



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 1: Introduction to Traditional Knowledge

1. Mention any two characteristics of Indigenous Knowledge.

- Indigenous Knowledge (IK) is **dynamic and adaptive**, evolving through generations based on experiences and environmental changes.
- It is **community-based and transmitted orally**, ensuring cultural continuity within indigenous groups.

2. What is the scope of traditional knowledge?

- Traditional knowledge spans multiple domains, including **medicine, agriculture, biodiversity conservation, and engineering**, influencing sustainable practices and cultural heritage.
- It is used in **healthcare, natural resource management, and environmental conservation**, benefiting both local communities and scientific advancements.

3. How does traditional knowledge differ from Western knowledge?

- Traditional knowledge is **holistic, experience-based, and orally transmitted**, while Western knowledge is **scientific, experimental, and documented in written form**.
- Western knowledge often focuses on **analytical and reductionist approaches**, whereas traditional knowledge emphasizes **interconnectedness with nature and cultural beliefs**.

4. Define Traditional Knowledge (TK).

- Traditional Knowledge refers to **practices, skills, and innovations developed by indigenous communities over generations**. It is passed down through oral traditions and practical experiences.

5. What are the key characteristics of Traditional Knowledge?

- TK is **holistic, community-owned, orally transmitted, adaptive, and deeply linked to nature and culture**.

6. What is the scope of Traditional Knowledge?

- TK is used in **agriculture, medicine, environmental conservation, engineering, and food security**.

7. Why is Traditional Knowledge important?

- It helps in **sustainable development, cultural preservation, biodiversity conservation, and natural resource management**.

8. **What are the different kinds of Traditional Knowledge?**

- TK includes **agriculture, healthcare, ecological conservation, water management, and spiritual practices.**

9. **Define Indigenous Knowledge (IK).**

- IK is **knowledge specific to native communities, developed through direct interaction with nature and cultural heritage.**

10. **Differentiate between Traditional Knowledge and Indigenous Knowledge.**

- Traditional Knowledge is **broader, covering various cultural aspects,** while Indigenous Knowledge is **specific to tribal or native groups.**

11. **What is Western Knowledge?**

- Western Knowledge is **formal, scientifically tested, evidence-based, and documented.**

12. **How is Traditional Knowledge different from Western Knowledge?**

- TK is **experience-based and holistic,** while Western Knowledge is **experiment-based and analytical.**

13. **How is Traditional Knowledge passed down?**

- It is transmitted **orally through generations via storytelling, rituals, and practical demonstrations.**

14. **Mention one example of TK in agriculture.**

- **Crop rotation and organic fertilizers** are traditional agricultural practices for maintaining soil fertility.

15. **Give an example of TK in medicine.**

- **Turmeric is used as an antiseptic, and neem leaves are used for skin treatments.**

16. **What role does TK play in environmental conservation?**

- TK promotes **sustainable farming, forest management, and water conservation.**

17. **What are the challenges in preserving TK?**

- Challenges include **globalization, lack of documentation, and biopiracy by commercial entities.**

18. Why is it important to document TK?

- Documentation helps in **protecting indigenous rights, preventing exploitation, and preserving cultural heritage.**
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Sixteen-mark question

UNIT 1: Introduction to Traditional Knowledge

1. Explain the nature and characteristics of traditional knowledge. How does its scope and importance impact modern society? Provide relevant examples to support your answer.
 2. Compare and contrast traditional knowledge with Western knowledge. How does Indigenous Knowledge (IK) relate to traditional knowledge? Provide real-life examples to illustrate your points.
 3. Analyze the relationship between Indigenous Knowledge (IK) and traditional knowledge. How do they contribute to solving global challenges such as climate change, food security, and biodiversity conservation?
 4. How does the principle of duality apply when comparing traditional and Western knowledge systems in problem-solving approaches? (*Analyzing - Level 4*)
 5. Evaluate whether the preservation of traditional knowledge conflicts with scientific advancements. Provide justified arguments. (*Evaluating - Level 5*)
 6. How can artificial intelligence be leveraged to document and protect oral traditional knowledge while maintaining authenticity? (*Creating - Level 6*)
 7. Analyze how traditional knowledge has influenced modern intellectual disciplines such as environmental science and medicine. (*Analyzing - Level 4*)
 8. Propose an interdisciplinary curriculum that integrates traditional knowledge into higher education without compromising scientific rigor. (*Creating - Level 6*)
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