

Code No. : **9013**

**FACULTY OF MANAGEMENT**  
**M.B.A. II Semester Examination, December 2012/January 2013**  
**OPERATIONS MANAGEMENT**  
**Course No. 2.6**

Time: 3 Hours]

[Max. Marks: 80

**Note :** Answer *all* questions.

PART – A

(10×2=20 Marks)

1. Answer the following in **50** words :

- a) Product life cycle
- b) Production control
- c) Control aids
- d) Reliability
- e) Quality circles
- f) OC curve
- g) Speculative buying
- h) Unavoidable waste
- i) Safety stock
- j) Value and value ratio.

PART – B

(5×12=60 Marks)

2. a) What do you understand by production and operations management ? Discuss in detail various interfaces between operations system with other sub systems.

OR

- b) 'Production planning and control is rightly called the 'heart' of production and operations management'. Discuss. Explain the production method and procedures in the case of continuous production.
3. a) A shoe manufacturer has to process 6 items through three stages of production i.e. cutting, pasting and curing. The time taken for each of these items at the different stages are given below in hours.

Item :	A	B	C	D	E	F
Cutting :	4	1.5	3.5	1	2.5	0.5
Pasting :	1.5	2	2.5	1	0.5	3
Curing :	4	3.5	3	4.5	5	4.5

Find an order in which these items can be processed in minimum time.

OR

- b) What are the objectives of plant layout ? Explain the types of layout.

(This paper contains 2 pages)

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4. a) The following figures give the number of defectives found in 20 samples with each sample containing 2000 items.

425	322	356	409
430	280	402	193
216	306	216	326
341	337	264	280
225	305	126	389

Draw a suitable control chart and comment if the process can be regarded in control or not.

OR

- b) The following data was collected from a time study job during a 40 hours work week. Determine the standard time per part.

Idle time = 20%

Rating factor = 135%

Total parts produced = 300

The allowance for this work = 10%.

5. a) What are the objectives of purchase function ? Describe the steps in the selection of source of supply. Discuss the methods of vendor rating.

OR

- b) Describe the steps in materials requirement planning. Discuss various functional aspects in make-or-buy decisions.

6. a) What is the importance of stores management in Operations Management ? List out the advantages of efficient stores management.

OR

- b) Micro Computer Company purchases a component for which it has a steady usage of 1000 units per year. The ordering cost is Rs. 100 per order and inventory carrying cost per year is 25 percent. The unit cost of the component is Rs. 80. Calculate the optimal ordering quantity and the total cost of inventory. If the supplier agrees for a discount schedule as given below, discuss the optimum ordering policy.

Lot size (units)	Price per unit
Upto 149	80
150 – 499	78
500 or more	76