# **SNS COLLEGE OF ENGINEERING**



Kurumbapalayam (Po), Coimbatore – 641 107



### AN AUTONOMOUS INSTITUTION

Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai

### **19MC003 - ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE**

# Syllabus

#### UNIT-I:

**Introduction to traditional knowledge:** Define traditional knowledge, nature and characteristics, scope and importance, kinds of traditional knowledge, Indigenous Knowledge (IK), characteristics, traditional knowledge vis-a-vis indigenous knowledge, traditional knowledge Vs western knowledge traditional knowledge

### UNIT-2:

**Protection of traditional knowledge:** The need for protecting traditional knowledge Significance of TK Protection, value of TK in global economy, Role of Government to harness TK.

#### UNIT-3:

**Legal framework and TK:** The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, Plant Varieties Protection and Farmer's Rights Act, 2001 (PPVFR Act); The Biological Diversity Act 2002 and Rules 2004, the protection of traditional knowledge bill, 2016.

#### UNIT-4:

**Traditional knowledge and intellectual property:** Systems of traditional knowledge protection, Legal concepts for the protection of traditional knowledge, Patents and traditional knowledge, Strategies to increase protection of traditional knowledge UNIT-5:

**Traditional Knowledge in Different Sectors:** Traditional knowledge and engineering, Traditional medicine system, TK in agriculture, Traditional societies depend on it for their food and healthcare needs, Importance of conservation and sustainable development of environment, Management of biodiversity, Food security of the country and protection of TK

#### Text Books:

1. Traditional Knowledge System in India, by Amit Jha, 2009.

#### Reference Books:

- 1. Traditional Knowledge System in India by Amit Jha Atlantic publishers, 2002.
- 2. "Knowledge Traditions and Practices of India" Kapil Kapoor1, Michel Danino2.

# Two mark Question and answer

UNIT 4: Traditional Knowledge and Intellectual Property

- 1. What is Intellectual Property (IP) in the context of Traditional Knowledge?
- IP refers to legal rights that protect indigenous knowledge and prevent its misuse by third parties.
- 2. What are the main IP systems used to protect Traditional Knowledge?
- TK is protected through **patents**, **copyrights**, **trademarks**, **Geographical Indications (GIs)**, **and sui generis systems**.
- 3. How does patent law affect Traditional Knowledge?
- Patent law **can sometimes lead to biopiracy**, but it also provides a means to legally protect TK-based innovations.
- 4. What is a Geographical Indication (GI), and how does it protect TK?
- A GI identifies products from a specific region, like Darjeeling tea or Mysore silk, ensuring authenticity and economic benefits.
- 5. What are some challenges in protecting TK through patents?
- Challenges include **difficulty in proving ownership**, **oral transmission of knowledge**, **and lack of documentation**.
- 6. How does the World Intellectual Property Organization (WIPO) support TK protection?
- WIPO develops international policies and guidelines to help countries safeguard their indigenous knowledge legally.
- 7. What are benefit-sharing agreements in TK protection?
- These agreements **ensure that indigenous communities receive financial and non-financial benefits from their knowledge.**
- 8. What is an example of a patent dispute related to TK?
- The **Neem patent case**, where India challenged a U.S. patent on neem-based pesticides, highlighting prior indigenous knowledge.
- 9. How can sui generis laws help protect TK?
- Sui generis laws create unique legal frameworks specifically tailored for preserving and protecting Traditional Knowledge.

- 10. What role does the Convention on Biological Diversity (CBD) play in TK protection?
- The CBD promotes the conservation of biodiversity and ensures fair use of genetic resources linked to TK.

## Sixteen-mark question

#### **UNIT 4: Traditional Knowledge and Intellectual Property**

- 1. How can blockchain technology be used to ensure fair benefit-sharing in traditional knowledge-related patents? *(Creating Level 6)*
- 2. Critically assess the impact of patenting traditional medicinal practices on indigenous communities' access to healthcare. *(Evaluating Level 5)*
- 3. Analyze the limitations of current Intellectual Property Rights (IPR) laws in safeguarding TK from biopiracy. *(Analyzing Level 4)*
- 4. Propose a new legal instrument that ensures both economic sustainability and cultural preservation of TK. *(Creating Level 6)*
- 5. Compare case studies of successful and unsuccessful TK protection through patents. What key factors contributed to their outcomes? *(Analyzing Level 4)*