

Up to Date

**Objective MCQs, Topic Wise
Guide for Pedagogy Teaching
Jobs**

*Research Techniques in
Education*

Part I

1. The main purpose of research in education is to _____

- A. Increase social status of an individual
- B. Increase job prospects of an individual
- C. Help in the personal growth of an individual
- D. Help the candidate become an eminent educationist

Answer: D

Research: the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

2. Sampling is advantageous as it _____

- A. Saves time
- B. Helps in capital-saving
- C. Both (a) and (b)
- D. Increases accuracy

Answer: C

Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population. The methodology used to sample from a larger population depends on the type of analysis being performed, but it may include simple random sampling or systematic sampling.

3. Random sampling is helpful as it is _____.

- A. Reasonably accurate
- B. Free from personal biases
- C. An economical method of data collection
- D. All the above

Answer: D

Random and Systematic Sampling:

Simple random sampling uses a table of random numbers or an electronic random number generator to select items for its sample. ... Meanwhile, systematic sampling involves selecting items from an ordered population using a skip or sampling interval.

4. The data of research is _____

- A. Qualitative only
- B. Quantitative only
- C. Both (a) and (b)
- D. Neither (a) nor (b)

Answer: C

Qualitative data is defined as the data that approximates and characterizes. Qualitative data can be observed and recorded. This data type is non-numerical in nature. This type of data is collected through methods of observations, one-to-one interviews, conducting focus groups, and similar methods.

Quantitative data is the type of data whose value is measured in the form of numbers or counts, with a unique numerical value associated with each data set. Also known as numerical data, quantitative data further describes numeric variables (e.g. How many?)

5. The longitudinal approach of research deals with _____.

- A. Short-term researches
- B. Long-term researches
- C. Vertical researches
- D. None of the above

Answer: B

In a longitudinal study, researchers repeatedly examine the same individuals to detect any changes that might occur over a period of time. Longitudinal studies are a type of correlational research in

which researchers observe and collect data on a number of variables without trying to influence those variables.

In vertical research, questions are asked that only one or a few people are able to answer. In-depth knowledge about a real-world situation is needed to answer these questions.

6. Survey research studies _____

- A. Events
- B. Processes
- C. Populations
- D. Circumstances

Answer: C

Survey Research

Survey Research is defined as the process of conducting research using surveys that researchers send to survey respondents. The data collected from surveys is then statistically analyzed to draw meaningful research conclusions.

7. Evaluation research is concerned with _____

- A. Why are we doing?
- B. What are we doing?
- C. How well are we doing?
- D. None of the above

Answer: C

8. Which of the following is NOT the characteristic of a research?

- A. Research is systematic
- B. Research is not passive
- C. Research is not a process
- D. Research is problem oriented

Answer: C

9. Which of the following statement is correct?

- A. Discoveries are researches
- B. Researches lead to discovery
- C. Invention and Research are related
- D. None of the above

Answer: B

10. Books and records are the primary sources of data in:

- A. clinical research
- B. historical research
- C. laboratory research
- D. participatory research

Answer: B

11. The depth of any research can be judged by:

- A. title of the research
- B. duration of the research
- C. objectives of the research
- D. total expenditure on the research

Answer: C

12. Research can be conducted by a person who:

- A. is a hard worker
- B. holds a postgraduate degree
- C. has studied research methodology
- D. possesses thinking and reasoning ability

Answer: C

13. Research can be classified as:

- A. Basic, Applied and Action Research
- B. Quantitative and Qualitative Research
- C. Philosophical, Historical, Survey and Experimental Research
- D. All the above

Answer: D

Research is a logical and systematic search for new and useful information on a particular topic. Research is important both in scientific and nonscientific fields

Basic research, also called pure research or fundamental research, is a type of scientific research with the aim of improving scientific theories for better understanding and prediction of natural or other phenomena.

Basic research

- Seeks generalization
- Aims at basic processes
- Attempts to explain why things happen
- Tries to get all the facts
- Reports in technical language of the topic

What is Applied Research?

