PHILOSOPHY

STANDARD ELEVEN

GOODNESS

LAWS

MYTH

PROBLEM

ART

INDIVIDUAL

THOUGHT

SOCIETY

TRUTH

WISDOM

METHOD

VALUE

PHILOSOPHY

KNOWLEDGE

BEAUTY

MIND

ACTION

OPINION

PERCEPTION

The Constitution of India

Chapter IV A

Fundamental Duties

ARTICLE 51A

Fundamental Duties- It shall be the duty of every citizen of India—

(a)   to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b)   to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c)   to uphold and protect the sovereignty, unity and integrity of India;

(d)   to defend the country and render national service when called upon to do so;

(e)   to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities, to renounce practices derogatory to the dignity of women;

(f)   to value and preserve the rich heritage of our composite culture;

(g)   to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures;

(h)   to develop the scientific temper, humanism and the spirit of inquiry and reform;

(i)   to safeguard public property and to abjure violence;

(j)   to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;

(k)   who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

Philosophy

Standard Eleven

Maharashtra State Bureau of Textbook Production and Curriculum Research, Pune.

E1E3K1

The digital textbook can be obtained through DIKSHA APP on a smartphone by using the Q.R.Code given on title page of the textbook. On this Q.R.Code audio-visual teaching-learning material of the relevant lesson will be available.

(A)

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The Constitution of India

Preamble

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

(C)

NATIONAL ANTHEM

Jana-gana-mana-adhināyaka jaya hē
    Bhārata-bhāgya-vidhātā,

Panjāba-Sindhu-Gujarāta-Marāthā
    Drāvida-Utkala-Banga

Vindhya-Himāchala-Yamunā-Gangā
    uchchala-jaladhi-taranga

Tava subha nāmē jāgē, tava subha āsisa māgē,
    gāhē tava jaya-gāthā,

Jana-gana-mangala-dāyaka jaya hē
    Bhārata-bhāgya-vidhātā,

Jaya hē, Jaya hē, Jaya hē,
    Jaya jaya jaya, jaya hē.

PLEDGE

India is my country. All Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give my parents, teachers and all elders respect, and treat everyone with courtesy.

To my country and my people, I pledge my devotion. In their well-being and prosperity alone lies my happiness.

Preface

Student friends,

We appreciate that you have chosen a subject, Philosophy which is quite new for you. You must be very curious about it. Philosophy is considered to be the mother of all sciences or branches of knowledge. Arts faculty studies various dimensions of human life, society and culture. The direct or indirect contribution of philosophy in the constitution of all these is very great. Seen from this perspective, the study of philosophy is foundational for an overall study of arts faculty. The main objective of this book is to introduce this subject to you and to make you understand its significance.

Since you are learning this subject for the first time, it is explained in as simple a language as possible, using the examples from daily life. The scope of philosophy is very vast. It has many branches and sub-branches. In the first lesson of this book the subject matter of philosophy, the main questions it reaises and the methods it uses are introduced for letting you understand the nature of the subject. The book emphasizes upon three main questions in philosophy, namely, 'What is?' 'How do we know it?' and 'How does it affect our actions?' After you are acquainted with the branches of philosophy in the second chapter, the later three lessons discuss the three branches respectively related to the questions stated above, namely, Metaphysics, Epistemology and Ethics. The last lesson discusses the relation of philosophy to science and technology in the context of some prominent problems in contemporary times.

From amongst the various traditions of philosophy that are found all over the world, we would get acquainted in this book with the Indian and the Western traditions. Through this, you will understand how philosophy is related to a culture and a historical period.

In the 12th standard, we will elaborately study the branches introduced to you in the 11th standard. At the same time we will also get information about new branches, new problems, new thoughts. Let us think about all of these and give a philosophical foundation to our studies and also to our lives. We hope that in these two years, you will develop a liking of this subject and will have a motivation to go for an in depth study of the same.

Pune
Date : 20 June 2019
Bharatiya Saur Dinank : 30 Jyeshtha 1941

(Dr. Sunil Magar)
Director
Maharashtra State Textbook Bureau

(E)

- For the Teachers -

The subject 'Philosophy' is completely new for the students taking an admission in the 11th standard. Since they have some different notions of this subject they feel pressurized by or scared of the subject. As a matter of fact they do come across problems, concepts, thoughts related to philosophy in their day-to-day life, but they are not aware of the philosophical nature of all these. For creating such an awareness, philosophy as a subject must be introduced to them in such a way that they would develop a liking for it and understand its overall significance. With this intention, the book attempts to explain the subject in as simple a language as possible, deliberately choosing examples from daily life. Philosophical terminology is used whenever it is inevitable.

Since the students are learning this subject for the first time, the nature, branches, sub-branches, methods of the subject and the problems and concepts it considers are introduced to a certain extent by way of information. However, the book does not aim at providing information alone. The chief objectives of the book are to inculcate philosophical perspective in the students, to motivate them to think, to generate a habit of critical thinking. For this purpose, it is not only essential to allow students to raise questions in the class, but also to create an atmosphere conducive for it. This will enhance the student's inclination for thinking.

The students will realize the need for studying philosophy if they receive a guidance regarding how it is associated with other subjects as well as actual life. Taking this into account, the book gives an exposition to the interrelations between philosophy and culture, philosophy on the one hand and science and technology on the other. They will also get introduced to interdisciplinary studies through this.

Exercises and activities have been prepared with the intention of putting emphasis on understanding and application rather than memorization. These exercises and activities are very valuable for enabling the students to search for the information related to the topics in the book through other sources, to present it properly, to express their thoughts through dialogues, discussions and other creative ways. At the same time, the students will realize that philosophy can be learnt\not only through the conventional methods of reading and writing but also by way of observation, viewing pictures, listening to music, playing different types of games etc. They will experience the joy of philosophizing through these.

The purpose behind the peculiar organization of the book is that rather than being afraid of philosophy, the students should develop a liking for it and have a desire to study it further. We hope that the study of philosophy would be joyful and thought enriching for both the students and the teachers, if this purpose is kept in mind while teaching-learning in the classroom.

Competency Statements

No.	UNIT	COMPETENCY At the end of each Unit, the learner will be able:
1	What is Philosophy? Why Philosophy?	• to explain the peculiar nature of the subject Philosophy • to mention (1) the use of the word philosophy in day-to-day language (2) the difference between scientific perspective, artistic expression and philosophical perspective • to describe the significance of philosophy in life • to describe how philosophy can be used in practise with examples. • to explain how can a person's actions be affected by philosophy
2	What is? How do we know? What to do?	• to explain the main questions of philosophy • to classify the philosophical questions into main branches of philosophy • to describe the interrelations amongst the branches of philosophy • to describe the association between culture and philosophy
3.	Appearances are de–ceptive	• to explain the main concepts in philosophy such as Real-Unreal, Permanent-Impermanent • to explain different philosophical theories about reality • to understand the main problems in metaphysics and the related philosophical positions
4.	Getting to know, 'Knowing'	• to distinguish between information, knowledge and belief. • to explain different sources of knowledge with examples • to critically evaluate sources of knowledge • to note the process of acquisition of knowledge
5.	Freedom and Moral Rules	• to understand the difference between mechanical and human action • to distinguish between voluntary and non-voluntary actions • to describe the significance of moral rules from the perspective of the association between individual and society. • to explain the concept of moral value • to apply the basic concepts in ethics.
6.	Science, Technology and Philosophy	• to explain the role of philosophy with respect to science and technology • to take the historical overview of increasing use of energy • to understand the place of science and technology in today's life • to explain the concepts of sustainable development and alternative lifestyle with examples

(G)

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(H)

1. What is Philosophy? Why Philosophy?
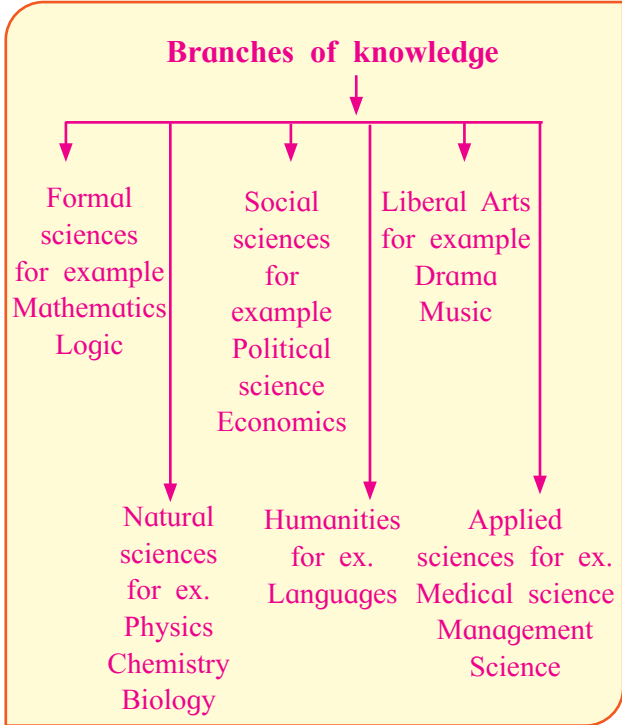
Preface

We have been introduced to various subjects at school so far but we have not yet been taught 'Philosophy'. Nevertheless the word has often fallen on our ears. We criticize a person for sounding 'philosophical' when he/she addresses a topic in a grave, elaborate manner.

"I have a different philosophy of life. Keep yours to yourself," one says. These remarks shape our notions, opinions on Philosophy. On such a basis we determine its value and whether it is worth being pursued. But one must be well acquainted with a subject before judging its significance and usefulness, don't you think? In this chapter we shall acquaint ourselves a little with Philosophy.

Humans have felt a deep sense of wonder about the world around them for more than thousands of years, long before the contemporary branches of knowledge were founded.

Branches of knowledge

Different study subjects are called as 'branches of knowledge.' Every branch of knowledge has its peculiar concepts, rules and theories. They can be classified as follows.

Branches of knowledge

Formal sciences for example Mathematics Logic	Social sciences for example Political science Economics	Liberal Arts for example Drama Music
Natural sciences for ex. Physics Chemistry Biology	Humanities for ex. Languages	Applied sciences for ex. Medical science Management Science

Let's think!

Where would you place subject philosophy in this chart?

Human beings are involved in a constant struggle to know. In fact, every living being must acquire some knowledge of itself and its surroundings in order to survive. Man learnt a great many things

while striving to survive but his curiosity about the universe peculiarly surpassed the extent that was required to fulfill their basic needs.

Why do nightly stars disappear in daytime? Why do some beings walk, while some others crawl or fly? What does it mean to die? - Questions, questions, more questions! Humans continued to be perplexed by countless questions as they undertook the quest for answers. The prehistoric human was no different than a baby that has just learnt to utter its first fumbling words. His/her mind was brimming with such excited curiosity as can be seen in the gleaming eyes of a toddler. Thus emerged the enquiries about living and non-living beings: 'What is this?' 'Why is it so?' 'Why does it change?' The development of intellectual, rational, linguistic abilities of human beings furthered with time.

The Responses to curiosity -
1. Mythology
2. Religion
3. Philosophy
4. Science
5. Art

In various stages of this development humans came up with various kinds of answers. Some of them were rejected over the course of passing centuries, while some bear relevance still.

Do you know?

Man's inquisitive intelligence and his impressions of the world found vibrant expression in Mythology, Religious thinking, Philosophization, Sciences and the Art. These were the ways he used to try and understand his relationship with the universe, the natural world and fellow human beings. Tales and stories flourished in every culture as they put to use brilliant creative imagination to unveil phenomena that could be witnessed but not easily explained.

Mythology is concerned with stories / fictional accounts that were prevalent in human societies a long long time ago. They are passed on through tales from generation to generation. These tales usually employ superhuman entities such as devata, asura, yaksha to explain various phenomena that can be experienced and observed all around us. These tales also highlight certain ritualistic beliefs. e.g. it is an ancient belief that certain trees are abodes of deities. They must not be touched for human purposes and that one must first pray to the respective deity and obtain his/her consent in case one desperately needs to cut it.

Some tribal communities across the world follow such rituals to this date. Contemporary reading of the tales obviously prompts one to ask what must have caused them. Did they originate in a thought or a principle? Every society has its own mythology. Let's take a quick look at two tales from two remarkably different parts of the world.

Thor's tale –

The tale of Thor, a warrior god, is widely known in northen European countries like Sweden, Norway, Denmark etc. (There also exists a superhit film based on this character.) Thor carries a hammer for a weapon the way Indra carries his vajra. The ancient tribes that inhabited this region two thousand years ago believed that Thor roams about in the skies in his chariot. The chariot is driven by two goats. The thunder we hear and lightning we see is the swinging of his hammer! In thunder we hear him roar! Thunder and lightning bolts announce the rains. And rains bring good harvests. So Thor was worshipped for fertility.

Let's Read!

Indravrutra's tale

References in **'Rugveda'** reveal that Indra was a very important deity in the ancient times. Indra was worshipped as the god of rains. Vrutra was Indra's chief enemy. Many sutras regarding feats of annihilation of Vrutra can be found in Rgveda. Tale of Indravrutra likens Vrutra to a monstrous giant and a dark cloud. Vrutra is a danava who obstructs the water channels and causes drought. Indra tears his belly apart and water comes out gushing.

1.1 The wonder-ful universe

Both the tales have been used to make sense of the rains, the lightning and thunder. Both tales draw on the importance of water. It is probable that the ancient communities must have thought it necessary to worship a god of rains to ensure good harvests, abundance of drinking water and the resulting wellbeing of the people.

Although the stories originate in the material world, they simultaneously fabricate a fantastic, imaginary world. They popularized the beliefs that several supernatural forces control the happenings of the world, reward or punish humanity for its various deeds. Rites and rituals were devised in order to please or appease these forces.

Let's talk!

Narrate and discuss mythological tales in class.

As humans went on to observe the world, they realized that things do not randomly occur. They are related to one another. They often have a fixed sequence. For example: in our type of climatic conditions; summer, monsoon and winter always arrive in the same order; water extinguishes fire but evaporates when heated. Thus they sensed that there is an order in the world. The what and how of existence of things is governed by certain laws. In the human world it is humans who lay out the laws. Philosophers assumed that there must be someone who lays out the laws, the system of the natural world too. Perhaps the universe has been created by someone. The power it took to create the universe must be tremendous, rather infinite. These postulations gradually led us to the idea of 'God'. Ideas concerning human beings

possible, fitting relationship to God laid the foundation of religious thinking. Intellect was equally engaged along with imagination in this discourse. Normally religious thinking put a lot of emphasis on faith. One was asked to have faith in the otherworldly, supernatural power and in persons who were said to possess knowledge of the nature of that power.

Let's do!

Discuss the following and find suitable examples for each –
• Work of imagination
• Work of intellect
• Superstition

All that humans sensed or understood about the world found expression in manifold ways. They also perceived beauty in worldly objects and events apart from their properties, co-relations. The beauty fascinated them and inspired them to create beauty in response. From this emerged music, dance, painting and several other art practices. Art offers us the opportunity to indulge in life without being occupied with utility or profitability. It delights both the creator and the appreciator. Creativity is essential for art.

Stone age cave painting from Bhimbetka

The relationship between man and art and between various arts has been vividly discussed in Indian literary tradition since ancient times. Here is an example.

Vishnudharmottar Purana (Volume 3, Chapter 2)

A dialogue between king **Vajra** and **Markandeya Rushi** -

King : I would like to make sculpture.

Rushi : Only he who knows **chitra-sutra** (formulation of image) shall know **pratima-lakshana** (making of a sculpture).

King : Teach me **chitra-sutra,** O sage.

Rushi : That cannot be until you know **nrutta**.

King : Teach me **nrutta**, then.

Rushi : You can't be taught to dance until you are conversant with **atodya** (the ability to play a musical instrument).

King : Very well, teach me to play an instrument.

Rushi : For that you must learn **gayana** (vocal music).

King : Teach me to sing, o wise man.

Rushi : Music uses both **sanskrut** and **prakrut**. You must first learn the colloquial tongues.

King : Surely. Teach me language then.

Rushi : Not until you have learnt **vyakarana (grammar)**.

The dialogue goes on to illustrate the interdependence and supplementary nature of all art forms.

Intellect is one of the faculties involved in the three aforementioned answers to questions arising out of man's curiosity about the world. But the answers provided by Philosophy and Science are entirely based on human intellect. That does not mean imagination is thrown out of the window here. Many thinkers used their imagination to find answers in the times when observation and experimentation were severely limited. But here imagination was regulated by intellect. Only the ideas that stood the test of Reason retained themselves in philosophical thinking. One realized that events taking place in this world aren't caused by otherworldly forces but by other events in this world itself.

One began to perceive cause and effect relations e.g. rivers flood not as a result of God's fury but as a result of excessive rainfall in some of their catchment areas. One began to recognize interesting facts such as the water in liquid state assumes the gaseous form when it evaporates and a solid form when it freezes. These initial considerations propelled philosophical thinking. The world is full of different things with different properties. Philosophers and thinkers realized that there is a similarity underlying apparent diversity. One began to contemplate that there might be something extra-sensory, imperceptible beyond the perceptible and sensory world. The quest for abstract principles began. The very early philosophers were eager to know the fundamental principle of the universe, the generative principle of the world. They pondered on the exact possible number of such principles and the nature of interplay that formed this

diversified world. Let's overview a list of fundamental principles of the universe declared by some of the pre-Socratic Greek philosophers –

Philosopher	Fundamental principle
Thales	Water
Anaximander	Apeiron (infinite)
Anaximenes	Air
Pythagoras	Number
Parmenides	Being
Heraclitus	Fire
Anaxagoras	Nous
Empedocles	4 elements - Fire, Air, Water, Earth

What is the relationship between these principles and the world as we experience it? World is always changing, but can there be something that does not change? Why do things change? How do changes occur? All these questions were deliberated and the resultant answers were called 'Philosophy'. Philosophy studies the experience of the world, its cognizance within the framework of Reason, the light it sheds on the overall meaning of human life and truths regarding how to live.

In a way, experience and reason are the two foundational pillars of science. The branches of science that we presently call Physics, Chemistry, Geology, Biology etc. came to exist in modern times. Modern science uses many instruments, equipments to investigate things that are beyond the grasp of our sensory abilities. These apparatuses highly augment our powers of perception. Such increased powers enable us to observe micro-organisms under a microscope, or to see distant objects through binoculars.

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Experiments and observations carried out using these apparatuses are characteristic of the scientific method. Philosophy and Science ask similar questions but Philosophy relies only on 'reason' in looking for answers, whereas science supplements the reason with many material instruments and advanced technology. Philosophy paved the way for the questions and sciences followed in. That is why Philosophy is called the mother of all sciences.

1.2 The scope and characteristics of philosophy

With varying answers sciences branched out further and further. The state of man and the world started to become clearer. We do not know everything about the universe and its origins yet.

Let's discover!

What are the new horizons of science?

Scientific questions continue to interest philosophy but it mainly considers questions that fall out of the bounds of scientific enquiry. For instance, 'knowledge' becomes a subject of deliberation in philosophy. How do we know? How do we know that we know? What is knowledge, first of all? Is it merely information? Philosophy poses such questions regarding knowledge.

Science bears merely on facts. But values, norms, principles, ideas and concepts bear significance in philosophy. Facts describe 'what is', while values help us ascertain if it is right, 'how should it be'. Science explains why we get to see the rainbow but when we say its 'beautiful', questions such as 'what is beauty?', 'are there any conditions to beauty?', 'do arts create beauty?' are not debated in science but in philosophy. Psychology explains 'why do people lie?' but philosophy ventures to find out if lying is good or bad, if it is right or wrong. In addition, philosophy also examines arguments that a person presents in order to support his views. In a wider perspective, philosophy studies four types of relationships. They are (1) Human and Nature relationship (2) Individual and Society relationship (3) One's relationship with oneself. and (4) Human relationship with any being beyond the perceptible world if any. In a certain sense 'human' has a central place in philosophy. What is our potential as human being? What are our limitations? In what way can we realize our full potential and live a content and happy life? These questions are considered important in philosophy.

