

MODEL QUESTIONS AND ANSWERS

1. The purpose of educational research is to
 - A. Collect data on educational phenomena
 - B. Determine educational phenomena
 - C. State educational phenomena
 - D. Understand and explain educational phenomena
2. Educational research can be defined as
 - A. A way of generating solutions to educational problems
 - B. A systematic method of gathering and interpreting information regarding educational phenomena
 - C. Different methods applied to educational issues
 - D. Empirical methods of data generation and analysis in education
3. A student who goes to the library to obtain information to answer a question posed by his/her teacher in class. The student can be described as doing research in a scholarly sense.
 - A. True
 - B. False
4. The following statements are characteristics of research **except**
 - A. Research begins with an issue
 - B. Research demands a plan
 - C. Research requires clear statement of problem
 - D. Research is vertical
5. Data collection is a necessary condition for research.
 - A. True
 - B. False
6. To solve a research problem, a researcher must formulate only research questions.
 - A. True
 - B. False
7. Which way of knowing is likely to provide you with the most valid knowledge?
 - A. Authority
 - B. Personal experience
 - C. The scientific method
8. A weakness of personal experience as a source of knowledge is that it is not objective.
 - A. True
 - B. False
9. A tradition as a source of knowledge has the advantage of engaging and accepting new knowledge.

A. True B. False

10. The method of knowing which involves observing specific instances and then generalizing from the instances is known as

A. deduction B. induction C. syllogism

11. The following are characteristics of the scientific method **except**

A. subjectivity B. precision C. verification

12. In using the scientific method to generate new knowledge a researcher must complete one stage before moving on another.

A. True B. False

13. The conclusion of a study is final

A. True B. False

14. Research is important because it

A. determines everything that we do.
B. fills the void in our knowledge.
C. guides our value system.

15. Repeating a previously conducted research using new participants does not usually add to knowledge.

A. True B. False

16. Research, on the whole, tends to push back our horizon of ignorance.

A. True B. False

17. As a teacher now can research help you to improve your practice?

A. By establishing questions to be answered.
B. By helping students know what they are taught
C. By indicating what works

18. How will you make use of research to determine the effectiveness of certain methods of doing things in the classroom?

A. Asking people about the methods
B. Effective teaching
C. Review of research on the methods

19. Educational policies formulated based on research are likely to be better than those formulated without considering relevant research results.
A. True B. False
20. Once an educational policy is formulated, there will be no need to change it.
A. True B. False
21. Research will help you to acquire the following skills **except**
A. conceptualizing. B. organizing. C. reading. D. writing.
22. The type of educational research that helps in understanding and explaining phenomenon is
A. an evaluation research B. applied research C. basic research
23. A research to test the effectiveness of a theory within a specific context can be described as
A. applied research B. basic research C. research and development
24. A study in which a researcher manipulates a factor to determine its effect on another factor can be described as
A. action research B. experimental research C. non-experimental research
25. Which type of research emphasizes measurement of variables and their relationship?
A. Applied research B. Quantitative research C. Qualitative research
26. A piece of research that is aimed at obtaining the perspectives of participants through verbal narratives is qualitative research.
A. True B. False
27. Which of the following types of research can be under taken by a classroom teacher to solve his/her problems?
A. Action research B. Applied research C. Quantitative research
28. Suppose you want to investigate the effect of using a new technique to teach mathematics on mathematics achievement. Your research can be described as
A. basic, experimental and qualitative
B. applied, experimental and quantitative
C. action, non-experimental and quantitative
29. An example of a continuous variable is

A. Height B. Method of instruction C. Nationality

30. Which of the following variables can be serving as dependent variable?
A. Type of reinforcement B. Attitude C. Method of instruction
31. A variable that can be described in terms of kind only can be said to be
A. continuous B. dichotomous variable C. extraneous variable
32. The purpose of this study was to examine the impact of systematic cooperative learning and test-taking strategies on one component of academic performance the recall of text materials. Which type of research was done?
A. Applied research B. Basic research C. Research and development
33. The purpose of this study was to examine the impact of systematic cooperative learning and test-taking strategies on one component of academic performance the recall of text materials. What is the dependent variable is the study?
A. Cooperative learning B. Recall of text material C. test taking strategies
34. The purpose of this study was to examine the impact of systematic cooperative learning and test-taking strategies on one component of academic performance the recall of text materials. What is the independent variable is the study?
A. Cooperative learning
B. Cooperative learning and test taking strategies
C. Performance
35. A research proposal is a plan of how a study is to be conducted.
A. True B. False
36. Without preparing a research plan, a researcher is not likely to proceed systematically in conducting a study.
A. True B. False
37. A research proposal should indicate the results of the study.
A. True B. False
38. The introduction section of a proposal should clearly indicate the following except
A. design to be used. B. problem to be investigated. C. Research question
39. Which type of research will warrant the formulation of research hypotheses?

