UNIT 4    ARISTOTLE

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4.0 OBJECTIVES

The main objective of this unit is to analyse the philosophy of the great Greek philosopher Aristotle. It is worth saying a word about Aristotle's approach to philosophy. His very name suggests to some people the idea of a dogmatic system of rigid doctrines. This is a misleading idea. Aristotle's manner is far from dogmatic: he is always reopening questions and admitting difficulties. Nor is his method dogmatic. He does not argue arrogantly from premises laid down by him as self-evident. He considers carefully what his predecessors have said and what ordinary men say, he assumes that their divergent views will all have some element of truth in them, and he seeks to elicit reasonable solutions to problems by clarifying the issues and qualifying or refining the various inconsistent solutions that have been offered. This unit introduces basic ideas of Aristotle. Throughout this unit we are to analyse the universality of his ideas, which were later taken up and grown up by so many great philosophers in the Western tradition.

4.1 INTRODUCTION

Among the pioneers of human knowledge Aristotle was undoubtedly, the greatest. Aristotle was a master of dialectic. He was a great observer, a various reader and specialist both in natural sciences as well as in philosophy. His philosophy included almost all the sciences and humanities such as logic, mathematics, physics, biology and psychology, metaphysics and ethics, politics and aesthetics. His range was encyclopaedic, original as well as creative. His position in the history of Philosophy is unique. From the criteria of breadth, originality and influence Aristotle was undoubtedly, “master of those who know.”

Life
Aristotle, (384-322 B.C.) was the son of a doctor of Stagira in northern Greece. For twenty years, from 367, he was a member of Plato's Academy. When Plato died and Speusippus became head of the Academy, Aristotle left Athens and went first to Assos (on the coast of Asia Minor) and then to Lesbos. About 342 he was invited by King Philip of Macedonia to go there to supervise the education of the King's son, Alexander. A few years later he returned to Athens to found a new school, which became known as the Lyceum or Peripatos. The school flourished; but in 323 Aristotle left Athens for political reasons and retired to Euboea. There he died in 322.

Works
It has been said that Aristotle wrote as many as 400 books. The important works are as follows:-

Logic: Aristotle's views concerning logic are available in his work Organon. This work includes categories, rules of interpretations, analytic and fallacies etc. This great work is divided into different books on these different topics.

Metaphysics: 'On Metaphysics ' includes as many as 14 books of Aristotle.

Ethics: Aristotle's famous work Nicomachean ethics consists of 10 books on different topics concerning ethics. Another important work on ethics is Eudemian Ethics.

Politics: Aristotle's famous book Politics consists of 8 books. Besides this important work he also wrote another book entitled 'On the Constitution of Athens.'

Psychology: Aristotle's famous work 'On the Soul' consists of 8 books different topics concerning human psychology. Besides, he also wrote small independent treatises on memory, dream etc.

Natural Sciences: Physics (eight books of which book VII is an interpolation); Astronomy (four books); Origin and Decay (two books); Meteorology (four books); Cosmology (spurious) Botany (spurious); History of Animals (ten books, Book X spurious); On the parts of Animals (four books); On the Progression of Animals (not genuine, according to some); On the Origin of Animal (five books); On the Locomotion of Animals (spurious).

4.2 CATEGORIES

The initial book in Aristotle's collected logical works is The Categories, an analysis of predication generally. It begins with a distinction among three ways in which the meaning of different uses of a predicate may be related to each other: homonymy, synonymy, and paronymy (in some translations, "equivocal," "univocal," and "derivative"). Homonymous uses of a predicate have entirely different explanations, as in "With all that money, she's really loaded," and "After all she had to drink, she's really loaded." Synonymous uses have exactly the same account, as in "Cows are mammals," and "Dolphins are mammals." Paronymous attributions have distinct but related senses, as in "He is healthy," and "His complexion is healthy." It is important in every case to understand how this use of a predicate compares with its other uses. So long as we are clear about the sort of use we are making in each instance, Aristotle proposed that we develop descriptions of individual things that attribute to each predicates (or categories) of ten different sorts. Substance is the most crucial among these ten, since it describes the thing in terms of what it most truly is. For Aristotle, primary substance is just the individual thing itself, which cannot be predicated of anything else. But secondary substances are predicable, since they include the species and genera to which the individual thing belongs. Thus, the attribution of substance in this secondary sense establishes the essence of each particular thing. The other nine categories — quantity, quality, relative, where, when, being in a position, having, acting on, and being affected by — describe the features which distinguish this individual
substance from others of the same kind; they admit of degrees and their contraries may belong to the same thing. Used in combination, the ten kinds of predicate can provide a comprehensive account of what any individual thing is.

