Total No. of Questions : 5] *[Total No. of Printed Pages : 2*

Roll No .....

AU/ME/IP/IEM/TX/PR - 601

B.E. VI Semester

Examination, December 2015

Operations Management

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Write about recent trends in operations management.
   b) State Little's Law. State its applications.
   c) Explain Porter's five forces model.
   d) Explain the term productivity. State its types giving suitable examples.

   OR

   Discuss in detail the procedure of doing SWOT analysis.

2. a) Define the terms: simplification, standardization, mass customization.
   b) Compare Design For Manufacturing (DFM) Vs Design For Environment (DFE).
   c) State and explain Valerie's service quality model.
   d) Define and draw PLC (Product Life Cycle). State its design steps, evolution and innovation.

   OR

   What do you mean by Service Triangle of Customer? Discuss its objectives and benefits.

3. a) Define the terms: availability and maintainability.
   b) What do you mean by transformation process and value addition process explain?
   c) State and explain the term "process capability".
   d) Define the term "six sigma". State its implementation by QFD.

   OR

   Write short note on ISO-9000. Discuss its objectives and benefits.

4. a) Define the term "Group Technology". State its advantages.
   b) Discuss the steps in plant location selection. State the possible selection errors.
   c) Discuss "inflexibility in Product Layout".
   d) Explain Brown-Gibson Model. Why it is important?

   OR

   Discuss the importance of spare capacity to reduce Q-length and cycle time.

5. a) Define the terms: JIT, Sequencing.
   b) Briefly describe the Kanban and CONWIP.
   c) Write short note on "Lean Manufacturing".
   d) What is "Aggregate Planning" and "Master Scheduling"? How they play a critical role in functional organization.

   OR

   Briefly explain the following terms: (any two)

   i) Forecasting elements

   ii) Delphi technique

   iii) Synchronous manufacturing

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