Applied research is a type of research design that seeks to solve a specific problem or provide innovative solutions to issues affecting an individual, group or society. It is often referred to as a scientific method of inquiry or contractual research because it involves the practical application of scientific methods to everyday problems.

Applied research

- Studies individual or specific cases without the objective to generalize
- Aims at any variable which makes the desired difference

- Tries to say how things can be changed
- Tries to correct the facts which are problematic
- Reports in common language

Types of Applied Research

There are 3 types of applied research. These are evaluation research, research and development, and action research.

• Evaluation Research

Evaluation research is a type of applied research that analyses existing information about a research subject to arrive at objective research outcomes or reach informed decisions. This type of applied research is mostly applied in business contexts, for example, an organisation may adopt evaluation research to determine how to cut down overhead costs.

• Research and Development

Research and development is a type of applied research that is focused on developing new products and services based on the needs of target markets. It focuses on gathering information about marketing needs and finding ways to improve on an existing product or create new products that satisfy the identified needs.

• Action Research

Action research is a type of applied research that is set on providing practical solutions to specific business problems by pointing the business in the right directions. Typically, action research is a process of reflective inquiry that is limited to specific contexts and situational in nature.

Characteristics of Applied Research in Education

1. It clearly highlights generalizations and hypotheses that inform the research findings.
2. It relies on empirical evidence.

3. It is set at providing solutions to a defined problem.
4. It requires accurate observation and description.

Examples

1. A study into the way to improve teacher-learner classroom engagements.
2. A study into the way to improve a school's readiness for its students.
3. A study to build students' interests in Mathematics.

Qualitative methods

Qualitative research is a method that collects data using conversational methods, usually open-ended questions. The responses collected are essentially non-numerical. This method helps a researcher understand what participants think and why they think in a particular way.

Types of qualitative methods include:

1. One-to-one Interview
2. Focus Groups
3. Ethnographic studies
4. Text Analysis
5. Case Study

Quantitative methods

Quantitative methods deal with numbers and measurable forms. It uses a systematic way of investigating events or data. It answers questions to justify relationships with measurable variables to either explain, predict, or control a phenomenon.

Types of quantitative methods include:

1. Survey research
2. Descriptive research
3. Correlational research

Descriptive research

Descriptive research is used to describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the "what" question.

Correlational research is a type of non-experimental research method in which a researcher measures two variables, understands and assesses the statistical relationship between them

Survey Research

Survey Research is defined as the process of conducting research using surveys that researchers send to survey respondents. The data collected from surveys is then statistically analyzed to draw meaningful research conclusions.

Philosophical Research has 3 types:

Descriptive Philosophical Research: It includes study of history of philosophy, study of different philosophers, and general development of philosophical thought. For example: Educational issues looked at from the viewpoint of different philosophers.

Normative Philosophical Research: It includes to establish, norms, standards or guidelines, for conduct of human affairs with reference to knowledge of reality. It involves identification of human dispositions which are worthy of cultivation, pointing out arguments for why these dispositions are to be considered excellence and discussing how these excellence are to be nurtured or cultivated.

Analytical Philosophical Research: It includes analysis of concepts, theories, language etc.

Historical research studies the meaning of past events in an attempt to interpret the facts and explain the cause of events, and their effect in the present events.

Experimental research is research conducted with a scientific approach, Any research conducted under scientifically acceptable conditions uses experimental methods. Experimental research allows you to test your idea in a controlled environment before taking it to market. It also provides the best method to test your theory

Comparative research

- To identify similarities and differences between units at all levels

Causal research

- It aims at establishing cause and effect relationship among variable

Theory-testing research

- It aims at testing validity of a unit

Theory-building research

- To establish and formulate the theory

14. The first step of research is:

- A. Finding a problem
- B. Selecting a problem
- C. Searching a problem
- D. Identifying a problem

Answer: D



15. A research problem is feasible only when:

- A. it is researchable
- B. it has utility and relevance
- C. it is new and adds something to knowledge
- D. all the above

Answer: D

16. Fundamental research reflects the ability to:

- A. Expound new principles
- B. Synthesize new ideals
- C. Evaluate the existing material concerning research
- D. Study the existing literature regarding various topics

Answer: A

17. The study in which the investigators attempt to trace an effect is known as:

- A. Survey Research
- B. Historical Research
- C. Summative Research

D. 'Ex-post Facto' Research

Answer: D

Ex post facto study or after-the-fact research is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher.