1.3 Methods of Philosophy

The scope of philosophy is very vast. But in a nutshell, philosophy poses three pivotal questions –

What is?

How do we know that which is?

How does that knowledge affect our life and behavior?

Philosophy digs deep and systematically into such questions. 'Critical examination' is the essence of philosophical method. To examine is to weigh and understand an opinion, a thought or an idea presented to us by posing multi-dimensional queries, without accepting it blindly. In order to examine democracy, for example, one must look into its meaning, nature, types, history

etc. Philosophy conducts such examination by analyzing concepts. It means, it studies various facets of the concept and their interrelations. The concept of Democracy involves 'concept of government' and 'people'. So in order to understand the concept of democracy one must ask what exactly do 'people' comprise of? What is 'government'? What is 'State?' One must study what, 'government of the people' actually means.

The traditional purpose of philosophy has been to attain a comprehensive understanding of the subject matter. One must study it properly and consider various aspects of it. One must maintain a critical approach in the course of this study. Philosophy has used unique methods to attain this goal. Philosophy neither relies on faith, nor lets imagination run wild nor uses the empirical methods used by science as we saw. Intellect, especially the faculty of reason is the chief device employed by philosophy. Methods of philosophy guide us on the efficient use of this device.

Method of Analysis

Philosophy has extensively employed the method of analyzing thoughts, ideas, concepts, theories, examples using logical reason since ancient times. To analyze is to identify various elements of a compound by segregating them, and to understand them. You must have learnt of the importance and analysis of chemical compounds in chemistry. However, unlike empirical sciences philosophy does not require a laboratory set-up to use the analytical method, because it does not analyze material objects. It analyzes abstract concepts. The investigative set-up is already present in the brain. It won't be an exaggeration to say that our brain is a laboratory accessible to us 24x7. It keeps churning over information, thoughts, beliefs that we come across. We use analytical method when we consciously try to unearth roots and structure of all these things.

The word 'man' (a human being) does not have any constituent elements as such. But it points at a concept that is generally understood. The concept can be analyzed into other constituent concepts.

A human being is a bipedal, rational and social being. That is how this concept can be dissolved. It must have struck you that this is a definition of 'man'. Ancient Greek thinker Socrates used this kind of analytical method in order to arrive at precise definitions of concepts.

A concept cannot be defined until we gain a clear understanding of it. Analytical method helps to bring about this clarity, refinement. It washes away the confusion, muddle of thought. Although this method often comes in handy, a trend of philosophical thinking called 'analytical philosophy' emerged in the twentieth century west. These philosophers proclaimed analysis to be the sole function of Philosophy.

Method of Dialogue

All human beings are naturally endowed with intellectual faculty. But everyone's capabilities bear different limits. Everyone's intellect normally does not display equal efficiency in every field. Some of us excel in Mathematics, some excel in Languages. Some people's talents lay in the sports; some people's talents lay in the arts. The development of our intellect is also greatly affected by our socio-cultural environment. Evidently, one might not be able to conduct a holistic study of a particular subject. Collective thinking proves to be more fruitful in such a case because multiple dimensions of a subject can be simultaneously studied. Also our thinking becomes more inclusive and well-balanced due to the awareness of diverse perspectives on a subject matter. Collective methods carry a greater weight for disciplines such as philosophy, which do not use empirical observation, experimentation and verification. In this way philosophization gets less influenced by personal judgments and prejudices.

Both Indian and Western philosophies profusely used the 'method of dialogue' in the ancient times. Ancient India had a tradition of obtaining knowledge by staying in the company of Guru (teacher).

Do you know?

Born in Athens (470 B.C.) with an ordinary familial background, Socrates is known today as 'the father of western philosophy'. In Greece, philosophical thinking existed even

Socrates

before Socrates but he gave it a definitive turn. That is why he has come to be honored with this title.

Socrates did not possess a particularly charming personality but the cast of his genius and character were extremely radiant. Socrates was not interested in metaphysical questions. Enquiry into man's individual and social life-forms the core of his philosophy. His philosophization sought to discover truth and universal, eternal values so as to live in their light. He pursued this aim with dauntless diligence, paying no heed to material gains or losses.

Furthermore he calmly accepted death sentence in the wake of his search for truth. With torrents of questions, he carefully, critically examined the then popular notions regarding Virtue, Justice, Courage, Restraint etc. His manner of openly questioning people from all strata of the society offended many. He was accused with corrupting the youth and dismissing the state-sanctioned gods. Socrates therefore was imprisoned and sentenced to death by drinking poison.

Socrates resolutely faced his death without appealing the court for pardon, without making a bargain or trying to escape from prison even though it was in his power to do so. His maxim **'A life unexamined is not worth living'** is world renowned. He showed extreme integrity in his thought, speech and action. We shall remember him forever for his adherence to truth, love of wisdom and extraordinary moral fibre.

The chief medium for imparting knowledge in these times was dialogue amongst a teacher and his disciples (shishya). A teacher aided the disciples on the path of knowledge by answering their queries, questions, counter questions. 'Upanishada' are one of the most essential texts in Indian philosophy. In many upanishada philosophical thought is presented in the form of a dialogue. For example the dialogue between **'Shwetaketu and Uddalaka'** from **'Chhandogya upanishada'** or the one between **'Maitreyee** and **Yadnyavalkya'** from **'Bruhadaranyaka upanishada'**. The buddhist text **'Milindapahna'** (Milindaprashna) similarly wraps philosophy in dialogue. Bhagwadgeeta is also in the form of a dialogue between Krishna and Arjuna.

Socrates used the method of dialogue with remarkable effectiveness. He asked various questions to the listener-participants on a range of topics – "What is virtue?" "What is Justice?" People confidently stepped forward to answer the seemingly simple questions. Socrates scrutinized their answers, pointed out the lacuna and prompted them to think further. At the end of this dialogue people realized their ignorance or intellectual inadequacies. They more or less moved from confusion to clarity. Plato, the disciple of Socrates also used the method of dialogue. He wrote his reflections down as dialogues instead of writing philosophical treatises or essays.

> **Let's do!**
>
> Choose a topic for dialogue.
> Assume the roles of Guru-Shishya.
> Enact this dialogue in front of the class.

Chhandogya Upanishada Khanda - 13

Uddalaka said to Shwetaketu.

1. 'Place this salt in the water. In the morning come unto me.'

Shwetaketu did so.

Then Uddalaka said to him : 'that salt you placed in the water last evening - please bring it hither.'

Then Shwetaketu grasped for it, but did not find it, as it was completely dissolved.

2. 'Please take a sip of it from this end,' said Uddalaka. 'How is it?'

'Salty.'

'Take a sip from the middle,' said Uddalaka.

'How is it?'

'Salty.'

'Take a sip from that end,' said Uddalaka.

'How is it?'

'Salty.'

'Set it aside. Then come unto me.'

Shwetaketu did so, saying, 'It is always the same.'

Then Uddalaka said to him: 'Verily, indeed, my dear, you do not perceive Being here. Verily, indeed, it is here.

3. 'That which is the finest essence - this whole world has that as its soul. That is Reality. That is Atma (Soul).

That art thou, Shwetaketu.' said Uddalaka

Method of Debate

Along with dialogue, ancient Indian tradition also used the 'method of debate' **Vada**.

A 'vada' is not a verbal fight! It was an important, well-recognized truth-finding method used in ancient Indian philosophies. 'Vadasabhas' were organized (sort of a symposium) in order to conduct the discussion with the aid of this method. Two parties used to debate from opposing views on a subject matter.

A topic was selected to begin with. Then the 'vadi ' (the party that chose to put forth his views first) presented his 'paksha' (his views). Then the 'prativadi' (the opposing party) challenged the vadi's views by presenting counter-arguments and later put forth his own views. The vadi and the prativadi examined each other's argument with a critical disposition. Even the spectators could participate by asking questions as 'prashnika'. 'Sabhapati', or the chairperson of the symposium moderated the activities of the entire session. The paksha that succeeded in making a stronger appeal to reason was finally declared a winner.

This description might apparently sound like the debate competitions of today but that was not the case. The purpose of vadasabha was to discover the truth of a given matter by means of deliberation. Both the parties openly conceded if they agreed with each other's views. Agreement wasn't considered a sign of defeat. Faulty arguments, unverified information if pointed out, were promptly withdrawn. Additionally, both parties were allowed to reappear in the vadasabha with better preparations.

> वादे वादे जायते तत्त्वबोधः|
>
> If opposing views are discussed open mindedly both the parties come to have an understanding of the principle. (Reference - Rambha-Shuka Samvad)

Let's talk!

> What kind of debate competitions your school had organized? On what topic would you like to talk in any debate competition?

Ancient Indian tradition acknowledged the fact that open-mindedness and an atmosphere of freedom are indispensable for the acquisition of knowledge. But some people participated in debates with a competitive ambition. They were more interested in winning against their opponents. Such competitive debates were called 'jalpa'. Some others preferred to argue for its own sake. They enjoyed retorting to their opponents' arguments without presenting their own. This kind of debate was called 'vitanda'. But search for truth remained the central focus of a genuine 'vada'.

Let's watch!

> Watch the debates on different news channels on the TV. Categorize the debates into vada, jalpa or vitanda.

Socrates Crito Dialogue

Background:

Socrates was kept in a prison till the implementation of the death sentence given to him. Socrates's friend and disciple Crito, came to meet him in the prison the night before the day of implementation of the death penalty. He had planned a way to escape for Socrates. What follows is a small part of the dialogue that took place between them at that time Crito expressed his opinion that the people who knew both Socrates and Crito, would speak ill of Crito if they would come to know that Crito did not help Socrates to escape from the prison, though it was possible for him to do so. Socrates, however, is of the opinion that, just as for physical fitness we consult a doctor or trainer, in the same manner as for as question of justice/injustice are concerned, we must consider only the expert's opinion and not the opinion of any tom, dick and harry.

Socr. You are right. And, Crito, to be brief, is it not the same in everything? In questions of justice and injustice and of the base and the honorable and of good and evil, which we are now examining, ought we to follow the opinion of the many and fear that, or the opinion of the one man who understands these matters (if we can find him), and feel more shame and fear before him than before all other men? For if we do not follow him, we shall corrupt and maim that part of us which, we used to say, is improved by justice and disabled by injustice. Or is this not so?

Crito. No, Socrates, I agree with you.

Socr. Now, if, by listening to the opinions of those who do not understand, we disable that part of us which is improved by health and corrupted by disease, is our life worth living when it is corrupt? It is the body, is it not?

Crito. Yes.

Socr. Is life worth living with the body corrupted and crippled?

Crito. No, certainly not.

Socr. Then is life worth living when that part of us which is maimed by injustice and benefited by justice is corrupt? Or do we consider that part of us, whatever it is, which has to do with justice and injustice to be of less consequence than our body?

Crito. No, certainly not.

Socr. But more valuable?

Crito. Yes, much more so.

Socr. Then, my good friend, we must not think so much of what the many will say of us; we must think of what the one man who understands justice and injustice, and of what truth herself will say of us. And so you are mistaken, to begin with, when you invite us to regard the opinion of the multitude concerning the just and the honorable and the good, and their opposites.

Khandana-Mandana

'Khandana-mandana' is one more method that reflects the ancient Indian tradition of treating antithetical views with respect. This method, used in the writing of texts, first systematically introduced the opinion of those who opposed the opinion of the author. This was called **'purvapaksha'**. The refutation of this paksha using proper argumentation was called **'khandana'**. Then in **'uttarapaksha'** the views of the author were put forth and supported with arguments. The ensuing conclusion was known as **'siddhanta'**.

The invention of a third, more fair, developed outlook from the collision of two contradictory outlooks was also used in Western tradition and was known as **'dialectical method'**.

There aren't definitive, final answers to questions studied under Philosophy unlike Mathematics or sciences.

Purvpaksha $\longrightarrow$ Khandan $\longrightarrow$ Uttarapaksha $\longrightarrow$ Siddhanta

Do you know?

Method of Doubt:

Rene Descartes, a French philosopher, utilized the 'method of doubt' in modern western philosophy. We eye 'doubt' with negativity. Indulging in doubt is considered rude. One must however understand that in philosophy 'doubt' doesn't bear a negative connotation. It is not a person that is doubted in a philosophical exchange. Instead, everything presented as knowledge and the supportive arguments are doubted. Descartes' times were influenced by a trend in philosophy called 'skepticism'. The skeptics used to vehemently reject the possibility of knowledge that is irrefutably held true at all times in all places. Being a student of Mathematics, Geometry and Science, Descartes was certain that such knowledge is possible. He set out to prove this possibility by using the method of doubt. Descartes tried to find out if there is a truth that simply cannot be doubted. Questioning, one after the other, all truths he had hitherto experienced or learnt, he realized that all these can be disputed, why, even the existence of the world can be doubted and disputed. But by the end of this process he arrived at one truth that lay beyond doubt "I think, therefore I am." – **"Cogito, ergo sum"** (Latin). Descartes indicated that everything can be doubted except the existence of the doubter. The act of doubting presupposes the existence of someone who doubts. He discovered many such truths and tried to fortify the foundations of knowledge.

History of Philosophy is indebted to the doubt incited by skeptics in so far that the doubtful, questioning attitude encourages us to be critical in our thinking. Blind belief in an experience, opinion, thought can deceive us. Appropriate doubting is a healthy practice in the process of gathering knowledge.

Rene Descartes

Philosophical questions might have varying answers and none of them is rejected without enough research. Every answer is systematically examined, compared with the other possible answers. This process is endless.

The questions change with changing times and circumstances, so do the answers. Thus, one cannot presume answers obtained by him/her to be the most perfect or final. Such rigid presumption would hinder the progress of Philosophy.

1.4 Definitions and value of philosophy

If we would briefly see the prevalent definitions of philosophy, we will quickly understand the answer to the question "why do we need philosophy"? In the history of Indian philosophical tradition the word 'Tattvajnana' / 'Tattvadnyana' was used as a substitute to the word 'philosophy' in the period of British India. The meaning of the term 'Tattvajnana' is 'jnana' (knowledge) of 'Tattva' (principle). Tattva is a very broad term. In a sense, it is the fundamental, abstract principle underlying all existence. The intellect grasps it but the senses fail to experience it. All things of the same kind have a uniform 'essence' to them. For example, trees come in different shapes and qualities. Yet all trees are commonly called as 'tree' due to the constant essence of 'tree-ness' that they all share.

Philosophy explores whether there are abstract principles that lie beyond the material world. The various systems of Indian philosophical tradition are individually called a 'darshana'. The word 'darshana' signifies an all-inclusive understanding of all aspects of life. Many darshana originated in this tradition.

The English word 'Philosophy' derives from the Greek words 'philo', meaning 'love' and 'sophia', meaning 'wisdom'. Philosophy means the 'love of wisdom'. 'Wisdom' isn't synonymous with 'Intelligence'. Intelligence/intellect is a means to attain knowledge. Wisdom doesn't mean 'Knowledge' either. An intelligent or knowledgeable person isn't necessarily 'wise'. It takes a lot of intelligence and know-how to design deadly weapons. But such an act cannot be said to be wise. Wisdom concerns our actions, our conduct. Wisdom consists of awareness of a situation, awareness of morality. Philosophers aspire to be wise. Which wise person would say that wisdom

isn't necessary for the welfare and flourishing of an individual, family, society and the entire world? The above mentioned definition is an etymological definition of Philosophy – it traces the roots of the word. There are many other definitions besides.

Let's write!

Definitions of philosophy offered by some philosophers are given below. Find out and write definitions given by other philosophers.

1. Philosophy is a child of wonder. - Plato
2. The philosophers have only interpreted the world in various ways, the point however is to change it. - Karl Marx
3. Philosophy aims at the logical clarification of thoughts. Philosophy is not a body of doctrines but on activity. - Ludwig Wittgenstein
4. Philosophy keeps alive our sense of wonder by showing familiar things in an unfamiliar aspect. - Bertrand Russell

Philosophy is a discipline that undertakes an all-encompassing study of life and world. It isn't averse to any arena of life. A specific branch of science normally restricts itself to a specific aspect of the world. Social sciences study society. Bio-sciences study living beings and physical-sciences study matter. Philosophy desires to unravel everything that is. Philosophy also questions presuppositions of science. Philosophical search is carried out by critically using the intellectual faculties. Even the most advanced sciences presuppose the verity of certain statements – they do not doubt or question those. A statement or a hypothesis acts as the foundation of an edifice. The edifice stands on it. The building may appear sturdy and magnificent but it can come crashing down if the foundations are weak. So, philosophy finds it imperative to examine the postulates of science.

Philosophy might seem puzzling at the first glance, but all of us possess the faculties it requires. We are intelligent beings equipped with advanced thinking capacity. All of us are curious about things and happenings that surround us. All of us are faced with questions, like, what is the purpose of life? What is happiness? How can we be happy? We try to find the answers in our own ways, and to verify them. Questioning is as important as answering for how will answers come if we do not question? The study of philosophy trains and directs our innate ability to question. It elucidates our questions to us and indicates the possible answers. We tend not to accept a thought or a principle senselessly due to the stress philosophy gives on critical reasoning. We tend not to get misled. Philosophy teaches us to have informed opinions and to regard other people's opinions with respect. Intellectual sloth and intellectual arrogance are dangerous, philosophy empowers us to avoid them both. Ultimately all this affects our individual and social life. Philosophy makes us aware of our relationship with Nature, world, and ourselves. It guides us about how should this relationship be.

Philosophy helps us immensely in our effort to lead a good life.

So, let's study Philosophy further!

- Indra - इंद्र
- Vrutra - वृत्र
- Vajra - वज्र
- Vishnudharmottara - विष्णुधर्मोत्तर
- Purana - पुराण
- Markandeya - मार्कंडेय
- Rushi - ऋषी
- Chitra-sutra - चित्र-सूत्र
- Pratima-Lakshan - प्रतिमा-लक्षण
- Nrutta - नृत्त
- Atodya - आतोद्य
- Gayan - गायन
- Sanskruta - संस्कृत
- Prakruta - प्राकृत
- Vyakarana - व्याकरण
- Shishya - शिष्य
- Upanishada - उपनिषद
- Aaruni - आरुणि
- Uddalak - उद्दालक
- Shwetaketu - श्वेतकेतू
- Chhandogya - छांदोग्य
- Maitreyee - मैत्रेयी
- Yadnyavalkya - याज्ञवल्क्य
- Bruhadaranyaka - बृहदारण्यक
- Milindpanha - मिलिंदपन्ह
- Bhagwadgeeta - भगवद्गीता
- Krushna - कृष्ण
- Arjuna - अर्जुन
- Danava - दानव
- Devata - देवता
- Asura - असुर
- Yaksha - यक्ष
- Rugveda - ऋग्वेद
- Khanda - खंड
- Atma - आत्मा
- Vaada - वाद
- Vaadasabha - वादसभा
- Vaadee - वादी
- Paksha - पक्ष
- Prashnik - प्राश्निक
- Sabhapatee - सभापती
- Guru - गुरू
- Jalpa - जल्प
- Vitanda - वितंड
- Khandana-Mandan - खंडन-मंडन
- Purva Paksha - पूर्वपक्ष
- Siddhanta - सिद्धान्त
- Tattvajnana - तत्त्वज्ञान

EXERCISE

Q.1 Fill in the blanks choosing the correct option from the bracket.

