

Directorate of Distance Education

UNIVERSITY OF JAMMU

JAMMU



457

SELF LEARNING MATERIAL

B.A. SEMESTER-I

Subject : PHILOSOPHY

Unit I-V

Course No. : PL - 101

Lesson No. 1-15

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Course Coordinator

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PHILOSOPHY

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SYLLABUS

TITLE : INTRODUCTION TO PHILOSOPHY

DURATION OF EXAM. :3 HRS

TOTAL MARKS : 100

THEORY EXAMINATION : 80

INTERNAL ASSESSMENT : 20

UNIT I : NATURE OF PHILOSOPHY

- 1.1 Origin and Development of Philosophy
- 1.2 Meaning and Nature of Philosophy
- 1.3 Scope of Philosophy
- 1.4 Aims of the study of Philosophy

UNIT-II Branches of Philosophy

- 2.1 Metaphysics - meaning, nature of Scope
- 2.2 Epistemology - Meaning and its problems.
- 2.3 Axiology - Meaning and Scope

UNIT-III : Theories of Knowledge

- 3.1 Rationalism (Rene Descartes)
- 3.2 Empiricism (John Locke)
- 3.3 Apriorism (Immanuel Kant)

UNIT IV : Theories of Reality

- 4.1 Idealism - meaning, Kinds and its characteristics
- 4.1 Materialism - Meaning, characteristics and comparison between Idealism and Materialism
- 4.3 Realism - Meaning, Kinds and its basic tenets.

UNIT V: Logic

- 5.1 Meaning and Nature of Logic
- 5.2 Inductive and Deductive Reasoning
- 5.3 Syllogism - Meaning and Rules of Syllogism.
- 5.4 Fundamental Principles of Logic.

Note of Paper Setting :

The question paper for each course will consist of two sections, viz: A and B

Section 'A' will consist of 10 long answer type questions, 02 questions from each unit with internal choice. Each question will be of 12 marks. The candidate will be required to answer 05 questions, selecting 01 question from each unit. Total weightage will be of
 $12 \times 5 = 60$

Section 'B' will consist of 10 short answer type questions, 02 questions from each unit with internal choice. Each question will be of 04 marks. The candidate will be required to answer 05 questions, selecting 01 question from each unit. Total weightage will be of.
 $04 \times 5 = 20$

Internal Assessment (Total Marks : 20)

20 Marks for theory paper in a subject reserved for internal assessment shall be distributed as under ;

(i) Class Test	:	10 Marks
(ii) Two written Assignments / project reports	:	10 Marks (05 marks each)

Book Recommended :

1. Introduction to Philosophy - J.N. Sinha
2. Introduction to Philosophy - G. T. W.Patrick
3. Philosophy - A Text with reading- Manuel velasques and vincent barry.
4. Philosophy- The Power of ideas - Moore Noel Brooke and Kenneth Bruder
5. Philosophy - A very Short Introduction - Edward
6. Way to Wisdom - An Introduction to Philosophy Jaspers
7. Text Book of Deductive Logic - Bholā Nath Roy
8. Deductive Logic - Balkrishna S. pandit
9. Introduction of Logic - Irving M. Copi
10. Introduction of Logic and Scientific Method – Cohen and Negel.

PHILOSOPHY
B. A. SEMESTER-1
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ORIGIN AND DEVELOPMENT OF PHILOSOPHY

1.1.1 Objectives

- To make the students aware of the roots of Philosophy as a discipline
- To familiarize students with the major movements in the history of Philosophy
- To trace a historical outline of philosophical development from ancient to modern times

1.1.2 Introduction

In the case of any academic subject, it is fundamental to have at least a working knowledge of its past, both distant and more recent, so that it becomes evident how the subject has been understood and developed across ages, and how it has assumed the shape it has at present. In the case of philosophy, we find that it goes back to where most other subjects begin and instead of resting there, inquires further back. Any serious student of philosophy can see that it has emanated in response to enduring problems arising from life and thought. This is why thinkers of different historical ages often appear to be discussing and deliberating on the same fundamental problems. Hence it is imperative to refer to the historical and intellectual context of philosophy as a discipline as a primary step for understanding the meaning, nature and value of the subject.

1.1.3 Origin of Philosophy

If one looks in the dictionary, one will discover that the term philosophy is derived from two Greek words philos (love) and sophie (wisdom). Philosophy thus means the love of wisdom. It was in ancient Greece that philosophy, as it is understood in the West, developed along with many of its primary questions: What ought we to do? (ethics); What is reality? (metaphysics); How do we know anything? (epistemology); What is the nature of correct reasoning? (logic); What is art? (aesthetics). Ancient Greek thought is generally divided

into two periods with the figure of Socrates in the middle, philosophers prior to him being collectively known as the Pre-Socratics, and Plato and Aristotle following him.

1.1.4 The Pre-Socratics

The first philosophers appeared in Greece in the sixth century B.C. and made the first attempts to provide a thoroughly secular and rational explanation of the natural world. The earlier explanations were largely centred around religious, mythological and magical grounds. The first group of philosophers, known as the Milesians after the ancient city of Miletus where they were from, put forward their explanation of the world in terms of natural elements and processes, such as air, water, fire, heat, condensation etc., and justified their explanations through reason and logic rather than religious faith.

The question dominating this early period was: What is the single basic reality underlying the world, the raw material out of which all things were made? Thales, widely credited as the first philosopher, thought the whole universe to be composed of various forms of water. Anaximenes concluded that it had to be air; Heraclitus thought it was fire. Anaximander was of the opinion that it had to be something "boundless" or "indeterminate." Here we see the genesis of two important philosophical problems: the search for a 'real' underlying substance in opposition to the 'apparent' things, and the problem how this one substance changes into the many things we see around us.

The latter problem, that is, the problem of change, led to two extremes of thought. Heraclitus, on the one hand, believed in an ever-going process of perpetual change where there was a constant interplay of opposites, leading to ever-new manifestations. Because nothing was unchanging, "one could not step into the same river twice," he declared. On the other hand was Parmenides, who denied that there was any such thing as change at all, and that everything that existed was permanent, indestructible and changeless. Parmenides' disciple Zeno, through his various paradoxes, illustrated his master's thesis that all belief in plurality and change was unfounded, and everything that suggested otherwise, such as motion, was an illusion.

Many other philosophical strands of thought emerged out of these basic problems: that of Empedocles, for example, who postulated a universe whose changes were the recombination of four basic and permanent elements air, fire, earth and water, and that of the Atomists who conceptualized for the first time the notion of 'atoms' unchanging, eternal, impenetrable and identical physical entities and argued that reality consisted of nothing but empty space

and atoms, and everything else was to be explained as different arrangements of atoms. Another distinct school was that of Pythagoras, wherein it was believed that the basic substance of the world consisted of mathematical entities numbers, relations, geometrical figures and so on and therefore its essence could be encountered only through the study of mathematics. In a way, this school can also be seen as making an attempt to go beyond the apparent world towards an underlying reality.

1.1.5 Classical Philosophy

With Socrates began the classical age of philosophy, carried on further by Plato, Aristotle and their successors. Unlike the philosophers preceding or succeeding him, Socrates never wrote anything down, and we know of him primarily through the 'Dialogues' of Plato, who was his disciple. Socrates developed a system of critical reasoning in order to engage with the fundamental questions of life, for example, how to live properly, how to distinguish between right and wrong, what was meant by justice, piety, and so on. The Socratic method, as it came to be known, consists in breaking a problem into a series of questions, through the answering of which a seeker comes to the desired knowledge.

Unlike his predecessors, Socrates did not concern himself with metaphysical questions, and was more interested in how people should behave, thus making him the first philosopher of Ethics. This made a huge influence on Plato who took up the Socratic concern with morality and linked it to the Pre-Socratic conceptions of reality, especially the Pythagorean and the Parmenidean ones. Plato explained the multiplicity of the ordinary physical world in terms of eternal, unchanging, ideal entities which he called 'Forms.' The world perceived by us was composed of mere representations or instances of the pure ideal Forms, which had their own independent existence elsewhere. When we inquire into 'justice,' for example, we are not asking about a particular law, state or person; we are trying to define the essential characteristic of the 'form' of justice, which all other things that we call 'just' more or less resemble. This accounts both for the 'reality' as well as 'the appearances.' Plato also believed that 'virtue' was a kind of knowledge that we need in order to reach the ultimate good, which is the aim of all human desires and actions. This was to be achieved through the agency of an ideal society composed of Workers and Warriors, ruled over by wise Philosopher Kings. Thus Plato can be seen as a pioneer in many areas of philosophy, such as metaphysics, ethics, epistemology, political science etc., making him one of the greatest philosophers of all time.

The third in the trio of classical philosophers was Aristotle, who was Plato's main disciple. Taking a more common-sense view, he opposed Plato's postulation of the independent Forms' existing by themselves. For him, the Forms could only exist in particular physical things, and the ordinary objects composed of matter and form together made up the world. Another seminal contribution of his was the development of the system of deductive logic with its emphasis on the syllogism, which remained the dominant form of Logic till the 19th Century.

In ethics, Aristotle postulated the theory of the 'golden mean' wherein happiness could best be achieved by living a balanced life and avoiding excess by pursuing a middle position in everything. According to this theory, all virtues must strike a balance between the vices of excess and vices of defect. Accordingly, his formula for political stability was also to steer a middle course between tyranny and democracy. Not limited to theoretical philosophy only, Aristotle was a pioneer in literary theory and zoology as well, giving some insight into the interdisciplinary nature of philosophy at that time.

The period following Aristotle saw the emergence of schools of thought following in the lines of either Plato or Aristotle, in addition to several independent philosophical movements, such as: Epicureanism, whose main goal was to attain happiness and tranquillity through leading a simple, moderate life, the cultivation of friendships and the limiting of desires; Stoicism which taught self-control and fortitude as a means of overcoming destructive emotions in order to develop clear judgment and inner calm and the ultimate goal of freedom from suffering; and Neo-Platonism, which was a largely religious philosophy which became a strong influence on early Christianity, and taught the existence of an ineffable and transcendent One, from which the rest of the universe "emanates" as a sequence of lesser beings. The classical age of philosophy ended with the triumph of Christianity over the Greco-Roman culture.

Development of Philosophy

Ancient philosophy was characterized by an overriding concern with metaphysics and ethics. That gave way in the Middle Ages to an overriding concern with theology, and that in turn was overridden by epistemological concerns in the Modern period. All these concerns criss-cross in the story of philosophy's development as a discipline.

1.1.6 Philosophy in the Middle Ages

The Middle Ages in the West were characterized by the dominance of Christianity over all

walks of life. The major accomplishment of contemporary philosophers therefore was to marry philosophy with the requirements of the expanding Christian religion. Such a synthesis was achieved by defining God as the most real being or 'Pure Form' in Platonic-Aristotelian tradition and by understanding all the other Forms as ideas in the mind of God. The Greek philosophy survived as an umbrella, and the major debates of the time raged over the question whether the Forms were to be understood as real, or only as names which we use to refer to particular things. However, with the Renaissance, and the rise of modern science around the late sixteenth and early seventeenth centuries, a primary concern with knowledge took over Western thought and modern philosophy was born.

1.1.7 Modern Philosophy

The modern philosophers were inspired by science and mathematics and the certainty that these disciplines promised in their methods and results, and desired the same in philosophy as well. The primary goal therefore was to discover the most secure foundation for our knowledge of the external world. The pioneer in this expedition was the French philosopher and mathematician Rene Descartes who proclaimed that what one was most sure of was one's own thoughts and one's certified existence as the thinker of those thoughts. The focus of earlier philosophers upon the external world turned inwards in Descartes towards the perceiving self and the ideas of this self. This idealist trend took two forms: Continental Rationalism, wherein thinkers like Descartes, Baruch Spinoza and Gottfried Leibniz stressed the important of reason in the acquisition of knowledge, and British Empiricism, wherein philosophers like John Locke, George Berkeley, and David Hume stressed the role of sensation and observation. Both groups, however, agreed that the knowledge of the external world had to be constructed out of subjective certainty, regardless of whether that certainty was derived from reason or experience.

The rationalists looked primarily to Plato as a source of inspiration, while Aristotle and the Atomists were the authority for the empiricists. The rationalists stressed logical and mathematical knowledge as the basis of all knowledge and emphasized the uncertainty of opinions about the external world. The empiricists held that our sensations are caused by the interaction of our bodies with the physical world leading to perceptual knowledge, and that logical and mathematical knowledge which was true simply by definition could not properly account for the entire process of knowing, thus emphasizing the empirical over the rational.

Just as Plato synthesized the competing views of his predecessors, the eighteenth century German philosopher Immanuel Kant came up with a compromise between the conflicting views of rationalists and empiricists that held together for centuries and are relevant in the present too. Borrowing Plato's distinction of matter and form, Kant argued that the materials of our knowledge come from sensation, while the form of our knowledge comes from reason and the other faculties of cognition, conceding to the empiricists and the rationalists respectively. Human beings can only assimilate information after it has been programmed through their own forms of perception and reason; we cannot perceive, leave aside thinking, raw sense impressions. Kant concluded that the objects of our experience can be neither pure sensation, i.e. matter, nor pure thought, i.e. form, but must always be a combination of the two, echoing Aristotle for whom things could only exist as a combination of form and matter, and not as pure form or pure matter separately.

Kant also contributed greatly to Ethics through his theory of the 'Categorical Imperative,' which says that we should act only in such a way that we would want our actions to become a universal law, applicable to everyone in a similar situation and that we should treat other individuals as ends in themselves, not as mere means, even if such an approach would mean sacrificing the greater good.

1.1.8 Twentieth Century Philosophy

Coming to recent history, one would see philosophy making a break with the metaphysical dream of discovering the real nature of the world and instead taking the 'analysis of meaning' to be its fundamental task. Similar to the Continental-British divide in modern philosophy between the rationalists and the empiricists, there arose an Anglo American-Continental divide between the 'Analytic Philosophers' and the 'Phenomenologists' respectively. For the Analytic Philosophers led by Moore, Russell, Wittgenstein, Ryle and others, 'analysis of meaning' meant the analysis of words and concepts, while for the opposite camp led by Husserl, Sartre, Merleau-Ponty etc. it meant the analysis and meaning of the most general structures of our experience. The analytic philosophers thrived on logic and linguistic rigor, while the phenomenologists were more attentive to ordinary experience and emotions. While there has been no explicit reconciliation between these two streams of philosophy, it is heartening to see contemporary philosophers like Thomas Nagel, Richard Rorty and Paul Ricoeur borrowing from both the traditions in developing their own philosophical accounts.

1.1.9 Summary

Looking back at how philosophy originated and how it has developed so far, we may identify certain major issues at the fore front of various philosophical periods. While early ancient philosophy was dominated by the search for a single underlying substance beneath the plurality of the apparent world, Socrates and his successors brought in the issue of how to live properly in the world, and both metaphysics and ethics dominated the philosophical scenario until the Middle Ages. The Middle Ages saw Christianity co-existing with Greek philosophy and debates following in the footsteps of the classical tradition. It was with modern philosophy that focus was shifted to man and his faculties of reason and perception, and the limits thereof. Kant synthesized reason and perception and gave rise to a comprehensive system. Twentieth century philosophy shifted gears and bifurcated itself into two strands linguistic philosophy and phenomenological thought. The two are still to be assimilated and reconciled.

1.1.10 Glossary

Metaphysics :- The branch of philosophy dealing with the most fundamental concepts of reality such as existence, substance, causality, time etc.

Ethics :- The branch of philosophy inquiring into the standards of right and wrong, good and bad, in respect of character and conduct.

Epistemology :- The branch of philosophy inquiring into the nature and the possibility of knowledge.

Logic :- The branch of philosophy concerned with the principles of correct reasoning.

Aesthetics :- The branch of philosophy concerned with the study of the nature of beauty.

Forms :- Absolute, changeless objects of knowledge, ideal realities such as the form of Justice, of Beauty, of Equality, by partaking of which things become just, beautiful and equal, respectively.

Theology :- The study of religion.

Subjective Idealism :- A theory of knowledge suggesting that a subject can know nothing except its own ideas.

Analytic Philosophy :- A twentieth century philosophical trend which sees analysis of language as the proper method to resolve definitively the problems of philosophy.

Phenomenology :- A twentieth century philosophical trend which emphasizes the study of consciousness and direct human experience, separately from its origins and development, independently of the causal explanations that historians, sociologists or psychologists may give.

1.1.11 Questions

- Q1) Write a short note on the origin of philosophy.
- Q2) Discuss the contribution of Pre Socratic Philosophers in the development of Western Philosophy.
- Q3) Discuss the main characteristics of modern Western Philosophy.
- Q4) Write a short note on recent trends in Philosophy.

1.1.12 Suggested Readings and References

Blackburn,S., Think: A Compelling Introduction to Philosophy, New York: Oxford University Press, 2002.

Craig,E., Philosophy: A Very Short Introduction, Delhi: Oxford University Press, 2002.

Patrick,G.T., Introduction to Philosophy, Delhi: Surjeet Publications, 1978.

Sinha,J.N., Introduction to Philosophy, Calcutta: New Central Book Agency, 1996.

THE MEANING AND NATURE OF PHILOSOPHY

1.2.1 Objectives

- To enable the students to attempt to define Philosophy
- To bring out the chief features and characteristics of Philosophy
- To help students distinguish Philosophy from other disciplines

1.2.2 Introduction

Many students coming to philosophy for the first time are unclear about the nature of the subject they are studying. The word Philosophy means different things to different people. Some people use the word to refer to a person's overall view or outlook. In a very general way, we may refer to somebody's attitude towards doing business as a 'business philosophy' or we may call an individual's general theory of life as his or her 'philosophy of life.' The term philosophy is a kind of synonym for general viewpoint, when used in this way. Others may understand philosophy as having a passive attitude towards life. They might call someone a philosopher if he or she takes life as it comes and accepts things without worrying about them. Although many philosophers, like the Stoics in ancient Greece, have argued for a similar view, not all philosophers share the same sentiment. And one useful way to define philosophy is to see what it is that philosophers do.

1.2.3 Definition

So what is Philosophy? How should it be defined? The dictionary meaning of philosophy is 'love of wisdom' and it comes from a combination of two Greek words philo (love) and sophie (wisdom). When the ancient Greeks talked about wisdom, they meant by it the knowledge of basic laws and principles, an awareness of what was basic and unchanging,

as opposed to the things that change and are transitory. Putting this into perspective, philosophy could be defined as the search for an outlook on life based on the discovery of broad, fundamental principles. This concern with the basics has been a fundamental defining feature of Philosophy, and this is what distinguishes it from other disciplines.

1.2.4 Philosophy and Other Subjects

Philosophy is different from subjects such as science and mathematics. Unlike in science, it does not base itself on experiments or observation, but only on thought. Unlike mathematics, there are no formal methods of proof in philosophy. Philosophy is done just by asking questions, through arguing, trying out ideas and testing them by thinking of possible arguments against them.

The main concern of philosophy is, as has been said before, not with the superficial details, but with the underlying fundamentals. It seeks to question and understand the common ideas that all of us use daily without thinking about them. Let us take some instances. A social scientist may specialize in a small area, like the social rituals of a tribe, but a philosopher will ask, "Is man a social being?" A historian may concern herself with an event that happened sometime in the past, but a philosopher will ask, "What is time?" A mathematician may study the relations among numbers, but a philosopher will ask, "What is a number?" A layman may ask whether stealing is right or wrong, but a philosopher will ask what makes an action right or wrong. The aim of investigating these basic principles is to push our understanding of the world and ourselves a bit deeper.

1.2.5 The Philosophical Method

Another thing that makes philosophy distinct from other subjects is its method the method of rational reflection. Unlike the sciences, philosophy is not concerned with discovering new facts, but instead reflects on the facts already familiar to us to see where they lead us and how well they interact to make sense of the world.

Before we get to study philosophy, we get our fair share of knowledge about the world through science and through our everyday experience, and have a spectrum of ideas, beliefs and opinions about what the world is like, and how we ought to live in it and make sense of it. What philosophy does is make us rationally reflect on our beliefs; this deepens our pre-reflective understanding, so to say, and we are able to see what it all adds up to in a larger perspective.