18. The main characteristic of scientific research is:

- A. empirical
- B. theoretical
- C. experimental
- D. all of the above

Answer: D

19. Which technique is generally followed when the population is finite?

- A. Systematic Sampling Technique
- B. Purposive Sampling Technique
- C. Area Sampling Technique
- D. None of the above

Answer: A

20. Research problem is selected from the stand point of:

- A. Social relevance
- B. Financial support
- C. Researcher's interest
- D. Availability of relevant literature

Answer: A

21. Formulation of hypothesis may NOT be required in:

- A. Survey method

- B. Historical studies
- C. Normative studies
- D. Experimental studies

Answer: B

22. Field-work based research is classified as:

- A. Historical
- B. Empirical
- C. Biographical
- D. Survey

Answer: B

23. Which one of the following is the most comprehensive source of population data?

- A. Census
- B. National Sample Surveys
- C. Demographic Health Surveys
- D. National Family Health Surveys

Answer: A

24. The research is always -

- A. exploring new knowledge
- B. verifying the old knowledge
- C. filling the gap between knowledge
- D. all of these

Answer: D

25. How can the objectivity of the research be enhanced?

- A. Through its validity
- B. Through its reliability

- C. Through its impartiality
- D. All of these

Answer: D

26. Action-research is:

- A. An applied research
- B. A longitudinal research
- C. A research carried out to solve immediate problems
- D. All the above

Answer: C

27. The research which is exploring new facts through the study of the past is called

- A. Content analysis
- B. Historical research
- C. Mythological research
- D. Philosophical research

Part II

Answer: B

1. 'Ethnography' describes _____

- a) Culture
- b) Way of life
- c) Progeny
- d) Both (a) and (b)

ANSWER: d) Both (a) and (b)

It is the study of culture and people.

2. If a researcher conducts a research on finding out which administrative style contributes more to institutional effectiveness ? This will be an example of

- A. Applied Research
- B. Survey Research
- C. Basic Research
- D. Descriptive of the above

Answer: A

3. Which of the following variables cannot be expressed in quantitative terms?

- A. Marital Status
- B. Numerical Aptitude
- C. Professional Attitude
- D. Socio-economic Status

Answer: C

4. Which of the following is not an example of a continuous variable?

- A. Height
- B. Attitude
- C. Family size
- D. Intelligence

Answer: D

What is a Continuous and Discrete Variable?

Continuous Variables would (literally) take forever to count. In fact, you would get to “forever” and never finish counting them. For example, take age. You can’t count “age”. Why not? Because it would literally take forever. For example, you could be:

25 years, 10 months, 2 days, 5 hours, 4 seconds, 4 milliseconds, 8 nanoseconds, 99 picoseconds...and so on.

You *could* turn age into a discrete variable and then you could count it.

For example:

- A person's age in years.
- A baby's age in months.

If you start counting now and never, ever, ever finish (i.e. the numbers go on and on until infinity), you have what's called a continuous variable.

If your variable is "Number of Planets around a star," then you can count all of the numbers out (there can't be an infinite number of planets). That is a discrete variable.

5. A research paper is a brief report of research work based on

- A. Primary Data only
- B. Secondary Data only
- C. Both Primary and Secondary Data
- D. None of the above

Answer: C

Primary data is a type of data that is collected by researchers directly from main sources through interviews, surveys, experiments, etc. Primary data are usually collected from the source—where the data originally originates from and are regarded as the best kind of data in research.

