

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech. II Year II Semester Regular Examinations July/August-2025

INDUSTRIAL MANAGEMENT

(Mechanical Engineering)

Time: 3 Hours

Max. Marks: 70

PART-A

(Answer all the Questions 10 x 2 = 20 Marks)

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|---|---|--|-----|----|----|
| 1 | a | What is the fundamental difference between Taylor's principles of management and Fayol's principles of management. | CO1 | L2 | 2M |
| | b | Identify the merits in setting industry in Urban areas. | CO1 | L1 | 2M |
| | c | State five important objectives of Work study. | CO2 | L1 | 2M |
| | d | When a flow chart is used in Industrial Engineering. | CO2 | L1 | 2M |
| | e | List out various benefits of implementing a quality control system. | CO3 | L1 | 2M |
| | f | List out various advantages of Six Sigma. | CO3 | L1 | 2M |
| | g | Identify the purpose of payback period. | CO4 | L1 | 2M |
| | h | Mention the importance of the term ARR in capital budgeting. | CO4 | L1 | 2M |
| | i | Briefly explain the role of Human Resource Management. | CO4 | L1 | 2M |
| | j | Define the supply chain with an example. | CO4 | L1 | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|---|---|--|-----|----|----|
| 2 | a | Elucidate the Objectives of Management. | CO1 | L3 | 5M |
| | b | Summarize various applications of Industrial Management. | CO1 | L2 | 5M |

OR

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|---|--|--|-----|----|-----|
| 3 | | How do you classify the plant layouts? Write in detail about each of them. | CO1 | L4 | 10M |
|---|--|--|-----|----|-----|

UNIT-II

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|---|---|--|-----|----|----|
| 4 | a | Discuss in detail about the functions of Operations Management in an Organization. | CO2 | L2 | 5M |
| | b | Compare Method Study and Work Measurement. | CO2 | L3 | 5M |

OR

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|---|---|--|-----|----|----|
| 5 | a | Write a short notes on Predetermined Motion Time system (PMTS). | CO2 | L2 | 5M |
| | b | List out various symbols used and its usage in work measurement. | CO2 | L4 | 5M |

UNIT-III

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|---|--|--|-----|----|-----|
| 6 | | A team collected the variables data recorded in the table below. | CO3 | L4 | 10M |
|---|--|--|-----|----|-----|

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X1	6	2	5	3	2	5	4	7	2	5	3	6	4	5	3	6
X2	5	7	6	6	8	4	6	4	3	5	1	4	3	4	4	2
X3	2	9	4	6	3	8	3	4	7	2	6	2	6	6	7	4
X4	7	3	2	7	5	4	6	5	1	6	5	2	6	2	3	4

Draw the X bar & R bar charts

For a sample size of 4, Consider A2= 0.729 and D4 = 2.282

OR

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|---|---|---|-----|----|----|
| 7 | a | Explain about the tools used for Quality Control. | CO3 | L3 | 5M |
| | b | Indicate the important advantages of Statistical Quality Control. | CO3 | L3 | 5M |

UNIT-IV

8 Elucidate in detail about various Capital budgeting techniques. **CO4 L4 10M**

OR

9 a Illustrate the functions of Cash Management. **CO4 L3 5M**

b Elucidate the methods used to calculate Working capital Requirement for a firm. **CO4 L4 5M**

UNIT-V

10 How do you classify the Wage Incentive Plans? Explain them in detail. **CO4 L4 10M**

OR

11 a Explain about the elements of Human Resource Management. **CO4 L2 5M**

b Explain the benefits and challenges of Supply Chain Management. **CO4 L3 5M**

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