The above point can be illustrated by showing how philosophical engagement with the fundamental questions of life gives rise to various areas of philosophy. All of us inquire sometime in our life into the nature of reality. We ask questions such as: Is nature blind and purposeless or is there any purpose to it? Such questions are beyond the purview of science, and form the core of the type of philosophical enquiry known as metaphysics.

Another ongoing concern of philosophy is how we come to know whatever we claim to know. Are the five senses the only source of experience? Are there any limits to our knowledge? Can we know God? These questions demand reasoning and unprejudiced reflection, and constitute the domain of epistemology or the theory of knowledge.

The third most important issue of rational reflection is how we live our life. What are the standards which determine our conduct and how we choose them? Do I have any duty to myself or toward others? What makes an action right or wrong? Philosophers engage with these questions in an unbiased manner, arguing out each position and looking at its consequences, and the result is the philosophical discipline of ethics. Thus we see how philosophy is nothing but a rational inquiry into the most fundamental issues of existence and human life, pursued through constant questioning and argument.

1.2.6 Philosophy A Normative Inquiry

Last but not the least, what separates philosophy from other subjects is that it is normative it distinguishes 'what is' from 'what ought to be.' This can be seen as philosophy's concern with establishing the criteria for correct and incorrect thinking and acting. It establishes norms, and to do this, it appeals to the nature of things. If a philosopher says that 'man is a social animal,' for instance, it means not only that men generally behave that way, but that they ought to behave that way. The 'ought to' part in this pronouncement rests on the assumption that it is the social aspect that makes humans different from other animals. The philosopher does not stop at this; normative definitions are accompanied by normative modes of behaviour. Given the above-stated conception of what it means to be human, it follows that activities which carry forward this vision of man be encouraged and contrary activities discouraged. A kind of value judgment almost always accompanies philosophy. This value judgement is deliberately avoided in the natural and social sciences which seek primarily to explain the belief systems of their subjects rather than evaluating them. For example, a psychologist would describe what people claim to know and his task would

end there. The epistemologist, however, would try to find a standard which distinguishes genuine from bogus knowledge claims. Similarly in case of ethics, an anthropologist would describe moral attitudes and beliefs of a tribe as they actually exist, while a moral philosopher would try to distinguish correct from incorrect moral thinking and behaving. The search for these normative criteria is no less important task of philosophy than is its search for basic principles.

1.2.7 The Nature of Philosophy

How does philosophy go about doing what it does? How does it proceed in its task of discovering general principles and normative standards? Philosophy is at once constructive as well as analytical in its procedure. The constructive nature of philosophy refers to its systematic and rational task of developing a holistic world view. In this sense, it is a kind of superscience, which strives to discover the ultimate, underlying reality and thus go beyond the appearance that we call the physical world, which is bounded by space-time. This superscience can be approached via reason and logic and also via emotions, feelings and intuition; humans being as much creatures of emotions as of reason.

The constructive view of philosophy is contrasted with the view of philosophy as analysis. As per this view, the role of philosophy is to examine the various sciences or theories and analyse the concepts and methods they use, including those of philosophy itself. In philosophy, the concepts with which we approach the world themselves become the objects of inquiry. A given science X, often has an associated 'philosophy of X,' which fulfils this role. Philosophy of history, philosophy of physics or philosophy of law seeks not so much to solve historical, physical or legal questions, as to study the concepts that structure such thinking, and analyse their foundations and presuppositions.

Philosophy is therefore probably best characterized as a rational examination or critique of the most basic elements of our everyday experience and beliefs. Two consequences follow from this: first, that philosophy cannot teach us anything totally new but only clarify what we already take for granted, and second, that philosophy takes nothing for granted. Here we can see how philosophy as construction and philosophy as analysis are mutually interwoven. Since the world as we are aware of it is to an extent conceptual in nature a world which exhibits beauty, violence, injustice, love and so on the analysis of our con-

cepts of 'beauty,' 'violence,' 'injustice,' and 'love' entails analysis of our world. And if philosophy seeks, as a constructive enterprise, to develop a worldview, then the analysis of concepts is essential for that task.

Nothing escapes the light of philosophical criticism; not even the assumptions of the philosophers themselves. That is why there are no absolute starting or ending points in philosophy, and philosophy is continually examining the views of other philosophers and of its own past. All in all, philosophy is an all-embracing inquiry, and at one point or the other, all sciences have benefitted from philosophical reflection, and it has played a part in shaping their discourse.

1.2.8 Summary

Philosophical inquiry is what all of us have indulged in our life at one moment or another, but a proper definition of philosophy as a subject interprets it in terms of an inquiry regarding the most fundamental questions of life. This inquiry proceeds primarily by way of rational reflection and argument, and seldom by means of observation or experiment, unlike most of the other sciences. Other disciplines and their concepts are also subject to philosophical scrutiny, and this over-reach makes philosophy a special subject. It performs constructive as well as analytical functions, and submits its own axioms and results for examination too. While doing so, it lays down norms for itself and other subjects, and shapes the structure and content of further discourse.

1.2.9 Glossary

Stoics:- An ancient Greco-Roman school of philosophy that recommended living in harmony with a natural world over which one had no direct control.

Rational:- Positive term used to commend beliefs, actions and processes as appropriate. To accept something as rational is to accept it as making sense, as required in accordance with some acknowledged goal, such as aiming at truth or aiming at the good.

Pre-Reflective:- It is the stage of awareness we have before we do any reflecting on our experience.

Normative:- To call something normative is to say that it puts forward some standard or criteria to be followed or some action to be done.

Analysis:- The process of breaking a concept down into more simple parts. In philosophy, it simply means the explication of concepts like 'substance,' 'cause,' 'good,' 'material object,' asking for example, what things count as material objects and what they all have in common. In this ordinary sense all philosophy involves analysis.

1.2.10 Questions

- a) What are the different senses in which the word 'Philosophy' is used?
- b) What do you think are the most important distinctions between Philosophy and Science?
- c) Discuss the normative function of Philosophy.
- d) What do we mean by the analytical nature of philosophy?

1.2.11 Suggested Readings and References

Blackburn, S., *Think: A Compelling Introduction to Philosophy*, New York: Oxford University Press, 2002.

Craig, E., *Philosophy: A Very Short Introduction*, Delhi: Oxford University Press, 2002.

Patrick, G.T., *Introduction to Philosophy*, Delhi: Surjeet Publications, 1978.

Sinha, J.N., *Introduction to Philosophy*, Calcutta: New Central Book Agency, 1996.

• **Scope of Philosophy**

STRUCTURE:

1.3.1 Objectives

1.3.2 Introduction

1.3.3 Scope of Philosophy

1.3.4 To sum up

1.3.5 Suggested reading

1.3.1 Objectives:-

- To make the students familiar with the scope of philosophy.
- To acquaint students with the different branches of philosophy.
- To make them aware of the different issues these branches deal with.

Introduction: The term 'scope' of anything means 'the area of work' of that thing. When someone asks 'what is the scope of art'- it means with what kind of things is art connected, what are the different works that art does, what are the causes, what are the uses and abuses etc. In the same way, when it is asked "what is the scope of philosophy", it means the type of works that philosophy does. There may be a huge number of works that any study or discipline might be doing and yet there are only some works which constitute the core of a particular study. There are certain core areas in which philosophical investigation is active. If these are demarcated, we shall find the scope of philosophy. The scope keeps on increasing or expanding. Just as one cannot completely specify the scope of science: whether it is physics, or physics and chemistry; or it includes botany and biology and anthropology and psychology and sociology..... One is not sure. But about physics and chemistry, one is sure. In the same way, though we cannot have a detailed scope of

philosophy; it has to include the core areas of philosophy.

Scope of philosophy means the subject-matter with which it deals. It includes its core areas as :

(a) Epistemology

(b) Metaphysics

(c) Ethics

(d) Aesthetics

(e) Theology

(And the extensive list will be quite long)

Let 's discuss them briefly:

(a) Epistemology refers to that branch of philosophy that deals with the sources, limitations, contingencies and nature of knowledge. It also refers to the theory of knowledge that answers questions such as: what is knowledge?

And what is the difference between knowledge and opinion?

It is science of knowledge and truth. It is often called theory of knowledge also. The Greek word 'episteme' is the root of epistemology or study of knowledge. It deals with what we know and how we know it. Therefore we might say it is to do with justifying our knowledge. And justified knowledge is also associated with the notion of truth and the idea of belief. Thus the definition of knowledge is 'justified, true belief.' Epistemology tries to examine and establish the conditions for certain knowledge. It attempts to answer the basic question: what distinguishes true knowledge from false knowledge? It is not knowledge of any other thing, but discussion on the problem of knowledge itself. Here we study what is knowledge, how does it originate, what is its limitation, can we know everything about a phenomenon, etc. The first or ancient theories of knowledge stressed its permanent character but the contemporary epistemological theories put emphasis on its relativity, its continuous development or evolution. The whole trend today is to understand knowledge not as a static reality but as an active process.

(b) Metaphysics is the systematic study of the fundamental problems relating to the nature of ultimate reality. The term 'metaphysics' literally means beyond physics [meta-

beyond]. It is the philosophy or theory of the 'real'. It is held that the term 'metaphysics' was coined by Andronicus of Rhodes [c. 70 b.c.] for those collected works of Aristotle placed 'after physics'. The writings of Aristotle which were given the name metaphysics concerned with things other than natural objects. In such writings there was discussion on philosophical problems like god, soul and other problems concerning supernatural phenomenon. Later on, metaphysics came to mean the study of those phenomenon which lie beyond nature.

The equivalent meaning of the term 'metaphysics' in Indian philosophy could be traced to notions like atmavidya, brahmavidya etc. It is also called ontology. It is concerned with all those things which exist. It also raise question regarding the existence and non existence of God. It also tries to discover the nature of life, death and life after death. It treated of realities beyond the physical properties of beings. It is that department of philosophy which deals with those features of beings that are beyond physical world and are immaterial.

(c) **Axiology** : It refers to that area of philosophy that examines value issues especially in ethics and aesthetics. It is the science of values. It can be divided into :

Ethics: After knowing what knowledge is and after dealing with the issue of the known, a question arises in our mind that if the world is what it seems to be-then how shall I live in this world? How do I behave in it? For we will be continuously facing more than one alternative courses of action and we will be forced to choose among them. And we have to use our discretion while choosing. Any consideration that we will bring to bear on our choices will have what is commonly called the 'moral' implication. So the term ethics is used to refer to morality, which involves notions as rightness and wrongness, guilt and shame, and so on.

It is the study of human conduct based on moral impulses and wisdom.

Aesthetics: It owes its name to Alexander Baumgarten who derived it from the Greek 'aisthanomai', which means perception by means of the senses. It is defined as the philosophical study of the nature of art, beauty and taste.

- (d) **Theology :** It is also an important branch of philosophy. It investigates the nature of religious experiences. It constitutes a deep inquiry into religious phenomena and is more commonly called philosophy of religion.

SUM UP:

Starting with epistemology up to theology, we have seen what actually constitute the subject matter of philosophical inquiry. This does not constitute the entire scope of philosophy. There are other areas like society, politics, human rights, feminism, environment etc. which can be important aspects of philosophical enquiry.

Suggested readings:

Concise Routledge Encyclopedia of Philosophy

Introduction to Philosophy by Patrick

Introduction to Philosophy by J. N. Sinha

Introduction to Philosophy by D. R. Bali

NATURE OF PHILOSOPHY

Semester-1st

Lesson No.4

Unit-I

Philosophy

Aims and purposes of the study of Philosophy

By. Dr. Kiran Bakshi

Structure:

1. 1 Objectives
1. 2 Introduction
1. 3 Aims and purposes of the study of Philosophy
1. 4 To sum up
1. 5 Suggested reading

1.1 Objectives:-

- To make the students familiar with the value of Philosophy.
- To acquaint students with the aims of the study of Philosophy.
- To make them aware of the purpose behind the study of Philosophy.
- To show the wider areas of impact of Philosophy.
- To show the versatility of the subject Philosophy.

Introduction : Philosophy and life are very closely connected. Man is a rational being. He lives in the physical and social environment. He reacts upon his environment and adjusts himself to it. He is a free centre of activity. He is moulded by the environment, and moulds it according to his ideal. He reflects upon the environment and himself, and their relation to each another. He reflects upon the nature, value and purpose of the world and society in which he lives. He reflects upon the deepest mystery of the universe, the real nature of his own soul, the innermost core of reality

and the nature and meaning of God in relation to human experience. Man, as a rational being, cannot but philosophize. Philosophy is a rational reflection on life; it is a criticism of life and experience. It seeks to give a rational conception of the reality as a whole, which satisfies man's deepest intellectual, moral, aesthetic and religious aspiration.

So philosophy influences man's personal as well as his social life. This gives direction to man and decides a goal of life for him. Most of the western philosophers have considered the goal of philosophy to be the achievement of knowledge. The existentialist school considers man with all his moods, anxieties and tensions as the centre of their study. The pragmatic school emphasizes the pragmatic value of truth.

Seeing the different approaches of different schools we can say that life and philosophy are very closely connected. The following points show their close relationship and the interaction between them.

1.3 Aims and purposes of the study of Philosophy :

- 1. Value of Philosophy in personal life :** In our personal life we daily come across the problems where we have to decide between right and wrong. This decision requires criterion of right and wrong or good and ultimate good. To present such a criterion is the job of the moral philosophy.
- 2. Value in behaviour towards others :** Whereas philosophy influences personal life, it influences social life as well. Our behaviour towards others is determined by our philosophies. If a man consider others as ends in themselves his behaviour will be different from that of those persons who consider others as means. So everybody's behaviour is determined by his philosophy.
- 3. Value in Political life :** Philosophy influences political life also. Various types of political philosophies such as democracy, socialism, communism, dicatatorship etc. lead to different types of government and different aspects of political life.
- 4. Value in economic life :** Every one has to earn money in order to lead his life. The question whether money is a means or an end in itself is an important question of the economic philosophy. The form of production, consumption and exchange very much depends on the answer to this philosophical question.

5. Value in social life : Society is a web of social relationships. These relationships are found in different institutions such as family, marriage, business etc. All these are influenced by philosophy. For example; whether the marriage is a social compromise or it is a religious sacrament, this is a philosophical question, on the answer to which depends the form, stability and result of marriage in a particular society. Similarly, the relationships between parents and their children in a family do not depend on the biological and psychological attachments alone but also on their philosophical attitude towards life.

What are the rights of society over the individual and do these rights have a limit ? How far should the individual accept social control and how far can he evade it ? All these are philosophical questions which have important social influence.

6. Value in cultural life : The philosophy of a nation is the index of its cultural progress. Thus, philosophy influences each aspect of culture. The forms of dance, music, art, literature etc. are very much influenced by philosophy. A healthy philosophy will lead to a healthy attitude towards all these. To illustrate, Indian philosophy is mainly spiritual, therefore one finds the stamp of spirituality on Indian dance, music, art, literature etc. On the other hand western philosophy is materialistic and therefore, western culture bears the stamp of materialism.

The philosophy of a nation represents the infancy, adolescence and maturity of a nation's culture. Philosophical progress manifests cultural progress.

7. Value in educational field : No thoughtful person denies the importance of philosophy in the educational field. In the words of Blanshard, "The function of philosophy in universities is properly the same as its function in the cultural development of a society, to be the intellectual conscience of the community."

The most fundamental question in the field of education is concerning its aim. This question raises another question as to what is man, because what he is not, he cannot become. He can become only that which is implicit in him. Man's nature is therefore a philosophical question the answers to which have developed so many philosophies of education which are the foundations of different modern methods of teaching.

In this field, philosophy plays a very important role. There is a separate branch of

philosophy known as the philosophy of education. This branch deals with the nature, theories and problems of education. There are many views regarding the curriculum, discipline, methods of teaching etc. There are different philosophies like Pragmatism, Naturalism, Idealism and Instrumentalism etc. Any system of education which is not based on the proper philosophy does not prove to be beneficial.

8. Value in the field of knowledge : Knowledge is an important problem of philosophy. Infact it is the aim of philosophy to reach the depth of knowledge.

Dr. Radhakrishnan has rightly said, "Philosophy is a search after knowledge."

Many people, in the modern times, undermine the importance of philosophy and give more importance to sciences. But they forget this fact that without a philosophical basis, any knowledge is imperfect, because no total picture can be presented without the synthetic function of philosophy. Without this total picture there will always be an incomplete knowledge. Moreover we cannot help philosophizing. As Aristotle has said, "Whether we philosophize or not, we must philosophize." This can also be expressed in the words of Perry when he says, "Philosophy is neither accidental nor supernatural, but inevitable and normal." Besides its synthetic function, another important function of philosophy is the criticism of the postulates and conclusions of different sciences. Whenever a scientist delves deeper in his own particular field, he reaches a depth where the process of his thinking is not scientific but philosophical. This can be seen in the thinking of many a great scientists of the world. The importance of philosophy in the field of knowledge is, therefore, quite clear.

9. Solution of ultimate problems : One of the greatest aim of the study of philosophy is that it helps in the solution of the big problems of life. The problems of philosophy are not of ordinary nature. In it we are concerned with those problems which other subjects fail to solve.

Philosophy solves the questions regarding knowledge, reality and values. So in a way it prepared us to lead a proper life.

10. Development and maturity of mind :- Another use of philosophy is that it develops our mind and intelligence. Philosophy literally means love of wisdom. It tries to develop our wisdom and knowledge. It also changes our outlook

towards life. Since philosophy is related with thinking so no aspect of knowledge remains untouched by philosophy. It reaches the depth of things and in reaching the root of problems our mind gets matured.

11. **In the field of values :-** Truth, beauty and the goodness are the fundamental values of human life. God is thought to be the embodiment of these values. These values give direction to our activities and thereby we perform our actions.

Aesthetics is a very important branch of philosophy, which deals with the various aspects and problems concerning beauty. "What is beauty" and "what is art" are the questions answered by Aesthetics.

What is value? What are the ultimate values? These questions are answered by Axiology.

So philosophy tries to satisfy our intellectual curiosity by providing answers to such questions.

12. **Nature of Reality :-** Another important aim of philosophy is that it helps us in understanding the nature of reality. It tries to distinguish between appearance and reality.

Different theories have been put forward regarding the nature of reality. Some people have considered reality to be spiritualistic. Some people have considered God as the ultimate reality whereas some others have considered reality to be formless and qualityless. Some people consider the world to be created while others think it to be evolved. Some consider it to be real where some others consider it to be an illusion.

Hence philosophy supplies the answer to the question of the nature of reality and tries to satisfy the inquisitiveness of the human beings.

13. **Reflective attitude :-** Another use of philosophy is that it gives us a deep and reflective attitude. It reaches the bottom of things and tries to reveal the truth.

The laws of thought and the ways of thinking form the subject matter of an important branch of philosophy known as logic. The knowledge of logic

makes our thinking better and more accurate.

14. **In the development of personality :-** Philosophy of mind is an important branch of philosophy. It tells us about the various qualities of man. It guides us to create an ideal environment for living. This helps in the development of personality of man. The psychological processes like memory, learning, thinking etc. are deeply connected with the human self and personality. Prof. Bahm says, "Philosophical attitude and psychological insight can ensure the proper development of our personality.

15. **In Daily Life :-** Philosophy performs a very important function in our daily life. It helps us at every step of life. We can come out victorious in the various challenges of life if we have a philosophical attitude. It makes us broad minded and saves us from petty quarrels and conflicts of life. There are many problems of life which can be solved with the help of philosophy.

Lord Russell says, "Philosophical attitude helps us at every step in life."

The study of philosophy is not a wastage as it comes for our rescue whenever the need arises. So philosophy is very valuable subject as it helps us at every step and at every stage of life.

Philosophy helps us to understand the nature and history of our civilization. In others words, it gives us a perspective upon our human history and our present day experience. This reveals in John Dewey's words, "the predicaments, the prospects and aspirations of men."

