English

1. The research which is exploring new facts through the study of the past is called:
(A) Philosophical research
(B) Historical research
(C) Mythological research
(D) Content analysis
Correct Option(s): A

English

2. 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 is:
(A) Explanation
(B) Description
(C) Influence
(D) Prediction
Correct Option(s): D

English

3.

Match List-I with List-II and choose the correct answer from the code given below.

List-I	List-II
A. Historical method	I. Past events
B. Survey method	II. Vision
C. Philosophical method	III. Present events
D. Experimental method	IV. Future action

(A) A-I, B-III, C-II, D-IV
(B) A-I, B-II, C-III, D-IV
(C) A-II, B-III, C-I, D-IV
(D) A-II, B-IV, C-I, D-III
Correct Option(s): B

English

4. The strongest evidence for causality comes from which of the following research methods?
(A) Experimental
(B) Causal-comparative
(C) Correlational
(D) Ex-Post Facto
Correct Option(s): B

English

5. Which of the following is not a method of research?
(A) Observation
(B) Historical
(C) Survey
(D) Philosophical
Correct Option(s): C

English

6. The research that applies the laws at the time of field study to draw more and more clear ideas about the problem is:
(A) Applied research
(B) Action research
(C) Experimental research
(D) Explanatory research
Correct Option(s): C

English

7. Which of the following best describes the development process for a research question?
(A) A broad question is made more specific as terms are more clearly defined.
(B) A broad question is made more specific in order to be more significant.
(C) A specific question is broadened as terms are more clearly defined.
(D) A specific question is broadened in order to be more significant.
Correct Option(s): A

English

8. Extraneous variables are essentially:
(A) Independent variables
(B) Dependent variables
(C) Independent or dependent
(D) Neither independent nor dependent
Correct Option(s): A

English

9. An experiment is performed to test the effects of sleep deprivation on rote memory. In this experiment, the dependent variable is:
(A) Number of hour's subjects go without sleep
(B) Rote memory scores
(C) Number of subjects deprived of sleep in the experimental group
(D) Correlation between hours of sleep and fatigue
Correct Option(s): B

English

10. A researcher divides the school students on the basis of gender and then by using the random digit table, he selects some of them from each group. This process is called:
(A) Stratified sampling
(B) Stratified random sampling
(C) Representative sampling
(D) Sequential sampling
Correct Option(s): B

English

11. Which of these is not a method of data collection?
(A) Questionnaires
(B) Interviews
(C) Observations
(D) Experiments
Correct Option(s): D

English

12. An investigator wants to study the vocational aspirations of visually challenged children in a wide geographical area. He should select his sample by using:
(A) Simple random sampling
(B) Stratified sampling
(C) Purposive sampling
(D) Convenient sampling
Correct Option(s): B

English

13. Control groups and experimental groups are exactly the same except for:
(A) Dependent variable
(B) Independent variable
(C) Extraneous variables
(D) Replication variables
Correct Option(s): B

English

14. Which of the following is an example of a random sampling method?
(A) Two-stage random sampling
(B) Systematic sampling
(C) Convenience sampling
(D) Purposive sampling
Correct Option(s): A

English

15. In a unimodal and symmetric distribution, the relationship between averages is:
(A) Mean > Median > Mode
(B) Mean < Median > Mode
(C) Mean = Median = Mode
(D) Mean > Median < Mode
Correct Option(s): C

English

16.

