

Master of Business Administration
MBA Semester II
Core Course

206: Operations Management

Marks: 100

Duration: 60Hrs.

CREDITS: 4

Objective: This Course is oriented towards the exposition to the various operational problems in the area of Production. The Stress in the Course is on various techniques available for discharging the responsibilities as operations manager.

Course Outcomes: The successful completion of this course shall enable the student to:

CO1: Understand the operations management systems and evaluate the production control process.

CO2: Acquire knowledge about the inventory control system and evaluate the purchasing function.

CO3: Analyze and evaluate the work methods and create more efficient ways of performing a job

CO4: Ensure the quality standards of goods produced and create quality products.

Contents:

UNIT	Content	Hours
I	The Operations Management System, Responsibilities of operations personnel, Basic Manufacturing Process – Continuous Intermittent and Repetitive flows of processing. The Production Control System for intermittent and continuous floor processes.	11
II	Inventory Control – Costs associated with inventory control systems, Economic Order Quantity. Purchasing function, Source selection, Vendor rating, Value analysis.	10
III	Work Study, Method study and motivation study. Plant Layout concepts. Developing the process layout and the product layout. Facility location planning.	11
IV	Project Scheduling PERT / CPM Method – Network analysis, earliest and latest time analysis. Gantt Charts.	10
V	Acceptance Sampling by Attributes – Single Sample, double sample and multiple sample plans with sated risk. Control Charts for variables – averages and ranges. Control charts for defectives – fraction defective and numbers defective.	10
	Small group learning exercise involving discussion, case studies role-play, presentations by students	8
	TOTAL	60

Readings (Unit Wise)

Unit-I

1. Stevenson, W.J., (2018). Operations Management (12th ed.). McGraw Hill, Chennai.
2. Bedi, K. (2014). Production and Operations Management (3rd ed.). Oxford University Press, New Delhi

Unit-II

3. Stevenson, W.J., (2018). Operations Management (12th ed.). McGraw Hill, Chennai.
4. Bedi, K. (2014). Production and Operations Management (3rd ed.). Oxford University Press, New Delhi

Unit-III

1. Stevenson, W.J., (2018). Operations Management (12th ed.). McGraw Hill, Chennai.
2. Bedi, K. (2014). Production and Operations Management (3rd ed.). Oxford University Press, New Delhi

Unit-IV

1. Stevenson, W.J., (2018). Operations Management (12th ed.). McGraw Hill, Chennai.
2. Bedi, K. (2014). Production and Operations Management (3rd ed.). Oxford University Press, New Delhi

Unit-V

1. Stevenson, W.J., (2018). Operations Management (12th ed.). McGraw Hill, Chennai.
2. Bedi, K. (2014). Production and Operations Management (3rd ed.). Oxford University Press, New Delhi

Additional Reading

1. Cachon, G. and Terwiesch, C. (2018). Matching supply with demand. McGraw Hill, 3rd edition, Chennai
2. Chase, R. B., Shankar, R., and Jacobs, R. F. (2019). Operations and Supply Chain Management (15th ed.) Mc Graw Hill, Chennai
3. Gaither, N. and Frazier G. (2011). Operations Management (9th ed.), Cengage Learning, New Delhi.
4. Heizer, J., Render, B., Munson, C and Sachan, A. (2017). Operations Management (12th ed.). Pearson Education, Delhi.
5. Krajewski, L.J., Malhotra, M.K., and Ritzman, L.P. (2016). Operations Management: Processes and Supply Chains (11th ed.), Pearson Education, Delhi.
6. Mahadevan, B. (2015). Operations Management (3rd ed.). Pearson Education, Delhi.
7. Nahmias S. and Olsen, T.L. (2015). Production and Operations Analysis (7th ed.). Waveland Press, Inc.
8. Russell, R. S. and Taylor, B.W. (2016). Operations and Supply Chain Management (9th ed.), Wiley, New Delhi.

Pedagogy:

- ICT enabled Classroom teaching
- Case study
- Practical / live assignment

- Interactive classroom discussions
- Flipped classroom

Teaching Plan:

At the beginning of each semester faculty teaching the course will provide (i) Teaching Plan, (ii) updated reading list, and (iii) the list of case studies for uploading on Department website.

Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
I	Ability to understand the role of operations in both manufacturing and service organizations and the significance of operations strategy in overall business.	Lecture/Video/ Case/ Presentation/Role Play	Class participation, Presentation, Viva/ test, Analysis of Case Study
II	Ability to understand the importance of Exercises and case facilities location decision in the whole supply chain in globalized operations and learn the tools relating to facilities location.	Lecture/Video/ Case/ Presentation/Role Play	Class participation, Presentation, Viva/ test, Analysis of Case Study
III	Ability to understand different types of production processes and facility layout suitable for manufacturing different categories of products and how different processes could be analyzed with the help of process flow charts.	Lecture/Video/ Case/ Presentation/Role Play	Class participation, Presentation, Viva/ test, Analysis of Case Study
IV	Ability to learn different quality tools and the tools of statistical process control for analyzing a process in terms of quality and also develop an understanding about six sigma quality.	Lecture/Video/ Case/ Presentation/Role Play	Class participation, Presentation, Viva/ test, Analysis of Case Study
V	Ability to learn how process output could be improved by committing extra inputs to bottleneck resource.	Lecture/Video/ Case/ Presentation/Role Play	Class participation, Presentation, Viva/ test, Analysis of Case Study