(FOR THE CANDIDATES ADMITTED

DURING THE ACADEMIC YEAR 2021 Only

21PBY413

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF- SEMESTER EXAMINATIONS : MAY - 2023

COURSE NAME: M.Sc.-BOTANY   **MAXIMUM MARKS: 70**

SEMESTER: IV   **TIME : 3 HOURS**

RESEARCH METHODOLOGY

SECTION - A   (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING MULTIPLE CHOICE QUESTIONS.   (K1)

1. Which one of the following is the main feature of qualitative research?

   a) Collects data in numerical form   b) Uses the empirical method of data analysis

   c) Avoids positive assumptions and data analysis   d) subscribes to pre-existing categories

2. Reproducing others report as our own without citing the source is called_____.

   a) Review   b) Plagiarism   c) Citation   d) Report

3. Observed data and expected data can be compared with the help of _____.

   a) Chi square test   b) student- t -test   c) ANOVA   d) t –test

4. What will be the probability of getting odd numbers if a dice is thrown?

   a) 1/2   b) 2   c) 4/2   d) 5/2

5. Highest resolution of SEM is_____.

   a) 0.1 µm   b) 1 µm   c) 10 µm   d) 0.01 µm

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.   (K2)

6. Define research.
7. Define monograph.
8. What is chi-square test ?
9. Define probability.
10. Expand SEM.

SECTION – B   (5 X 4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a)   List the objectives of research.
                    (OR)
    b)   Describe the basic principles of experimental designs.

12. a)   Write the importance of plagiarism.
                    (OR)
    b)   Describe the role of Research Institutions.

13. a) Describe the random sampling techniques.

(OR)

   b) How to calculate tests of significance for small samples?

14. a) Define SPSS and describe the application of it.

(OR)

   b) Define range and assess its importance in measuring dispersion.

15. a) Describe the basic principles and applications of lyophilizer.

(OR)

   b) Define PAGE and describe the principles of it.

SECTION - C (4 X 10 = 40 MARKS)

ANSWER ANY FOUR OUT OF SIX QUESTIONS
(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS
(FROM Qn. No : 17 to 21) **(K4 (Or) K5)**

16. How will you classify and present your data by tabulation? Explain.

17. Write an essay on types of research and its significance.

18. Discuss the importance of bibliography in research

19. Give an account of regression analysis.

20. Describe Analysis of Variance and its importance in biology.

21. Enumerate the principles and application of HPLC.

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ETHICAL PAPER