4.3 METAPHYSICS

Aristotle expresses two views about “first philosophy” (the name "metaphysics" was given by an editor to the treatise on first philosophy because it came after - *meta* - the Physics in his edition). One view, already mentioned, is that it is the study of changeless, separable substance, that is, theology. The other is that it is not a departmental science dealing with a particular kind of being, but that it studies being as such, together with concepts (for example, unity, identity) and principles (for example, the law of contradiction) which are common to all departmental sciences. Aristotle is not very successful in reconciling these two views.

**Form and Matter**

A table is wood and glue put together in a certain way. Aristotle distinguishes as separate aspects of the table its matter (the wood and glue) and its form (how it is put together, its structure). Many of his central ideas - and of his puzzles - are connected with this distinction. (a) **Form is immanent**: the form of table exists only as the form of this table or that table, that is, as the form of certain matter. (b) **Form or structure** is normally determined by function. It is because of what it has to do that a table has a flat top and four legs. (c) **Matter** is "for the sake of" form, not vice versa. If you want an axe - something for cutting down trees - you must of course use iron to make it; but there can be iron without there being an axe. So to state the form or function of something explains it far more than stating what it is made of; the form implies the appropriate matter in a way in which the matter does not imply the form. (d) **Wood and glue**, the matter of a table, are not matter in an absolute sense. In a piece of wood we can again draw a distinction between form and matter, since wood, like everything else, is made of earth, air, fire and water (or of some of these) combined in a certain way. Nor are these four elements pure matter. They can change into one another. This implies a persistent underlying stuff capable of receiving the form of earth, air, etc. but in itself without any form or definite character. This if what Aristotle calls first (or "prime") matter, a characterless substrate which never actually exists on its own but only in the form of earth, air etc. (e) **Besides** pressing the distinction of matter and form to the extreme concept of prime matter, Aristotle also uses it by analogy in quite different problems. Thus in the definition of a species he treats the genus as the matter and the differentia as the form: the genus is relatively indeterminate, the differentia gives its definite character to the species. This is typical of Aristotle's way of extending the application of key concepts, - which adds a certain unity to his thought at the cost of some obscurity. (f) **So far** form has been the correlative of matter, the form of some matter. Aristotle raises the question whether there can be form without matter and says that there can. But his form without-matter is very different from a Platonic Form. God is form without matter.

**Actuality and Potentiality**

Referring to ‘Potentiality,’ this is what a thing is capable of doing or being acted upon, if the conditions are right and it is not prevented by something else. For example, the seed of a plant in the soil is potentially (*dynamis*) plant, and if it is not prevented by something, it will become a plant. Potentially beings can either 'act' (*poiein*) or 'be acted upon' (*paschein*), which can be either innate or learned. For example, the eyes possess the potentiality of sight (innate – being
acted upon), while the capability of playing the flute can be possessed by learning (exercise – acting).

Actuality is the fulfilment of the end of the potentiality. Because the end (telos) is the principle of every change and for the sake of the end exists potentiality, therefore actuality is the end. Referring then to our previous example, we could say that an actuality is when a plant does one of the activities that plants do.

In summary, the matter used to make a house has potentiality to be a house and both the activity of building and the form of the final house are actualities, which is also a final cause or end. Then Aristotle proceeds and concludes that the actuality is prior to potentiality in formula, in time and in substantiality.

**The Four ‘Causes’**

Aristotle proposed in Physics II, 3 that we employ four very different kinds of explanatory principle to the question of why a thing is, the four causes:

- **The material cause** is the basic stuff out of which the thing is made. The material cause of a house, for example, would include the wood, metal, glass, and other building materials used in its construction. All of these things belong in an explanation of the house because it could not exist unless they were present in its composition.