- A. Qualitative research
 - B. Quantitative research
 - C. Both quantitative and qualitative research
40. In writing a research proposal, the researcher must indicate the research instrument he/she will use as well as how valid the instruments is.
- A. True
 - B. False
41. A research problem statement should indicate the following, **except** the
- A. expected results
 - B. target group
 - C. variables of interest
42. The data analysis section of a proposal must indicate how each hypothesis is to be tested.
- A. True
 - B. False
43. The problem which motivates the researcher to undertake his/her study is known as the research problem.
- A. True
 - B. False
44. A problem is anything that a person finds unsatisfactory or a state of affairs that needs to be changed.
- A. True
 - B. False
45. There are established rules that govern a final selection of research problem that every research must know.
- A. True
 - B. False
46. The research problem must be ambiguous and complex so that readers would spend time to understand, as a way of making it researchable.
- A. True
 - B. False
47. The significance of a topic implies, it must be capable of adding new information to the present state of knowledge.
- A. True
 - B. False
48. Each of the following is a criterion for a good research problem **except**
- A. is clear and concise
 - B. indicates the type of research
 - C. indicates the expected results
 - D. indicates the variables

49. A common source for research problem is
- A. the researcher's own experience
 - B. the available literature
 - C. opinions from experts
 - D. theory
50. A teacher encounters a problem in the classroom that leads to investigation or a research into such a problem. What source of problem is this?
- A. Experience B. Opinion
 - C. Theory D. Ideas from external source
51. Research problems that are obtained as a result of reading journals, especially those that report the results of studies in their area of interest, is from what source?
- A. Literature B. Replication C. Textbooks D. Development agencies
52. Research question are stated in a declarative form.
- A. True B. False
53. Stating a research problem as a research question has the advantage of simplicity and direction over the statement form.
- A. True B. False
54. Which of the following documents can be described as a secondary source?
- A. A review of a book in a journal
 - B. A report written by an investigator
 - C. An article published in a refereed journal
55. The purpose of review of literature is to identify previously used methods of investigation to avoid past mistake.
- A. True B. False
56. The review of literature is useful for
- A. determining the direction of the study.
 - B. introducing the methodology to be used for the study
 - C. resolving contradictory findings
57. Opinion of experts in a field of study is of interest to the researcher in reviewing related literature.

A. True B. False

58. The review of related literature provides a basis for the formulation of hypothesis and/or research questions.

A. True B. False

59. A scholarly textbook is a secondary source.

A. True B. False

60. A high quality of literature will summarize, critique and relate the problem.

A. True B. False

61. A review of literature should cover both theoretical and empirical issues related to the research problem under consideration.

A. True B. False

62. The most effective way to organize a review of literature is

- A. to begin with the most recent studies
- B. to structure paragraphs chronologically
- C. by themes and sub-themes
- D. to start with the primary sources

63. The original articles and reports in which researchers communicate directly to the researcher the methods and results of their study are

A. secondary sources B. primary sources C. authority

64. Primary sources tend to be distorted through being summarized or reported in another form.

A. True B. False

65. The most common approach to organizing the review literature is to group together studies that investigate similar topics or subtopics.