But philosophy has an even more important use. It has bearing not only on the shape of the past, but also on the shape of things to come. It is a methodical study which distinguishes between truth and falsity.

16. **Place of man in the universe:-** Another use of philosophy is that it concerns itself with the place of man in the universe from the point of view of certain basic questions which prick all reflective men at some time or the other. This question is not answered by any of the special sciences. But it is answered only by philosophy. Hence Philosophy tries to solve all the problems which man is confronted with.

1.4. To Sum up :- Thus it is clear that we are in need of philosophy at every step of our life. Man cannot live a thoughtless life. He has to always think over many types of problems. New situations arise daily and we have to come out of them. Although the philosopher does not himself have to be a wise man, but he knows the methods and techniques by which the process of reflection is carried out. He has the vision of possibilities. His vision often shows a glimpse through which a society can be made better. The philosopher leaves his mark upon the experience of others, whose ordinary life acquires new dimensions of significance.

1.4 Suggested reading :-

1. An introduction to Philosophy – A.J.Bahm
2. The Range of Philosophy – Titus

BRANCHES OF PHILOSOPHY

Semester-1st

Lesson No.5

Unit-II

Philosophy

MEANING, NATURE AND SCOPE OF METAPHYSICS

By. Dr. Kiran Bakshi

Structure:

2. 1 Objectives
2. 2 Introduction
2. 3 Nature of Metaphysics
2. 4 Problems of Metaphysics
2. 5 Scope of Metaphysics
2. 6 Utility of Metaphysics
- 2.7 Metaphysics considered futile by some philosophers.
- 2.8 Relation with other sciences
- 2.9 To Sum up
- 2.10 Suggested Reading
- 2.1 **Objectives:-**
 - To enable students to know reality.
 - To know the problems of metaphysics.
 - To enable them to know the nature of God and origin of world.

2.2 Introduction

Metaphysics is an important branch of philosophy. It is with Metaphysics that philosophy is understood in this world. Metaphysics is made of two words Meta+Physics. The former means beyond and the later means physical world. Thus metaphysics is a subject which tries to see what is beyond this physical world. It tries to go deep into the nature of things.

It is rightly said that 'the world as it appears is not real'. 'The things are not what they seem'. There are many things in the world which do not have any guarantee of reality and existence.

The subject matter of physics, as we all know, is the laws of external form of existence. But the Metaphysics studies what can be called as the real essence of things.

Metaphysics is the theory of Being. It enquires into the nature of reality. It investigates the nature of world including matter, life, soul and God.

Some persons consider metaphysics to be vague and indefinite because different metaphysicians have answered metaphysical problems differently. Each philosopher interprets it in the light of its own perspective. Thus, each metaphysical view point is limited and one sided. But this does not mean that it is false and meaningless.

Some persons have alleged that Metaphysics is mystical. This is the view of those who fail to understand it. If the adjective 'mystical' means that the subject of metaphysics cannot be explained in completely intellectual terms, metaphysics is mystical. But it is not mystical in the sense that nothing can be known intellectually about it.

2.3. Nature of Metaphysics : From the point of view of problems, attitude, methods, activity, conclusions and effect on individual and society, the nature of metaphysics is philosophical. It does not make use of the scientific methods of experimentation and observation.

The nature of metaphysics is that it is reflective and tries to solve the general

problems. A metaphysician never worries about the conclusions but continues for his search after truth. The unanimity is generally found in the opinions regarding scientific issues. The metaphysicians generally disagree with each other.

So, from the above discussion it can be deduced that the nature of metaphysics is philosophical.

2.4. Problems of Metaphysics : A survey of different metaphysical problems will prove their importance for religious beliefs. Every religious man while he worships God, hopes that the object of his worship is eternal and ultimately real. That is why different aspects of religion have their solid foundation in metaphysics. The metaphysician enquires into the reality of God with a philosophical attitude and through philosophical methods. He tries to know whether God has made the world and if yes, why has He done so? The metaphysician enquires into the nature of ultimate reality. The answer to all these queries are very much important for religious faith.

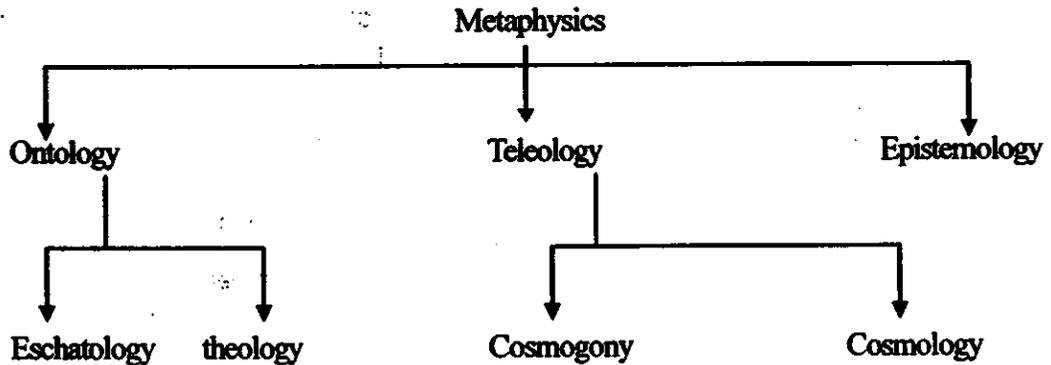
The problems like

1. What is the nature of reality?
2. What is being?
3. What is becoming?
4. Is reality one or many?
5. What is space and time?
6. What is relation?
7. What are causal connections?
8. Is the world free or determined?
9. Is there any purpose in life and world?
10. What are the proofs for existence of Gods?

are discussed an on attempt is made to find solution of different opinions presented, evaluated and discussed by the metaphysicians.

4.5 Scope of Metaphysics

The scope of metaphysics is very wide; it covers a wide range of subjects. Its scope includes the self, the world and the God, so it has been divided into the following branches.



- 1) **Ontology :-** This is the fundamental branch of metaphysics. In it are studied the eternal and temporal, the limited and the unlimited elements of the world and their interrelation. Its main problem is the explanation of 'Reality' and 'Existence'. This branch of metaphysics searches into the ultimate reality.
- 2) **Philosophy of self:** - The subject matter of this branch of metaphysics is the nature of self. Its main question is: Who am I? The dictum of the philosophy of Socrates was "Know thyself".

In the Upanishads, the seers declared "I am self" "All is self". Without the knowledge of self all knowledge is one sided. The programmatic knowledge is considered to be valid only after the attainment of the knowledge of self.

Many types of theories explain the nature of this world and its components. Many theories like Idealism, Realism, Materialism etc. have been put forward to know the ultimate reality.

- a) **Eschatology:-** Enquires into the destiny of things and events. 'What is the destiny of soul?' is the main question which is studied in eschatology.
- b) **Theology:-** In this branch of metaphysics questions are raised

regarding the existence, nature and function of God.

- 2) **Teleology:** - In this we are concerned with the aim and purpose of this world. Is there any purpose in life? This is an important question which has baffled the minds of philosopher since time immemorial. Some people think that there is some purpose in life and world. Others like Karl Marx have clearly ruled out any possibility of any aim of life and world.

Karl Marx said "It is a mere change that mind became conscious" shows that life is governed by higher and spiritual values.

Teleology can be further sub-divided into the following branches :-

- a) **Cosmogony:-** In this branch we study the nature and causes of creation.
 - b) **Cosmology:-** The main question raised in this branch is whether the world is one or many and what is the stuff of which the world is made up of.
- 3) **Epistemology :-** This is the third branch of metaphysics In it we are concerned with the important problems of knowledge. We examine the nature, validity, sources and limitations of knowledge. It is also seen how knowledge is possible at all.

Hence the study of metaphysics' is very important because it touches the important aspects of life and takes us deep into the inner truth of things.

Value of metaphysics: - Some contemporary philosophers have expressed doubt in the utility of Metaphysics. According to F.H. Bradley. "Metaphysics is the finding of bad reasons for what we believe upon Instinet". The important, objection against it has been raised by the 'logical positivists' who say that it is a non-sensual study and its propositions are meaningless. Metaphysics, according to these philosophers, is impossible. Some persons consider its study to be indefinite and wastage of time. But these opinions only prove that the subject of metaphysics is complex and multisided. Each philosopher interprets it in the light of his own preferences. Thus each metaphysical view point in limited and one side but this does not mean that it is false and meaningless.

Hence, the study of metaphysics is very useful as it helps to disclose the real mysteries of the metaphysical world pertaining to the basic and fundamental realities of life.

2.6. To Sum up :- Hence, the study of metaphysics is very useful as it helps to study the real essence of things. It solves various questions regarding the self, the world, the God, the relation between man and God. Infact it answers even those questions which are left unanswered by other subjects at the end of their enquiry.

Although some people consider it as an unimportant subject but it is not so as it pertains to the basic realities of life.

2.7. Suggested Reading

1. History of Western Philosophy--Banerjee
2. Self, Thought and Reality--A.C.Mukerji
3. An introduction of Metaphysics--Henri Bergson

EPISTEMOLOGY MEANING AND ITS PROBLEMS

2.2.1 Objectives

- To make students familiar with Epistemology as a branch of philosophy
- To attempt an analysis of the term Knowledge
- To bring out the distinction between Rationalism and Empiricism
- To introduce to the students the three important theories of truth

2.2.2 Introduction

What does it mean to know something? What means should be used to determine the truth of things? Is it right to depend on the evidence of our eyes and ears, on our senses of smell, taste, and touch? What is more trustworthy our-rational mind and its logic, or what our heart tells us? Are things true for one person but not for another; in other words, is truth objective or subjective? Can human beings ever claim to achieve reliable knowledge, or is it their fate to remain satisfied with theories, assumptions, opinions, and beliefs? These are some of the problems tackled by epistemology. Just as metaphysics deals with reality and tries to differentiate it from mere appearance, epistemology deals with knowledge and attempts to distinguish between what is knowledge and what merely appears as knowledge. There are a variety of topics on which human beings have a wide range of opinions, but it is important to know whether these opinions are genuine; whether we really know or only think that we know. This is what makes knowledge as well as the theory of knowledge so important.

2.2.3 Definition

Epistemology is another name for the theory of knowledge. The word 'epistemology' comes from the Greek words episteme meaning knowledge and logos meaning science. In ancient

Greek philosophy, episteme was the opposite of doxa which meant mere belief or opinion. Therefore one of the important constituents of a definition of epistemology is the distinction between knowledge and opinion. Epistemology may be defined as a branch of philosophy which deals with knowledge in its different aspects its origin, nature, validity, limits etc. It also investigates related notions, such as perception, memory, proof, evidence, belief and certainty.

2.2.4 What is knowledge?

As can be easily made out in the above account, much of epistemology is hinged upon the important concept of 'knowledge'. The very word has an honorific quality, connoting a positive value, especially when compared to belief or opinion. The whole point of a great deal of our thinking is to correctly adjust our beliefs to the way things actually are in the world, choosing in other words - some particular ones out of the larger class of beliefs, which are then called knowledge. Part of the flavour of the word knowledge and our confidence in the truth of what we claim to know arises from the fact that we have better reasons for believing our information to be true. It is only in affirmation with this requirement that the most popular definition of knowledge defines it as 'justified true belief,' a simple statement of the three necessary and jointly sufficient conditions for knowledge. Only those beliefs can be included under the category of knowledge which a) are sincerely affirmed by the believer, b) are true, and c) the believer is justified in believing them to be true. The correct analysis of each element of the definition, however, is open to question. Philosophers have held different views about the nature of belief, and have proposed many different theories of truth. The strength of the definition however results from the fact that it puts us in the best possible position to know weighing all the evidence, examining all the arguments, pros and cons. The result of this is not necessarily or absolutely the truth which is difficult to guarantee in view of the epistemological limitations of human existence but what is most probable and therefore the likeliest to be true.

2.2.5 Sources of Knowledge

One of the most important problems in epistemology concerns the source of our knowledge. Is knowledge based entirely on reason, or should it be constructed upon a direct sense experience of the world, or some combination of the two? Within epistemology, the first position is referred to as 'rationalism' and the second as 'empiricism.' The rationalists

claim that there are significant ways in which our concepts and knowledge are gained independently of sense experience, while the empiricists claim that sense experience is the ultimate source of all our concepts and knowledge. The former argue that there are cases where the content of our concepts or knowledge goes beyond the information that sense experience can provide, and it is reason in one form or the other which provides this additional information about the world. The latter contest that reason can never be the source of concepts or knowledge, and that experience and not reason - accounts for the additional information that the rationalists talk about.

2.2.6 Empiricism

Let us talk about empiricism first. It is the view that sense perception, chiefly our ability to see and hear, is the best means to grasp reality. It claims that only the information provided by the senses can be trusted, and sense evidence must justify whatever is accepted by us as true. We know the color of a thing by seeing it, its texture by touching, its flavour by tasting, its odour by smelling and its sound by hearing it. Everything we do know, we know through this apparatus only. Our concepts depend upon our experience; there is nothing in the intellect that was not previously in the senses.

However, the problem with this theory is that our senses can deceive us. A tree at the far end of a street can appear as a person to us in dim light. We claim to see the sun rise and set, and to see the stars twinkle, when, in fact, these are nothing more than illusions. Similarly, the earth may appear to be stationary, but it is rotating on its axis, orbiting the sun. All these facts are contrary to our direct sense experience but are real nevertheless. Sense perception cannot therefore be called infallible.

2.2.7 Rationalism

Rationalism is a rival position, offering an alternative theory of knowledge. Rationalists claim that there are significant ways in which our knowledge is gained independently of sense experience. According to this view, we should use our reason, rather than sense perception, to determine reality. Everything must be tested in the light of rationality, so that any mistakes made by the senses can be corrected. For example, we realize that the 'snake' we are getting frightened of in the dark is actually a rope because it is too stationary and rigid to be a snake. Again, if a magician pulls a rabbit out of an empty hat, there must be a trick to it. The hat might have a false bottom, or maybe the rabbit was in the magician's

sleeve, but rabbits cannot materialize out of thin air.

Mathematical knowledge, for example, is grounded primarily in reason, not sense perception. For example, if a square has one side of four inches, then we know its volume to be four inches times four inches times four inches, or sixty-four cubic inches. We do not go out in the world and measure the side. This theorem can be logically proven; it is conceived rather than perceived.

However, rationalism also has certain weaknesses as an epistemic theory. The principal defect is that we never know whether a structure of thought, however rational, accurately diagrams reality. In other words, although ideas may fit together coherently, they may not represent the actual world. It is not unlike those detective novels where the evidence points to a certain person as the killer. He or she had the opportunity and the motive, was heard uttering a threat, has a history of violence, and so forth. Everything makes sense, but it turns out that someone else committed the crime.

2.2.8 Kant's Contribution

At the first glance, the rationalist and the empiricist worldviews seem to be at loggerheads with each other, with no common grounds between the two. It appears as if reason and sense experience are antithetical to each other with no possibility of a compromise. However an ingenious synthesis between the two was achieved by the eighteenth century German philosopher Immanuel Kant. He disagreed with the rationalists as far as their belief in the power of reason as the ultimate means of knowledge was concerned, but agreed that the mind had an active role to play in the knowing process. He agreed with the empiricist view that all our knowledge is based on our experience of the world, but attacked their idea of a passive mind, a tabula rasa or blank slate on which senses record their impressions. Thus Kant declared that even though "...there can be no doubt that all our knowledge begins with experience, ...it does not follow that it all arises out of experience." We perceive things no doubt due to our sense organs, but in a vague and undefined manner. We know things as objects only because the mind itself contributes important organizing principles (such as relations of cause and effect, being ordered in space and time etc.) which make knowledge of objects possible. These organizing principles are contributed by the perceiving subject rather than being out there in the world, existing independently of us. The objects of our experience can hence be neither 'pure sensation' nor 'pure thought,' but must always be a combination of the two. Thus both the sense organs and the mind are

complementary to each other and the knowing process cannot function well in the absence of any of these.

2.2.9 Scepticism

An important thing to note here is that both the empiricists and the rationalists come under the category of philosophers who think that knowledge is possible; they dispute only on the means to knowledge. There have been, however, at various points in the history of philosophy, thinkers who have argued that knowledge is not possible, either about some specific subject matter, or in any area whatsoever. That there is a veil of perception which hides the reality of things from us and presents only appearances to us, that there is a veil of language which distorts reality by putting it in words, and so the external world is never directly available to us, and hence we cannot claim to know about it. This denial of the possibility of knowledge is called scepticism and such thinkers are called sceptics. If we accept radically sceptical conclusions, there is no knowledge and therefore no epistemology. It is however a self-contradictory position to hold because to claim that 'we cannot know anything' still involves knowing such a claim to be true.

2.2.10 Philosophy and Truth

As mentioned earlier, epistemology strives to separate knowledge from opinion. Knowledge is nothing but a true belief that has been justified. Thus epistemology is also concerned with discovering a sure guide to truth. This leads us to the three main theories of truth that philosophers throughout the ages have postulated:

- a) the correspondence theory of truth
- b) the coherence theory of truth
- c) the pragmatic theory of truth.

Generally speaking, most empiricists accept a correspondence theory of truth and most rationalists accept a coherence theory. They may be distinguished thus: the correspondence theory holds that our ideas are true if they correspond to reality. If someone says it is raining, he will be proved true if it indeed is raining. This theory works well if you hold to a theory of knowledge which maintains that thoughts and ideas are copies of physical objects mediated by the senses. The correspondence theory works pretty well as long as you are dealing with physical objects, not so well when you are dealing with nonphysical

objects moods, emotions, moral truths, arithmetic, and so on.

The coherence theory, in contrast to the correspondence theory, holds that we are entitled to accept the truth of a statement if it is coherent and consistent with our other accepted items of belief and knowledge. Beliefs are tested for truth in the light of other beliefs, including perceptual beliefs. Unlike the correspondence theory's emphasis on an independent reality, the coherence theory holds that reliable beliefs constitute an inter-related system, each element of which entails very other, and it is not required to step out of this system to see how well it is doing in terms of correspondence with the world.

The third theory is known as the pragmatic theory of truth. Sometimes we may not have empirical evidence for establishing the truth of a new claim, despite its being coherent with our other established beliefs. To determine whether to accept or reject it, many philosophers suggest the pragmatic test as a way of judging hypotheses proposed to us for acceptance. If one is given two hypotheses, and no other way of determining the truth or falsity of them, one must ask oneself what the practical difference would be if one accepted one of these and rejected the other. If there is no practical difference between them, then no matter of truth is at stake. In other words, a theory or idea would be true if it leads to fruitful practical results and it would be false if it leads otherwise.

Philosophers who argue for each of these theories are usually quite one-sided in the defence of their views. In practice though, we probably use all three methods of judging the truth of the claims available to us. We accept some claims because there is a correspondence with empirical data. We adopt others because they fit in well with our other well-established views. There are still others which must be decided by appealing to the practical difference resulting from our acceptance or rejection of the truth claim presented to us for belief.

2.2.11 Summary

In this chapter, we tried to understand what epistemology is, why the concept of knowledge is so central to epistemology and what constitutes knowledge. Not every opinion or belief can be called knowledge; only those which are true and justifiable pass the test. As far as the source of knowledge is concerned, there has been a great debate between the rationalists and the empiricists on the primacy of reason over experience and vice versa. It was resolved by Kant when he showed that both reason and experience were complementary and we made sense of things and came to know about them only through a

utilization of both sensory and rational faculties. However any advance in epistemology or philosophy in general faces a challenge from the sceptics who claim that the human mind does not represent things as they are and the latter can never be known with certainty. In the end, an analysis of various theories of truth shows how human beings have striven to distinguish truth from falsity over the ages, and that doing this is a cornerstone of the epistemological project.

2.2.12 Glossary

Perception The awareness of external objects through the use of the sense organs, as well as the process through which this is accomplished

Tabula Rasa A Latin phrase meaning 'blank slate.' Refers to the idea that individuals are born without built-in mental content and that therefore all knowledge comes from experience or perception.

