

GOVT POLYTECHNIC BOLANGIR
Department of Mechanical Engineering

LESSON PLAN: 2025-26	
Name of the Faculty: Manabhanjan Bhoi (Lecturer Stage-II)	
Subject: ESSENCE OF INDIAN KNOWLEDGE AND TRADITION (AU202) Program: Diploma in Mechanical Engineering Semester: 4th Total Contact Hours: 30 Total Marks: 100 Assessment: Progressive –100, End Term – 0 Credits: 0	

COURSE OBJECTIVES:


After completion of the course, the students will be able to


1. Discuss the concepts of traditional Indian knowledge and roots of knowledge system and indigenous knowledge system.
2. Explain the technique of protection of traditional Indian knowledge.
3. Discuss legal frameworks of traditional knowledge.
4. State intellectual property rights.
5. State traditional knowledge in Different Sectors.

UNIT-I: Introduction to Traditional Knowledge (Total Classes: 07)				
Class No.	Topic	Subtopics Covered	Teaching Aids / Activities	Course Objective
1	Introduction to Traditional Knowledge	Definition of traditional knowledge	Lecture, PPT	CO1
2	Nature & Characteristics of TK	Nature and characteristics of TK	Lecture, discussion	CO1
3	Scope and Importance of TK	Scope, importance and relevance	PPT, examples	CO1
4	Kinds of Traditional Knowledge	Unani, Siddha, Ayurveda systems	PPT, charts	CO1
5	Indigenous Knowledge (IK)	Meaning and characteristics of IK	Lecture, PPT	CO1
6	TK vs IK	Comparison between TK and IK	Comparative chart, discussion	CO1
7	Traditional Knowledge of Odisha	Examples of Odisha's traditional practices	Case study, discussion	CO1

UNIT-II: Protection of Traditional Knowledge (Total Classes: 07)				
8	Need for Protection of TK	Reasons for protecting TK	Lecture, PPT	CO2
9	Significance of TK Protection	Cultural significance	Discussion, PPT	CO2
10	Significance of TK Protection	Social and economic significance	Discussion, PPT	CO2
11	Value of TK in Global Economy	Economic importance of TK globally	PPT	CO2
12	Value of TK in Global Economy	Economic importance of TK globally	Examples	CO2
13	Role of Government	Government initiatives to harness TK	Lecture	CO2
14	Role of Government	Government initiatives to harness TK	Discussion	CO2
UNIT-III: Legal framework and TK (Total Classes: 06)				
15	Legal Framework – Overview	Introduction to legal framework for TK	Lecture, PPT	CO3
16	Forest Rights Act, 2006	Scheduled Tribes & Forest Dwellers Act	Lecture, handouts	CO3
17	PPVFR Act, 2001	Plant Varieties Protection & Farmer's Rights Act	PPT, discussion	CO3
18	Biological Diversity Act	Biological Diversity Act 2002 & Rules 2004	Lecture, charts	CO3
19	TK Protection Bill	Protection of Traditional Knowledge Bill, 2016	Lecture, discussion	CO3
20	Revision & Evaluation	Overall revision and interaction of Unit-I, II & III	Q&A, discussion	CO1- CO3
UNIT-IV: Traditional Knowledge and Intellectual Property (Total Classes: 04)				
21	Intellectual Property Rights	Concept and types of IPR, Systems used for protection of TK	Lecture, PPT	CO4
22	Patents and TK	Relationship between patents and TK	Case studies	CO4
23	Strategies for TK Protection	Legal and policy strategies	Lecture, discussion	CO4
24	Geographical Indications (GI)	GI and its role in TK protection	PPT, examples	CO4

UNIT-V: Traditional Knowledge in Different Sectors (Total Classes: 06)				
25	TK in Engineering and Medicine Systems	Application of TK in engineering, Traditional healthcare and medicine	Lecture, examples	CO5
26	TK in Agriculture	Role of TK in agriculture	PPT, examples	CO5
27	TK , Food Security and Environment	Food security and traditional practices, Importance of conservation and sustainable development	Lecture, PPT	CO5
28	Biodiversity Management, TK and Sustainable Development	Management of biodiversity using TK, Sustainable development through TK	Lecture, discussion	CO5
29	Protection of TK	Community role in protection of TK	Lecture, discussion	CO5
30	Revision & Evaluation	Overall revision and interaction	Q&A, discussion	CO1-CO5


 22-12-25
 Signature of Faculty


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