

**M.Sc. Pharmacology 2<sup>nd</sup> Year**

(BF/2023/12)

**Experimental pharmacology, bio assay statistics and  
pharmacokinetics and recent advances  
MSCP-03/Paper III**

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. Compare rabbit and rat as experimental animals. [5]
2. Therapeutic drug monitoring. [5]
3. First order and zero order kinetic of elimination. [5]
4. High performance thin layer chromatography. [5]
5. Pharmacoeconomic [5]
6. Informed consent. [5]
7. Liposomal drug delivery. [5]
8. Nonparametric statistical tests. [5]

**Section-B**

**Write about the following:**

1. Technique for collection of blood samples in laboratory animals. [5]
2. Beers-Lambert law and its limitations. [5]
3. Preclinical screening models for anti-diabetic agents. [5]
4. Investigational new drug (IND) and new drug application (NDA). [5]
5. Mutagenicity studies. [5]
6. Types of randomization. [5]
7. Drug and cosmetics act. [5]
8. Two compartment pharmacokinetic model. [5]

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