

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – WINTER • 2014

Subject Code: 2920001**Date: 22-12-2014****Subject Name: Research Methodology****Time: 10:30 am - 01:30 pm****Total Marks: 80****Instructions:**

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- | | | |
|-------------|--|-----------|
| Q.1 | (a) Explain the purpose of research. Describe educational and experimental research. | 06 |
| | (b) Why patent oriented research is becoming popular? How does it differ from basic research? | 05 |
| | (c) Literature survey is critical for the success of any research project.- Justify the statement giving examples. | 05 |
| | | |
| Q.2 | (a) A student wants to start a research project on “Effect of instrumental variability on Experimental results”. Suggest a detailed systematic literature survey to the student. | 06 |
| | (b) What are online databases? Describe three online databases useful in pharmaceutical research. | 05 |
| | (c) Describe various techniques of documentation. | 05 |
| | | |
| Q.3 | (a) Describe qualitative studies and quantitative studies. | 06 |
| | (b) Highlight the importance of poster presentation. Draw the figure of a typical poster labeling the different parts of poster and details to be included in each part. | 05 |
| | (c) What is a questionnaire? How can it be effectively used in research? | 05 |
| | | |
| Q.4 | (a) Enumerate different parts of a research paper. Explain the importance of Results and Acknowledgements with examples. | 06 |
| | (b) An oral presentation needs effective skills to make it successful. .- Discuss the statement with special reference to stage fright and eye contact. | 05 |
| | (c) Computers have become an integral part of any research program..- Explain in detail. | 05 |
| | | |
| Q.5 | (a) Write a note on various reference styles used in writing research papers. | 06 |
| | (b) Industry Institute Interaction is important to reduce the technological gap and foster mutual benefits. Suggest methods to develop this. | 05 |
| | (c) What is a feasibility report? How will you prepare a feasibility report for an industrial project? | 05 |
| | | |
| Q. 6 | (a) Describe various sources of research grants. | 06 |
| | (b) What are the components of cost in a research project? Describe in detail instrumentation costs. | 05 |
| | (c) Enumerate the different parts of a thesis. Explain Aim and Rationale. | 05 |

- Q.7** (a) Write the following reference in 3 different reference styles: **06**
Title: Nanocrystals: Comparison of the size reduction effectiveness
of a novel combinative method with conventional top-down
approaches
Journal: European Journal of Pharmaceutics and Biopharmaceutics
Authors: Jaime A Salazar, Antoine B Ghanem, Rainer H. Müller ,
Jan P. Möschwitzer
Page no: 82–90
Volume: 81
Year: 2012
- (b) Prepare a draft of MODROBS proposal for Sophisticated **05**
Instrumentation Lab to be submitted to AICTE for funding.
- (c) Write a note on limitations and sources of errors. **05**