(a) .... is the fundamental principle according to Thales.
(air, water, number)

(b) .... and .... are foundational to the sciences.
(experience, tales, intellect, faith)

(c) .... method was used in both Indian and Western philosophies.
(khandana-mandana, dialogue, analysis)

(d) .... is the fundamental principle according to Anaximenes.
(apeiron, atom, air)

(e) Objects of the same kind have a common ....
(particularity, principle, essence)

(f) A competitive debate is called ....
(vada, jalpa, vitanda).

Q.2 Take the odd word/pair out.

(a) dialogue, debate, analysis, evaluation
(b) air, water, mountain, fire
(c) shishya, vadi, prashnika, prativadi

Q.3 **Write the terminological words from philosophy to describe the following.**
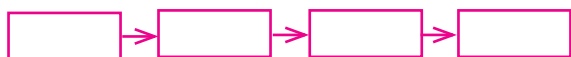
(a) Refutation of the opponents' argument without offering one's own argument

(b) The method of developing a third outlook out of the collision of two contradictory outlooks

(c) The method that analyzes concepts

(d) That which contains moral awareness along with intelligence and knowledge
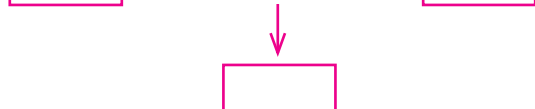
Q.4 **Distinguish between.**

(a) Philosophy and sciences
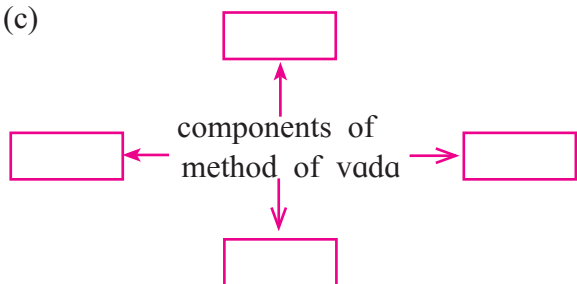
(b) Vada and jalpa

Q.5 **Complete the concept chart.**

(a) Process of khandana-mandana

$$\boxed{} \rightarrow \boxed{} \rightarrow \boxed{} \rightarrow \boxed{}$$

(b)

$$\boxed{} \leftarrow \text{Types of vada} \rightarrow \boxed{}$$
$$\downarrow$$
$$\boxed{}$$

(c)

$$\boxed{}$$
$$\uparrow$$
$$\boxed{} \leftarrow \begin{array}{c}\text{components of}\\\text{method of vada}\end{array} \rightarrow \boxed{}$$
$$\downarrow$$
$$\boxed{}$$

Q.6 **Write a short note on the following.**

(a) Characteristics of Philosophy

(b) Method of analysis

(c) Method of dialogue

Q.7 **Write the answers in 20-25 words.**

(a) What is Philosophy?

(b) What is dialectical method?

(c) What is essence?

(d) What does wisdom consist of ?

(e) What does religion ask us to have faith in?

(f) What are the characteristics of art?

(g) How does man's curiosity express itself?

Q.8 **Explain the following statements with examples.**

(a) Science uses various equipments for the purpose of acquiring knowledge.

(b) Critical attitude is the core of philosophization.

Q.9 **Write long answers.**

(a) Describe the nature of philosophy using its various definitions.

(b) What are the different methods of philosophy? Describe any two at length.

(c) Try to explain any one of these concepts using the method of analysis - friendship/religion/society/beauty/faith.

Q.10 **Write a dialogue on following philosophical themes.**

(a) Faith and superstition

(b) Justice

(c) Virtue

Activity

Perform a play based on a teacher student dialogue on Teacher's day in your school/college.

Introduce dialogue as a method of philosophy to your student friends on this occassion.

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2. What Is? How do we know? What to do?

2.1 **Philosophy and Culture**

2.2 **The main branches of Philosophy**

2.3 **The nature of Indian Philosophy**

Preface

The principles, theories and concepts we study in Mathematics, Geometry or Physics do not vary according to nationality, society or culture. The sum of three angles of a triangle is 180° in India as it is in Thailand, Mexico or France. The law of gravity is same all over the world. It is a feature of philosophy that it changes to various extents according to the society, the culture it originates in.

Let's watch!

Observe some paintings that evoke multiple interpretations.

Thus philosophy gets divided into Indian, Chinese, African, Western philosophy etc. Just like music, which is called a universal language but changes with changing times, regions, culture etc.! Just like basic human needs that are universally the same but fulfilled differently in different circumstances. Human curiosity about the world, the questions that humans confront are largely similar.

Let's listen!

Listen to the songs from different regions and cultures.

Let's talk!

Discuss cultural diversity. For example, Wheat flour is differently cooked into chapati, nan or bread in different parts of the world. Think about the experiences and manifestations that change as per the changing society and culture.

The nature of the questions and the answers change according to space-time-circumstances. Philosophy resembles more with arts than with sciences in this regard. Like arts, philosophy is intimately connected with culture. Philosophical thinking takes root in the soil of a culture like other disciplines in humanities.

Philosophy generates in the processes of thought. Our everyday experiences are raw material for thoughts. Thinking processes this material and produces philosophization. Our experience is composed of our natural surroundings, society and mental world. Everyone is normally endowed with similar experiential abilities but we live in diverse natural and social environments, our geographical and historical contexts differ widely. Therefore colors, textures and forms of human experience vary according to difference of space and time. Obviously philosophies which interpret these experiences and make sense of our inner and outer worlds; also differ.

2.1 Philosophy and Culture

Every culture provides humans with a life-perspective. This perspective acts as a framework for human beings relationship

Humanities

Human curiosity and human needs gave birth to numerous branches of knowledge. These branches/disciplines of knowledge can, on the whole, be categorized into formal sciences, natural sciences, social sciences and humanities. Mathematics, Logic are formal sciences. Physics, Geology, Astronomy and Chemistry are physical sciences. Biology, Zoology, Botany are natural sciences. Economics, Politics, Psychology and Sociology are social sciences. Philosophy comes under humanities along with Languages, Linguistics etc. Humanities, as the name suggests, study the realm of human experience, society and culture. Social sciences and humanities share this commonality. However, humanities do not use empirical methods. They employ rationalistic and critical methods. They consider subjects that are vital to the understanding of human life but haven't yet fully merged into sciences. They discuss matters such as understanding of the self, communication, critical thinking, evaluation, multicultural sensibilities, artistic and aesthetic sensibilities, responsibilities of citizenship, moral sensitivity etc. It shows many paths to answer questions such as what does it really mean to be 'human'? What are the characteristics of humanhood? How can human experience be interpreted and analyzed?

The study of humanities shapes skills and abilities necessary in all fields of knowledge - abilities that are a requisite to good life on social and individual plain. This kind of study develops our personality.

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to nature, society, god; a framework for his daily life. Philosophy bears the influence of this life-perspective sculpted by each culture. Philosophy sometimes supports it, sometimes rejects it. But philosophization is definitely a response or a reaction to this life-perspective.

Some cultures believe in a supernatural world existing beyond this material world. Now the philosophy originating in this culture usually thinks of this world with reference to the 'other' world. It would edify us on the pertinent way of life. Many cultures possess an idea of God but it changes with changing cultural and temporal scenario. Ancient Greek gods differed drastically from the Christian god, and so pre-christian philosophies did not revolve around gods. But god assumes a dominant position in the philosophization after Christ.

Let's talk!

Discuss the following in groups -
- various concepts of God
- Attributes of saints

Socio-political situation of a period in time gets reflected in its philosophies. For example, in times of war or political instability, philosophy turns its attention from abstract questions regarding nature of knowledge or world to practical moral dilemmas and nature of human relationships.

The interrelations between Historical conditions and Philosophy in the Indian context:

The rise and development of Bhakti movement in medieval Maharashtra illustrates how political and social history of a geographical region in a given time influences the philosophical discourse. The Bhakti sampradaya reassured a society that was plagued by political instability and social inequality, deprived of education and dignity. It instilled a sense of self-worth in the peoples. The saints from Bhakti movement deliberated on themes such as God, religion, spirituality in colloquial tongues and opened the gates of Indian philosophical tradition to one and all. Furthermore, Bhakti philosophy severely scrutinized the inordinate prevalence of ritualism, and criticized harmful customs, superstitions. They asserted that people do not require middlemen (i.e. priests) in order to connect to God. The saints synthesized belief in God with immaculate moral conduct, attempting to elevate the social practices. The philosophy of these saints became a guiding light in day-to-day life rather than an abstract thought. In Maharashtra, the saint-tradition that began with Jnaneshwara went on to flourish well into the 20th century. The saints expressed their philosophical views and ideas in popular literary/performative genres such as Abhanga, Bharuda, Gavalana to make them accessible to the wider population. They created social awareness through Bhajana and Kirtana. Jnaneshwara proclaimed 'The world is my home',

(He vishwachi majhe ghar). He presented Chidvilasvada. Saint Namadeva travelled to Punjab, wrote Abhanga in the local dialect and emphasized the solidarity between Bhakti traditions across the regions. Samartha Ramdasa and saint Tukarama eagerly proclaimed that true devotion and the love for all life-forms are inseparable. Saint Ekanatha used anecdotes from day-to-day life to preach virtue and spirituality. Gadage baba and Tukadoji maharaja created social awakening by presenting philosophical ideas through socially relevant, contemporary content. The philosophy that bears relevance to its times and circumstances is proved of great use in many walks of life.

You must have studied the social, political and cultural changes that took place in 19th century India under the British rule. They caused a great intellectual stir. Foreign administrative-system, social-system, value-system and ways of thinking posed challenges to Indian tradition. Our thinkers undertook an in-depth study of our traditions while confronting the challenges. They analyzed acceptable as well as unacceptable ideas, values from the foreign tradition and attempted to synthesize antiquity and modernity.

The philosophization from this period once more engaged in critical examination of religion, since religion occupied a central place in Indian tradition. Thinkers attempted once again

to seek true religiosity and loosen the hold of ritualism, superstitions and baneful practices on social psyche.

Lokamanya Tilak, Yogi Aurobindo, Mahatma Gandhi, Vinoba Bhave etc. expounded on Bhagavatgita from their own perspectives. Social reformers such as Raja Ramamohana Roy, Nyayamurti Mahadev Govind Ranade, Dayananda Sarasvati reformed the tradition. Svami Vivekananda propounded practical Vedanta. Gopal Ganesha Agarakara championed rationalism. Mahatma Phule established Sarvajanika Satyadharma that overthrew casteist code.

Dr. Babasaheba Ambedakara discussed at length the Buddhist concept of 'Dhamma' and revitalized Buddhism in his times. Manavendranatha Roy, a proponent of scientific attitude, espoused the philosophy of Radical humanism. Rabindranath Tagore critically analyzed the idea of 'nationalism' whilst cherishing an artistic, aesthetical vision of life. Many Indian philosophers were influenced by western streams of thought which they were exposed to. At the same time Gurudeva R.D. Ranade, Dr. Radhakrishnan conducted a comparative study of Western and Indian traditions and highlighted the unique features of Indian philosophy.

In Twentieth century Europe, suffering the horrors and atrocities of two world wars, the philosophical trend known as Existentialism brought up such questions as 'what is the meaning of human existence? Is there a purpose to life? Who gives it this purpose?'

The present times have presented philosophy with new challenges. The activities in many fields such as Neurology, Cognitive science, Artificial Intelligence (A.I.), social media are impelling us to consider once more the metaphysical question – 'what does it actually mean to be a human being?' Also, the contemporary research in these fields is shedding new light on 'how we know'. These findings are valuable to epistemology.

Today the human population has overexploded, and on the other hand markets are overflowing with products and services manufactured using advanced technology. This has taken a toll on natural environment. Mankind is now facing a ghastly environmental crisis. Philosophers' endeavours in response to this crisis have given rise to Environmental Ethics, a new sub-branch of Ethics a few decades ago.

Let's write!

Let's list the problems engendered by present times.

Even though philosophy differs in keeping with time and place, philosophies with diverse cultural backgrounds also display many remarkable similarities. Philosophical questions are essentially the same even if their nature seems to transform with the changing contexts. The scope of philosophy is very huge as we mentioned earlier, and it does not rule out any subject whatsoever. The list of

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philosophical questions is too long, it is infact endless. Some of them are supremely important and focal to philosophy. All of us confront these questions in the humdrum of everyday existence. We sort them out too, knowingly or unknowingly as per our strength and in our own ways. But philosophy consciously and systematically tries to solve the questions. In this chapter, let's acquaint ourselves with three major philosophical questions.

2.2 The main Branches of Philosophy

All beings strive to survive. An organism becomes aware of the world and things besides itself in course of sustaining itself by gathering food, building shelter, finding a mate and self-protection. This preliminary awareness grows into genuine curiosity about the world in the better evolved human intellect. If we go to a market place to buy something, a myriad other products attract our attention. The immense variety arouses interest and we spend hours exploring the whole market.

Human being feels the desire to go beyond his/her needs and instincts and finds out what all the vast universe consists of. And this sparks a short yet profound question - 'What is?' It's simple, you may say, all that can be experienced by the five senses 'is'. i.e. it exists. In addition, all that can be felt – our thoughts, sentiments, wishes, ideas exist as well. But think a while. All that meets the eye really exist? World appears yellow to a person with jaundice. But it isn't yellow, is it? We often have illusions or hallucinations. And while calling them illusions, we are trying to assert that these phenomena are not real. That is why philosophers feel the need to undertake the in-depth study of existence, reality, 'Sat'. The branch of philosophy that performs this study is called 'Metaphysics'.

Illusion and Hallucination

In day-to-day life, many a times, we use the words illusion and hallucination as if they are synonymous. But actually there is an important though subtle difference between them. The reasons for the accurance of illusions are not personal. We have seen that the experience of the material world that we have through our sense organs is relative to the circumstances; it changes according to the factors pertaining to the circumstances. Experiences are called illusions when due to the factors such as the distance between us and the object, availability of light, density of atmosphere etc; objects appear to be different from what they actually are. It is an illusion when while traveling, the rails which always run parallel to each other appear to be colliding with each other. The proverb 'the mountains appear to be blue from a distance' also gives an example of an

illusion. In specific circumstances everybody has such illusions. This is not however the case with hallucinations. The reasons behind hallucinations pertain to the physical, psychological conditions of the person having hallucinations. Some times a person who is having high fever, feels that someone is talking to him/her. The patient then starts conversing with the person who is actually not there. Sometimes a person experiences tremendous grief due to the death of a close relative. Not being in a state to accept the truth, the person hallucinates about the dead person, feels that he/she is meeting the dead or talking to them.

Briefly stated, what is common to illusions and hallucinations is that in both the cases, reality appears to be different from what it actually is. However illusions are caused by external reasons, while hallucinations are caused by the internal ones.

'Sat', reality is that which has a veritable existence. It is important for metaphysics to discern the difference between that which truly is real and that which appears to be real. Metaphysics considers many absorbing questions such as what forms the things we experience? What is the nature of this underlying ingredient, the fundamental being? What causes mutations in this being and why?

A detailed discussion of these questions gives birth to one more fundamental question – 'How do we know what is or what is not?' Because amusingly enough, we answer 'what is' based on our knowledge but sometimes what we think exists does not really exist. A mirage is an illusion of water. We think there is water but in reality, there isn't.

Every experience does not give us knowledge. Sometimes experiences produce misapprehension, sometimes they delude us. This being so, when can we definitively say that we know that which exists? What is knowledge? How can it be defined? What are the means / instruments of knowledge? What are the types of knowledge?

The branch of philosophy that addresses these questions is called 'Epistemology'.

Most of us generally believe that we more or less know the world, that we can make sense of the world. We maintain some notions about what the world is,

what all does it contain, how all its contents are interrelated. Our notions and beliefs shape our life, our behavior.

Our fundamental beliefs determine the way we treat the living and nonliving world around us. We judge our actions to be good or bad, right or wrong based on these beliefs. Those who believe that every living organism has a right to live and no organism should be hurt unnecessarily do not harm any organism easily. But those who believe that human being is the supreme being and thus has right to use other organisms for their whims and fancies do not care for the harm done to other organisms. These beliefs change from person to person, culture to culture, from time to time; yet everyone lives in accordance with their beliefs and values that are an outcome of these beliefs.

Human life is not governed by instincts alone. They have many choices, many courses of action at their disposal and they must go on choosing all the time. A human is capable, while making these choices, of considering not only practical utility or losses and gains but also the moral values that he/she upholds. He is capable and accustomed to evaluating an action to be good or bad, right or wrong, just or unjust.

Let's talk!

Think-pair-share (activity to be performed between two students)

Pick examples of moral choices from day-to-day life and discuss them with your partner.

The branch of philosophy known as 'Ethics' conducts the study of these concepts. What is moral behavior? Why is it necessary? What does it really mean for something to be 'morally good' or 'morally right'? How should one behave? How should one live? Must one be mindful of the society, the entire humanity or himself only? Must one be considerate about all living things or the entire universe? – Ethics goes into such questions.

Let's discuss!

What should be the attitude of human beings towards other life forms? Discuss on the basis of the above picture.

In summary, 'What is?', 'How do we know?' and 'How does it affect human life and acts?' are the three questions rendered vitally important by philosophy which grow into Metaphysics, Epistemology and Ethics.

These branches are extensions of the similar disciplinal trunk and are organically related to one another. The branches of a tree are a part of the tree itself. One must remember that the branches of philosophy are connected to each other.

Logic

Logic and Aesthetics are two more major branches of philosophy along with Metaphysics, Epistemology and Ethics. Greek philosopher and Plato's disciple Aristotle is said to be the father of 'Logic'. Medieval times were greatly influenced by his Logic. Formal logic emerged in the modern times. In olden times, logic was defined as 'the science of laws of thought'. But later it was admitted that this definition of logic does not hold true if the act of thinking comprises of memorizing, imagining etc. Logic studies the interrelationship between propositions and conclusions that can be inferred from a certain set of proposition. Therefore, it came to be known as 'the science of reasoning'.

All of us think and draw conclusions on the basis of what we know. But our ways of thinking and inferring may not always be correct. Logic studies the correct and incorrect methods of inference. We present arguments in a discussion or a heated debate, we examine arguments presented by others. Argumentation is a form of act of inference.

The study of logic trains us in making logically consistent, rigorous arguments, and in detecting inconsistencies and logical fallacies in other person's arguments. The study of logic is undoubtedly useful to philosophy as well as many other disciplines. It also acts as a substantial aid in everyday life. We, human beings, are thinking animals and study of logic is indispensable if we wish to realize the complete potential of our faculties of thinking. Wherever there is thought there, is logic.

Aesthetics

Aesthetics concerns itself with beauty. Doesn't beauty captivate you? But where does it lie? What does it mean for something to be 'beautiful'? Does 'beauty lie in the eyes of the beholder', as some say, or in the beautiful object itself? Have you ever been faced with these questions? Well, aesthetics studies these questions. Despite the fact that aesthetics rose to be a separate branch of philosophy in 18th century, precious exchanges on beauty can be found in the dialogues of Greek master-disciple duo, Plato and Aristotle. There aesthetical views are coupled with their views on art. This is quite obvious because we experience the marvel of beauty not only in natural settings/ landscapes but also in works of art. Man doesn't create beauty in nature but he creates works of art. The appreciator and creator of beauty is an enticing side of man. Plato and Aristotle regarded 'beauty' as a property of the object, meaning beauty wasn't contingent on a person's attitude or an experience for them. They associated beauty with the form, the symmetry etc. of an object. Modern philosophers, however, were inclined to reject the idea that beauty lies absolutely in the object.

Art for art's sake/Art for the sake of Life.

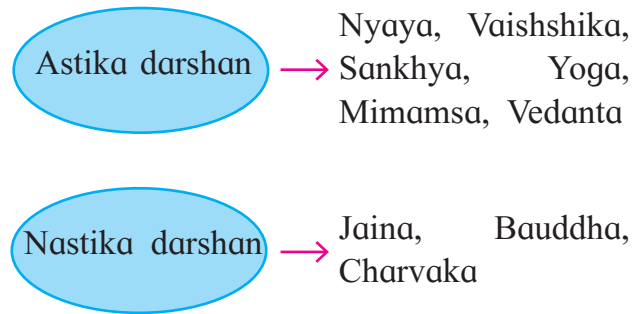Beauty lies in the eyes of the beholder.

