



**International Management Institute**

**PROGRAMME NAME: Post Graduate Diploma in Management (PGDM)**

**OM 501: Operations Management – I**

**CREDIT: Full (2 credits)**

**SESSION DURATION: 60 Minutes**

**BATCH:2018-20**

**TERM: II**

**FACULTY: AMAN DUA**

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**Office hours:** 9:30 a.m. - 5.30 p.m.

**Course Introduction:** Operations management (OM) helps to understand the role of OM in an organization and to develop abilities to structure and solve problems related to the task. The course will empower students with skills to address important aspects of business operations including capacity, productivity, quality, and supply chain. Students will understand how operations in an organization are configured and factors that can potentially drive the complexity of managing such operations.

### **Course Objectives (CO):**

- a) To develop competence in applying operation management concepts in business organizations.
- b) To develop an understanding of the applications of operations management concepts in strategic decision making
- c) To develop analytic capabilities in the students by equipping them with concepts, tools and techniques required in managing operations.

### **Learning Outcome (LO)**

- 1. To comprehensively understand the concept of operations management.
- 2. To integrate Operations Management with strategic decision making in an organization.
- 3. To generate skill to apply concept and tools of operations management in field situation for efficiency and effectiveness improvement.

### **Mapping of CO and LO**

<b>CO/ LO➡</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>a</b>	*		
<b>b</b>		*	*
<b>c</b>		*	*

## Pre-requisites for the course

1. Basic knowledge of mathematics and management fundamentals.

## Pedagogy

Pedagogy would be a combination of lectures, case studies and problem-solving. Lecture classes shall be discussion based and students are expected to read the relevant chapters from the **book and any other reading material provided before** they come to the class. Case studies will be discussed which will help in understanding Operations Management in actual work situations. The course will be taught as per the session plan is given in this document. *Students are expected to participate in the class discussions.*

## Evaluation criteria

	Percentage	Remarks
End term exam	40	Duration: 2.5 hours
Mid-term exam	30	Duration 1.5 Hours
Assignment	15	Assignment ( 3 in Number). One assignment will consist field study also.
Quiz	15	Objective type

## Reading

### Reference Books

1. Chase R B, Shankar Ravi, Aquilano N J and Jacobs F R, “Operations and Supply Management”, Tata McGraw Hill Education Limited, 12<sup>th</sup> edition.
2. Heizer, Jay; Render, Barry and Rajashekhar, Jagdeesh, ‘Operations Management’, Pearson publication, 9th Edition.

## Session Plan

Serial Number	Topic	Session No.	Covered LO	Reading
1	Introduction to Operations Management Definition and scope <ul style="list-style-type: none"><li>• Operations Management as a system</li></ul>	1	1	Chapter 1 and 2 from Reference 1 Chapter 1 from reference 2
2	Product Vs. services systems <ul style="list-style-type: none"><li>• Components of Operations strategy</li></ul>	2	1,2	Case on “Narayan Hrudayalaya” from chapter 1 of Reference

Serial Number	Topic	Session No.	Covered LO	Reading
3	Product design and development <ul style="list-style-type: none"> <li>• Product lifecycle</li> <li>• Product development process</li> <li>• Concurrent engineering</li> </ul>	3	2, 3	<i>Case: Wal-Mart China : Sustainable Operations Strategy</i>
4	<ul style="list-style-type: none"> <li>• Reliability</li> <li>• Designing for Manufacturability</li> <li>• Value engineering</li> <li>• Case study discussion on <b>Ikea Design and Pricing.</b></li> </ul>	4	2, 3	Chapter 4 From Reference 1 Case: Page number 136 in Reference 1.
5	<ul style="list-style-type: none"> <li>• Case study discussion</li> <li>• Introduction to facility location</li> </ul>	5	2, 3	<i>Case : McDonalds Corporation</i> Chapter 8 from Reference 2.
6	Facility location <ul style="list-style-type: none"> <li>• Factors affecting location decisions</li> <li>• Techniques for deciding on facility location: Weighted Score Model, Load distance method, Center of gravity method, Break-even analysis</li> </ul>	6.	1	Chapter 11 From reference 1
7	Facility layout <ul style="list-style-type: none"> <li>• Types of facility layouts: Process layout, Product layout, Cellular layout, Project layout</li> </ul>	7	1, 2	Chapter 7 from reference 1
8	Facility layout – Product Layout Design of layouts <ul style="list-style-type: none"> <li>• Assembly Line Balancing</li> </ul>	8	2, 3	Chapter 7A of Reference 1 and <i>Case: Assembly Line Balancing: Helgeson-Bernie Rank Positional Weight (RPW) Technique</i>
9	Capacity Planning <ul style="list-style-type: none"> <li>• Importance of capacity decisions</li> <li>• Types of capacities</li> </ul>	9	2, 3	Chapter 5 From Reference 1.
10	<ul style="list-style-type: none"> <li>• Determining capacity requirements</li> <li>• Measuring capacity</li> </ul>	10	2, 3	<i>Case: Scharffen Berger Chocolate Maker</i>
11	<ul style="list-style-type: none"> <li>• Economies of scale and Learning Curve</li> <li>• Case on Strategic Capacity Management in Indian railways</li> </ul>	11	2, 3	Chapter 5A from Reference 1.

<b>Serial Number</b>	<b>Topic</b>	<b>Session No.</b>	<b>Covered LO</b>	<b>Reading</b>
12	Process Analysis and Process Flow Charting	12	2, 3	Chapter 6 of Reference 1 and Chapter 7 from Reference 2
13	<ul style="list-style-type: none"> <li>• Measurement of Performance</li> <li>• Process throughput time Reduction</li> </ul>	13	2, 3	Chapter 6 of Reference 1
14	<ul style="list-style-type: none"> <li>• Time function Mapping</li> <li>• Value Stream Mapping</li> </ul>	14	2, 3	Chapter 7 of reference 2.
15	Service Blue Printing	15	2, 3	Chapter 7 of reference 2.
16	The Introduction and importance of project management	16	2,3	Chapter 3 of Reference 1
17	Project Control chart and Network Planning Model	17	1,2	Chapter 3 of Reference 1 and Chapter 3 of Reference 2
18	Management of Resources in Project	18	1, 2	Chapter 3 of Reference 1
19	Case on Cost Management in Phase 1 of Delhi Metro Project.	19	3	Chapter 3 of Reference 2
20	Introduction to PERT and CPM	20	2, 3	Chapter 3 of Reference 1 and Chapter 3 of Reference 2