

Code: 13R00804

B.Pharm IV Year II Semester (R13) Regular & Supplementary Examinations April 2018
BIOSTATISTICS & DESIGN OF EXPERIMENTS

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Describe various methods of measurement of central tendency.
 - (b) Define qualitative and quantitative variables.
 - (c) What is meant by degrees of freedom?
 - (d) Write note on sign test.
 - (e) Explain the concept of rank correlation.
 - (f) Explain the factors causing non-sampling errors.
 - (g) Write briefly about Plackett-Burman design.
 - (h) Write briefly about 'F' test.
 - (i) Write short notes on regression coefficient 'b'.
 - (j) Explain tests of significance in statistical analysis of data.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Explain about normal distribution and its properties.

OR

- 3 Explain about binomial and Poisson distribution.

UNIT – II

- 4 What is 't' test? When it is used and what is the purpose of it? Explain by means of example?

OR

- 5 (a) What is 'F' statistic and write down the assumptions in 'F' test?
(b) Illustrate the step by step procedure for the analysis of variance (ANOVA-one way).

UNIT – III

- 6 Briefly describe the different non-parametric tests and add a note on significance of each such test.

OR

- 7 Write briefly about Wilcoxon signed rank test.

UNIT – IV

- 8 Write basic principles of design of experiments.

OR

- 9 Explain about randomized block design with ANOVA table.

UNIT – V

- 10 Write informative notes on higher order designs.

OR

- 11 Find the lines of regression X on Y and Y on X for the following data:

X	3	5	6	6	9
Y	2	3	4	6	5
