Lesson Plan

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

Semester : 6th

Subject : ESTIMATING AND COSTING

Lesson plan duration : 16 weeks (from 06 March 2023 to 23 JuNE, 2023)

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| Week | Theory | |
| Lecture Day |  |
| 1st Week | 1st | Definition of estimation, Importance, aims and functions of estimating; cost accounting, |
| 2nd | purposes of cost accounting, Comparison of estimating and costing, |
| 3rd | estimating procedure |
| Week 2 | 1st | cost estimators and their qualifications |
| 2nd | types of estimates, constituents of job estimates, cost of production, selling price, |
| 3rd | capital investment, rate of return(ROR) on investment |
| Week 3 | 1st | Definitions, objectives, elements of costs, components of costs, |
| 2nd | overhead expenses:: factory expenses, |
| 3rd | depreciation-causes; methods of calculation of depreciation, obsolescence, |
| Week 4 | 1st | interest on capital, idleness costs, repairs and maintenance cost, |
| 2nd | selling and distribution overheads and methods of allocation of overhead charges |
| 3rd | procedure for costing |
| Week 5 | 1st | Objectives of cost accounting |
| 2nd | difference between financial accounting and cost accounting, |
| 3rd | advantages of cost accounting, |

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| Week 6 | 1st | methods of costing |
| 2nd | unit costing, batch costing, departmental costing |
| 3rd | process costing, multiple and composite costing |
| Week 7 | 1st | Objectives of cost estimating |
| 2nd | functions of cost estimating, |
| 3rd | organization of estimating department |
| Week 8 | 1st | principal factors in estimating, |
| 2nd | miscellaneous allowances, estimating procedures, |
| 3rd | qualities of estimator |
| Week 9 | 1st | Estimation of volumes,. |
| 2nd | weights and cost of material for items like pulley, |
| 3rd | spindle, lathe centre |
| Week 10 | 1st | fly wheel, crank shaft and similar items. |
| 2nd | Simple numericals on the above |
| 3rd | budgets and types of budgets |
| Week 11 | 1st | Set up time, operation time, |
| 2nd | handling time, machining time, tear down time, allowances; personal, fatigue, |
| 3rd | tool checking/sharpening/changing |
| Week 12 | 1st | unit operation time, cycle time and total time, |

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| 2nd | full depth of cut, cutting speeds for various operations for different tool materials and product materials |
| 3rd | estimation of time for various machining operations - turning, drilling, |
| Week 13 | 1st | boring, tapping, |
|  | 2nd | shaping, planning,. |
|  | 3rd | milling and grinding |
| Week 14 | 1st | Estimation of cost of different products produced in welding- gas and electric welding |
| 2nd | , forging and foundry shops. |
| 3rd | Revision |
| Week 15 | 1st | Revision |
|  | 2nd | Revision |
|  | 3rd | Revision |
| Week 16 | 1st | Revision |
|  | 2nd | Revision |
|  | 3rd | Revision |