

Total No. of Questions : 5]

SEAT No. :

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[6648]-735

S.Y. M.B.A.

**OSCM 613 MJ : MANUFACTURING RESOURCE PLANNING
(2024 Pattern) (Semester-III)**

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Make necessary assumptions, wherever required.
- 3) All questions carry equal marks.

Q1) Solve any 5 out of 8:

[5×2=10]

- a) Define changing MPS within time fences.
- b) What is meant by lot sizing?
- c) Name any two capacity expansion strategies.
- d) Define key difference between MRP-I and MRP-II.
- e) What is a manufacturing calendar?
- f) How does MRP-II integrate materials and capacity planning?
- g) What is capacity feedback?
- h) Illustrate limitation of MRP-I that led to MRP-II.

Q2) Solve any 2 out of 3:

[2×5=10]

- a) Explain the role of MPS as a link between strategic planning and tactical planning.
- b) Differentiate between independent demand and dependent demand.
- c) Explain how MRP-II supports production planning and control.

Q3) Solve (a) or (b)

[10]

- a) A manufacturing firm faces fluctuating demand. Explain how safety stock and hedges can be used in MPS.

OR

- b) Discuss the relationship and compatibility between MRP-II and Just-in-Time (JIT).

P.T.O.

Q4) Solve (a) or (b) [10]

- a) A manufacturing firm faces mismatch between customer demand and production capacity. Explain how MRP-II can solve this problem.

OR

- b) A company follows make-to-stock and make-to-order simultaneously. Explain how VAT analysis and FAS help manage such a scenario.

Q5) Solve (a) or (b) [10]

- a) A bicycle manufacturing firm has multiple components like frame, tyres, chains, and brakes. Production delays occur due to poor material planning.

Questions:

- i) Prepare a BOM structure for the bicycle.
- ii) Explain how dependent demand affects material planning.
- iii) Suggest how MRP-I and lot sizing can improve efficiency.

OR

- b) A garment manufacturing company faces high demand during festive seasons and low demand during off-season.

Questions:

- i) Explain how production smoothing can help.
- ii) Suggest suitable capacity management techniques.
- iii) Discuss advantages of proper capacity planning.

