Paper Code – 6706

M.Sc. Sem-III Examination

JULY-SEP- 2021

BT-SE-308 RESEARCH METHODOLOGY AND PROFESSIONAL PRACTICES IN BIOTECHNOLOGY

કુલ સમય :– ૩૦ મીનીટ **કુલ પ્રશ્નો :** ૩૫ **વિદ્યાર્થીએ ટીક કરવાના પ્રશ્નો :** ૨૫

નોંધ : વિદ્યાર્થીએ માત્ર ૨૫ પ્રશ્નો જ ટીક કરવાના રહેશે. જો વધારે ટીક કરેલ હશે તો પ્રથમ ૨૫ પ્રશ્નો જ ગણતરીમાં લેવામાં આવશે.

1. 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

2. 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.

3. How is random sampling helpful?

a) Reasonably accurate B.An economical method of data collection

C.Free from personal biases D.All of the above

4. 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?

a) Descriptive survey method B.Historical method C.Ex-post facto method D.Experimental method

5. 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

6. The format of thesis writing is the same as in

a) Writing of Seminar representation B.Preparation of research paper/article

C.A research dissertation D.Presenting a workshop/conference paper

7. Which one among the following statements is false in the context of participatory research?

a) It recognizes knowledge as power B.It is a collective process of inquiry

C.It emphasizes people as experts D.Its sole purpose is the production of knowledge

8. 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 tested.

9. 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

10. What does the longitudinal research approach actually deal with?

a) Long-term research B.Short-term research C.Horizontal research D.None of the above

11. What do you understand by the term "Anusandhan"?

a) Goal-oriented B.Following an aim C.Attaining an aim D.Praying to achieve an aim

12. Evaluation Research is concerned with _____

a) How well are we doing? B.Why are we doing? C.What are we doing? D.None of the above

13. 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

14. Which of the following options are the main tasks of research in modern society?

a) To learn new things B.To keep pace with the advancement in knowledge

C.To systematically examine and critically analyze the investigations/sources with the objective

D.All of the above

15. 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

16. The main aim of the scientific method in the research field is to _____

a) Improve data interpretation B.Confirm triangulation

C.Introduce new variables D.Eliminate spurious relations

17. 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?

a) Rating Scale B.Interview C.Questionnaire D.Schedule

18. The conclusions/findings of which type of research cannot be generalized to other situations?

a) Casual Comparative Research B.Historical Research

C.Descriptive Research D.Experimental Research

19. 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

20. Who can successfully conduct Research?

a) Someone who is a hard worker B.Possesses post-graduation degree

C.Has studied research methodology D.Possesses thinking and reasoning ability

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

a) Survey B.Historical C.Observation D.Philosophical

22. A research problem is feasible only when

a) It has utility and relevance B.It is new and adds something to knowledge

C.It is researchable D.All of the above

23. 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

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

a) Problem Solving B.Trial and Error C.Objective Observation D.Systematic Activity

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

a) Manipulation B.Controlling C.Content analysis D.Observation

26. Which one among the following falls under the category of research development?

a) Descriptive Research B.Philosophical Research C.Action Research D.All of the above

27. How can we enhance the research objective?

a) By making it more valid B.By making it more reliable C.By making it more impartial D.All of the above

28. Action-research can be understood as _____

a) A longitudinal research B.An applied research

C.A kind of research being carried out to solve a specific problem D.All of the above

29. What are those conditions where a research problem is not viable?

a) It is new and adds something to knowledge B.It can be researched

C.It has utility and relevance D.It contains dependent and independent variables

30. The process not needed in experimental research is

a) Controlling B.Observation C.Reference collection D.Manipulation and replication

31. The F-test:

a) Is essentially a two-tailed test. B.Is essentially a one-tailed test.

C.Can be one-tailed as well as two-tailed depending on the hypotheses. D.Can never be one tailed test.

32. "Sampling Cases" can be defined as

a) Sampling using a sampling frame B.Identifying people who are suitable for research

C.Literally the researcher's brief case D.A sampling of people, newspapers, television programs etc.

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

a) Systematic Sampling Technique B.Purposive Sampling Technique

C.Area Sampling Technique D.None of the above

34. Research problem is selected from the standpoint of

a) Social relevance B.Financial support C.Researcher's interest D.Availability of relevant literature

35. What is the use of Factorial Analysis?

a) For setting the hypotheses B.To understand the difference between two variables

C.To understand the relationship between two variables

D.To understand the difference between various variables