# **Question No 01**

**(1)** 

## **Empirical Research:**

Empirical research is research using empirical evidence. It is also a way of gaining knowledge by means of direct and indirect observation or experience. Empiricism values such research more than other kinds. Empirical evidence can be analyzed quantitatively or qualitatively.

#### **Theoretical Research:**

Theoretical research is a logical exploration of a system of beliefs and assumptions. This type of research includes theorizing or defining how a cyber-system and its environment behave and then exploring or playing out the implications of how it is defined.

# Differentiate between Empirical and Theoretical Research:

The empirical (or experimental) probability of an event is an "estimate" that an event will occur based upon how often the event occurred after collecting data from an experiment in a large number of trials. This type of probability is based upon direct observations. Each observation in an experiment is called a trial.

# **Example:**

A survey was conducted to know fav brand of students in the class of 60. The 4 brands listed as A,B,C,and D.

21 number of students choose brand D so the probability is 23 divided bt 60.

The probability of getting4 in dice by rolling it 6 times is 1.

The theoretical probability of an event occurring is an "expected" probability based upon knowledge of the situation. It is the number of favorable outcomes to the number of possible outcomes.

# **Example:**

The probability of getting 4 in dice by rolling it 6 times is 1.

**(2)** 

# Qualities of good research paper:

- Rigorous.
- Controlled.
- Accurate.
- Clear.
- Concise.
- · Valid.
- Verifiable.
- · Sequential.
- Precise
- Original
- Coherent

## Rigorous.

Research is a lengthy and tough work in reality and it needs great tolerance and control. Research paper needs rigorousness to uphold its quality. There can be numerous aspects that can affect the quality and the result of the research, the researcher should have govern over these factors. Some factors will affect the research positively whereas other factors can negatively affect the research. Negative factors can decline the legitimacy of the research, so these factors should be kept in control by the researcher.

#### Controlled:

A different very significant and basic characteristic of a research paper is that it should have to be precise or measured. All that you add in a research paper is preplanned and cannot occur accidental.

#### **Accurate:**

Precision is essential because without accuracy the research paper cannot be usable and generalizable. In every stage of the research the researcher has to check the precision. When the researcher is reviewing literature he should add up the references along with the literature review so that when writing those reviews he can exactly write the reference of each review.

### Clear:

A research paper should have to be free of doubts and it should have great clearness. Clarity is one of the key principles of research and without clarity the research paper is inadequate.

#### **Concise:**

As a researcher you do not necessity to add too much to the research paper to make it distinctive or fascinating pretty you should add only related and creative content. The readers will be able to recognize a brief research more easily, there should not be unnecessary details in the research.

#### Valid:

Validity is the supreme essential concern in writing and leading a research. The genuine strength of the research paper is its legitimacy. A valid research is valid to various conditions in general or it can be applied to any definite condition, people or society.

#### Verifiable:

The research should have to be directed and written in a reasonable way. The researcher should monitor a classification so that he cannot get distressed in the end as to how to accumulate this research. It is better if you start writing the research paper as you are directing it.

#### **Precise:**

Preciseness means that the research paper should have extensiveness and it should comprise thorough examination of the research topic.

## **Original:**

The research paper should cover only usual content and copy work should be absolutely escaped. You can add literature from other sources in numerous practices like in the form of literature review but you should never negotiate on the creativity of the research paper.

#### **Coherent:**

Coherence is essential because it makes the research paper a whole and one unit. Every part of the research paper should be so connected that it makes a whole.

# **Question No.03**

**(1)** 

Fresh bites started a new business as it is only one n half year of their operations.

There are multiple reasons of declining the sales the most important of them are competition. The business of fresh bites must beat the competitors either in marketing or in pricing and quality.

The poor quality of fresh bite causing sales decline.

In order to improve the sale fresh bites must improve its marketing strategy as well as quality of its products.

We will use empirical research that will help us forecast the highest probability of buying you product. As in empirical research we use empirical evidence. It is also a way of gaining knowledge by means of direct and indirect observation or experience. Empiricism values such research more than other kinds. Empirical evidence can be analyzed quantitatively or qualitatively.