**RJLB Govt. Polytechnic, Loharu**

***LECTURE PLAN (FEB.-JUNE. 2024)***

**BRANCH:** ME **SEMESTER: 6th**

**SUBJECT:** E&C

**NAME OF FACULTY**: ANKIT PANGHAL

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| **S.**  **No.** | **Name of Topic** | **No. of Lectures** |
| **Chapter -1- Introduction** | | |
| 1 | Definition of estimation, Importance, aims and functions of estimating | 1 |
| 2 | Cost accounting, purposes of cost accounting | 1 |
| 3 | Comparison of estimating and costing, estimating procedure | 1 |
| 4 | cost estimators and their qualifications | 1 |
| 5 | types of estimates, constituents of job estimates, cost of production | 1 |
| 6 | selling price, capital investment, rate of return(ROR) on investment | 1 |
| **Chapter -2- Elements of Costing** | | |
| 7 | Definitions, objectives, elements of costs | 1 |
| 8 | components of costs, overhead expenses | 1 |
| 9 | factory expenses, depreciation-causes | 1 |
| 10 | Methods of calculation of depreciation | 1 |
| 11 | Methods of calculation of depreciation | 1 |
| 12 | obsolescence, interest on capital, idleness costs, | 1 |
| 13 | repairs and maintenance cost, selling and distribution overheads | 1 |
| 14 | methods of allocation of overhead charges, procedure for costing | 1 |
| **Chapter -3- Cost Accounting** | | |
| 15 | Objectives of cost accounting | 1 |
| 16 | difference between financial accounting and cost accounting | 1 |
| 17 | advantages of cost accounting, methods of costing | 1 |
| 18 | unit costing, batch costing, | 1 |
| 19 | departmental costing, process costing, | 1 |
| 20 | multiple and composite costing | 1 |
| **Chapter -4- Fundamentals of Estimating** | | |
| 21 | Objectives of cost estimating | 1 |
| 22 | functions of cost estimating | 1 |
| 23 | organization of estimating department | 1 |
| 24 | principal factors in estimating | 1 |
| 25 | miscellaneous allowances | 1 |
| 26 | estimating procedures | 1 |
| 27 | qualities of estimator | 1 |
| **Chapter -5- Estimation of Material Cost** | | |
| 28 | Estimation of volumes | 1 |
| 29 | weights and cost of material for items like pulley | 1 |
| 30 | weights and cost of spindle, lathe centre | 1 |
| 31 | Weights and cost of fly wheel, crank shaft and similar items. | 1 |
| 32 | Simple numerical | 1 |
| 33 | budgets and types of budgets | 1 |
| **Chapter -6- Estimation of Machine Shop** | | |
| 34 | Set up time, operation time | 1 |
| 35 | handling time, machining time | 1 |
| 36 | tear down time, allowances | 1 |
| 37 | tool checking/sharpening/changing, | 1 |
| 38 | unit operation time, cycle time and total time | 1 |
| 39 | full depth of cut for various operations for different tool materials and product materials | 1 |
| 40 | cutting speeds for various operations for different tool materials and product materials | 1 |
| 41 | estimation of time turning | 1 |
| 42 | estimation of time drilling | 1 |
| 43 | estimation of time boring | 1 |
| 44 | estimation of time tapping | 1 |
| 45 | estimation of time shaping | 1 |
| 46 | estimation of planning | 1 |
| 47 | estimation of milling and grinding | 1 |
| **Chapter -7- Estimation of Other Shops** | | |
| 34 | Estimation of cost of different products produced in welding | 2 |
| 35 | Estimation of cost of different products produced in gas welding | 2 |
| 36 | Estimation of cost of different products produced in Arc welding | 2 |
| 37 | Estimation of cost of different products produced in foundry shops | 2 |
| 38 | Estimation of cost of different products produced in forging | 2 |