- **The formal cause** is the pattern or essence in conformity with which these materials are assembled. Thus, the formal cause of our exemplary house would be the sort of thing that is represented on a blueprint of its design. This, too, is part of the explanation of the house, since its materials would be only a pile of rubble (or a different house) if they were not put together in this way.

- **The efficient cause** is the agent or force immediately responsible for bringing this matter and that form together in the production of the thing. Thus, the efficient cause of the house would include the carpenters, masons, plumbers, and other workers who used these materials to build the house in accordance with the blueprint for its construction. Clearly the house would not be what it is without their contribution.

- Lastly, **the final cause** is the end or purpose for which a thing exists, so the final cause of our house would be to provide shelter for human beings. This is part of the explanation of the house's existence because it would never have been built unless someone needed it as a place to live.

Causes of all four sorts are necessary elements in any adequate account of the existence and nature of the thing, Aristotle believed, since the absence or modification of any one of them would result in the existence of a thing of some different sort. Moreover, an explanation that includes all four causes completely captures the significance and reality of the thing itself.

### 4.4 CLASSIFICATION OF SCIENCES

A survey of Aristotle’s work in special fields can conveniently be prefaced by an account of how he classifies the various branches of inquiry, a classification of considerable historical importance. His basic division is into theoretical, practical and productive sciences. Theoretical science studies “what cannot be otherwise” and aims simply at truth. The Theoretical sciences, which are concerned with pure, abstract knowledge. The Theoretical sciences enumerated by Aristotle are: mathematics, physics, biology and psychology, and first philosophy.
or what is known as metaphysics. Practical sciences are to do with "what can be otherwise" and are ultimately aimed at action; the most important practical sciences are ethics and politics. Productive sciences, in which knowledge is subordinated to the creation of beauty. Productive sciences are concerned with making things.

4.5 LOGIC

Logic is regarded by Aristotle not as a substantive part of philosophy but as ancillary to all parts. For it studies forms of reasoning and expression common to various subject-matters, and a grasp of it is pre-requisite for the student of any topic. This view of logic is reflected in the traditional name of Aristotle's logical works - the "Organon" (that is, tool or instrument).

The Prior Analytics contains Aristotle's great contribution to formal logic, his theory of the syllogism. This is a purely formal system of remarkable rigour but limited scope. The limitations are that it handles only certain kinds of statement and that the inferences it studies are all inferences from two such statements to a third. The statements in a categorical syllogism all have one of the following forms: all A is B, no A is B, some A is not B. Modal syllogisms bring in such forms as "all A may be B" and all A must be B". Aristotle works out all possible combinations of premises and conclusions, determines which syllogisms are valid, and investigates some of the logical relations between different syllogisms.

The Posterior Analytics contains Aristotle's "logic of science." His account of the form a completed science should take is much influenced by the model of geometry and rests on the view that there are in nature "real kinds" whose essence we can know. A given branch of science is about some limited - objects. It starts from principles and axioms common to all sciences, some peculiar to this one - and from definitions of the objects being studied. It then demonstrates by syllogisms that properties necessarily belong to the objects in question. This seems remote from what scientists do, and indeed from what Aristotle does in his scientific works; but it must be remembered that it expresses an ideal for the exposition of a completed science rather than a programme for investigators.

Check Your Progress I

Note: Use the space provided for your answers.

1) What are the categories in Aristotle’s Metaphysics?

2) Explain Aristotle’s understanding of causality.

4.6 THEOLOGY - NATURE OF GOD

Aristotle's metaphysics culminates in theology. God according to him, is an eternal unmoved mover, that which causes all motion but which is not moved himself. Thus, He is the first cause
of motion in the world. He is pure form, unadulterated by matter. He is complete actuality. He is substance per excellence. It is thought-thinking-thought. In the words of Aristotle "He must be itself that thought thinks; and its thinking is thinking on thinking". Thus God's thought is intuitive. It is reflective thought.

Following are the features of God according to Aristotle:

- **God is the Prime mover** - The actualization of the world becomes possible through the dynamism and motion released in the matter. Matter in motion takes on various forms and the diversity of objects of the world is due to different ratio proportion of matter and form in various objects. However, the initial push or motion provided to matter is by Pure Form, that is, God. Accordingly, God is the prime mover of this world.

