DEPARTMENT OF ELECTRICAL ENGINEERING

GOVERNMENT POLYTECHNIC, BARGARH

LESSON PLAN

ESSENCE OF INDIAN KNOWLEDGE

4TH SEMESTER

ELECTRICAL & ELECTRONICS ENGINEERING

PREPARED BY SMT. PRITEE P. MINZ

SR. LECTURER (ELECTRICAL)

DEPARTMENT OF ELECTRICAL ENGINEERING

VISION:

To produce Electrical Engineer professionals who can contribute for socio-economic and technological development to meet global needs.

MISSION:

M1 - To strengthen academic infrastructure leading to quality professional by using modern technical tools and technologies.

M2 - To impart innovative knowledge among the students and make more industry-institution programs to make them successful professionals for serving the society.

M3 - To provide a learning environment to improve problem solving abilities, leadership abilities, ethical responsibilities and lifelong learning.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO1: Apply electrical engineering knowledge and practical skills to solve well-defined engineering problems using modern tools and techniques.

PEO2: Perform effectively in industry and society as competent junior engineer, supervisors, or entrepreneurs with ethical and sustainable engineering practices.

PEO3: Demonstrate teamwork, communication, leadership, and project management skills in professional engineering activities.

PEO4: Engage in lifelong learning and adapt to emerging technologies for career growth and higher education.

PROGRAM SPECIFIC OUTCOMES

The electrical diploma engineers will be able to:

PSO1:-Apply the fundamentals of mathematics, science and engineering knowledge to identify, formulate, design and investigate engineering problems of electric circuits, analog and digital electronics, control system, electrical machines and power system.

PSO2:- Apply the appropriate techniques and modern engineering hardware and software tools in electrical engineering to engage in life-long learning and to successfully adapt in multidisciplinary environments.

PSO3:-Work professionally in power systems engineering, Electrical machinery and electrical circuit.

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DEPARTMENT OF ELECTRICAL ENGINEERING

Semester:4th
Subject: EIKT
Branch: Electrical Engineering

Season: Summer -2026
No. of period: 30(2p/week)
Name of Faculty: **Pritee Prava Minz, Sr. Lecturer (EE)**

Week	Class	Topics to be Covered
1	1	Course Introduction, Syllabus Discussion, Importance of Indian Knowledge System
1	2	Definition, Nature and Characteristics of Traditional Knowledge (TK)
2	3	Scope and Importance of Traditional Knowledge
2	4	Indian Knowledge Systems: Unani, Ayurveda and Siddha
3	5	Indigenous Knowledge (IK): Meaning, Characteristics and Applications
3	6	Traditional Knowledge vis-à-vis Indigenous Knowledge; Traditional Knowledge of Odisha
4	7	Unit-I Revision and Discussion
4	8	Need and Significance of Protection of Traditional Knowledge
5	9	Value of Traditional Knowledge in the Global Economy
5	10	Role of Government in Protecting Traditional Knowledge
6	11	Traditional Knowledge Digital Library (TKDL) and Government Initiatives
6	12	Unit-II Revision, Quiz and Discussion
7	13	Forest Rights Act, 2006
7	14	PPVFR Act, 2001
8	15	Biological Diversity Act, 2002 and Rules, 2004
8	16	Protection of Traditional Knowledge Bill, 2016
9	17	Legal Frameworks for Protection of Traditional Knowledge
9	18	Unit-III Revision and Assignment Discussion
10	19	Traditional Knowledge and Intellectual Property Rights (IPR)
10	20	Patents and Traditional Knowledge
11	21	Strategies for Protection of Traditional Knowledge
11	22	Geographical Indications (GI) and Traditional Products
12	23	Traditional Knowledge in Engineering and Technology
12	24	Traditional Medicine Systems and Healthcare Applications
13	25	Traditional Knowledge in Agriculture
13	26	Biodiversity Conservation and Sustainable Development
14	27	Food Security and Protection of Traditional Knowledge
14	28	Unit-IV & V Revision with Case Studies
15	29	Comprehensive Revision and Question Discussion
15	30	Final Quiz, Course Outcome Assessment and Feedback

Faculty Signature

HOD Signature