

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR Post Graduate  
Diploma in Management (PGDM)  
OM502: Operations Management – II  
CREDIT: Full (three credits)  
SESSION DURATION: 90 Minutes

TERM: III  
YEAR: 2016-2018  
BATCH: I

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Course Objectives:

- a) To make the students aware of the role of Operations Management in business organizations.
- b) To develop an understanding of the applications of Operations Management concepts in decision making.
- c) To develop analytic capabilities in the students by equipping them with concepts, tools and techniques required in managing operations, particularly in medium and short term planning

Learning Outcome:

1. To develop competence and skill sets in using OM concepts in a variety of contexts.
2. To display familiarity with OM concepts and how OM concepts can be used to improve the competitive position of the firm.
3. To formulate proper Operations Management strategies.
4. To develop analytical tools to solve OM problems.

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. Numerical problems are essential to Operations Management and some tutorial classes shall be held so that students get practice in solving such problems. The course will be taught as per the session plan given in this document. Students are expected to participate in the class discussions.

Evaluation criteria

End term exam	: 35%
Mid term exam	: 30%
Quizzes	: 20%
Assignments/ Project	: 15%
Total	: 100%

## Reference books

Heizer, Jay and Render, Barry 'Operations Management : Sustainability and Supply Chain Management', Pearson publication, 11th Edition\*

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.

## Tentative Session Plan

Topic	Session No.	Learning Outcome	Reading
Aggregate planning <ul style="list-style-type: none"> <li>· Strategies for meeting uneven demand</li> <li>· Techniques for aggregate planning – linear programming, transportation method, informal method</li> </ul>	1,2	LO1, LO2, LO3, LO4	Chapter 13 of *
Tutorial	3		
Scheduling <ul style="list-style-type: none"> <li>· Scheduling high volume, medium volume and low volume systems</li> <li>· Priority rules for Job Shop scheduling</li> <li>· Johnson's Rule</li> <li>· Assignment method</li> <li>· Scheduling personnel</li> <li>· Theory of Constraints</li> </ul>	4, 5	LO1, LO3, LO4	Chapter 15 of *
Tutorial	6		
Material Requirements Planning <ul style="list-style-type: none"> <li>· Dependent vs Independent Demand inventories</li> <li>· Bill of materials</li> <li>· MRP Computations</li> <li>· Lot sizing rules</li> <li>· MRP I MRP II and ERP</li> </ul>	7, 8	LO3, LO4	Chapter 14 of *
Tutorial	9		

Topic	Session No.		Reading
Inventory Management <ul style="list-style-type: none"> <li>· Importance of holding stocks</li> <li>· Costs associated with inventory</li> <li>· EOQ model</li> <li>· EOQ model with non- instantaneous replenishment</li> <li>· EOQ model with quantity discounts</li> <li>· Reorder point model</li> <li>· Periodic review model</li> <li>· Single period model</li> <li>· ABC, VED and FSN analysis</li> </ul>	10, 11, 12	LO1, LO2, LO3, LO4	Chapter 12 of *
<ul style="list-style-type: none"> <li>· Tutorial</li> </ul>	13		
Supply Chain Management <ul style="list-style-type: none"> <li>· Introduction to Supply Chain Management</li> <li>· Evolution of supply chains</li> <li>· Responsive and Efficient supply chains</li> </ul>	14, 15	LO1, LO2, LO3	Chapter 11 and supplement of Chapter 11 *
JIT Systems <ul style="list-style-type: none"> <li>· The seven wastes</li> <li>· Push vs pull systems</li> <li>· Features of JIT</li> <li>· Calculating number of Kanbans required</li> </ul>	16	LO1, LO2, LO3 <b>1.0</b>	Chapter 16 of *
Managing for Quality <ul style="list-style-type: none"> <li>· Definitions of quality</li> <li>· Importance of Quality Philosophies : Deming, Juran's &amp; Crosby</li> <li>· Total Quality Management</li> <li>· Tools for quality management</li> <li>· Statistical Quality Control</li> </ul>	17, 18	LO1, LO2, LO3, LO4	Chapters 6 and supplement to Chapter 6 of *
Project Presentation	19, 20		