

GOVERNMENT POLYTECHNIC KORAPUT

Pr1. MECHANICAL ENGINEERING LABORATORY

Name of the Course: Diploma in Electrical Engineering			
Faculty: N Bikash Rao		Semester Start Date: 01/08/2023 End Date : 30/11/2023	
Course code:	Pr1.	Semester	3 rd
Total Period:	45	Examination	3Hrs
Theory periods:	3P/Week	Internal Assessment	25
Maximum marks:	75	End Semester Examination	50

DEPARTMENT OF ELECTRICAL ENGINEERING

Vision:-

To create competent & 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 (PEOs)

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 of the needs of Society and Industry to become a successful Professional/Entrepreneur.
PEO3:	To engage in lifelong learning, career enhancement to adopt emerging technologies.

GOVERNMENT POLYTECHNIC, KORAPUT

LESSON PLAN

Week	ClassDay	Theory/Practical Topics
1 ST	1-3	1. APPLIED MECHANICS AND MATERIAL TESTING <i>1.1 determination of M.A, V.R and efficiency of screw jack (contd...)</i>
	4-6	<i>1.1 determination of M.A, V.R and efficiency of screw jack (contd...)</i>
2 ND	1-3	<i>1.2 determination of co-efficient of bearing (contd...)</i>
	4-6	<i>1.2 determination of co-efficient of bearing</i>
3 RD	1-3	<i>1.3 determination of young's modulus by Searle's apparatus (contd...)</i>
	4-6	<i>1.3 determination of young's modulus by Searle's apparatus</i>
4 TH	1-3	<i>1.4 determination of M.A, V.R and efficiency of wheel train (contd...)</i>
	4-6	<i>1.4 determination of M.A, V.R and efficiency of wheel train</i>
5 TH	1-3	<i>1.5 determination of bending stress in beam using strain gauge</i>
	4-6	<i>1.6 study the universal testing machine and determination of tensile stress and young's modulus of M.S specification. (contd...)</i>
6 TH	1-3	2. HYDRAULICS & HYDRAULIC MACHINE LAB <i>2.1 Study of pressure measuring devices such as (a) Piezo-meter (b) Simple manometer (contd...)</i>
	4-6	<i>2.1 Study of pressure measuring devices such as (a) Piezo-meter (b) Simple manometer</i>
7 TH	1-3	<i>2.2 Study of venturi-meter (contd...)</i>
	4-6	<i>2.2 Study of venturi-meter</i>
8 TH	1-3	<i>2.3 Verification of Bernouli's Theorem (contd...)</i>
	4-6	<i>2.3 Verification of Bernouli's Theorem</i>
9 TH	1-3	<i>2.4 Model study of Centrifugal pumps, Francis, Turbine, Kaplan turbine and Pelton wheel. (contd...)</i>
	4-6	<i>2.4 Model study of Centrifugal pumps, Francis, Turbine, Kaplan turbine and Pelton wheel.</i>

10 TH	1-3	3. HEAT ENGINE LAB 3.1 Study of Cochran Boiler (contd...)
	4-6	3.1 Study of Cochran Boiler
11 TH	1-3	3.2 Study and demonstration of Stream Engine (contd...)
	4-6	3.2 Study and demonstration of Stream Engine
12 TH	1-3	3.3 Study and demonstration of Diesel Engine (contd...)
	4-6	3.3 Study and demonstration of Diesel Engine
13 TH	1-3	3.3 Study and demonstration of Diesel Engine
	4-6	3.4 Study and demonstration of Petrol Engine (CONTD...)
14 TH	1-3	3.4 Study and demonstration of Petrol Engine (CONTD...)
	4-6	3.4 Study and demonstration of Petrol Engine
15 TH	1-3	LAB RECORD SUBMISSION
	4-6	LAB RECORD SESSION

N. Venkatesh Rao
Sign. Of Faculty concerned
01/08/23

Sign. Of HOD/M/C

Principal