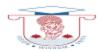


(Deemed to be University under section 3 of the UGC Act 1956)

#### **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 ca           | lled                                   |                            |
| A. Availability samplir                 | ıg                                     |                            |
| B. Probation sampling                   |  |                            |
| C. Probability sampling                 |  |                            |
| D. Prospect sampling                    |  |                            |
| 2. The degree of freedom for p          | aired t-test based on n pairs of obser | evations is:               |
| A. 2n - 1                               |  |                            |
| B. n - 2                                |  |                            |
| C. 2(n - 1)                             |  |                            |
| D. $n - 1$                              |  |                            |
| 3. When one examines the enti-          | ire population instead of a subgroup   | of the population, this is |
| A. Sampling                             |  |                            |
| B. Census                               |  |                            |
| C. Population                           |  |                            |
| D. Bias                                 |  |                            |
| 4. Which of the following is <b>n</b> e | ot one of the seven major parts to the | e research report?         |
| A. Results                              |  |                            |
| B. Abstract                             |  |                            |
| C. Method                               |  |                            |
| D. Footnotes                            |  |                            |

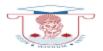


| 5. What type of chart is useful for showing trends or changes over time?   |
|--|
| A. Pie Chart   |
| B. Column Chart  |
| C. Line Chart  |
| D. Dot Graph   |
| 6. ANOVA is  |
| A. A government body which collects social statistics.   |
| B. The name of a statistical software package.   |
| C. A one-way 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 <b>not</b> 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.               |
|  |



- 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

- 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



- 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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| House was   | (Deemed to be oniversity under section 3 of the ode Act 1930)   |
|-------------|---|
|             | search method which is best suited for collection of information regarding highly natters 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 <b>EXCEPT</b>  |
| A.          | Mean  |
| B.          | Variance  |
| C.          | Standard deviation  |
| D.          | Range   |
|             |   |
| 28. Find th | ne 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



- 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 **no**t 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

