

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
Ph.D. COURSE WORK EXAMINATION – SUMMER - 2021

Subject Code: PHD20-01

Date: 10/10/2021

Subject Name: Research Methodology [Pharmacy]

Time: 11:30 AM – 1:00 PM

Total Marks: 35

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Subject relevant literature, book, research papers are permitted to carry in the exam hall.
5. Use of e-books, e-materials on electronics devices are strictly prohibited.

- Q.1 (a)** Answer in brief: **10**
- i) A lot of agencies conduct surveys, for example, the best Pharmacy schools in the country; the top ten Pharma company in the country; the best schools to study in, etc. What do you think of these studies? Would you call them research? Why/why not?
 - ii) Explain following terminologies with reference to Research experimentation: Reproducibility and Sensitivity.
 - iii) What is basic research? Explain with suitable examples.
 - iv) What are sources of research problems?
 - v) Enlist various electronic research databases for medicine and healthcare science.
- (b)**
- i) Give different type of hypothesis statements for the study entitled “To study the effect of new drug reducing in cholesterol level”. Explain possible different types of errors in hypothesis testing with reference to this research study. **05**
 - ii) Explain briefly deductive and inductive types of research with suitable examples.
- Q.2 (a)** Write general objective and specific objectives for the following research problem: **05**
- “Why do persons with leprosy delay their medical consultation?”
- (b)** Explain various criteria for good research problem? Give two examples of researchable and non-researchable problems. **05**
- Q.3 (a)** It is important to conduct a literature review before embarking on a research study – Justify. How do we carry out systematic literature search? **05**
- (b)** Give examples of parametric and non-parametric data. Enlist all statistical methods used for analysis of both type of data. Write importance of post hoc test with suitable example. **05**
