



PG – 998

**II Semester M.B.A. Degree Examination, June/July 2015
(2007-2008 Scheme)**

2.3 : PRODUCTION AND OPERATIONS MANAGEMENT

Time : 3 Hours

Max. Marks : 75

SECTION – A

1. Answer **any six** questions. **Each** question carries **two** marks. **(6x2=12)**

- a) What is QFD ?
- b) Under what conditions is group technology layout appropriate ?
- c) What is closed loop MRP ?
- d) What is OEE ?
- e) List any two problems faced in using MRP system.
- f) What is ISO 9000 ?
- g) Define housekeeping.
- h) What is six sigma ?

SECTION – B

Answer **any three** questions. **Each** question carries **eight** marks. **(3x8=24)**

2. Discuss the factors influencing plant location criteria.
3. What is purchasing ? Bring out the importance of purchasing. What are the factors considered for evaluating vendor ?
4. Define the term maintenance. Outline the various types of maintenance.
5. What is quality control ? Explain the tools of quality control.
6. What is just-in-time ? Discuss the importance of JIT in manufacturing firms.

P.T.O.



SECTION - C

Answer **any two** questions. Each question carries 12 marks.

(2×12=24)

7. Compute the production cost per piece from the following data.

- i) Direct material per piece = Rs. 2
- ii) Wage rate of Rs. 2,000 per month consisting of 25 working days and 8 hours per day.
- iii) Overheads expressed as a percentage of direct labour costs = 200%.
- iv) The time for manufacturing of 4 pieces of the item was observed during time study. The manufacturing of the item consists of 4 elements a, b, c and d. The data collected during the time study are shown below :

Element	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Element rating on scale (1 - 100)
a	1.2	1.3	1.3	1.4	85
b	0.7	0.6	0.65	0.75	120
c	1.4	1.3	1.3	1.2	90
d	0.5	0.5	0.6	0.4	70

The personnel, fatigue and delay allowance may be taken as 25%.

8. Discuss the advantages and disadvantages of automation. State the approaches used to decide among automation alternatives.
9. What is material requirements planning ? List out the potential benefits from MRP. Discuss the problems faced in using MRP system.

SECTION - D

Case study (**compulsory**):

10. Read the following case and answer the questions given below :

(1×15=15)

Supriya Patil is Maruthi pharmaceutical's sales manager. Thirty-four salespersons report to Patil and sell pharmaceuticals to retail chains and stores throughout 5 states. During the past five years, Patil has put together a team of salespersons



that is second to none in its ability to co-operate. These salespersons appear to be happy with their jobs in all respects, including pay, supervision, attitude towards the company, and morale. Patil feels that she has done everything in her power to make each salesperson in her group happy with his or her particular job.

In recent months, Maruthi's sales have declined 10 percent when compared to comparable periods in the past. Patil has racked her brain to come up with some reason, such as decline in the overall economy or competitor activity, to explain the sales decline. After much investigation, however, Patil has concluded that there has been a drop-off in productivity among the salespersons because of lack of motivation.

Questions :

- a) Use management theory to explain how employees who are happy with their jobs could be unproductive.
- b) What was Patil doing wrong ?
- c) What should Patil do to correct this situation ? Give the specific steps that she should follow in improving the productivity of the sales staff.