1) Who was the author of the book named "Methods in Social Research"?

1. Kerlinger
2. CR Kothari
3. Goode and Hatt
4. Wilkinson

Hide Answer Workspace

**Answer:** c) Goode and Halt

**Explanation:** The book named "Methods in Social Research" was authored by Goode and Hatt on Dec 01, 1952, which was specifically aimed to improve student's knowledge as well as response skills.

2) What is the major attribute of Correlation Analysis?

1. Association among variables
2. Difference among variables
3. Regression among variables
4. Variations among variables

Hide Answer Workspace

**Answer:** a) Association among variables

**Explanation:** Mainly the correlational analysis focus on finding the association between one or more quantitative independent variables and one or more quantitative dependent variables.

3) What is the name of the conceptual framework in which the research is carried out?

1. Research hypothesis
2. Synopsis of Research
3. Research paradigm
4. Research design

Hide Answer Workspace

**Answer:** d) Research design

**Explanation:** A conceptual framework can be understood as a Research design that you require before research.

4) What is the main role of research in education?

Skip Ad

1. To upsurge one's social status.
2. To increase one's job prospects.
3. To augment one's personal growth.
4. To help an applicant in becoming a renowned educationalist.

Hide Answer Workspace

**Answer:** d) To help an applicant in becoming a renowned educationalist

**Explanation:** Educational research can be defined as an assurance for reviewing and improving educational practice, which will result in becoming a renowned educationalist.

5) Which of the following features are considered as critical in qualitative research?

1. Collecting data with the help of standardized research tools.
2. Design sampling with probability sample techniques.
3. Collecting data with bottom-up empirical evidence.
4. Gathering data with top-down schematic evidence.

Hide Answer Workspace

**Answer:** c) Collecting data with bottom-up empirical evidence.

**Explanation:** In qualitative research, we use an inductive methodology that starts from particular to general. In other words, we study society from the bottom, then move upward to make the theories.

6) How is random sampling helpful?

1. Reasonably accurate
2. An economical method of data collection
3. Free from personal biases
4. All of the above

Hide Answer Workspace

**Answer:** d) All of the above

**Explanation:** In random sampling, for each element of the set, there exist a possibility to get selected.

7) A research intends to explore the result of possible factors for the organization of effective mid-day meal interventions. Which research method will be most appropriate for this study?

1. Descriptive survey method
2. Historical method
3. Ex-post facto method
4. Experimental method

Hide Answer Workspace

**Answer:** c) Ex-post facto method

**Explanation:** Mainly in the ex-post facto method, the existing groups with qualities are compared on some dependent variable. It is also known as quasi-experimental for the fact that instead of randomly assigning the subjects, they are grouped on the basis of a particular characteristic or trait.

8) Tippit table refers to as \_\_\_\_\_\_\_\_\_

1. Table of random digits
2. The table used in sampling methods
3. The table used in statistical investigations
4. All of the above

Hide Answer Workspace

**Answer:** d) All of the above

**Explanation:** Tippit table was first published by L.H.C Tippett in 1927.

9) In order to pursue the research, which of the following is priorly required?

1. Developing a research design
2. Formulating a research question
3. Deciding about the data analysis procedure
4. Formulating a research hypothesis

Hide Answer Workspace

**Answer:** b) Formulating a research question

**Explanation:** Before starting with research, it is necessary to have a research question or a topic because once the problem is identified, then we can decide the research design.

10) The format of thesis writing is the same as in

1. Writing of Seminar representation
2. Preparation of research paper/article
3. A research dissertation
4. Presenting a workshop/conference paper

Hide Answer Workspace

**Answer:** c) A research dissertation

**Explanation:** The format of thesis writing is similar to that of a research dissertation, or we can simply say that dissertation is another word for a thesis.

11) Which one among the following statements is false in the context of participatory research?

1. It recognizes knowledge as power
2. It is a collective process of inquiry
3. It emphasizes people as experts
4. Its sole purpose is the production of knowledge

Hide Answer Workspace

**Answer:** d) Its sole purpose is the production of knowledge

**Explanation:** Participatory action research is a kind of research that stresses participation and action.

12) Which one among the following statement is true in the context of the testing of hypotheses?

1. It is only the alternative hypotheses that can be tested.
2. It is only the null hypotheses that can be tested.
3. Both the alternative and the null hypotheses can be tested.
4. Both the alternative and the null hypotheses cannot be tested.

Hide Answer Workspace

**Answer:** b) It is only the null hypothesis that can be tested.

**Explanation:** Hypotheses testing evaluates its plausibility by using sample data.

13) What are the conditions in which Type-I error occurs?

1. The null hypotheses get accepted even if it is false
2. The null hypotheses get rejected even if it is true
3. Both the null hypotheses as well as alternative hypotheses are rejected
4. None of the above

Hide Answer Workspace

**Answer:** b) The null hypotheses get rejected even if it is true

**Explanation:** The Type-I Error can be defined as the first kind of error.

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

1. R&D targets human development
2. R&D can enhance people's standard of living in the country
3. R&D reflects the actual economic and social conditions being prevailed in the country
4. All the above

Hide Answer Workspace

**Answer:** d) All of the above.

**Explanation:** No explanation.

15) What does the longitudinal research approach actually deal with?