A. True B. False

66. Publications in which authors describe the work of others referred to as

A. Primary sources B. Secondary Sources C. Educational Index

67. The review should omit studies that conflict with personal values.

A. True B. False

68. Which part of the review of literature offers a brief description of the nature of the research problem and the statement of the research questions?
A. Conclusion B. Methodology C. The body D. Introduction
69. The summary of the review presents a composite picture of what is known or thought to date.
A. True B. False
70. Which part of the literature report must include ‘what the literature suggests are appropriate course of action to take to try to solve the problem’?
A. Summary B. Conclusion C. Introduction D. Reference
71. The section that acknowledge the source of opinions, points of view and generalization is known as
A. Summary B. Conclusion C. Introduction D. Reference
72. What type of conclusions are warranted from descriptive studies?
A. Relationship B. Causal C. Causal comparative D. Current characteristics
73. A plan or blueprint which specifies how data relating to a given problem should be collected and analyzed is known as
A. research design B. hypothesis C. descriptive design D. proposal
74. A researcher decides to look at the perception of JSS teachers in the Ho Municipality towards the practice of continuous assessment. What type of design is this?
A. Research design B. Descriptive design
C. Causal comparative D. Case study
75. Which of the following is NOT a step involved in a descriptive research?
A. Definition of the problem B. Selection of method of data collection
C. Interpretation of results C. The cost involved in undertaking research
76. Research is mainly a fact finding and drawing of conclusion.
A. True B. False
77. The sampling frame is most similar to the
A. population B. sample C. respondents D. elements
78. We use the results obtained from a sample to

- A. generalize to the population B. study to the sample
 C. study convenience sample D. identify the subjects used in the study
79. Probability sampling is to systematic sampling as non-probability sampling.
 A. stratified sampling B. proportional sampling
 C. disproportional sampling D. purposive sampling
80. Systematic sampling is preferred when
- A. stratified sampling is not possible
 B. certain subjects need to be selected because of their position original knowledge
 C. it is not possible to number all members of the population
 D. there is periodicity in a list of the population
81. A Researcher decides to select a sample by taking simple random samples from three subgroups that have been identified from the population. What type of sampling was used?
 A. Proportional B. Cluster C. Convenience D. Stratified
82. Each of the following about the subjects of study should be indicated in the research except
- A. return rate of surveys
 B. method of sampling
 C. clear description of samples
 D. names of subjects
83. The stage in the research process whereby a researcher gathers any relevant information for the solution of the research problem under study is known as
 A. data collection B. questionnaire
 C. instrument development D. descriptive research
84. Observers will vary in the degree to which they
 A. are trained for conducting the study
 B. are involved with the participants in the setting
 C. interacts with the participants.
 D. are influenced by experimental bias.
85. Which of the following describes an observer who is a member of the group being observed but maintains some distance as a researcher?
 A. complete participant B. complete observer

C. observer participant D. participant observer

86. Case study typically involves the observation of individual units

A. true B. false

87. In a case study evidence should be built up from a single source that conclusions drawn could be reliable.

A. true B. false

88. Which of the following is NOT a skill needed by a case study investigator?

- A. the investigator should not be flexible.
- B. he /she must have a grasp of the issues he/she is studying
- C. lack of bias
- D. needs to be good listener and observer.

89. A means of reducing the chance of having the individual tell what the investigator wishes to hear is to minimize direct questions and use non-direct probes.

A. true B. false

90. Case studies provide very strong evidence for scientific investigation.

A. true B. false

91. In this type of study the researcher manipulates at least one independent variable, controls other relevant variables and observes what happens to the response of subjects. The study is

- A. casual comparative study B. es post facto study
- C. experimental study D. internal validity.

92. In direct manipulation of independent variables, the investigator has a direct control of when subjects receive the independent variable but has no control of how much of it each subject receives.

A. true B. false

93. In an experiment, the researcher seeks to keep constant for all subjects, all variables, conditions, events and procedures except the

- A. independent variable B. dependent variable
- C. extraneous variable D. environmental variables

94. Selection of subjects in an experimental design is usually undertaken by means of

- A. convenient sampling B. non-probability sampling

C. quota sampling D. probability sampling.

95. When a researcher employs a specific design to control for extraneous variables, the of the design is strengthened.

- A. external validity B. internal validity
- C. experimental validity D. generalisability

96. Control of extraneous variables is achieved by

- A. making sure none of the extraneous variables and plausible
- B. random assignment
- C. making groups homogeneous on the extraneous variables
- D. using experimental design

97. In the single-group pretest design, the most significant threat to internal validity is usually.....

- A. selection B. statistical regression C. history D. experiment bias.

