Lesson planning for the semester starting w.e.f. 08.01.2018

Govt. Polytechnic Education Society, Manesar

Name of the Faculty : Sh. Vijay Kumar

Discipline : Electrical/E.C.E/ Comp. Engg.

Semester : 2ⁿ

Subject : Workshop Practice-II (Electrical Shop)

Lesson plan duration : 15 weeks (January, 2018 to April, 2018) Workload per week

(in hours): Practical -06Hrs.

| Week | Theory | | Group Number | Practical | |
|-----------------|-------------|-------|-----------------|-----------------|---|
| | Lecture day | Topic | | Practical day | Topic |
| 1 st | | | 1 st | 1 st | Introduction to Single Phase & Three Phase supply & wiring system. Importance of three phase supply (RYB) & its sequence & wiring system. Job 1: Connecting generator & 3 Phase wiring through change over switch. |
| | | | | 2 nd | Estimating & costing of power consumption. Job 2: Connecting Single phase meter with supply & load. Reading & working out power consumption & cost of energy. |
| 2 nd | | | 1 st | 3 rd | Study of internal wiring diagram of common electrical appliances such as auto-electric iron, electric kettle, ceiling/table fan, desert cooler etc Demonstration of dismantling, servicing & reassembling of table/ceiling fan, air cooler, auto electric iron, heater etc Job 3: Dismantling, servicing |

| | | | 4 th | reassembling of any of the above electric appliances, finding faults with series testing lamps & multimeter Testing & reversing direction of rotation of single phase & 3 Phase motors. Job 4: Acceptance Testing of single phase/ three phase motor by using volt meter, ammeter & tacho-meter. Job 5: Reversing direction of rotation of single phase & three |
|-----------------|--|-----------------|-----------------|--|
| 3 rd | | 2 nd | 5 th | phase motor. Introduction to Single Phase & Three Phase supply & wiring system. Importance of three phase supply (RYB) & its sequence & wiring system. Job 1: Connecting generator & 3 Phase wiring through change over switch. |
| | | | 6 th | Estimating & costing of power consumption. Job 2: Connecting Single phase meter with supply & load. Reading & working out power consumption & cost of energy. |
| 4 th | | 2 nd | 7 th | Study of internal wiring diagram of common electrical appliances such as auto-electric iron, electric kettle, ceiling/table fan, desert cooler etc Demonstration of dismantling, servicing & reassembling of table/ceiling fan, air cooler, auto electric iron, heater |

| | | | 8 th | etc Job 3: Dismantling, servicing reassembling of any of the above electric appliances, finding faults with series testing lamps & multimeter Testing & reversing direction of rotation of single phase & 3 Phase motors. Job 4: Acceptance Testing of single phase/ three phase motor by using volt meter, ammeter & tacho-meter. Job 5: Reversing direction of rotation of single phase & three |
|-----|--|-----------------|-----------------|--|
| 5th | | | 9th | phase motor. |
| | | | 10th | 1 st Sessional Test |
| 6th | | 3 rd | 11th | Introduction to Single Phase & Three Phase supply & wiring system. Importance of three phase supply (RYB) & its sequence & wiring system. Job 1: Connecting generator & 3 Phase wiring through change over switch. |
| | | | 12th | Estimating & costing of power consumption. Job 2: Connecting Single phase meter with supply & load. Reading & working out power consumption & cost of energy. |
| 7th | | 3 rd | 13th | Study of internal wiring diagram of common electrical appliances |

| | | | | such as auto-electric iron, electric kettle, ceiling/table fan, desert cooler etc Demonstration of dismantling, servicing & reassembling of table/ceiling fan, air cooler, auto electric iron, heater etc Job 3: Dismantling, servicing reassembling of any of the above electric appliances, finding faults with series testing lamps & multimeter |
|-----|--|-----------------|------|--|
| | | | 14th | Testing & reversing direction of rotation of single phase & 3 Phase motors. Job 4: Acceptance Testing of single phase/ three phase motor by using volt meter, ammeter & tacho-meter. Job 5: Reversing direction of rotation of single phase & three phase motor. |
| 8th | | 1 st | 15th | Identification & familiarization with the following tools: Tweezers, Screw Driver, (Different Sizes), insulated pliers, cutters, snipers, Philips screw driver, L-Keys, Soldering iron, & their demonstration, & uses. Job 6: Practice on joining using soldering flux & removing components/ wires, by |
| 9th | | 1 st | 17th | desoldering. Revision of the Syllabus (Theory) Job 1 & Job 2 |

| | | 18 th | Revision of the Syllabus (Theory) Job 3 & Job 4 |
|------------------|-----------------|------------------|--|
| 10 th | | 19 th | 2 nd Sessional Test |
| 11 th | 2 nd | 21 st | Identification & familiarization with the following tools: Tweezers, Screw Driver, (Different Sizes), insulated pliers, cutters, snipers, Philips screw driver, L-Keys, Soldering iron, & their demonstration, & uses. |
| | | 22 nd | Job 6: Practice on joining using soldering flux & removing components/ wires, by desoldering. |
| 12 th | 2 ^{na} | 23 rd | Revision of the Syllabus (Theory) Job 1 & Job 2 |
| | | 24 th | Revision of the Syllabus (Theory) Job 3 & Job 4 |
| 13 th | 3 rd | 25 th | Identification & familiarization with the following tools: Tweezers, Screw Driver, (Different Sizes), insulated pliers, cutters, snipers, Philips screw driver, L-Keys, Soldering iron, & their demonstration, & uses. |
| | | 26 th | Job 6: Practice on joining using soldering flux & removing |

| | | | | components/ wires, by desoldering. |
|------------------|--|-----------------|-----------------------------------|---|
| 14 th | | 3 rd | 27 th | Revision of the Syllabus (Theory) Job 1 & Job 2 |
| | | | 28 th | Revision of the Syllabus (Theory) Job 3 & Job 4 |
| 15 th | | | 29 th 30 th | 3 rd - Seasonal Test |
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