1. Long-term research
2. Short-term research
3. Horizontal research
4. None of the above

Hide Answer Workspace

**Answer:** a) Long-term research

**Explanation:** In general, the longitudinal approach is long-term research in which the researchers keep on examining similar individuals to detect if any change has occurred over a while.

16) What do you understand by the term "Anusandhan"?

1. Goal-oriented
2. Following an aim
3. Attaining an aim
4. Praying to achieve an aim

Hide Answer Workspace

**Answer:** b) Following an aim

**Explanation:** No explanation.

17) Evaluation Research is concerned with \_\_\_\_\_\_\_\_\_\_

1. How well are we doing?
2. Why are we doing?
3. What are we doing?
4. None of the above

Hide Answer Workspace

**Answer:** a) How well are we doing?

**Explanation:** Instead of focusing on the process, the evaluation research measures the consequences of the process, for example, if the objectives are met or not.

18) Which of the following does not correspond to characteristics of research?

1. Research is not passive
2. Research is systematic
3. Research is not a problem-oriented
4. Research is not a process

Hide Answer Workspace

**Answer:** d) Research is not a process

**Explanation:** Research is an inspired and systematic work that is undertaken by the researchers to intensify expertise.

19) Which of the following options are the main tasks of research in modern society?

1. To learn new things
2. To keep pace with the advancement in knowledge
3. To systematically examine and critically analyze the investigations/sources with the objective
4. All of the above

Hide Answer Workspace

**Answer:** d) All of the above

**Explanation:** Research is an inspired and systematic work that is undertaken by the researchers to intensify expertise.

20) What is the main aim of interdisciplinary research?

1. To over simplify the problem of research
2. To bring out the holistic approach to research
3. To create a new trend in research methodology
4. To reduce the emphasis on a single subject in the research domain

Hide Answer Workspace

**Answer:** b) To bring out the holistic approach to research

**Explanation:** Particularly in interdisciplinary research, it combines two or more hypothetical disciplines into one activity.

21) The main aim of the scientific method in the research field is to \_\_\_\_\_\_\_\_\_

1. Improve data interpretation
2. Confirm triangulation
3. Introduce new variables
4. Eliminate spurious relations

Hide Answer Workspace

**Answer:** d) Eliminate spurious relations

**Explanation:** Scientific research aims to build knowledge by hypothesizing new theories and discovering laws.

22) A researcher is interested in studying the prospects of a particular political party in an urban area. So, what tool should he prefer for the study?

1. Rating Scale
2. Interview
3. Questionnaire
4. Schedule

Hide Answer Workspace

**Answer:** c) Questionnaire

**Explanation:** Since it is an urban area, so there is a probability of literacy amongst a greater number of people. Also, there would be numerous questions over the ruling period of a political party, which cannot be simply answered by rating. The rating can only be considered if any political party has done some work, which is why the Questionnaire is used.

23) The conclusions/findings of which type of research cannot be generalized to other situations?

1. Casual Comparative Research
2. Historical Research
3. Descriptive Research
4. Experimental Research

Hide Answer Workspace

**Answer:** b) Historical Research

**Explanation:** One cannot generalize historical research in the USA, which has been done in India.

24) How to judge the depth of any research?

1. By research title
2. By research duration
3. By research objectives
4. By total expenditure on research

Hide Answer Workspace

**Answer:** c) By research objectives

**Explanation:** Research objectives concisely demonstrate what we are trying to achieve through the research.

25) Who can successfully conduct Research?

1. Someone who is a hard worker
2. Possesses post-graduation degree
3. Has studied research methodology
4. Possesses thinking and reasoning ability

Hide Answer Workspace

**Answer:** c) Has studied research methodology

**Explanation:** Anyone who has studied the research methodology can undergo the research.

26) Which of the following is not the method of Research?

1. Survey
2. Historical
3. Observation
4. Philosophical

Hide Answer Workspace

**Answer:** c) Observation

**Explanation:** Mainly the research method comprises strategies, processes or techniques that are being utilized to collect the data or evidence so as to reveal new information or create a better understanding of a topic.

27) A research problem is feasible only when

1. It has utility and relevance
2. It is new and adds something to knowledge
3. It is researchable
4. All of the above

Hide Answer Workspace

**Answer:** d) All of the above

**Explanation:** A research problem can be defined as a statement about the area of interest, a condition that is required to be improved, a difficulty that has to be eradicated, or any disquieting question existing in scholarly literature, in theory, or in practice that points to be solved.

28) Circle graphs are used to show

1. How is one part related to other parts?
2. How various sections share in the whole?
3. How is one whole related to another whole?
4. How are various parts related to the whole?

Hide Answer Workspace

**Answer:** d) How are various parts related to the whole?

**Explanation:** A circle graph helps in visualizing information as well as the data.

29) Authenticity of a research finding is its

1. Validity
2. Objectivity
3. Originality
4. All of the above

Hide Answer Workspace

**Answer:** b) Objectivity

**Explanation:** No explanation.

30) Which one is called non-probability sampling?

