**HUM102: INTRODUCTION TO PHILOSOPHY**

**MIDTERM TAKE-HOME ESSAYS**

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**Ans to Question 1**

Aristotle, who studied under Plato, was one of the ancient Greek philosophers who contributed to the development of western virtue ethics. He lived from 384 BCE to 322 BCE, and throughout that time, he wrote and published numerous philosophical writings. According to Aristotle, logical reasoning is the foundation of knowledge. Knowledge requires both a claim and a justification. Logic serves as the foundation for all knowledge. He uses logical reasoning to determine whether an argument is valid or sound to obtain true knowledge.

Wisdom requires knowledge and knowledge includes statements with proper reasoning where a statement has to be proved true to reach wisdom. Again, a statement is a starting point for reasoning that is intended to reflect everything that happens in existence. For example, saying that criminals can be dangerous is a statement and if proper reasoning behind this statement can prove it true, it qualifies as wisdom. Statements are made of terms that are the basic words or elements in a statement. Additionally, categories are used to differentiate between different types of terms which are made up of separate, distinct items to which a variety of criteria or features may be applied. In like manner, terms of different categories are combined to create a statement. For example, trees, environment, better, planting, etc are different terms. Again, the term tree can be categorized as a subject, environment as a place and better as a state, and planting as doing something. Now, combining these we can form a statement that planting trees make the environment better. As can be seen, terms are the fundamental components of a statement that come together to form a statement and are grouped according to the types of data gathered which we refer to as categories. Furthermore, different statements are compared together to prove one true which then can be obtained as knowledge or wisdom. Another example of a statement would be, a courageous 5 feet man, who is riding a horse while wearing armor, and is practicing sword fighting with a double-sized man under the tree, right at the sunset. Accordingly, terms are the pieces that are utilized to explain the entirety of the statement, which is a statement that describes a specific event that is happening. Aristotle introduced categories to categorize the elements as terms. The categories in this statement are substance (man), quantity (5 feet), quality (courageous), relationship (double), place (under the tree), time (sunset), posture (riding a horse), state (wearing armor), and doing something (practicing sword fighting). The different presences or unique explanations of presence and activity are shown by these categories. Additionally, the sentence can be broken down into two parts which are its subject and predicate. The subject or substance is the thing that the statement is talking about. Again, the predicate denotes the thing that we are saying about the subject to be doing. In the last example, the subject is the 5 feet tall man whereas the predicates are all the characteristics that define that man's activity, such as being courageous, horse riding, sword fighting, etc. Again, we can only say something about the substance, not the predicate. To illustrate, we can say Socrates is ugly but not ugly is Socrates. There are two categories of substances. A primary substance is a discrete object made of material that can be identified by its shape. On the other hand, secondary substances are larger groups to which these specific individuals belonged.

Knowledge is of unchanging eternal forms which are certain and obtained by arriving at the truth. A good argument is a solid and certain knowledge that is obtained if the argument is valid and sound whereas a bad argument is an invalid and unsound argument that irrational and illogical. Arguments have two parts which are the premises and conclusion. The premises of an argument give the reasoning for the conclusion and based on the logic of the premises, it is determined if the conclusion is valid or invalid which later on helps us decide if it is a good argument or a bad one. If the premises of an argument are assumed to be true and the conclusion is also true based on the premises, then it is a valid argument. Consequently, deductive arguments are the ones that move from a general premise to a specific one. However, inductive arguments move from specific to general premises. So, inductive arguments cannot be used as a way to determine the validity of an argument as they cannot be the way to reach global certainty. Moreover, deductive reasoning can be used to check the validity of any argument.