2.2.13 Questions

- a) Define epistemology. Why is it important to distinguish knowledge from opinion?
- b) What is meant by justified true belief?
- c) Discuss Kant's critique of the rationalist empiricist debate.
- d) What are the various theories of truth?

2.2.14 Suggested Readings and References

Craig, E., *Philosophy: A Very Short Introduction*, Delhi: Oxford University Press, 2002.

Patrick, G.T., *Introduction to Philosophy*, Delhi: Surjeet Publications, 1978.

Russell, B. *The History of Western Philosophy*, New York: American Book Stratford Press, 1947.

Sinha, J.N., *Introduction to Philosophy*, Calcutta: New Central Book Agency, 1996.

THEORIES OF KNOWLEDGE

Semester-1st

Lesson No: 6

Unit-III

Philosophy.

2.3 Meaning and Scope of Axiology

2.3.1 Objectives

- To make students familiar with axiology as a branch of philosophy
- To define the term axiology
- To study the subdivisions of axiology

2.3.2 Introduction and meaning of axiology

Axiology is that branch of philosophy which is concerned with values. It is an attempt to discover and recommend principles for deciding what actions and qualities are most worthwhile and why they are so. It is not only the study of value but investigation of its nature as it enquires if value is a fulfillment of desire, a preference or simply some kind of human interest. About criteria of value, it verifies if rules and standards of values can be set. Regarding metaphysical status of values, axiology finds out how are values related to scientific facts? What ultimate worth do human values have, if any? Is value dependent upon the presence of human beings?

The word axiology is derived from greek 'axios' meaning worthy and 'logos' meaning science.

2.3.3 Subdivisions of axiology

Axiology has two major subdivisions: ethics and aesthetics.

Ethics: According to Prof. Mackenzie 'Ethics is the study of what is right or good in conduct.' It is concerned with good and bad, right and wrong, approval and disapproval as well as virtue and vice. It is the study of values in human behavior or the study of moral problems. Ethics as the study of values aims to evaluate human conduct in terms of good or

bad, right or wrong under the standards of society. Evaluation means determining the value. When a school boy or girl speaks a lie, the teacher admonishes and suggests that speaking the truth is good and desirable, not speaking a lie. The term Good implies favorable results. Good is related to social utility. Similarly the term Right implies action according to accepted rule or law of society. Thus an action is right if it produces beneficial results and is approved by society. Ethics is not only concerned with examining and judging the normal quality of human conduct but also with reflection on the nature of values. It is both a critical and an objective evaluation of conduct of human beings in society. Conduct refers to voluntary actions performed by conscious human beings who can visualize the possible consequences of their actions.

Ethics may be divided into four major areas of study:

Meta ethics: It is about the theoretical meaning and reference of moral propositions and how their truth values may be determined.

Normative ethics: It is about the practical means of determining a moral course of action.

Applied ethics: It is about how moral outcomes can be achieved in specific situations.

Descriptive ethics: It is also known as comparative ethics. It is the study of people's beliefs about morality.

AESTHETICS

Collins Discovery Encyclopedia defines aesthetics as:

1. the branch of philosophy concerned with the study of such concepts as beauty, taste, etc.
2. the study of the rules and principles of art

Aesthetics is the branch of philosophy concerned with the nature and appreciation of art, beauty and good taste. It has also been defined as "critical reflection on art, culture and nature". It is the study of value in the arts---the study of the beauty, the principles of taste, harmony, order and pattern. The word "aesthetics" is derived from the Greek "aisthetikos", meaning "of sense perception"

(Thus aesthetics), the branch of philosophy that is concerned with the nature of art and the criteria of artistic judgment. The classical conception of art as the imitation of nature was formulated by Plato and developed by Aristotle in his Poetics, while modern thinkers such as Immanuel Kant, F. W. Schelling, Benedetto Croce, and Ernst Cassirer have emphasized the creative and symbolic aspects of art. The major problem in aesthetics concerns

the nature of the beautiful. Generally speaking there are two basic approaches to the problem of beauty the objective, which asserts that beauty inheres in the object and that judgments concerning it may have objective validity, and the subjective, which tends to identify the beautiful with that which pleases the observer. Outstanding defenders of the objective position were Plato, Aristotle, and G. E. Lessing, and of the subjective position, Edmund Burke and David Hume. In his Critique of Judgment, Kant mediated between the two tendencies by showing that aesthetic judgment has universal validity despite its subjective nature. Among the modern philosophers interested in aesthetics, the most important are Croce, R. G. Collingwood, Cassirer, and John Dewey.

Aesthetics is broader in scope than the philosophy of art, which comprises one of its branches. It deals not only with the nature and value of the arts but also with those responses to natural objects that find expression in the language of the beautiful and the ugly. Almost anything might be seen as beautiful by someone or from some point of view; and different people apply the word to quite disparate objects for reasons that often seem to have little or nothing in common. It may however be that the term beautiful has no sense except as the expression of an attitude, which is in turn attached by different people to quite different states of affairs. For instance, to convey what is significant in a poem, we might describe it as ironic, expressive, balanced, and harmonious. Aesthetics must therefore cast its net more widely than the study either of beauty or of other aesthetic concepts if it is to discover the principles whereby it is to be defined.

2.3.4 Suggested readings

Introduction to philosophy by D R Bali

Introduction to philosophy by J N Sinha

Introduction to philosophy by Patrick

Concise Routledge Encyclopedia of Philosophy

K. E. Gilbert and H. Kuhn, A History of Esthetics (rev. ed. 1953, repr. 1972);

M. C. Beardsley, Aesthetics from Classical Greece to the Present (1965)

G Dickie, Aesthetics: An Introduction (1971);

Internet source

THEORIES OF KNOWLEDGE

Semester-1st

Lesson No. 6

Unit-III

Philosophy

3.1 Epistemology - Sources of Knowledge

Epistemology

The problem of knowledge is another very important aspect of philosophy. In it we are concerned with various problems that affect the validity, sources and structure of knowledge. It is thus a very significant branch of philosophy. With the help of this branch we are able to explore the various types of knowledge. Epistemology not only studies the sources but also the nature and truth of knowledge. Since time immemorial knowledge has been recognised as being very important for humanity.

"Socrates said, "Knowledge is the highest virtue".

Epistemology is also concerned with the problems like the nature and possibility of knowledge of time, space, relation, substance, causality etc. All these basic concepts of philosophy need a kind of total overhauling. Epistemology can help us in their true and correct understanding. In short, epistemology is concerned with the following important points.

1) What is knowledge:-

The area of knowledge is so wide that it is very difficult to present an exact definition of knowledge. It is not possible to delimit such a big topic in a few words. Even then people have tried to give various definitions of knowledge.

Prof. C.E.M. Joad says, "Knowledge is an addition to our existing information and experience".

Lord Russell says, "Knowledge is that which enlightens the human mind".

Prof. William James says, "Knowledge is another name for practical achievement and success".

2) Nature of knowledge:-

This is the second problem with which epistemology is concerned. Epistemology tries to study the nature as well as the content of knowledge. Some people are of the opinion that knowledge must have a direct link with reason. Whatever is rational is true and correct.

Prof. Dewey said, "Knowledge is always on probation". That knowledge which is not of any practical consequence is not useful at all. It must help us at any every step of life.

Branches of Philosophy

Epistemology -Sources of Knowledge

Epistemology is the theory of knowledge. It enquires into the origin of knowledge and the conditions of its validity. It enquires into the nature of knowledge. It answer the question as to whether knowledge represent the reality or facts, or whether it consists in judgement which do not correspond to facts. Epistemology enquires into the nature of time, space, substance, relation, and causality which govern the world of objects of our experience. All these basic concept of philosophy need a kind of total overhauling - epistemology can be help us in their true and correct understanding. Epistemology is concerned with the following important points.

- a) **Idealism:** - According to this theory all knowledge is subjective. In this world the things are not real, only ideas are real. There have been any advocates of this theory.

Prof. Berkely rightly said, "Esse est percipi". This means that essence of all knowledge lies in perception.

- b) **Realism:-** This theory holds that objects have got an independent existence of their own. Reality is not mental alone. It is objective also.

If there are no objects in this world. There can be no ideas therefore objects come first and ideas later on.

Validity of knowledge: - More obtaining of knowledge is not sufficient. It has to be seen whether the knowledge is valid and correct or not. It is better not to obtain knowledge than to obtain wrong knowledge. If somebody asks you the way to some place and you don't know it, it is better to show your ignorance rather than telling the wrong way. If wrong knowledge is given to anybody. It is a great curse for humanity.

The advocates of idealism hold that the validity of knowledge depends upon the ideas. The realists try to compare knowledge with the actual existing facts and things. The truth of knowledge is governed by the following of theories.

- 1) **Correspondence theory :-** According to this view the truth of a proposition is judged by its comparison to the actual existing facts. If any proposition or event perfectly corresponds to the facts of existence, then it is hold to be true.

Prof. Titus Says, "truth is the agreement between the statement of fact and the actual fact".

- 2) **Coherence theory:** - According to this view truth depends upon links and relations between the various objects and events. There is nothing in this world which can be held to be absolute and above other things. If we want to judge the truth of a thing than it can be seen by relating it to other allied things or events.

Prof. Bradley says, "Truth is an inter related coherent whole".

- 3) **Pragmatic theory:** - This theory lays more stress on the practical and day to day thing and events. Any statement is true or valid if it works and succeeds in our practical life. That which succeeds is true, that which fails is false.
- 4) **Sources of knowledge :** The knowledge is obtained in a variety of ways. In the traditional language of epistemology, knowledge must either be inborn; or it must come from reason; or it must come through the senses, like sight, hearing , taste smell, or finally, it must come from direct insight or intuition.

- a) **Rationalism** : This theory considers reason to be the source of knowledge. According to Descartes all valid knowledge comes to us through the faculty of reasoning. The advocates of this theory also believe in innate ideas. Whatever is not rational is neither good nor real.
- b) **Empiricism**: According to this view experience is the sole source of all knowledge. There is nothing inherited in the mind of man at the time of birth. Whatever he learns, he learns through experience. John Locke said, "The human mind at birth is 'Tabula Rasa' or a clean slate"

Sources of Knowledge

When we have examined the definition, nature and validity of knowledge then we must also examine the sources of knowledge. The knowledge is obtained in a variety of ways. The following can be the valid sources of knowledge.

- 1) **Reason**: - The rationalists consider reason to be the only genuine source of knowledge. Descartes, Spinoza and Leibnitz have advocated reason as a source of knowledge. They believe that all genuine knowledge comes through the faculty of reason only. They also believe in the theory of innate ideas. All necessary knowledge is already contained in our minds in the form of innate ideas and this knowledge is very clear and distinct. Rational knowledge alone is genuine.
- 2) **Experience**: - The empiricists consider 'Experience' to be the only genuine source of knowledge. The mind according to the empiricists is a tabula Rasa or a blank slate at the time of birth. Nothing is imprinted on it by God. Whatever is learnt is only learnt by experience. Experience comprises of two aspects i.e., sensation and reflection. By sensation we obtain ideas of things we suppose to exist outside us in the physical world: by reflection we come to have ideas of our own mental operations. Thus, "hard," "red" and "loud" are all ideas of sensation. while "perceiving," "remembering" and "thinking" are all ideas of reflection.

- 3) **Inference:** - Inference also is recognized as a valid source of knowledge. It is a knowledge which is followed by another source of knowledge e.g., when we see smoke and infer the existence of fire. Inference is mediate knowledge of an object by virtue of the relation of invariable concomitance between two objects which are always found together, e.g smoke and fire. Inference is a process of reasoning through which we pass from the apprehension of some marks (e.g. smoke) to reach to the inferable object e.g. (fire).
- 4) **Comparison:** - It is the means by which we acquire the knowledge of a new thing through its resemblance with another thing previously well known e.g., Suppose a person has never seen a wild cow. A forester tells him that it resembles a cow. When he sees a wild cow, he is able to recognize it because he remembers that a wild cow resembles a cow. He knows the animals to be a wild cow through the knowledge of its similarity with a cow which has previously well knows to him.
- 5) **Testimony:** - Testimony is the saying or writing of any reliable person who is aware of the truth and convey it to someone. Reliability of the person is the first criterion of testimony, otherwise we may get deceived.
- 6) **Intuition:** - This is another accepted source of knowledge. Many a times we get an inner flash of knowledge related directly to the voice of the heart. The voice of the conscience also generates valid knowledge and we arrive at the immediate knowledge of the things.

To conclude we can say that the above mentioned are the generally accepted sources of knowledge through whose operation we attain right knowledge.

RATIONALIST AND EMPIRICIST VIEWS ON EPISTEMOLOGY

Theories of the Origin of Knowledge: There are four main theories of the origin of knowledge. Rationalism regards reason as the sole source of true knowledge. Descartes is the typical exponent of rationalism. Empiricism regards experience as the source of true knowledge. Locke and Hume are the exponents of empiricism. Kant advocates apriorism and regards reason and experience both as the sources of

knowledge; Reason gives a priori form of knowledge; and experience gives the matter of knowledge in the shape of discrete and unconnected sensations. Kant's theory is called the critical theory of knowledge. Intuitionists regard intuition as the source of knowledge; They condemn reason or intellect as inadequate to the comprehension of reality. Bergson is an exponent of intuitionism.

Rationalistic View of Knowledge: Rationalism in philosophy believes in only that knowledge whose nature is rational. Such a standpoint began with Descartes who is regarded as the father of modern Western Philosophy. Descartes for the first time declared that in Philosophical reflections nothing should be admitted purely on the basis of faith.

According to Descartes reason is the source of real knowledge. Descartes calls this intuition. He says "By intuition I understand not the fluctuating testimony of the senses, nor the misleading judgement that proceeds from the blundering constructions of imagination. Intuition springs from the light of reason alone. It is undoubted, immediate apprehension of self-evident truth by reason. God imprints certain innate ideas at the time of birth. The ideas of causality, infinity, perfect Being of God and the like are innate ideas. These are clear and distinct. Clearness and distinctness of ideas is the test of their truth. The development of true knowledge consists in the deduction of other truths from these self-evident innate ideas. Thus Descartes applies the mathematical method to philosophy. His rationalism is called mathematical rationalism.

Descartes formulated the following four principles for philosophical reflection.

1. The first, 'never to accept anything true which I did not clearly know to be such; that is to say to carefully avoid prejudice'.
2. To divide each of the difficulties under examination into as many parts as possible, and as might be necessary for its adequate solution.
3. To begin with the simplest issues and then ascend to the more complex ones..
4. In every case to make enumerations complex and reviews so general, that I might be assured that nothing was omitted.

The above mentioned rules as laid down by Descartes show that he wanted to develop a purely rational philosophy. According to him we distinguish between real and unreal through our reason. Reason alone is a power by which we can reach knowledge. And since every one has reason in him so everyone can know the truth through personal endeavour.

Descartes divided ideas into three kinds, adventitious ideas, fictitious ideas and innate ideas. Innate ideas are and have always been within us, fictitious ideas or invented ideas come from our imagination and adventitious ideas come from experiences of the world. He argues that the idea of God is Innate and placed in us by God, and he rejected the possibility that the idea of God is invented or adventitious. Descartes deduces the existence of God from the innate idea of God. He proves it by saying that the finite things can not produce the idea of infinite beings. So God must Himself be the cause of this innate idea of Himself. Therefore, God exists. He is perfect and truthful. First of all Descartes deduces the existence of the external world from the veracity of God. If it were non-existent, God would be deceitful.

Before even establishing the existence of God, Descartes proves the existence of self. He starts with doubting everything. However, he says that that I can doubt the fact that I exist. This is because to doubt is to think and is to think is to exist, i.e. *Cogito Ergo Sum* - I think therefore I exist.

Hence, to him :

1. The self exists
2. The God exists
3. The world exists

Therefore, Descartes begins with a method of doubt and tries to reach to definite conclusions. His mathematical method consists in discovering the difference between the essential and the inessential and differentiating between the clear knowledge of reason and obscure knowledge of the senses. This method consists in so arranging the objects of our enquiry that we may be able to intuit them.

Development of Rationalism : Spinoza gave a developed form to the rationalism which was initiated by Descartes. In the epistemological thinking of both these philosophers the mathematical method was specially considered to be reliable. But besides this, there is a distinction between the two approaches. While Descartes approach was more scientific, Spinoza's approach was sort of mystic.

Like Descartes Spinoza also had immenses faith in reason. He believed that since reality is rational so we can know the truths through reason alone. According to Spinoza, God himself creates the world rationally. Spinoza has laid so much importance to reason that he considers intellectual love of God to be the highest state of man. The highest form of intellectual activity can be seen in intuition. Intuition is the realization of true knowledge. In its highest form it takes man to the peak of his moral and spiritual development.

Climax of Rationalism : The climax of rationalism in the modern western philosophy is seen in the philosophy of Leibnitz. Whereas Descartes considers only basic ideas to be innate; Leibnitz considers all ideas to be innate. According to Leibnitz, not the senses but the intellect is the source of knowledge. All our knowledge and ideas are implicit in our mind from the very beginning. We do not know them because they are not on the conscious level. By the activity of intellect these ideas gradually come to light and therefore become clear. To illustrate this point, Leibntiz has given the example of a horse who has the capacity of running inherent in him but who does not actually run without getting beating with the whip. Similarly, though the ideas are already in the intellect, the sense experience gives them occasion to be expressed. Just as the whip does not give any new capacity to the horse similarly the sense experience only presents an occasion for the innate knowledge to manifest.

Man has the intellect by which he knows the God and the necessary and eternal truths. Intellect makes the ideas manifested. Thus knowledge consists of ideas. This view takes rationalism to its climax.

Characteristics of Rationalism:--

- (1) Mind is active and not passive
- (2) According to Descartes only the root ideas are innate whereas according to Leibnitz

all ideas are innate.

- (3) Sensory perceptions do not give knowledge but only occasion for it.
- (4) Only through intellect we can arrive at definite, true and universal knowledge.
- (5) Reason alone is the final testimony of knowledge.

THEORIES OF KNOWLEDGE

Semester-1st

Lesson No. 7

Unit-III

Philosophy

3.2 Epistemology - Sources of Knowledge

Empiricist view of knowledge:—Empiricism is the philosophy which consider empirical experience to be the sole source of knowledge. According to it man attains knowledge through the sensations received by his sense organs. The empiricists are against the theory of innate ideas. Locke—the father of modern empiricism considers the child's mind as **Tabula Rasa**. The mind is a blank sheet on which the sensations leave their impressions. Thus the matter of knowledge comes from outside the mind. The empiricists do not admit the existence of anything which is not subject to sensual experience. Thus David Hume refuses that the ideas are the objects of our knowledge. We do not know any mind in which they live. The concept of mind therefore is baseless. Hume's skepticism shows the culmination empiricism. Most philosophical problems, the skeptics say, can not be solved, as their objects are not subject to experience. So Hume concluded that only knowledge of Science and Mathematics is possible. Thus Hume led empiricism to skepticism.

John Locke was of the firm faith that man can achieve all valid knowledge through sensation and does not require any innate ideas. He has advanced a number of criticism against the theory of innate ideas.

- 1) All the innate ideas should precede our experience and intellectual development.
- 2) These ideas should be known both to the children and fools.
- 3) The relative, moral and religious ideas cannot be called innate
- 4) In the absence of external impressions there cannot be any innate idea known or unknown

It is true that Locke rejects the theory of innate ideas and refuses to believe that there are innate ideas. But he believes in the capacity of mind to achieve knowledge. When a child is born, his mind is like a blank sheet. As and when he grows his mind acquires knowledge through sensation and reflections.

The external objects are made known to us by sensations. Reflection is the source of knowledge about the inner states of mind. Mind passively receives ideas and does not make any effort to perceive the qualities of the external objects.

Development of Empiricism:— After John Locke, the empirical philosophy developed in the thought of Berkley. Berkley admitted the idea and the object to be the two aspects of the same process. Acc to him the very existence of the object depends upon the presence of idea. Thus it is clear that Berkley did not admit Locke's empiricism as it is, but approached it critically. The only similarity which one finds in the thought of both these philosophers is that both admit that the source of knowledge lies in experience.

