



Code No. : 5217/M

FACULTY OF ENGINEERING
B.E. 4/4 (Mech./Prod.) II Semester (Main) Examination, May/June 2012
PRODUCTION AND OPERATIONS MANAGEMENT

Time : 3 Hours]

[Max. Marks : 75

Note : Answer **all** questions of Part – A. Answer **five** questions from Part – B.

PART – A

(25 Marks)

1. What is meant by FMS ?
2. Compare and contrast the location problems of a manufacturing firm and a supermarket.
3. Why are job standards important ?
4. Outline the advantages of aggregate planning.
5. What are priority sequencing rules ?
6. State the applications of RGV.
7. Distinguish between efficiency and productivity.
8. Describe fish bone diagram.
9. Describe the P-D-C-A cycle for problem solving.
10. What is process variation ?

PART – B

(50 Marks)

11. a) Describe the scientific management of F. W. Taylor.
b) Describe different types of manufacturing systems.
12. a) What aspects of different subcultures should be considered in location analysis ?
b) Compare and contrast the product layout and process layout.



13. a) Explain the pre determined time study approach to work measurement.
b) Write short notes on :
 - i) X-chart
 - ii) C-chart.
14. a) Outline and describe the critical parameters of the Job-Shop scheduling problem.
b) Discuss the advantages and limitations of using the Gantt load chart and visual load profile.
15. a) Describe the working principle of AGV.
b) Describe various Hoisting equipments and state their applications.
16. a) Why is it important to study Japanese manufacturing in a production and operations management system ?
b) Discuss the strength and weakness of Deming's philosophy.
17. Write short notes on **any two** :
 - a) Work sampling
 - b) Assembly line
 - c) KANBAN system.