Simultaneously, logic is an important and key tool to construct valid or invalid arguments based on which we can find a good argument or true knowledge. knowledge is founded in reality and truth and it is real and practically proven. logic is crucial or pertinent to the search for knowledge. Because without logic, there can be no knowledge. The quest for knowledge requires sound logic since, without it, knowledge may not be enduring or persuasive. Thus, Aristotle uses logic to determine the validity of an argument by syllogism using deductive logic. Aristotle's logic is also known as categorical logic since it links collections of categories. Using syllogisms is the most common method of establishing premises for a strong argument. A syllogism is a type of logical argument where the validity of two premises leads to the conclusion. Additionally, it is a concluding argument that is obtained from two premises followed by a certain form. In syllogism, Aristotle uses different categories of statements and determines which of those are valid or invalid. He uses the method of giving counter-examples as well for the same format to determine the nature of the argument. In syllogism, if the two premises are true, the conclusion has to be true.

Additionally, sound arguments are those valid arguments that have true premises. If an argument is invalid, that immediately becomes unsound. However, if it is a valid argument, the premises have to be true in order to be sound. Since an argument can be valid even if its premises aren’t true because it depends on the form of the arguments and not the certainty of the premises, those valid arguments that have untrue premises will be considered unsound arguments making resulting in a bad argument. However, if the premises are true, then they’ll be sound arguments making it a good argument overall.

Furthermore, Aristotle distinguishes between valid and invalid arguments by the certainty of knowledge. If an argument is inductive, it is not valid. However, if it is a deductive argument it is valid only in the case if the premises are true or assumed to be true and the conclusion is also real according to the premises as mentioned earlier. For example, if the first premise is that “all men can fly” and the second “Shihab is a man” are both assumed to be true, the conclusion “Shihab can fly” is a valid argument. Even though the first premise is not true in reality for which it cannot be a sound argument, the fact that I assumed the first premise to be true, concludes a valid argument. Again, there can be no counter-examples to this format found which is another approach to his identifying invalid arguments. Hence, this is how Aristotle distinguishes between valid and invalid arguments.

Aristotle has a method of identifying invalid arguments with the use of counter-examples using which it can be determined if an argument is valid or if it is invalid. The use of counter-examples helps to find out if the conclusion of assumed premises is true or not in reality by comparing it to other scenarios with the same sentence structure. When the conclusion is found true, the argument is considered valid and invalid otherwise as we know to be a valid argument the conclusion must be true if the premises are assumed to be true. Firstly, Aristotle takes two premises and turns them into a general format using variables. In the next step, he tries to apply different counter-examples for the same sentence structures. If any counter-example in the same format is found, where the conclusion is false even though the premises are assumed to be true, then it would be an invalid argument. If no counterexample is found but what can be only found is true conclusions in the same format, the argument will be valid. For instance, premise 1. All cows are animals that can swim. 2. All animals that can swim are animals that have been to Mars. 3. Therefore, all cows are animals that have been to Mars. Here, the formats of the statements are 1. All A’s are B’s. 2. All B’s are C’s. 3. Therefore, all A’s are C’s. There can be no counter-example found that can have false premises which makes this argument a valid one. Again, if we were to use this format to check if any other example provides a true conclusion we could say, 1. All the swimming pools are blue. 2. All things that are blue are full of chemicals. 3. Therefore, all oceans are things that are full of chemicals. This example is also another valid argument following the same format as the previous one.

However, in order to check if an argument is invalid, we can take premises such as 1. All people who wear black hats work in the wall street. 2. All people who are smart work in the wall street. 3. Therefore, all people who wear black hats are people who are smart. The form of the argument can be expressed as 1. All A’s are B’s. 2. All C’s are B’s. 3. Therefore, all A’s are C’s. To see that this is not valid, we only need to come up with one example where the premises are true, but the conclusion is clearly false as it would be enough to prove its invalidity. Accordingly, let us consider 1. All dogs are hungry. 2. All cats are hungry. 3. Therefore, all dogs are cats. Hence, this counter-example easily shows the use of the counter-example method where we can prove an argument invalid just by finding one counter-example in the same statement structure.

