



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM
Post Graduate Diploma in Materials Management - 2 years
PAPER No. 10(enrolment code- PMM, PSM, CMM,CSM)
PAPER No. 8 (enrolment code –CPM)
Operations Management

JUNE 2025

Date: 19.06.2025

Time : 10.00 am to 1.00 pm

Max. Marks : 70

Duration : 3 Hrs.

Instructions:

1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. **Total: 20 Marks**
2. From Part B – Answer any 3 questions out of 5 questions. Each question carries 10 marks. **Total :30 Marks**
3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions
Total: 20 Marks

Part – A

[20 Marks]

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

Q1 Select the right answer from the given options.

[5 marks]

- a) Which of the following is **NOT** an objective of operations management?
(i) Customer satisfaction (ii) Timeliness (iii) Profitability (iv) Employee punishment
- b) Distinct characteristic of services is -----
(i) Intangibility (ii) Inseparability (iii) invariability (iv) Perishability
- (c) Which of the following is true?
(i) Corporate strategy is shaped by functional strategies
(ii) Corporate mission is shaped by corporate strategy
(iii) Functional strategies are shaped by corporate strategy
(iv) External conditions are shaped by corporate mission
- (d) ----- is the system in which items are processed in lots
(i) Job production (ii) Batch production (iii) Mass production (iv) Flow production
- (e) ----- is a time table for performing activities utilizing resources or allocating activities.
(i) Scheduling (ii) Reporting (iii) Engineering (iv) Communication

Q2 Match the following –

[5 marks]

	Column A		Column B
1.	Control charts	A	High Labor intensity
2.	Mass service	B	ISO 9000: 2015
3.	Line Balancing	C	Shewhart
4	QMS	D	Service Organization
5	Customization	E	Assembly lines

Q3 Write the full form of –

[5 marks]

- a. FTA b. CRP c. QFD d. SLA e. PERT

Q4 State “true” or “False”

[5 marks]

- a) Manufacturing organizations generally produce standardized products
- b) The correct sequence of stages in a product life cycle is introduction-maturity-growth-decline.
- c) The layout in which machines are placed on the basis of their functions is known as product layout
- d) Internal failure costs are those costs that are incurred after the product is delivered to the end customer.
- e) MRP helps to improve the performance of production.

PART B

[30 marks]

(Attempt any 3. Each question carries 10 marks)

Q 5

- a) The main motive of Operations Management is to improve productivity while minimizing cost. In this context discuss the objectives of operations management.
[5 marks]

- b) What do you understand by Operations Strategy? Discuss the issues to be addressed in operations strategy. [5 marks]

Q 6

- a) Explain cellular manufacturing approach in managing manufacturing operations. What are the benefits of cellular manufacturing? [5 marks]
 b) What is a service blueprint? Explain the components of service blueprint. [5 marks]

Q 7

- a) Explain the factors to be considered while carrying out capacity planning exercise. [5 marks]
 b) The cost of quality is wrongly understood as the amount spent on producing quality products and services. Explain this statement and identify the different types of costs of quality. [5 marks]

Q 8

- a) The table below shows the X and Y coordinates of seven retail locations of a retail chain. Information regarding the quantity to be shipped to each of the seven locations is given in the table. Using the center of gravity method, identify the coordinates of the optimal location for the Facility. [5 marks]

Retail Outlet	X	Y	Volume
A	4	10	80
B	3.5	15	100
C	4	6	120
D	10	2	130
E	16	6	100
F	8	5	150
G	14	13	90

- b) Discuss the role of analytics in the decision-making process. [5 marks]

Q 9 Write short notes on: (Any two)

[2 x 5 = 10 marks]

- a) Cloud computing
 b) Scope and applications of operations research
 b) Ishikawa Diagram
 c) Data Mining

PART –C (Compulsory) [20 marks]

Q 10 Make a careful study of the following case and answer the questions which follow.

Sakshi Garments Ltd. was established in 1975 at Chennai. It is a 100% export oriented unit having a similar unit at Dehradun. The company manufactures readymade garments and the unit employed 500 workers. The garment unit consists of measurement, cutting, finishing, and packaging sections. Most of the processes have been automated in recent years.

The unit is headed by Vice President, Mr. A K Ghosh. In December 1996, the company saw a decline in the profitability. It was found that overtime cost had increased due to less productivity of workers. Management entered into an agreement with the recognized union for fixing performance standards and deduction of wages in case of any shortfall. The shortfall was mainly from stitching section which gave only around 60-65% performance. So, management decided to take corrective action.

It was decided to deduct proportionate wages for work not done as per standard performance. Stitching section workers agitated against the deduction of wages. On a trial basis, two workers were sent on comparatively complex machines who achieved 107% of the set performance norms within 45 days. Seeing this the other workers also began to show improvement in their performance – around 96% of set norms.

Mr. Ghosh was feeling at ease, assuming that the strategy has worked.

Questions

1. Why had the performance declined in the company?
2. Who was responsible for the problem?
3. If you had been in Mr. Ghosh's position, how would you have handled the situation?
4. Has the problem been resolved in this case? Comment.