Secondary data is the data that has already been collected through primary sources and made readily available for researchers to use for their own research. ... The data may also have been collected for general use with no specific research purpose like in the case of the national census.

6. Newton gave three basic laws of motion. This research is categorized as

- A. Sample Survey
- B. Applied Research

- C. Descriptive Research
- D. Fundamental Research

Answer: D

7. In the process of conducting research “Formulation of Hypothesis” is followed by

- A. Analysis of Data
- B. Collection of Data
- C. Statement of Objectives
- D. Selection of Research Tools

Answer: B

8. Which one of the following does not come under the methods of data classification ?

- A. Spatial
- B. Normative
- C. Qualitative
- D. Quantitative

Answer: A

9. The essential qualities of a researcher are

- A. systematization or theorizing of knowledge
- B. reliance on observation and evidence
- C. spirit of free enquiry
- D. all the above

Answer: D

10. Research is conducted to

- A. Generate new knowledge
- B. Obtain research degree

- C. Reinterpret existing knowledge
- D. All of the above

Answer: D

11. A hypothesis is a

- A. law
- B. canon
- C. nomination
- D. supposition

Answer: D

Hypothesis is a supposition or proposed explanation made on the basis of limited evidence as a starting point for further investigation.

12. Controlled group condition is applied in

- A. Survey Research
- B. Historical Research
- C. Descriptive Research
- D. Experimental Research

Answer: D

Control Condition is in an experiment or research design, a condition that does not involve exposure to the treatment or intervention under study

13. Workshops are meant for

- A. giving lectures
- B. multiple target groups
- C. showcase new theories
- D. hands on training/experience

Answer: D

14. Mrs. Smith is writing her daily observations of a student and writes, without interpretation, that the student is not completing the class work and is constantly speaking out of turn. Which of the following objectives does she appear to be using?

- a. prediction
- b. description
- c. explanation
- d. exploration

Answer is: B

15. Which of the following is a form of research typically conducted by teachers, counselors, and other professionals to answer questions they have and to specifically help them solve local problems?

- a. action research
- b. basic research
- c. predictive research
- d. orientation research

Answer is: A

Predictive research is chiefly concerned with forecasting (predicting) outcomes, consequences, costs, or effects. This type of research tries to extrapolate from the analysis of existing phenomena, policies, or other entities in order to predict something that has not been tried, tested, or proposed before.

Orientation Research: This type of research focuses on collecting information to help a researcher advance a specific ideological or political position or orientation that he/she believes will improve some part of our society.

16. The development of a solid foundation of reliable knowledge typically is built from which type of research?

- a. basic research
- b. action research
- c. evaluation research
- d. orientational research

Answer is: A

17. Research that is done to examine the findings of someone else using the "same variables but different people" is which of the following?

- a. exploration
- b. hypothesis
- c. replication
- d. empiricism

Answer is: C

Replication in research

Replication is a term referring to the repetition of a research study, generally with different situations and different subjects, to determine if the basic findings of the original study can be applied to other participants and circumstances.

18. A researcher designs an experiment to test how variables interact to influence how well children learn spelling words. In this case, the main purpose of the study was:

- a. Explanation
- b. Description

- c. Influence
- d. Prediction

Answer is: A

19. There is a set of churches in the U.S. where part of the service involves snake handling. The researcher wants to find out why the people attending these churches do this and how they feel and think about it. In this case, the primary purpose of the study is:

- a. Exploration
- b. Description
- c. Influence
- d. Prediction

Answer is: A

20. What general type of research is focused on collecting information to help a researcher advance an ideological or political position?

- a. Evaluation research
- b. Basic research
- c. Action research
- d. Orientation research

Answer is: D

21. Which of the following statements is true of a theory?

- a. it most simply means “explanation”
- b. it answers the “how” and “why” questions
- c. it can be a well developed explanatory system

d. all of the above are correct

Answers: D

22. Tippit table refers to _____

- a) Table of random digits
- b) Table used in sampling methods
- c) Table used in statistical investigations
- d) All the above

Simple random sampling lottery method tippit's random tables.

