

**Ph.D. IN LIFE SCIENCES  
(PHDLS)**

**Term-End Examination**

**December, 2018**

00162

**RLS-101 : RESEARCH METHODOLOGY**

*Time : 3 hours*

*Maximum Marks : 100*

*Note : Attempt any five questions from questions no. 1 to 8. All questions carry equal marks. Give examples wherever necessary to support your answer.*

1. (a) Define the terms "Research" and "Research Methodology". Discuss the different research approaches. 10
- (b) With the help of a flow chart describe how you build up the research process. 10
2. (a) Explain the importance of bioethics in the field of Life Sciences research. 10
- (b) What is Nuremberg code ? Enumerate ten points of Nuremberg code. 10

3. (a) Discuss the structure and significance of scientific abstract. 10
- (b) Describe the criteria of a good research. 10
4. What is the need of hypothesis in research ? How do you develop a hypothesis ? 20
5. (a) What do you mean by research ? How does research help in the development of a nation ? 10
- (b) Discuss different methods and techniques employed in laboratory and field research . 10
6. (a) Write the importance of literature review in preparation of any scientific document. Describe two important steps in writing an effective literature review. 10
- (b) Explain the significance of 'discussion' of a scientific paper/thesis. What are the elements to be included and avoided in a discussion ? 10

7. (a) What is annotated bibliography ? How is it different from bibliography ? 10
- (b) What is the Swales' model of Rhetorical Moves in research articles ? 10
8. Differentiate between any *two* of the following pairs :  $2 \times 10 = 20$
- (a) Research Methods and Research Techniques
- (b) Qualitative and Quantitative Research
- (c) Applied and Basic Research
-