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| Discipline : **MECHANICAL** **ENGG** | Semester : **6TH** | Name of the Teaching Faculty: **Er. Michael Suveer** |
| Subject: **INDUSTRIAL ENGG & MANAGEMENT** | No. of days/per week class allotted: **04** | Semester From date : **10.03.2022** To Date: **10.06.2022**  No. of Weeks: **15** |
| Week | Class Day | Theory / Practical Topics |
| 1ST | 1ST | 1. Selection of Site of Industry, Define plant layout |
|  | 2ND | Describe the objective and principles of plant layout. |
|  | 3RD | Explain Process Layout, Product Layout and Combination Layout. |
|  | 4TH | Techniques to improve layout. |
| 2ND | 1ST | Principles of material handling equipment. |
|  | 2ND | Plant maintenance. |
|  | 3RD | Importance of plant maintenance. |
|  | 4TH | Break down maintenance |
| 3RD | 1ST | Preventive maintenance |
|  | 2ND | Scheduled maintenance |
|  | 3RD | 1. Introduction to operations research & its applications |
|  | 4TH | Explain the procedure of solution of LPP by graphical method |
| 4TH | 1ST | Problem solving |
|  | 2ND | Problem solving |
|  | 3RD | Define PERT and CPM |
|  | 4TH | Explain the terms associated with PERT and CPM |
| 5TH | 1ST | Evaluation of project completion time by PERT and CPM |
|  | 2ND | Differentiate between PERT and CPM |
|  | 3RD | Problem solving |
|  | 4TH | Problem solving |
| 6TH | 1ST | 1. Classification of inventory. |
|  | 2ND | Objective of inventory control |
|  | 3RD | Describe the functions of inventories |
|  | 4TH | Benefits of inventory control |
| 7TH | 1ST | Costs associated with inventory |
|  | 2ND | Terminology in inventory control |
|  | 3RD | Explain and Derive economic order quantity for Basic model. |
|  | 4TH | Solve numerical |
| 8TH | 1ST | Solve numerical |
|  | 2ND | Define and Explain ABC analysis. |
|  | 3RD | 1. Define Inspection and Quality control |
|  | 4TH | 2Describe planning of inspection. |
| 9TH | 1ST | Describe types of inspection |
|  | 2ND | Advantages and disadvantages of quality control. |
|  | 3RD | Study of factors influencing the quality of manufacture. |
|  | 4TH | Explain the Concept of statistical quality control |
| 10TH | 1ST | Control charts (X, R, P and C - charts). |
|  | 2ND | Methods of attributes |
|  | 3RD | Concept of ISO 9001-2008 |
|  | 4TH | Quality management system, Registration /certification procedure. |
| 11TH | 1ST | Benefits of ISO to the organization |
|  | 2ND | JIT, Six sigma,7S, Lean manufacturing |
|  | 3RD | . Solve related problems. |
|  | 4TH | . Solve related problems. |
| 12TH | 1ST | . Solve related problems. |
|  | 2ND | 1. Introduction to production planning and control |
|  | 3RD | Major functions of production planning and control |
|  | 4TH | Methods of forecasting |
| 13TH | 1ST | Methods of forecasting |
|  | 2ND | Routing |
|  | 3RD | Scheduling |
|  | 4TH | Dispatching |
| 14TH | 1ST | Controlling |
|  | 2ND | Types of production |
|  | 3RD | Mass production |
|  | 4TH | Batch production |
| 15TH | 1ST | Job order production |
|  | 2ND | Principles of product and process planning |
|  | 3RD | Previous year question discussion, Assignment |
|  | 4TH | Important question discussion |

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