

*1/12/13*

Number of printed pages — 4

25(2) POM 202

2003

MBA 2nd sem.

**PRODUCTION AND OPERATIONS  
MANAGEMENT**

Paper : 202

Full Marks — 70

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions.

- 1. a) Define operations management. Illustrate the major activities of operations manager with a conversion diagram. *7*
- (b)** Explain strategic planning approaches for production and the relationship between cost vs quality and delivery vs flexibility. *7*
- 2. a) Explain Delphi technique as a tool for technological forecasting. *7*
- (b)** Explain the concept of product life cycle and major operations issues arising from the product life cycle. *7*

*Contd.*

2003  
2002  
2001  
2000  
1999  
1998

*(1998) Not available*

3. (a) Draw a comparison of flow shop and job shop characteristics. 8 ✓

(b) Outline the factors that should be considered in locating a call centre. List these factors in order of priority with brief explanation. 38 ✓

4. (a) Compare and contrast various layout types corresponding to major aspects of conversion process. 8 ✓

(b) Consider the following jobs and their processing times (hrs) at corresponding machines:

	M1	M2	M3
job A	8	5	9
B	5	3	7
C	6	4	5
D	7	2	6

Using Johnson's rule, find the optimal sequence. 7

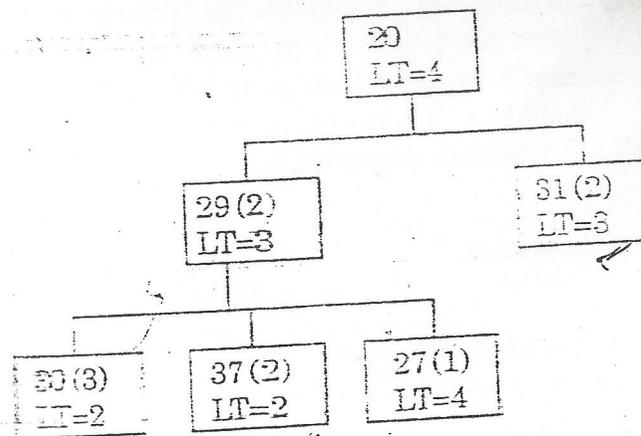
5. Define an FMS and describe its characteristics. 193

What is an economic order quantity? Why the EOQ model would be hard to use in practice? 193

Illustrate the procedure of using ABC in conjunction with VED of inventory control. 193

6. (a) Contrast Job enlargement and Job enrichment. 323

(b) Ambrex Ltd has received an order for 70 units of product 20 to be delivered in 12 weeks. The BOM of product 20 is given below. Ambrex has on hand 300 units each of components 31 and 37; there is no stock on hand or on order for other components. Determine the sizes and timing of planned order releases necessary to meet delivery commitments for product 20.



7. (a) Warren Associates produces minicomputers that have a seasonal demand pattern. Draw a plan for the optimum production rates and inventory levels for the next four quarter periods. The available production capacities during regular time, overtime and subcontract, as well as other cost data, are as follows: