



**Progressive Education Society's**  
**Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16**  
**(Autonomous)**  
**End Semester Examination: Mar/Apr 2025**  
**Faculty: Science and Technology**

**Program: B. Sc. Biotech (04)**  
**Program (Specific): Biotechnology**  
**Class: T. Y. B. Sc.**  
**Name of the Course: Research Methodology**  
**Course Code: 24BBT-606**

**Semester: VI**

**SET: A**  
**Course Type: Core**  
**Max. Marks: 35**  
  
**Time: 2 Hr**

**Instructions to the candidate:**

- 1) There are 4 sections in the question paper. Write each section on separate page.*
- 2) All Sections are compulsory.*
- 3) Figures to the right indicate full marks.*
- 4) Draw a well labelled diagram wherever necessary.*

**SECTION: A**

**Q1) Answer any FIVE of the following (Attempt any 5/6)**

**5**

1. Define a patent.
2. What is h-index?
3. State the role of Pub-med.
4. Write two applications of SPSS software.
5. Name any 2 plagiarism check tools.
6. What is a scientific abstract?

**SECTION: B**

**Q2) Answer the following (Attempt any 5/6)**

**10**

1. Enlist the importance of Review of Literature.
2. Write any two applications of realistic approach in research methodology.
3. Give any four advantages of utilizing Microsoft spreadsheets in data analysis.
4. What is the significance of “Control” in designing the experiment?
5. Write a short note on data processing in research.
6. Comment on “Scientific temper and attitude”.

**[P.T.O.]**

**SECTION: C**

**Q3) Answer any TWO of the following (Attempt any 2/4) 8**

1. What critical points should be considered while data fudging analysis?
2. Discuss the importance of social media in scientific communication.
3. What is Primary data? Schematically represent types of Primary data collection.
4. Discuss how structured research can resolve societal problems.

**SECTION: D**

**Q4) Answer any TWO of the following (Attempt any 2/4) 12**

1. What is hypothesis? Describe the factors affecting the hypothesis formulation and testing.
2. Explain the **SEVEN** steps of the research process.
3. Describe various ways of organizing the research data.
4. Define research philosophy. Discuss any two types of philosophies using a suitable example.