

**International Management Institute, Bhubaneswar**  
**Post Graduate Diploma in Management (PGDM)**  
**OM 502: Operations Management – II**  
**PGDM 2018-20, Term-III**  
**Session Duration – 60 minutes**  
**Credit: 2 Credits**

**Faculty** : Dr. Ranjit Roy Ghatak  
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**Office Hours** : Thursdays 3:00 – 5:00 pm

**Objectives of the course**

- 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:**

After attending the course the student is expected:

- 1. To explain the concept and scope of operations management in a business context
- 2. To evaluate a selection of frameworks used in the design and delivery of operations.
- 3. To appraise the appropriateness and applicability of a range of operations management systems/models in the control of business/HE environments.
- 4. To assess a range of philosophies for improving the effectiveness and efficiency of organizational operations.

**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 : 40%

Mid term exam : 30%

Quizzes : 20%

Assignment : 10%

TOTAL : 100%

### Text book

Chase R B, Shankar Ravi, Aquilano N J and Jacobs F R, “Operations and Supply Management”, Tata McGraw Hill Education Limited, 14<sup>th</sup> edition.

### Reference books

Heizer, Jay; Render, Barry and Rajashekhar, Jagdeesh, ‘Operations Management’, Pearson publication, 11<sup>th</sup> Edition.

### Readings

Relevant chapters from text book

### Session Plan

Topic	Session No.	Reading	Learning Outcome
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>• EBQ Model</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>	1,2,3,4,5,6	*Chapter 20 of text book	1,2,3

Topic	Session No.	Reading	Learning Outcome
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>• Scheduling personnel</li> </ul>	7,8,9,10	*Chapter 22,23 of text book	1,2,3
Aggregate planning <ul style="list-style-type: none"> <li>• Aggregate Planning Strategies- Capacity Options, Demand Options, Mixing Options to develop a plan</li> <li>• Methods of Aggregate Planning</li> </ul>	11,12,13,14	*Chapter 19 of text book	1,2,3
Material Requirements Planning <ul style="list-style-type: none"> <li>• Dependent vs Independent Demand inventories</li> <li>• MRP Computations</li> <li>• Lot sizing rules</li> </ul>	15,16	* Chapter 21 of text book	1,2,3
Managing for Quality <ul style="list-style-type: none"> <li>• Definitions of quality</li> <li>• Total Quality Management</li> <li>• Tools for quality management</li> <li>• Statistical Quality Control</li> </ul>	17,18,19,20	*Chapters 12 and 13 of text book	4