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.

12. Write short notes on :

a) QFD

b) Concurrent Engineering

c) TQM.

SECTION – D

This Section is **compulsory**.

(1×13=13)

13. A company makes automotive components and supplies to various Automobile Manufacturing Companies. A comparative statement in a decade is as follows :

	1995	2005
Sales	1500 Million	8000 Million
RMC	600 Million	3200 Million

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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