Karl Pearson's coefficient of skewness is calculated by the following formula:
(A) $(X - Z) / \sigma$
(B) $(X - M) / \sigma$
(C) $(X - M) / \sigma^2$
(D) $(X - M) / Z$
Correct Option(s): A

English

17. In the case of a _____ distribution, the mean, median, and mode coincide.
(A) Symmetrical
(B) Asymmetrical
(C) Moderately asymmetrical
(D) Negative Symmetrical
Correct Option(s): A

English

18. The mean age group of 100 persons was found to be 30.2. Later, it was discovered that age 57 was misread as 27. Find the corrected mean:
(A) 30.5
(B) 31.23
(C) 32.32
(D) 36.44
Correct Option(s): A

English

19. Coefficient of range can be calculated as:
(A) $(L + S) / (L - S)$
(B) $(L - S) / (L \times S)$
(C) $(L - S) / (L + S)$
(D) $(L \times S) / (L + S)$
Correct Option(s): C

20. In a moderately asymmetrical distribution, the mode and mean are 42 and 40, respectively. The median is:

(A) 39

(B) 40.67

(C) 38

(D) 41.02

Correct Option(s): B

21. A study compares the average salaries of male and female employees in a company. A random sample of 50 males and 50 females is taken, and their average salaries are compared. What statistical test should be used?

(A) Independent t-test

(B) Paired t-test

(C) Chi-square test

(D) ANOVA

Correct Option(s): A

22. A researcher conducts a hypothesis test and finds a p-value of 0.03. If the significance level is set at 0.05, what should the researcher conclude?

(A) Reject the null hypothesis

(B) Fail to reject the null hypothesis

(C) Accept the alternative hypothesis

(D) Increase the sample size and retest

Correct Option(s): A

23. A factory manufactures light bulbs, and the probability that a bulb is defective is 0.05. If a random sample of 10 bulbs is selected, what is the probability that exactly 2 bulbs are defective?

(A) 0.0746

(B) 0.1123

(C) 0.0915

(D) 0.2135

Correct Option(s): C

24. Calculation of arithmetic mean by short-cut and step-deviation method is based on the assumed mean, which is taken/selected from:

(A) Given independent variable

(B) Given frequency distribution

(C) Estimated cumulative frequency distribution

(D) Normal distribution

Correct Option(s): A

25. You conduct a survey to see if customer satisfaction differs by gender (male vs female). Satisfaction is rated on a scale from 1 to 5. Which test is most appropriate to analyze the data?

(A) Independent t-test

(B) Chi-square test

(C) Mann-Whitney U test

(D) ANOVA

Correct Option(s): C

26. For a regression equation $Y=5+2X$ with a standard error of the estimate of 3, the coefficient of determination (R-squared) is:

(A) 0.40

(B) 0.60

(C) 0.70

(D) 0.80

Correct Option(s): D

27. In a dataset with 50 observations, the median is:

(A) The average of the 25th and 26th values

(B) The 25th value

(C) The 26th value

(D) The average of the 24th and 25th values

Correct Option(s): A

28. A sample of 100 observations has a sample mean of 75 and a sample variance of 144. What is the 95% confidence interval for the population mean assuming the population variance is known?

(A) (73.12, 76.88)

(B) (72.10, 77.90)

(C) (74.40, 75.60)

(D) (74.24, 75.76)

Correct Option(s): D

29.

A bakery sells an average of 10 cakes per day. What is the probability that on a given day, they will sell exactly 12 cakes? (Assume Poisson distribution with $\lambda = 10$).

(A) 0.0948

(B) 0.1044

(C) 0.1126

(D) 0.1221

Correct Option(s): A

30. Which of the following can be calculated for grouped data with open-ended classes?

(A) Mean

(B) Median

(C) Mode

(D) Quartiles

Correct Option(s): B

31. For a symmetrical distribution, which of the following is true?

(A) Median - Q1 = Q3 – Median

(B) Mode - Q1 = Q3 - Median

(C) Mean - Q1 = Q3 – Mode

(D) Mode-Median = Median – Q1

Correct Option(s): A

English

32. Epistemology refers to:
(A) A term specifically used in the social sciences.
(B) A term used to study the types of diseases.
(C) Acceptable level of knowledge in a field of study.
(D) A type of interviewing technique.
Correct Option(s): C

English

33. What is the purpose of the conclusion in a research report?
(A) It explains how concepts were operationally defined and measured.
(B) It summarizes the key findings in relation to the research questions.
(C) It contains a useful review of the relevant literature.
(D) It outlines the methodological procedures that were employed.
Correct Option(s): B

English

34. Which form of reasoning is the process of drawing a specific conclusion from a set of premises?
(A) Rationalism
(B) Deductive reasoning
(C) Inductive reasoning
(D) Probabilistic
Correct Option(s): C

English

35.