According to Aristotle, "It is impossible for there to be proofs of everything". A first principle is an unquestionable tenet from which no other conclusions can be drawn. It is a fundamental claim or assumption that cannot be inferred from any other claim or supposition. According to Aristotle, first principles are a set of basic premises without which no other premises can be established. He thinks that induction is the most effective technique to reach the first principle because there are no premises. Inductive reasoning is a type of justification that relies on specific statements, like observable connections, to arrive at a generalization. This procedure is referred to as induction. The induction process starts with a set of presumptions, most of which are based on first-hand experience or empirical evidence.

To sum up, knowledge can be obtained through syllogism where deductive logic is used to check the validity and soundness of a statement which then helps to decide whether it can be considered to be true knowledge or not.

**Ans to Question 5**

One of the finding figures of contemporary philosophy is thought to be Descartes who emerged as one of the key thinkers of that century after science and technology entered a new era. Nevertheless, he continued to seek knowledge, just like earlier philosophers, but differently as he was interested in certain knowledge by questioning how does he know that something he knows is true. But unlike say Plato, or even Aristotle and Alpharabi, he's not looking at the world out there but rather looking inside himself to find out how he knows something is true where he uses his method of doubting everything first to arrive at certainty where nothing can be doubted.

Descartes develops his strategy called the method of doubt to reach a point on something that is undoubtable where he argues that if something is impossible to doubt, it must be certain. Accordingly, the method of doubt is a way of coming up with something absolutely certain. In this method, we take our beliefs and try to doubt them, and treat those as false until we reach a foundation or truth that cannot be doubted. Furthermore, we work our way up from that foundation to prove if our beliefs are certain or not. For example, if I left ice cream in the freezer and went to the university, I cannot tell for sure that it is there as my sister can eat it or any other person can take it from there. Even if there’s no one at home, my freezer can blast due to the overflow of electricity. Hence, I will have to treat the fact that ice cream is there as false until I can be really sure of that which again doesn’t necessarily mean it is false.

The method of doubting is divided into a couple of steps where Descartes doubts his senses, the physical world, and if there is an evil genius, mathematics, etc. He begins to construct his “method of doubt” by first doubting his senses where he points out that our senses are unreliable. Again, Our senses cannot be the foundation of knowledge because on any occasion they can deceive us as we can always doubt what it tells us. For example, if we look at the Brac University building 6 from the ground, to our eyes it would look like the building is wider towards the ground and narrower as we keep looking above. However, if we each of the floors, we’d see that all the floors are actually of the same square feet and equally wide. Here, we can see that our senses are presenting us with information that we know for sure are false and Descartes says that once something deceives us you should never trust it again. Likewise, thinking the sun is smaller than a house which is in front of us or looking at a coin from the side and thinking it’s oval are all examples that our senses are not accurate as we can easily doubt them.

Secondly, if let along the shape or size of something and start doubting whether that object is real or not, it would take us to his second approach which is doubting the physical world. Even if we are inclined to believe that the object that we see are real and are in front of us in real life it can be false. For example, if I was seeing the UB6 building in front of me and doing classes there I am inclined to believe that it is real. However, it is doubtful because it could be a dream of my experience of doing classes and seeing that building. Even if we have sensory attachments to the object we can see that experience of our senses in the dreams which would lead us to question even the physical world.

Thirdly, Descartes talks about a minor possibility that there could be an evil genius who created everything that we sense or see as an illusion to deceive us when there are no physical or real objects. But it could be true that everything that we sense, even me writing this paper right now could be just an illusion of some evil genius and there is no existence of me writing it in any real world. For example, in the movie inception, we can see Leonardo de Caprio and his team manipulating data and creating objects in people's dreams and making them do certain things when all they’re really doing is lying down and dreaming. Likewise, this evil genius who is considered to be evil since it deceives us is compared and assumed to have the power of God and Descartes believes that it is possible that there is no physical world’s existence and all that we can see is an illusion created by this evil genius. In effect, unlike in the movie “Inception”, here he even denies the existence of the physical world.

