



**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM**  
**(Deemed to be University under section 3 of the UGC Act 1956)**

**Instructions / Note:**

1. Answer all the questions. Each question carries one mark.
2. No negative marks for wrong answers.
3. Read each question carefully and answer in the OMR sheet provided for each question with only blue/ black pen to fill the circles in the OMR Sheet.
4. Return the question paper along with the OMR sheet.

Time: 90 Minutes

Venue: \_\_\_\_\_.

PART- B

[35X1=35]

1. Random sampling is also called \_\_\_\_\_.
  - A. Availability sampling
  - B. Probation sampling
  - C. Probability sampling
  - D. Prospect sampling
2. The degree of freedom for paired t-test based on n pairs of observations is:
  - A.  $2n - 1$
  - B.  $n - 2$
  - C.  $2(n - 1)$
  - D.  $n - 1$
3. When one examines the entire population instead of a subgroup of the population, this is called a \_\_\_\_\_.
  - A. Sampling
  - B. Census
  - C. Population
  - D. Bias
4. Which of the following is **not** one of the seven major parts to the research report?
  - A. Results
  - B. Abstract
  - C. Method
  - D. Footnotes



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5. What type of chart is useful for showing trends or changes over time?
- A. Pie Chart
  - B. Column Chart
  - C. Line Chart
  - D. Dot Graph
6. ANOVA is \_\_\_\_\_
- A. A government body which collects social statistics.
  - B. The name of a statistical software package.
  - C. A one-way analysis of variance.
  - D. A two-way analysis of variance
7. The chi-square test is:
- A. A mean
  - B. A multi-question tests.
  - C. A statistical mistake.
  - D. A statistic
8. Which of the following is **not** a non-random sampling method?
- A. Cluster sampling
  - B. Quota sampling
  - C. Convenience sampling
  - D. Accidental sampling
9. The first purpose of a survey is to .....
- A. Description
  - B. Evaluation
  - C. Pration
  - D. Provide Information
10. Which of the following is true regarding research objectives?
- A. Research objectives, when achieved, will provide sufficient earnings to obtain a reasonable return on investment.
  - B. Research objectives, when obtained, will ensure the viability of the marketing research department.



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- C. Research objectives, when achieved, provide the information necessary to solve the problem.
- D. Research objectives are seldom achieved but should be stated as goals to be sought.
11. What are the core elements of a Research Process?
- 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
12. Survey is a ..... Study
- A. Descriptive
  - B. Fact finding
  - C. Analytical
  - D. Systematic
13. The main problem in questionnaire is
- A. Accessible to Diverse Respondent
  - B. Greater Anonymity
  - C. Shows an inability of respondent to provide information
  - D. None of these
14. What are the conditions in which Type-I error occurs?
- A. The null hypotheses get accepted even if it is false
  - B. The null hypotheses get rejected even if it is true
  - C. Both the null hypotheses as well as alternative hypotheses are rejected
  - D. None of the above
15. Which one is called non-probability sampling?
- A. Quota sampling
  - B. Cluster sampling
  - C. Systematic sampling
  - D. Stratified random sampling



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16. What effect does increasing the sample size have upon the random error?
- A. It increases the random error
  - B. It has no effect on the random error
  - C. It reduces the random error
  - D. It may increase or decrease the random error
17. Before initiating a study involving primary data collection, the Principal Investigator must ensure that various approvals are obtained. Which of the following approvals is absolutely mandatory?
- A. Scientific committee approval
  - B. Ethics committee approval
  - C. Technical committee approval
  - D. Regulatory authority approval
18. Which of the following organizations directly deals with publication ethics?
- A. Indian Medical Association (IMA)
  - B. Committee on Publication Ethics (COPE)
  - C. World Health Organization (WHO)
  - D. Joint National Committee (JNC)
19. Mrs. X is in the process of writing review of literature for her thesis. Her guide has instructed her to avoid plagiarism. Mrs. X should take all the following measures to avoid plagiarism, **EXCEPT-**
- A. Avoid copying and pasting
  - B. Acknowledge original sources
  - C. Take help of anti-plagiarism software
  - D. Copy from her own previous work
20. Hypothesis means
- A. A tentative statement about the relationship
  - B. The outcome of a research
  - C. A form of bias in which the subject tries to outguess the experimenter
  - D. A conclusion drawn from a research



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21. Which of the following study design will be helpful if the department of health wants to know the burden of a particular disease?
- A. Ecological study
  - B. Cross sectional survey
  - C. Case series
  - D. Case report
22. Any process that tends to produce results that depart systematically from true values in a research study
- A. Chance
  - B. Bias
  - C. Random error
  - D. Effect Modification
23. All are true regarding measures to reduce information bias, **EXCEPT**
- A. Precise operational definitions of all variables
  - B. Detailed measurement protocols
  - C. Adequate sample size
  - D. Training, Certification and re-certification of data collectors
24. Which of the following sections mentions about the detailed plan for conducting the study
- A. Introduction
  - B. Results
  - C. Methods
  - D. Discussion
25. Which of the following study designs can be used as a tool a generate ideas/hypotheses?
- A. Qualitative study
  - B. Case-control study
  - C. Experimental study
  - D. Cohort study



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26. The research method which is best suited for collection of information regarding highly sensitive matters such as alcohol use
- A. Focus Group Discussions
  - B. Participant Observation
  - C. In-Depth Interview
  - D. Group discussions
27. All the following are measures of dispersion **EXCEPT**
- A. Mean
  - B. Variance
  - C. Standard deviation
  - D. Range
28. Find the median in the following sample of observations: 12, 26, 10, 29, 48
- A. 29
  - B. 48
  - C. 26
  - D. 25
29. All the following are true for standard deviation (SD) **EXCEPT**
- A. It is the square root of the average of the squared deviations of the observations from the arithmetic mean
  - B. It is the most important measure of dispersion
  - C. It is expressed in the same units of measurement as the observation
  - D. The square of the standard deviation is called mean deviation
30. In the following set of data, what is the mean? 4,1,9,7,3,8,2,6
- A. 5
  - B. 4.5
  - C. 9
  - D. 8



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31. Sampling based upon equal chance of selection is called
- A. Stratified random sampling
  - B. Simple random sampling
  - C. Systematic sampling
  - D. Subjective sampling
32. Which of the following is true about  $\beta$  error?
- A. It is the probability of correctly rejecting the null hypothesis when it is false
  - B. It is the probability of accepting the null hypothesis when it is false
  - C. It is the probability of rejecting the null hypothesis when it is true
  - D. It is the probability of making a Type I error
33. The interviewer **does not** provide options for responses in
- A. Open-ended questions
  - B. Close-ended questions
  - C. Semi-open questions
  - D. Survey
34. Which of the following is **not** important in the context of an informed consent document?
- A. Detailed description of study procedures
  - B. Budget of the study
  - C. Details regarding compensation and post trial access to care
  - D. Contact details of the Principal Investigator
35. Which of the following is **not** a consequence of plagiarism of manuscript?
- A. The journal can retract the manuscript
  - B. Institute can take action on the author/researcher
  - C. The researcher loses professional reputation
  - D. Authors may not be black listed from member journals

