



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM
Post Graduate Diploma in Materials Management - 2 years
PAPER No 10 (enrolment code –PGMM, PGSM)

Dec 2025

Operations Management

Date : 19.12.2025
Time : 10.00 a.m to 1.00 p.m

Max. Marks: 70
Duration : 3 Hrs.

Instructions:

1. From Part A, contains 4 main questions (with 5 sub-questions) each question carries 1 mark Total of 20 marks
2. From part B answer any 5 questions out of 5 questions. Each question carries 10 marks – A total of 30 marks
3. Part C is Case Study Compulsory - Total of 20 marks
3. Use of standard calculator is permitted.

PART – A

[20 marks]

(Compulsory- each sub-question carries one mark)

Q.1 Fill in the blanks –(5 marks)

- a) The long term goal of an organisation which defines what it wants to do is called it's _____
- b) The process of arranging manufacturing activities according to their starting and completion times is called _____
- c) Maximum output at any given point of time is called _____ capacity
- d) The longest sequence of activities in an activity network diagram is called the _____
- e) The need for capacity management strategies is due to _____ demand

Q.2 Match the following –(5 marks)

	Column A		Column B
1.	Fixed capacity	a	Day to day activities
2.	Operations Research	b.	Master Production Schedule
3.	Translate Plans into specific end items	c.	PDCA cycle
4.	Functional strategy	d	Problem solving using analytical tools
5.	Continuous improvement	e.	Number of seats in an aircraft

Q.3 Write the full form of – (5 marks)

- a). FMCG , b) QMS , c) MPS, d) PERT , e) CRP

Q 4 Select the right option –(5 marks)

- a) Service Blueprint does NOT include the following –
i). Customer action ii). Support processes iii). Inventories iv). Contact employee actions
- b) The technique that does not guarantee the best solution but gives a near optimal solution is called
i). Heuristics ii). Markov Analysis iii). Range Programming iv). Computer simulation
- c) Which of the following features of services means that services cannot be seen or touched
i). Heterogeneity ii). Intangibility iii). Compatibility iv). Perishability
- d). Which of these factors influence a firm's operations strategy
i). Product ii). Personnel iii). Processes iv). All of these
- e). Installed capacity is also called
i). Adjusted capacity ii). Designed capacity iii). Fixed capacity iv). None of the above

PART B**[30 marks]***(Attempt any three questions. Each question carries 10 marks)*

- Q5 a)** Compare and contrast Manufacturing Operations Strategy and Service operations strategy (5 marks)
b) For assembling a car, which layout would you choose and why? (5 marks)

- Q6 a)** Write a note on the various phases of a project life cycle (5 marks)
b) Explain the broad steps to be followed in designing a service process (5 marks)

- Q7 a)** Explain the term “line loading”. (5 marks)
b) Ruchi Sagar, a chain of hotels in Bangalore, is evaluating two prospective locations for it's expansion – Mysore and Hosur. The table below shows the relevant factors and their rating, used by the Group to determine the most suitable location for it's next hotel. (5 marks)

Factor	Factor rating (1-5)	Rating for Mysore (1-10)	Rating for Hosur (1-10)
Proximity to main road	4	7	5
Proximity to customers	3	6	5
Per capita income of customers	5	3	4
Raw material availability	3	5	8

Suggest the best location for the next theme park

- Q8 a)** What advantages do a proper service design process give to a firm? Give names of 3 service design tools (5 marks)
b) Explain the stages of a Project life cycle (5 marks)

- Q9** Write short notes on any TWO—(2 x 5 = 10 marks)
 i). Materials Requirement Planning (MRP) ii). Service standards
 iii). Breakeven analysis iv). Ishikawa diagram

PART C**[20 marks]****Q.10**

Wuxi Suntech Power Co Ltd, PR China was the world's largest producer of photovoltaic cells for converting light energy into electricity. In anticipation of America and Europe's continued drive for alternate energy sources, Suntech aggressively expanded Plant construction and capacity development to take advantage of the expected steady growth in the solar power industry.

But the anticipated big increase in demand did not occur. The company was stuck with idle capacity and excess inventory. Suntech was forced to declare bankruptcy in 2015 because it's anticipated higher demand for photovoltaic cells never materialized. Because of cheaper oil prices and US Government 's decision to protect home grown companies to putting tariffs on Suntech's exports, the company found that it's too rapid expansion had made it impossible to remain profitable

- Q1** Explain the problem faced by the company (5 Marks)
Q2 What are the general steps followed in capacity augmentation ? (5 Marks)
Q3 What is the difference between incremental and One step expansion (5 Marks)
Q4. What could Suntech have done to remain profitable? (5 Marks)
