

LESSON PLAN

NAME OF THE TEACHER	
CLASS	12 th
SUBJECT	KTPI
UNIT / CHAPTER	Module 8 – Other Technologies
DATE	FROM: TO:
NO. OF PERIODS	
CONTENT	<ul style="list-style-type: none"> • Harappan Technologies – Pottery, ceramic technology, brick technology, bead making technology. • Ganges Valley Technologies – Later pottery, Glass technology. • Water management – Rainwater harvesting, step wells. • Textile technology – Types of fabrics, weaving technology and dyeing technology. • Writing Technology – Manuscript writing, paper technology. • Pyrotechnics – Rocket technology, Making of gun power. • Cosmetics and perfumes – Ancient texts on cosmetics and perfumes.
EXPECTED LEARNING OUTCOMES (ELO) (Objectives should enhance knowledge (knowing), emotions (feelings) and actions (doing) using Blooms Taxonomy)	<p>Students will be able to:</p> <ol style="list-style-type: none"> List various technologies prevalent during Harappan and Ganges valley civilisation. Give examples of Kallanai, step well etc., of present times which are working monuments of the ancient water management technology. Recall their past experiences with traditional fabrics and identify their names based on their texture. Investigate about the origin of rocket making technology of the past and compare it with the present one. Apprise their other peer group about Varahamihira as a multifaceted person.
ACTIVITIES	<p>Activity 1: Fashion Show Instruction – Students are asked to bring different fabrics available at their home and few special ones the teacher can organise, and a catwalk can be organised displaying the fabric and each participant can have one volunteer holding a placard of the name of the fabric. Let the fabric be of Indian origin and attention can be paid even to the weaving and dyeing aspect of the fabric.</p> <p>Activity 2: Tableau presentation.</p>

Instruction – Every technology mentioned in the chapter can be presented in the form of a tableau and other grades or juniors can come and have a look at it for which one volunteer can explain how it was prevalent during the ancient times.

Activity 3: Handloom visit/Fabric Dyeing.

Instruction—A field visit can be arranged for students to have a hands-on experience of weaving and understand the life and livelihood of the weavers in our country. An expert on fabric dyeing or tie and dye can be invited for a demonstration on how to dye a cloth with natural colours like vegetable and flower colours.

Activity 4: Investigation on Rocket making technology, cosmetics and perfumes.

Instruction—Students can be encouraged to find out the details about rocket technology, its uses in various battles etc. and a report can be made by the students and the students can make a presentation for the junior class students of their school.

**PRIOR KNOWLEDGE /
PRE-REQUISITES**

- ✓ Chapters on ‘our environment’ and ‘management of natural resources’ from 10th grade text book.

21ST CENTURY SKILLS

Communication

- This skill is naturally enhanced when during activity 3 while interacting with weavers and dyers and during activity 4, while presenting to their juniors.

Collaboration

- Activities 1 & 2 makes the students more collaborative as they have to think as a team and put up a show.

Critical Thinking

- Is technology limited to human being or is it even seen in the animal and birds’ world? How is technology in the human world different from the technology related to other creatures?

Creativity

- Students can try innovating a simple water harvesting/water managing structure during rainy season in their own educational institution on a temporary basis. Example – erecting soil mound to channelize rainwater.

<p>CHINMAYA VISION PROGRAMME (CVP) LINKAGE <i>(Integrate one or more aspect of CVP & explain how these aspects will be brought out)</i></p>	<ul style="list-style-type: none"> ❖ Physical Development: Physical self-expression while presenting the tableau. Dress sense while organising fashion show. ❖ Emotional Development: Emotional expansion happen when students realise and develop reverence towards our ancient scientists like Varahamihira who could write texts on subjects ranging from Astronomy to cosmetics and perfumes. Sensitivity in speech, action and thoughts while interacting with the weavers and juniors. ❖ Intellectual Development: Observation and concentration while seeing the weavers and dyers working. Developing healthy curiosity while discussing on water management techniques which stand the test of time even after thousands of years. ❖ Spiritual Development: All the technological feats discussed in the chapter always was for the entire region and not for individuals. Example stepwells, Kallanai etc. built by the King for the entire region. Their well-wishing is still continuing in the present times. ❖ Indian Culture: Every technological aspect, be it step wells or bead making or glass technology or pottery, they were so culturally motivating in terms of sculptures, designs, art works etc., that along with their utility value, they are quite motivating and pleasing to the eyes. ❖ Patriotism: It is our duty to bring to light the history about all these technologies which existed much before the western world became aware of it.
<p>INTERDISCIPLINARY CONNECTION <i>(Explain the connection to other discipline / subjects)</i></p>	<ul style="list-style-type: none"> ✓ History – About different battles, manuscripts of which age. ✓ Physics & chemistry– While understanding the water management structures and rocket technology.
<p>RESOURCES <i>(Specify the resources used: Website, video links, and books etc.)</i></p>	<p>https://www.youtube.com/watch?v=fbf3NRcocXE Stepwells of India Only in India Episode 19. https://www.youtube.com/watch?v=KZG81sghPfw Fireworks Technology in Ancient Sanskrit. https://www.youtube.com/watch?v=QvhIaeKGdS8 Textile and other technologies.</p>

<p>MICROPLAN (component wise planning of a 40minute class)</p>	<u>Sr. No.</u>	<u>Component - Concepts covered (Textile technology)</u>	<u>Time Required</u>	<u>Name of the Facilitator</u>	<u>Expected Learning Outcome</u>
	1.	Recap/Revise/Refresh	05 minutes		iii)
	2.	Talk/ Lecture/Initiate or introduce the activity.	05 minutes		-
	3.	Q&A/Doubt clearing	05 minutes		21 st century skill – critical thinking.
	4.	Activity – Fashion show on different fabrics.	10 minutes		21 st century skills– communication and collaboration
	5.	Presentation by students	10 minutes		21 st century skill - communication
	6.	Wrapping up	05 minutes		-

<u>REFLECTION</u> (On completion of lesson, mention whether learning objectives were met, time allocated was sufficient,	<u>WHAT WORKED WELL?</u>

*method and resources used
were appropriate or
requires modifications)*

WHAT DIDN'T WORK WELL?

NOTES / CHANGES / SUGGESTIONS