- **God is the Apex of World process** - This world is a becoming and evolution in which the lower forms are superseded the higher. Now God comes at the pinnacle of this process. Therefore, God is the highest manifestation of the world processes.

- **God is the Formal Cause of the World** - Since matter is indefinite and undifferentiated which is made definite and particular: by imposition of forms, God which is Form of all forms is the formal cause of the world.

- **God is the Efficient Cause of the World** - Since it is through the agency of God that the process of world is initiated and maintained. God is also the efficient cause of the world.

- **God is the Final Cause of the World** - Since God is the apex of world evolution and since God is the Highest manifestation of world process, God is also the final cause or the aim of the world.

- **God is not a person** - Aristotle denies personality to God, because, according to him, God is pure form and is lacking in particularity. Therefore, it cannot be a person. Secondly, in order to be a person God must admit in itself the materialness and this will contradict Aristotle's conception of God.

### 4.7 PHYSICS

The study of physics, or nature, includes the study of living things, but it will be convenient to treat Aristotle's biology and psychology separately from his more general physical works. The Physics and connected works contain discussion and analysis of such concepts as nature, change, chance, time, place, continuity, infinity, growth; proofs that movement is eternal and that there is an eternal Prime Mover; and much doctrine as to the actual constitution and workings of the universe. Physics, according to Aristotle, is the science of Nature. He rejects the old concept of matter formed out of Atoms. He was against both Atomism and mechanism. Matter, according to him, is more dynamic. Motion includes all kinds of change. Matter is the vehicle of motion. Motion is, "the realisation of the possible." Motion is of four kinds:

- Substantial motion or the motion of origin and decay.
- Quantitative motion or the motion involved in change by addition and substraction.
- Qualitative motion or the motion involved in transformation of one thing into another.
- Locomotion or change of place.

Qualities of thing, according to Aristotle, are not merely subjective; they are real qualities of the things in themselves. Change, therefore, cannot be explained mechanically, there are absolute qualitative changes in matter. Nature is dynamic rather than static, teleological and not mechanical, qualitative rather than quantitative. The universe is eternal, without origin or destruction. Earth is the centre of universe. Then come, the celestial spheres which are followed
by sphere of stars. God encompasses the outermost sphere of fixed stars and causes them to move.

4.8 BIOLOGY - BODY AND SOUL

Aristotle is known as the founder of systematic and comparative zoology. His biology is opposed to quantitative and mechanical conception of nature. According to him it is qualitative, dynamic and teleological. The body is an Organon or instrument of the soul. It is meant for the use of the soul. Soul moves body and determines the principle of life. Thus, Aristotle's biology has been termed as vitalism. Body and soul form an indivisible unity. In this unity the soul is the controlling guiding principle. The whole is prior to the parts and the parts realised the purpose of the whole.

Thus the body is the instrument for the realization of the purposes of the soul. Where there is life, there is soul. Thus, corresponding to different forms of life, there are different grades or degrees of soul. As soul and body constitute one unit, neither there can be a body without soul nor a soul without body. Again, since every being has a different body and therefore a different soul, a human soul cannot enter the body of a horse. In this series of souls there is a gradual ascending order from lowest to the highest. This series starts from the plant soul and rises to the human soul. In man the plant soul governs the functions of nutrition, growth and reproduction while the human soul governs higher powers.

4.9 PSYCHOLOGY

The word "psyche", commonly translated "soul", really has a wider meaning; plants as well as animals have psyche, they are living. Living things can be ordered according to complexity of their powers. Some (plants) have only the power of nutrition and reproduction others have also the power of perception, desire and movement; men have in addition the power of thought. Aristotle's main discussion of these various psychical functions is in the De Anima, which also contains his general account Mind-Body Dualism

In the field of psychology Aristotle has discovered ideas concerning sensations, perception, imagination, feelings, memory, emotions, thinking and almost all other psychological processes. The soul of man, according to him, resembles the plant soul so far as it controls the lower vital functions. The animal soul in man works through the faculties of perception. Sense perception is change produced in the soul by the perceived thing. The soul is informed about the qualities of things through the sense organs. Heart is the organ of common sense. It is the meeting place of all the sensations which are then combined to form total picture of an object. Heart again, gives an idea concerning number, size, shape, motion and rest etc. The feelings of pleasure and pain are connected with perception. When functions are furthered we feel pleasure and we feel pain. Feelings again, arouse desire and Desire is the result of perception of desirable object. It is accompanied by deliberation or rational will. Reason, again, is the characteristic of human soul. It is the faculty of conceptual thought. It is initially potential and is actualised in thinking. Aristotle has distinguished between active and passive reason. Active reason is creative, pure actuality like the pure soul of Plato.