1. Quota sampling
2. Cluster sampling
3. Systematic sampling
4. Stratified random sampling

Hide Answer Workspace

**Answer:** a) Quota sampling

**Explanation:** In non-probability sampling, all the members do not get an equal opportunity to participate in the study.

31) What does a good thesis involve?

a) Reducing punctuations as well as grammatical errors to minimalist  
b) Correct reference citations  
c) Consistency in the way of thesis writing  
d) Well defined abstract

Select the answers from the codes given below:

1. b), c) and d)
2. a), b), c) and d)
3. a), b) and c)
4. a), b) and d)

Hide Answer Workspace

**Answer:** B. a), b), c) and d)

**Explanation:** All of the above.

32) Which one among the following statements is correct in context to research?

a) Research refers to a series of systematic activity or activities undertaken to find out the solution to a problem.  
b) It is a systematic, logical and unbiased process wherein verification of hypotheses, data analysis, interpretation and formation of principles can be done.  
c) It is an intellectual inquiry or quest towards truth,  
d) It enhances knowledge.

Select the correct answer from the codes given below:

1. a), b), c) and d)
2. a), b) and c)
3. b), c) and d)
4. a), c) and d)

Hide Answer Workspace

**Answer:** A. a), b), c) and d)

**Explanation:** All of the above.

33) On what basis did Jean Piaget give his theory of cognitive development of humans?

1. Evaluation Research
2. Fundamental Research
3. Applied Research
4. Action Research

Hide Answer Workspace

**Answer:** b) Fundamental Research

**Explanation:** Jean Piaget, in his cognitive-developmental theory, proposed the idea that children can actively construct knowledge simply by exploring and manipulating the world around them.

34) What are the core elements of a dissertation?

1. Introduction; Data Collection; Data Analysis; Conclusions and Recommendations
2. Executive Summary; Literature Review; Data Gathered; Conclusions; Bibliography
3. Research Plan; Research Data; Analysis; References
4. Introduction; Literature Review; Research Methodology; Results; Discussions and Conclusions

Hide Answer Workspace

**Answer:** d) Introduction; Literature Review; Research Methodology; Results; Discussions and Conclusions

**Explanation:** The core elements of the dissertation are as follows:

Introduction; Literature Review; Research Methodology; Results; Discussions and Conclusions

35) "Sampling Cases" can be defined as

1. Sampling using a sampling frame
2. Identifying people who are suitable for research
3. Literally the researcher's brief case
4. A sampling of people, newspapers, television programs etc.

Hide Answer Workspace

**Answer:** d) A sampling of people, newspapers, television programs etc.

**Explanation:** In general, sampling in case study research involves decisions made by the researchers regarding the strategies of sampling, the number of case studies, and the definition of the unit of analysis.

36) Which technique is generally followed when the population is finite?

1. Systematic Sampling Technique
2. Purposive Sampling Technique
3. Area Sampling Technique
4. None of the above

Hide Answer Workspace

**Answer:** a) Systematic Sampling Technique

**Explanation:** Systematic sampling can be understood as a probability sampling method in which the members of the population are selected by the researchers at a regular interval.

37) Research problem is selected from the standpoint of

1. Social relevance
2. Financial support
3. Researcher's interest
4. Availability of relevant literature

Hide Answer Workspace

**Answer:** a) Social relevance

**Explanation:** No explanation.

38) The F-test:

1. Is essentially a two-tailed test.
2. Is essentially a one-tailed test.
3. Can be one-tailed as well as two-tailed depending on the hypotheses.
4. Can never be one tailed test.

Hide Answer Workspace

**Answer:** c) Can be one-tailed as well as two-tailed depending on the hypotheses

**Explanation:** An F-test corresponds to a statistical test in which the test statistic has an F-distribution under the null hypothesis.

39) Which one among the following is the most comprehensive source of population data?

1. Census
2. National Sample Surveys
3. Demographic Health Surveys
4. National Family Health Surveys

Hide Answer Workspace

**Answer:** a) Census

**Explanation:** Census is an official survey that keeps track of the population data.

40) The process not needed in experimental research is

1. Controlling
2. Observation
3. Reference collection
4. Manipulation and replication

Hide Answer Workspace

**Answer:** b) Observation

**Explanation:** No explanation.

41) What are those conditions where a research problem is not viable?

1. It is new and adds something to knowledge
2. It can be researched
3. It has utility and relevance
4. It contains dependent and independent variables

Hide Answer Workspace

**Answer:** d) It contains dependent and independent variables

**Explanation:** A research problem can be defined as a statement about the concerned area, a condition needed to be improved, a difficulty that has to be eliminated, or a troubling question existing in scholarly literature, in theory, or in practice pointing towards the need of delivering a deliberate investigation.

42) How can we enhance the research objective?

