No. of Printed Pages : 3

BME-013

01817

BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING (COMPUTER INTEGRATED MANUFACTURING)

Term-End Examination

June, 2013

BME-013 : PRODUCTION MANAGEMENT

Time : 3 hours *Maximum Marks : 70*

*Note : Attempt **10** questions in all. Five each from **section A** and **B** . Use of scientific calculator is **allowed**..*

SECTION-A

1. Describe features of Production Management. What are the skills required for a production manager. 7

2. Discuss the characteristics of different forecasting methods in Production Management. What are the steps involved in each method? 7

3. What are the various types of project organisations? What do you understand by Project Scheduling? 7

4. What do you understand by PERT? How are mean and variance calculated in PERT? Explain with examples. 7

5. How does MRP reduce the inventory investment ? How does MRP increase plant operating efficiency ? 7

6. What do you understand by pre-determined motion time ? Explain the different forms of PTS systems with examples. 7

SECTION-B

7. Explain Nine rules for bottle-neck scheduling in TOC. 7

8. What are the benefits of an integrated supply chain ? Explain Bull-whip effect and factor responsible for it. 7

9. Why is it important to manage Inventory and operating expanses ? Explain synchronous manufacturing. How is TOC related to it ? 7

10. What are the main differences between fixed-order quantity model and fixed time period model ? 7

11. Consider an economic order quantity case where annual demand D=500 units economics order quantity Q=100 units, the desired probability of not stocking out P=0.95, the standard deviation of demand during lead time σ_L=20 units and Lead time L=12 days. Determine the reorder points. Assume that demand is over a 250 work day/year. 7

12. What is Gantt Chart ? Explain the importance of Gantt chart in project planning ? 7