

**VPM's**  
**Programme: PGP (2014-15)**  
**Second Semester Examination July 2015 (Operations)**

<b>Subject</b>	<b>Operations Management</b>		
<b>Roll No.</b>		<b>Marks</b>	<b>60 Marks</b>
<b>Total No. of Questions</b>	<b>7</b>	<b>Duration</b>	<b>3 Hours</b>
<b>Total No. of printed pages</b>	<b>2</b>	<b>Date</b>	<b>25.07.2015</b>

**Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.**

**Q.1) Case study (20 Marks)**

### **Company Profile**

Maryland Chemical Company, Inc. has supplied a wide variety of chemical products to their industry and government customers in the Mid-Atlantic region since 1953. Their reputation for providing quality products, timely deliveries, and technical assistance is well known. Maryland Chemical warehouses liquid and dry products in a wide variety of packages to fit their customer's needs. As members of the National Association of Chemical Distributors (NACD) and as a participant in the Responsible Distribution Process, Maryland Chemical is committed to responsible distribution of chemical products in every phase of chemical handling, storage, transportation and disposal. Maryland Chemical also holds the Underwriters Laboratories Incorporated certificate of document compliance verification, which was awarded after an audit of their written policies and procedures. The company has an uncompromising commitment to quality and a keen customer focus. They have faced many changes since the beginning and have been able to successfully adapt to meet ever changing market demand.

### **Situation**

The City of Baltimore wanted to acquire Maryland Chemical's existing site for a redevelopment effort. The company had to move their chemical distribution and manufacturing center operations to a new facility. They looked at this forced change as an opportunity to create a process-driven, 21st Century company with improved operational efficiency and enhanced ability to provide exceptional value for their customers. UMMAP was contacted to assist the company with the relocation and process improvement effort by providing a multi-disciplinary perspective gained from working with various industries, and by incorporation of best practices suitable for Maryland Chemical's processes.

- a) Give your suggestions to the management of Maryland Chemical regarding successful relocation of the facilities? **10 Marks**  
b) What factors should be considered for Plant Location? Explain in detail.

**10 Marks**

**Attempt Any FOUR from the Remaining SIX Questions**

**Q.2) Attempt any two from (a) or (b) or (c) (5\*2) = 10 Marks**

- a) Draw a tree diagram showing various types of production.  
b) Explain various product related decisions.  
c) Explain Product Layout in detail.

**Q.3) Attempt any two from (a) or (b) or (c) (5\*2) = 10 Marks**

- a) State and explain various features of continuous production system.  
b) What is six sigma? Explain in Detail  
c) Explain Process Layout in detail.

**Q.4) Attempt any two from (a) or (b) or (c) (5\*2) = 10 Marks**

- a) Explain process production system in detail.  
b) Explain various stages of a new product development.  
c) What is Lean Production?

**Q.5) Attempt any two from (a) or (b) or (c) (5\*2) = 10 Marks**

- a) State and explain various difference between Operation Management and Supply Chain Management  
b) Is logistic Management is part of Operation Management. Please elaborate  
c) Is Operation Management applies to Service Industry. Please elaborate

**Q.6) Attempt any two from (a) or (b) or (c) (5\*2) = 10 Marks**

- a) Discuss different companies ERP system in detail.  
b) State and explain various strategic level decisions to be taken in operations management.  
c) What are the potential benefits of ERP?

**Q.7) Attempt any two from (a) or (b) or (c) (5\*2) = 10 Marks**

- a) Discuss any product company on basis of their Operations.  
b) Discuss any service company on basis of their Operations.  
c) State and explain various operational level decisions to be taken in operations management.