

**M.E (Chemical)-2nd Semester/
M.E Chemical Food Technology- 2nd Semester/
PhD
Research Methodology
MST-June, 2021**

Time allowed: 1hour

Max. Marks: 25

Instructions

*Attempt 2 questions in all (12.5*2)*

- I. (a) Eight coins were tossed 256 times and the following results were obtained:

Number of Heads	0	1	2	3	4	5	6	7	8
Frequency	2	6	30	52	67	56	32	10	1

Are the coins biased? Use Chi-square test

- (b) What are the various types of Research and explain the attributes of a good Research
- II. What is the difference between Primary and Secondary data? Give various methods for collecting primary data. What is the difference between census and sample data? What are the laws governing sampling?
- III. (a) Significance of Research Design. Discuss the steps in Research Design
- (b) Differentiate between Probability and Non-Probability sampling
- IV. What are the motives of conducting research? Discuss in detail the steps involved in Research
- V. What steps you keep in mind while designing a questionnaire? Describe the steps involved in the development and use of a written questionnaire prior to actual data analysis?