

August - September 2010

**Master of Business Administration (MBA) Examination
II Semester**

Fundamentals of Operation Management

Time : 3 Hours]

[Max. Marks : 80

Note : Attempt any Four questions from Section A. Section B is compulsory.

Section A

1. (a) Differentiate between production and operation management. Discuss functions of production operation manager.
(b) Define Productivity. Explain types of productivity with suitable examples.
2. Explain the following :
 - (a) Factor affecting productivity
 - (b) Methods for improving productivity
 - (c) Assemble to-order-strategy.
3. (a) What do you understand by facilities planning? Discuss the process of technology selection.
(b) Explain Browns and Gibson Model.
4. Explain the following with suitable examples :
 - (a) Product Layout
 - (b) Load-distance matrix
 - (c) Material Handling.
5. (a) Discuss resource requirement. Explain application of learning curve.
(b) What do you understand by production planning and control? Discuss material requirement planning.
6. Write short notes on any three of the following :
 - (a) Control charts and their applications
 - (b) Quality Circle
 - (c) BPR
 - (d) Theory of Constraints
 - (e) Centre of Gravity Model.

Section B

| 7. | Task | Immediate Task Time Predecessor | Task Time (minutes) |
|----|------|---------------------------------|---------------------|
| | a | - | .9 |
| | b | a | .4 |
| | c | b | .6 |
| | d | c | .2 |
| | e | c | .3 |
| | f | d, e | .4 |
| | g | f | .7 |
| | h | g | 1.1 |
| | | Total | 4.6 |

Using the information in the above table :

- Draw a precedence diagram.
- Assuming that 55 minutes per hour per productive, compute the cycle time needed to obtain 50 units per hour.
- Determine the minimum number of work stations.

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