**Ways of knowing : Approaches to knowledge**

**Introduction :**

We are rarely aware of the assumptions we make as we seek solutions to problems, at times we are intuitive, relying on a hunch or feelings,at other times we axamine questions in a rational way, or based on experiences of others, often we rely on authority. Let’s take a look at those different sources of knowledge that we tend to rely on in our every day experiences:

**1 /Intuition:** most of us know this married couple who after years of trying to conceive , adopt a new child. Then within a short period of time, the woman becomes pregnant. This observation leads to the common belief that **adoption increases the likelihood of pregnancy** among couples who have the same difficulty conceiving a child. From this example, we can say that relying on intuitions means that you unquestionably accept what your own personal judgment tells you about the world. A problem with with intuition is that it may lead to erroneous conclusions about cause and effect.

**2 /Authority:** One source of knowledge is that derived from authority figures. Religious leaders, teachers, parents, and judges may dictate the truth as they believe it. Or truth may be found in authoritative works such as the Bible or an encyclopedia.

People often view a text like an encyclopedia as the truth when, in fact, some information is likely incorrect (such as historical accounts of events based on biased viewpoints). Although science as a discipline is not based on authority, scientists as people do, on occasion, rely on authority. In the past, some scientists have believed so firmly in their theories that they asserted, dogmatically, that they were true. When false, these beliefs resulted in faulty knowledge and hindered the development of these disciplines.

**3/ Common sense :** it results in knowledge and understanding gained as a group or society or shared by experts and leaders of your own community.

**4/ Rationalism ( logic ) :** emphasizes reasoning and logic rather than experience, they can be very powerful methods in the search of knowledge and understanding, they play an important role in the formation of theories and hypotheses.

There are three basic forms of reasoning :

**Deductive reasoning :**

an argument based on deduction, **begins with general statements and through logical arguments, a specific conclusion is drawn.**

**Example :**

**All live mammals breathe**

**This cow is a live mammal**

**Therefore, this cow breathes**

**Inductive reasoning :**

It starts from specfic observationsand derives general conclusions.

**Example :**

All swans that have been observed are white in color

Therefore, one can conclude that all swans are white in color

This conclusion can only handle certain types of statements ( or swans)

**Inductive and deductive reasoning:**

The combination of both inductive and deductive reasoning helps in developing a hypothesis ( testable) from observation then testing it to confirm or reject it, this forms a powerful basis for the progress of knowledge.so, it is the **combination of experience with deductive and inductive reasoning which is the foundation of modern scientific research.**

**5/Tenacity:** is persistence in maintaining or adhering to an idea because it is repeated by others over and over again.

**6/ Sensory perception:** is a way of knowing relying on sensory perception. It assumes that if something is accurately perceived, it is true.