2.3 The nature of Indian philosophy

Philosophical discourses from all regions and countries ruminate on the above mentioned questions but the nature of the questions and answers is temporally and culturally variable, as we saw. Indian philosophy considered these questions simultaneously. They didn't spring up into different branches. Indian philosophy seems to exemplify the definition of philosophy as an all-encompassing contemplation on life and the world. It is also believed that in Indian traditions, philosophy was closely hinged to the course and problems of day to day life. Thus questions such as 'What is the purpose of life?' 'What is worth attaining in life?' 'How is that to be attained?' gained foremost priority in Indian thought. The metaphysical, epistemological and ethical questions fell within this very framework. Many Indian 'darshana' explicated the types of sorrow and freedom from sorrow. The knowledge of ancient Indian Varna vyavastha and Ashrama vyavastha along with the concept of Purushartha is helpful in understanding Indian philosophical thinking. Indian philosophization seems also to be influenced by the concept such as Atma, Punarjanma (rebirth) and Karma siddhanta (law of Karma).

Nine darshana are considered the principal darshana in Indian tradition. They are categorized into 'astika' (orthodox) and 'nastika' (heterodox) darshana.

Chart of Indian Schools

Astika darshan → Nyaya, Vaishshika, Sankhya, Yoga, Mimamsa, Vedanta

Nastika darshan → Jaina, Bauddha, Charvaka

Veda and Upanisada have a reverential importance in Indian philosophy. The darshana that accept the authority of Vedic knowledge are called 'astika' darshana. Mimamsa (purva mimamsa), Vedanta (uttara mimamsa), Sankhya, Yoga, Nyaya and Vaishshika are the six astika darshana. The rest three – Charvaka, Jaina, Bauddha – are 'nastika' darshana since they reject the authority of Vedic knowledge.

An additional characteristic of these darshana is that along with discussing scholarly questions such as 'What is 'sat' (real)?' 'What is 'asat' (unreal)?' 'What is knowledge?' 'What are the means to knowledge?' they also enquire into the right perspective on life and guide us on why to live and how to live. The tradition emphasizes that knowledge must be utilized for leading a good life.

One more remarkable feature of Indian tradition is that many streams/ schools of thought that had opposing views and contrasting answers to philosophical questions emerged and flourished, to a large extent, parallelly and not one after the other. All darshana shared, exchanged their outlook with one

another. The method of 'vada' (debate) which we discussed in chapter one was practiced for this purpose. That is why this tradition could nurture, at least to some extent, the rich tradition of open-minded, respectful appreciation of antithetic views and the practice of rectifying one's own views through the careful study of the opponent's views. The lavish cultural variety of India stimulated a wide array of philosophical trends. Some of them sustained themselves inspite of gradually losing followership and failing to enter the mainstream thought.

The numerous schools of western philosophy developed over time, one after the other. The fountainhead of western philosophy is pure curiosity about the world that cuts across the resolution of practical issues or contemplation on the purpose of life. For this reason ancient western philosophers applied themselves deciphering the nature of the experiential, material world.

Historical Graph/Timeline of Ancient Indian Literature/Text
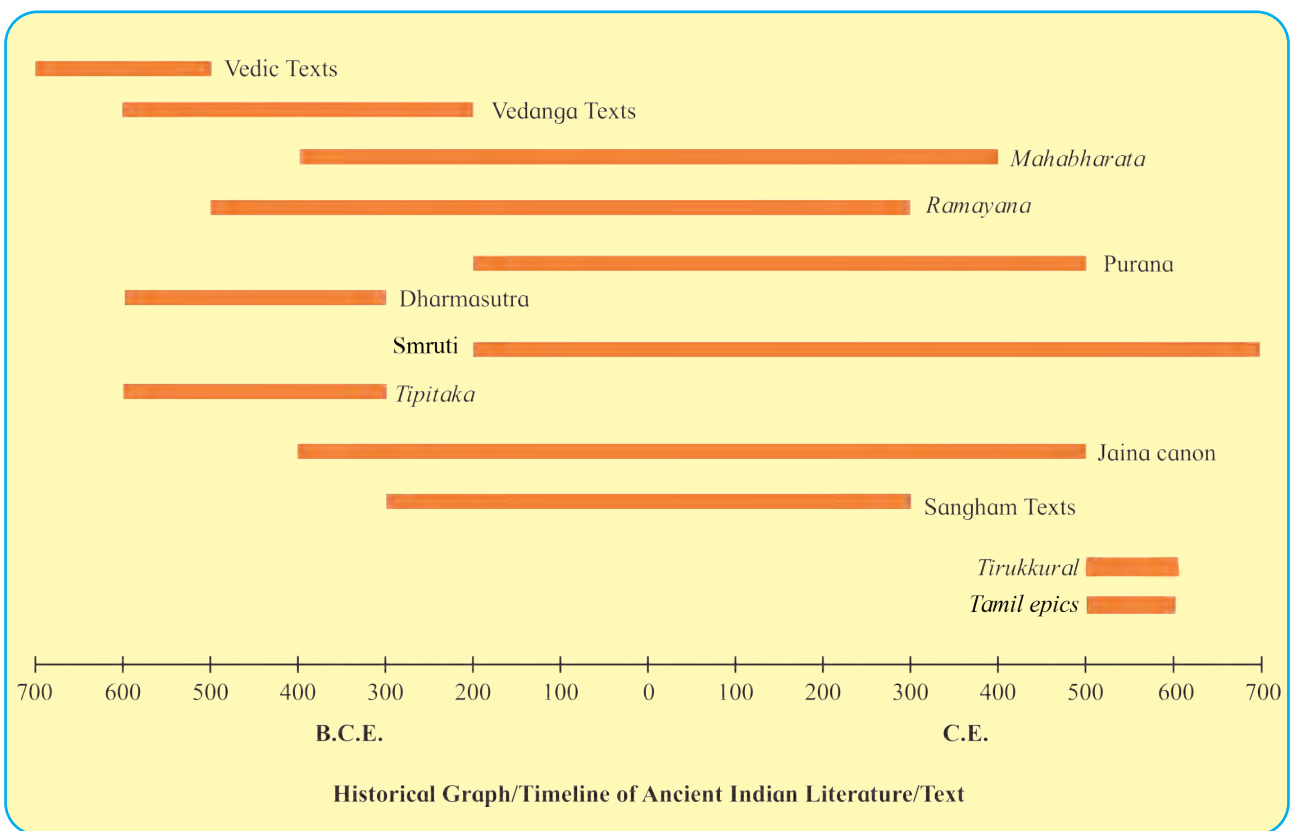
This is a timeline of the construction of ancient Indian literature. It denotes general time-frame of the construction of different literary works. This is to be read from left to right. This timeline has been generated on the basis of corroboration of different evidences. Reference: "A History of Ancient and Early Medieval India" by Upinder singh (2009).

Philosophies from this period are primarily metaphysical. Infact, branches of philosophy hadn't been formed initially. Aristotle was the first to categorize knowledge on the basis of contents of each subject. Since philosophization was the origin of knowledge, in the Aristotelian classification - Physics, Poetics, Logic, Metaphysics, Ethics were all considered branches of philosophy. Many of the branches (specially what is known today as Natural Sciences) later developed into independent disciplines.

Do you know?

In Greece, Philosophy deteriorated after Aristotle due to political instability and several Greek scriptures were lost. Fortunately many of the texts had been translated and preserved into Arabic. Later, these translations got retranslated into various European languages. These translations played a monumental role in the paradigm shift from dark ages (medieval times) to renaissance. European philosophy at the end of medieval period was heavily influenced by Aristotelian thought.

The branches of philosophy evolved and multiplied differently in different historical conditions. For example, the establishment of Christianity across Europe witnessed a tilt of philosophization from metaphysical questions to questions related to nature of God, and His relationship with the world. With the rise of modern sciences, philosophy took an epistemological turn, preferring questions such as 'What is knowledge?' 'What are the most reliable means to it?' 'Which human faculties are important in actuation of knowledge?'

We have taken a brief overview of Indian and western traditions. It shows that the questions 'What is?' 'How do we know?' and 'What to do?' keep surfacing in philosophization at all times, in all places. The question that will take precedence, the way it will be handled and the way it will be answered for the time being, is largely governed by the cultural milieu and historical factors of a philosophy. Cultural perspective plays a vital role in the development of a philosophy and in turn philosophy forms an important part of a culture. Culture and philosophy share a reciprocal bond and comprehension of philosophical systems proves beneficial in appreciating a culture. Understanding of philosophies other than our own enriches, nourishes our intellectual, cultural world. It reduces the cultural estrangement amongst peoples. We can understand each other better. We can envisage better the dream of a noble human society.

In these times of globalization, let's familiarize ourselves with various philosophies of the world. But let us first know, step by step, the important questions addressed by them.

Other branches of philosophy

We have some idea of the vastness of philosophy when we inform ourselves on a multitude of its branches and sub-branches. Besides the branches that we have seen, many other branches also emerged in the course of history of

philosophy. Human being becomes the center of all thoughts in the period which is called modernity in history. Thinkers grew confident in believing that the society, the state has been created by man and he/she is fully competent to alter/amend them. This gave rise to fields such as social philosophy, political philosophy, religious philosophy etc. The nature of philosophy changed strikingly around the 20th century. Lingual (language-related) thought grew predominant. Philosophy took upon itself the function of conducting an in-depth study of a subject along with its methodology. Thus new trends such as Analytical philosophy, Logical empiricism, Phenomenology, Pragmatism came into being. The changing global currents at the end of 19th century caused a renewal of interest in socio-political philosophy and Socialism, Marxism rose to prominence.

Political upheaval and the effects of world wars left deep marks on the Existential philosophy of the 20th century. Socio-political predicament of the latter half of 20th century evoked the need to turn to Ethics for answers. The requirement produced a sub-branch called 'Applied ethics' which included Environmental ethics, Medical ethics, Business ethics, Media ethics etc. Moreover streams of thought such as feminism, multiculturalism entered the terrain of philosophy.

In short, every sphere of life is closely connected to philosophy. Philosophy has contributed to all the fields. If you are interested in any of these, study of philosophy would enhance your understanding of it. Philosophy guides you to deal with some of the most irksome problems of life.

- Buddhi - बुद्धि
- Indriya - इंद्रिय
- Sat - सत्
- Mimansa - मीमांसा
- Man-mata - मन–मत
- Dhatu - धातु
- Antahkarana - अन्तःकरण
- Darshana - दर्शन
- Varna Vyavastha - वर्ण व्यवस्था
- Purushartha - पुरुषार्थ
- Punarjanma - पुनर्जन्म
- Karma - कर्म
- Aastika - आस्तिक
- Nastika - नास्तिक
- Nyaya - न्याय
- Vaisheshika - वैशेषिक

- Sankhya - सांख्य
- Yoga - योग
- Mimansa - मीमांसा
- Vadanta - वेदान्त
- Jaina - जैन
- Charvaka - चार्वाक
- Veda - वेद
- Vedanga - वेदांग
- Mahabharat - महाभारत
- Ramayana - रामायण
- Dharmasutra - धर्मसूत्र
- Smruti - स्मृति
- Tirukkural - तिरुक्कुरल
- Silappadikaran - सिलप्पदीकरम
- Manimekh - मणिमेखला
- Sangham - संघम

Q.1   Fill in the blanks choosing the correct option from the bracket.

(a) .... is an astika darshana.

(Nyaya , Jaina, Charvaka)

(b) The Greek philosopher ....
was the first to categorize knowledge.

(Plato, Socrates, Aristotle)

(c) That which has a true/real existence

is called ....

(asat, bhasa, sat)

(d) The various systems of Indian philosophical tradition are called
....

(siddhanta, darshana, purushartha,)

(e) .... evaluates an act to be good or bad as a branch of philosophy.

(Logic, Epistemology, Ethics)

Q.2   Take the odd word/pair out.

(a) Advaita, Charvaka, Sankhya, Nyaya

(b) Statistics, Logic, Physics, Poetics

Q.3   State with reason whether the following statements are true or false.

(a) Charvaka darshana believes in the authority of the Veda.

(b) The concept of God does not occupy a central position in pre-christian philosophy.

(c) Indian darshana have overlooked the problem of sorrow.

(d) Indian darshana guide us on the problems of life.

(e) During the development of modern sciences philosophy turned towards epistemological questions.

Q.4   Write the philosophical terms used to describe the following.

(a) A specific outlook at life found in every society.

(b) The branch of philosophy that is concerned with 'sat'.

(c) The darshana which believes in the authority of the Veda.

(d) The branch of philosophy that concerns itself with knowledge.

Q.5   Distinguish between.

(a) Astika darshana and nastika darshana

Q.6   Write a short note on the following.

(a) Indian darshana tradition

(b) Metaphysics

(c) Epistemology

(d) The relationship between culture and philosophy

Q.7   Write the answers in 20-25 words.

(a) What is astika darshana? Explain with an example.

(b) What is nastika darshana? Explain with an example.

(c) Explain the word mimamsa.

(d) What is 'sat'?

(e) Which branches of knowledge have presented philosophy with challenges in today's times?

Q.8 **Explain the following statements with examples.**

(a) Philosophy is closely related with culture.

(b) The list of questions addressed by philosophy is quite lengthy.

Q.9 **Explain the characteristics and scope of philosophy.**

Q.10 **Complete the concept chart.**
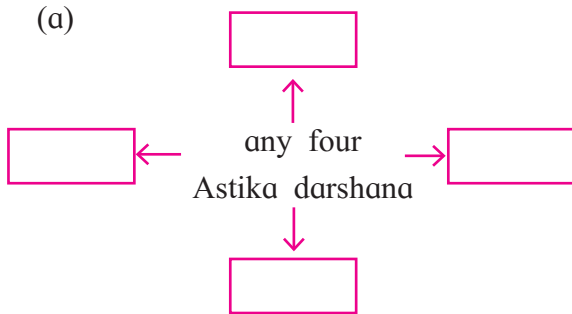
(a)

(b) Mental experiences

❋❋❋

3. Appearances are Deceptive

Flower as seen by an insect   Flower as seen by human

Preface

The title of this chapter is a proverb. What do proverbs have to do here, you may think. This is a book of philosophy, not of language. But have you ever noticed how expressive even the simplest proverbs and idioms are? The wisdom of the generations in a culture transmutes into colloquial proverbs, phrases. 'Appearances are deceptive', 'All that glitters is not gold', 'Distance lends enchantment to the view'… all these proverbs warn us against the mistake of taking things for what they outwardly appear to be. Reality of things can be far removed from appearences.

Let's write!

Make a list of all the proverbs you know. Don't forget to write the metaphorical meaning hidden inside them.

To explain it in philosophical terms - it is true that our five senses inform us about the objects of the world, their shapes, structures, properties and interrelationships. But this knowledge isn't absolutely reliable. For several reasons, the world appears to be different than what it really is. All of us experience this one way or the other. So, the traditional wisdom instructs us in not believing anything blindly. We try to keep this in mind yet at times we are duped.

Shuktirajat Nyaya, Rajjusarpa Nyaya

In Indian philosophy, especially in Advaita darshana, two examples related to the proverb 'appearences are deceptive' are very famous. One is shuktirajat nyaya and the other is rajjusarpa nyaya. (The word 'nyaya' is used here to mean an analogy). Shukti is shell, rajat is silver. A shell shining in the sunlight if viewed from a distance, looks like a piece of silver; but the closer view reveals that it is a shell. Similarly, if we see a rajju, i.e. a rope lying wishy- washy from a distance, we get scared thinking that it is a snake. A little more observation makes us realize that actually it is not a snake. What both these examples tell us is that we get deceived due to the similarities between what 'seems/appears to be the case' and what 'is the case'. The shimmer of the shell is like silver, while the wishy-washy

shape of the rope is like a snake. These examples are given in the Indian tradition in order to explain the fact that the true nature of the world cannot be understood easily and that makes the attainment of the knowledge of the world, difficult.

Freak limbs of a tree sometimes frighten us in the dark, sometimes we try to smell artificial flowers taking them to be real. In short, it becomes urgent for us to be able to distinguish between illusion and reality.

Let's discuss!

Discuss the examples of 'deceptive appearances' from day to day life.

3.1 The difference between 'what is' and 'what we see'

Let's get to the roots of the questions. For philosophers it is very much important to know how to make this distinction, and on what basis. Metaphysics studies reality or 'sat' as we saw in the last chapter. How to differentiate between the 'real' and what merely appears to be 'real' is crucial question therein. Layman does try to make such a differentiation. Do you remember the children's tale where a furious lion pounces on his own reflection thinking it to be his rival and falls in the well? We do not confuse reflection with reality. The existence of shadows and reflections depends on the objects that they are shadows or reflections of, and also on mirrors, the light or a water surface. But the object exists despite the existence of its shadow or reflection.

Let's talk!

Collect and narrate the stories of confusion between illusion and reality. For example, The tale of Birbala where he detects the real garland from two exactly identical garlands.

All of us have dreams in our sleep. But we do not realize it to be a dream as and when we are dreaming. All that takes place in a dream appears true while we dream. We get scared or overjoyed in dreams, sometimes we cry as well. It is only after waking up that we know it was only a dream. Even in waking life we sometimes have illusions or hallucinations of things that don't exist.

Let's write!

Describe an experience from your life which was later proved to be an illusion. Conduct a discussion in class.

Am I Reading in a dream ?

The above discussion demonstrates that the truthfulness of our experience cannot be established until we examine it. Our experience of the world is the only footing we have for making a distinction between 'real' and 'unreal'. The metaphysical 'What is?' is invariably connected with the epistemological 'How do we know?'

3.2 The concept and the nature of 'Sat'/ real

The experience that informs us on 'what is' is always subjective, meaning it changes to various degrees from person to person. Reaching college early in the morning, some find the weather cold, some find it hot whereas some find it pleasant! While having a sweetmeat, some find the taste sickly sweet, some find it perfectly fine and some find it insipid.

The main reason behind this is the differences in psychosomatic features of human beings. Specific situational factors affect our experiences too. There are internal factors as well. Just as sound travelling farther in winters due to high atmospheric density is an instance of external factor, the malfunction of our olfactory system when we catch common cold is an instance of internal factor. An experience is shaped by the complex interaction amongst factors such as a person's psychosomatic state and external circumstances. These factors change constantly. An experience cannot be called 'real' or 'unreal' until we thoroughly investigate it.

Through such investigations into experience philosophers reached the fact. Although the experience changes from person to person, the object of experience does not change according to the changing 'experiencer'. It remains as it is. Its existence, nature, qualities are not dependent on experience. They are not affected by whether and how they are experienced. So, the existence and nature of an object is objective even though its experience is subjective. That alone is real, actual. From this fact it can be inferred that the objects or events experienced by one person only cannot possibly be real. The things that we experience in dreams and illusions fall under this category because their existence is limited to the single person only. Though such experiences are 'real' for the experiencer, their content does not exist really.

Going little further in this direction we come to ask if it is possible that 'real' has a changing nature and why does it change if at all it does? Distant sounds are heard only in winter and not in summertime. This fact applies equally to all persons with a normal hearing ability. The varying experience in changing seasons is conditional; it changes according to changing conditions. The properties of objects are similarly altered by change of conditions. The solid, liquid or gaseous state of water is determined by its temperature. These states of water are conditional. But under all conditions water is constituted by two atoms of hydrogen and one atom of oxygen. Therefore, it is the true nature, 'sat-svarupa' of water. H_2O is the permanent nature, of water. The changing states at various temperatures are impermanent transient. Both the 'permanent' and 'impermanent' states are 'real' because they are objective.