One finds two mutually contradictory currents in Berkley's epistemology. On the one hand, he is an empiricist and gives a most systematic form at Locke's principles of knowledge. On the other hand, he appears to be an intellectualist because he admits mind and its ideas to be the sole reality.

Climax of empiricism :— Just as Berkley developed his philosophy through a criticism of Locke's ideas, similarly David Hume developed his thought through a criticism of Berkley's theory of knowledge. According to Locke the mind and the external objects are required for knowledge. Berkley conceives perception to be the essence of existence and therefore does not admit the existence of anything outside the mind and its ideas. Hume denies even the existence of mind because it is not subject to experience. Thus the current of thought begun by Locke and Berkley reached its culmination in the Philosophy of David Hume. Like Locke and Berkely. Hume also analyses the nature of human knowledge and man's capacity to achieve it and concludes that all our knowledge is based on experience. He refuses to accept the existence of anything which is outside the limits of experience.

A comparative study of rationalism and empiricism:—

Rationalism	Empiricism
1) Knowledge is intellectual	Knowledge is sensory
2) The basis of knowledge is intellect.	The basis of knowledge is Sensory experience
3) Truths are a priori	Truths are posteriori
4) True ideas are innate	True ideas are acquired
5) Mind is active	
6) Reason is the testimony of knowledge	Perception is the testimony of knowledge
7) The limits of reason are the limits of knowledge	The limits of sense experience are the limits of knowledge

To sum up : It can be logically concluded that epistemology is very important branch of philosophy. It is the science of knowledge and truth. Its problems are the fundamental problems of the process of knowledge. It is very strange that when so many people are busy in the acquisition of knowledge, not many think over the general questions concerning the nature of knowledge, its limits, the relation between knower and the known etc. These questions are addressed in epistemology. Therefore epistemology provides the basic foundation of knowledge. Epistemology critically examines different methods to achieve different types of knowledge. Philosophers have discussed such problems since time immemorial and conclusions of philosophers like Hume and Kant have proved to the epoch making. Thus, in brief, epistemology satisfies the inquisitive mind.

Suggested Reading :

- 1) Introduction of Philosophy—Patrick
- 2) The Range of Philosophy—Titus.

APRIORISM (IMMANUEL KANT)

3.3.1 Introduction

The philosophy of Immanuel Kant (1724-1804) developed during the conflict of different theories of that time, primarily those of metaphysics, epistemology, morals and aesthetics. His ideas played a significant role in the progression of German Idealism. His philosophical writings develop through two commonly differentiated stages namely, the 'pre-critical' and the 'critical'. The 'pre-critical' phase is from 1746 to 1770 and the 'critical' period refers to the years after 1780. It was in the 'critical' period that he offered his three major critiques the Critique of Pure Reason, the Critique of Practical Reason and the Critique of Judgement.

3.3.2 Objectives

- To make students familiar with the philosophy of Kant.
- To make them aware of the advancement made by Kant in reconciling rationalism and empiricism.
- To make them understand the concepts of a-priori and a-posteriori in the structure of knowledge.
- To make them comprehend the distinction between analytic and synthetic judgements.
- To make them understand Kant's notion of space and time.
- To make them comprehend the importance of apriori in Kant's epistemology and ethics.

3.3.3 Kant's Epistemological Enquiry

The metaphysical and epistemological problems that are very much inherent in Kant's

philosophy were his attempt to answer some fundamental questions coming from both the rationalist as well as empiricist tradition. The metaphysics in these traditions was a study of material and mental substances, causation, nature and existence of God and nature of space, time etc. On the other hand, the quest for understanding the proper functioning of mind was another important topic that his predecessors were concerned with. The most prominent epistemological problem at that time was the structure of knowledge. Kant owes a great deal to both rationalism and empiricism in the development of his own philosophy. Reconciling these two rival schools, Kant famously claimed that 'both these schools were right in what they asserted and wrong in what they denied'. In fact he declares that knowledge is not properly explained by these two schools of thought. Knowledge, according to Kant is that which is certain, universal and necessary. It begins with experience, but does not necessarily originate from it. As soon as sense-experience registers its impression on the mind, the mind at once is motivated into its own activity and contributes its own ordering activity into the discrete impressions of senses. The ordering activity is discharged by 'a-priori' elements. Knowledge proper is a joint venture of both sense and understanding. The empiricists and rationalists highlighted only one aspect of knowledge. Kant, on the contrary, claimed that knowledge begins with sense, proceeds thence to understanding and ends in reason. In his explanation of knowledge, Kant also answered an important question - where did rationalism and empiricism go wrong?

According to Kant's analysis both these theories are based on a common assumption concerning the status of objects which is accountable for their failure to explain knowledge. For rationalism and empiricism the objects of knowledge exist external to the mind. Therefore the mind has to approach them in order to know them. In opposition to this view, Kant maintains that it is the objects that must approach the mind in order to be known. This created what is popularly called as the 'Copernican Revolution' in the history of modern philosophy.

Kant calls his epistemological enquiry 'Transcendental'. He says, 'I entitle transcendental all knowledge which is occupied not so much with objects as with the mode of our knowledge of objects insofar as this mode of knowledge is to be possible a priori'. There are three modes in which the mind proceeds for ordering any empirical knowledge. In the first instance, discrete sensations have to be organised into space and time to give rise to 'percepts'. These percepts have to be organised further still by the twelve categories of the understanding in order to give rise to judgements. Percepts and concepts joined together yield empirical knowledge proper. A further process of synthesis is effected a-priori by the

three ideas of reason, namely, the world, soul and God. However, these ideas are regulative only and concerning them no knowledge is possible. This conclusion of Kant, concerning the unknowability of everything suprasensible is known as Agnosticism.

Agnosticism is that branch of philosophy according to which it is claimed that human beings have no faculty for knowing certain ultimate realities. Kant is categorical in stating that 'we know that they are but we do not know what they are'. He says that there are things-in-themselves which are unknown and unknowable. This doctrine of the unknowable follows from his transcendental philosophy. According to the transcendental philosophy of Kant only those objects are known which lend themselves to human forms of knowing. Naturally objects of knowledge would be transformed by the a-priori forms of human knowing. Therefore, Kant maintains that we can know objects only as they appear to us, coloured and transformed by our ways of knowing. What these objects are in themselves apart from our ways of knowing, of course, can never be ascertained by us. Hence, according to Kant, knowledge of the phenomena alone is possible; noumena or things-in-themselves remain unknown and unknowable. Later on, Kant has maintained, although they are not objects of knowledge, they are yet proper objects of 'faith'. So in his view the reference to metaphysical entities is only a matter of faith which cannot be otherwise demonstrated.

Kant's philosophy is primarily based on the distinction between analytic and synthetic judgements. This distinction is explained by Kant in the introduction to his Critique of Pure Reason. In fact he uses this distinction precisely to demonstrate in the critique the impossibility of 'a-priori' knowledge of metaphysics.

3.3.4 Distinction between Synthetic and Analytic Judgement

While making the distinction between analytic and synthetic judgement Kant follows Hume's distinction between 'relation of ideas' and 'matter of facts'. He explains that all judgement can be categorised in these two broad categories. Kant claims that synthetic judgements are informative and tells us about the subject by synthesising two different concepts under which the subject is assumed. Analytic judgement on the other hand, is uninformative and only serves to clarify the concept under which the subject is assumed. Along with these distinctions Kant also associates the distinction between 'a-priori' and 'a-posteriori' judgements. The former are universal and necessary and also independent of experiences whereas the latter are dependent on experience and may be true or false. Moreover he also states that analytic judgements are those in which the concept of the predicate is

always contained in the concept of the subject. For example: 'A bachelor is an unmarried male'. Synthetic judgements on the other hand are those where the concept of predicate stands outside the concept of the subject. For example: 'All bodies are heavy'. However there is another criterion he uses to distinguish analytic and synthetic judgements. It says that the denial of an analytic judgement always leads to a contradiction whereas the denial of a synthetic judgement does not lead to a contradiction. Kant uses this background to show how some a-priori judgements are synthetic and not analytic.

3.3.5 Knowledge as Synthetic Judgement a-priori

Although most of the philosophers have the tendency to put together the a-priori and analytic propositions in one category and an a-posteriori and synthetic propositions in another category, Kant claims that we find synthetic judgements a-priori in all scientific propositions particularly in mathematics and physics. According to him it is because of such propositions that we can have certainty in these two areas. Metaphysics on the other hand, does not contain such propositions and therefore any amount of certainty is impossible in metaphysics. He makes an attempt to demonstrate how synthetic judgement a-priori is possible in mathematics and physics and how it is impossible in metaphysics.

Synthetic Judgement A-priori in Mathematics

It is a known fact that mathematical propositions are universal and necessary. For instance, $4+8$ together makes 12 is universal and necessary and hence this proposition is a-priori. However, doubt arises regarding the synthetic character of such a proposition. In order to show that the proposition is synthetic we need to demonstrate that the number 12 is not contained in the subject ($4+8$). Kant explains that the subject $4+8$ only represents a uniting principle involving two numbers. He explains that when we look into the combination of these two numbers we do not think about the number 12 which is the product of the combination of these two numbers. Moreover he says that the subject $4+8$ conveys a process of addition and does not refer to any product. Although in this particular example the obviousness of the product is much evident, Kant maintains that if we take large numbers involving six to seven digits then we cannot reach the product simply by adding them in our imagination.

Criticism

Kant has been criticised for such an explanation by philosophers who claim that he simply

uses a psychological process to support his case. In order to answer his critics Kant takes up geometrical proposition to show that they are synthetic and a-priori at the same time. He takes up the statement 'the straight line between two points is the shortest'. In this geometrical proposition Kant shows that the predicate 'shortest' is not contained in the subject 'straight lines between the two points'. This is because the word 'straight' signifies quality and the word 'shortest' denotes a quantitative notion. Quantitative predicate cannot be contained in qualitative subject. Thus he shows that geometrical propositions are synthetic judgements a-priori.

Synthetic Judgement A-priori in Physics

In order to show that pure physics contains synthetic judgements a-priori Kant examines the proposition 'Every effect has its cause'. In this proposition 'effect' is the subject and 'cause' is the predicate. Although we know that this proposition is true without an appeal to experience (a-priori), we also know that this judgment is synthetic since the predicate (cause) is not contained in the subject (effect). Thus Kant shows that the statements of physics are synthetic as well as a-priori.

3.3.6 Space and Time as A-priori Forms of Intuition

Kant deals with the concepts of space and time in his 'Transcendental Aesthetics'. Aesthetic in Greek means 'sensibility' or 'sense perception' which is different from any theory of beauty. In 'Transcendental Aesthetics' he tries to show that there are a-priori forms of sensibility. He explains that everything that we perceive must be given in a particular space and at a particular time because space and time constitute the basic condition for any kind of perception. He claims that even the propositions of Mathematics and Science cannot be synthetic a-priori unless they are given in space and time. Thus according to Kant space and time are a-priori forms. It would be significant to mention at this point that when Kant divides the entire process of cognition into the three stages of sense, understanding and reasoning, he is primarily concerned about the a-priori aspect of the cognitive process and not with the objects that are known. For him a percept can be both empirical and a-priori. He explains the empirical percept as one which is derived from sense experience. A pure percept, on the other hand, is not the experience of any object but something which lies at the basis of any perception whatsoever. These pure percepts are a-priori for Kant since they are not derived from any sense experience.

Intuition, according to Kant, is the sensible perception of physical objects in their spacio-

temporal relation as well as the faculty of apprehending the physical objects. Thus in 'Transcendental Aesthetics' Kant intends to deal with the pure form of intuition namely, space and time which are necessary in all our external and internal experiences. In other words, space and time are not only a-priori percepts but they are also the pure forms of intuition. He gives two features of space and time which make them a-priori as well as pure form of intuition. These are

1. The given[ness] of space and time as pure intuition.
2. Perception of particular sensations given in spacio-temporal relation.

In order to elaborate the distinct characteristics of space and time, Kant offers two kinds of expositions:

- a) **Metaphysical exposition** here he deals with a-priori characteristics of space and time as they are in themselves.
- b) **Transcendental exposition** in this he deals with space and time in their necessary relation with the objects of sense perception.

Metaphysical Exposition of Space and Time

Kant gives the following arguments in the metaphysical exposition of space and time in order to show that they are ideal concepts.

- I. Space and time are not the empirical concepts derived from outer experiences. In fact external experiences are possible only when they are contained in space and time. Kant argues that all experiences presuppose the reality of space and time. In other words, instead of experience making the idea of space and time possible, it is the idea of space and time that make these experiences possible.
- II. Space and time are the necessary a-priori representations. Kant says, we can never think of the absence of space and time. They form the basis of all our experiences and appearances.
- III. Space and time are not the general concepts but the pure form of intuition. This is because they are essentially one and representation is possible only in one space and one time. The so-called many spaces and many times are nothing but parts of one single space and time which have only one dimension which is of succession.
- IV. Space and time are represented as the infinite given magnitudes. According to Kant, it is only the concept of space and time which contains within itself the idea

of infinite representations of parts.

Thus with the help of the above four arguments Kant tries to show that space and time are a-priori forms of intuition.

Transcendental Exposition of Space and Time

We have observed in the metaphysical exposition of space and time as to how they are given to us in an a-priori manner as things-in-themselves. In transcendental exposition, Kant tries to explain the concept as a principle from which the possibility of other a-priori synthetic knowledge can be understood. Also, it consists in showing that the propositions of Mathematics as synthetic judgement a-priori are possible if and only if space and time are a-priori i.e. they are a-priori forms of all perceptions.

Kant holds that if space and time are not a-priori then they have to be derived from some experience. Further if they are derived from experience then either they should be an appearance or they should be something which exists in their objectivity i.e. independent of mind. But we have discussed in the above arguments that space and time are not an appearance. Moreover, if they are the independent realities then they can be known only by experience. This would lead to the conclusion that the concept of space and time is empirical and cannot be universal and necessary. It is for this reason that Kant claims that space and time are a-priori.

3.3.7 Categories of Understanding

In addition to the pure percepts of Space and Time, Kant deduces the pure concepts, commonly known as the 'categories of understanding'. Kant claims that any judgment through which we arrive at knowledge presupposes certain underlying concepts which are the preconditions of any judgment whatsoever. According to Kant, most of the times we deal with empirical concepts- concepts which are derived from sense experience, for example- the concepts of horse is an empirical concept which has been derived only after observing various horses of different shape, size and color. The concept of table is similarly an empirical concept. Kant, however was not so much concerned with these empirical concepts since he believed that an empirical concept may vary from person to person depending upon how a particular individual perceives the underlying objects (e.g horses or tables) which forms a particular concept. Thus the empirical concepts have a subjective nature and lack the element of universality and objectivity which are preconditions for any objective judgment. Kant, on the other hand, was interested in apriori concepts, concepts which exist prior to any experience whatsoever and which make any proper experience

possible at the first place. Such pure or apriori concepts are derived by Kant in the Transcendental Analytic and he comes up with 12 different categories of understanding. These 12 categories correspond to the 12 different kinds of judgments as given in Aristotelian logic. These are divided into four sets of 3 categories each where the four sets correspond to the judgments concerning Quality, Quantity, Relation and Modality. The apriori categories are as under:

Quantity: Unity, Plurality, Totality

Quality: Reality, Negation, Limitation

Relation: Substance/Accident, Cause/Effect, Action/Reaction

Modality: Possibility/Impossibility, Existence/Non Existence, Necessity/Contingency.

Thus Kant claims that for any judgment to be possible at all, it must fall under these twelve categories. These categories are not derived from experience but they make all meaningful experience possible.

3.3.8 Moral Law as Apriori

In his Critique of Practical Reason (1788), Kant uses his notion of apriori in the domain of ethics. According to Kant, the moral law is not derived from experience, rather the moral law exist prior to any experience and must form the basis of our entire moral conduct. Thus unlike many other moral philosophers who try to derive moral laws from particular facts in experience, Kant claims that the moral law is based on a principle which is apriori and this apriori law gives rise to the notion of Categorical Imperative. The Categorical Imperative is central to Kant's ethics. The imperative states that one should act in such a way so as the act can become a universal law. In fact in the first and most cited formulation of the Categorical Imperative, Kant says - "Act only according to that maxim by which you can at the same time will that it should become a universal law." Kant maintains that this imperative is Categorical in nature and hence must be obeyed at all times by any rational and moral agent. Kant in fact deduces the imperative force of this maxim by claiming that since moral law is apriori to human agents, it exists prior and external to humans and hence must be obeyed categorically.

3.3.9 Conclusion

Thus we observe that the notion of apriorism forms the cornerstone of Kant's philosophy. He uses the notion of apriorism to explain the nature and scope of our knowledge as well as to develop a theory of ethics. While he introduced the notions of forms of sensibility and the categories of understanding as apriori, he also developed an ethical theory based on

the categorical imperative which is a priori in nature, according to Kant. Both of these aspects of Kant's a priori- epistemological as well as ethical- has had a great influence on the philosophy that followed Kant and his ideas keep influencing philosophers even up to this date. Although many subsequent philosophers have also disagreed with Kant's a priori, there can be no denying the fact that that he gave an altogether new direction to the way philosophy was done by making use of these novel ideas.

3.3.10 Glossary

A-priori: That which is obtained before any experience

A-posteriori: That which is obtained after some experience

Percept: Something that is perceived by the senses

Concept: An idea that is used to make sense of the percepts

3.3.11 Questions

Q1) Discuss Kant's notion of the Forms of Sensibility.

Q2) Explain the difference between analytic and synthetic judgments.

Q3) Discuss the categories as propounded by Immanuel Kant.

Q4) What is the importance of a-priorism in Kant's philosophy?

3.3.12 Suggested Readings and References

Kant, I., Critique of Pure Reason, Cambridge: Cambridge University Press: 1998.

Russell, B., The History of Western Philosophy, New York: American Book Stratford Press, 1947.

Thilly, F., A History of Philosophy, Ulan Press, 2012.

THEORIES OF REALITY

Semester-1st

Lesson No. 9

Unit-IV

Philosophy

MEANING & CHARACTERISTICS OF IDEALISM

By. Dr. Kiran Bakshi

Structure:

4. 1 Objectives
- 4.2 Introduction
- 4.3. Characteristics of Idealism
- 4.4. Difference between idealism and materialism
- 4.5 Kinds of idealism
- 4.6. To sum up
- 4.7 Suggested readings

4. 1 Objectives

- To know the meaning of idealism
- To understand its kinds
- To know its exact connotation
- To know the views of different philosophers regarding idealism.

4.2 Idealism :

It has been the endeavour of man to know the reality of the world and life since time immemorial. Idealism is one such theory which offers an explanation in this

connection. But before we embark on the detailed study of the idealism we must understand how this term is used in the world by an ordinary man. In common parlance an idealist is a person who lives life according to some lofty morals and also believes in the aesthetics and religious ideals and values. Sometimes an idealist is deemed to be a person who visualizes and advocates some plan or program that is too ideal to be practical. In this sense every reformer is an idealist.

Some issues regarding idealist philosophy:

- 1) **Ideal versus things:-** The conflict between ideas and things has been a major problem of philosophy. It is in fact a conflict between idealism and materialism, idealism holds that only ideas are real and things are not real whereas materialism holds that material things are real.
- 2) **Mental versus Material:-** In idealism the mental is considered to be superior to the material. All material things are made of matter. Matter is worldly and a non-mental reality. It is not above change and mutation. Ideas are not made of any matter and hence they are not subject to destruction which all matter has to face in the course of time.
- 3) **Man versus Machine:-** Materialism holds that this world is governed by strict mechanical laws. World is a big machine which works according to scientific and deterministic laws. But for idealism man is more important and central than the machine. The materialists considers man also as a machine. Man is relegated to subordinate position in the scheme of things. However for an idealist, there is an inner harmony between the rest of world and man. Man is at the center and is not alien to the world. He is not a creation of chance. The Universe relies on the higher values of truth, beauty and goodness. This process is reflected in man's search for truth, beauty and goodness.

