

**Name: Sara Javed**

**ID: 14881**

**Department: MSMC**

**Semester: 3<sup>rd</sup>**

**Subject: Introduction to logic.**

**Content: Midterm Paper**

**Date of submission: 13<sup>th</sup> April 2020**

Question No #1: What is logic? Differentiate between inductive and deductive arguments, provide at least 5 examples of each.

Answer: **Introduction to Logic:**

Basically logic means to distinguish something good from bad to reach the right conclusion. It is pronounced as logos in latin language and logica in Greek language which means thoughts or reasons.

**History of Logic:**

The concept of logic came from ancient Greek, from the era of karinth, sparta and athens.

\*Karinth were interested in trade.

\*Sparta were interested in military systems.

\*Athens were interested in democracy, trade, knowledge, wisdom art and literature. They were reasonable and sincere people, it is believed that they were atheist because they worshipped different gods, and source of their education was oral, speaking, debating, and sharp thinking in order to lead. And some of their well known teachers were Plato, Socrates, and Aristotle.

\*Aristotle was followed till years, his teachings were followed till 2000 years, he was a great philosopher and logician of old and modern times.

**Logic:**

This is the study of correct reasoning, for finding out the correct reasoning we have Arguments which are correct as well as incorrect, we have 2 premises and that give us a final conclusion, the conclusion maybe wrong or right.

**Argument:** It is the set of premises and conclusion, An Argument that provide reasons to believe is called Argument.

**Premises:** It is the reason to make you believe in something, but sometimes it don't makes you believe. It is something what we presuppose about an argument, it can be on any number in an argument.

**Conclusion:** It is the final stage that Argument was arguing for, when an argument reach to the ending point is called conclusion.

**Example:**

- All teachers are hardworking.
- Sir Mehboob is a teacher.
- So therefore, sir Mehboob is a hardworking teacher.

**Inductive and Deductive Argument:**

**Inductive Argument:**

It is the Argument in which premises are supported to make a conclusion. Some Arguments are valid and some are invalid.

Truth/Invalid.

Truth: Here the premises carry the true statements, and when all premises are true with conclusion, the whole statement gets valid.

Invalid: When the premises do not support each other, and all are different from each other, there is a fault and the whole statement gets invalid.

**Example:**

- 1) Every time I met Hindus they treat me rudely, so therefore, all Hindus are rude.
- 2) Every time I eat kiwi, It makes me feel like vomiting, I am allergic to kiwi, So therefore, I am allergic to fruites.
- 3) Every time I see lion in the zoo it roars, so therefore, all lion's roars.
- 4) A boy in my university visited from Turkey has blue eyes, So therefore, all people from turkey has blue eyes.
- 5) The kids in my family likes to eat cereal , so therefore all the kids likes to eat cereals.

### **Deductive Argument:**

It is a statement, where two premises are made to support the conclusion, If the premises are true then there is no way for the conclusion to be false, In a statement where premises succeed to guarantee a conclusion, then the Argument is deductive valid Argument. The Argument can be valid or invalid, same as it can sound rational or irrational.

### **Examples:**

- 1) All kids are innocents, Ali is a kid, so therefore, ali is an innocent kid.
- 2) All marine animals survive only in water, dolphin is a marine animal, so therefore, dolphins survive only in water.
- 3) All birds can fly, sparrow is a bird, so therefore, sparrow can fly.
- 4) All humans are mortal, Men are humans, therefore, men are mortal.
- 5) All students in this class are obedient, Sara is a student of this class, so therefore, Sara is a obedient student.

Question No#2: Discuss the five basic functions of language, with examples, also discuss emotive neutral language?

Answer: **Language:**

It is a skill that we learn when we get able to learn, It is a knowledge which we learn with the time passage, it is possession and time tool, which we use in our daily life, It is also like an object that has existence like humans have existence.

**Characteristics of Language:**

- It is valuable possession of human being.
- Without language it is difficult to survive in the world.
- It is code of beliefs, ideas, emotions and desires.
- It is the source of humans success.
- It is the only sources that keeps the survival going.

**Example:**

\* A person who knows how to talk, can easily survive in house, school, work place or at gatherings, she will not have any issue, because she will talk about it, and will get ideas about it how to get solve.

\* A person who can not speak, will have difficulty in communicating, she will have problems which she can not speak about, she will have difficulty in home, school or gatherings. This will keep her backward in society.

**Functions of language:**

Language has unlimited functions, it is as important as the humans existence. But Geoffrey Leech in 1974, has given 5 main functions of language. That are:

- 1) Informational.
- 2) Expressive.
- 3) Directive.
- 4) Aesthetic.
- 5) Phatic.

