

M.Sc. Pharmacology 2nd Year

(BF/2023/12)

Research methodology and recent advances

MSCP-04/Paper IV

M.M.: 80

Time: 3 Hours

- Note:** 1.) ***Attempt all questions.***
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

Section-A

Write about the following:

1. Latin-square design [5]
2. Measures of dispersion [5]
3. Recent advances in the treatment of Type-2 Diabetes mellitus [5]
4. Various research tools for collecting research data [5]
5. Precision index [5]
6. Systematic error [5]
7. Double-blinded studies [5]
8. Differentiate numerical and categorical variables [5]

Section-B

Write about the following:

1. Explain the significance of standard deviation [5]
2. Standard error of mean [5]
3. Commonly used statistical methods for assay validation [5]
4. Basic types of regression analysis [5]
5. Hypothesis testing and write different steps of hypothesis testing [5]
6. Confidence interval [5]
7. Fischer's exact test [5]
8. Post hoc tests- Types and uses [5]