While, Passive reason is the matter, active reason is the form of thought and concepts are the result of the combination of both. Thus, Aristotle’s dualism of form and matter continues in his psychology. The same dualism is found in body mind relationship. Perception, imagination and
memory are connected with the body. The Active or Creative reason, however, is connected with the soul. It is immaterial, imperishable and therefore, immortal. It is the spark of divine in human soul. It does not arise with man nor perish with him. It is not individual reason but the universal in man.

4.10 ETHICS

The *Nicomachean Ethics* is certainly one of the best books ever written on the subject. It is rich in analysis of moral and psychological concepts, and in ingenious arguments. The following account will indicate the main lines of the work:

(i) **The good life.** "Good" is not, Aristotle argues, the name of a single quality. Different kinds of thing are called good for different reasons: an axe is a good one if it cuts efficiently; eyes are good if they see well. To decide what is the best life for man one must ask what are the proper functions of a man (as cutting is the function of an axe); a good man will be one who performs those functions excellently, and his will be the good life. Man is distinguished from other animals by his power of thought. So the functions of a man - the effective performance of which will make him a good man - are those of his activities which involve thought and which therefore he does not share with other animals. Man's possession of reason shows itself not only in his ability to think, but also in his ability to control by thought and principle his desires and conduct; so the virtues of the good man will be not only intellectual but also moral or ethical (that is, virtues of character, ethos).

(ii) **Moral virtue.** Moral virtues, like skills, are acquired by practice. A man becomes generous by being trained or habituated to do the things a generous man would do. He has himself become generous when he has acquired a settled disposition of character so that he now does such things regularly, gladly and without ulterior motive. The "gladly" is important; it helps Aristotle to argue that the virtuous life is pleasant. His ideal is the man who always does what he ought because he wants to; "the presence of a moral struggle, the need to conquer desires - these are signs of imperfection.

Moral virtue is concerned with feelings and actions, and in these there can be too much, too little, or the right amount, "the mean". Virtue is a matter of striking the mean between opposite vices: generosity lies between meanness and prodigality. The mean involved is not an arithmetical average, it is the mean "relative to us"; that is, it is what is appropriate to a man. There are no simple rules for deciding what is appropriate; it is the possession of phronesis ("practical wisdom") which enables a man to hit the mean. This doctrine of the mean is more famous than it deserves to be. Aristotle admits to difficulty in bringing all virtues and vices into his scheme. The doctrine of the mean, in fact, contains little positive moral teaching and is inadequate if considered as simply analysis of vice-virtue concepts.

(iii) **Intellectual virtue:** It is a practical wisdom. This intellectual virtue enables a man to get the right answers to practical questions of conduct. It involves skill in deliberation but also presupposes the possession of moral virtue. For to have the right aims is a matter of moral virtue - character determines ends. Moral goodness and practical wisdom are in fact inseparable, each involving the other in its definition.

(iv) **Intellectual virtue:** It is a theoretical wisdom. This intellectual virtue is wisdom about "what cannot be otherwise". It involves intuitive knowledge of unprovable starting-points (concepts and truth and demonstrative knowledge of what follows from them. This virtue, Aristotle argues, is the highest that man can have: it is to do with the highest objects and it is the
virtue of the divine part of man's soul (for no activity but that of pure thought can be attributed to God). The life of theoretical philosophy is the best and happiest a man can lead. Few men are capable of it (and they only intermittently). For the rest there is a second best way of life, that of moral virtue and practical wisdom.

It is striking how Aristotle, starting from the question what is man's nature and his function as a man, ends by finding his highest and most proper activity in the imitation of God through the exercise of pure reason, the spark of divinity in him.

