M. E. (M E) 2nd Semester Examination, 2014

Operations Management (M E – 1016)

Time: 3 hours

Full Marks: 70

Answer any five questions.
All questions are of equal value.

- 1(a) what is an operations system? Give some examples of operations systems.
- (b) What are the various functions of operations and how are they linked with other parts of an organization?
- 2(a) Draw the flow diagram of competitive priorities: Link between corporate strategy and functional area strategies.
- (b) What does term operations strategy mean? How it is different from corporate strategy?
- 3 (a) How can an organization configure its supply chain using an operations strategy process?
 - (b) What is the role of technology in the operation strategy?
- 4(a) Differentiate between core competence and core process.
- (b) "Market analysis" and "Market segmentation" are important tools for developing customer- driven operation strategy. Discuss in brief.
- 5(a) How is the continuous flow system different from intermittent flow system? What are the key implications for operations managers?
- (b) Enumerate mass production, intermittent flow system and jumbled flow system.
- 6(a) Discuss the term decision theory under certainty, uncertainty and under risk.
- (b) What do you understand by the term FMS? What are the characteristic features of FMS? How does FMS help in improving process design in the case of mid-volume and mid- variety manufacturing?

7(a) Discuss briefly the role of break down maintenance, preventive maintenance and predictive maintenance in a manufacturing organization.

(b) Discuss Maintenance and Reliability.

8(a) What do you understand by the term Break analysis? What is Contribution? Discuss the term Margin of safety.

(b) The following data from a plant is available:

Product	Price Rs.	Variable cost Rs.	Percentage of sales units
A	10 .	6	20
В	6	4	30
С	20	12	50

Fixed cost per year = Rs.75,000/- and Sales for current year = Rs.25,000/- It is decided by the management to drop the product A and add the product D.

Assume sales for products B, C, D as Rs.26,000/- and data are as follows:

Product	Price Rs.	Variable cost Rs.	Percentage of sales
			units
D	16	6	10
В	6	4	50
C	20	12	40

To find whether this decision is profitable or not.