

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

Pharm.D (Post Baccalaureate) (Sem.-4)
BIOPHARMACEUTICS AND PHARMACOKINETICS

Subject Code : PD405T-19

M.Code : 78151

Date of Examination : 06-07-22

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** contain **SEVEN** questions. Attempt any **FIVE** questions. Each question will carry **TWO** marks each.
2. **SECTION-B** contain **EIGHT** questions (Short Essay Type). Attempt any **SIX** questions. Each question will carry **FIVE** marks.
3. **SECTION-C** contain **THREE** questions (Long Essay Type). Attempt any **TWO** questions. Each question will carry **FIFTEEN** marks.

SECTION-A

1. What are the factors which influence duration of action of a drug?
2. How to adjust the dose of drug in renal disease?
3. Define Q value. What is the dissolution acceptance criterion as per USP?
4. Describe Fick's first law.
5. Give brief account of true detoxification reactions.
6. What do you mean by monitoring drug therapy?
7. Write briefly about Active transport.

SECTION-B

8. Describe various physiological barriers to distribution of drug.
9. Give a brief account on mechanisms of drug absorption.
10. Discuss in brief the various factors affecting Protein-drug binding.

11. Discuss the factors influencing renal excretion of drug.
12. Define pharmacokinetic interactions. Discuss various mechanisms of drug interactions.
13. Describe Michaelis Menten Equation.
14. What are the two methods for determining elimination rate constant from urinary excretion data?
15. Describe in detail In *Vitro-In Vivo* correlation.

SECTION-C

16. Discuss in brief the pharmaceutical factors affecting drug absorption
17. Explain phase I oxidative reactions responsible for drug biotransformation.
18. Discuss various methods of enhancement of bioavailability through drug solubility.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.