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**P.E.S. College of Engineering, Mandya - 571 401***(An Autonomous Institution affiliated to VTU, Belagavi)***Seventh Semester, B.E. - Mechanical Engineering****Semester End Examination; Jan. / Feb. - 2021****Production Management***Time: 3 hrs**Max. Marks: 100**Note: Answer FIVE full questions, selecting ONE full question from each unit.***UNIT - I**

- 1 a. By considering an example of your choice, explain product life cycle stages. 10
- b. List any ten differences between process focused and product focused organization. 10
- 2 a. Discuss the nature and success of production management. 12
- b. Discuss the evolution of production / operation management. 8

UNIT - II

- 3 a. Discuss the three main category types of forecasting methods. 15
- b. List the uses of forecasting. 5
- 4 a. Discuss the qualitative methods of forecasting in detail. 10
- b. List all the types of forecasting and also list uses of forecasting. 10

UNIT - III

- 5 a. Discuss the need for selecting a suitable location. 10
- b. List the objectives of a plant layout. 10
- 6 a. Discuss the factors influencing plant location. 10
- b. Discuss the principles of plant layout. 10

UNIT - IV

- 7 a. Find the sequence for the following eight jobs that minimizes the total elapsed time for completion of all jobs. Each job being processed in the order CAB. Find the total elapsed time and idle time of each machine. 10

Jobs	1	2	3	4	5	6	7	8
Machine - A	4	6	7	4	5	3	6	2
Machine - B	8	10	7	8	11	8	9	13
Machine - C	5	6	2	3	4	9	15	11

The entries give the time in hours on the machine.

- b. Discuss the various scheduling strategies. 10
- 8 a. Find the sequence for the following six jobs and total minimum elapsed time. A machine operator has to perform three operations turning, threading and knurling on a number of jobs in that order. 10

Contd...2

Job	Machine - 1 Turning (min)	Machine - 2 Threading (min)	Machine - 3 Knurling (min)
1	3	8	13
2	12	6	14
3	5	4	19
4	2	6	12
5	9	3	8
6	11	1	13

b. List the guidelines for preparing scheduling.

10

UNIT - V

9 a. Considering an example of final year B.E. project, prepare a Gantt chart and explain .

12

b. Describe the importance of follow up and list the techniques involved.

8

10. Write short notes on;

i) Significance of Gantt chart

ii) Dispatching

20

iii) Progress reporting

iv) Expediting

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