

**ADITYA ENGINEERING COLLEGE (A)**

MBA II Semester End Examinations (Regular), APR 2018

**PRODUCTION & OPERATIONS MANAGEMENT**

**Time: 3 hours**

**Max. Marks: 60**

**PART – A Answer any FOUR questions**

**PART – B Compulsory**

**All Questions Carry Equal Marks**

**All parts of the questions must be answered at one place only**

**PART – A**

- |   |   |  |     |      |
|---|---|--|-----|------|
| 1 | a | Define production and operations management and write its functions                          | CO1 | [6M] |
|   | b | Explain how POM is evolved historically  | CO1 | [6M] |
| 2 | a | Explain different manufacturing styles in production process?                                | CO1 | [6M] |
|   | b | Define production planning and control. Explain its function?                                | CO2 | [6M] |
| 3 | a | Discuss the job and batch manufacturing systems in PPC.                                      | CO2 | [6M] |
|   | b | What is the importance of plant location? Explain the factors influencing the plant location | CO2 | [6M] |
| 4 | a | Describe the objectives and importance of plant layout.                                      | CO3 | [6M] |
|   | b | What do you mean by work environment? Explain the factors affecting worker performance.      | CO3 | [6M] |
| 5 | a | Explain Juran's quality trilogy and its 14 principles  | CO4 | [6M] |
|   | b | What is quality circle? Discuss the benefits and limitations of quality circles.             | CO3 | [6M] |
| 6 | a | Discuss the ISO 9000:2000 clauses and coverages  | CO4 | [6M] |
|   | b | What are the requirement for efficient management of stores?                                 | CO5 | [6M] |
| 7 | a | Explain techniques for new product development and design.                                   | CO4 | [6M] |
|   | b | Define inventory and elaborate on inventory control techniques                               | CO5 | [6M] |

(P.T.O)

**PART - B**

8 **CASE STUDY**

[12M]

Alpha a four-wheeler company is a leading company in the south manufacturing chassis of bus/lorry in 600 acres of land with 3000 employees. The annual production capacity of the plant is 6000 chassis; The market research department projected its future demand to be 2.5 times the present capacity of the plant. So, the company took a decision to set up another plant in the north with a capacity of 75,000 chassis. It is in the process of procurement of the required land of 1,000 acres. The projected number of employees in the new factory would be 4,000.

The productivity of any company mainly depends on the type of layout that is used to carry-out the activities to produce the product. so, the industrial engineering department of the exiting company is given the task of design the righty type of layout for the new company,

All the sections of the automobile company will not have the same type of layout. The final assembly of chassis is done on a powered conveyer belt. This part of the company uses product layout which assembles the necessary subassemblies and components to form a full chassis.

**Questions:**

- a What do you suggest to Alpha company about this problem ?
- b What is suitable layout for Alpha company to extend?

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