

Paper /Assignment:

Research Methodologies

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Subject: Research Methodologies



Assignment

Student ID:.....

Question No: 1

- a) Differentiate between Search and Research. (05)
- b) Why it is necessary to know about different methods in Research Methodology? (05)

Question No: 2

- a) Explain the following: (05)
 - i) Epistemology
 - ii) Methodology
- b) Differentiate between Qualitative and Quantitative Methods of research. (05)

Question No: 3

Assume that you are the Mayor of Greenwood, a small town in Illinois, and you've got to make decision based on the information collected from the following research study.

The chief of police wants to experiment with increasing the number of patrol officers (X) to reduce the crime rate (Y). The chief invites all twelve area captains to participate in the experiment; only the 103rd volunteers participated. In October, patrol officers in the 103rd are increased by 15%. Reported crime drops 5% between September and December. The chief now wants to implement the program citywide.

Test your research survey with the following case. (10)

☺Good Luck☺

Question No. 1 (a) Difference between research and search:

The systematic investigative process that revise and increase the study and knowledge about a topic by scientific observation and experimentations is called research. More precisely we may differentiate the research and search as “research is the process of searching again and again in a systematic way by using specific methodology and utilizing the physical as well as the mental skills” according to the Advanced learner’s dictionary of current English lays down the meaning of research as “a careful investigation or inquiry especially thorough search for new facts in any branch of education”.

The literal meaning of research is *meticulous search*. If you simply 'search', you will find something. However, if you conduct 'research' you will be able to answer a particular question, solve a problem, or gather information, especially for a project, literary work, cinema, or a television series. This is the popular concept of research.

In academic fields, the term 'research' is used to denote activities such as defining, redefining, and solving problems; observing facts and their interpretation; formulation of hypotheses and their testing through experiments; revision of existing theories and laws; and practical application of information already generated. In most scientific disciplines, research is used as a tool to understand and solve problems for the benefit of people.

Examples: (1) You can search your key on the other hand research means making your key.

(2) You can search your research article online but research is the process of writing your research article through observation, experimentations and proper result generations under specific rules and regulations.

Question No. 1 (b) Why it is necessary to know about different methods in research methodology

Knowing about different methods in research methodology is very crucial in every walks of life.

For a graduated student it is helpful to read, understand and improve the pragmatic and practical approach towards literature on the basis of critical use of collected information. Moreover, to establish and implement the thesis and solve the expected hurdles in the future studies.

It will able us to actively & intelligently participate in the research projects, evaluations, studies and implementations taken by the institution.

It will able us to easily differentiate between the scientifically acquired knowledge and other info.

Question No. 2 (a) (i) Epistemology:

A branch of philosophy dealing with knowledge acquisition is called Epistemology. It is especially concerned about possibilities, nature and limitations of knowledge. It also explains the valid and invalid relationship of our mind with reality.

Example: The three main examples or conditions of epistemology are truth, belief and justification. Truth occurs when false propositions cannot be recognized.

Question No. 2 (a) (ii) Methodology:

"Methodology is a theory and analysis of how research does or should proceed". It is the procedure through which we collect and analyze data. Here the point that, how to achieve the results is just as important as the results itself. The importance is associated with not only the validity of the research itself but also the tools and means by which others can replicate what we've done in the research.

Example: If I know precisely, what steps you took to arrive at a specific location, as long as I follow those steps without deviation, I must to arrive in the exact location.

Question No. 2 (b) Quantitative and qualitative research:

Quantitative research:

Quantitative research is that type of research that is based on the measurement of quantity or amount. It is applicable to the phenomenon that can be presented in the form of quantity. Quantitative research is also call descriptive research.

Qualitative research:

Qualitative research is that type of research which concerns with the quality phenomenon. This type of research aims at discovering the underlying motives and desires where interviews, various types of test and questionnaires are taken to improve the quality of the research. The difference between qualitative and quantitative research is elaborated in the following table.

Table 1: Characteristics of quantitative and qualitative research

S.NO	Quantitative research	Qualitative research
1	Experimental	Descriptive
2	True experiment	Case study
3	Quasi-experiment	Ethnography
4	Meta-analysis	Survey/sampling
5	Reliable, involving hard and replicable data	Focus groups
6	generalizable	Text analysis
7	Assuming stable reality	Quantitative description
8	Outcome oriented	Prediction
9	Objective and removed from data	Soft data

Question No.3

After thorough review of the above question it can be easily concluded that the crime rate in the town is decreased due to increase in number of Captains & Volunteers. But the following factors can't be ignored.

1. **Season:** From the facts & figures it is also observed the crime rates are less in Winter as compared to the summer. Decrease in crime rate in September to December may be the reason which can't be ignored.
2. **Demonstration of Improved Honesty:** Police Chief was closely monitoring the performance of the Captains in the survey so this may be the reason in reduction of crime rates.
3. **Involvement of Volunteers:** As it is understood that the volunteer's performance is always laudable. They work with extreme honesty.
4. **Involvement of Volunteers:** As it is understood that the volunteer's performance is always laudable. They work with extreme honesty without there greed.
5. **Interested in Hiring:** Police Chief may have altered the facts & figures of crime rates with the aim to hire nears & dears in the police department or in compulsion of political interference.

Decision As a Mayor:

After the consideration of the above expected reasons as a Mayor I have to take the following steps but on the basis of availability of budget.

1. **Hiring of Manpower:** In underdeveloped areas such as old and congested, old populations areas I have to increase the Captains and constables.
2. **Hiring of Technologies:** In developed areas of cities such as Hayatabad, well developed societies where continuous supply of electricity can be maintained I will install a network of CCTV and intruders along the boundary walls. Recordings & display will be observed at Centralized control centre.
3. **Vigilance on the criminals:** Continuous monitoring of those criminals which are punished in any case, there hideouts, there relations and the suspected ones will be recorded & updated.