

II Semester M.B.A. (Day) Degree Examination, June/July 2007  
(Updated Scheme)  
MANAGEMENT

Paper - 2.5 : Production and Operations Management

Time : 3 Hours

Max. Marks : 75

SECTION - A

Answer any six questions.

(6×2=12)

1. Explain :

- a) Learning Curve.
- b) Modular Design.
- c) What is benchmarking ?
- d) CAD/CAM.
- e) ISO 9000.
- f) FMS.
- g) Process Planning.
- h) Make or Buy decision.

SECTION - B

Answer any four questions.

(4×5=20)

2. Explain the importance of ancillary units (SSIs) in supporting the JIT type of manufacturing.
3. Explain in brief supply chain management.
4. A manufacturing company works 8 hrs shift a day and produces 320 units of a product. The idle time is 15%. Assuming 10% of normal time (NT) for relaxation allowance, calculate the standard time (ST) per piece. Performance Rating is 120%.

P.T.O.

5. Carry out the Vendor rating from the following data :

Suppliers	P	Q	R
Qty. Supplied	108	90	80
Qty. Accepted	102	90	75
Price of item	Re. 1.00	Rs. 1.20	Rs. 1.10
Delivery Promised	3 weeks	4 weeks	4 weeks
Actual Delivery	2.7 weeks	5 weeks	4.4 weeks

Assume weightages for Quality : 50%, Price : 15% and delivery : 25%

6. Explain the new product development process.
7. Using Johnson's rule, find the optimal sequence for four jobs on 2 machines.

**Processing Time (hours)**

Job	Machine A	Machine B
1	12	6
2	6	4
3	7	5
4	8	3

**SECTION - C**

Answer **any three** questions.

**(3×10=30)**

8. What are the aims of TPM ? How is TPM implemented in manufacturing organisations ? What are the benefits of T.P.M. ?
9. Discuss in detail the EOQ model and ABC analysis as the two important techniques of inventory management.

10. Consider a project having the following data. Draw the network diagram, identify the critical path and compute the expected project completion time.

Activity	Predecessor	$t_o$	$t_m$	$t_p$
		days		
A	-	2	4	6
B	A	8	12	16
C	A	14	16	30
D	B	4	10	16
E	C, B	6	12	18
F	E	6	8	22
G	D	18	18	30
H	F, G	8	14	32

11. a) What are the objectives of method study and work measurement?  
b) Explain the importance of line balancing in reducing the cycle time in continuous flow type of manufacturing.

RMC inventory	400 Million	20 Million
OEE	62%	88%
Quality	5000 PPM	40 PPM

Questions :

- a) Describe how the company has improved in terms of inventory reduction (RMC), OEE and Quality.
  - b) What are the essential features exhibited by the company in achieving the above ?
  - c) What techniques/tools might have been employed to achieve the above ?
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