



GOVERNMENT POLYTECHNIC KORAPUT

Pr1. ELECTRICAL WORKSHOP PRACTICE

Name of the Course: Diploma in Electrical Engineering			
Faculty: Mahesh Kumar Biswal			
Course code:	Pr1	Semester 10/3/2022	6 th
Total Period:	90	to 10/6/2022	
Theory periods:	6P/week	Examination	3hrs
		Term work	25
Maximum marks:	150	End Semester Examination:	100

DEPARTMENT OF ELECTRICAL

Vision:-

To create competent and industry ready Electrical diploma engineers with professional and social values to meet future challenges.

Mission:-

- To prepare diploma holders through “qualitative competency based education system” to compete with national requirement along with core values
- To produce dynamic Electrical Engineers to serve the society and industry .
- To develop leadership qualities, communication skills, critical thinking and attitude for Lifelong learning.

Program educational objectives:-

PEO1:	Apply technical knowledge and skills learned in the field of Electrical Engineering to excel in professional and/or higher education.
PEO2:	to provide students an excellent academic environment and make them aware the needs of Society and Industry to become a successful Professional/Entrepreneur.
PEO3:	To engage in lifelong learning, career enhancement to adopt emerging technologies

Course outcomes:-

Co1	To acquire knowledge of various tools, machine, devices used in engineering fields.
Co2	Explore the knowledge of carrying out various operation in electrical engineering workshop
Co3	Analyze for fault finding, repairing of DC and AC machine.
Co4	Develop skill in basic engineering practice for creating object from raw material.





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LESSON PLAN

Week	Day	Theory topic
1 st	1 st	Identification of single core (SC), twin core (TC), three cores (3c), four cores (4c); copper and aluminum PVC, VIR & Weather proof (WP) wire and prepare Britannia T- joint and Married joint
	2 nd	do
	3 rd	do
	4 th	do.
	5 th	do
	6 th	do
2 nd	1 st	Cutting copper and aluminum cable and crimping lug to them from 2.5mm ² to 6 mm ² cross section
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
3 rd	1 st	Connection and testing of fluorescent tube light, high pressure M.V. lamp, sodium vapor lamp, M.H lamp, CFL and latest model lamps — measure inductance, Lux/ lumens(intensity of illumination) in each case-prepare lux table
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
4 th	1 st	Study battery charger and make charging of lead acid battery (record charging voltage, current and specific gravity).
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
5 th	1 st	Erection of residential building wiring by CTS and conduit wiring system using main two points and test installation by test lamp method and a meggar
	2 nd	Do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
6 th	1 st	Fault finding & repairing of Ceiling Fan – prepare an inventory list of parts.
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
7 th	1 st	Find out fault of D.C. generator, repair and test it to run



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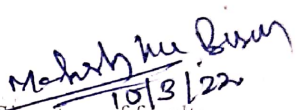
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
8 th	1 st	Find out fault of D.C. motor starters and A.C motor starter – prepare an inventory list of parts used in different starters
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
9 th	1 st	Dismantle, over haul and assemble a single phase induction motor. Test and run it. —prepare an inventory list
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
10 th	1 st	Dismantle over haul and assemble a three phase squirrel cage and phase wound motor. Test and run them
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
11 th	1 st	Overhaul a single phase and 3-phase variac
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
12 th	1 st	Revision of previous experiments
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	Do
13 th	1 st	Revision of previous experiments
	2 nd	Do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
14 th	1 st	Revision of previous experiments



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	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do
15 th	1 st	Revision of previous experiments
	2 nd	do
	3 rd	do
	4 th	do
	5 th	do
	6 th	do


Signature of HOD (electrical)
10/3/22


Signature of faculty
10/3/22