The sensation of taste, colour, odour and touch of water depends to a considerable extent on the experiencer. Water may taste sour to a person with fever, but the sourness is 'unreal' since it does not belong to the water.

Let's write!

Describe a few experiences that vary from person to person and situation to situation.

The principle elucidated by the case of water applies to everything that can be perceived by the senses. The things, their states and qualities keep changing. Transience is their nature as it were. Creation, Sustenance and Dissolution are three basic forms of transformation.

sustenance

creation   dissolution/destruction
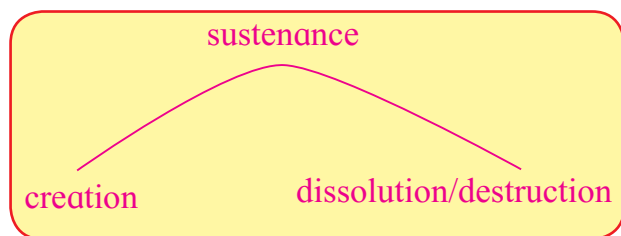
Organisms are born, they grow, and they perish. Things naturally materialize and disintegrate due to changes in the basic element. Humans create stuff which breaks down some day or the other. The process of transformation ceaselessly goes on. But some philosophers thought that there must be an eternal principle which lies beyond this everlasting process of rise and fall of beings. They reckoned this principle to be eternal, permanent and constant. Getting back to the case of water, its original composition does not change with a change of states. The structure and existence of atoms that form a molecule of water is even more fundamental and precursory. These atoms retain their original form upon break-up

and can fuse with other atoms to constitute other molecules.

Since the ancient times metaphysicians laboured to unveil the eternal principle(s) underlying the transient world.

Chhandogue Upanishad Khand 6
Yatha somya ekena mrut-pindena sarvam mrunmayan vidnyatam syat |

Vachaarambhanam vikaro naam dheyam mruttika ityevsatyam ||

Shwetaketu's father said, "Dear boy, consider this example: Through a single clod of clay, all that is made of clay becomes known; for being based upon words any change to the clay is but name and the clay alone is real." Shwetaketu's father is explaining to him, do not stop merely at appearances. Ornaments like ring, bangle, necklace etc. are different but they all are made up of gold, instead of understanding these different ornaments try to understand 'Gold'. There are different tools like axe, knife etc. they all are made up of iron, instead of understanding these different tools try to understand the basic element 'Iron'.

Let's do!

Form groups. Set a table for each group.

Table 1 - earthen pots / objects

Table 2 - metallic utensils / objects

Table 3 - objects made of paper

Table 4 - wooden objects,

Table 5 - objects made of plastic

Students will observe the objects in group and discuss the fundamental element.

Some philosophers proposed that the existence of that which changes depends on that which does not change and that alone is 'sat' / real. Change can't ultimately be real; it takes place only on a superficial level. But some other philosophers maintained that Change is the actual nature of the world. They dismissed the notion of an eternal underlying, unalterable principle. They believe that 'change is the only permanent principle / law of the world'.

Number of fundamental principles

Theories	Philosophers/Darshana
1)Monism -	Paramenides, Advaita Vedanta, Spinoza, Hegel
2)Dualism -	Sankhya Darshan, Descartes
3)Pluralism -	Empedocles, Jain Darshan, Leibniz

3.3 The difference between permanence and impermanence

We experience the relationship between permanence and impermanence in connection with our own existence. All of us firmly believe that we are the same person from the moment we were born up to this moment now.

But we don't mean to say that we are the same as 'the way we appear' in our childhood photographs. We undergo many physical, mental, intellectual changes. Yet we are dead sure that it is the same 'us/me' that has gone through these tides of change. Even while remarking 'I am not the old me anymore' we want to affirm that 'it's the same me but I have changed'.

We tend to believe that the changes that take place due to several reasons is my impermanent nature and the 'I' in relation to which the change occur is a never-changing permanent existence. But there's nothing in us that does not change, that does not come to an end. Our sentiments, wishes, thoughts, instincts, desires too change.

Let's talk!

Discuss 'the changes that have occurred in me' in class.

Where's the fundamental, permanent principle then? What is it called? Philosophers have called it 'Atma' (soul). Some philosophical systems sought to resolve the conflict of permanence-impermanence by putting forth the idea that; that which takes birth, that which dies and decays is body and that which is not subject to birth, that which is changeless, immortal, in other words that which is permanent is the soul. The streams of thought that rejected the notion of a constant fundamental principle obviously rebuffed the idea of soul, whereas those who believed permanent alone to be real declined that body is the ultimate reality. Many streams of philosophization that emerged in Indian and western world concerned themselves with diverse parings between real-unreal and permanent-impermanent and the way they can be reconciled. These endeavours shed light on other issues. What might be the number of these intransient, indestructible principles? What might they be like?

These two interrelated questions are central to metaphysics. To give you an

example, the pre-Socratic philosopher Thales proposed that water is the fundamental element; that the world originates from water. Now with this one would have to assume that fire too is made up of water. But in actuality water extinguishes fire, water destroys fire. How could this be settled? One has to carefully meditate on the nature and properties of an element while declaring it to be the only fundamental element responsible for the creation of the world.

A major question that arises here is, how can things which are in stark contrast with the element be formed of it?

All existing things of the world are loosely categorized into living and non-living things. What category does the fundamental element fall into? Philosophers have to explain how it produces the entities of the other category if it belongs to one of the categories. If 'consciousness' is considered a sign of life then those who regard the fundamental element to be 'matter' /non-living must account for how matter creates consciousness. Those who say that the fundamental element is consciousness, have to make clear how 'matter' is formed out of 'consciousness'. Some schools of philosophy propagate that the world is made of both conscious and material fundamental elements. Some state that the world came into existence from interactions between multiple physical elements.

Let's talk!

Conduct a discussion on permanence-impermanence matter-consciousness form of the fundamental element using Jurisprudential Model. In this model two students present their views in front of the class. Two other students present alternative views. 3 to 7 students become the jury. They hear the arguments with the whole class like in court of law and give judgment in the end.

One more important question pertaining to this is, are the fundamental elements static or dynamic? If they are responsible for the creation of the world then there must be some changes, constructions, deconstructions happening. Nothing can change without motion. Motion is a pre-requisite to change. A lot of times we perceive the changes that are caused by motion without perceiving motion itself. We can experience a volcanic eruption or tsunami waves but we can't possibly realize the movements that take place in earth's interior, movements that are responsible for these phenomena. The phenomena cannot occur without the dynamics.

Nature of Reality

Theory	Philosopher/Darshan
1) Idealism -	Vedanta darshan, Berkeley, Hegel, Bradley
2) Materialism -	Charvaka darshan, democrites, Marxism
3) Realism -	Jaina, Nyaya, Vaisheshika, Sankhya, Purva Mimamsa, Locke, Russell, Moore

One more question follows - Are the fundamental elements dynamic by nature or are they accelerated by someone? It is a quality of animals to be able to move without any outside force. Things have to be set to motion. Explanation of motion and changes caused by motion is very much necessary for any theory regarding the nature of the world. Philosophers who believe the fundamental elements to be dynamic proclaim that various worldly entities come into existence due to the movements, the coming together and falling apart of the elements. According to the philosophers, these movements follow the laws of physics, they aren't driven by a purpose and they create all beings.

Different causes of Motion

The shifting shapes of clouds in the sky are a result of the movement of vapour, gusts of wind and the direction of the wind. Clouds cannot consciously 'decide' to assume the form of a plumage or a flower, nor are they crafted by anyone else.

3.4 Theistic and atheistic philosophy

Some thinkers believe that physical elements (matter) aren't inherently dynamic. They have to be set into motion from the outside, and they are thus moved by an omnipotent, omniscient God. According to this line of thought an all-powerful God intends to create the world out of these fundamental elements. He has an intention behind the creation of the world which we may or may not fathom. All things exist as long as God wishes them to exist. They cease to be when God does not want them to be. God is the creator-governor of the infinite forms, their relations to each other and the order of the world. Not all streams of philosophy believe in the existence of God though.

Indian and western traditions consist of both Theistic and atheistic philosophies. However they don't have a consensus over the nature and function of God. We looked at the notion of God that creates the world by amalgamating the already existing fundamental elements. Some philosophies think that God created the world from a void, a null. Nothing existed before God created the world. The world is wholly a divine creation. Human beings deem themselves a creator too and in a limited sense they are. But their creation is merely a renovated usage of that which already exists. They do not have the power to create that which does not exist. God has that power.

It is a speciality of philosophy to dig deep into every question it encounters. Everyone knows that 'appearances are deceptive' but the philosophical journey which begins in this awareness takes us to the fundamental metaphysical question - 'What is?' The question is not as brief as it seems. It accommodates many hidden questions such as 'How much is it?', 'Where is it?', 'How is it?', 'How is it interconnected?' Every question points at newer questions. Grappling with such questions is a healthy exercise for our intellect, it strengthens our mental faculties. You must have grasped that this equips our brain to face new challenges. There is a great intellectual joy in pursuing new questions, looking for answers. You are intelligent indeed - so, ready to embrace new challenges?

- Shuktirajat - शुक्तिरजत
- Rajjusarpa - रज्जूसर्प
- Sat - सत्
- Asat - असत्
- Nitya - नित्य
- Anitya - अनित्य
- Darshan - दर्शन
- Vedant - वेदांत
- Charvaka - चार्वाक
- Jaina - जैन
- Nyaya - न्याय
- Vaisheshika - वैशेषिक
- Sankhya - सांख्य
- Purva Mimamsa - पूर्वमीमांसा

EXERCISE

Q.1 Fill in the blanks choosing the correct option from the bracket.

(a) .... is the branch of philosophy that studies reality. (Epistemology, Metaphysics, Ethics)

(b) .... is the nature of objects that can be experienced by senses. (illusion, sustenance, transience)

(c) Dreams and illusions are ....

(subjective, intersubjective, objective)

Q.2 Take the odd word/pair out.

(a) creation, sustenance, dissolution, permanence

(b) static-dynamic

permanent-impermanent

knowledge-information

real-unreal

Q.3 Write the philosophical terms used to describe the following.

(a) The stream of philosophy which believes that there is one ultimate reality (sat)

(b) The stream of philosophy which believes that there are two ultimate realities

(c) The stream of philosophy which believes that there are many ultimate realities.

(d) The stream of thought which believes God to be the creator of the world

(e) The stream of thought which rejects the existence of God

(f) The stream of philosophy which believes the ultimate truth to be consciousness

(g) The stream of philosophy which believes the ultimate truth to be matter

Q.4   Distinguish between.

(a) Monism, Dualism, Pluralism

(b) Idealism, Materialism

Q.5   Write a short note on the following.

(a) Subjective experience

(b) Theism

(c) Problem of motion

Q.6   Write the answers in 20-25 words.

(a) What is objectivity?

(b) What are the concerns in Metaphysics?

(c) Explain Rajjusarpa nyaya.

(d) Explain the relationship between motion and change.

Q.7   Explain the following statements with examples.

(a) The existence of an object is objective even though its experience is subjective.

(b) Appearances are deceptive.

(c) Motion is a pre-condition to change.

Q.8   Discuss the nitya-anitya problem in Metaphysics.

Q.9   Discuss various philosophical perspectives to the ultimate reality.

Activity

Discuss the difference between 'what is' and 'what appears to be' with a friend who hasn't opted for Philosophy.

❋❋❋

4. Getting to know, 'Knowing'?

Preface

You might have heard that anecdote about Albert Einstein. Various towns and villages invited him to talk about 'theory of relativity'. The chauffer who drove him to these places used to attend every lecture. Once when they were invited to a town where no one had seen Einstein in person, the chauffer asked if he could give the lecture posing as Einstein. Einstein agreed. Thus the chauffer explained ideas which by now he had learnt by heart. Einstein sat in the audience and listened. When the question-answer session began, the chauffer very smartly said, "my chauffer is sitting in the audience and even he can answer these queries!" Einstein smilingly answered the audience.

What does the anecdote tell us? The chauffer gave a lecture from memory but he could not answer questions. One can't answer questions on a topic until one has understood it closely, known it in depth. Those who mug up a few answers for exams are discomfited to face different questions in the question paper, aren't they? This happens because just as there is a difference between 'truth' and an 'illusion of a truth', so is there a difference between knowledge and beliefs/conceptions that appear to be knowledge. Cramming a topic in our heads and presenting it without proper understanding gives us an illusion of knowledge. That is why it is called 'parroting'. A trained parrot can imitate human sounds but he does not understand the meaning behind the utterances. There is no knowledge, only an illusion of knowledge.

4.1 What is knowledge?

If asked to talk about things you know, some of you will talk about themselves, some will present a long list of things they've learnt in Mathematics, History, Sciences, Geography etc. The list might not even end. Some of you may feel they are very knowledgeable. Some might wonder if they really know anything about the things they listed. They might find themselves asking tons of other questions such as 'what is knowledge? How does it occur? How do I know that I know? They will come to see that they do not know what is it 'to know,' what is means 'to understand'. Have you begun to feel the same?

Let's get to know things about 'knowing'. All the questions mentioned above and many more are considered in the branch of philosophy called 'Epistemology'. Let's familiarize ourselves with the discourse on two vital questions - 'What is knowledge?' and 'What are the sources of knowledge?'

Knowledge is called as Jnana (ज्ञान) in Marathi but the word isn't frequently used in day-to-day conversations. People

use other verbs that are synonymous with the verb 'to know'. English uses the verb 'to know' with several shades of meaning - 'to realize', 'to recognize', 'to understand' etc. We must understand the subtle differences between these. Let's discuss the process of 'knowing' first of all.

> **Let's write!**
>
> Write sentences that accurately represent the meanings of verbs such as 'to understand', 'to realize', 'to recognize', 'to comprehend'. Discuss the differences.

'Knower' is the one who knows and 'known' is that which can be known. Knowledge is born when the two come into contact, when they interact.
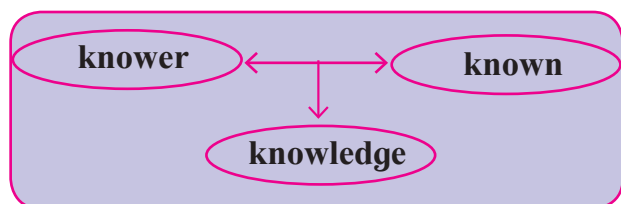
Knowledge requires awareness of one's surroundings and of one's self. The more advanced this awareness, the more superior the knowledge! All that falls within the bounds of human awareness can be known.

We come in touch with objects, properties, relations, events, statements, arguments, theories etc. through awareness. Although every kind of contact might not result into knowledge. The majestic beauty and force of a cascading waterfall enraptures us and astonishes at once. We feel proud to be commended for an excellent performance. The sight of raw mangoes makes our mouth water. We are highly impressed to see a robot at work.

We are baffled when something doesn't bear the expected outcome. We are interacting with the world every passing moment, and it leaves various impressions on us. The interaction between the knower and the known is a necessary but insufficient condition for the creation of knowledge. The interactions have to be of a particular kind.

4.2 The difference between knowledge and information

The interactions that help us understand what an object is give us knowledge. Our intellect, our sense organs are the means to know an object. We shall look into the means later. But we must ponder over what is it to know an object/event. Does knowing mean to be familiar with it, to possess some information about it - or something more? Let's have an example. Do you know what an Indian giant squirrel is?

Shekaru

Some of you might have seen it in photographs, some of you might have actually seen it, some of you might have heard of it. A student might know that an Indian giant squirrel is a large tree squirrel belonging to the species R. indica. It is found in the dense, evergreen forests. It travels from tree to tree with jumps of

up to 6 metres which look like flights. Those who have read/heard about the Indian giant squirrel and seen in it photographs might be able recognize it but those who have actually seen it would know better, don't they? It can be said that a student knows shekaru when he/she knows what class of animals it belongs to, how it feeds itself, how it lives etc. Moreover, those of you who'd wonder how shekaru almost 'flies' from one tree to the other despite having no wings, those of you who'd take the pains to find an answer will have a more comprehensive knowledge of it. One can better understand the phenomenon of a 'leap of the Indian giant squirrel' if one also applies what he/she already knows about birds and animals.

This example illustrates a few interactions that are a part of construction of knowledge – reading about a thing, hearing about it, experiencing/witnessing it, being aware of certain facts, being able to link them with the information we already possess. Loosely speaking all of the interactions above seem to emit knowledge. But it is not so to the scrupulous philosophical eye. Philosophically speaking, all the interactions except the last, provide us
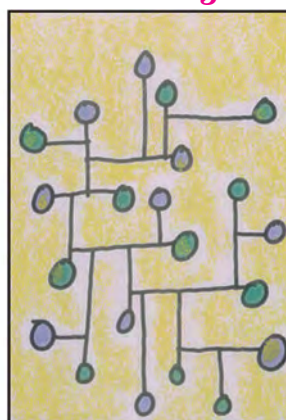
information about an object of knowledge. Information is required for knowledge, but knowledge isn't merely information - it is extremely critical to understand this in the age of Information Technology. Information is a collection of facts about something. This can be an assorted collection of different, isolated facts.
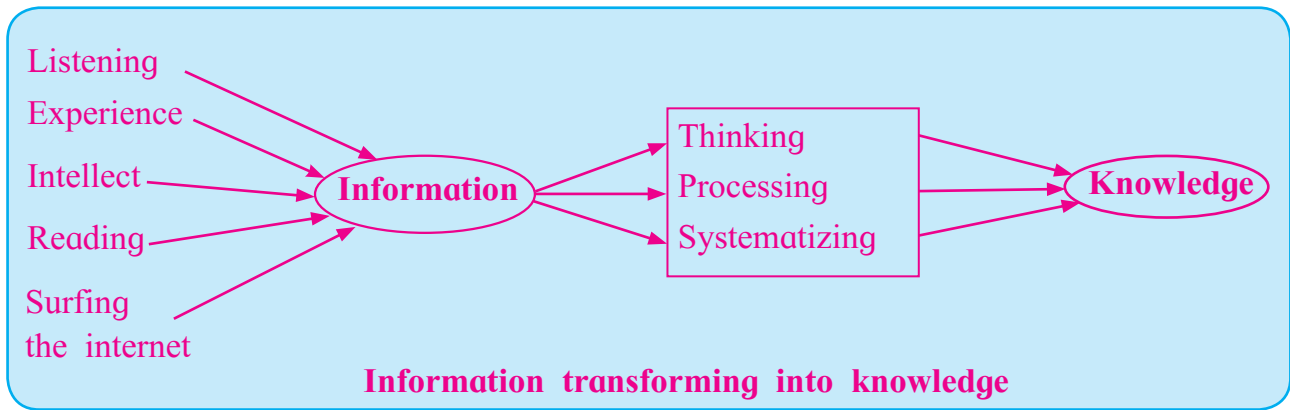
Have you ever collected coins or postage stamps? These things can either be randomly stacked or can be systematically classified according to the country, release year, contents etc. We pile up information in the form of experiences, intellect, reading, listening, surfing the internet. But as long as they are haphazard, they are like randomly collected coins. The process of internalization begins when we think over facts, discover the interrelationships, similarities and differences among them. Then it becomes feasible to classify facts, to put them together. This is when information starts getting transformed into knowledge. Knowledge has to be a coherent system of information. To build a project, we, at first carefully assemble the required materials and then systematically organize them. Information means for knowledge that which materials mean to a project.

