PART-B: Descriptive

Time. 2 ms. 40mm.	Marks: 50
[Answer question no.1 & any four (4) from the rest]	
1. Critically examine the meaning of Science. Explain the important steps involved in scientific methods.	3+7=10
2. Discuss the meaning and definition of research. Highlight the important types of research in detail.	3+7=10
3. Discuss the meaning and types of sampling in research highlighting its merits and demerits.	10
4. Write a short note on sources of data collection highlighting observation, interviewing, and questionnaire.	10
5. What is 'measures of central tendencies'? Discuss the importance of mean, median, and mode.	3+7=10
6. In a sample, we have ten students from a class whose ages are 23, 24, 25, 26, 27, 23, 24, 25, 26, and 27 years respectively. Calculate the mean deviation of age in years of this sample.	10
7. What do you mean by research proposal? Explain in detail.	10
8. Highlight the basic steps of report writing and its presentation.	10

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REV-00 2018/12 MPS/68/73

MA POLITICAL SCIENCE THIRD SEMESTER

RESEARCH METHODOLOGY & STATISTICS IN SOCIAL SCIENCES MPS-303

(Use separate answer scripts for Objective & Descriptive)

Duration: 3 hrs. Full Marks: 70

[PART-A: Objective]

Time: 20 min. Marks: 20

Choose the correct answer from the following:

1×20=20

- 1. Scientific method involves?
 - a. Formulation of hypothesis
- b. Testing of hypothesis
- c. Analysis of data and drawing conclusion
- **d.** All of the above
- **2.** Which of the following steps to solve a scientific problem must be completed *first*?
 - a. Analyzing data

b. Recognizing and identifying the problemd. Testing a hypothesis

- c. Forming a hypothesis
- 3. Which of the following steps to solve a scientific problem is completed *last?*
 - a. Analyzing data

b. Recognizing and identifying the problem

c. Drawing conclusions

- d. Testing a hypothesis
- **4.** In scientific method, a prediction or tentative statement that can be tested is known as:
 - a. Conclusion

b. Observation

c. Control

- d. Hypothesis
- 5. The hypothesis which the researcher tries to disprove is known as:
 - a. Alternate hypothesis

b. Ad hoc hypothesis

c. Null hypothesis

d. Auxiliary hypothesis

- 6. Hypothesis must:
 - a. Be based on existing knowledge
- b. Be simple with high predictability

c. Be empirical

- d. All of the above
- 7. According to the scientific method, how should conclusions be stated?
 - a. So that no one can refute the conclusion.
 - b. So that it works with only one set of data.
 - c. So that it is completely correct, with no mistakes.
 - d. In a form that can be evaluated and replicated by others.
- 8. An important practical issue to consider when designing a research project is:
 - a. Which theoretical perspective you find most interesting.
 - b. Whether or not you have time to retile the bathroom first.
 - c. How much time and money you have to conduct the research.
 - d. Which colour of ring binder to present your work in.
- 9. What is a research design?
 - a. A way of conducting research that is not grounded in theory.
 - b. The choice between using qualitative or quantitative methods.
 - c. The style in which you present your research findings, e.g. a graph.
 - **d.** A framework for every stage of the collection and analysis of data.

- 10. A sampling frame is:
 - a. A summary of the various stages involved in designing a survey.
 - b. An outline view of all the main clusters of units in a sample.
 - c. A list of all the units in the population from which a sample will be selected.
 - d. A wooden frame used to display tables of random numbers.
- 11. A simple random sample is one in which:
 - a. From a random starting point, every *n*th unit from the sampling frame is selected.
 - b. A non-probability strategy is used, making the results difficult to generalize.
 - c. The researcher has a certain quota of respondents to fill for various social groups.
 - d. Every unit of the population has an equal chance of being selected.
- 12. Which of the following is *not* a type of non-probability sampling?
 - a. Snowball sampling

b. Stratified random sampling

c. Quota sampling

- d. Convenience sampling
- 13. Closed ended questions are those that:
 - a. Have a fixed range of possible answers.
 - b. Prevent respondents from allocating themselves to a category.
 - c. Encourage detailed, elaborate responses.
 - d. Relate to the basic demographic characteristics of respondents.
- 14. Which of the following is *not* a disadvantage of telephone interviewing?
 - a. Researchers do not have to spend so much time and money on travelling.
 - b. Some people in the target population may not own a telephone.
 - c. It can be difficult to build rapport over the telephone.
 - d. Interviewers cannot use visual cues such as show cards.
- 15. An open question is one that:
 - a. Allows respondents to answer in their own terms.
 - b. Does not suggest or provide a limited range of responses.
 - c. Can help to generate answers for closed questions.
 - d. All of the above.
- 16. The purpose of a coding manual is to:
 - a. Provide a form onto which the data can be entered.
 - b. Provide researchers with instructions about how to code the data.
 - c. List all the categories that have been omitted from the schedule.
 - d. Test researchers' knowledge of statistics.
- 17. What is the advantage of using SPSS over calculating statistics by hand?
 - a. This is how most quantitative data analysis is done in "real research" nowadays.
 - b. It reduces the chance of making errors in your calculations.
 - c. It equips you with a useful transferable skill.
 - d. All of the above.
- 18. The flexibility and limited structure of qualitative research designs is an advantage because:
 - a. The researcher does not impose any predetermined formats on the social world.
 - b. It allows for unexpected results to emerge from the data.
 - c. The researcher can adapt their theories and methods as the project unfolds.
 - d. All of the above.

- 19. The introductory section of a research report should aim to:
 - a. Identify the specific focus of the study.
 - b. Provide a rationale for the dissertation, or article.
 - c. Grab the reader's attention.
 - d. All of the above.
- **20.** What is the purpose of the conclusion in a research report?
 - a. It explains how concepts were operationally defined and measured.
 - b. It contains a useful review of the relevant literature.
 - c. It outlines the methodological procedures that were employed.
 - d. It summarizes the key findings in relation to the research questions.

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