1. By making it more valid
2. By making it more reliable
3. By making it more impartial
4. All of the above

Hide Answer Workspace

**Answer:** d) All of the above

**Explanation:** The research objectives must be concisely described before starting the research as it illustrates what we are going to achieve as an end result after the accomplishment.

43) Action-research can be understood as \_\_\_\_\_\_\_\_\_\_\_

1. A longitudinal research
2. An applied research
3. A kind of research being carried out to solve a specific problem
4. All of the above

Hide Answer Workspace

**Answer:** c) A kind of research being carried out to solve a specific problem

**Explanation:** In general, action research is termed as a philosophy or a research methodology, which is implemented in social sciences.

44) On what basis can one formulate the assumptions?

1. The cultural background of the country
2. Universities
3. Some specific characteristics of castes
4. All of the above

Hide Answer Workspace

**Answer:** a) The cultural background of the country

**Explanation:** An assumption can be identified as an unexamined belief, which we contemplate without even comprehending it. Also, the conclusions that we draw are often based on assumptions.

45) Which one among the following falls under the category of research development?

1. Descriptive Research
2. Philosophical Research
3. Action Research
4. All of the above

Hide Answer Workspace

**Answer:** d) All of the above

**Explanation:** No explanation.

46) What is the use of Factorial Analysis?

1. For setting the hypotheses
2. To understand the difference between two variables
3. To understand the relationship between two variables
4. To understand the difference between various variables

Hide Answer Workspace

**Answer:** b) To understand the difference between two variables

**Explanation:** Factor analysis can be understood as a statistical method that defines the variability between two variables in terms of factors, which are nothing but unobserved variables.

47) What is the best-suited name for a process that doesn't necessitate experimental research?

1. Manipulation
2. Controlling
3. Content analysis
4. Observation

Hide Answer Workspace

**Answer:** a) Manipulation

**Explanation:** In an experimental research design, whenever the independent variables (i.e., treatment variables or factors) decisively get altered by researchers, then that process is termed as an experimental manipulation.

48) Which one among the following variables cannot be expressed in quantitative terms?

1. Numerical Aptitude
2. Marital Status
3. Socio-economic Status
4. Professional Attitude

Hide Answer Workspace

**Answer:** d) Professional Attitude

**Explanation:** A professional attitude is an ability that inclines you to manage your time, portray a leadership quality, make you self-determined and persistent.

49) The "Sociogram" technique is used to study \_\_\_\_\_\_\_\_\_

1. Vocational Interest
2. Human Relations
3. Professional Competence
4. Achievement Motivation

Hide Answer Workspace

**Answer:** b) Human Relations

**Explanation:** The term sociogram can be defined as a graphical representation of human relation that portrays the social links formed by one particular person.

50) Which one among the following phrases does not correspond to the meaning of research as a process?

1. Problem Solving
2. Trial and Error
3. Objective Observation
4. Systematic Activity

Hide Answer Workspace

**Answer:** c) Objective Observation

**Explanation:** The research process comprises classifying, locating, evaluating, and investigating the data, which is required to support your research question, followed by developing and expressing your ideas

1. The range of a partial correlation coefficient is:

* 0 to 1
* 0 to ∞
* ***−1 to 1***
* −∞ to ∞

2. The lines of regression intersect at the point

* (X, Y)
* ***(X―,Y―)***
* (0 0)
* (1, 1)

Question was not answered

3. The average of two regression coefficients is always greater than or equal to the correction coefficient is called:

* Fundamental property
* Signature property
* Magnitude property
* ***Mean property***

Question was not answered

4. Homogeneity of three or more population correlation coefficients can be tested by

* t-test
* Z-test
* ***χ2-test***
* F-test

Question was not answered

5. If βYX>1, then βXY is:

* ***Less than 1***
* Greater than 1
* Equal to 1
* Equal to 0

Question was not answered

6. If ρ=0, the lines of regression are:

* Coincident
* Parallel
* ***Perpendicular to each other***
* None of the above

Question was not answered

7. Regression coefficient is independent of

* ***Origin***
* Scale
* Both origin and scale
* Neither origin nor scale

Question was not answered

8. In multiple linear regression analysis, the square root of Mean Squared Error (MSE) is called the:

* Multiple correlation coefficient
* Standard error of estimate
* Coefficient of determination
* None of these

Question was not answered

9. If X and Y are two independent variates with variance σX2 and σY2, respectively, the coefficient of correlation between X and (X−Y) is equal to:

* σXYσX2σY2
* ***σXσX2+σY2***
* σYσX2+σY2
* σYσYσX2+σY2

Question was not answered

10. If the correlation coefficient between the variables X and Y is ρ, the correlation coefficient between X2 and Y2 is

* ρ
* ***ρ2***
* 0
* 1

Question was not answered

11. If βXY and βYX are two regression coefficients, they have

* Same sign
* Opposite sign
* Either same or Opposite sign
* Nothing can be said

Question was not answered

12. If ρ is the correlation coefficient, the quantity 1−ρ2 is termed as

* ***Coefficient of determination***
* Coefficient of Non-determination
* Coefficient of Alienation
* All of the above