98. A 'true' experimental design is distinguished by.....

- A. stronger internal validity
- B. strong external validity
- C. researcher control over most extraneous variables.
- D. random assignment of subjects

99. Establishing the reliability or consistency of test scores over items and over time, thus showing that the test biases introduced by consistently is a means of controlling the biases introduced by

- A. statistical regression B. selection C. mortality D. instrumentation

100. The processes of change that take place within the subjects of an experiment refers to

- A. mortality B. maturation C. instrumentation D. history

101. Examining research data with the view to correcting mistakes in it is termed

- A. coding B. editing C. scoring

102. What is the purpose of editing research data?

- A. to introduce errors in the data collected
- B. to eliminate errors in the data collected
- C. to increase the number of respondents.

103. Scoring of data refers to assigning numbers to variables consistently.
A. true B. false
104. Coding of qualitative data is the same as coding quantitative data
A. true B. false
105. The type of coding that involves more of test is quantitative
A. true B. false
106. It is necessary to prepare data before proceeding to analyze it.
A. true B. false
107. Preparation of data contributing to conclusion validity of a study.
A. true B. false
108. The role of descriptive statistic in research is to provide the researcher with
A. the computations of data
B. the meaning of his/her observations
C. a summary of the pieces of information collected
109. Which of the following is a measure of central tendency?
A. mode B. range C. standard deviation
110. It is appropriate to use the mean to describe the numbers on the jerseys of football players.
A. true B. false
111. Which of the following measures of central tendency is appropriate for describing observations that are measured on the interval scale but not skewed?
A. mean B. median C. mode.
112. When is it appropriate to use the median to describe data?
A. when the data is categorical
B. when the data is measure using the ordinary scale
C. when the data is measure using the nominal scale.
113. The mean is the best measure of central tendency.
A. true B. false

114. Which of the following measures of speed is dependent on the two extreme scores in the distribution?

- A. inter quartile range B. range C. standard deviation.

SECTION B

Q 1.

(a) **What is educational research?**

(b) **Explain any four problems facing research in Ghana**

CONTENT:

(a)

- ❖ According to burns (1994), a research is “a scientific investigation of find answers to a problem
- ❖ To Gut (1992) research has to do with the formal systematic application of scientific method to the study of educational problems
- ❖ Frankel and Wallen (2000) point out that, the term “research” can mean any sort of careful systematic knowledge, undertaken to discover or establish facts and principles.
- ❖ Amedahe (2004) says that research involves the systematic application of the scientific method to answer perplexing questions so as to increase knowledge and understanding of phenomena.

Note: Anyone of them is correct definition of educational research

(b)

i. **Illiteracy:**

In Ghana the proportional/rate of illiteracy estimated at 60% and 70% which is high. It is difficult for people who cannot read or write appreciate the need to supply relevant information due to suspension. Again effective communication with the illiterate folks is difficult.

ii. **Secrecy:**

Our social and political set-up make people secretive and hence try to be lip-tight over issues such as marital affairs, financial matters, health matters and like.

“People do not open up /responds to questions seeking information on such issues due to suspicion.

iii. Lack of Statistics/Scanty Statistics:

The basic statistics that form the bedrock of research are often not available and where they are available they may be outmoded and unreliable.

iv. Lack of Financial Support

There is lack of financial support and the capital equipped, lack of basic equipment either from the government or the private sector. Research centres and laboratories are poorly equipped, lack of basic equipments like computers due to lack of funds. As a result enterprises in Ghana are research-oriented.

v. Neglect of Previous Researches.

People would not want to take up research if previous researches are not being used.

vi. Lack of Research Skills

Research is not done anyhow. It requires certain skills which is not available to students in institution of high learning. The result is that many who may be carrying out research may lack the much needed skills.

Q 2.

a) Explain the meaning of the term “review of related literature”

b) Explain five importance of review of related literature.

CONTENT:

a). In the classical format, this is usually the chapter two of the report. It has to do with locating, reading, sifting and analyzing documents /books containing information related to the topic under consideration. In other words, it is the summary of the writings of recognized authorities and previous researches done on the problem under investigation.

The review is in two parts, with each performing a unique function;

- i) Theoretical review which sets the theoretical framework or base for the research study; and
- ii) Empirical review which puts the current research into perspective to show the state of the art.

b) Importance

- i) It helps to determine what has been done or others have said or written that relates to the problem under the study.
- ii) It helps the researcher to know how feasible the study is in relation to resources available to him or her.
- iii) It helps the researcher to interpret the significance of the studies. It shares with the researcher result of other study that is closely related to the study being undertaken.
- iv). It points out research strategies and procedures as well as measurable instruments that other authorities have used. This may give an idea to the researcher about how to organize his/her into a logical pattern.
- v) It helps in the identification of a research problem. By critically examining the process of a study a researcher is likely to exploit a loop-hole upon which he can develop a research problem.
- vi). It helps to delimit the research problem; the researcher gets to know the scope of other studies and this guides him/her to delimit his/her problem.
- vii) It provides a framework for establishing the importance of the study as well as serving as a benchmark for comparing the results of the study with other findings.

