Specimen of lesson Plan

Name of the Faculty : Mr. Sumit Rohilla

Discipline:

Semester: 4th

Subject: Estimating and costing in electrical engineering

Lesson plan duration: 15 weeks

Work load: Lectures-04, Practical -00

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| **Week** | **Theory** | | **Practical** | |
| Lecture day | Topics | Practical  days | Topics |
| 1st | **1st** | Purpose of estimating and costing, Performa for making estimates, preparation of materials schedule, costing, price list |  |  |
| **2nd** | Preparation of tender document, net price list |
| **3rd** | Market survey over head charges, labour charge |
| **4th** | Electrical point method & fixed percentage method |
| 2nd | **5th** | Contingency, profit, purchase system, enquiries |  | |
| **6th** | Comparative statements, orders for supply and payment of bills |
| **7th** | Tenders-its constituents, finalization, specimen tender (class test-1) |
| **8th** | Cleat, batten, casing and capping, conduit wiring |  | |
| 3rd | **9th** | Comparison of different wiring systems, selection and design of wiring schemes for particular situation |  | |
| **10th** | Selection of wires and cable, wiring accessories and uses of protective devices i.e MCB,ELCB,etc |
| **11th** | Use of wire-gauge and tables (class test-2),  Domestic installations. |
| **12th** | Descriptive of various tests to test the wiring installation before commissioning.  Standard practice as per IS and IE rules. |
| 4th | **13th** | Planning of circuits and position of different accessories, Electrical layout |
| **14th** | Preparing estimates including cost as per schedule rate pattern and actual market rate (class test-3) |
| **15th** | Industrial installations, relevant IE and IS standards practices |
| **16th** | Planning, designing and estimation of installation for single phase motors of different ratings |
| 5th | **17th** | Electrical circuit diagram, starters, preparation of list of materials |
| **18th** | Estimating and costing exercise on single phase |
| **19th** | 3- phase motor load and light load |
| **20th** | Service line connection estimate for domestic upto 10 kw |
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| 6th | 21th | Estimating the material required |  |
| 22th | Transmission and distribution line |
| 23rd | Overhead and underground |
| 24th | Planning and designing of lines with different fixtures |
| 7th | 25th | Earthing cost calculation |
| 26th | Introduction of substation |
| 27th | Types of substation |
| 28th | Substations schemes and components |
| 8th | 29th | Estimate of 11/0.4 kw, pole mounted substation up to 200kw rating |
| 30th | Methods of earthing of substations |
| 31st | Key diagram of 66kv/11kv and 11kv/0.4 kv substation |
| 32nd | Single line diagram of indoor and outdoor |