Definition It is that method of sampling in which each and every item of the universe has an equal chance of being Selected. In other words, there is an equal probability for every item of the universe.

23. Research and Development become the index of development of country. Which of the following reasons are true with regards to this statement?

- a) Because R&D reflect the true economic and social conditions prevailing in a country
- b) Because R&D targets the human development
- c) Because R&D can improve the standard of living of the people in a country
- d) All the above

ANSWER: d) All the above

24. Primary data for the research process be collected through _____.

- a) Experiment
- b) Survey

- c) Both (a) and (b)
- d) None of the above

ANSWER: c) Both (a) and (b)

25. A researcher wants to study the relationship of family size to income. He classifies his population into different income slabs and then takes a random sample from each slab in order. Which technique of sampling is he working with?

- a) Cluster sampling
- b) Random sampling
- c) Stratified random sampling
- d) Systematic sampling

ANSWER: c) Stratified random sampling

Cluster sampling is a probability sampling technique where researchers divide the population into multiple groups (clusters) for research.

Stratified random sampling is a method of sampling that involves the division of a population into smaller sub-groups known as strata. In stratified random sampling, or stratification, the strata are formed based on members' shared attributes or characteristics such as income or educational attainment.

Random sampling is a part of the sampling technique in which each sample has an equal probability of being chosen. A sample chosen randomly is meant to be an unbiased representation of the total population. An unbiased random sample is important for drawing conclusions.

Systematic sampling is a statistical method involving the selection of elements from an ordered sampling frame.

26. Participant observation is the process of immersing yourself in the study of _____

- a) Outcomes
- b) Methods
- c) People
- d) Options

ANSWER: c) People

Participant observation is a qualitative research method in which the researcher studies a group not only by observing the group, but also by participating in the activities of the group.

Different types of participant observations are non-participatory, passive participation, moderate participation, active participation, and complete participation.

Part III

1. The type of research by purpose is:

- A. Basic Research
- B. Applied Research
- C. Action Research
- D. All of the above

Answer is: D

2. The type of research by method is:

- A. Historical research

- B. Survey research
- C. Experimental research
- D. All of the above

Answer is: D

3. The research concerned with the development of theories is called?

- A. Basic Research
- B. Applied Research
- C. Action Research
- D. Experimental Research

Answer is: A

4. The research concerned with the use or testing of theories is called:

- A. Basic Research
- B. Applied Research
- C. Action Research
- D. Experimental Research

Answer is: B

5. The research concerned with the classroom problems is:

- A. Basic Research
- B. Applied Research
- C. Action Research
- D. Experimental Research

Answer is: C

6. The research concerned with the explaining of events of the past is:

- A. Basic Research
- B. Historical Research
- C. Action Research

D. Experimental Research

Answer is: B

7. The research concerned with the current status of the subject of the study is:

- A. Historical Research
- B. Experimental Research
- C. Action Research
- D. Descriptive Research

Answer is: D

8. Criticism is an important step in:

- A. Historical Research
- B. Experimental Research
- C. Action Research
- D. Descriptive Research

Answer is: A

9. Cause and effect relationship is established in:

- A. Historical Research
- B. Experimental Research
- C. Action Research
- D. Descriptive Research

Answer is: B

10. Control Group is the characteristics of:

- A. Historical Research
- B. Experimental Research
- C. Action Research

D. Descriptive Research

Answer is: B

11.Data is collected through questionnaire, interview or observation in:

- A. Historical Research
- B. Experimental Research
- C. Action Research
- D. Descriptive Research

Answer is: D

12.The development and testing of hypothesis is necessary in:

- A. Historical Research
- B. Experimental Research
- C. Action Research
- D. Descriptive Research