QN 3.

- a) **Explain clearly when each of the following techniques in data collection is most appropriate for data collection**
 - i. Observation**
 - ii. Questionnaire**
 - iii. Interview**
- b) **State and explain THREE advantages and TWO disadvantages of the use of questionnaire in data collection.**

CONTENT:

a).

i. Observation

- ☞ It is appropriate when the phenomena being studied lend itself to watching and recording events or incidents.

- ☉ When a researcher wants to understand the natural environment as lived by participants without altering or manipulation.
- ☉ When you are dealing with young children

ii. Questionnaire

- a) When a question is descriptive survey
- b) When participants in a study can meaningfully read and write
- c) When sample is large and cannot be easily interviewed and are literate
- d) The study lends itself to specific issue that does not need any further explanation by respondents.

iii. Interview

- a) When the participants are relatively small in number
- b) When participants in a study are not able to read and write
- c) When there is the need to probe further into issues with for their clearer understanding
- d) When interviewees can easily be reached for face to face or telephone interview

b)

Advantages

- i. Less expensive
- ii. Can be used when respondents are scattered.
- iii. Provide uniform questions to participants.
- iv. Completed at respondents convenience
- v. Ensure anonymity.

Disadvantages

- i. Not appropriate for illiterate population
- ii. Less motivated due to lack of contact
- iii. Do not allow for the collection of any additional information
- iv. Low return rate
- v. Can produce results which are not credible

QN. 4. a). What is a questionnaire?

b). Explain FOUR advantages of using a questionnaire to gather data for research.

CONTENT:

A)

- ❖ The Questionnaire is a carefully designed instrument for collecting data in accordance with the specifications of the research questions and hypotheses.
- ❖ It consists of a set of questions to which the subject respond in writing
- ❖ It may also be described as a self – report instrument used for gathering information about variables of interest in an investigation.
- ❖ It is often a onetime data – gathering device on the variables of interest to the researcher.
- ❖ It is a form consisting of interrelated questions prepared by the researcher about the research problem under investigation, based on the objectives of the study.
- ❖ It is a set of questions distributed to a large number of people to respond to in writing. These are collected and analyzed.

Note; anyone of them is correct definition of questionnaire

B) Advantages

1. As a tool for data collections, it is less expensive compared to other methods. This is because the questionnaire can be mailed to the respondent to fill in, and also mailed back to the researcher for analysis.
2. Questionnaire can be filled at the respondent's convenience. This increases the chances of getting valid information.
3. Questionnaire can involve personal on- the spot administration and collection and thus produces quick results. This enables the researcher to complete the work within the stipulated time.
4. Questionnaires offer greater assurance of anonymity. In the case where the researcher is handling a sensitive topic like corruption in an organization, the target sample can give sensitive information without fear, as their identification is not needed on the questionnaire.
5. Questionnaires may cover a wide geographical area since researchers approach respondents more easily through questionnaires than any other method.
6. It yields objective results compared to other data collection techniques.
7. It is easier to administer in collecting data as compare to other techniques
8. Problem of not contact does not exist.

Q 5.

- a. Describe the steps involved in the research process?**
- b. Argue which is the most difficult step.**

CONTENT:

a.

The research process includes the ff. steps

Step 1: Identification of the problem to be investigated.

Step 2: Review of related literature.

Step 3: Identifying research questions and hypothesis (to clarify the research problem)

Step 4: Development of research designs for data collection, including sampling methodology and data gathering instruments.

Step 5: Data analyses, interpretations, drawing conclusion from findings and recommendation based on conclusion.

Step 6: Writing the research report.

b. The chosen step should come from the first three. Reasons may include difficulty in.

- Delimiting the many factors in a problem to specific one.
- Defining characteristics and issues to be included and those to be assessed

NB: When these steps are accomplished (or well executed) the others are methodological and may logically (naturally) follow.

