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Pre-Ph.D. Course Work

Printed Pages : 7  
Roll No. ....

**PP-1033**

Pre-Ph.D. Course Work Examination, July-2021

(Session 2018-19)

(Common Paper for Science Faculty-(Bio Group  
i.e. Botany, Zoology and Microbiology))

**RESEARCH METHODOLOGY AND COMPUTER  
APPLICATIONS**

Code No. :- (Botany-Ph.D.H-04, Zoology-  
Ph.D.H.-54 & Microbiology-Ph.D.H-43)

Time : Three Hours] [Maximum Marks : 100

Note : Attempt any five questions. All questions carry equal marks.

**Special Instructions :**

Please mention the paper code according to your subject code in your answer book.

1. Write an essay on basic principles, objectives, types and importance of research. 5+5+5+5=20
2. Discuss various criteria used for selection of research topic and problem. 20
3. Give an account of the following :
  - (a) Research design 10
  - (b) Ethics in research 10

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4. Define data. Explain types, sources and methods used for collection of data. 5+5+5+5=20
5. What is Central Tendency ? Describe types of measures of central tendency alongwith suitable examples. 5+15=20
6. Write notes on the followings :
  - (a) Skewness 10
  - (b) Chi-square test 10
7. Discuss the followings :
  - (a) MS Word 10
  - (b) pdf 10
8. What is networking ? Describe types of networking alongwith their applications. 5+15=20
9. Write notes on the following :
  - (a) Web Search Engine 10
  - (b) Software used for scientific and statistical analysis 10
10. Explain the following :
  - (a) Virtual labs 10
  - (b) F-gate 10

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