QP Code: UV25C004 **Reg.No : .....**

Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20
III SEMESTER (CBCSS-VUG) DEGREE EXAMINATIONS, OCTOBER 2025
B. Voc Applied Biotechnology
A12: Research Methodology
2024 Admission Onwards

Time: 2.5 Hours **Maximum Marks: 80**

Section A

*Short answer type carries **2** Marks each*

(Ceiling 25)

1. Define research objectives.
2. Mention two sources of literature collection.
3. Define experimental research.
4. Write the advantages of Open assess journals.
5. What are the features of Pubmed?
6. Define abstract in thesis.
7. Differentiate between research article and review article.
8. Explain the use of Agricola and Medline in agricultural research.
9. Explain the role of Summer schools in research training.
10. Differentiate between research topic and research problem
11. Examine how training in research institutes helps students in developing research skills and practical knowledge.
12. Assess the ethical implications of plagiarism in academic and research setting
13. Demonstrate how you would prepare and follow a protocol for DNA isolation from plant tissue.
14. Give the importance of review of literature in thesis.
15. Which is more reliable for academic research: open access journals or magazines? Justify briefly.

Turn Over

Section B

*Paragraph types carries **5** Marks each* ***(Ceiling 35)***

16. Enumerate five important digital sources for literature collection.
17. List any five components of a manuscript for journal publication.
18. Explain data analysis in research.
19. Briefly explain on construction of tables and write the significance of headings and footers.
20. Describe how a digital library helps researchers in accessing scholarly articles.
21. Analyze the importance of impact factor in journal selection.
22. Illustrate the essential elements of a project proposal with examples.
23. Compare newsletters, magazines, and journals as sources of research literature.

Section C

*Essay-type carries **10** Marks : Answer **any two** questions.*

24. Write in detail about the essential steps in planning research.
25. Discuss on the different types of plagiarism.
26. Analyze the differences between results, discussion, and conclusion sections in research reporting.
27. Analyze different digital databases and their relevance to biological research.

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