Answer is: B

13. The tentative explanation of a phenomenon or event is:

- a. Problem
- b. Hypothesis
- c. Data
- d. Analysis

Answer is: B

Tentative: not certain or fixed; provisional, not fully worked out or developed

14. The important characteristics of a research problem is:

- A. Novel

- B. Significant
- C. Researchable
- D. All of the above

Answer is: D

15. The minimum sample size in descriptive research is:

- a. 10 % of the population
- b. 20 % of the population
- c. 30 % of the population
- d. 50 % of the population

Answer is: B

16. The pre testing the instrument to detect weakness is:

- a. Sampling
- b. Pilot Testing
- c. Socio metric technique
- d. Inventory

Answer is: B

Pilot testing is a rehearsal of your research study, allowing you to test your research approach with a small number of test participants before you conduct your main study.

Sociometric techniques are methods that qualitatively measure aspects of social relationships, such as social acceptance (i.e., how much an individual is liked by peers) and social status (i.e., child's social standing in comparison to peers).

Inventory is a complete list of items such as property, goods in stock, or the contents of a building.

17. First part of research report is:

- a. Preliminary pages
- b. Main body
- c. Appendices
- d. None of the above

Answer is: A

Preliminary pages are, in order, the title page; copyright page; Statement of Thesis/Dissertation Approval; abstract; dedication (optional); table of contents; lists of tables, figures, symbols, and abbreviations; and acknowledgments (optional).

An appendix contains supplementary material that is not an essential part of the text itself but which may be helpful in providing a more comprehensive understanding of the research problem or it is information that is too cumbersome to be included in the body of the paper.

18. The middle part of research report is:

- a. Preliminary pages
- b. Main body
- c. Appendices
- d. None of the above

Answer is: B

19. The last portion of research report is:

- a. Preliminary pages
- b. Main body
- c. Appendices
- d. None of the above

Answer is: C

20. The basis of experimental research is:

- a. Hypothesis
- b. Assumptions
- c. Conclusions
- d. Findings

Answer is: A

21. Research study starts from:

- a. Development of hypothesis
- b. Testing the hypothesis
- c. Data collection
- d. Finding a problem

Answer is: D

22. What is the purpose of research?

- a) To describe and explain a new phenomenon
- b) To verify what has already been established
- c) To reject what has already been accepted as a fact
- d) None of the above

ANSWER: A

23. Research is a continuous critical investigation.

- a.) True
- b.) False

ANSWER: a.) True

24. Which of the following is not an essential element of report writing?

- a. Methodology
- b. Reference
- c. Conclusion
- d. None of these

Answer is: D

The key elements of a report

- Title page.
- Methodology
- Table of contents.
- Executive summary.
- Introduction.
- Discussion.
- Conclusion.
- Recommendations.
- References.

25. What is the purpose of doing research?

- a. To identify problem
- b. To find the solution
- c. Both a and b
- d. None of these

Answer is: C

26. In group interview there are _____

- a. One interviewer and one interviewee
- b. More than one interviewer and one interviewee
- c. One interviewer and more than one interviewee

d. More than One interviewer and more than one interviewee

Answer is: C

27. In inductive method, we proceed from:

- A. General to specific
- B. Specific to General
- C. General to specific
- D. Specific to specific

Answer is: B

The **inductive approach** in research involves beginning with a set of empirical observations, seeking patterns in those observations, and then theorizing about those patterns

A **deductive approach** to research is the one that people typically associate with scientific investigation. The researcher studies what others have done, reads existing theories of whatever phenomenon he or she is studying, and then tests hypotheses that emerge from those theories.

28. In deductive method, we proceed from:

- A. General to specific
- B. Specific to General
- C. General to specific
- D. Specific to specific

Answer is: A

29. What is the importance of educational research?

- A. It solves the problem of students
- B. It helps in the development of curriculum
- C. It helps in understanding of how children learn
- D. All of the above

Answer is: D

30. How can educational research be useful for teachers?

- A. Teachers can get better pay scales
- B. It can improve methods of solving instructional problems
- C. Teacher and headmaster can better cooperate with each others
- D. Teacher can communicate with the society more effectively

Answer is: B

31. What type of remains a historical research can find?

- A. Physical
- B. Printed
- C. Hand written
- D. All of the above

Answer is: D

32. The publication that contains description of education research by an author who was not the direct observer or participant is a _____ source?