QN. 6

- a. Explain the difference between “a population” and “a sample” in research.**
- b. Describe the following sampling procedures;**
 - **Simple random sampling**
 - **Cluster sampling**
 - **Snowball sampling**
 - **Purposive sampling**

CONTENT:

a. A population is:

- A complete collection of all the elements that are of interest in a particular study or

investigation.

- A totality of objects or people having one or more characteristics in common that are of interest to the researcher and where inferences or generalization are to be made. Not necessarily demographic (i.e., consisting of human), but could be objects.

A sample is:

- A collection of some (a subset) elements of population.
- Portions of the population whose results can be generalized to the entire population.
- An extraction of some subjects of the population for the purpose of studying certain characteristics of the population.

b.

i. **Simple random sampling:** This is a sample obtained by the population in such a way that samples of the same sample size have equal chances of being selected. In other words, every element of the population is given and has an equal chance of being selected. Two commonly used methods are lottery and random numbers.

ii. **Cluster Sampling:** Here elements of the population are grouped into clusters (i.e. partitioning the population into sub-groups) Sampling, random sampling or any type of sampling is then used on the clusters to obtain the sample required.

iii. **Snowball sampling (also known as network sampling):** It involves a researcher asking a key to name other people who should be contacted in order to gather information to understand some aspect of an issue under study. It is used in cases where respondents are difficult and impossible to locate using other means.

i. **Purposive Sampling (also called judgmental sampling):** The researcher selects a sample based on his or her experience or knowledge of group to be sampled. She/he has in mind that the respondents have the information being required. It is also an attempt to include a range of people or a variety of different situations in a study. E.g., using some lower level and higher level for a study on leadership.

QN. 7

1. What is “research” in a scholarly sense?

2. Discuss FIVE characteristics of research.

CONTENT:

(a)

- ❖ Research entails identification of a problem, data collection, organization, analysis and interpretation of the results obtained with the view to solving the identified problem.
- ❖ More formally, research can be defined as a systematic investigation to increase knowledge and / or understanding of a phenomenon. It is the search for an answer to an unsolved and perplexing question(s) using the scientific approach.
- ❖ Gay (1992), for example, defines research as the formal, systematic application of the scientific method to the study of problems. In short, we can say that research is the systematic application of the scientific method to answer perplexing questions in order to increase knowledge and understanding of phenomena. Research is a form of scientific inquiry.
- ❖ Research is the manner in which we solve perplexing problems in our attempt to push back the frontiers of our ignorance regarding phenomena (things or issues).

Note; anyone is accepted

(b)

- **Research begins with the questions, an issue or problem in the mind of the researcher.** Those characteristic points out that when you set out to do research you must have set in mind a question to answer an issue to explain or a problem to solve.
- **Research requires a plan.** Research entails a clearly stated plan, including direction and procedures. Research is a purposeful activity and for it to be successful, it requires a plan. In research language, the plan is known as a research proposal.
- **Research demands a clear statement of the problem:** A good research commences with a clear statement of the problem or issue of concern. The first characteristic says research begins with a problem, issue or question you set out to deal with in your research must be stated clearly indicating the relevant variables and the expected relationship, if any.

- **Research deals with the main problem through sub – problems.** Usually, the main issue or problem of concern may be too big to solve at ago. What, therefore, is done is to break down the main problem into smaller problems to which the researcher will find solutions to by solving smaller problems within the bigger problem, the main problem is solved.
- **Research seeks direction through appropriate hypotheses or questions.** Having stated the problem or issue of study and the attendant sub – problems, the sub – problems are then each stated in the form of hypothesis or a specific research question.
- **Research deals with facts and their meanings.** Earlier, we explained that research does not mean data collection per se. research goes beyond the collection of data. It is a fact that in research data are collected.

QN. 8

- (a) **Explain interview as a tool for data collection.**
- (b) **Discuss FIVE skills or qualities an interviewer should possess to collect a credible data for study**

CONTENT:

(a) An interview is a form of questioning characterized by the fact that it employs verbal questioning as its principal technique of data collection. It involves posing questions to respondents for answers in a face-to-face situation or by phone. It also represents direct attempt by the researcher to obtain reliable and valid measures of characteristics, behaviours, attitudes, etc in the form of verbal responses from one or more respondents.