Idealism and knowledge :

There are two chief theories regarding the nature of knowledge :

- a) **Subjective :-** According to this theory all knowledge is subjective. In this world the things are not real, only ideas are real. There have been many advocates of this theory.

Prof. Berkeley has said, "Esse est percipi" this means the essence of all knowledge lies in perceptions.

- b) Objective: - This theory holds that objects have got an independent existence of their own. Reality is not mental alone. It is objective also. If there are no objects there can be no ideas. Objects come first and ideas later on.

4.3. Characteristics of Idealism :-

- 1) Existence of the universe in the mind.
- 2) Spiritualistic explanation of universe.
- 3) Teleological explanation for creation of the universe.
- 4) Synthesis between nature and man.
- 5) Evaluative explanation of the universe
- 6) Man as the centre of the universe.
- 7) Special emphasis on normative & social sciences.
- 8) Belief in conceptual knowledge.
- 9) Stress on spiritual aspect of the universe
- 10) The universe is knowable

(1) **Existence of the universe in universe:-** Idealism believes that the universe exists in the mind & the entire world is fundamentally of the nature of spirit or mind.

(2) **Spiritualistic explanation of universe:-** Idealism is against mechanistic explanation of universe, for it is inadequate. It does not believe that the universe can be explained on a mechanistic principle. According to it the existence of the universe can be explained by the spiritual process only.

(3) **Teleological explanation of the universe:-** According to this explanation, human life and natural processes have common objectives which both simultaneously try to accomplish.

4) **Content of Epistemology: -** The idealists believe in idealism. It means that only the thoughts, selves or ideas are real. The materialists outrightly reject this theory and give importance to matter. They believe that it is matter alone which forms the basic content of the world.

5) **Relation between man & nature: -** The idealists believe in the harmonious working of nature and man. They regard man as the centre of the universe. The

materialists reject this theory and give more importance to the physical aspects as compared to the mental.

6) **Difference in philosophy:** - The philosophy of idealist is idealism and the philosophy of the materialists is realism. Thee realists, unlike idealists, consider the object as having more reality than their ideas.

7) **Different faith in sciences :-** The idealists have more faith in the normative and social sciences whereas the materialists believe more in the positive or natural science such as physics, chemistry, Biology etc. These are more acceptable to a materialists as compared to Logic, Ethics and Aesthetics.

8) **Different in outlook :-** The idealists have a spiritual outlook and the outlook of materialists is material. The idealists recognize a spiritual element in the man and universe where as the materialist consider everything as having a physical aspect.

Comparison between idealism and materialism

Idealism	Materialism
1) The idealists believe in the supremacy of mind, thoughts, or ideas.	1) The Materialists believe in the supremacy of matter.
2) According to idealists, the elements of creation are reason, thought, values etc.	2) The elements of creation according to the materialists are matter, motion and energy.
3) Idealists establish the supremacy of ideas over matter.	3) Materialists establish me supremacy of matter over mind.
4) The idealists believe in idealism on the content of epistemology.	4) The materialists believe in realism on the content of epistemology.
5) Idealists believe in the harmonious working of man and nature.	5) Materialists believe more in the physical energy.
6) The philosophy of idealists is idealism.	6) The philosophy of materialists is realism.
7) Idealists believe more in the teleological aspect of life.	7) Materialists believe more in the deterministic aspect of life.
8) Idealists give importance to normative sciences.	8) Materialists give importance to the positive or natural science.
9) The idealists have a spiritual outlook	9) The materialists have a material outlook.

Kinds of Idealism :

1) Subjective idealism:- Subjective idealism denies the existence of the external objects and reduces them to the subjective ideas of the finite mind that perceives them. The so-called external objects are sensations produced in the minds of perceivers by God.

Berkeley is an advocate of subjective idealism. He denies the existence of the external world. The theory of subjective idealism is termed subjective in as much as the reality depends upon the subjective states of mind.

According to Berkeley existence lies in perception, meaning there by that a thing exists only when it is the subject of perception. His famous statement is 'Esse Est percipi'. It means existence is perception.

Berkeley held that matter is nothing but a cluster of qualities; and all the qualities of matter both primary and secondary are nothing but subjective states or ideas of mind. Berkeley admits the existence of minds only i.e. finite mind and infinite mind.

There is no necessary connection between a material object and sensation. An object can never be perceived apart from its sensations. The subjectivist holds that there can be no object or its perception without a knower. Thus only perception by mind and the mind itself is real. The world is a mental world. The sensations produced by God are the real ideas and the ideas excited by imagination are less vivid & vague. This is the difference between imaginary and real things.

2) Phenomenalism:- Kant is phenomenalist, who stands midway between subjective & objective idealists. For Kant there are three realms. There is the inner realm of subjective states, which is purely personal and not the realm of knowledge. There is the outer world of ultimate reality, the noumenon, which by its very nature is unknown and unknowable. Man's contact with this realm is achieved through the

sense of duty or the moral law. There is also the world of nature or the phenomenal world, which is the realm of human knowledge.

Kant said that there is some objective reality in the back of phenomena knowledge results from the mind's action upon sensation. We know the real as it appears and never as it is. For this reason Kant's philosophy is usually identified with phenomena.

According to Kant, the mind has certain innate ways of working. Form and order are thrust on nature by the mind. Sensory experience furnishes mind its content. The mind is active, it forms the raw sense data into a system of knowledge. Just as a potter takes the formless clay and fashions it into one form or another, so the mind forms or organizes material of the senses. Thus our thoughts regarding the world are determined in large part by the structure of the mind.

3) Objective Idealism:- Objective idealists regard knowledge as determined by the nature of the world itself. They are idealists in the sense that they interpret the universe as an intelligible entity. When they say that the ultimate nature of the universe is mental, they mean that the universe is one all embracing order, that its basic nature is mind, and that it is an organic whole. The beginning of idealistic speculation in western culture is often attributed to plato. Plato believed that behind the empirical world there is an ideal world of forms or ideas. He believed in the objective reality of the highest forms, e.g. the concept of man has got more reality than any individual person has.

Hegel has also propounded one of the best known systems of objective or absolute idealism. According to him thought is the essence of the universe, and nature is whole of the mind objectified. The universe is an unfolding process of thought. The world expresses itself in thinking; our thinking does not determine the nature of the world. When we think of the total world order and the spiritual levels of existence, we

speak of the absolute or God. Instead of the static reality, Hegel sets forth a dynamic conception of world.

The objective idealists do not deny the existence of objective world or reality. The existence in this context means the existence in mind. This belief in meaning and intelligence in the structure of the world is a basic assumption underlying idealism.

8.4 Suggested Reading:-

Elements of philosophy -Dr. Surinder Kumar

Introduction to philosophy -Patrick

THEORIES OF REALITY

Semester-1st

Lesson No. 10

Unit-IV

Philosophy

MEANING AND CHARACTERISTICS OF MATERIALISM

By. Dr. Kiran Bakshi

Structure:

- 4.1 Objectives
- 4.2 Introduction
- 4.3. Historical aspect
- 4.4. Kinds of Materialism
- 4.5 Characteristicis of Materialism
- 4.6. Grounds for support
- 4.7 Criticism of Materialism
- 4.8 To sum up
- 4.9 Suggested reading
- 4.1 **Objectives**
 - To know the reality
 - To know different views regarding reality
 - To know historical perspective of materialism

4.2 Introduction: Materialism is a doctrine of philosophy which holds that matter is the ultimate reality of the life and universe. It is as old as humanity. There have

been people at all times and ages who have considered matter to be the ultimate stuff of the universe. They believe in the existence of a mechanical order in the universe.

Prof. Bahm says, "The materialists hold that the world is governed by strict mechanical forces and laws."

The materialists do not believe in the existence of any spirit or idea. Even the mind is also considered to be a by-product of matter. The materialists have a scientific concept of matter. They think that science is fully capable of explaining every thing in this world. All the actions and things are governed by the laws of materialism. Physics, Chemistry, Biology and many other sciences have got certain rules and principles. All these can easily explain the matter under investigation. In this way there remains no need of any divine power or God.

Prof. Titus says, "Materialists deny the existence of any spiritual or divine power."

In contrast to idealism, materialism prefers and asserts the superiority of material things over ideas. In the modern time, materialism has become very popular. People are following this philosophy not only in metaphysics, but also in ethics and their daily life.

Prof. Mackenzie says, "Materialism and hedonism have become the dominant notes of modern life."

Modern materialism holds that the universe is an unlimited material entity. The universe including all matter and energy have already existed and will always exist.

Karl Marx says, "The world is a hard, tangible, material, objective reality that man can know."

Materialism holds that matter existed even before mind. Such a doctrine is opposed to all kinds of idealism or spiritual theories which rule out the existence of matter. The history of materialism is as old as the human history.

4.3. Historical Perspective

Ancient Period : It was for the first time in Greece that history of materialism

began. The ancient Greek philosopher, Democritus and his master Leucippus first advocated the philosophy of materialism. Democritus believed that body was made of a number of material elements. According to him, the Chemical structure of the different bodies is the same. They only differ in their external appearance. He did not believe that there was any purpose in the world. Even the soul according to him, was made of atoms which were a little more refined and smooth than those which went in to the building of other beings of things.

Epicurus, who followed Democritus, also advocated a materialistic philosophy. His ideas are found contained in the poems of the Roman poet, Lucretius.

Older Materialism believed that the atoms are eternal and they are in motion through empty space. Ends or purposes do not exist in nature nor does freedom. Matter in motion under the operation of natural laws will explain the world and all that it contains. Democritus emphasized the method of analysis. His followers, the Epicureans emphasized, the peace of mind which is the outcome of a materialistic world view. The term 'Atomism' has usually been applied to the kind of materialism held by Democritus and his followers.

Thus, we see that the older materialism including the earlier forms of the modern theory was very dogmatic. It felt quite sure that the whole world, including life and mind and human society and art and literature and human history, could be explained as the result of the redistribution of matter and motion, or of atoms moving in empty space.

Materialism is usually described as a form of monism, reducing all reality to one single kind of being, namely matter. Historically materialism have never succeeded in realizing the ideal of oneness. Even the Greek atomists assumed two first principles, atoms and motion, besides empty space.

Modern Period : In the modern period materialistic philosophies developed in Europe. They were formulated and presented by Thomas Hobbes in England, Karl Vogt, J. Moleschott, L. Buchner were other notable materialists of the era.

These philosophers considered the definition of materialism as presented by Newton to be the most satisfactory. But this definition was later found to be inadequate and therefore rejected. The recent analysis of atom has presented a new picture of Nature in which the matter as explained by materialistic philosophers hardly finds any place. It is believed today that we know too much of matter to be materialists any more.

4.4. Kinds of Materialism

1) **Gross Materialism** : According to this kind of materialism gross matter is thought to be the ultimate stuff of all the things. These thinkers subscribing to this view are crude materialists who do not get into the detailed ramification. They believe in the ultimate reality of gross, unrefined matter. If there is any thing which can be called ultimate, it is primal, unformed matter. The old philosophies believed that there are five basic elements of which matter is constituted. These are earth, water, air, fire and ether.

2) **Mechanistic Materialism** : According to this kind of materialism the world is governed by strict mechanical laws. The laws of physics & mechanics govern the affairs of the world.

Mechanistic materialism interprets mind and consciousness as a kind of physiological behaviour. In the field of physiology the study of behaviour is considered to be very important. The concept of consciousness is rejected in such a view.

3) **Dialectical Materialism** : Dialectical materialism is a very important doctrine of modern times. It is based on dialectic. The dialectical method is a very old method of philosophy. It is based on three basic constituents i.e. thesis, antithesis and synthesis.

The thesis is the statement of the problems or the facts. The anti-thesis is the examination of its opposite. The synthesis refers to the combined result of the contradictions.

Marx was the Chief advocate of the dialectical materialism. He took up

dialectical method from Plato and Hegel. He distinguishes between two types of materialism.

The first is Historical and the second is dialectical. Historical materialism states that all events of history are ultimately governed by the major materialistic causes. All wars and other important events of the world took place either because of money or woman or land or some other material things.

The materialistic conception of history is the basis of historical materialism. The second kind is known as dialectical materialism. According to this theory, materialism is guided by the laws of dialectic wherein a thesis and an antithesis give rise to a synthesis.

5.5 Characteristics of Materialism

The following are the Chief features of materialism which have developed in the course of historical progress.

- a) Matter as the ultimate reality.
- b) No qualitative difference between different bodies.
- c) Matter modified into life.
- d) Developed form of matter is mind.
- e) Mechanism & determinism.
- f) Materialistic explanation of things.
- g) Hedonistic ethics.
- h) Matter, a substitute for God.
- i) Things versus ideas.
- j) Superiority of the material over the mental.

a) Matter as the Ultimate Reality : The materialists believe that the universe is made of matter. The matter is the basic stuff of the world. There is motion in the matter. All the living beings and the things in the world are made of this matter and its motion.

b) No Qualitative Difference : The materialists refuse to admit that there is any qualitative difference between one thing and another. According to them, all things are made of atoms and the distinctions that appear are owing to material atoms. Whatever distinctions are seen are quantitative and not qualitative. It would be better to say that qualitative difference is produced by quantitative difference. This is proved by the conversion of electrical and mechanical movements into one another.

c) Developed form of matter is mind : Another religious theory that materialists reject is that mind is a substance or the soul in the body. According to them the unity that appears in the human personality is only temporary. Everyone has a brain in it which is made of material substance. All mental activities occur due to it.

e) Mechanism and determinism : When the materialists present a mechanical explanation of man's behaviour they rule out the possibility of free will. They believe that whatever man does is always determined by the environment.

f) Materialistic explanation of things : Society, according to materialists, is made of nature. The social relationship is due to physical contact of the people. It is only through physical instruments that all activities in society are performed.

g) Hedonistic ethics : The materialism believes in the theory of hedonism so far as morality is concerned. If one tries to avoid pain and seek pleasure, they argue, it is a psychological fact and it points to the truth that only pleasure should be sought. The human relationship grows because its root is physical needs and the influence of environment on them. Even beauty and truth have materialistic explanation according to them.

h) Matter, a Substitute for God : Generally speaking, materialists are atheists. They do not believe in God, who, they argue, is the creation of man's mind. They say that there is no need for God to explain the creation of the world. This can be done on the basis of physical laws. Only the matter is creator. Whatever is attributed to God should be attributed to matter.

The main characteristic of the materialism is that it is free from any kind of dualism.

i) Things Versus Ideas : Materialism holds that the things are primary. They

came first in the scheme of things. If things are not present in the world the ideas can never be made. The idealists think that the ideas are primary. They consider idea to be eternal & ever lasting.

j) Superiority of the material over the mental : Materialism holds that matter is superior to mind. Mental processes are nothing but the manifestation of some material forces. The advocates of materialism think that the mind is nothing but an extension of matter. Thus all mental activities and mental functions are just like the properties of matter. When matter becomes highly sophisticated and refined, it changes into mind and mental modifications.

4.6 Grounds for Support : The materialists have produced many arguments to support their theories. The arguments are as follows :

- a) Perception and experiment,
- b) Real explanation
- c) Only physical phenomena
- d) Comparative psychology
- e) Conservation of energy
- f) Theory of evolution.

Let us now consider these arguments one by one.

- a) Perception & experiment :** Only the matter is perceived by us and not mind or God.
- b) Real explanation :** Materialistic explanation is scientific and more acceptable as the same materialistic principles are applicable to explain everything in the world.
- c) Only physical phenomena :** It has been proved with the help of science that mental phenomena are the results of physical activities or the activity of brain.
- d) Comparative Psychology:** The comparative psychology also supports materialism. The comparative psychologists trace the localization of all mental functions in the brain.

e) Conservation of energy : According to the scientific principle of conservation of energy, the quantum of energy does not undergo change. It remains the same in all conditions.

f) Theory of evolution : The modern theory of evolution also believes, as the materialists do, that the life has evolved out of matter.

4.7. Criticism of materialism : The following arguments have been presented against the theory of materialism.

- a) Modern physics rejects materialism
- b) Psychological and social sciences also reject it.
- c) The theory of evolution is against it.
- d) The materialists differ among themselves
- e) Perception does not support matter
- f) The principle of conservation of energy refutes materialism
- g) No synthesis between unity and multiplicity.
- h) Intellectual laws cannot explain the world.
- i) Matter different from atoms
- j) Difference between mental & physical activity.
- k) Mechanical laws can not be applied in human sphere
- l) Purpose cannot be explained by materialism.
- m) Faith in values hit by materialism

a) Modern physics rejects materialism : According to the modern physics, the so called matter is formed of energy whose nature is still unknown.

b) The theory of evolution against it : It is found that this very theory condemns the materialistic hypothesis because, according to the materialists, the matter is absolute whereas the theory of evolution makes no such absolutistic claim.

- c) **Rejection by psychological & social sciences :** These sciences along with philosophical science have now refuted the mechanistic explanation of psychological and social phenomena.
- d) **The materialists differ among themselves :** Some materialists believe that in the beginning of creation there were three elements the material atoms, space and time. Here also the difference of opinion is found on the question whether the atoms are active or inactive.
- e) **Perception does not support the matter:** The materialists do not accept the existence of anything which is not perceived. Many philosophers believe that matter can not be proved by perception as it is only certain qualities which are perceived by the human senses and nothing called matter as such is perceived.
- f) **The principle of conservation of energy refutes it :** There is difference of opinion among the psychologists over the question if the mental & physical processes are one or two. If these are considered to be different the principle of conservation of energy does not prove to be true, which would refute the materialists theory.
- g) **No synthesis between unity and multiplicity :** When the materialists admit that the universe was created by atoms, they place more importance on multiplicity than unity. But on the other hand by admitting the atoms to be undivided units the materialists have been unable to explain unity.
- h) **Intellectual laws cannot explain the world :** The materialists claim that universe can be explained by mechanical and mathematical laws. Critics argue that these two can not explain everything.
- i) **Matter different from atoms :** Materialists have given all the qualities of God to matter. On the other hand they give the qualities of creation to the atoms. So their theory is self-contradictory.
- j) **Difference between mental & physical activities :** The Characteristics of mind are not found in matter. While matter can be controlled by mind, mind cannot be controlled by matter.
- k) **Mechanical laws cannot be applied in human spheres :** The Chief

characteristic of man is his freedom of will. This is the principle which materialism cannot explain adequately.

l) Purpose cannot be explained by materialism: The change in the world has been called by the materialists as an accident in the mechanical processes. Such an argument does not serve the purpose of evolution.

m) loss of faith in values : Materialism strikes at the very root of values we have long cherished and on which our society and culture is based.

4.8 To sum up : The philosophy of materialism has a great appeal to the modern man. Infact materialism provides to us readymade and short cut ways to success and enjoyment. It also provides the scientific explanation to things. It goes to the extreme of considering matter as the source of everything.

Thus, the materialists think that science is fully capable of explaining everything in this world. All the actions and things are governed by the laws of materialism.

THEORIES OF REALITY

Semester-1st

Lesson No. 11

Unit-IV

Philosophy

Realism : Meaning, Kinds and Chief Tenets of Realism

Structure:

4.1 Objectives

4.2 Introduction

4.3 Chief tenets of Realism

4.4 Kinds of Realism

4.5 To Sum up

4.1 Objectives

- To make students aware of the meaning of Realism.
- To acquaint them with the concept of objectivity.
- To help them differentiate between the idealistic and the realist approach.
- To know the different kinds of realism.

4.2 Introduction or Meaning of Realism

Realism is the theory that holds that the existence of objects is real. Both realism and objectivism are metaphysical theories concerned with the existence of things. In epistemology realism holds that in the process of knowledge things are independent of the existence and influence of the knower. Hence the main tenet of this

theory in the epistemological field is that object and its qualities are independent of and uninfluenced by the knower and the process of knowledge.

