

**END TERM EXAMINATION**

14

FIFTH SEMESTER [BBA] DECEMBER-2012

Paper Code: BBA305

Subject: Production & Operations  
Management

Time : 3 Hours

Maximum Marks :75

Note: Attempt any five questions. All questions carry 15 marks each.

- Q1 (a) Differentiate between production and operations management.  
(b) What is the transformation process? Explain the transformation process in a Bank and an automobile assembly plant.
- Q2 (a) List and explain the core concepts of TQM.  
(b) Explain any two of the following:-  
(i) Continuous Improvement  
(ii) Zero defect  
(iii) Design Quality
- Q3 Last week visual inspection carried out to find defectives in a manufactured term revealed the following data for a sample size of 30 numbers.

| Sub group no. | No. of defectives | Sub group no. | No. of defectives |
|---------------|-------------------|---------------|-------------------|
| 1             | 5                 | 11            | 5                 |
| 2             | 4                 | 12            | 7                 |
| 3             | 4                 | 13            | 4                 |
| 4             | 4                 | 14            | 5                 |
| 5             | 7                 | 15            | 4                 |
| 6             | 4                 | 16            | 5                 |
| 7             | 5                 | 17            | 5                 |
| 8             | 6                 | 18            | 7                 |
| 9             | 4                 | 19            | 6                 |
| 10            | 5                 | 20            | 5                 |

This week 30 pieces were again inspected on each of two occasions and 6 pieces and 9 pieces were found to be defective in each case respectively. Determine whether the process is under control or not this week.

- Q4 Two locations A and B are being examined for location of a new manufacturing plant. Two production processes X and Y are being examined. The annual operating costs for each process at two locations are as follows:-

| Location | Process X              |                              | Process Y              |                              |
|----------|------------------------|------------------------------|------------------------|------------------------------|
|          | Fixed cost (Rs. Lakhs) | Variable cost per unit (Rs.) | Fixed cost (Rs. Lakhs) | Variable cost per unit (Rs.) |
| A        | 15                     | 5.9                          | 34                     | 3.8                          |
| B        | 12.5                   | 6.4                          | 30                     | 4.1                          |

In what range of outputs would each location process combination be preferred.

- Q5 Write short notes on **any two** of the following:-  
(a) Advantages of product layout  
(b) Assembly line balancing  
(c) Service Facility Layout
- Q6 Compare and contrast fixed order quantity inventory system with fixed order period inventory system. Which system is more commonly followed and why?
- Q7 Explain of the following:-  
(a) Economics of waiting line  
(b) Waiting line Models