



**II Semester M.B.A. (Day) Degree Examination, June/July 2012**  
**(2007-08 Scheme)**

**MANAGEMENT**

**Paper – 2.3 : Production and Operation Management**

Time : 3 Hours

Max. Marks : 75

**Instruction :** 1) Use graph sheets **wherever** necessary.

2) Calculators are **allowed**.

**SECTION – A**

Answer **any six** questions. **Each** question carries **two** marks.

**(2×6=12)**

1. a) What is work study ?
- b) What is product design ?
- c) What is ERP ?
- d) What is line of balance ?
- e) What are SPMs ?
- f) What are work instructions ?
- g) What is CIM ?
- h) What is EOQ ?

**SECTION – B**

Answer **any three** questions. **Each** question carries **eight** marks.

**(3×8=24)**

2. The fixed and variable costs for four potential plant locations are given below.

Location	Fixed Cost Per Year (In Rs)	Variable Cost Per Unit (In Rs.)
A	2,50,000	11
B	1,00,000	30
C	1,50,000	20
D	2,00,000	35

- a) Plot the total cost lines for these on a single graph.
  - b) Identify the range of output for which each alternative is superior. (i.e., has the lowest total cost)
  - c) If expected output at the selected location is to be 8,000 units per year, which location would provide the lowest total cost ?
3. What are the characteristics of facility layout decisions ? Explain the different basic layout forms.
  4. What is TPM ? Is it a lean initiative ? Discuss the different types of maintenance in a factory system and their benefits.





5. How is inventory managed in a factory ? What are the two fundamental inventory decisions ? What is the role of inventory in services ?
6. What is a supply chain ? What are the different types of supply chains ? How is mass customization related to supply chains ?

## SECTION – C

Answer **any two** questions. Each question carries **twelve** marks. (2×12=24)

7. Discuss the concepts of method study and work measurement as components of work study.
8. What is manufacturing planning and control ? Discuss push and pull systems and Kanban as part of the JIT concept in production.
9. What is POKAYOKE and Zero Defect Quality ? Discuss the seven steps to POKAYOKE attainment. Explain the nine types of wastes in POKAYOKE achievement.

## SECTION – D

**Compulsory case study.**

**(1×15=15)**

10. A time study analyst gave a performance rating of 1.01 for an assembly operation. The time study of this operation yielded the following observed times for one element of the job. Using an allowance of 18 per cent of job time, determine the appropriate standard time for this operation.

Observation (i)	Time in minutes
1	1.01
2	1.04
3	1.00
4	1.01
5	1.02
6	1.05
7	1.02
8	1.03
9	1.07
Total	9.25