- A. Primary
- B. Secondary
- C. Review
- D. Preliminary

Answer is: B

1. What is true about hypothesis?

- A. They are always tested
- B. They are merely happy accidents
- C. They are always proved
- D. Facts may be collected to prove the hypothesis

Answer is: A

2. Another name for the independent variable is:

- A. Consequent
- B. Antecedent
- C. Response
- D. Effect

Answer is: B

The **independent variable** represents a predictor or causal variable in the study. In any antecedent-consequent relationship, the antecedent is the independent variable and the consequent is the dependent variable.

An **antecedent variable** is a variable that occurs before the independent and dependent variables under study and can help explain the relationship between the two.

3. The best way to find the solution to a problem is:

- A. Scientific method
- B. Inductive reasoning
- C. Deductive reasoning
- D. Expert opinion

Answer is: A

4. The group to which a researcher would like the results of a study to be generalized is referred to as:

- A. Sample
- B. Experimental group
- C. Control group
- D. Population

Answer is: D

5. Survey studies and observational studies come under the category of which type of research?

- A. Experimental research
- B. Historical research
- C. Descriptive research
- D. Action research

Answer is: C

6. Administration of the instrument on two or three respondents to find out its flaws is termed as:

- A. Pilot study
- B. Try out
- C. Validation
- D. Appropriateness

Answer is: A

As a process, validation involves collecting and analyzing data to assess the accuracy of an instrument. There are numerous statistical tests and measures to assess the validity of quantitative instruments, which generally involves pilot testing

7. An interview in which questions to be asked from the interviewee are determined in advance is called:

- A. Open ended
- B. Close ended
- C. Structured
- D. Un structured

Answer is: C

8. The ultimate focus of scientific method is:

- A. Hypothesis formulation
- B. Observation
- C. Formulation of law/ theory
- D. Experimentation

Answer is: C

9. The lowest level of measurement is represented in:

- A. Nominal scales
- B. Ordinal scales
- C. Interval scales
- D. Ration scales

Answer is: A

Nominal Scale: 1st Level of Measurement

Nominal Scale, also called the categorical variable scale, is defined as a scale used for labeling variables into distinct classifications and doesn't involve a quantitative value or order. This scale is the simplest of the four variable measurement scales. Calculations done on these variables will be futile as there is no numerical value of the options.

Nominal Scale Examples

- Gender
- Political preferences
- Place of residence

What is your Gender?	What is your Political preference?	Where do you live
<ul style="list-style-type: none"> • M- Male • F- Female 	<ul style="list-style-type: none"> • 1- Independent • 2- Democrat • 3- Republican 	<ul style="list-style-type: none"> • 1- Suburbs • 2- City • 3- Town

Ordinal Scale: 2nd Level of Measurement

Ordinal Scale is defined as a variable measurement scale used to simply depict the order of variables and not the difference between each of the variables. These scales are generally used to depict non-mathematical ideas such as frequency, satisfaction, happiness, a degree of pain, etc. It is quite straightforward to remember the implementation of this scale as ‘Ordinal’ sounds similar to ‘Order’, which is exactly the purpose of this scale.

How satisfied are you with our services?

- Very Unsatisfied – 1
- Unsatisfied – 2
- Neutral – 3
- Satisfied – 4
- Very Satisfied – 5

An interval scale is one where there is order and the difference between two values is meaningful. temperature (Fahrenheit), temperature (Celcius), pH, SAT score (200-800), credit score (300-850).

Even if interval scales are amazing, they do not calculate the “true zero” (negative value is also calculated using this scale) which is why the next scale comes into the picture.

Ratio Scale: 4th Level of Measurement

Ratio Scale is defined as a variable measurement scale that not only produces the order of variables but also makes the difference between variables known along with information on the value of true zero.