Information

Knowledge

Listening
Experience
Intellect
Reading
Surfing the internet

→ **Information** →

Thinking
Processing
Systematizing

→ **Knowledge**
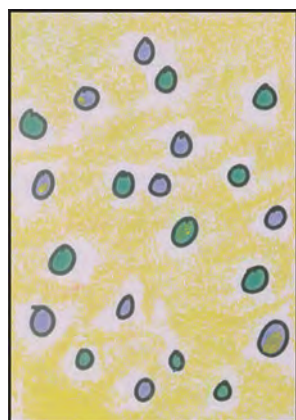
Information transforming into knowledge

Therefore, the person who merely accumulates unprocessed information cannot be called 'knowledgeable'. Otherwise books, encyclopaedias or Google would have been called the most knowledgeable! There is awareness at the root of knowledge. Knowledge has to be absorbed and processed using this awareness. Only then there is understanding.

Such knowledge becomes an integral part of our thoughts, feelings, behaviour and life. In order to prepare a dish, we gather all the ingredients and process them/cook them and consume them. Knowledge has to be consumed; it has to be ingested. But sometimes the ingredients are adulterated, sometimes the preparation goes wrong, and the dish is a failure! The same can happen with knowing. The accumulated information may be fallacious, untrue or insufficient. Sometimes it is organized in an imprecise matter. The knowledge that comes from such information cannot be called knowledge. Information is the raw material to knowledge. The quality of knowledge depends to a great extent on the status of information. One has to scrupulously examine the sources of information and if it is genuine or invalid. The social media posts and forwards that claim authenticity are more often fraudulent/

rumorous than true. We are at a great risk of being deceived online unless we cautiously find trustworthy websites. By trusting any information blindly, we mistake untruth for truth and knowledge can never be untrue.

Let's talk!

Think-Pair-Share

Share a rumor with your classmate. Discuss its credibility. How did you deduce that it was a rumor?

'Falsehood is not strictly entitled to the term 'knowledge'. Even in day-to-day conversation we use phrases like 'I believe that...', 'I think...' or 'In my opinion...' if we are not certain about the authenticity of our statements. These phrases have a dubiousness, which phrases like, 'I know...' or 'I am sure that...' do not have.

Chinese whispers

When we say 'I know...' we have, at least for ourselves, confirmed the verity of our opinions. We believe what we're saying is true. And we want others to believe the same. We also give explanations if required. We give proofs and justifications.

Suppose you come across the statement - 'German poet Goethe put the Sanskrit epic 'Shakuntal' on his head and danced merrily.' We do not know who wrote it so you go about asking friends. One of them says 'I think xyz wrote it.' Someone else says 'I know, Kavi Kulguru Kalidasa

Knowledge and opinion

These are the times of IT and media overflow. Internet is overfull with information. We are being bombarded as it were with various ideas, opinions and information through various media. It would be a grave mistake to call it knowledge. We tried to grasp the difference between knowledge and information. Let's take a look at knowledge and opinion. In the course of a conversation we often say, 'I agree with you' or 'I beg to disagree'. This clearly suggests that people have divergent opinions on a subject matter. And it is considered quite normal for opinions to change with time or circumstances. But we don't confer on changing opinions a status of knowledge because knowledge doesn't differ from person to person. It is supposed to be universal across time. So, even on the level of common-sense we must make the distinction between knowledge and information. Ancient Greek philosophers from the western tradition also marked this distinction. Plato, the disciple of Socrates has discussed this in detail although he uses the word 'opinion/ belief' in a much different sense. Our sense organs inform us on the nature of the world. But the structure and properties of things keep changing.

Leaves become yellow before fall. A shady tree becomes leafless in summer. Thus statements like 'Leaves are green' or 'Trees are shady' which hold true at one time do not hold true at another time. Experience of things also changes according to our varying sensory abilities. Contrarily, statements like 'A is greater than B, B is greater than C, therefore A is greater than C', are always true and are not susceptible to difference of opinion. Only the statements which do not change with space, time or person can have the status of 'knowledge' according to Plato. He calls it 'episteme'. If the verity of the statements changes with space, time or person he calls it 'belief'. Beliefs / opinions can be true or false. Knowledge can't be false. Falsehood can't be called knowledge. Acquisition of knowledge takes an exhaustive study of a subject matter. Opinions are often formed of erroneous information or deficient understanding. One has to justify an opinion, to submit proofs that vouch for its truthfulness if one wishes to call it knowledge.

Will you mind the difference between knowledge and opinion while making knowledge-claims or accepting them?

wrote it.' You'd obviously ask 'How do you know?' 'I have opted for Sanskrit in college' he adds, 'and we have passages from the epic in our syllabus.' Now you'd believe him. In other words, when a person makes a knowledge-claim he/she tries to assert that what he knows is correct, that the knowledge has been satisfactorily internalized. But such claims can't be accepted without verification. Various sources must be employed to carry out this examination.

Apart from 'What is knowledge?' epistemology also asks 'What are the means/sources of knowledge?' Indian and Western traditions have mentioned many sources of knowledge. Various schools have approved various sources. Let's get to know a couple of them:

> **Let's do!**
>
> Draw a mind-map of the instances of knowledge which is obtained through following sources: sense perception, intellect, memory, testimony.

4.3 The sources of knowledge

As a child you must have ran off at the sound of a flying aeroplane in order to catch a glimpse of it. We hear the sound with ears. We remember that to be the whizzing of a plane because we've seen a plane pass by making that noise on multiple occasions in the past. So we infer that this sound must be that of an aeroplane. Our science textbooks tell us what a plane is and how it flies. We believe what's written in a textbook is true.

This simple example demonstrates how we used multiple sources of knowledge to conclude that the specific sound is that of a flying aeroplane. Let's discuss them one by one.

Our sense organs - eyes, nose, ears, tongue and skin are our premier means to know the world around us. With eyes we perceive shapes and colours of things. With nose we smell them. With ears we receive sounds and with tongue we discover tastes. The skin informs us on the texture of things.

Sense organs need to come into direct contact with an object in order to grasp the properties of color, form, smell, taste, sound etc. This contact produces sensations through which we know. That is why this source is called 'sense-perception' or 'pratyaksha pramana'. Although sense organs give us knowledge of the attributes of objects through sensation, in what is termed 'sense experience' all these different sensations are interconnected. That is why through sense experience, we come to know not just the characteristics of the object isolatedly, but also the existence of the object and its relations with other objects. In brief, whatever basic knowledge that we get about the material world is through sense experience

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only. This knowledge cannot be attained through any other source of knowledge independently. Rather, whatever knowledge of the material world that we get through all other means of knowledge, is inevitably based on sense experience. That is why, sense perception has a unique place in the sources of knowledge.

Moreover, various sensations also let us know what's going on inside our body and mind. We go to a doctor when we experience hurt/ache but we don't need a doctor to tell us that something hurts. We sense the pain first-hand. We know when we feel elated or low. The inner and external sensations play an undoubtedly significant role in our knowledge of the world.

Sources of knowledge	
Western tradition	*Indian Tradition*
Sense perception	Pratyaksha (perception)
Reason	Anumana (Inference)
Memory	Upamana (Comparison)
Intuition	Shabda (Testimony)
Authority	Arthapatti (Postulation)
	Anupalabdhi (Non Apprehension)

"But we saw 'the appearances are deceptive' in the last chapter itself ", you might say - quite right. We've learnt that what we experience might not exist and even if it does, it might not exist the way we experience it.

Colours appear strikingly different in darkness. The olfactory sense is enfeebled when we have common cold. Many more examples can be presented. That is why sense perception cannot be considered an absolutely reliable source of knowledge. However senses are indispensible to know the material world around us. But they must be used with caution. The information that reaches us through senses cannot be regarded indubitably true. It must be verified through other sources and sensations. A stick looks bent / crooked when half-drowned in water. Then we remember that it isn't actually crooked. Our intellect has realized why it looks that way through Science education.

4.4 The process of obtaining knowledge

Although we perceive the things and their characteristics through sense experience, their cognizance is made possible by memory. We recognize the whizzing of a flying plane because we remember that it sounded that way when we previously saw it. We associate the sound with a mental image of a plane and anticipate the sight of an actual plane. We memorize mathematical tables and utilize this memory to quickly solve multiplication/division sums.

Remembering a new lesson is as important as understanding it. We compare a new experience with our past experiences as a way of making sense of it.

We are bewildered if there's nothing in our memory storage that matches with the new experience. In short, memory is an important instrument in the process of knowledge-acquisition. But memory also isn't absolutely faithful to us. It often fails us. Sometimes we completely forget what happened. Sometimes we remember things in a distorted, foggy manner. Several psychosomatic factors have an impact on our process of remembrance. We tend to forget unpleasant events. We 'remember' things that didn't take place when imagination mingles with memory. So, memory isn't entirely dependable.

Let's write!

Describe the drawbacks of memory and testimony as sources of knowledge.

You have learnt about light refraction from your teachers, from books or the internet. Light changes its direction while passing from one medium to another. You know that the stick which appears to be partially bent in water isn't actually bent. In reality we do not possess much theoretical knowledge about light refraction. We do not perform advanced scientific experiments related to it. But we trust the word of scientists and our teachers. We accept their authority in the subject matter. Testimony is the source of knowledge we happen to use while consulting an expert on a subject matter.

A considerable portion of our knowledge consists of verbal testimony. Mankind has created a mammoth repository of knowledge till today. It is impossible for a single human being to cover it in study. All of us have to believe the word of experts, knowledgeable persons and well-reputed texts. But we must be highly watchful as to whom to trust, what to trust, and to what extent. We are at a great risk of being misled if we trust ignorant persons or erroneous sources of information. One must not forget to scrutinize a source of knowledge using one's intellect and reason.

Critical thinking is the core of philosophy. It teaches us not to accept a belief or opinion without adequate investigation. All of us possess intellectual faculties and hence it is our duty to put them to work while accumulating knowledge and searching for truth.

Intellect/Reason is a crucial source of knowledge. Miscellaneous information cannot be called knowledge as we saw before. Heaps of soil, stones, bricks, iron rods, cement isn't a building, is it? A building has to be constructed by systematic placement of these materials. Senses, memory, testimony provide us with elements required for creation of knowledge. Intellect puts all the elements together. It is an important function of intellect to interpret the nature and interconnections between facts that come to us through several sources. The sky gets cloudy. It starts pouring in. Streets get drenched. The cool breeze flows. Our intellect points out the interrelations between all these phenomena. The soil gets moist and a bacterial reaction releases the distinctive, lovely smell called 'petrichor'. It is not our senses but our

intellect that grasps the causal relationship between the phenomena. Intellect can make conjectures or guesses on the basis of this very understanding. These intellectual skills are as advantageous in the field of thought and knowledge as they are in practical life. They are also incomparably important in science and technology.

The scope of intellect isn't restricted to the things and events that occupy space and time. It also includes abstract principles, values and laws. Senses give us the knowledge of things but our intellect grasps their essences. The concept of 'friendship' unfolds more and more to the intellect as we go on making friends. As we grow up we realize that seasons occur in a sequential pattern. We realize the 'value' of wellness when we fall sick. We realize that keeping our word is an important 'value'.

Intellectual functions like drawing conclusions, inference, argumentation, justification, critical examination are central to philosophization. We call this 'reason'. It is the task of rational faculty to arrange the facts and information it meets in a logically sound manner and what comes out of it.

Logic is an important branch of Philosophy and is intimately connected with epistemology. Inconsistencies cannot be afforded while converting information into knowledge. An opinion has to be backed or countered with appropriate arguments. Logic shows the way to right argument; it throws light on possible fallacies of thought and argument. Logic plays an important role in every stream of knowledge. Abstract laws and concepts in Geometry, Mathematics, Logic cannot be comprehended without intellect.

One must note here, that intellect does not mean 'intuition'. When we sense something without visible evidence or conscious reasoning we say 'I simply felt that it was going to happen'. We bump into a friend and sometimes we feel we know we were going to meet her today. But we don't have convincing answer if she asks 'How did you know that?' Sometimes we get a premonition and cancel a journey only to come to know that the vehicle met with an accident. We think we possess the 'intuitive power'. To believe such a thing and rely on it is quite dangerous. Sometimes these guesses can go disastrously wrong. There is no way to affirm their accuracy.

Secondly, intuition changes from person to person and as a result what it tells us is subjective. Objectivity is a necessary characteristic of knowledge. Beliefs, impressions, opinions can be subjective but knowledge has to be objective. It has to be intellectually justifiable. The reality of intuition does not pass this test. That is why intuition cannot be regarded as an authentic source of knowledge.

Apart from acquiring knowledge, the job of the intellect is also to determine how to use the knowledge in daily life. We do pursue knowledge for knowledge's sake but for the most part we strive after it to improve our lives by all means. Actions based on scant knowledge of the world and the self do not come to fruition.

'Knowing how' and 'knowing that'

A good life requires knowledge and skills. The skills can be physical, mental and emotional and can range from being able to cook, to operate a computer. We adopt these skills through formal and informal means and employ them to carry out many things in our day-to-day lives. But skillfulness isn't knowledge. When we learn to swim we obtain the skill to float and move on the water-surface but we aren't aware of the physics or physiology of the act. Our mechanic repairs our two-wheelers dexterously often without any theoretical knowledge of mechanics. To know how something is done is different from the kind of 'knowledge' we are discussing in this chapter. The knowledge of a skill is called 'knowing how' in English. For example, 'I know how to use Google.' This kind of knowledge is functional. The knowledge that is studied in epistemology is called 'knowing that'. For example, 'I know that all metals expand when heated'. This kind of knowledge is propositional knowledge.

Let's talk!

Describe various examples of 'knowing how' and 'knowing that' and discuss the differences.

Intellect has to decide what a good life is. Is good life a 'successful life'? Is it a 'happy life'? Good for self or good for all? What is the right path to good life?...Good lord, more questions!

Let's think them over in the next chapter.

- Shakuntala - शाकुंतल
- Kavi kulaguru - कवि कुलगुरू
- Kalidasa - कालिदास
- Pratyaksha - प्रत्यक्ष
- Anumana - अनुमान

- Upaman - उपमान
- Shabda - शब्द
- Arthapatti - अर्थापत्ती
- Anupalabdhi - अनुपलब्धी

EXERCISE

Q.1 State with reason whether the following statements are true or false.

(a) Known is the person who knows.

(b) All knowledge gained through the senses is true.

(c) Credibility is not important in testimony.

(d) Knowledge and skill isn't important for good life.

Q.2 Distinguish between

(a) Direct knowledge and indirect knowledge

(b) Knowledge and information

(c) Knowledge and opinion

(d) Knowledge and wisdom

Q.3   Write the answers in 20-25 words.

(a) What are the elements of process of knowledge?

(b) What is testimony?

(c) Illustrate the instances of uses of memory in the process of knowledge.

(d) What are sense organs?

(e) What is inner sensation?

Q.4   Explain the following statements with examples.

(a) Knowledge is not merely information.

(b) Sense experience has to be used carefully as a source of knowledge.

Q.5   Discuss the sources of knowledge in detail.

Q.6   Write a Dialogue.

The need of knowledge and skill for leading a good life.

Activity

Observe how children between three to six years of age acquire knowledge and note down the methods that they use for it.


❃❃❃

5. Freedom and Moral Rules

Preface

What irritates you the most? Let me guess – that everyone around keeps telling you what to do and what not to do, right? That people always nag you about the way you talk, the way you behave etc. "To hell with your rules and restrictions! I am not a child anymore! I can think for myself. Let me breathe! I want to be free to do just as I please..." - you feel like shouting from the rooftop, isn't it? But you never get such a freedom. Not only you, no one, no child, no grown-up gets the freedom to behave entirely as one would wish.

Everyone has to accept certain constraints in a societal setup. But does that mean that a person who doesn't want to be constrained, who wants to be free should not live in a society, does it? What if we settle down far far away, cut-off from all human contact? Will we be able to live in total liberty then? It's extremely tough to conduct this experiment for real. But as students of philosophy you are not required to conduct lab-experiments. Did you forget the little laboratory that's available to us 24x7? – Our brain, that is. And we can certainly conduct thought experiments. Imagine that a marine manages to save his life by getting on a life-boat after a shipwreck.

Let's do!

Find out and discuss the story of Robinson Crusoe and Tarzan.
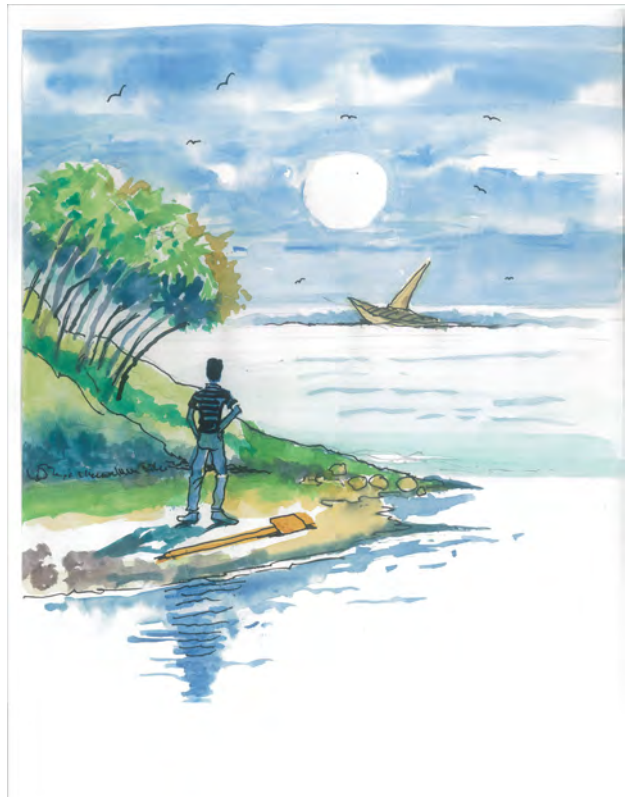
On an isolated island

The sea waves carry him to a secluded island. He is the only man on the entire piece of land. There's no one to reproach him, advise him, instruct him. He is free to choose for himself. He wishes to make life better by utilizing the living/non-living world around him. He gathers food, builds a safe shelter and lives a solitary, unrestrained life. Would you like to live this way? I don't think you would. How can we like a place, a world where we don't have near and dear ones, where there's no one to talk to, no one to share our joys and sorrows with?

Now let's add a few more things to this experiment.

Suppose if he (the marine) encounters another human being while wandering on the island. What would he feel? Joy, fear, anxiety, threat? – possibly everything. One thing is certain - thenceforth he'll have to be aware of another person's presence on the island. The life of the marine will be better if the other person co-operates with him. But for this he'll have to adjust, he'll have to regulate his ways or else there will be conflict. It will be detrimental for them both. They will have to share the resources of the island in order to avoid conflict, they will have to share responsibilities. And for all this to fall in place they will have to form a set of rules/laws. Do you see?

What we do, what we speak affects those around us, those who are directly or indirectly associated with us. Their behaviour similarly affects us. We know this and thus find ourselves tussling with questions: 'What to do?' 'How to do?' How to behave? A friend can't attend the classes sometimes and asks you to mark a proxy. Should you listen to her? You detest deafening music being played during festivals and social events. You know that it seriously harms the infirm, the old people, infants and animals. What should you do about it? How does it matter if you pass time with a friend under the pretext of studying once in a while? Don't you face questions like these? How are we to find the answers? What is the basis to determine if the answers we find are right or wrong? Ethics guides us in all these matters. 'Ugh! that's what we are being told all the time,' you may react. 'Parents, teachers, relatives, elderly acquaintances – everyone constantly exhorts us. Even stories from storybooks have 'morals' attached to them.'

'We are bored to teeth with it. Why add Ethics on the top of this?' Your doubts are surely fair-minded. But ethics does not preach. It doesn't burden us with lengthy list of do's and don'ts. It aids us to decide what to do and why. Ethics deliberates on factors that must be considered while determining right and wrong, good and bad, just and unjust, and the interrelationships between those factors.