For the realist, the world is real. The things and the person along with qualities and relations are real. The existence of this world is in no way dependent upon any knowing mind. The idealists on the other hand, argue to the effect that there cannot be any world independent of mind and if a thing or quality is to exist it must be perceived or known by a mind. Materialism on the other hand holds that ultimate reality is material. But realism is different from both of these theories viz idealism and materialism. The idealists hold that the object is that which exists for a mind as an idea, the materialist believes in the material construction of the mind but the realists hold that the object is independent of the knowing mind. The realists contend that the object exists outside the mind.

Realism was revived in modern times through a reaction against absolute idealism. Since it supports common-sense and science so it again came into prominence in the 20th century after a long dominance of idealism in the 19th century philosophical thought.

The outlook of the realists is mainly pluralistic. They believe that the ultimate reality is vested in the particular objects of experience rather than in an organic whole which has only a secondary existence. The method used by the modern realists is the critical analysis. They regard the synthetic construction of philosophical views either as impossible or as fruitless. The realistic attitude however is not a new one in philosophy. Modern realism draws its sustenance from the different forms of ancient realism. Modern Realism has flourished most in Great Britain and America. G.E. Moore and Bertrand Russell are the great leaders and the founders of the modern realism in Britain.

4.3 The Chief Tenets of Realism :

The following are the chief tenets of realism :

1. Existence of objects is independent of knowledge :

According to the Naive realists the objects exist irrespective of our knowledge

of them and our thoughts about objects only describe the actual qualities of objects. Scientific realism accepts the existence of objects independent of the mind but according to it thoughts concerning the objects are based on the mind.

2. **Qualities are inherent in known objects :** According to the Naive realist the object or its qualities do not suffer by becoming the subjects of knowledge but according to the scientific realist this theory does not hold true for secondary qualities.
3. **Knowledge of objects is direct :** According to the Naive realist knowledge of the objects is direct and perceptual. According to the scientific realism, this is true of simple thoughts, for in complex thought knowledge is indirect since complex thoughts are made up of simple ones.
4. **Objects are Common :** According to the Naive realists, objects are common while according to the scientific realists, objects are commonly available only for the purposes of primary or elementary thought. Scientific realism holds that the same object may be experienced differently by different individuals.
5. **Relation between object and thought :** Naive realism holds that there is a relation of exact correspondance between object and its thought, but the scientific realists reject this theory.
6. **Modern realism is related to epistemology :** Modern realism is mainly an epistemological doctrine as compared to ancient realism which was mainly a metaphysical doctrine.
7. **Modern realism supports science and commonsense :** The modern realism supports commonsense and sciences. It is against any kind of idealistic unscientific explanation of reality.
9. **Pluralistic Outlook :** The outlook of the realists is mainly pluralistic. Ultimate reality according to them, is vested in the particular objects and not in the whole.
10. **The method:** The realists make use of the analytical method and not the

synthetic method.

10.4 The main types of Realism

Realism has assumed various forms and all thinkers are not of the same opinion as to the nature of knowledge and the reality of the external world. Some realists hold that in perception we directly know the external things and these things are our objects of perception. Other realists are of the opinion that we know the external reality indirectly through the medium of ideas which are in mind and ideas are about objects of perception. So there is difference of opinion among the realists also due to the various forms of realism.

The main types of realism are the following :-

1. **Naive or Popular realism:** Naive realism is based on the common-sense according to which objects are independent of mind whether they are known or not. Objects possess their own qualities and knowledge does not affect the object. The objects are what they appear to be. They are known directly and objects are common for all. The naive realists consider this world as an aggregate of many independent objects. The existence of things and their qualities does not depend on their being cognized by any mind. Things exist with all their qualities even when no mind thinks or perceives them. Things are known through our consciousness. Our consciousness is like a beam of light which shines through the sense-organs and illuminates the world just as it is.

1. Chief Characteristics of Naive Realism

1. **Objects exist independently of knowledge of them:** Objects do not come into existence when they are known since they continue to exist even when no mind is perceiving them.
2. **Objects possess their own qualities:** Each object has its own qualities and characteristics the existence of which does not depend upon the knower.
3. **Knowledge does not influence objects:** Knowledge of an object or its qualities does not have any influence on either the object or its

qualities.

4. **The object is what it appears to be :** There is no difference between the form and nature of the object, it is exactly what it appears to us. In this way there is no difference between the reality of the object and the experience of it.
5. **Objects are known directly:** Nothing intervenes between the object and the knowledge of it. They are the subjects of our experience and we experience them for what they are.
6. **Objects are public:** The knowledge of an object is not limited to any individual. Many people can have experience and knowledge of the same object. Therefore, objects and their knowledge both are public.

II. Neo Realism: Neo-Realism is a novel approach to the Platonic theory of reality. In this theory it is believed that the total object is not the subject of knowledge but its aspects are, and they are independent of knowledge. The qualities of the objects are its own and do not affect the objects. An object is what it is manifestly seen to be. Knowledge of the aspects of an object is direct while logical entities are universal.

The following are the chief tenets of Neo Realism.

1. **Objects are independent of knowledge:** Both Naive-realism and Neo-realism are same with respect to the independence of knowledge. Both of them hold that the existence of the object is independent of knowledge.
2. **Qualities are part of the known object:** According to both these theories all qualities are in the object itself, not in the knowledge of them. They do not make any distinction between primary and secondary qualities.
3. **Nature of object is not influenced by knowledge of it:** Objects and their qualities exist even when there is no consciousness to take cognizance of them.

4. **Objects are what they appear to be:** Both Naive and the Neo realism accept that there is no difference between the object and its conception, that all impressions of the object are as real as the object itself.
5. **Objects are known directly:** The neo-realists are of the opinion that the subjects of our perceptions are not complete objects but some of their aspects which are known in our perceptions are known directly.

III. Scientific Realism : The doctrine of scientific realism or representationisms, introduced by Descartes and Locke states that mind never perceives anything external to itself. Mind can perceive only its own ideas - its own states and processes. Consciousness instead of being a beam of light illuminating external reality is like a photographic plate on which external things are represented. There are two types of qualities viz. primary and secondary. Primary qualities are not affected by the state of mind whereas the secondary qualities like taste, smell etc are affected by the mind. The primary qualities belong to the objects so they are objective whereas secondary qualities depend upon the perception of objects by the mind.

This theory of Locke is known as Representationalism because it asserts that we do not know external things but only their representations or copies.

The following are the characteristics of Representationalism.

1. **Objects exist independently of knowledge:** The Representationalists share this belief with all other realists that objects exist independently of the knowledge of them but they differ in as much as that even though ideas are aroused by objects they depend upon the mind.
2. **Primary qualities of the object do not depend upon the knower:** Primary qualities are size, shape, length, solidity etc. They are not dependent upon the knower. Only the secondary qualities like touch, taste, smell etc. are dependent on the knower.
3. **Objects and its primary qualities are not affected by the ideas:** Mind does not conjure up primary ideas which are the images of

primary qualities. So it does not even modify the impressions thrown up by the object and its primary qualities.

4. **Objects are what they appear to be in primary idea but not what they appear to be in secondary ideas:** Locke differs from the Naive realists when he believes that only primary ideas are the symbols of the object and not the secondary ideas.
 5. **Knowledge of real objects in indirect :** According to Locke we can never know the real nature of an object because our knowledge of it is indirect. We know the object through simple ideas which are representations of it.
 6. **Primary ideas are public:** Since the primary qualities are objective so the primary ideas are public. On the other hand secondary qualities are dependent upon the mind so the ideas that are formed of the secondary qualities are not public and objective.
4. **Critical Realism:** The Critical Realism believe that the existence of objects does not depend upon knowledge in any way. The object is directly known. Critical realism does not hold the object of knowledge as it is seen to be. When the object becomes object of knowledge it is influenced by knowledge. Knowledge can be direct as well as indirect. The relation between the knower and the known is not direct but takes place through the medium of thought which is the subject matter of knowledge. Different people can have different knowledge of an identical object.

The following are the characteristics of the critical realism..

1. **Objects are independent of knowledge:** Critical realists, like all other realists believes that the objects known are independent of the knowledge of them. The objects keep on existing without even being known.
2. **Qualities are independent of knowledge :** According to the critical realists, the qualities of the objects are independent of the knowledge of them.

3. According to critical realism although objects are independent of knowledge and the knower, it is knowledge which creates the object as a subject of knowledge.
4. The critical realists believe that all knowledge is indirect. According to them knowledge has reference to the directly perceived object but the object is not its cause.
5. Critical realists hold that thoughts exist between the knower and the known.

SYMBOLIC LOGIC

Semester-1st

Lesson No. 12

Unit-V

Philosophy

5.1 Definition, Nature and Scope of Logic

By Dr. P. P.Singh

Structure:

- 5.1. Objectives
- 5.2. Introduction
- 5.3. Definition of Logic
- 5.4. Nature of Logic
- 5.5. Scope of Logic
- 5.6. To sum up
- 5.7. Suggested Reading
- 5.8. Exercise

5.1. Objectives

- To enable the students to understand what logic is.
- To give them an understanding of the methods of logical inference, both inductive and deductive.
- To enable the students to develop a critical attitude towards assumptions and presuppositions of logic.
- To assist the students to improve their own powers of cogent reasoning.
- To make the students familiar with the subject - matter with which logic deals.

5.2. Introduction

Philosophy is not a sheer speculative activity and should not be confused with it. Philosophy is infact based on good reasoning. Logic as the science of reasoning is the study of whether or not a putative conclusion can be correctly derived from a given set of premises.

The word 'Logic' is derived from the Greek word *logos*, which means thought, reason or discourse. It is thus the pursuit of correct reasoning, which seeks to investigate and establish the criteria of valid inference and demonstration.

Reasoning is the process of inference; it is the process of passing from certain propositions already known or assumed to be true, to another truth distinct from them but following from them. It is a discourse or argument which infers one proposition from another, or from a group of other propositions having some common elements between them . When inference is expressed in language, it is called an argument.

However, reasoning is guided by certain principles. These principles are rules of inference or forms of arguments which tell us when we are reasoning correctly i.e following the rules or incorrectly breaking the rules. In this sense, logic is the study of the structure and principles of reasoning. It is the study of the principles governing valid argument. In other words, logic is an examination of some of the general principles for distinguishing sound arguments from unsound ones and an endeavour to pick out some of the commonest kinds of error in reasoning. Logic may also be defined as the science of the Laws of Thought. It is the science of the principles to which thoughts must conform in order that they may be valid.

Sometimes, logic is defined as the science of the principles and rules of valid inference. It is concerned with whether the premises of a given argument warrant acceptance of the conclusion.

Some of the well known definitions of logic are:

1. Aldrich defines logic as " The art of reasoning".
2. Whately amends the definition given by Aldrich and defines logic as " The

art and science of reasoning”.

3. In the words of Thomas, “Logic is the science of the Laws of thought”.
4. Arnauld defines logic as “The science of the understanding in the pursuit of Truth”.

5.4. Nature of Logic.

Defining logic as the science of reasoning provides only a general indication of its nature. Indeed the nature of logic can be studied under the following headings.

- I. **Logic as a normative science:** A normative science is concerned with the norms and values rather than with facts. It deals with things as they *ought to be* rather than as they *are*. Logic is a normative science, because it deals with thoughts and reasoning not as they are but as they ought to be. Logic sets before itself the ideal of Truth, and seeks to know the conditions which our thoughts must fulfill in order to attain the ideal of Truth. Moreover, logic is not concerned with the psychological process of reasoning.
- II. **Logic as a formal Science :** Modern logic aims merely at formal Truth. It is mostly concerned with the forms of thought i.e. with the manner of our thinking irrespective of the particular objects about which we are thinking. In logical thinking, we are not concerned with the question whether the premises are true as a matter of fact, we only deal with the question whether the conclusion correctly follows from the premises or not. The validity of an argument in logic is determined not by the content of the argument but by its *form*.
- III. **Logic as a Science and an Art.** Logic is both a science and an art. A science teaches us to know, and an art teaches us to do. Logic is science in so far as it gives the student an understanding of the nature of the principles and methods of logical inference, and logic is an art because it assists the student to improve his own powers of cogent reasoning so that he may be able to pick out some of the commonest kinds of error in reasoning. In this way, logic has a theoretical as well as a practical side.

- IV. Logic as the science of sciences:** Logic has indeed been described as the science of sciences (*Scientia Scientiarum*), because while the different sciences deal with different departments of the world, knowledge of the fundamental laws of valid thought with which logic deals is indispensable to all of them. Every science must conform to the general laws of correct thinking with which logic is concerned. Logic is thus the basis of all the sciences.
- V. Logic is a deductive as well as an Inductive science:** Logic as the science of reasoning includes both the deductive and the inductive procedure. Deduction is a method of reasoning which aims to establish the truth of propositions. It is a method of formal proof or demonstration. Induction is also a method of reasoning. It may be defined as the method of arriving at general conclusions of varying degrees of probability on the basis of factual evidence. It is generally designated as the method of discovery.

SYMBOLIC LOGIC

Semester-1st

Lesson No.13

Unit-V

Philosophy

5.2 Scope of logic:

In its broadest sense logic is the study of the structure and principles of reasoning or of sound argument. Within the study of reasoning which aims to establish the truth of Propositions, the major distinction is between deductive and inductive methods of reasoning.

Deduction is a method of formal proof or demonstration. In this process of reasoning we first lay down certain statements which we know or presume as true (such statements are called premises) and then infer or deduce some new propositions from the given ones which functions as conclusion of our argument. Indeed, a deductive argument or inference, is one in which the conclusion follows necessarily from the premises. And if the premises are true in a valid deductive inference, then the conclusion will also be necessarily true. It is therefore contradictory in a deductive inference or argument to assert the premises and deny the conclusion followed by them. It is in deduction that we move from the premises to the conclusion, or we may say that the conclusion follows from the premises or that we infer the conclusion from the premises, or that the premises imply the conclusion. There is a certain relation of implication between the premises and the conclusion. Deductive method has somewhat the characteristic of syllogistic reasoning. It is sometimes defined as the inference from general premises to a particular conclusion by means of a syllogism. An example of it is hereunder.

All men are mortal

Socrates is a man

Therefore, Socrates is mortal

In a deductive argument the conclusion necessarily follows from the premises. This means that if the premises are true, the conclusion must be true.

Induction is also a method of reasoning. It is usually contrasted with deduction. It may be defined as the method of arriving at general conclusion of varying degrees of probability on the basis of factual evidence. It is generally designated as the method of discovery. Induction may also be described as that process of reasoning by means of which we derive the premises of an argument. It usually consists of some form of generalization from a number of particular instances to a universal proposition. It is sometimes defined as the inference from particular premises to a general conclusion. Inductive reasoning starts with particulars and ends with generalizations regarding those particulars. It never gives us a conclusion as certain as the premises. Its conclusions are merely probable. An example of it is hereunder:

This is a crow and is black

That is a crow and is black

That is a crow and is black

Therefore, all crows are black.

Inductive argument does not guarantee that the conclusion must be true if the premises are true. Instead, inductive argument provides evidence that shows merely that the conclusion is probably true or that it is reasonable to accept the conclusion on the basis of the evidence.

Logic has also been defined as the science of the valid thought. It is concerned with two aspects of thought, viz.

(i) Processes of thinking

(ii) Products of thinking

(i) **Processes of thinking:** The processes of thinking are Conception, Judgement and Reasoning.

(ii) **Products of Thinking:**

The products of thinking are terms, propositions and arguments when expressed in language. Logic deals both with the processes and with the products of thinking.

Besides the above, Logic investigates the nature of Truth. It is concerned both with Formal and Material Truth. Formal truth means free from self-contradiction amongst thoughts themselves. Material truth means correspondence of thought with things of the actual world. Formal Logic aims merely at formal truth. It includes all forms of deductive reasoning. Material Logic aims not merely at formal truth but also at material truth. It includes all forms of inductive reasoning. Meaning and rules of syllogism

The scope of logic has therefore been classified into inductive and deductive logic. Inductive logic includes fundamental laws of thought, types of propositions, definition, classification, formation of propositions and fallacies incidental to inductive reasoning. Deduction logic includes hypothesis, explanation, classification, nomination and other such processes. Thus all these falls within the scope of logic.

13.6 To sum up :

Logic is the branch of Philosophy that examines the nature of argument, focusing on the principles of valid reasoning, the structure of propositions and the methods and validity of deduction. More specifically, logic is concerned with arguments: their types and structures; the relationships among the propositions within the arguments and the basic principles governing valid argument.

13.7. Suggested Reading

- | | |
|---------------------------------------------------|---------------------------------|
| 1. Textbook of Deductive Logic | By Bhola Nath Roy |
| 2. Logic and its Limits | By Patrick Shaw |
| 3. Logic: A very short Introduction | By Graham Priest |
| 4. Introduction to Logic | By Irving M Copi and Carl Cohen |
| 5. An Introduction to Logic and Scientific Method | By M.Cohen and E.Nagel |

13.8 Exercise(Answer the Questions)

1. Define Logic and discuss its nature.
2. Logic is the science of reasoning. Explain.
3. What is meant by saying that Logic is a Normative science? Explain fully the nature of logic as a science.
4. Discuss the scope and subject matter of logic.

SYMBOLIC LOGIC

Semester-1st

Lesson No.13

Unit-V

Philosophy

5.3 Meaning and rules of syllogism

Structure

5.1 Objective

5.2 Introduction

5.3 Meaning of categorical syllogism

5.4 Rules of categorical syllogism

5.5 Suggested readings

5.1 Objectives

- To acquaint students with the meaning of syllogism.
- To make them aware of the two kinds of syllogism.
- To enable them to understand the structure of categorical syllogism.
- To make them familiar with rules of categorical syllogism.

5.2 Introduction:

Syllogism is the most important part of Aristotle's logic. It is a kind of mediate inference in which conclusion follows from two premises. There are two kinds of syllogism, viz: conditional and unconditional.

There are two divisions of conditional syllogism: mixed and pure. In this topic, we shall confine ourselves to unconditional or categorical syllogism.

5.3 Meaning of categorical syllogism:

A categorical syllogism is a deductive argument consisting of three categorical propositions which contain exactly three terms, each of which occurs

in exactly two of the constituent propositions.

Syllogism consists of two premises and a conclusion. Thus, we have three propositions and only three terms.

The structure of categorical syllogism:

No heroes are cowards

Some soldiers are cowards

Therefore some soldiers are not heroes.

A term which is common to the premises (cowards), is called middle (M);

Predicate of the conclusion (heroes) is called major (P) and subject of the conclusion (soldiers) is called minor (s). While major has maximum extension, minor has minimum extension.

The middle term is so called because its extension varies between the limits set by minor and major. The premise in which major occurs is called major premise & the premise in which minor occurs is called minor premise.

In a standard-form syllogism, the major premise is stated first, the minor premise second, & the conclusion last. In the syllogism stated above, the major premise is No heroes are cowards, and the minor premise is Some soldiers are cowards.

The mood of a standard-form syllogism is determined by the forms of the standard-form categorical propositions it contains.

It is represented by three letters, the first of which names the form of the syllogism's major premise, the second that of the minor premise & the third that of the conclusion.

Consider the following syllogisms:-

All great scientists are college graduates

Some professional athletes are college graduates.

Therefore some professional athletes are great scientists.

All artists are egoists.

Some artists are paupers.

Therefore some paupers are egoists

Both the syllogisms are of mood All but they are of different forms. The difference in their forms can be brought out by displaying their logical skeletons, abbreviating the minor terms by S, the major terms by P, and the middle terms by M. The skeletons or forms of these two syllogisms are:

All P is M.

All M is P.

Some S is M.

Some M is S.

∴ Some S is P.

∴ Some S is P

In the first syllogism the middle term is the predicate term of both premises, while in the second the middle term is the subject term of both the premises. These examples show that although the form of a syllogism is partially described by stating its mood, syllogisms having the same moods may differ in the forms, depending upon the relative positions of their middle terms.

