SARASWATI Education Society's

SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Mechanical Department

Name of Programme: ME

Name of Course: Industrial Engineering and Quality Control (SEM -VI 2024-25)

Course Outcome: Apply work study technique to optimize manufacturing process.

Assignment –I

1. State objectives and procedure of method study
2. List the process charts used in data recording and state the importance of each chart. Also explain the symbols used in process chart.
3. Draw outline process chart to replace battery in a car.
4. Write short notes on micro-motion study and therbligs.
5. Explain string diagram with neat sketch.
6. State significance of time study along with the procedure and also list the time study equipment and its uses.
7. Write a short note on standard time and allowances considered while calculating it.

SARASWATI Education Society's

SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Mechanical Department

Name of Programme: ME

Name of Course: Industrial Engineering and Quality Control (SEM -VI 2024-25)

Course Outcome: Prepare the detailed sequence of operations for manufacturing of component.

Assignment –II

1) Define process planning and explain the steps involved in process planning.
2) Explain factors affecting the process planning
3) State importance of operation sheet and its role in improving process planning.
4) Explain the concept of line balancing. State its importance and objectives.
5) Short note on SCM and mention objectives and functions of it.
6) Explain CPM and its application related to project completion.

SARASWATI Education Society's

SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Mechanical Department

Name of Programme: ME

Name of Course: Industrial Engineering and Quality Control (SEM -VI 2024-25)

Course Outcome: Apply Ergonomic principle for designing simple mechanical component.

Assignment –III

1) Define and explain concept and need of ergonomics.
2) Explain Man-machine relationship.
3) Define anthropometry, state principles in application of anthropometric data and steps to apply it.
4) State the use of ergonomics in design of controls.
5) Explain types of display with neat sketch
6) Explain compatibility in design of control members

SARASWATI Education Society's

SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Mechanical Department

Name of Programme: ME

Name of Course: Industrial Engineering and Quality Control (SEM -VI 2024-25)

Course Outcome: Interpret the data obtain from different quality control processes.

Assignment –IV

1) State the principles of TQM
2) Explain statistical meaning and methodology of six-sigma.
3) Shortnotes on i)kaizen ii) poka-yoke iii) 5-s technique.
4) Explain various Q-C tools in details.
5) State importance and limitations of ISO 9000, ISO-14000.
6) Explain cost of quality, value of quality and optimum quality using graph.
7) Define inspection and explain role of quality control inspector

SARASWATI Education Society's

SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Mechanical Department

Name of Programme: ME

Name of Course: Industrial Engineering and Quality Control (SEM -VI 2024-25)

Course Outcome: Interpret the control chart for variable and attribute data.

Assignment – V

1) Explain SQC in detail along with its importance.
2) Define and classify Quality control charts in detail.
3) Define process capability and state how it is achieved.
4) Enlist the types of sampling plan.
5) State merits and demerits of sampling methods revised
6) Enlist the types of sampling plan
7) State merits and demerits of sampling methods.