Question was not answered

13. If the two lines of regression are perpendicular to each other, the correlation coefficient r= is:

* ***0***
* −1
* 1
* Nothing can be said

Question was not answered

14. The estimate of β in the regression equation Y=α+βX+e by the method of least square is:

* Biased
* ***Unbiased***
* Consistent
* Efficient

Question was not answered

15. The geometric mean of the two regression coefficient βYX and βXY is equal to:

* ***r***
* r2
* 1
* None of these

Question was not answered

16. An investigator reports that the arithmetic mean of two regression coefficients of a regression line is 0.7 and the correlation coefficient is 0.75. Are the results

* Valid
* ***Invalid***
* Inconclusive
* None of these

Question was not answered

17. If each of X variable is divided by 5 and Y by 10 then $\beta\_{YX} by coded value is:

* Same as βYX
* ***Half as βYX***
* Twice as βYX
* None of the above

1. Let the [coefficient of determination](https://itfeature.com/correlation-and-regression-analysis/coefficient-of-determination) computed to be 0.39 in a problem involving one independent variable and one dependent variable. This result means that

* The relationship between the two variables is negative
* The correlation coefficient is 0.39 also
* ***39% of the total variation is explained by the independent variable***
* 39% of the total variation is explained by the dependent variable

Question was not answered

2. The percent of the total variation of the dependent variable Y explained by the set of independent variables X is measured by

* [Coefficient of Correlation](https://itfeature.com/correlation-and-regression-analysis/correlation-coefficient-is-a-measure-of-degree-of-linear-relationship)
* Coefficient of Skewness
* [***Coefficient of Determination***](https://itfeature.com/correlation-and-regression-analysis/coefficient-of-determination)
* Standard Error of Estimate
* [Multicollinearity](https://itfeature.com/statistics/multicollinearity)

Question was not answered

3. If “time” is used as the independent variable in a simple linear regression analysis, then which of the following assumption could be violated

* There is a linear relationship between the independent and dependent variables
* The residual variation is the same for all fitted values of Y
* The residuals are normally distributed
* ***Successive observations of the dependent variable are uncorrelated***

Question was not answered

4. The strength (degree) of the [correlation](https://itfeature.com/correlation-and-regression-analysis/correlation-coefficient-is-a-measure-of-degree-of-linear-relationship) between a set of independent variables X and a dependent variable Y is measured by

* [Coefficient of Correlation](https://itfeature.com/correlation-and-regression-analysis/correlation-coefficient-is-a-measure-of-degree-of-linear-relationship)
* [Coefficient of Determination](https://itfeature.com/correlation-and-regression-analysis/coefficient-of-determination)
* Standard error of estimate
* ***All of the above***

Question was not answered

5. A [coefficient of correlation](https://itfeature.com/correlation-and-regression-analysis/correlation-coefficient-is-a-measure-of-degree-of-linear-relationship) is computed to be -0.95 means that

* The relationship between the two variables is weak
* The relationship between the two variables is strong and positive
* ***The relationship between the two variables is strong and but negative***
* The correlation coefficient cannot have this value

Question was not answered

6. A residual is defined as

* ***Y−Y^***
* Error Sum of Square
* Regression Sum of Squares
* Type I Error

Question was not answered

7. [Multicollinearity](https://itfeature.com/statistics/multicollinearity) exists when

* ***Independent variables are correlated less than -0.70 or more than 0.70***
* An independent variable is strongly correlated with a dependent variable
* There is only one independent variable
* The relationship between the dependent and independent variable is non-linear

Question was not answered

8. Relationship between [the correlation coefficient](https://itfeature.com/correlation-and-regression-analysis/correlation-coefficient-is-a-measure-of-degree-of-linear-relationship)and [coefficient of determination](https://itfeature.com/correlation-and-regression-analysis/coefficient-of-determination) is that

* Both are unrelated
* ***The coefficient of determination is the coefficient of correlation squared***
* The coefficient of determination is the square root of the coefficient of correlation
* Both are equal

Question was not answered

9. What test statistic is used for a global test of significance?

* Z-test
* t-test
* Chi-square test
* ***F-test***

Question was not answered

10. In [multiple regression](https://itfeature.com/correlation-and-regression-analysis/multiple-regression-analysis), when the global test of significance is rejected, we can conclude that

* All of the net sample regression coefficients are equal to zero
* All of the sample regression coefficients are not equal to zero
* ***At least one sample regression coefficient is not equal to zero***
* The regression equation intersects the Y-axis at zero

5.

The best-fitting trend is one for which the sum of squares of error is

* Zero
* ***Minimum (Least***)
* Maximum
* None

Question was not answered

6.

Which one is equal to explained variation divided by total variation?

* Sum of squares due to regression
* ***Coefficient of Determination***
* Standard Error of Estimate
* Coefficient of Correlation

1. Literature review is not usually concerned with helping in

a) objective setting b)research instrument design

c)literary appreciation d)subsequent data collection.