The form of a syllogism may be completely described by stating its mood and figure, where the figure indicates the position of the middle term in the premises. There are four possible different figures that syllogisms may have depending upon the different possible positions of the middle term

5.4 Rules of categorical syllogism:-

I Rules of structure:

1. Syllogism must contain three, and only three propositions:-
Syllogism must consist of two premises & one conclusion. Therefore together they make up for three propositions.
2. Syllogism must consist of three terms only:-
A proposition consists of two terms. However, three proposition consist of only three terms because each term occurs twice.

Suppose that there are four terms. Then there is no middle term, a term common

to two premises. In such a case the violation of rule results in a fallacy called fallacy of four terms. Such a fallacy is never committed knowingly because knowing fully well the fixed number of terms, we do not choose 4 terms.

It happens when an ambiguous word is used in two different senses on two different occasions. Then there are really 4 terms, not 3 terms.

If an ambiguous word takes the place of middle term, then the fallacy committed is known as fallacy of Ambiguous middle.

Eg:

All charged particles are electrons

Atmosphere in the college is charged

Therefore atmosphere in the college is an electron.

The word charged is ambiguous.

The conclusion (moral) is that all sentences in arguments must be unambiguous.

II Rules of distribution of terms:-

1. Middle term must be distributed at least once in the premises. If this rule is violated, then the argument commits the fallacy of undistributed middle.

Eg:

All circles are geometrical figures

All squares are geometrical figures

Therefore all circles are squares.

2. A term which is undistributed in the premise must remain undistributed in the conclusion. However, it is not necessary that a term, which is distributed in the premise, must be distributed in the conclusion.

If the major term violates this rule, then the argument commits the fallacy of illicit major. When the minor term violates this rule, fallacy of illicit minor is committed.

Fallacy of illicit major:

All philosophers are thinkers

No ordinary men are philosophers

Therefore no ordinary men are thinkers.

Fallacy of illicit minor:

All aquatic creatures are fish
All aquatic creatures swims.
Therefore all those which swim are fish.

III Rules of Quality:

1. No conclusion can be drawn from two negative premises. It means that at least one premise must be affirmative.

2. If both premises are affirmative the conclusion cannot be negative. It means that a negative conclusion is possible only when premise is negative.

IV Rules of Quantity:

1. No conclusion can be drawn if both premises are particular. It means that at least one premise must be universal.

2. If one premise is particular then the conclusion must be particular only. It means that universal conclusion is possible only when both premises are universal.

These are the eight rules of valid categorical syllogism; Four of them concern the terms and four of them concern the propositions.

5.5 Suggested readings:

Introduction to logic by Irving M. Copi and Carl Cohan
An Introduction to logic and scientific method by Cohen and Nagel
Symbolic Logic by Irving M. Copi
Textbook of Deductive Logic by Bhola Nath Roy

SYMBOLIC LOGIC

Semester-1st

Lesson No. 14

Unit-V

Philosophy

Argument Forms and Truth Tables

By Dr P. P. Singh

Structure

- 5.1. Objectives.
- 5.2. Introduction.
- 5.3. Statements and their truth values.
- 5.4. Truth-Functional Connectives.
- 5.5. Argument Forms.
- 5.6. Validity and Invalidity of Argument Forms.
- 5.7. Construction of Truth Table.
- 5.8. Testing Arguments on Truth Tables.
- 5.9. Suggested Reading.
- 5.10. Exercise.

5.1 Objectives

- To enable the students to understand the use of symbols in logic.
- To enable them to define both argument forms in general and the specific form of a given argument.
- To enable them to know the purpose and importance of Truth Tables.
- To teach them how to construct Truth Tables correctly according to the definition of Truth-Functional connectives.
- To acquaint them with the techniques for testing arguments on Truth Tables.
- To teach them how to determine the validity or invalidity of argument forms by using Truth Tables.

15.2 Introduction

Arguments presented in English in or any other natural language are often difficult to analyze and appraise because of (i) the peculiarity of the language in which they are presented, (ii) vague and equivocal nature of the words used, (iii) the ambiguity of their construction, (iv) the confusing metaphors and idioms they may contain and (v) the distraction due to whatever emotive significance they may express. To avoid these difficulties, logicians construct an artificial symbolic language, free from linguistic defects, in which arguments and statements can be formulated.

The use of special logical notation (Symbols) is not peculiar to modern logic. Aristotle also used variables to facilitate his own work.

The special symbols of modern logic help us to exhibit with greater clarity the logical structures of propositions and arguments. Modern logicians think that by the aid of Symbolism we can make transitions in reasoning almost mechanically by the eye, which otherwise would call into play the higher faculties of the brain.

15.3. Statements and their Truth-Values.

All statements can be divided into two general categories, simple and compound. A *simple statement* is one that does not contain any other statement as a component part. For example, "Ram is honest" is a simple statement. A *compound statement* is, on the other hand, one that does contain another statement as a component part. For example, "Ram is honest and Ram is intelligent" is a compound statement, for it contains two simple statements as components.

Every statement is either true or false. Therefore, we say, every statement has a truth-value. The truth value of a true statement is true and the truth value of a false statement is false. The shorthand for 'truth' is 'T' and the shorthand for 'false' is 'F'. Some logicians use the symbol I instead of T and O instead of F. The two possible Truth values of a statement can be represented on a Truth Table as follows:

F

T

15.4 Truth - Functional Connectives

A truth-functional connective is a logical connective within a truth functionally compound proposition. It is also known as sentential connective. In the propositional calculus five truth functional connectives are of central importance. These are: 'not', 'and', 'or', 'if then' & 'if and only if'. They are designed to join up simple statements to make compound statements. Each has a symbol:

1. **Negation** : The symbol of the negation is " \sim " called a "curl" or a "tilde", which means 'not', 'it is not the case that ...'. We deny the truth of a statement by asserting its negation. The negation of a true statement is false, and the negation of a false statement is true. Thus ' $\sim P$ ' is true when P is false and false when P is true" This fact can be presented by means of a Truth Table:

<u>P</u>	<u>$\sim P$</u>
T	F
F	T

2. **Conjunction**

The symbol of the conjunction is " \cdot ". Called a "dot", which means "and". Conjunction is a type of compound statement. In symbolic logic we use " \cdot " to conjoin two statements to make a single statement. Thus where p and q are any two statements whatever, their conjunction is written $p \cdot q$. The two component statements so combined are called "conjuncts".

The truth value of the conjunction of two statements is determined entirely by the truth values of its two conjuncts. A conjunction is true if both its conjuncts are true; otherwise it is false. In other words, $p \cdot q$ is true if and only if p is true and q is true; otherwise it is false.

A conjunction is a truth-functional compound statement, and the symbol (\cdot) dot is a truth-functional connective. Given any two statements, p and q, there are just four possible sets of truth values they can have. These four possible cases and the truth value of the conjunction in each, can be exhibited as follows:

In case p is true and q is true, $p \cdot q$ is true.

In case p is true and q is false, $p \cdot q$ is false.

In case p is false and q is true, $p \cdot q$ is false.

In case p is false and q is false, $p \cdot q$ is false.

Representing the truth value “true” and “false” by the Capital letters “T” and “F” respectively, the way in which the truth value of a conjunction is determined by the truth values of its conjuncts can be displayed more clearly by means of a Truth Table as follows:

p	q	$p \cdot q$
T	T	T
T	F	F
F	T	F
F	F	F

As shown by the truth table defining the “dot” (\cdot) symbol, a conjunction is true if and only if both of its conjuncts are true.

3. Disjunction

The symbol of the disjunction is “ \vee ” called a wedge(or a vee), which means “Or” Disjunction is a type of compound statement. In symbolic logic we use “ \vee ” to form the disjunction of two statements. The disjunction of any two statement p and q is thus written as “ $p \vee q$ ”. The two component statements so combined are called “disjuncts”.

The Truth value of the disjunction of two statements is determined entirely by the truth value of its two disjuncts. The disjunction of two statements is true if and only if at least one of its disjuncts is true ; if both the disjuncts are false , the disjunction is false. In other words, $p \vee q$ is true if and only if p is true or q is true or both are true, otherwise it is false.

The symbol “ \vee ” is a truth- functional connective, and is defined by the following Truth Table:

p	q	$p \vee q$
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T	T	T
T	F	T
F	T	T
F	F	F

As shown by the Truth Table defining the “wedge” (\vee) symbol, a disjunction is true if at least one of its disjuncts is true.

4. Implication

The symbol of Implication is “ \supset ” called a “horseshoe”, which means “If... then...” Where two statements are combined by placing the word ‘if’ before the first statement and inserting the word ‘then’ between them, the resulting compound statement is a conditional, also called a hypothetical or an ‘implication’. In symbolic logic, we use “ \supset ” to form from two statements a conditional statement. Thus where p and q are any two statements whatever, their implication is written as $p \supset q$. In a conditional, the component statement that follows the ‘if’ is called the ‘*antecedent*’ and the component statement that follows the ‘then’ is the “consequent”. For example, ‘if there are clouds, then there will be rain’ is a conditional statement or implication in which ‘there are clouds’ is the *antecedent* and ‘there will be rain’ is the *consequent*.

The truth value of the implication is determined by the truth values of its antecedent and the consequent.

An implication is false if the antecedent is true and the consequent is false, otherwise it is true. In other words, $p \supset q$ is false if p is true and q is false, otherwise it is true.

The implication symbol (\supset) is a truth-functional connective like the symbols of conjunction and disjunction. As such, it is defined by the Truth Table.

P	q	$p \supset q$
T	T	T

T	F	F
F	T	T
F	F	T

As defined by the truth table, the horseshoe symbol “ \supset ” have the following features: that a false antecedent materially implies a true consequent is true; and that a false antecedent materially implies a false consequent is also true.

5. Equivalence or Material Equivalence

The symbol of equivalence is ‘ \equiv ’ called “three bars” which means ‘if and only if’, sometimes written as ‘iff’. We use the words ‘if and only if’ to obtain from two statements a *biconditional* statement and the two statements connected by ‘if and only if’ are called the left and right members of the equivalence. A biconditional statement (equivalence) is true if and only if its two members are either both true and both false. In other words, when they have the same truth value. $P \equiv Q$, for example, is true if and only if the truth value of P and Q are both true or both false.

Being a truth - functional connective, the three-bar symbol is defined by the following Truth Table:

p	q	$p \equiv q$
T	T	T
T	F	F
F	T	F
F	F	T

Thus two statements are said to be materially equivalent when they have the same truth value, i.e. when they are either both true or both false. And to say that two statements are materially equivalent is to say that they materially imply each other, as is verified by the truth table.

Thus there are four truth - functional connectives upon which deductive argument commonly depends. These are conjunction, symbolized by the dot; Disjunction, symbolized by the wedge; implication, symbolized by the horseshoe and Equivalence, symbolized by the three bars.

15.5 Argument Forms

To analyze forms of argument, we need some method of symbolizing argument forms themselves. In order to substitute any statement (compound as well as simple) which constitutes an argument, in its argument form we use small, or lowercase, letters from the middle part of the alphabet p,q,r,s... as *statement variables*. Thus a statement variable is simply a letter for which, or in place of which, a statement may be substituted. To avoid any confusion, the same statement is substituted for the same statement variable throughout an argument.

An argument form may be defined as any array of symbols containing statement variables, but no statements, such that when statements are substituted for the statement variables, the result is an argument. And any argument that results from the substitution of statements for statement variables in an argument form is called a *substitution instance* of that argument form.

15.6 Validity and Invalidity of Argument Forms.

The terms 'valid' and 'invalid' can apply not only to arguments but also to argument forms. We may define the terms 'valid' and 'invalid' as applied to argument forms as follows:

An argument form is valid if and only if it has no *substitution instances* with true premises and a false conclusion. On the other hand, an argument form is invalid when it has at least one *substitution instance* with true premises and a false conclusion.

15.7 Construction of Truth Table

The construction of truth tables is essentially a mechanical task. In using them to determine the validity or the invalidity of an argument form, it is important that the Truth Table first be constructed correctly. To construct the truth table correctly there must be a guide column for each statement variable p, q, r, etc in the argument form. The array must exhibit all the possible combinations of the truth and falsity of all these variables, so there must be a number of horizontal rows sufficient to do this: Two rows if there is only one variable, four rows if there are two variables, eight rows if there are three variables, and so on. And there must be additional vertical columns for each of the premises and for the conclusion.

It then requires a careful counting and the careful placement of **T**'s and **F**'s in the appropriate columns, all governed by the definition of the truth-functional connectives symbolized by the *dot*, *curl*, *wedge* and *horseshoe*. As for example, we construct the following truth table to determine the invalidity of the argument form:

$$\begin{array}{c}
 p \supset q \\
 q \\
 \cdot \cdot p
 \end{array}$$

p	q	p \supset q
T	T	T
T	F	F
F	T	T
F	F	T

Each row of this table represents a whole class of substitution instances. The **T**'s and **F**'s in the two initial or guide columns represent the truth values of the statements substituted for the variables *p* and *q* in the argument form. We fill in the third column by referring back to the initial or guide columns and the definition of the horseshoe symbol. The third column heading is the first "premises" of the argument form, the second column is the second "premises" and the first column is the "conclusion". Thus the second and the third columns of the truth table represent the premises, while the first (leftmost) column represents the conclusion.

And we find that in the third row there are **T**'s under both the premises and **F** under the conclusion, which indicates that there is at least one substitution instance of this argument form that has true premises and a false conclusion. This row suffices to establish that the argument form is invalid.

15.8 Testing Arguments on Truth Table

To determine the validity or invalidity of an argument form, we must examine all possible *substitution instances* of it to see if any one of them has true

premises and a false conclusion. Any argument form, of course, has an infinite number of substitution instances, but we need not worry about having to examine them one at a time. Our concern is only with the truth or falsehood of their premises and conclusions. We need consider only the truth values of their premises and conclusions.

Once the Truth Table has been constructed and the completed array is before us, it is essential to *read* it correctly, i.e., to use it correctly to make the appraisal of the argument form in question. We must note carefully which columns are those representing the premises of the argument being tested, and which column represents the conclusion of that argument. It is possible for the premises and the conclusion to appear in any order at the top of the Truth Table, depending upon which argument form we are testing. Their position to the right or to the left is not significant. The thing that matters is that we must understand which column represents what, and we must understand what we are in search of. We attempt to find out if there is any one case, any single row in which all the premises are true and the conclusion is false? If there is such a row the argument form is invalid; if there is no such row the argument form must be valid. Thus after the full array has been neatly and accurately set forth, great care in reading the Truth Table accurately is of the utmost importance.

15.9 Suggested Reading:

- | | |
|---------------------------------------------|----------------------------------|
| 1. A Survey of Symbolic Logic | By C .I. Lewis |
| 2. Symbolic Logic (5 th edition) | By Irving M.Copi |
| 3. Introduction to Logic | By Patrick Suppes |
| 4. Introduction to Logic | By Irving M. Copi and Carl Cohen |
| 5. Logic | By W.H.Newton-Smith |

15.10 Exercise A .(Answer and Questions)

1. How does logic use symbols?
2. Write a short note on Argument Form
3. Distinguish between simple and compound statements.
4. Explain conditional statement

SYMBOLIC LOGIC

Semester-1st

Lesson No. 15

Unit-V

Philosophy

5.4 Fundamental Principles of Logic

By Dr. P. P. Singh

Structure:

- 5.1 Objectives
- 5.2 Introduction
- 5.3 Four fundamental principles of Logic.
- 5.4 To sum up
- 5.5 Suggested Reading
- 5.6 Exercise (Answer the Questions)

5.1. Objectives

- To enable the students to understand the necessary and sufficient condition of valid thinking.
- To acquaint them with the basic postulates of Aristotle's Logic
- To develop in the students the power of consistent thinking,.
- To give them an understanding of the nature of the principles of logical thinking.

5.2. Introduction

In traditional logic one finds three principles upon which all logical thinking is supposed to depend. These principles of logical reasoning are known as the *Laws of Thought*. These principles are fundamental presuppositions of all valid thinking. These laws are formal laws and cannot inform us about the material property of a thing or proposition. These laws are *a priori*, and are universal

postulates of all reasonings like the laws of mathematics. These are in some sense prescriptive. Obedience to them is both the necessary and the sufficient condition of correct thinking.

5.3. Four Fundamental Principles of Logic.

Aristotle formulated three principles upon which all logical thinking rests. These have traditionally been called:

1. The principle of Identity.
2. The principle of Contradiction
3. The principle of Excluded Middle.

1. The Principle of Identity:

This principle asserts that *if any statement is true, then it is true*. The simplest statement of the Principle of Identity is the formula, "S is S" or "Everything is what it is" that the meaning of a proposition remains the same throughout an argument. In other words, the Principle of Identity asserts that *every statement of the form $P \equiv P$ must be true*, that every such statement is a tautology. It holds that 'if a proposition is true then it is true'. It is demonstrated by the following truth table.

P	P	$P \equiv P$
T	T	T
F	F	T

2. The Principle of Contradiction

This principle asserts that *no statement can be both true and false*. The simplest statement of the Principle of Contradiction is the formula, "S cannot be both P and not P" or "Nothing can be and not be at one and the same time", that a proposition cannot be both true and false at the same time. In other words, the Principle of Contradiction asserts that every statement of the form $P \cdot \sim P$ must be false, that every such statement is self-contradictory. It holds that 'it cannot be the case that "P" and "not P" are true at the same time', is demonstrated by the following truth table:

P	$\sim P$	$(P \cdot \sim P)$	$\sim(P \cdot \sim P)$
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T	F	F	T
F	T	F	T

3. Principle of Excluded Middle (*tertium non datur*)

This principle asserts that *every statement is either true or false*. Its simplest formulation is “S must be either P or not P” or everything must either *be or not be*, that a proposition must be either true or false. In other words, the Principle of Excluded Middle asserts that every statement of the form $P \vee \sim P$ must be true. That every such statement is a tautology. It is demonstrated by the following truth table.

P	$\sim P$	$P \vee \sim P$
T	F	T
F	T	T

Thus the three laws or Principles can be expressed by the following statement forms:

The Principle of Identity:	$P \equiv P$
The Principle of contradiction:	$\sim (P \cdot \sim P)$
The Principle of Excluded Middle:	$(P \vee \sim P)$

If, for example, a mango is sweet then it is sweet (Principle of Identity); mango cannot be both sweet and not sweet at the same time (Principle of Contradiction) and mango must be either sweet or not sweet (Principle of Excluded Middle).

These three principles are known as the Traditional Laws of Thought since they have come down to us from Aristotle. In addition to these Laws, Gottfried Wilhelm Leibnitz gives a fourth principle which is known as the Principle of Sufficient Reason. It holds that nothing takes place without a reason. It asserts that a consequent has a definite antecedent i.e. every effect has a necessary and definite cause. For example why mango is sweet, or, why it is not sweet. There must be sufficient reason for its cause. The law of Sufficient Reason refers to matter of fact,

and is not a mere formal law like Aristotle's three laws of thought.

14.4 To Sum Up :

Indeed these principles of thought are the logical equivalences that have been considered by the logicians to be fundamental in all reasoning. Aristotle gives a clear expression of these principles. He says of the *Principle of Identity* that a proposition or a thing is identical with itself and implies itself. And he says of the *Principle of Contradiction* that it is impossible for the same thing to belong and not to belong to the same thing at the same time in the same respect. And he says of the *Principle of Excluded Middle* that it is not possible that there should be anything between the two parts of a contradiction. The fourth principle known as the *Principle of Sufficient Reason* advocated by Leibnitz states that nothing takes place without a reason sufficient to determine why it is as it is and not otherwise.

14.5. Suggested Reading:

1. Textbook of Deductive Logic By Bholanath Roy
2. Introduction to Logic By Irving M. Copi & Carl Cohen (11th edition)
3. Logic By Dr Vatsyayan.

5.6. Exercise (Answer the Questions)

1. Explain with concrete illustrations the Fundamental Principles of Deductive Logic.
2. State the Principle of Identity, Contradiction and Excluded Middle.
3. What are the fundamental principles of Logic? Explain their practical application in deductive logic.
4. What do you understand by the Law of Sufficient Reason? Is it a formal law like Aristotle's three laws of thought ?