4.11 POLITICS

In addition to his works on ethics, which address the individual, Aristotle addressed the city in his work titled Politics. Aristotle considered the city to be a natural community. Moreover, he considered the city to be prior in importance to the family which in turn is prior to the individual, "for the whole must of necessity be prior to the part". He is also famous for his statement that "man is by nature a political animal." Aristotle conceived of politics as being like an organism rather than like a machine, and as a collection of parts none of which can exist without the others. Aristotle's conception of the city is organic, and he is considered one of the first to conceive of the city in this manner.

The common modern understanding of a political community as a modern state is quite different to Aristotle's understanding. Although he was aware of the existence and potential of larger empires, the natural community according to Aristotle was the city (polis) which functions as a political "community" or "partnership" (koinōnia). The aim of the city is not just to avoid injustice or for economic stability, but rather to allow at least some citizens the possibility to live a good life and to perform beautiful acts: "The political partnership must be regarded, therefore, as being for the sake of noble actions, not for the sake of living together." This is distinguished from modern approaches, beginning with social contract theory; according to which individuals leave the state of nature because of "fear of violent death" or its "inconveniences."

4.12 POETICS

Aristotle considered epic poetry, tragedy, comedy, dithyrambic poetry and music to be imitative, each varying in imitation by medium, object, and manner. For example, music imitates with the media of rhythm and harmony, whereas dance imitates with rhythm alone, and poetry with language. The forms also differ in their object of imitation. Comedy, for instance, is a dramatic imitation of men worse than average; whereas tragedy imitates men slightly better than average. Lastly, the forms differ in their manner of imitation – through narrative or character, through change or no change, and through drama or no drama. Aristotle believed that imitation is natural to mankind and constitutes one of mankind's advantages over animals.

While it is believed that Aristotle's Poetics comprised two books – one on comedy and one on tragedy – only the portion that focuses on tragedy has survived. Aristotle taught that tragedy is composed of six elements: plot-structure, character, style, spectacle, and lyric poetry. The characters in a tragedy are merely a means of driving the story; and the plot, not the characters, is the chief focus of tragedy. Tragedy is the imitation of action arousing pity and fear, and is meant to effect the catharsis of those same emotions. Aristotle concludes Poetics with a discussion on which, if either, is superior: epic or tragic mimesis. He suggests that because tragedy possesses all the attributes of an epic, possibly possesses additional attributes such as spectacle and music,
is more unified, and achieves the aim of its mimesis in shorter scope; it can be considered superior to epic.

Check Your Progress II

Note: Use the space provided for your answers.

1) Give the account of Aristotle on question of God.

2) What are the ethical teachings of Aristotle?

4.13 LET US SUM UP

Aristotle speaks about the following twelve categories in which the first three are very important: equivocal, univocal, derivative, quantity, quality, relative, where, when, being in a position, having, acting on, and being affected by. Aristotle expresses two views about his “first philosophy” (metaphysics): 1. Theology (the study of changeless, separable substance). 2. The study of being as such together with concepts and principles that includes Form and Matter, Actuality and Potentiality, and The Four "Causes". Aristotle classifies his science into three kinds - theoretical, practical and productive sciences. Aristotle’s Logic is not as a substantive part of philosophy but as ancillary to all parts, which studies forms of reasoning and expression common to various subject-matters, and a grasp of it is pre-requisite for the student of any topic. It includes two kinds of analytical methods - The Prior Analytics and The Posterior Analytics. Aristotle’s idea of God consists the following features: 1. God is the Prime mover, 2. God is the Apex of World process, 3. God is the Formal Cause of the World, 4. God is the Efficient Cause of the World, 5. God is the Final Cause of the World, 6. God is not a person. Physics, according to Aristotle, is the science of Nature. His biology is qualitative, dynamic and teleological and it is called “vitalism”. According to him Body and soul form an indivisible unity. In the field of psychology Aristotle has discovered ideas concerning sensations, perception, imagination, feelings, and memory, emotions, thinking and almost all other psychological processes. In his idea of ethics he deals about - The good life, Moral virtue, Intellectual virtue (Practical Wisdom), and Intellectual virtue (Theoretical Wisdom). The natural community according to Aristotle was the city (polis) which functions as a political "community" or "partnership" (koinōnia). Aristotle's Poetics comprised of two books comedy and tragedy.

4.14 FURTHER READINGS AND REFERENCES