2. The literature review will examine:

a) only facts b)only one side of the main argument c)only opinions d)all aspects of a topic

3. The starting point for a literature search is

a) primary data b) tertiary data c) secondary data d) some other data

4. Which is the major disadvantage of using peer-reviewed journals in literature reviews?

a) the information is too recent b) information could be as old as four years

c) subscription fees are high d) Humans control the quality

5. Why is it important for a researcher to review the literature?

a) Because it will find if anyone has done the work before

b) Because it is traditional

c) Because it identifies like-minded researchers

d) Because it shows time has been spent on the subject

6. To read the literature critically means

a) to suggest the previous research was always poorly conducted

b) skimming through the material because most of it is just padding

c) evaluating what you read in terms of your own research questions

d) being negative about something before you read it.

7. Schematic literature review is

a) one which generates a literature review using a treasure hunt system

b) a replicable, scientific, and transparent process

c) one which gives equal attention to the principal contributors to the area

d) a manufactured system for generating literature reviews tailored to your subject.

8. According to the Harvard referencing convention, pick out the correct version of showing this

book in a bibliography

a) Bryman, A. and Bell, E. (2011, 3e) Business Research Methods, Oxford; Oxford University Press

b) Bryman (2011, third edition), Oxford University Press

c) Bryman and Bell, Business Research Methods (2011: OUP)

d) Bryman, A. Business Research Methods (2011)

9. Which of the following statements about plagiarism is most accurate?

a) It is so easy to "copy and paste" from the internet that everyone does it nowadays. If a proper

reference is given, where is the harm in that?

b) How can we say for sure where our own ideas come from exactly? If we tried to give a

reference for everything we could never hope to succeed.

c) Any suggestion that we have written what another actually wrote is morally wrong. The whole

point of a literature review is to show what we have read and what we thought about it.

d) Plagiarism is such an awful crime that those found guilty should be obliged to wear a scarlet

"P" on their clothing.

10. Which of the following is not required in a reference list or bibliography entry?

a) Call number

b) Place of publication

c) Authors’ names

d) Publisher.

11. The main purpose of research in education is to \_\_\_\_\_\_\_\_\_

a) Help in the personal growth of an individual

b) Help the candidate become an eminent educationist

c) Increase job prospects of an individual

d) Increase social status of an individual

12. \_\_\_\_\_ is the classical form of research?

a) Experiment b) Case study c) Grounded theory d) Narrative inquiry

13. Preliminary data collection is a part of the\_\_\_\_\_\_\_\_

a) Descriptive research b) Exploratory research c) Applied research d) Explanatory research

14. \_\_\_\_\_\_\_research is the naturalism

a) Field research b) Descriptive research c) Basic research d) Applied research

15. If the researcher is concerned with finding out who, what, when or how much, then the

study is \_\_\_\_\_\_\_\_

a) Descriptive research b) Exploratory research c) Empirical research d) Causal research

16. \_\_\_\_\_\_\_ is referred to as "the father of research on teaching"?

a) N. L. Gage B. b) David Berliner c) Egon Brunswik d)Donald T. Campbell

17. MLA stands for\_\_\_\_\_\_

a) Modern Literature Art b) Modern Linguistic Association

c) Modern Language Association d) Make Life Awesome

18. E-books are\_\_\_\_\_\_\_

a) Normal text book in electronic version b) Paperless book

c) Soft copy of the book d) All the above

19. Reference should be \_\_\_\_\_\_

a) In the alphabetical order b) In the end of research article

c) Strictly follow the instruction of the publisher d) All the above

20. What is a bibliography?

a) A true story written about someone

b) Another name for writing a book.

c) A religious book.

d) A list of sources used in a report and where they can be found.

21. If a solution has to be a buffer, its pH should be

a) at its *pka* value b) at its *ka* value c) at 7 d) at 14

22. Molar absorbtivities of compounds exhibiting charge transfer absorption are

a) small b) moderate c) large d) extra large

23. Beer Lambert’s law gives the relation between which of the following?

a) Reflected radiation and concentration b) Scattered radiation and concentration

c) Energy absorption and concentration d) Energy absorption and reflected radiation

24. Beer’s law states that the intensity of light decreases with respect to

a) concentration b) distance c) composition d) volume

25. What is the use of tubular-bowl centrifuge?

a) to separate soap from oil b) to separate waste material

c) to separate cells and viruses from broth d) to separate salts from mixtures

26. In which industry tubular-bowl centrifuge not used?

a) food industry b) pharma industry c) metallurgical d) baking industry

27. The product of freeze dried sample can be stored at\_\_\_\_\_\_\_\_ for long time.

a) 3°C b) 4°C c) 10°C d)12°C

28. Freeze drying’s second phase is \_\_\_\_\_\_

a) primary drying b)condensation drying c) secondary drying d)freeze drying

29. Agarose can be extracted from which of the following?

a) *Gracilaria esculentus* b) *Lycazusican esculentum*

c) *Ficum benghalensis* d) *Agrostis stolonifera*

30. Electrophoresis cannot be used to separate\_\_\_\_\_\_\_\_\_\_\_

a) DNA b)RNA c)amino acid d)protein

31. The polymerization of the gel used in PAGE occurs between polyacrylamide and\_\_\_\_\_\_\_\_

a) N, N- acrylamide b) Bisacrylamide

c) N- methyleneacrylamide d) N, N- methylene bisacrylamide

32. If DNA is digested by endonucleases in four sites giving rise to fragments of which two are

equal in length how many bands would be seen after electrophoresis?