Subsequently, coming to the example of sitting in front of a table and reading a book, I would be inclined to believe that it is real. However, I shouldn't trust my senses because it could not be true. Since I could rather be dreaming about reading a book when I am sleeping in my bed. Again, there are no tables in dreams but it is my experience of a table and reading a book that I am sensing. Again, all of these could just be some work of an evil genius where there are no real objects and all that I am doing is sensing the illusion of reading a book created by an evil demon. Descartes introduces these concepts and doubts his senses, the physical world, etc to show that we can not rely on sensory evidence as a foundation of knowledge.

In the next step of the method of doubting, Descartes starts doubting mathematics even though the ancient Greeks and Plato never doubted. Whether there is any physical world or not, they always believed the terms of mathematics are certain. For example, they all believed that 1+1 equals 2. However, Descartes thinks he can imagine 1+1 isn’t equal to 2. Henceforth, he breaks his approach into two parts where in the first one he talks about how people tend to make common mistakes in maths over and over. Again, we also are familiar with some common mistakes in maths that we all do over and over which could be easily a reason to doubt mathematics. Accordingly, Descartes thinks that people are making some mistakes while proving 1+1=2. Secondly, he thinks that the evil genius is tricking us into proving this as one plus one is equal to 2 when it could be equal to 3. He isn’t saying that this math is false but what he wants to prove is that it is very easy to be tricked while proving it so it can also turn out to be equal to something else making it doubtable. Thus, mathematics has always room for errors in each step which makes it questionable so it cannot be the foundation of knowledge.

Descartes attempted to learn about the facts that cannot be questioned by addressing all of these doubts and doubting techniques because every idea and conviction we currently have has been passed down to us by our ancestors through many generations. Most of the time, we don't have any doubts before we think or believe any of these. However, there is no evidence to support these opinions and ideas. Even our own senses can mislead us and lead us to believe falsehoods. Descartes emphasizes the value of doubting and questioning anything before believing it, which helps determine the amount of certainty in a notion.

In Descartes's method of doubting he doubts all the mentioned aspects to see if he can come up with anything that he absolutely cannot doubt. Consequently, he realizes that even though he can doubt everything and claim that it's all an illusion, the concept of himself or "me" does in fact exist. Thus, it leads him to say that if I'm doubting there must be a me who can do all of this doubting, and I must be thinking. So this is something that I cannot doubt. Therefore, I exist which is undoubtable and all of these reservations demonstrate the existence of his mind and demonstrate that he is present somewhere even if his physical body does or doesn't exist. As a result, he started his famous phrase Cogito ergo sum meaning “I think, therefore I am”. Moreover, he defines it as a clear and distinct idea and the foundation of knowledge based on which he can work his way up checking certainty for other things. Similarly, he finds another clear and distinct idea which is the knowledge of the existence of God. Because he thinks he has the idea of a perfect being, who's the cause of everything and he knows that he’s not a perfect being. But him having the idea doesn't come from the thin air. If he has a mind and an idea, there must be something corresponding to that and that's how he'll proceed to argue that knowledge of God is another foundation of knowledge.

Descartes defines the belief in his existence as a clear and distinct idea which is the foundation of Descartes's epistemology. Moreover, an idea is clear if it is grasped by an awake and attentive rational mind. The power of reasoning by the rational faculties of rational beings makes the idea of "cogito ergo sum" clear and true. Again, an idea is distinct if it contains nothing but the true things. So everything in an idea can be proved to be clear using the rational faculties, it will be distinct as well. Descartes's idea of existence is self-evident because the thinking itself is the evidence for it to be so for which it is clear and distinct. He provides "cogito ergo sum" as the foundation of knowledge because from this idea he could sum up saying all clear and distinct ideas are true which is apprehended by rational intuition that becomes the key criteria for any argument to be certain in his notion. Having arrived at this notion of existence he builds all his previous doubts back up using this as a foundation of knowledge.

To sum up, the Latin phrase "cogito ergo sum" means "I think, therefore, I am." Descartes began formulating his ideas using a method based on his idea of certainty, which he described as unchanging truth. He wanted absolute confidence and so presented solid proof of his existence. He, therefore, concludes that the fact that he is capable of reasoning is evidence that he is real.

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