### **Informational language:**

Language written on page will carry an information for life, it will be like saved document, that can be read anytime and get knowledge from. Language can be spoken as well, which is effective in exchange of information among human beings. It can be true or false, which will give us life lessons in many ways, language can be seen in analytical reports, descriptions, and daily life spoken. You can use as daily information with other humans.

### **Example:**

- 1) Talked with my friend from UK, she talked to me about global warming, I had no idea about it and after listening to her, I was aware of global warming in the world. I got the information while talking to her.
- 2) Sara was traveling by bus to her village, Sara shared her next seat with Amna, who was traveling to other village, on the way, they talked about their villages, and both got knowledge about different villages.
- 3) Two friends going on a walk talked about the weather forecast, and they got different information.

## **Expressive Language:**

It shows our expressions, our good and bad mood, and our attitude, It tells us about someone emotions, about their happiness and sadness, or it tells us what the person is going through, by words we can judge how the other person is doing, It has nothing to do with information. Wishes, sorrows, swearing, cheering are different sounds that represents our emotions.

### **Examples:**

- 1) Alas! He fought the long battle of cancer but still couldn't survive.
- 2) Hurray! I topped the class with highest grades.
- 3) Ouch! I dropped the glass.
- 4) Sorry! I didn't mean to hurt you.
- 5) Congratulations! You won the debate competition.

## **Directive Languages:**

It is used to induce certain actions or reactions, it is based on situational meaning, it represents social control, and interpersonal interaction. It is the direct speech or on the spot talk we do with others.

### **Examples:**

- 1) Ali and Hamza met each other at a super store, and they talks about each other.
- 2) Sara and Aliya were talking about clothes in university.
- 3) Fahad and Yousef were talking about football in cafeteria.

### **Aesthetic Language:**

It can not be controlled, humans can not control it but they try to control it anyway. There is no message or action or request seen. It helps us in our vocabulary, it is artistic and poetic, here beauty of words matters, and not the information. It is prolonged and made romantic, it can be seen in books, or literature.

### **Examples:**

- 1) She was like the snow that hugged the dark strong mountains.
- 2) He is an elegant, smart and decent guy.
- 3) She was like a fragile beauty outside but dark and on fire inside.

### **Phatic Language:**

The purpose of phatic language is to maintain social relationships, and to begin the conversation, it is mostly done while one is bore or talkative, or traveling by local vehicle, there is no information or purpose in such Language.

### **Examples;**

- 1) I was traveling by bus and I was bore so I talk to a passenger about the weather that day.
- 2) Ali and Hamza were standing in lane at a super store so they talked about the rates of grocery.
- 3) Yousef and Fahad were sitting in OPD at hospital so they talked about different diseases.

### **Emotively Neutral language:**



It is the choice of words that explains your emotions. It is to convey the beliefs that maybe neutral and exact, but it has an impact on the attitude of our listener, there are some words that will appeal the listeners, and some words will make them upset or angry. Everyone has their own sense of accepting the emotions, some words may seem relevant to us but it will look different to others, we all have different sense of humour.

In emotively Neutral language a person choose emotional words to express her feelings to the listener. Like if a person talks about fresh red rose and a red flower, both are same, both smell same, but it sounds different. In red fresh rose the emotions are linked, it feels like romantic and poetic while red flower is general and don't show any expressions. That's why both sounds different.

### **Examples:**

1) Non-emotive: A person was killed in a car accident last night.

Emotively Neutral language: An innocent person while moving smoothly on his way back to his home faced a tragic accident last night, where he lost his precious life.

2) Non-emotive: She topped her class in exam.

Emotively Neutral language: After days and nights of hard work, she finally got the best fruit from her hard work and topped the class with highest score.

3) Non-emotive: The cases of corona virus are increasing day by day in the world.

Emotively Neutral language: And sadly the cases of the scary pandemic novel coronal virus is increasing rapidly throughout the world.

Question No #3: What are different kinds of fallacy of relevance? Also discuss fallacy of ambiguity with examples.

Answer: **Fallacies:**

When we draw a wrong conclusion, a baseless conclusion, which has no meaning. It refers to error in reasoning. And flaws or error that is found in an argument is called fallacies in logic. Or any Argument where premises are right but the conclusion is giving error, there must be fallacy in that statement. It happens when we don't have enough knowledge, and we argue without knowing about that specific topic.

**Fallacy of Relevance:**

It appeals the general beliefs, and it appeals large number of people. It has one belief that is followed and accepted by a big community of people.

