

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name : Research Methodology

Subject Code : 5TE02RSM1

Branch: M.Tech (All)

Semester : 2

Date : 23/04/2018

Time : 10:30 To 1:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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SECTION – I

- Q-1 Attempt the following questions (07)**
- a. Define ‘research design’.
 - b. Discuss the significance of research.
 - c. What do you mean by peer reviewed and indexed journal?
 - d. What is Plagiarism?
 - e. Justify the need of a hypothesis in research.
 - f. Enlist various types of research.
 - g. Define research observation.
- Q-2 Attempt all the questions. (14)**
- a) Compare in detail the characteristics of Qualitative and Quantitative research design methods.
 - b) Discuss important considerations for selecting a research problem.
- OR**
- Q-2 Attempt all the questions. (14)**
- a) Define Accuracy, reliability, reproducibility, sensitivity in connection with the experiments in research.
 - b) Write a note on ‘Research ethics’.
- Q-3 Attempt all the questions. (14)**
- a) What is Literature Review? What is the importance of literature review in research?
 - b) Explain ‘Research Methods’ and ‘Research Methodology’ in detail
- OR**
- Q-3 Attempt all the questions. (14)**
- a) Explain the statistical methods for testing and evaluation.
 - b) How to identify research gaps? Explain various steps in formulation of a research problem.



SECTION – II

- Q-4** **Attempt the following questions.** **(07)**
- a. What is ‘Copy Right’?
 - b. Enlist the quality indices of research publications.
 - c. What is null hypothesis?
 - d. What do you mean by ‘Patent’?
 - e. What do you mean by ‘Trademark’?
 - f. Enlist inherited qualities of a researcher.
 - g. What is ‘Industrial designs’?

- Q-5** **Attempt all the questions.** **(14)**
- a) What are the steps involved and needed in a research process?
 - b) Differentiate between experimental research and survey research.

OR

- Q-5** **Attempt all the questions.** **(14)**
- a) Enlist the structure and components of thesis and reports.
 - b) What are basic research observation methods? Explain any two.

- Q-6** **Attempt all the questions.** **(14)**
- a) How to develop a theoretical models and framework for the purpose of research? Discuss in detail.
 - b) Define research approach. Discuss various research approaches along with their significance.

OR

- Q-6** **Attempt all the questions.**
- a) What are the different types of errors in Research? Discuss in detail.
 - b) What is the importance of publishing good research? What are the measurements to assess quality of research?