a) 3 b)4 c) 5 d)6

33. The fluorescent dye such ethidium is used for visualizing DNA. How do ethidium binds to

DNA?

a) stacked between histone molecules b) binds to the nucleotide base

c) intercalated between the stacked bases d) binds to the phosphodiester backbone

34. Which of the following will migrate faster? The condition is the molecular weight of the

following is equal.

a) supercoiled circular DNA b) nicked circular DNA

c) single stranded DNA d) Double stranded DNA

35. Which of the following is not a character of polyacrylamide gel?

a) inert b) ionic strength c)stable over a wide range of pH d) separate upto a few 100bp of DNA

36. Lead levels in drinking water could be determined by using

a) HPLC b) GC-MS c) CZE d) AAS

37. Which of the following techniques would be useful for monitoring dioxin levels in the

environment?

a) GC-MS b) AES c) CZE d) AAS

38. Which of the following is commonly used as the mobile phase in GC-MS?

a) CH3CN b) He c) H2O d) air

39. Derivatization of drugs is a routine strategy during analysis by GC-MS. Which of the

following is not a routine derivatizaton method?

a) methylation b) trimethylsilyation c) perfluoroacylation d) bromination

40. 1 pg is equal to

a) 1x109 g b) 1x10-12g c) 1x10-9g d) 1x1012 g

41. Sample size depends on

a) Type of problem investigated b) Resources available c) Required precision d) all of them

42. Data obtained by the investigator from personal experimental studies is called

a) Primary data b) Arrayed data c) chronological data d) None of these

43. When data is classified according to the magnitude it is called

a) Chronological b) qualitative c) quantitative d) continuous

44. Frequency of a discrete variable can be represented by

a) Line diagram b) Bar diagram c) none of them d) both of them

45. Continuous variables are represented by

a) Histogram b) line diagram c) bar diagram d) pie chart

46. Percentage frequency distribution is represented by

a) Frequency polygon b) Ogive representation c) pie diagram d) frequency table

47. Mode is

a) Most frequent value b) Least frequent value c) Middle most value d) none

48. The positional average is

a) mean b) median c) mode d) harmonic mean

49. Mean deviation can be computed from

a) arithmetic mean b) mode c)median d) variance

50. Which of the following is a measure of variation?

a) standard deviation b) midrange c) mode d) median

51. The ratio between experimental and observed results is represented by

a) theta value b) chi- square c) variance ratio d) correlation

52. Chi-square test was developed by

a) W. S. Gosset b) Karl Pearson c) A. R. Fisher d) Pascal

53. Two variables deviate in opposite directions is called

a) positive correlation b) ideal correlation c) inverse correlation d) moderate positive

54. The fundamental statistical indicators are

a) Mean b) Median c) Variance d) Standard deviation

55. The average of a series of numerical values is

a) The sum of the values divided by their number

b) Lower than the minimum value in the series

c) Lower than the maximum value in the series

d) An indicator of central tendency for the values of the series

56. Standard deviation

a) is the square root of variance

b) is measured using the unit of the variable

c) is measured using the squared unit of the variable

d) has values generally comparable with the average value

57. If the average of a series of values is 10 and their variance is 4, then the coefficient of

variation (= the ratio standard deviation / average) is

a)40% b)20% c)80% d)10%

58. The median of a series of numerical values is

a) Equal to the average b) A graph or chart c) A number d) A frequency table

59. The median of a series of numerical values is

a) A value for which half of the values are higher and half of the values are lower

b) The value located exactly midway between the minimum and maximum of the series

c) The most commonly encountered values among the series

d) A measure of the eccentricity of the series

60. In a contingency table that shows data from a clinical trial is good to have high values for

a) sick subjects, diagnosed as negative

b) sick subjects, diagnosed as positive

c) healthy subjects, diagnosed as negative

d) healthy subjects, diagnosed as positive

61. A regression line is a straight line which

a) is located as close as possible to all the points of a scatter chart

b) is defined by an equation having 2 parameters: the slope and the intercept

c) provides an approximate relationship between the values of two parameters

d) is parallel to one of the coordinate axes

62. Pearson correlation coefficient, denoted by r, measures

a) The scattering strength of data for a statistical series

b) The strength of the correlation between the mean and median

c) The strength of the correlation between two numerical parameters

d) The tendency of simultaneous increase or decrease, or inverse evolution, for two numerical

parameters

63. The Student's t test is

a) a parametric test

b) a nonparametric test

c) a test for comparing averages

d) a test for comparing variances

64. Which of the following tests are parametric test?

a) ANOVA b) Student c)Wilcoxon d) Kruskal-Wallis

65. A subset of the population selected to help make inferences on a population is called

a) a population b) inferential statistics c) a census d) a sample

66. A set of all possible data values for a subject under consideration is called

a) descriptive statistics b) a sample c) a population d) statistics

67. The number of occurrences of a data value is called

a) the class limits b) the frequency c) the cumulative frequency d) the relative frequency

