



A-1512

M. Sc. (Microbiology) (Sem. III) Examination

March/April – 2015

MB - 304 : Biostatistics,
Research Methodology & IPR

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
M. Sc. (Microbiology) (Sem. III)

Name of the Subject :
MB - 304 : Biostatistics, Research Methodology & IPR

Subject Code No. : 1 5 1 2 Section No. (1, 2,.....): Nil

Seat No. :

Student's Signature

(2) Figures to the right indicate full marks of the question.

(3) Draw neat and labelled diagrams whenever necessary.

1 Answer the following : (Any two)

18

1. Justify : 'Tabulation might be the process of presentation of random or classified data in a scientific manner'.
2. The following data are on the population of few animals in a reserve forest in Tamilnadu. Represent the data in pie and bar diagram.

Sr. No.	Animals	Population
1.	Elephants	50
2.	Fox	40
3.	Monkeys	60
4.	Tigers	30

3. Describe the criteria require for selection of the appropriate measurement of central tendency. Explain in detail about geometric and harmonic mean.

2 Attempt the following: (Any two) **18**

1. Write a note on t-distribution used for comparison the means of two groups.
2. Explain Chi-square test with reference to – as a test of goodness of fit, Precautions and Conditions of its application.
3. Analyse the following data to ascertain the association between the blood group of patient and the severity of a disease.

Severity	Blood group O	Other blood groups	Total
High	51	59	110
Low	489	901	1390
Total	540	960	1500
Severity %	9.4	6.1	7.3

3 Answer the following: (Any two) **18**

1. Explain in brief about the steps in research methodology.
2. Discuss in detail about the process of collection of review literature.
3. Enlist the type of sampling technique'. Describe in detail about the method to select the random samples.

4 Write short notes on the following: (any two) **16**

1. Trade secrets and trademarks.
 2. Patenting genes.
 3. Plant breeders and farmers right.
-