## End Term Examination

Fifth Semester [BBA] December 2015

Paper Code: BBA-305
Subject: Production \& Operation Management
Maximum Marks: 75
Note: Attempt any five questions.

Q1 (a) Elaborate Systems view of operations management, and discuss factors of production?
(b) Discuss various types of transformations with examples.

Q2 (a) What are acceptance Sampling Plans? Explain the SSP (Sequential Sampling Plans).
(b) Distinguish between defects and defectives. Explain the construction and use of a 'p' chart.

Q3 Explain various factors relevant for deciding the location of Pharmaceutical Plant. Discuss various Plant Location methods with merits and demerits of each.

Q4 Explain in brief four basic layout formats and draw a neat sketch of each type. Also explain the product-volume conditions under which it is appropriate to use each type of layouts.
(a) Poka - Yoke
(b) Pillars of TQM.
(c) Control charts
(a) What is 'Line Structure' in waiting lines? Explain single channel - single phase, multi-channel-single phase and multi-channel-multiple phase line structures.
(7.5)
(b) Explain any one waiting line management technique with examples.
(a) Derive formula for Economic Order Quantity (EOQ) and state the assumptions of the model. (7.5)
(b) A firm has several items of inventory. The average numbers of each of these items as well as their unit costs are listed below:-

| Item No. | Average no. of units in inventory | Average cost per unit (Rs.) |
| :--- | :---: | :---: |
| 1 | 4000 | 1.96 |
| 2 | 200 | 10.00 |
| 3 | 440 | 2.40 |
| 4 | 2000 | 16.80 |
| 5 | 20 | 165.00 |
| 6 | 200 | 6.00 |
| 7 | 160 | 76.00 |
| 8 | 3000 | 3.00 |
| 9 | 1200 | 1.90 |
| 10 | 6000 | 0.50 |
| 11 | 1800 | 25.00 |
| 12 | 130 | 2.70 |
| 13 | 4400 | 9.50 |
| 14 | 3200 | 2.60 |
| 15 | 1920 | 2.00 |
| 16 | 800 | 1.20 |
| 71 | 3400 | 2.20 |
| 18 | 2400 | 10.00 |
| 19 | 150 | 21.00 |
| 20 | 320 | 4.00 |

The firm wishes to adopt ABC Inventory System. Classify them and explain the criteria for classification.
(a) Benchmarking
(b) Assembly Line Balancing
(c) OC curve.

