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 2016

Operation 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 question 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.

Unit-I

1. a) What is ERP technique?
   b) Explain Little's law.
   c) Explain the concept of raw process time.
   d) Explain the various production strategies, namely MTO, MTS and ATO. Also, compare their merits and demerits.

OR

What is critical WIP? Explain Bottleneck throughput and cycle time with example of penny-fab-1, 2.

Unit-II

2. a) What is PLC?
   b) What is Globalisation of services?
   c) Explain the concept of design for Manufacturing and Environment.
   d) Classify various service characteristics. What is service triangle of customer?

OR

Distinguish between technical and functional service quality. Explain Valerie's service quality model.

Unit-III

3. a) What is TPM?
   b) What is Taguchi Loss function?
   c) Explain Bath-Tub curve.
   d) What is cost of quality? Explain the chain action of improving quality to productivity to motivation and low cost.

OR

What is six sigma technique? How it is implemented by DMAIC, QFO, TQM and ISO-9000?

Unit-IV

4. a) What is subjective relationship ranking method?
   b) What is Brown-Gibson model?
   c) What are the various problems of inventories How?
   d) What is Group Technology? Also, explain the importance of spare capacity to reduce of length and cycle time.

OR

Distinguish between product and process layouts. Which is better? Explain by giving one example.

Unit-V

5. a) What do you mean by forecasting elements?
   b) What is HMMS model?
   c) Compare Kanban and Kaizen philosophies.
   d) Compare corporate and production planning processes. Also, explain aggregate planning and master production schedule.

OR

Explain Johnson method for n-job 2/3 m/c. Also explain how matching between supply to demand fluctuations over a certain time horizon is done?

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