

Code No: R4203A

**R10**

**Set No. 1**

**IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015**

**PRODUCTION PLANNING AND CONTROL**

**(Common to Mechanical Engineering and Automobile Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions  
All Questions carry equal marks**

**\*\*\*\*\***

1. a) Describe the objectives of production planning and control.  
b) What decisions can be taken to overcome the production planning and control problems.
2. Explain the objectives and analysis of the market research.
3. How to determine the level of the inventory which is carried out in a company.
4. Discuss the inputs and working of MRP elements.
5. a) What are the difficulty levels of routing in job, intermittent and continuous production.  
b) Discuss the advantages of Routing.
6. Describe the Johnson method and Jackson's method to develop a schedule for a basic situation.
7. a) What are the costs relevant with the aggregate planning?  
b) How the single stage and multi stage aggregate planning decision system is represented?
8. Explain the activities of dispatch section.



Code No: R4203A

**R10**

**Set No. 2**

**IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015**  
**PRODUCTION PLANNING AND CONTROL**  
**(Common to Mechanical Engineering and Automobile Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. Discuss the functions of production planning and control.
2. Describe the process, advantages, limitations and factors affecting the sales forecasting.
3. Describe the total inventory costs associated with the inventories.
4. Explain about the JIT and KANBAN system.
5. What are the factors affecting the routing and scheduling procedures? Discuss in detail.
6. What are the purposes and reasons necessary for scheduling a job?
7. Explain the functions of progress controlling aspects.
8. What are the common forms raised by the dispatcher? Explain.



Code No: R4203A

**R10**

**Set No. 3**

**IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015**

**PRODUCTION PLANNING AND CONTROL**

**(Common to Mechanical Engineering and Automobile Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions  
All Questions carry equal marks**

\*\*\*\*\*

1. Explain the need, effect and advantages of PPC.
2. a) The following are the available data of sales in lakhs of rupees :

| Year  | 1980 | 1981 | 1982 | 1983 | 1984 |
|-------|------|------|------|------|------|
| Sales | 50   | 70   | 60   | 80   | 90   |

Assume the same relationship holds true for future, forecast the sales for the year 1990 and 1995 by applying least square method.

- b) Explain the types and objectives of forecasting.
3. How to determine EOQ for an inventory model with uniform demand, several production runs of unequal length and when stock replenishment is not instantaneous.
4. What are the various LOB techniques used for manual planning and scheduling technique.
5. Differentiate between the operation sheet and route sheet. Explain with an example what the route sheet consists of.
6. a) How the information flows for a master scheduling.  
b) What is short term scheduling?
7. What are the commonly heuristic methods used for an optimal solution for a line balancing problem.
8. Describe the applications of computers in production planning and control problems for data acquisition, analysis and results to arrive at the right decision.



Code No: R4203A

**R10**

**Set No. 4**

**IV B.Tech II Semester Supplementary Examinations, July/Aug - 2015**  
**PRODUCTION PLANNING AND CONTROL**  
(Common to Mechanical Engineering and Automobile Engineering)

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. Explain the function of production planning and control by sketching the block diagram.
2. What are the various important methods of sales forecasting. Explain in brief stating the advantages and disadvantages of each of them.
3. Briefly describe about the ABC and VED analysis of stock control.
4. Describe the classes and characteristics of MRP-II as a structured approach to manufacturing management.
5. Describe the main objectives and routing procedure to be followed to perform a job.
6. Discuss the statistical load control and index method of scheduling to improve the effectiveness of scheduling procedure.
7. What are the different ways to expedite a job for its timely completion? Explain.
8. a) Explain the dispatching rules to complete the job order.  
b) Differentiate centralized and decentralized dispatching system.

