

4. (C) What is purchase management ? Discuss the importance of quotations and comparative statement. 7
- (D) JIT is viewed as a "production methodology which aims to improve overall productivity through elimination of waste and which leads to improved quality". JIT provides for the cost efficient production in an organization and delivery of only the necessary parts in the right quantity at right time and place while using the minimum facilities. You as the JIT expert required to state the challenges to be faced in terms of production held up and customer dissatisfaction. 7

#### SECTION—C

5. A work study was conducted in a machine shop. The data has been recorded as below :
- Total No. of observations — 2000  
 No activity — 500  
 The ratio between manual to machine — 3 : 1  
 Average performance rating — 85%  
 Total no. of pieces produced — 120  
 Duration of the study — 60 Hrs.  
 Allowances — 12%
- Calculate :
- |                                          |   |
|------------------------------------------|---|
| (i) Overall time per unit                | 4 |
| (ii) Normal and effective time per piece | 6 |
| (iii) Standard time per piece.           | 4 |

### M.B.A. (Semester-II) Examination PRODUCTION AND OPERATIONS MANAGEMENT

Paper—MBA/206

Time—Three Hours]

[Maximum Marks—70

**Note :—**(1) All questions are compulsory.

(2) Figures to the right indicate marks.

#### SECTION—A

1. (A) What is the role of Inspection in quality assurance ? Identify various locations where quality can be inspected in the production process and explain what quality inspection steps you take. 14

**OR**

1. (B) Discuss the role of ISO-9000 in total quality management. What and how quality objectives can be achieved through ISO-9000 ? Discuss. 14

#### SECTION—B

2. (A) What are the different types of plant layout ? Discuss the importance of process layout. 7

- (B) A manufacturing is considering three locations A, B and C for a new plant. Cost studies shows that fixed cost per year at the sites are Rs. 24 lakhs, 27 lakhs and 25.2 lakhs respectively, whereas variable costs are Rs. 10,000, 9,000 and 9,500 per unit respectively. If the plant is designed to have an efficient system capacity of 2500 units per year and is expected to operate at 80% efficiency, what is the most economic location on the basis of actual output ? 7

**OR**

2. (C) Define the term production function. Discuss the role and responsibilities of manager in controlling production functions. 7
- (D) As far as selection of factory layout is concerned, the decisions are taken on the basis of either grouping similar types of machines together or arranging machines in the sequence of line production. You as a Production Manager what factors, you would consider important to arrive at decision related to layout, stating its advantages and disadvantages. 7
3. (A) Discuss the role of production planning and control in Batch production process. 7
- (B) Alpha is the LPG refilling centre with refilling capacity of 10,000 cylinders per day. You as a Production Manager to display the charts, banners

and posters to spread the safety awareness in employees what measures you feel important and how will you do it ? 7

**OR**

3. (C) Discuss the importance of routing and scheduling in production planning and control. 7
- (D) India witnessed one of the most devastating tragedies in 1984. The incident took place in Bhopal's union carbide plant established by Union Carbide Corporation of US. The incident was waiting to take place as the locals has witnessed that the kinds of gas leaks but on much smaller scale. During the inspection this was ignored by the company. It was also noticed that safety measures were not in place and was not in good working condition. If you are appointed as a Safety Manager, what initiatives would you have been taken to avoid the accident ? 7
4. (A) Discuss different costs related to inventory. 7
- (B) You as the incharge of material handling department required to explain three major divisions in classification of material handling equipments. Elaborate this classification with suitable example mentioning the importance of classification. 7

**OR**