

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

Ph.D in Faculty of Applied Science (Chemical Sciences)

RESEARCH METHODOLOGY

M.Code : 77390

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES:

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carry TWENTY marks.

Q1) a) Discuss the significance of graphical representation in today's research, giving examples.

b) Comment on the various problems being faced by Indian researchers today.

Q2) a) Write a brief note on the various guidelines for construction of a questionnaire.

b) Explain the process of detection and elimination of systematic errors.

Q3) a) Discuss the significance of problem formulation.

b) Comment on the importance of various forms of publications available today.

Q4) a) Discuss the various tools used for importing and exporting data.

b) Explain the process of hypotheses testing.

Q5) Write notes on :

a) Error propagation

b) Statistical uncertainties

Q6) Discuss the significance and utility of CHEMDRAW software in today's research. Give examples in support of your answer.

Q7) Write notes on :

a) Path analysis

b) Canonical correlation analysis

Q8) Discuss in detail the various professional & research ethics required for a PhD process.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.