68. A large collection of data may be condensed by constructing

a) classes b) a frequency polygon c) class limits d) a frequency distribution

69. What is the purpose of a summary table?

a) This is the only way to present categorical data in numerical form

b) To sum the values of responses to a survey

c) To list data to create a bar or pie chart

d) To see differences between or among categories

70. A graphical representation of a frequency distribution is called a

a) stem and leaf plot b) scatter diagram c) time-series plot d) histogram

71. The width of a class interval in a frequency distribution will be approximately equal to the

range of the data divided by the

a) highest value in the data set b) lowest value in the data set

c) number of class intervals d) average of the data set

72. The cumulative frequency for a particular class is equal to 35. The cumulative frequency for

the next class will be \_\_\_\_\_\_

a) less than 35 b) equal to 65 c) 35 plus d) 35 minus

73. The highest bar in a histogram represents?

a) the class with the highest cumulative frequency

b) the class with the lowest frequency

c) the class with the highest frequency

d) the class with the lowest relative frequency

74. Which of the following would be most helpful in the construction of a pie chart?

a) cumulative percentages b)frequency distribution c) ogive d) relative frequencies

75. The following numbers represent exam scores in botany:

78, 93, 85, 8, 73, 96, 72, 86, 90, 85. If a stem and leaf diagram is developed from this data,

how many stems will be used?

a) 3 b) 5 c) 10 d) 4

76. Can a frequency distribution have overlapping classes?

a) sometimes b) no c) yes d) all of the above

77. Which of the following is not a measure of central tendency?

a) mode b) variability c) median d) mean

78. Which of the following is the crudest measure of dispersion?

a) mean absolute deviation b) variance c) mode d) range

79. Second moment about mean is

a) SD b) variance c) coefficient of variation d) none

80. The most frequently occurring value in a data set is called the

a) spread b) mode c) skewness d)maximum value

81. Which of the following is true for a positively skewed distribution?

a) mode=median=mean b) mean<median<mode c) mode<median<mean

d)median<mode<mean

82. If the number of values in a data set is even, and the numbers are ordered, then

a) the median cannot be found b) the median is the average of the two middle numbers

c) the median, mode and mean are equal d)none

83. The coefficient of skewness is always zero for\_\_\_\_\_\_\_\_\_ distribution

a) symmetrical b) skewed c)median d) none

84. If the correlation coefficient is zero, the slope of a linear regression line will be

a) positive b)negative c)positive or negative d) none

85. Thin layer chromatography is

a) partition chromatography b) electrical mobility of ionic species

c) adsorption chromatography d) one of the above

86. In gas chromatography, the basis for separation of the components of the volatile material is

the difference in

a) partition coefficients b) conductivity c) molecular weight d) molarity

87. Which section of a paired samples t test output can be ignored?

a) regression b) mean c)median d) paired samples correlation

88. A regression line is a straight line which:

a) is located as close as possible to all the points of a scatter chart

b) is defined by an equation having 2 parameters: the slope and the intercept

c) provides an approximate relationship between the values of two parameters

d) is parallel to one of the coordinate axes

89. What is the alternative name for a repeated measures t- test?

a) unrelated t-test b) related t-test c) a paired samples t-test d) unpaired sample t-test

90. Conducting multiple t- tests increases the likelihood of which of the following?

a) finding correct conclusions b) type 1 error c) homogeneity d) type II error

91. SPSS stands for

a) simple perfect squaredsquare

b) statistical product and service solutions

c) statistical package for social science

d) software package for statistical science

92. HPLC stands for

a) High pressure liquid chromatography

b) High performance liquid chromatography

c) both (a) amd (b)

d) Highly placed liquid chromatography

93. The eluent strength is a measure of

a) solvent absorption energy b)solvent adsorption energy

c)solvent diffusivity d) solvent mixing index

94. Which can be used as a mobile phase in HPLC applications?

a) any compound with solubility in liquid

b) any compound with limited solubility in liquid

c) any compound with non-solubility in liquid

d) none

95. HPLC methods includes

a) liquid/liquid chromatography

b) liquid/solid chromatography

c) ion exchange and size exclusion chromatography

d) all of the above

96. For a typical adsorbent such as silica gel, the most popular pore diameters are

a) 10 and 50 A° b) 60 and 100 A° c) 100 and 150 A° d) 150 and 200 A°

97. What is the possibility of having 53 Thursdays in a non-leap year?

a) 6/7 b) 1/7 c) 1/365 d) 53/365

98. The collection of one or more outcomes from an experiment is called

a) probability b) event c) random variable d) Z-value

99. Which of the following is not a condition of the binomial distribution?

a) only 2 possible outcomes b)have constant probability of success

c) must have atleast 3 trials d) trials must be independent

100. When two coins are tossed simultaneously, what are the chances of getting atleast one tail?

a) 3/4 b) 1/5 c) 4/5 d) 1/4