**Types of Fallacy of Relevance:**

- 1)AD populum.
- 2) Ad Misericordiam.
- 3)Red Herring.
- 4) Straw man.
- 5) AD homeinm.
- 6)AD Baculum.
- 7)Ignorated Elenchi.

### 1) **AD Populum:**

It shows the wrong conclusion, it takes people to the wrong side. It is irrelevant. It appeals to populace.

#### **Examples:**

\*The Pakistani media calling Nawaz Sharif a criminal by all Pakistani's but there are many people who support him and don't call him a criminal.

\*Advertising agency calling their product the best among all, but there are many people who dislike that product and had bad experience with it.

\*A political leader telling his public about all his good work and how people are satisfied, whereas there are many people who are not satisfied.

### 2) **AD Misericordiam:**

It appeals the emotions, it touch the emotions and feelings of people. It is done to catch the emotional side of the people and to convince them that way.

#### **Examples:**

- A leader gives an emotional speech to his public for the support and attention.
- A doctor giving emotional speech about health issues in a seminar to attract people towards health issues.

### 3) **Red Herring:**

It is to grab the attention of the people, It is done for attention deflection. It is done in thriller, politics, business announcements and government information.

## **Examples:**

- 1) Government asking for tax from public, “ For the normal state and revenue we need to stable our economy, which will be stable once we get taxes, after the stable economy we will work on different social activities that will give benefits to all..
  - 2) Giving precautions on Corona virus, “ If we will take precautions as the government command us to do, we can fight the virus together and it will harm us less.
- 4) Straw man:** It is a shift from real dispute, It oversimplify opposing views or disregard inconvenient points in favour of points that are easy to argue about.

### **Example:**

We should not make bike lanes on roads because bikes cross the red light and it endangers the other passengers.

## **5) AD Homnem:**

Here we argue about people, it is the personal attack on ones character or life, and not to address the actual facts about that issue.

### **Example:**

- 1) Targeting someone on their education,” You are talking that cheap, you didn’t even pass your high school.
- 2) Targeting someone on their gender, “ You can’t even acheive something great because you are a female and females are weak.

## 6) **AD Baculum:**

It appeals the force. Force is applied to get something. When you can not get something by asking so you get it by force, it gets to negativity and puts bad impression.

### **Example:**

- 1) If you will fight back with snatchers on road with a gun, you might end up in the hospital, or die.
- 2) If you did not vote for me in the election all your wishes must not fulfilled and you will end up in poverty for your life.

## 7) **Ignorated Elenchi:**

It is all mixed up things together, statements are something else, and conclusion is something else. It is problematic and confusing, and can not understand it.

### **Examples:**

- 1) Previous president of Pakistan Nawaz Sharif was a criminal, so now Imran Khan is the president of Pakistan, he will be a criminal too.
- 2) The apples from my garden are sour, so all the apples in the world are sour.

## **Fallacy of Ambiguity:**

It depends on language identified by Aristotle. Any text that has two meanings are called ambiguity. It has not a clear meaning, because one word carries different meanings, and it creates confusion.

### **Types of Fallacy of ambiguity:**

- 1) Equivocation.

- 2) Amphiboly.
- 3) Accent.
- 4) Composition.
- 5) Division

### **1) Equivocation:**

It means equal voice. It means to use unclear language to deceive someone intentionally or unintentionally. It refers to two same voices. Here single statement give us two meanings.

#### **Example:**

I left my job.

I took earlier retirement from my job.

When a statement mislead people, it is equivocal because everyone took it in other sense. It maybe accidentally or deliberately.

### **2) Amphiboly:**

It is a loose awkward combination of words, that can be interpreted in more then one way. It is used as a one statement in another statement that makes the confusion.

#### **Examples:**

- 1) I went for hunting,  
I hunt birds in my pajamas.
- 2) I went for boating in my jeans.

### **3)Accent:**

It relies on the meaning of same word that is emphasized differently, it refers to misleading and wrong accent.

#### **Examples;**

1) I will go for shopping tomorrow

I will go for shopping the other day.

### **4)Composition:**

It happens when a conclusion is drawn about a feature based constituent element when no justification is provided.

#### **Examples:**

Ali has strong bones.

Ali is a man.

So therefore, all men have strong bones.

### **5)Division:**

It means if one statement is true then it must be true for all of its parts or for at least some of its parts.

#### **Example:**

Sana is in 0 grade, she eats lots of chocolates.

Anum is also a 0 grade student,

So therefore, Anum eats lots of chocolates.