R-11 / R-13

Code: 1G581

IV B.Tech. II Semester Supplementary Examinations March 2019

Production and Operations Management

(Mechanical Engineering)

Max. Marks: 70   Time: 3 Hours

Answer any **five** questions

All Questions carry equal marks (**14 Marks** each)

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1. a) What is production planning and control? What are its main functions?

   b) Discuss the strategies for new product development.

2. Using exponential smoothing techniques compute the forecast from the following data of time series; compute the forecast for the 11th period. Use Exponential Coefficient $\alpha = 0.35$ & $\beta = 0.2$

Month	1	2	3	4	5	6	7	8	9	10
Demand	10	12	08	11	09	10	15	14	16	15

3. a) Discuss the factors affecting facilities location.

   b) Describe product layout, process layout.

4. a) "Mixed strategies are always superior to pure strategies in an APP exercise." Comment on this statement.

   b) Describe the steps involved in approaches to an acceptable aggregate plan.

5. Explain any five inventory control techniques and discuss EOQ model by taking suitable example?

6. a) Define scheduling and what are the factors affecting scheduling?

   b) Explain the different steps in Johnson's Algorithm

7. a) Briefly explain the purpose and concept of Line of Balance.

   b) What are the applications of line of balancing (LOB) and describe the steps of line of balancing.

8. a) What is TQM? Explain the elements of TQM?

   b) Define the following

      i) VA Activity

      ii) NVA Activity

      iii) NNVA Activity

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