5.1 The subject matter of Ethics

The subject matter of ethics is human behaviour and moral values. Psychology studies human behaviour too, but the two branches have different perspectives. Psychology describes human behaviour; it also traces its causes using empirical scientific methods. Ethics concerns itself with how human conduct should be. Facts are important to Psychology; values are important to Ethics. Ethics carries out a

moral evaluation of our acts and behaviour. It comprehensively discusses the principles, values that are to be used for this purpose. It puts forth ethical theories. This study goes on to illuminate our notions of good life on the individual and social level. We start marching toward the pertinent way of life. Man's actions shape his life for better or worse, after all.

5.2 Types of action

What exactly is a human action? All that we do, all our 'karma' are our actions in a way. But Ethics does not study or assess all sorts of action. The actions which occur mechanically such as involuntary actions, or the actions without our conscious awareness do not fall under the realm of Ethics. It only takes into account actions which are performed consciously and willfully. Respiration, blood-circulation, metabolism 'happens' without our knowledge. We do not have to 'do' it. Eyes 'automatically' blink more when dust particles get inside them.

Let's understand this in detail. Things of the world are either living or non-living. The activities of non-living things are governed by nature. Things and forces affect each other mechanically.

We call them 'actions-reactions'.

Things have no control over this. A magnet attracts metallic objects due to its inherent characteristics. Whether it 'wishes' to do so is not a question at all. Similarly, it does not have the power to prevent it. There can be no other choice in this matter. Living beings however go beyond the chains of action-reaction and are able to 'act' intentionally. The potential to act/intervene is directly proportionate with the level of consciousness in any being.

The distinct constitution of humans and their developed level of consciousness allows them many options and they have the freedom to choose one of those. Non-human animal behaviour is largely governed by natural urges and instincts. Humans are free, at least to a certain extent, not to react to impulses and to regulate their natural urges. That is why even while being crucified Jesus Christ could say, "Forgive them father, for they know not what they do." Voluntary actions are rooted in human free will. Let's take an example -

There are many options, many ways to pass time. Some read, some go out, some listen to music, some watch a film. If we choose to watch a film, we have to choose a film next. Thus, voluntary action is to act by choosing one thing out of many. We perform a number of voluntary acts day in and day out. We also bear the responsibility for the consequences of the choice since it is our choice. The effect are also diverse. Some

actions lead to quick reactions and some actions have delayed effects. Some effects are anticipated by the doer, some are not. Many a times, we act with one intention and experience different effects. Since we have chosen acts, the responsibility to bear effect is also ours. Freedom and responsibility are thus always connected with one another. If humans did not have the liberty to act voluntarily they could not have concluded if their actions were right or wrong, good or bad, moral or immoral. Good counsel or ethical lessons would have meant nothing. Human freewill renders the efforts to make the world a better place meaningful. There is a scope to dream of a better life, to hope to turn them into reality, to strive towards it.
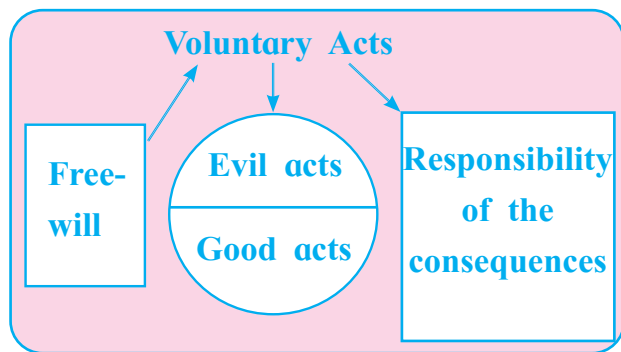
Freewill enables man to perform 'good' acts as well as 'evil' acts. Human behaviour can be right or wrong. Rules have been set down since the beginning of civilization so that human conduct be right and good. Rules channelize human disposition. Rules enter our lives very early on. Our domestic setting, our neighbourhood, our school, the playground, the public places – every space is armed with rules that direct our behaviour. Traditional customs, rights and rituals are various forms of rules. Religion and law try to impose limits on individual freedom in order to monitor his conduct. We don't understand much of this in childhood, but the rules begin to suffocate us as we grow up.

The urge to lead an unrestrained life is quite overwhelming specially in an age such as yours. That's why you frequently wonder why we need these rules. Can't society be constraint free? Let's consider these questions, shall we?

'Man is a rational animal'. You might also have heard that he is a social animal. He naturally prefers to live in collectives. In ancient times he realized that human beings must unite and co-operate in order to keep up in the struggle for survival. This basic need gave rise to society. Several kinds of human potential can only flourish in a societal setting. All our needs right from survival to our real development as human beings, can be fulfilled in a society. Society is essential for human wellbeing. The existence and wellbeing of a society depends on individuals, just as an individual needs society for his existence and wellbeing. Individuals and society have a relationship of interdependence.

A society consists of people with diverse dispositions and abilities – it is a mixed bunch of flowers we may say. Everyone is nurtured differently. Everyone has different opinions, thoughts, goals, values. Naturally, there's a possibility of conflict of interest. A society constituted of self-centred individuals where everyone thinks solely of his/her own goals and interests shall soon be in peril. There will soon be chaos. The powerful, brush aside the interests of the powerless, they exploit the powerless in case of the absence of a social mechanism that synchronizes conflicting interests and aspirations.

Virtue-based Ethics

The western tradition of Ethics has three major theories - Utilitarianism, Deontology and Virtue-based Ethics. The first two edify us on how to judge an act to be moral or immoral. We shall study them next year. Let's briefly get introduced with the third, namely Virtue-based Ethics. The person, and not the act, is the focus of this theory. Persons with estimable character mostly display moral behavior. So, this theory stresses on shaping the moral character of man rather than separately regarding the morality of the acts. Prominent ancient Greek philosophers like Socrates, Plato and Aristotle advocated virtue-based Ethics. The concept of 'virtue' had an important place in medieval Ethics. However, it went out of fashion in the modern times and the other two theories were presented. In the Greek tradition 'virtue' means an excellent trait of character.

Aristotle differentiated between intellectual virtue and moral virtue. Ethics evidently concerns itself with moral virtue. Moral virtue is the disposition to perform morally right acts under any circumstances. Persons who have a virtuous nature almost habitually behave well. Honesty is a virtue. A person who is honest by nature normally won't face the dilemma as to whether to behave honestly. The person simply behaves honestly because that is an inescapable part of his / her character.

There are many moral virtues. Greek tradition considers Courage, Temperance, Wisdom and Justice to be the cardinal virtues.

Let's collect!

Collect newspaper reports on 'powerful exploiting the powerless' and create a portfolio for the class.

'Might makes right', don't they say? Such a state of affairs benefits no one neither the indivisual nor the society in the long run. Therefore, we need rules to regulate the inherent self-serving urge. Self-love is natural, but in the course of time; qualities like pity, kindness and sense of affection for others have also naturally evolved in man. Besides, through reason, man intelligently understands that being considerate towards other peoples' interests is advantageous to his own.

Reckoning with the co-dependency between individual and society; self-interest and societal-interest cannot be regarded in an isolated manner. Moral code maintains the balance between the two. The criteria that are used to interpret 'right' and 'wrong' are ethical criteria.

5.3 The necessity of moral laws

Let's observe an example from our daily life. A great disorder ensues on busy roads soon as traffic signals stop working in the evening. Everyone tries to thrust through the traffic. No one wants to be patient. No one is heedful of the inconvenience faced by children, elderly people or handicapped persons.

Find a video that depicts a collapsing system / mechanism. Show it in class and discuss afterwards.

For example, the film "Happy Anniversary"

This situation is not only chaotic but also hazardous. It increases the risk of road accidents. This example illustrates that after the breakdown of societal rules and the mechanism designed for their implementation; only self-regulation can save a system. Absence of rules leads to disorder. (I think, by now you might have understood why we need rules and why we must follow them, am I right?)

Let's discuss-

(1) What will happen if everyone always lied?
(2) Why should we observe moral rules?

Society originates in rules/laws and both evolve in due course of time. These rules change as per the wants and demands of time. Sometimes new rules replace the old. The process of change isn't always harmonious though. Historical moments of change witness a great friction between the old and the new orders. One has to choose from the two. Rules direct our judgements on rightness or wrongness of actions. But sometimes even rules have to be examined for their validity. For this we have to turn to values.

'Value' means merit, worth or importance of something! We normally use this word to connote 'monitory worth / price' of something. But 'value' as in price signifies only the monitory value of a thing. Value in Ethics has much broader significance. An aid received in times of hardship is very valuable. Admitting a seriously injured person into a hospital is an act of invaluable charity. Trying to save a person's life is an in-valuable act since life is supremely valuable, the most precious. Things obtain a value in the very context of life.

5.4 The concept of value and types of values

There are several kinds of values. Things that fulfill our basic needs, natural urges, desires, instincts, feelings have value in some sense or the other as they are indispensible to human life. Likewise, some things are valuable for the wellbeing, security and progress of a society. An exhaustive study of values takes an overview of a wide variety of values such as personal, economical, social, political, cultural, religious, spiritual, ethical, aesthetical etc.

Ethics primarily deals with ethical values. Values are mainly linked with a person's disposition/attitude, intent, aspirations and acts. We do not ascribe ethical value to things or their properties. They have an 'amoral' value. If we want to buy a cell phone, we must pick one from a plentitude of available models. We make this choice on the basis of amoral value of the cell-phone. Its price is its monitory value. Its storage memory, its numerous facilities, its weight and user-friendliness determine its utility value. Its shape, built, color and attractiveness

determine the aesthetic value. We make a choice using such criteria. But our choice will have a moral value if we think further and decide to buy cell phone from a company which doesn't engage child labour, which sticks to an eco-friendly policy and so on.

Here the value will be ascribed not to the product but to a company that adheres to an important, good policy, and to your choice (to buy from that company). This shows that values can be moral or amoral. Moral values are connected with the person, his acts and facets of his personality as we saw. But this isn't a sufficient differentiating criterion. When I call someone an outstanding sportsman or a talented artist, I evaluate them by amoral values. But when I call a person honest or compassionate, I evaluate them in the context of moral values. Moral values and amoral values employ different criteria for calling something a 'value'. Convenience, usefulness, beauty determine amoral value of various kinds of objects, people or actions.

However one needs to consider a person's intentions and effects of his/her actions on other people and society at large for determining his moral value and that of his actions. The acts that do not hamper other peoples' interests, acts that benefit individuals, collective or a society are generally considered moral. 'Amoral' and 'immoral' both have 'moral' in them, with a negative prefix attached. But they aren't synonymous. That which lies beyond the scope of morality, that which cannot be viewed from ethical lense is called 'amoral', for instance a cell-phone. 'Immoral' is antonymous to 'moral'. That which violates / goes against morality is called 'immoral'. But it is still a moral evaluation of a conduct. The word 'immoral' lies within the scope of moralistic gaze.

Classification of non-moral values

In our daily life, we frequently evaluate things and persons. Most of the times, such an evaluation is in the form of our judgement about the non-moral values that the things or persons have. It does not always consist of an explicit mention of values. Many a times the words good/ bad are used instead. The values indicated by them, change as per the object, person and the situation. In calling a knife 'good' what is indicated is that the knife is sharp. But a butter knife is good if it is blunt. The meaning of the sentence stating that a certain eatable is good can be that it has not deteriorated, or that it is tasty or that it is nutritious. In short, the non-moral value of things/persons is determined by their characteristics and within the context of a situation. That is why if we decide to make a list of these values, it can never be perfect/exhaustive.

However it is possible to devide them into two types. These two types are values in themselves and instrumental values or intrinsic values and extrinsic values. The value of some things lies in their being means or instruments for attaining some other, external value. For instance though the value of a knife is determined on the basis of its sharpness, the sharpness is valued because with it, the function of the knife, i.e. to cut something; is performed efficiently. The bitter medicine to be consumed during illness has value because basically health has a value. When we are not unwell, that medicine does not have value at that time. Do you think that health has a value as a means to something else? We wish to attain many things in life, but we want them as we think that we will be happy if we get them. That is why, value of happiness is for its own sake. It is not valued for something else or as a means for something else. That is why the value of happiness is value-in-itself or an intrinsic value.

We do not use the words 'moral', 'immoral' in day-to-day conversation to refer to either persons or acts. We use the words 'right', 'wrong', 'good' or 'bad' in daily life to evaluate persons and actions. Ethics uses these words too. These words have both moral and amoral connotations. Hence, we must meticulously perceive sense in which the words are used in our conversations or writing. 'Good' and 'bad' are used as adjectives that describe objects, their properties, their correlation, persons, the aspects of their personality etc. Moral value can be ascribed only to people and people-related things as we just saw. We most probably use 'good' and 'bad' in moral sense when we attach it to people. But the words can't be said to convey a moral meaning if the assessment of a person or an act is associated with its amoral value. A 'good' mobile, a 'good' sportsman, a 'good' artist are a few examples of the amoral usage of the word 'good', as opposed to which in 'a good man', 'good' has a moral sense.

Let's do!

8-10 students will stand in a circle. A student, with a ball in hand, will narrate an example of an act and throw the ball to another. That student will identify the type of act – moral, immoral or amoral. And pass the ball to someone else. (This game will help students to gain clarity on the types of actions).

The words 'right' and 'wrong' similarly have two connotations. Mugging up a lesson is the 'wrong' way to study, grasping the subject is the 'right' way. Microscope is the 'right' instrument to observe things that are not visible to the naked eye. Radio is a 'right' medium for the wider dissemination of news. – All these instances use the word 'right' in an amoral sense. On the contrary, when we tell a lie and our teacher says, 'it's not right what you did'; or 'you did the right thing by helping your elderly neighbor to go to the bank' – these sentences use the word 'right' in a moral sense.

The amoral usage of 'right' often considers the work-efficiency of an object,

instrument or a mode/method.

Sometimes compliance with general rules is called 'right' behavior and violation of the rules is called 'wrong' behavior. It is a matter of a widespread rule of hygene to wash one's hands and feet after getting home. The conduct that obeys this rule is 'right' conduct. We expect these words to be used is a moral sense when the behavior is judged to be right or wrong with the help of a moral code. The examples that illustrate the moral connotation of these words are related to rules such as 'one must not lie', 'one must help the needy', 'Duty' is one more frequently-used word in life and Ethics. Duties can be familial, social, political. When we call something 'duty' we mean to say that it must be done. A duty must be done irrespective of our willingness. It is perhaps for that reason that you don't like being reminded of your duties. Your annoyance is often associated, not so much with the action, as with the obligation to perform it. Parents, when going out, ask you to look after your younger sibling. They say it is your duty and you frown in disapproval. You love your sibling and are perfectly willing to rush to his / her aid, but you do not like being compelled to do so. To fulfill a duty is to carry out a responsibility properly.

The society can run smoothly only if all the members shoulder their own responsibility. Responsibility does entail some restrictions. Suppose you take the responsibility to perform an event in the college gathering. You will be bound to devote it enough time, prepare well, won't you? The performance will come out brilliantly only if you accept these obligations. The individual and the society can advance towards their goals only by accepting restraints, duties and responsibilities.

Till now we tried to understand moralistic uses of the words 'good', 'right' and 'duty'. Deliberation over the criteria to judge 'goodness' or 'righteousness' is the further level of study of ethics. What has an ethical value? What actions ascertain a person's ethical duties? According to what laws? Philosophers have many theories, principles, concepts in answer to these questions. Ethics critically examines these. This is an ongoing task. Although some fundamental moral values can be applied across time, we have to reconsider their application owing to challenges that the changing circumstances bring. Sometimes we have to make amendments. Sometimes we must incorporate new values. Moral deliberation is thus a perpetual process.

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EXERCISE

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Q.1 Fill in the blanks choosing the correct option from the bracket.

(a) Man can perform good actions because he has ....
(freedom of expression, free will, freedom of speech)

(b) Ethics studies behavior and its ....
(aesthetic value, moral value, utility value)

(c) Actions-reactions take place according to .... in the non-living world.

(social laws, moral laws, laws of nature)

Q.2 Take the odd word/pair out.

(a) Good-bad, right-wrong, legal-illegal, just-unjust

(b) beauty, good, virtue, duty

Q.3 Distinguish between.

(a) Moral and amoral values.

(b) Voluntary and involuntary actions.

Q.4 Write short notes on.

(a) Virtue

(b) Duty

(c) Types of action

Q.5 Write the answers in 20-25 words.

(a) What is a voluntary act?

(b) What is moral philosophy?

(c) What is free will?

(d) What is the importance of laws in human life?

Q.6 Explain the following statements with examples.

(a) The subject matter of ethics and psychology is human behaviour but their perspectives are different.

(b) Absence of rules leads to disorder.

Q.7 Write a Dialogue.

(a) Suppose that while going for an examination, you see an accident. You have to decide what should be done at that time.

(b) Since 75% attendance is necessary, Rajesh marked his friend's attendance even though he was absent.

Activity

Discuss with your family members the reasons for which your family wants you to follow a rule which you find very restrictive.

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6. Science, Technology and Philosophy

Preface

Science and technology are the key words today. Technology has occupied every sphere of our life. We always discuss the goodness and badness of technology. Science is not just a subject in academic curriculum. It's important for the students of philosophy to know what exactly is science and how does it's knowledge affect us. The present lesson discusses the correlation between science, technology and philosophy. Once we understand their true nature and correlation, we develop a perspective to look at the issues and problems created by technology and human life.

6.1 The interrelation between science and philosophy

Historical overview of Philosophy shows us that the questions it considers and the answers it puts forward have changed in the course of time. The rise of modern science is a crucial juncture in the journey of philosophy. In the past few centuries, science has more or less tackled the central metaphysical question 'What is?' and is moving fast towards solving the riddle of 'How do we know?' Therefore, today's philosophers have to constantly tackle questions such as 'What is the subject matter of Philosophy?' 'What is the nature of the relationship between philosophy and science?'

Different scholars hold different opinions on these matters. Science studies the experiential, material world as we know. Those who believe that there is no reality beyond the material world agree that such a world can be known only through scientific methods. Their ethical views are also based on their materialistic, scientific outlook. It does not have any reference to the other world.

However, some philosophers believe that there is not a strong enough support for the view that what does not fall within the limits of sense experience, does not exist. They are of the opinion that there is a reality, an abstract, supersensible, transcendental reality beyond this world. That is why the study of this reality does not come within the scope of science. The answer they give to the question 'What is? rejects materialism. For this reason they answer the epistemological question 'How do we know it?'differently. They have to consider questions such as can the super-sensible reality be known?'Íf it can be known, how?'Can intuition, mystic experience be considered as sources of knowledge?'These philosophers believe that it is the job of philosophy to attain knowledge of this reality and in the light of this knowledge, guide us about how life should be lived. They think that

unless we know how human beings are related to this reality, we will not be able to know what is beneficial for humans and how can we achieve it. In short, even after accepting the usefulness and the value of science, these philosophers believe that there are some obvious limitations of science. Philosophy has something different to offer even in the field of metaphysics and epistemology.

Epistemology began discussing scientific methodology extensively, after science came to be well-recognized as a field of study that gives us extremely elaborate knowledge of the empirical world. What exactly is scientific method? What are its strengths and limits? Is it suitable for all fields of knowledge? And the likewise questions were deliberated in epistemology. The development of social sciences under the influence of natural sciences kindled a widespread rumination on whether they should have a uniform methodology. We got to know about Humanities in one of the earlier chapters. Humanities do not use scientific method, so their very position in the knowledge-scene was questioned.

The whole review suggests that although science has successfully resolved major questions in philosophy, metaphysics and epistemology are significant till date due to the continuity of philosophical inquiry. Philosophy today aims at synthesizing philosophical questions with answers from science and creating a coherent, comprehensive perspective of looking at the world. Value-concerns comprise an important part of these perspectives. Ethics, Aesthetics engage chiefly with value-concerns. The problems we face while living in the twenty-first century are somehow associated with scientific and technological progress. We must sufficiently grasp the nature of science and technology in order to understand these problems and establish our moral stand. Only then we may get to their root and be shown the way to right answers.

