced using batch processing.

**Q.4 Give the full forms:**

**(8 marks)**

a) SCM	b) FSN	c) UCL	d) FMS
e) CNC	f) PERT	g) TPM	h) PDCA

Part – B

**48 marks**

**(Answer any 3 questions out of 5 questions. Each sub-question carries 16 marks.)**

**Q. 5** Discuss the evolution of the discipline of production management. Differentiate between production management and operations management. **[16 marks]**

**Q. 6** Distinguish between the terms corporate strategy and operations strategy. **[16 marks]**

**Q. 7** What are the various issues that need to be considered while devising an effective materials handling system.

**[16 marks]**

**Q. 8 a).** State the objectives of production activity control. **[8 marks]**

**b).** What do you understand Kanban Cards? **[8 marks]**

**Q.9** Write short notes on **ANY FOUR** of the following: **[ 4 X4= 16 marks]**

- a. Work study
- b. Capacity planning
- c. ABC analysis
- d. JIT
- e. Enterprise resource planning

Part – C (compulsory)

**20 marks**

**Q.10** Discuss ways to apply the concept of total quality management in a manufacturing organization.

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