

Sep'05

SYBMS

IJ9AED

Production Mths

Time : 2 Hrs.

Max. Marks : 60

- NOTE :** 1) Section I is compulsory.  
2) Solve ANY THREE questions from Section II.  
3) Figures to the right indicate full marks.

**SECTION I**

**Q.1 Explain the following terms.**

(15)

- 1) FSN Analysis
- 2) P System
- 3) Cellular Layout
- 4) Centralised Stores
- 5) Production System
- 6) Diversification
- 7) Product development

**Q.2 Solve the problems.**

(15)

**A) From the following data, classify A,B,C items.**

Group	No. of Items	Monthly Consumption (in Units)	Unit Price (in Rs.)
I	70	400	80
II	30	200	150
III	90	1800	4
IV	250	1400	3
V	30	320	100
VI	400	2500	0.5
VII	10	20000	0.25
VIII	80	140	600

The company accounts following basis for classification.

- 'A' item accounts for 80% of total consumption.
- 'B' item accounts for 15% of total consumption.
- 'C' item accounts for 5% of total consumption.

**B) A factory uses annually 64,000 units of a raw material which costs Rs. 4/- per unit. Placing each order costs Rs. 50 and carrying cost is 10% per year of average inventory.**

- a) Find the economic order quantity and the total inventory cost including the cost of materials.
- b) The factory consumes 200-250 units per day. If the procurement time is 10-12 days, find the recorder point, minimum, maximum and average inventories level.

**SECTION II**

(10)

**Q.3 What are the factors inflencing product design?**

(10)

**Q.4 What is Maintenance system ? Explain its various types.**