FACULTY OF MANAGEMENT
MBA II - Semester Examination, July / August 2016
Subject: Operations Management
Course No. 2.6
Time: 3 Hours
Max. Marks: 80

## PART - A (10x2 = 20 Marks) [Short Answer Type]

Note: Answer all the questions.

1. Write short notes on the following.
a) Production cycle
b) Job shop
c) Product sequencing
d) Types of layout
e) Quality circles
f) Control chart
g) Make or buy decisions
h) Waste Management
i) ABC analysis
j) Safety stock

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\text { PART - B (5x12 = } 60 \text { Marks })
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## [Essay Answer Type]

## Note: Answer all the questions using internal choice.

2 a) What is production planning? What are the important functions of production planning?

OR

b) Examine the relationship between product life cycle and process life cycle.

3 a) What factors influence the location of a plant?
OR
b) Obtain the optimum job sequence, the minimum elapsed time for the following:

| Job | Operation time in minutes |  |  |
| :---: | :---: | :---: | :---: |
|  | $\mathrm{M}_{1}$ | $\mathrm{M}_{2}$ | $\mathrm{M}_{3}$ |
| A | 10 | 11 | 14 |
| B | 15 | 12 | 16 |
| C | 14 | 8 | 12 |
| D | 12 | 9 | 13 |
| E | 11 | 10 | 17 |

4 a) Following is the record of defectives observed during the inspection of a component. Draw the relevant control chart and comment.

| Sample No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample size | 25 | 50 | 45 | 55 | 35 | 40 | 50 | 65 | 30 | 25 | 55 | 40 | 50 | 25 | 40 |
| No. of defectives | 3 | 5 | 1 | 2 | 0 | 1 | 9 | 2 | 3 | 2 | 5 | 4 | 3 | 2 | 2 |

b) Outline the various methods available for work measurement.

5 a) What do you understand by vendor rating? Outline the determinants of vendor rating. OR
b) Critically examine the need and importance of materials management.

6 a) What is value analysis? How does value analysis help in cost reduction?
OR
b) Perform ABC analysis on the following sample of items.

| Item | Annual <br> consumption | Price $/$ <br> unit in Rs. |
| :--- | :---: | :---: |
| A | 300 | 0.10 |
| B | 2800 | 0.15 |
| C | 30 | 0.10 |
| D | 1100 | 0.05 |
| E | 40 | 0.05 |
| F | 220 | 1.00 |
| G | 150 | 0.05 |
| H | 800 | 0.05 |
| I | 600 | 0.15 |
| J | 80 | 0.10 |

