

B.Sc. Semester-VI Examination, 2022-23**BOTANY**[Honours]

Course ID : 61317 Course Code : SH/BOT/604/DSE-4

Course Title : **Research Methodology**

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **five** of the following questions: $1 \times 5 = 5$
- Define metagenomics.
 - State two uses of ethanol in research methodology.
 - What are fixatives?
 - What is a molar solution?
 - State two safety ways to handle toxic chemicals.
 - What are tabulation of data?
 - Define applied research.
 - What are coagulating fixatives?
2. Answers any **two** of the following questions: $5 \times 2 = 10$
- Describe briefly the descriptive vs analytical research. 5

b) Define plagiarism. How it differs from copyright? Name one software used to check plagiarized content. 2+2+1

c) Define progressive and regressive dyes used for staining plant tissues with one example of each. How deparaffinization is performed? 4+1

d) Describe briefly about the tabulation and generation of graphs. 5

3. Answer any **one** question from the following: $10 \times 1 = 10$

a) Define mounting. Describe briefly about peel mounts, squash preparations, maceration and sectioning. 2+8

b) Write a detailed note on role of ethics in research. Make a brief account on laboratory research. 5+5