In addition to the fact that the ratio scale does everything that a nominal, ordinal, and interval scale can do, it can also establish the value of absolute zero. The best examples of ratio scales are weight and height.

10. The highest, most precise level of measurement is:

- A. Nominal Scale
- B. Ordinal scales
- C. Interval scales
- D. Ratio scales

Answer is: D

11. While writing the research report, one should be:

- A. Objective
- B. Introspective
- C. Both of the above
- D. None of the above

Answer is: A

12. The size of sample depends upon:

- A. Population
- B. Research type
- C. Researcher
- D. Convenience

Answer is: B

13. By using the lottery method, we do:

- A. Random sampling
- B. Systematic sampling
- C. Both of the above
- D. None of the above

Answer is: A

14. Treatment group is formed in:

- A. Action research
- B. Descriptive research
- C. Historical research
- D. Experimental research

Answer is: D

15. The scale which categorizes events collectively and mutually is named as:

- A. Nominal scales
- B. Ordinal scales
- C. Interval scales
- D. Ratio scales

Answer is: A

16. When in depth investigation of an individual, group or institution is done, it is called:

- A. Self report
- B. Observation research
- C. Case study
- D. Ethnography

Answer is: C

17. The boundaries of the study in a research process are known as:

- A. Limitations
- B. Delimitations
- C. Assumptions
- D. Specifications

Answer is: B

Limitations are influences that the researcher cannot control. They are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on your methodology and conclusions

Delimitations are choices made by the researcher and they describe the boundaries that you have set for the study.

18. Questionnaire is most useful instrument for:

- A. Historical study
- B. Observational study
- C. Experimental study
- D. Survey study

Answer is: D

19. The difference between the means of two groups is calculated using the:

- A. A.Test
- B. B.Test
- C. T.Test
- D. C.Test

Answer is: C

What Is a T-Test?

A **t-test** is a type of inferential statistic used to determine if there is a significant difference between the means of two groups, which may be related in certain features.

Calculating a t-test requires three key data values. They include the difference between the mean values from each data set (called the mean difference)

20. The qualities of a good research tool are:

- A. Validity
- B. Economy
- C. Reliability
- D. All of the above

Answer is: D

21. The reference list or bibliography is placed:

- A. In the beginning of the research report
- B. In the middle of the research report
- C. At the end of the research report
- D. Both A & B

Answer is: C

22. When data is collected from all the members of the population, the study is called as:

- A. Sample study
- B. Census study
- C. Case study
- D. Comparative study

Answer is: B

23. A questionnaire in which possible responses are provided to the respondent and he/ she has to select from the given responses is called:

- A. Open ended
- B. Close ended
- C. Short questions
- D. Long questions

Answer is: B

24. All members of hypothetical set of persons, objects or events are called:

- A. Population
- B. Sampling
- C. Random sampling
- D. Cluster Sampling

Answer is: A

25. A description of the study in a research report, written by a person who conducted it, is called as:

- A. Secondary source
- B. Primary source
- C. Related material
- D. Personal observation

Answer is: B

26. A condition or characteristic that can take on different values or categories is called ____.

- a. a constant
- b. a variable
- c. a cause-and-effect relationship
- d. a descriptive relationship

Answer is: B

27. Which of the following can be described as categorical variable?

- A. Age
- B. Annual income
- C. Average
- D. Religion

Answer is: D

28.The correlation between and intelligence test score grades is:

- A. Positive
- B. Negative
- C. Perfect
- D. They are not correlated

Answer is: A

Positive correlation is a relationship between two variables in which both variables move in tandem—that is, in the same direction. A positive correlation exists when one variable decreases as the other variable decreases, or one variable increases while the other increases.

Negative correlation is a relationship between two variables in which one variable increases as the other decreases, and vice versa.

29. Which techniques are mostly used in educational research?

- A. Questionnaire
- B. Survey
- C. Interview
- D. Observation

Answer is: D

The End