

**FACULTY OF ENGINEERING**

B.E. 4/4 (Mech/Prod.) II-Semester (Make-up) Examination, August 2012

Subject : **Production and Operations Management**

Time : 3 Hours

Max. Marks: 75

**Note:** Answer **all** questions of Part – A. Answer any **five** questions from Part-B.**PART – A (25 Marks)**

1. What relationships exist between layout and location decisions?
2. Contrast between operation charts and activity charts.
3. What factors should be considered in selecting or planning horizon?
4. Distinguish between control chart for variables and attributes.
5. What is KANBAN?
6. Explain the concept of total quality control.
7. State the advantages of screw conveyor system.
8. Describe the functions of management.
9. Explain how strategy and quality interrelate.
10. Discuss the steps in process capability study.

**PART – B (5x10=50 Marks)**

- 11.(a) Distinguish between batch and mass production system.  
(b) Describe flexible manufacturing system.
- 12.(a) Identify the primary behavioural factors involved in product oriented layout design.  
(b) Outline the advantages and disadvantages of the three pure strategies of aggregate planning.
- 13.(a) Describe different types of material handling systems.  
(b) Sketch and explain the principle of hydraulic conveying systems.
- 14.(a) Describe the process of constructing a 'p' chart and state their applications.  
(b) Explain work sampling with an example.
- 15.(a) Describe operating characteristic curve with an example.  
(b) Explain different types of wave measurement techniques.
- 16.(a) Explain Taguchis quality loss function with an illustration for estimating the same.  
(b) Explain Deming's theory of variance.
17. Write short notes on any two of the following :
  - (a) Types of Business firms.
  - (b) Loading assignment algorithm
  - (c) Pre determined time study

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