

**Anjuman Islam Janjira Degree College of Science**  
**Murud-Janjira, Raigad-402401**  
**Affiliated to University of Mumbai**

<b>Class: -S.Y.B.Sc C.S</b>	<b>Subject: - Research Methodology</b>
<b>Semester:- IV</b>	<b>Course code: -USCS4071</b>
<b>Exam Event:- Summer 2024 (FH)</b>	<b>Marks: -75</b>
<b>Date: - 08/04/2024</b>	<b>Duration: - 02:30 Hours</b>

- N.B. – 1 – All questions are compulsory.**  
**2 – All questions have internal choice.**  
**3 – Figures to the right indicate full marks.**

**Q1. Answer the following question. (Any 4 out of 6) 20**

- 1) What is research problem? Discuss how to formulate a research problem?
- 2) Describe in detail the meaning of Research design?
- 3) Explain in detail on different types of research.
- 4) Discuss the concept of research methods and research methodology.
- 5) Write a note on criteria of good research.
- 6) Elaborate the basic principle of experimental design.

**Q2. Answer the following question. (Any 4 out of 6) 20**

- 1) Describe the different methods used in collection of primary data.
- 2) Explain what are the steps involved in sampling design?
- 3) Write a note on case study.
- 4) What are the characteristics of good hypothesis.
- 5) Discuss the one sided and two-sided hypothesis.
- 6) Describe in detail the non-probability sampling technique.

**Q3. Answer the following question. (Any 4 out of 6) 20**

- 1) What are the ethics in scientific publications.
- 2) Explain in detail how to write title, list the authors and address.
- 3) Describe the results and discussion section in research paper?
- 4) How to state the acknowledgments in research paper?
- 5) Write short note on writing a research proposal.
- 6) Explain how to write a thesis in research.

**Q4. Answer the following question. (Any 5 out of 6) 15**

- 1) Write a note on significance of research?
- 2) What are the Objectives of research.
- 3) Describe in short the Null hypothesis.
- 4) Convenience and Judgmental sampling.
- 5) Explain the procedure of manuscript submission to journals.
- 6) Write a note on effective design of tables in research papers?