LessonPlan

Name of the Faculty : Neeraj Sangwan Discipline :Mechanical Engg.

Semester : 4th

Subject : I.E.

Lesson plan duration : 16 weeks (from 06 march, 2023 to 23 june, 2023)

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| Week | Theory | |
| Lecture Day | Topic (including assignments /tests) |
| 1st Week | 1st | **Unit1:Productivity;** Introductiontoproductivity,factorsaffectingproductivity |
| 2nd | Measurement of productivity, causes of low productivity and methods to improve productivity |
| 3rd | contribution of standardization in improving productivity. |
| Week 2 | 1st | **Unit 2: Work Study;** Definition and scope of work study |
| 2nd | Inter-relation between method study and work measurement |
|  | 3rd | factors for selection of work study job, uses and limitations of work study, |
| Week 3 | 1st | Human aspects of work study;Role of work study in improving productivity |
| 2nd | **Unit 3: Method Study;** Objectives and procedure for Method analysis |
| 3rd | Information collection and recording techniques. |
| Week 4 | 1st | Assignment |
| 2nd | Revision & Test |
| 3rd | **Unit 4: Motion Analysis;** Principles of Motion analysis |
| Week 5 | 1st | Therbligs and SIMO charts |
| 2nd | Normal work area and design of work places |
| 3rd | Ergonomics, design of tools and equipments. |
| Week 6 | 1st | **Unit 5: Work Measurement;** Objectives; workmeasurement techniques, stop watch time study |
| 2nd | principle,equipment used and procedure; systems of performance rating; |
| 3rd | calculation of basic times, various allowances |

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| Week 7 | 1st | calculation of standard time |
| 2nd | work sampling, standard data and its usage. |
| 3rd | Assignment |
| Week 8 | 1st | **Unit 6: Wages & Incentive Schemes;** Introduction to wages, |
| 2nd | Wage payment for direct and indirect labour, wage payment plans and incentives |
| 3rd | various incentive plans, incentives for indirect labour. |
| Week 9 | 1st | Revision & Test |
| 2nd | **Unit 7:Production Planning & Control;** Introduction,objectivesand components (functions) of P.P.C |
| 3rd | Advantages of production planning and Production Control |
| Week 10 | 1st | stages of P.P.C, process planning |
| 2nd | routing, scheduling, dispatching and follow up |
| 3rd | routing purpose, route sheets |
| Week 11 | 1st | scheduling – purpose, machine loading chart, Gantt chart, |
| 2nd | dispatching –purpose, and procedure |
| 3rd | follow up – purpose and procedure |
| Week 12 | 1st | CPM/PERT technique |
| 2nd | drawing of simple networks and critical time calculation |
| 3rd | Production Control in job order |
| Week 13 | 1st | batch type and continuous type of productions.Difference between these controls. |
| 2nd | **Unit 8: Estimating & Costing;** Introduction |
| 3rd | Different Layout and structures of stores |

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| Week 14 | 1st | Inventory control |
| 2nd | calculation of EOQ |
| 3rd | Bin cards |
| Week 15 | 1st | various forms required in stores for documentation |
| 2nd | Purchase procedures. |
| 3rd | Revision |
| Week 16 | 1st | Previous paper solution |
| 2nd | Previous paper solution |
| 3rd | Previous paper solution |