21BTH3S3LP

Question Booklet Code

A

Question Booklet Serial Number

M.Sc. III Semester Degree Examination, April/May - 2023
Skill Enhancement Courses (SEC)
BIOTECHNOLOGY
Research Methodology

Time : 1 Hour   Maximum Marks : 30

INSTRUCTIONS TO CANDIDATES

1.   The Question Paper will be given in the form of a Question Booklet. There will be four/two/one versions of Question Booklets with Question Booklet Code viz. **A**, **B**, **C** & **D** / **A** & **B** / **A**.

2.   The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same Code.

3.   Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him contains all the 30 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same Code. This is most important.

4.   A blank sheet of paper is attached to the Question Booklet. This may be used for Rough Work.

5.   **Please read carefully all the instructions on the top of the Answer Sheet before marking your answers.**

6.   Each question is provided with four choices **(A)**, **(B)**, **(C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using **Black Ball-Point Pen** in the OMR Answer Sheet.

7.   No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator.

8.   Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

9.   First fifteen minutes is provided to fill the general information of the Student. Eg. Student Name, Student ID, etc. in the OMR Answer Sheet.

10. Without the instruction of the Invigilator do not open the Question Paper Booklet Seal.

1. The original hypothesis is known as _____.

(A) Alternate hypothesis

(B) Null hypothesis

(C) Both (A) and (B) are incorrect

(D) Both (A) and (B) are correct

2. A researcher collecting the data by himself is called :

(A) Primary data   (B) Secondary data

(C) Tertiary data   (D) Quaternary data

3. In the process of conducting research 'Formulation of Hypothesis' is followed by :

(A) Statement of Objectives   (B) Analysis of Data

(C) Selection of Research Tools (D) Collection of Data

4. Which of the following statements is true for correlation analysis ?

(A) It is a bivariate analysis   (B) It is a multivariate analysis

(C) It is a univariate analysis (D) Both (A) and (C)

5. NCBI stands for :

(A) National Centre for Biotechnology Information

(B) National Centre for Bio Informatics

(C) National Centre for Biology Information

(D) National Centre for Botany Inforamation

6. _____ is search engine for life sciences and biomedical topics.

(A) Google search (B) PubMed   (C) Yahoo   (D) None

7. Survey is a _____ study.

(A) Descriptive   (B) Fact finding   (C) Analytical   (D) Systematic

A

8. Which of these can be used to develop a new process ?

(A) Design of experiments   (B) Acceptance sampling

(C) Control charts   (D) Histogram

9. Identify the correct sequence of the steps in research process.

(i) Research design   (ii) Data collection

(iii) Formulation of hypothesis   (iv) Literature review

(v) Problem identification

(A) (i), (ii), (iii), (iv), (v)   (B) (ii), (iii), (iv), (v), (i)

(C) (iii), (iv), (v), (i), (ii)   (D) (v), (iv), (iii), (i), (ii)

10. i10-index is associated with _____.

(A) Google Scholar   (B) Facebook

(C) Twitter   (D) None of the above

11. _____ author level matrix calculated by counting the no. of publications or which an author has been cited by other authors at least that same number of times.

(A) G-index   (B) h-index   (C) Impact factor (D) i10 index

12. Publisher of WOS is :

(A) Springer   (B) Nucleus   (C) Elsevier   (D) Clarivate

13. Out of these, which needs the small size sample to see its efficiency ?

(A) Quota Sampling   (B) Simple Random Sampling

(C) Cluster Sampling   (D) None of these

14. Organized and systematic way of finding answers to questions is :

(A) Science   (B) Philosophy

(C) Research   (D) None of the above

15. Wrong questionnaire is an example of _____.

(A) Primary data collection problem

(B) Secondary collection problem

(C) (A) and (B) both

(D) None of the above

16. Collection and Selection of the knowledge from available sources related to research topic is called :

(A) Data preparation   (B) Literature review

(C) Research design   (D) None of the above

17. One of the members of the population is known as the :

(A) data   (B) family   (C) element   (D) group

18. Coefficient of correlation lies always between :

(A) 0 and +1   (B) −1 and 0

(C) −1 and +1   (D) none of the above

19. If the values of two variables move in the opposite direction, _____.

(A) The correlation is said to be linear

(B) The correlation is said to be non-linear

(C) The correlation is said to be positive

(D) The correlation is said to be negative

A

20. Research is :

(A)   Searching again and agian

(B)   Finding solution to any problem

(C)   Working in a scientific way to search for truth of any problem

(D)   None of the above

21. Of the following sampling methods, which is a probability method ?

(A)   Judgement   (B)   Quota

(C)   Simple random   (D)   Convenience

22. The following molecular modeling program used to create and modify images of chemical structures.

(A)   Chemdraw   (B)   Chemsketch

(C)   MS Office   (D)   None of the avove

23. In controlled experiment how many variables are kept constant ?

(A)   One   (B)   Two   (C)   Three   (D)   Four

24. Action research is :

(A)   Applied research

(B)   A research carried out to solve immediate problem

(C)   Longitudinal research

(D)   Simulative research

25. The quality of a journal is indicated by its :

(A)   G-index   (B)   h-index

(C)   Impact factor   (D)   i10 index

26. What do we call the difference between the parameter value that is being estimated and the expected value of that statistic ?

(A) Sampling Error   (B) Non-Sampling Error

(C) Standard Error   (D) Bias

27. 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

28. Which of the following statements is true about the collection of data ?

(A) The data that is collected from the place of origin is known as primary data

(B) The data that is collected from the place of origin is known as secondary data

(C) The data that is collected from the place of origin is known as tertiary data

(D) None of the above

29. Attributes of objects, events or things which can be measured are called :

(A) Scale   (B) Hypothesis   (C) Type   (D) Variable

30. The independent variable is used to explain the dependent variable in _____.

(A) Linear regression analysis

(B) Multiple regression analysis

(C) Non-linear regression analysis

(D) None of the above

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SPACE FOR ROUGH WORK

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