Roll No. **Total No. of Pages : 02**

Total No. of Questions : 15

MBA / MBA (IB) (Sem.–2nd)

PRODUCTION & OPERATION MANAGEMENT

Subject Code : MBA-202 (2012 Batch)

Paper ID : [C0247]

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTION TO CANDIDATES :

1. **SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.**
2. **SECTIONS-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.**
3. **SECTION-C is COMPULSORY and consist of ONE Case Study carrying EIGHT marks.**

SECTION-A

1. Define Facility Location.
2. Discuss the concept of Batch production systems.
3. What do you understand by capacity planning?
4. Explain the benefits of Six Sigma.
5. What is the utility of acceptance sampling?
6. Elaborate the importance of value analysis in Production Management.

SECTION-B

UNIT-I

7. Discuss the need and importance of new product design and development. Explain the steps involved in new product design and development with examples.
8. Discuss the objectives of plant location. What are the various important factors to be kept in mind while deciding on a new plant location? Give examples.

UNIT-II

9. Discuss the concept and importance of Capacity Planning. What are the factors affecting capacity planning?

10. What are the various types of plant layouts? Also discuss the problems faced while deciding on a facility layout.

UNIT-III

11. Discuss the various types of Sampling Techniques. What are the applications of control charts? Explain with illustrations.

12. What is the importance of Total Quality Management? Discuss Deming's 14 principles and Juran's Quality Trilogy.

UNIT-1V

13. Explain J.I.T with illustrations. Discuss Kanban technique of Inventory Management.

14. Derive an expression for Economic Order Quantity, stating suitable assumptions. Also find the expression for total optimised costs.

SECTION-C

ompulsory Case Study)

15. XYZ Ltd does the ABC classification of the various components and parts it uses for assembling its tractors. As an operations manager, you are required to classify the following parts and components into A, B and C categories according to their usage values. Draw the ABC distribution curve. Item # 8 has a high criticality class i.e. a shortage of this item may lead to a complete halt in the production process. What special treatment can be given to this item?

Item ID #	Unit Price (Rs.)	Annual usage (Units)
1	5	1,00,000
2	35	2,600
3	79	420
4	68	13,600
5	800	210
6	2,300	670
7	450	76
8	6	400
9	92	6,100
10	3	2,50,000