6.2 Problems generated by technology

We live in the world dominated by science and technology. Technology occupies our lives. We keep discussing the curses and blessings of Technology. Technology has brought the world closer and has broken it apart at once. We see people sitting with heads sunk in mobile phones without even looking up to talk. We witness road accidents. Technology has helped us achieve tremendous speed but the very speed is posing threats to our life.

Weaponry has become unimaginably destructive today. The impending possibility of its usage is the biggest dread of humanity.

Pollution is yet another crisis. We are surrounded by trash. Our natural resources are fast depleting and degrading. Innumerable species are in jeopardy. All this is inevitably affecting the standards of human health and human life.

Mentions of these and many such issues often fall on our ears. We are aware of the intimate connection between science and technology. But while trying to grasp the problems generated by technology, it is very important to understand what technology is. It is equally important for a student of philosophy to know what science is and how the knowledge of science affects our

lives. In this chapter we shall try to understand the nature and interrelations between science, technology and philosophy. The awareness of their nature and interconnections shapes our outlook towards problems raised by technology.

Up to now we've glanced at certain philosophical questions. We looked into questions such as 'What is?', 'How do we know?' and 'How does knowledge affect our conduct?' And we saw also that these questions were answered differently in different times.

Once upon a time, mythology came to be in an attempt to provide 'true' answer to 'what is'. The causality of rain-cycle as it is explained in Thor's tale might sound utterly fantastical to us today. We might not accept it as the 'factual/true reason' behind rains. Because science has explained the phenomenon of rain in a different way. This causation can be verified by everyone and that is why a majority of people find it satisfactory / reasonable.

(The word 'science' is being used as 'natural sciences' here.)

Science	Technology	Philosophy of science and technology
The study of laws of Nature	Processing of physical matter	Analysis of nature, function and purpose of science and technology

Subjective, objective and intersubjective reality

Science is the study of laws that governs the objective reality. What is **objective reality?** It is the kind of reality

that can be verified by anyone. This reality is not a figment of someone's imagination nor is it a matter of collective faith. The reality that can be verified by everyone using sense perception and other instruments is called objective.

When someone says, 'I am so happy I'm floating in air!' we do not wonder how is it possible when he/she can clearly be seen sitting, when gravity is acting on him? Nor do we believe he/she to be literally floating in the air. We understand that it is a **subjective** feeling or a way of expressing joy.

There is also an **intersubjective reality.** Its existence depends on what several people believe in. For example, the bank notes that we use are a piece of paper. Paper is a material object but the value / worth of this particular kind of piece of paper is a part of intersubjective reality. This reality is not a part of the objective natural world unlike gravity even though its value is accepted by one and all. The value of a bank note is ascribed and presupposed by humans. It can fluctuate. What can change and what can't change can be known once we understand what is objective and what is postulated.

Let's talk!

Describe the examples of subjective, objective and intersubjective reality to your classmates.

The journey of science:

Science discovers laws that apply across space and time. They are called 'universal laws of nature'. But these laws were not revealed at once. We have

travelled a long way from the world of imagination to objective reality. It can be called the journey of science. Science detached its course from mythology, religious beliefs and philosophy. Humans had certain customary beliefs in the past which had religions sanction. For instance, it was believed for a long time that the earth is static and the sun revolves around it. Galileo challenged this belief in 16th century. He shook the popular belief and had to suffer a great deal as a result. Science has busted many such conventional ideas and notions by illuminating what is real.

But even today scientific opinion isn't uniformly acknowledged. Even today questions pertaining to objective reality are provided with imaginative answers. People consult quacks and exorcists; they believe in sorcery, they consider it a bad omen if a cat cuts across their path. Hence it is very important to know what science is, how it works, what information it has presented us with so far, how this information is utilized and how it ultimately affects our lives.

Science has answered lots of 'what is's and 'how do we know's in every walk of life. Physics tells us that the world is made up of particles. The particles have actions-interactions amongst themselves and formulate elements. Biology tells us that the earliest DNA of a living molecule was formed by matter alone. The law of evolution explains the progression of the living world.

The voyage of science continues. There remain aspects of universe to be unravelled and atoms to be unfolded. The road is endless in a way. But science doesn't ask itself where it should halt. It continued its explorations even after discovering the fundamental laws. It is not in its hands to ascribe a purpose to this journey. That is deliberated in philosophy.

Technology and science are intimately connected. Sometimes we altogether mistake technology for science. We live in a world submerged in technology as it were. No sphere of life remains untouched by it. Anyone can hardly imagine living without technology. But we know that technology results in disturbing as well as enjoyable experience. Sometimes it salvages, sometimes it wrecks. This being so one has to formulate one's technology-policy. Is technology capable of resolving the problems it has created? Would it require help from science and philosophy? Let us first understand what technology is. Let us examine the connection between science and technology and look into the approach philosophy adopts over the two.

Let's collect!

Collect the news reports on incidents where technology proved beneficial or ruinous. Create posters and exhibit them in class.

Technology is processing of matter. For example, in an earthen pot, a wooden raft, a woolen clothing the raw material is processed to various degrees. It was nothing but technology when the primitive man chipped a stone into an axe. Everything is technology in a sense, right from cultivation of land to today's smart-phones.

Let's write!

Write down the instances of use of technology in day-to-day life.

6.3 The interrelation between science and technology

Did the ancient man posses the knowledge of natural laws and their mechanisms while he was crafting tools from stone? It would not have been necessary. He could keep experimenting, working on the material and advancing the technology. But the experiments revealed fundamental facts about matter to humans. They came to know, for example, while handling numerous materials that there are 118 elements on earth. All we see around us is diverse forms and states of those very elements. We know this through the periodic table. The processing of the elements is a matter of technology but the periodic table is fundamental science.

Let's search!

What is a periodic table? What is its significance?

We realized that the periodic table had many uses. It became easier to know how the elements would compound with each other, what their characteristics would be. Science and technology work as a pair. They influence each other.

Technology and man

If technology is the processing of matter, this processing doesn't take place on its own. Someone has to work on it. Secondly, creation of by-products is an inevitable consequence of processing. Heating water on chulha (stove) will inevitably produce smoke and ashes. The undesirable by-products are called 'waste'. The combustion of petrol/diesel produces smoke. We call it pollution because this smoke bothers us. Electric vehicles do not produce smoke and we think they are 'clean' but the havoc that electricity-based technology wrecks on resources is well beyond our perception. It enormously contributes to pollution. More complex the technology, more the by-products, more cumbersome the task of disposing them off. It also has many psychosomatic hazards.

Let's talk!

Discuss the examples of by-products.

We are aware of innumerable stages of complicated technology and the problems they create. We can't, as a result, put a finger on what exactly we gain through all the efforts and harm. What do we expect from technology? - security, comfort and entertainment. We live in houses. A house/a shelter protects us from uncertainty in nature. A ceiling fan cools us. Television entertains us. It costs us something. And it is paid in form of efforts and damage. We have to go on calculating what we gain for what we pay. Can it be estimated all the time? And can it be followed through? What are your experiences and observations?

Let's write!

Explain the cost we pay in terms of efforts and harm for a mobile-phone. Also write its advantages.

Technological solutions for technological problems, some might say! Electric geyser apparently reduces the efforts involved in collecting firewood. But we must see that people take various kinds of efforts to design technical

equipments / gadgets. Their usage, maintenance, repairing and disposal keeps swallowing our time and labour. This gives rise to various labour classes. Some have to do harsh physical labour; some have to do more intellectual labour. Everyone becomes a cog in the labyrinthine system of machines.

Sr. No.	Simple technology	Complex technology
1	Less number of processes on the source material	More number of processes on the source material
2	Less by-products produced during the processing	More by-products produced during the processing
3	Direct and instant effects in form of efforts and harm	Indirect and long-term / delayed effects in form of efforts and harm
4	Less manpower is required for production, usage, maintenance and repairing	More manpower is required for production, usage, maintenance and repairing. Tensions and compromises become unavoidable

Let's look at an example. In olden times people heated water on chulha (the traditional stove). It is still used at many places. What does one have to do? One has to collect the firewood, light the stove etc. It involves certain efforts. Someone has to be responsible for collecting the firewood; someone has to suffer the smoke of the chulha. It causes damage but people cook food on it, people obtain light from it. Which means the technology of chulha affects everyone in different ways. The effort and damages can be experienced immediately.

Let's juxtapose it with how an electric heater or geyser works. How is electricity generated? Till date we produce most of our electricity from coal. We extract coal from mines. We process it, burn it, heat water on it, convert the water into steam under high pressure and use this steam to run an engine. The running engine generates electricity.

This is the entire procedure. The electricity then has to be stored, it has to be distributed to far off places. This requires a stupendous system at work. Innumerable people have to work under hazardous, unhealthy conditions. The disposal of the resultant smoke and ashes becomes a serious problem. The manufacturing and repairing process of a geyser is equally tedious. Multitudes of people have to work together, work in unfavorable conditions and face the stress in complicated systems. New technology is invented to resolve the issues borne by the old. But it brings its own problems. We must observe the technology that creates less trouble and the one that creates more.

In the instance of a chulha we can see that women mostly have to do the difficult chores. They have to search for firewood; they have to breathe in all the smoke. Now what would happen if everyone would treat these problems as their own? How can the chulhā technology be improved? One must heat water but one wishes to avoid the problems involved in generation of electricity. What can be the alternatives? Many innovators across the world are working on technology that is hassle-free, which addresses local needs. Technology must not be focused

only on machines and gadgets, it must also be considerate about the users, the effects it has on them and the disparities that arise out of it. Sensitive technology is the way to sustainable development.

Simple technology: generating less number of problems

Chulha

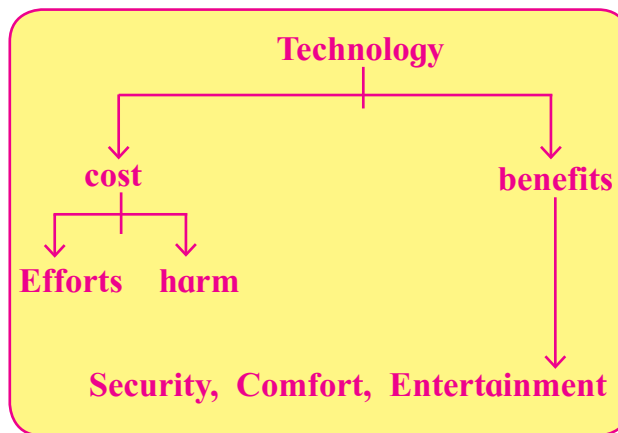**Complex technology: generating more number of problems**

Power Plant

Alternative technology

Smokeless chulha

Effects of technology of humban beings

Technology

cost — benefits

Efforts   harm

Security, Comfort, Entertainment

Let's do!

Find an example and make a chart / drawing of changes brought about by technological progress.

Science, technology and economics

'We get paid for all the labour and harm. We earn money. Isn't it the most important thing?', you may say. All things, except air, now cost money. What do we pay for? - Goods and services. Goods and services are nothing but matter and energy.

Things are produced by processing matter and its human beings or non-human organisms that carry out these processes. They 'run' on the energy they get from food. One may assume that all will be well if we invent machines to do the job. But again, it takes humans to produce, use, maintain and dispose of the machines. Economics is based on goods and services, which are governed by laws of the material world. Science informs us about these laws. This is how empirical sciences and economics are connected.

Technology solves problems on the

one hand and raises more problems on the other. Today we cannot possibly imagine living without technology. This doesn't mean technology is evil or wrong. The history of humanity illustrates that some technological inventions are so ingrained in human life that it'd be utterly impossible to survive without them – cooked food, clothing, housing etc. These have become fundamental to our lives and very few can manage to live without them. This means we shall have to put in the necessary efforts for some amount of technology at the least.

Let's talk!

Select a case and make a map or chart about the changes brought about by technological progress. There are several alternatives/choices for the kind of food, clothing, shelter we can have. Do we explore them, is that possible or do we simply do what the majority of people do? What are the criteria for these choices? – Discuss in groups.

Several other kinds of technology occupy our lives today and much of it isn't well-embedded in our lives. The brain cannot concentrate on more than one thing when we drive a car, for instance. That is why talking on the phone, texting, reading while driving can cause fatal accidents. It is baseless to assume that it won't happen to us. We

should be aware of technology and our biological heritage. We choose to look only at the brighter side of technology. We haven't learnt to think holistically.

6.4 Introduction to environmental philosophy and the concept of sustainable development

Human use of technology is not a recent phenomenon as we saw. It has a generations-old history. But initially extra-somatic energy – the kind that we get from combustion of wood or coal or oils - wasn't used in enormous quantities. The iron age began four thousand years ago, and our natural surroundings have been undergoing drastic, rapid transformations since then. The use of steam for generating mechanical energy was invented at the end of 18th century and the changes gained an unforeseen pace. Electrical energy was invented soon after and transformed the entire tech-scene. Now people think that life won't be possible without electrical energy. In the west, the discourse over effects of complex technology on other life-forms and on posterity substantially began in the 1970s.

The entire process encroached and disrupted the intricate web of life on earth. Ecosystems came under threat. Air, soil, water got polluted. Humans were in great crisis. But we couldn't forecast this. We realized it after innumerable changes had taken place. How to turn back the wheel of time?

Let's talk!

We can't revert the circumstances but what then can be done? What measures can taken on individual and collective level? Discuss.

The ill-effects of American industries on ecology became a great concern in the 70s. Marine biologist, author, and conservationist Rachel Carson was at the forefront of this deliberation. Her book 'Silent Spring' informed common people on this pressing issue and this gave rise to a wide-spreading movement. The book talked of hazardous effects of chemical pesticides, DDT in particular. American industrial circles and politicians were forced to take notice of the objective observations presented in it. DDT got banned.

This is a perfect example to understand 'What the world is?' (a web of living and non-living things); 'how do we know' (through instruments and experiments) and 'how it affects our actions' (the ban on DDT).

Rachel Carson

6.5 philosophy's changing stand on science and technology

Philosophy doesn't expect itself to interfere directly with the objective world. Because in that case philosophy will turn into science. The analysis of the anthropocentric view of technology (where human interests determine what is beneficial and what is not) falls within the scope of philosophy. The adequacy and moral status of scientific methods and instruments are discussed in philosophy. For example, experiments on animals is an ethical concern. Thus, we can observe the interrelationship between science and philosophy.

Philosophy doesn't restrict itself to what is and how do we know. It also asks if existence has a meaning, a purpose; if it can have a purpose, if it has value, what kind of value, how to ascertain that value. Even if science tackles what is in its entirety, philosophy must search what should be. It must be marked here, that standing where we are now in the course of the development of knowledge, no discipline can stay untouched by the influence of other disciplines. All branches of knowledge are inevitably linked to one another. Every discipline therefore has to be aware of what's going on in other disciplines. It has to be in touch with them. This is especially important for philosophy because from the very beginning it has consciously attempted to contemplate the world in a holistic fashion. A relevant, contemporary philosophization is required to maintain a contact with science and technology. That is why in this chapter we have tried to understand the nature of science and technology.

Next year we shall discuss ecology, medical sciences and social disparity from philosophical perspective.

Q. 1 Fill in the blanks choosing the correct option from the bracket.

(a) That which can be verified by all using sense organs and instruments is called .... world.
(objective, subjective, imaginative)

(b) The laws that apply in all times and at all places are called .... laws.
(human, universal natural laws, evolution)

(c) .... is the processing of matter.
(Philosophy, Science, Technology)

(d) Science provides comprehensive knowledge of the .... world.
(imaginary, theoretical, material)

Q.2 State the differences.

(a) Complex and simple technology
(b) The function of science and philosophy
(c) Objective and subjective reality

Q.3 Write a short note on the following/ present your opinions.

(a) Problems generated by technology
(b) Importance of science for human well-being
(c) Collective reality: real or imaginary

Q.4 Discuss in detail: the impact of science and technology on human life.

Q.5 Write dialogues on the following.

(a) A conversation among friends on celebrating eco-friendly festivals.
(b) Advantages and disadvantages of a phone/T.V.

Activity

Find a real-life instance of person(s) who refuse to use certain forms of technology and don't have problems living that way.

❈❈❈

Food for thought

Philosophy, like all other studies, aims primarily at knowledge. The knowledge it aims at is the kind of knowledge which gives unity and system to the body of the sciences, and the kind which results from a critical examination of the grounds of our convictions, prejudices, and beliefs. But it cannot be maintained that philosophy has had any very great measure of success in its attempts to provide definite answers to its questions. If you ask a mathematician, a mineralogist, a historian, or any other man of learning, what definite body of truths has been ascertained by his science, his answer will last as long as you are willing to listen. But if you put the same question to a philosopher, he will, if he is candid, have to confess that his study has not achieved positive results such as have been achieved by other sciences. It is true that this is partly accounted for by the fact that, as soon as definite knowledge concerning any subject becomes possible, this subject ceases to be called philosophy, and becomes a separates science. The whole study of the heavens, which now belongs to astronomy, was once included in philosophy; Newton's great work was called 'the mathematical principles of natural philosophy'. Similarly, the study of the human mind, which was a part of philosophy, has now been separated from philosophy and has become the sciences of psychology. Thus, to a great extent, the uncertainty of philosophy is more apparent than real: those questions which are already capable of definite answers are placed in the sciences, while those only to which, at present, no definite answer can be given, remain to form the residue which is called philosophy.

Reference:
Russell Bertrand: Problems of Philosophy, Chapter 15, 'Value of Philosophy'

Thought

Thought, I love thought.

But not the jiggling and twisting of

already existent ideas

I despise that self-important game.

Thought is the welling up of unkown

life into consciousness,

Thought is the testing of statements

  on the touchstone of the conscience,

Thought is gazing on to the face of

life, and reading what can be read,

Thought is pondering over experience,

and coming to a conclusion.

Thought is not a trick, or an exercise,

or a set of dodges,

Thought is a man in his wholeness

wholly attending.

- D. H. Lawrence

1) Think of someone you know who you think is a really good person. What makes that person a good person?

2) Let's all think. What are you thinking about?

   Can you think about what you're thinking about?

   Let's try wondering. What are you wondering about?

   Can you wonder about what you're wondering about?

3) Think of something that's real.

   Is there a way it might not be real?

   Think of something that's not real.

   Is there a way it could be real?

4) Wonder why

   Wonder how

   Wonder what

   Wonder when
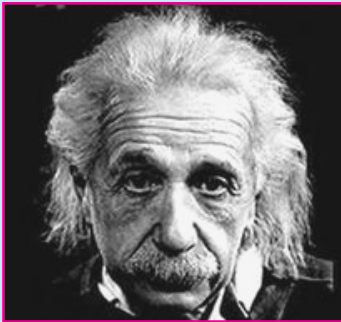
   Wonder who

   Wonder if
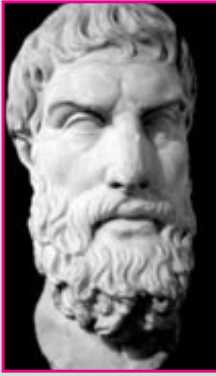
Happiness and freedom begin with a clear understanding of one principle. Some things are within your control. And some things are not.

– Epictetus
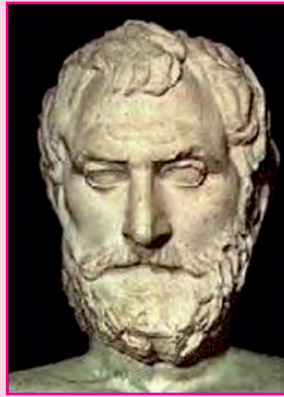
"The most difficult thing in life is to know yourself."

– Thales

A person who never made a misake never tried anything new.

– Albert Einstein

"Real knowledge is to know the extent of one's ignorance."

– Confucius

Notes

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