

Code: 23HS1402

**II B.Tech - II Semester – Supplementary Examinations
DECEMBER 2025****INDUSTRIAL MANAGEMENT
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 10 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each Question carries 10 marks.
4. All parts of Question paper must be answered in one place.
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PART – A

1.a)	What is plant layout?
1.b)	Describe Taylor's principle.
1.c)	Explain flow process charts.
1.d)	Define the concept of time study.
1.e)	What is sampling inspection?
1.f)	Define statistical quality control.
1.g)	What is six sigma concept?
1.h)	Define Ratio analysis.
1.i)	Explain the concept of human resource management.
1.j)	Explain the functions of Personnel management.

PART – B

			Max. Marks
UNIT-I			
2	a)	Define Industrial management. Discuss the historical development of Industrial management.	5 M
	b)	List and explain Fayol's principles of management, providing examples of their application.	5 M
OR			
3	a)	What are the different factors that govern the plant location?	5 M
	b)	Discuss the principles of scientific management proposed by Taylor.	5 M
UNIT-II			
4	a)	What is an outline process chart, and how is it used in method study?	5 M
	b)	Describe the applications of work study in modern manufacturing industries.	5 M
OR			
5	a)	Explain the importance of production in the context of industrial operations and economic growth.	5 M
	b)	Discuss the objectives of time study in improving production efficiency.	5 M
UNIT-III			
6	a)	Explain the concept of statistical quality control (SQC) and its importance in manufacturing.	5 M

	b)	Discuss the implementation process of quality circles and how they contribute to continuous improvement in an organization.	5 M
OR			
7	a)	What are ISO quality systems, and how do they contribute to maintaining high-quality standards?	5 M
	b)	What is the zero defect concept in total quality management (TQM), and why is it significant?	5 M
UNIT-IV			
8	a)	How is ratio analysis used to assess the financial health of a company? Provide examples.	5 M
	b)	Determine the payback period for a project which requires a cash outlay of Rs.24,000 and generates cash inflows of Rs. 4,000, Rs. 8,000 and Rs. 10,000 in the first, second, third and fourth years respectively.	5 M
OR			
9	a)	Describe the process of estimating working capital requirements for a business.	5 M
	b)	Explain the Internal Rate of Return (IRR) method and its significance in capital budgeting.	5 M
UNIT-V			
10		Identify and describe the key components of a supply chain management system and their roles in optimizing the supply chain.	10 M
OR			
11		Define merit rating and discuss the quantitative methods used in assessing employee performance.	10 M