Ref. No.: Ex/ME/5/T/424/2024

## BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING) FOURTH YEAR SECOND SEMESTER-2024

## **INDUSTRIAL MANAGEMENT**

Time: 3hrs Full Marks:100

Answer any five questions.

1. Write short note on any four:

4X5 = 20

- a) Role of GANTT chart in production planning and control.
- b) Value Engineering
- c) Delphi Technique
- d) Method study
- e) Preventive Maintenance
- 2.a) Write the objectives of Inventory control.

4+8+4+4=20

- b) Explain with diagram
  - i) ABC analysis ii) Operation process chart
- c) State the role of inspection in Quality Control.
- d) Briefly describe the role of control charts in statistical quality control.
- 3. a) Explain the role of work study in Industrial management.

4+6+10=20

- b) Break even analysis has an important role in production planning and control of any industry Explain in details.
- c) A Break-Even analysis for a type of product is as follows:

Fixed costs = Rs.10.00000

Variable costs = Rs 10 per unit of product.

Revenue = Rs 15 per unit.

Determine:

- i) Break-Even quality
- ii) Break-Even cost
- iii) Profitability for 5,00,000 unit.

10+10=20

- 4. a) Explain the different criterion to select the facility location appropriately.
- b) What are the various types of plant layout? Explain with their advantages and disadvantages.

5. a) Write down the advantages of line and staff organisation.

**6+6+8=20** 

- b) Describe the major functions of a manager of an organisation.
- c) Write F.W Taylors scientific management and justify its importance.
- 6. a) Write the difference between PERT and CPM.

6+4+10=20

- b) Define slack and float.
- c) Explain the need of Industrial safety. Mention various steps to control the industrial accident.