(b) *Amedahe (2002) has identified the following skills and qualities to be followed for a successful interview session.*

1. **Knowledgeable;** the researcher must be knowledgeable on the topic/theme he/she is working on. This will enable interviewer to pursue relevant issues.
2. **Structuring;** an interviewer should be able to structure the interview-introduction process and closing. He/she should be able to give an introduction that will capture the attention of the interviewees. In the process

of the interview he/she should be lively and not boring in order to sustain the interview throughout the session.

3. **Clear;** The interviewer should pose clear, simple, short and straight forward questions. He/she should be able to speak distinctly and understandably and avoid academic and professional jargons.
4. **Gentle;** Allows subjects to complete what they are saying and tolerate pause and accept unconventional and provocative opinions.
5. **Sensitive;** Listen attentively to the content of what is said. be empathetic, if need be.
6. **Steering;** The interviewer should control the course of the interview and should not be afraid of interrupting digressions from the interviewee.
7. **Open;** approach the interview with an open mind. Must be open to others' opinions. Accept whatever opinions and interviewee expresses on an issue once he/she has not digressed.
8. **Critical;** does not take everything that is said at the face value but questions critically to test the reliability and validity of what the interviewee tell.
9. **Remembering;** the interviewer should be able to retain and recall what interviewees tell and must be able to relate them.
10. **Interpreting;** an interviewer must throughout the interview session try to clarity and extend the meanings of the statements made by the interviewee for confirmation or disconfirmation.

QN. 9.

State and explain FIVE steps involved in the use of the scientific method in carrying out inquiry. Indicate the relevance of each step in the process.

CONTENT;

The general order of the scientific method is as follows:

- (a) **Identification of a Problem or Question:** There is a problem or a question of some sort to start with. That is, in the use of the scientific method to obtain knowledge, there must be a problem to begin with. The problem may be an issue or something bothering the researcher and needs explanation or comprehension.

If there is no problem of some sort to be solved, or a question to be answered, one cannot commence a scientific inquiry.

(b) **Clarification of the Problem:** Once a problem is identified, the researcher takes steps to define it more precisely. The purpose here is to make the problem clearer and exact as to what the purpose of the study is. This second step directly relates to the characteristic of precision.

(c) **Determination of the information needed to solve the problem and how to obtain it:** Having clarified the problem either through operational definitions, review of previous research and formulation of hypotheses or specific questions, there is the need to determine the information relevant to be collected and how to collect the information. The information may be quantitative (i.e., dealing with number) or participants of a study determine how to obtain the data. For example, you may decide to give a questionnaire to teachers to complete but interview their pupils on relevant issues.

It is important for you to note that, the data collected and how it is collected are very important in determining the credibility of the results of a study.

(d) **Organization of the Information (Data):** In this fourth step, the researcher must decide how he / she will organize the information that will be obtained. This is to make sense out of the data collected. This can take the form of summarizing the data (e.g., computing descriptive statistics) and analyzing it (i.e. testing formulated hypotheses or guesses).

(e) **Interpretation of the Results:** After the data is organized, summarized and analyzed, the next step is to interpret the emerging results. Interpretation of the results is one of the most important parts of researcher. Research is not data collection per se so we need to interpret the data and the results. This process ends with a conclusion which we said, is tentative.

ANSWERS

1. D 13. B 25. B 37. B 49. D 61. A 73. A 85. D 97. C 109. A
2. B 14. 26. A 38. A 50. A 62. C 74. B 86. A 98. D 110. B

3. B	15. B	27. A	39. B	51. A	63. B	75. D	87. B	99. D	111. A
4. D	16. A	28. B	40. A	52. B	64. A	76. B	88. A	100. B	112. A
5. A	17. C	29. A	41. A	53. A	65. A	77. A	89. A	101. B	113. A
6. B	18. C	30. B	42. A	54. A	66. B	78. A	90. B	102. B	114. B
7. B	19. A	31. A	43. A	55. B	67. B	79. D	91. C	103. B	
8. A	20. B	32. A	44. A	56. A	68. D	80. B	92. B	104. B	
9. B	21. A	33. B	45. B	57. B	69. A	81. D	93. C	105. B	
10. B	22. C	34. B	46. B	58. A	70. B	82. D	94. A	106. A	
11. A	23. A	35. A	47. A	59. A	71. D	83. A	95. D	107. A	
12. B	24. B	36. A	48. C	60. A	72. B	84. B	96. B	108. A	