The term associated with the theory and the method of interpretation of human action in social sciences is
(A) Theology
(B) Hermeneutics
(C) Ontology
(D) Phenomenology
Correct Option(s): D

English

36. The following figures represent the number of books issued at the counter of a library in 11 different ways. Calculate the median: 96, 180, 98, 75, 270, 20, 102, 100, 94, 75, 200
(A) 96
(B) 98
(C) 100
(D) 102
Correct Option(s): A

English

37. What does the term "normal distribution" refer to?
(A) A distribution that is commonly observed in everyday life
(B) A distribution with a perfect bell-shaped curve
(C) A distribution that only contains positive values
(D) A distribution with extreme outliers
Correct Option(s): B

English

38. Which of the following is NOT a qualitative research method?
(A) Case study
(B) Content analysis
(C) Survey research
(D) Ethnography
Correct Option(s): C

English

39. What is the name of the conceptual framework in which the research is carried out?
(A) Research hypothesis
(B) Synopsis of Research
(C) Research paradigm
(D) Research design
Correct Option(s): D

English

40. Which of the following features are considered as critical in qualitative research?
(A) Collecting data with the help of standardized research tools.
(B) Design sampling with probability sample techniques.
(C) Collecting data with bottom-up empirical evidence.
(D) Gathering data with top-down schematic evidence.
Correct Option(s): C

English

41. In order to pursue the research, which of the following is priorly required?
(A) Developing a research design
(B) Formulating a research question
(C) Deciding about the data analysis procedure
(D) Formulating a research hypothesis
Correct Option(s): B

English

42. Which one among the following statement is true in the context of the testing of hypotheses?
(A) It is only the alternative hypotheses that can be tested.
(B) It is only the null hypotheses that can be tested.
(C) Both the alternative and the null hypotheses can be tested.
(D) Both the alternative and the null hypotheses cannot be teste
Correct Option(s): B

English

43. Which of the following does not correspond to characteristics of research?
(A) Research is not passive
(B) Research is systematic
(C) Research is not a problem-oriented
(D) Research is not a process
Correct Option(s): D

English

44. What is the main aim of interdisciplinary research?
(A) To over simplify the problem of research
(B) To bring out the holistic approach to research
(C) To create a new trend in research methodology
(D) To reduce the emphasis on a single subject in the research domain
Correct Option(s): B

English

45. How to judge the depth of any research?
(A) By research title
(B) By research duration
(C) By research objectives
(D) By total expenditure on research
Correct Option(s): C

English

46. Which of the following is not the method of Research?

(A) Survey

(B) Historical

(C) Observation

(D) Philosophical

Correct Option(s): C

English

47. Which one is called non-probability sampling?

(A) Quota sampling

(B) Cluster sampling

(C) Systematic sampling

(D) Stratified random sampling

Correct Option(s): A

English

48. 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:

(A) a), b), c) and d)

(B) a), b) and c)

(C) b), c) and d)

(D) a), c) and d)

Correct Option(s): A

English

49. What are the core elements of a dissertation?

(A) Introduction; Data Collection; Data Analysis; Conclusions and Recommendations

(B) Executive Summary; Literature Review; Data Gathered; Conclusions; Bibliography

(C) Research Plan; Research Data; Analysis; References

(D) Introduction; Literature Review; Research Methodology; Results; Discussions and Conclusions

Correct Option(s): D

English

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

(A) Systematic Sampling Technique

(B) Purposive Sampling Technique

(C) Area Sampling Technique

(D) Simple sampling Technique

Correct Option(s): A