

Printed Pages : 8



MBA025

(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 270212**

Roll No.

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**M.B.A.**

(SEM. II) THEORY EXAMINATION, 2014-15  
**PRODUCTION AND OPERATIONS MANAGEMENT**

Time : 3 Hours]

[Total Marks : 100

**SECTION - A**

Attempt all questions.

**1X20**

- 1 Which of the following is not a method of work measurement ?  
 (a) Work sampling (b) Stop watch method  
 (c) Method study (d) All of the above
- 2 When new product development process is a case of:  
 (a) Innovation (b) Adaptation  
 (c) Diffusion (d) Adoption
- 3 The layout in which the machines are placed according of product manufactured by them is:-  
 (a) Process layout (b) Product layout  
 (c) Fixed layout (d) Hybrid layout

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[ Contd...

- 4 Which of the following is not a factor while choosing a location?
- (a) Personal preference (b) Water  
(c) Fire fighting (d) None of them
- 5 Which of the following is type of operations?
- (a) Job shop (b) Project  
(c) Batch (d) All of the above
- 6 The building in which very high roofs are used with ventilators is:-
- (a) One and half storey  
(b) High bay monitor types  
(c) Single storey  
(d) Double storey
- 7 Which of the following are tools used for forecasting?
- (a) Correlation and regression  
(b) Exponential smoothing  
(c) Delphi  
(d) All of the above
- 8 Which of the following is not the chart used in method study ?
- (a) Two handed chart' (b) Man machine chart  
(c) SIMO Chart (d) Pie-Chart
- 9 Procurement difficulty is bases of which model?
- (a) VED (b) SDE  
(c) FSN (d) EOQ
- 10 Which of these is type of inventory?
- (a) Utility inventory  
(b) WIP Inventory  
(c) Finished goods inventory  
(d) All of the above

- 11 Expediting is used in -
  - (a) Production planning
  - (b) Production control
  - (c) Production organizing
  - (d) Production expediting
  
- 12 TQM and traditional approach is different in which feature?
  - (a) Reactive and proactive
  - (b) Preventive and reactive
  - (c) Whole organization V/S quality control department
  - (d) All of the above
  
- 13 Which of the following is the quality attribute?
  - (a) Functional
  - (b) Durability
  - (c) Reliability
  - (d) All of the above.
  
- 14 14 principles of quality was given by:-
  - (a) Juran
  - (b) Deming
  - (c) Kawakita
  - (d) Ishikawa
  
- 15 \_\_\_\_\_ is a process in which a supplier generates orders for its distributor based on demand information sent by the distributor.
  - (a) Point of Sale
  - (b) Integrated Supply Chain Management
  - (c) Distributed Control System
  - (d) Vendor Managed Inventory

- 16** A quality circle is composed of a small group of employees who genuinely care about others and who preferably do work that includes which of the following?
- (1) Meeting voluntarily with a leader on a regular basis
  - (2) Identifying the problems
  - (3) Balancing operations in assembly line
  - (4) Setting up productivity norms and evaluation of production operations
- (a) Options (1) and (4)
  - (b) Options (1) and (2)
  - (c) Options (1) and (3)
  - (d) Options (2) and (3)
- 17** \_\_\_\_\_ and \_\_\_\_\_ are the two well-known methods of make or buy decisions.
- (a) Matching demand, level capacity
  - (b) Forecast demand, matching demand
  - (c) Dispatching, expediting
  - (d) Dispatching, expediting
- 18.** The cycle time includes both the as well as the time along with the idle time if any.
- (a) Balance delay, service
  - (b) Service time, productive
  - (c) Productive, non-productive
  - (d) Service time, non-productive
- 19** Two effective global strategies adopted by firms are \_\_\_\_\_ and \_\_\_\_\_.
- (a) Strategic alliance, make-to-order
  - (b) Strategic alliance, make-to-order
  - (c) Assemble-to-order, make-to-order
  - (d) Strategic alliance, locating operations abroad

20 'Kaiser' is:-

- (a) a word meaning 'continuous improvement'.
- (b) a method of stock control.
- (c) a modern way of operating a production line.
- (d) another word for Quality Circles.

## SECTION - B

### Case Study

1 Attempt any one of the following:

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- (a) VIBGYOR Corporation is searching for a new location for establishing new plant. After wide search, the corporation has settled on three locations- Nagpur, Kanpur and Raipur. After this, the corporation has calculated various costs and the results are as follows:

Factors	Location		
	Nagpur (Rs.)	Kanpur (Rs.)	Raipur (Rs.)
Land Cost	1,50,000	1,75,000	1,95,000
Raw Material Cost	2 per unit	3 per unit	4 per unit
Power Cost	3 per unit	2 per unit	4 per unit
Labour Cost	2 per unit	3 per unit	2 per unit
Machine Cost	4 per unit	4 per unit	3 per unit

Now, the corporation is in fix to resolve the problem :

- (i) Help in organization to find out the best location
- (ii) What one factor is considered in this case?  
What other factors can be considered?

- (b) Mansukh Fast Foods Ltd, located in the New Okhla Industrial Estate provides food services in North India. There are 200 employees working in full time with the firm. Currently, the firm generates excessive waste from one of their production lines named Manuskh Paneer Paratha. The average daily waste is around 9.5 percent. This waste is equivalent to the loss of Rs 4 lakh annually. The management of the firm wants to reduce this waste by redesigning the waste tracking system through identifying the root causes. It is estimated that there will be a saving of at least RS 2.5 lakh annually by reducing the waste daily even by 25 percent.

To achieve the waste reduction, the senior management constituted a team comprising an operations manager supervising the line, main employees from the Research and Development unit of the firm, and people from the finance unit. An emergency meeting of the core team was called to implement the process of waste reduction. The team member analyzed the entire process through various steps such as supplier selection, input material, machining process and machine operators. From this, the team members targeted the waste being created at particular points throughout the production line. The main goal of

the team was to determine what data was required to understand the current situation and the impact of any factor of daily waste (in percentage). The team, with the help of a well-known Six Sigma consultant, developed a thorough measurement plan that considered the main reasons behind the waste.

Questions :

- (1) Considering yourself as the head of the team, do you think that DMAIC process of the production line can be developed? Justify your response.
- (2) Develop all phases of the DMAIC process to implement Six Sigma.

### **SECTION - C**

Attempt all questions. Each question carries equal marks.

- 1 Why is Layout important? Classify Layout. Explain advantages and disadvantages of Layout.

**OR**

- 1 Differentiate between Production Management and Operations Management. List the advantages that are desired from an efficient production system.

- 2 Explain how Method study can lead to higher productivity?  
With a flow chart describe the present method of handling parcels of medium size in the railway parcel office.

**OR**

- 2 What are the different classifications of forecasting methods?  
How forecasting helps production department of manufacturing firm in its advance manufacturing planning?

- 3 What is Inventory Management? Discuss the objective of Inventory Management. What are various inventory control techniques?

**OR**

- 3 Write short notes on any TWO

- (a) ABC Analysis
- (b) Master Production Schedule
- (c) Routing and Scheduling

- 4 Write down Deming's 14 principles for management. Write a short note on PDCA cycle

**OR**

- 4 Good Organization is a key factor in the management of maintenance. Discuss. Can TPM logic be extended to service?