MBHC-4.1

Sl. No.

IV Semester M.B.A (CBCS) Degree Examination, May/June - 2026
MANAGEMENT
Quality and Operations Management

Time : 3 Hours **Maximum Marks : 80**

SECTION - A

Answer any FIVE sub-questions. Each question carries Five marks. (5×5=25)

1. Describe the historical development of production management.
2. Differentiate between NC and CNC machines.
3. What is the difference between production planning and production control?
4. Explain the concept of aggregate planning.
5. Discuss the concept of Kanban and its application in manufacturing.
6. Briefly explain the concept of line balancing. What are the objectives of line balancing?
7. Highlight the role of quality circles in TQM.

SECTION - B

Answer any FOUR questions. Each question carries Ten marks. (4×10=40)

8. Explain the concept of Computer-Integrated Manufacturing (CIM). Describe its components, benefits, and challenges in implementation.
9. Analyse the impact of recent trends such as Industry 4.0 and additive manufacturing on production management.
10. Analyse the factors that should be considered when making decisions about plant location and facility layout.
11. Discuss the various inventory control techniques and their benefits.
12. Explain the concept of Just-in-Time (JIT) manufacturing. Discuss its principles, advantages, and potential challenges in implementation.
13. Discuss the role of ISO 9000 and ISO 14000 standards in quality management. Explain their requirements, benefits and the certification process.

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SECTION - C

14. Case (Compulsory) **(1×15=15)**

XYZ Corporation, a manufacturing company specializing in producing customized furniture, was struggling to meet increasing customer demand. The company faced challenges in effectively planning production, leading to delays, inefficiencies, and customer dissatisfaction. Production planning was ad-hoc, relying heavily on manual processes and spreadsheets. This resulted in inaccurate forecasts, insufficient resource allocation, and frequent bottlenecks in the production process.

Questions:

a) What Challenges did XYZ corporation face in its production planning process, and how did these challenges affect customer satisfaction.

b) Suggest suitable strategies and modern tools that XYZ Corporation can adopt to improve efficiency, reduce lead times, and eliminate bottlenecks in production planning.

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