



R20 Regulation

Subject code:3E7CE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Regular/Supplementary Examinations, December 2024

INDUSTRIAL ENGINEERING AND MANAGEMENT
(Mechanical Engineering)

Maximum Marks: 70

Date:04.01.2025

Duration: 3 hours

- Note: 1.This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks Marks)		(10X2M=20	CO	Bloom Tx
1	Define Industrial Engineering.		1	Understand
2	Briefly explain the history and development of Industrial Engineering.		1	Understand
3	Explain the factors to be considered while selecting a plant location.		2	Apply
4	Differentiate between different types of plant layouts.		2	Understand
5	What are the basic steps in method study?		3	Understand
6	Explain the concept of performance rating.		3	Understand
7	Differentiate between MRP I and MRP II.		4	Analyze
8	What is JIT?		4	Analyze
9	Explain the concept of collective bargaining.		5	Understand
10	What are the provisions of the Factories Act, 1948?		5	Understand

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	Explain the concept of Industrial Engineering and its role in modern manufacturing systems. [10M]	1	Knowledge
	OR		
12	Critically analyze the different leadership styles and their impact on organizational performance. [10M]	1	Analyze
13	A. Explain the concept of production planning and control[5M] B. A company is planning to set up an assembly line for a new product. Explain the concept of assembly line balancing and discuss the factors to be considered while balancing an assembly line. [5M]	2	Understand Apply
	OR		
14	A. Briefly discuss the production cycle. [5M] B. Solve a simple problem on assembly line balancing (data can be assumed). [5M]	2	Understand Apply
15	A. Explain the concept of work study. [5M] B. Explain the principles of motion economy. [5M]	3	Understand Analyze

	OR		
16	A. What are the basic steps involved in method study? [5M] B. Discuss the use of Therbligs in work study. [5M]	3	Understand Analyze
17	A. Explain the concept of marketing mix. [5M] B. Discuss the different stages of a product life cycle. [5M]	4	Understand Analyze
	OR		
18	Critically analyze the role of manufacturing planning in achieving organizational goals. [10M]	4	Analyze
19	Explain the concept of collective bargaining and its significance in maintaining [10M]	5	Understand
	OR		
20	A. Briefly explain the concept of Human Resource Management (HRM). [5M] B. List and explain any two basic functions of an HR Manager. [5M]	5	Understand Understand