

VINAYAKA MISSION'S RESEARCH FOUNDATION
(Deemed to be University) , SALEM

B.PHARM. DEGREE EXAMINATION – October 2021
Sixth Semester

BIOPHARMACEUTICS AND PHARMACOKINETICS

Time : Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions: (2 x 10 = 20)

1. Explain mechanism of drug transportation.
2. Explain in clinical significance of protein binding of drugs.
3. Explain renal elimination of the drugs.

II. Write short answers on any **SEVEN** questions: (7 x 5 = 35)

4. Compartment model.
5. Factors affecting drug absorption.
6. Calculation of maintenance dosing.
7. Factors affecting drug metabolism.
8. First pass effect.
9. Bioavailability.
10. Blood placental barrier.
11. *In vivo* drug dissolution models.
12. Drug receptor binding mechanisms.

III. Write short notes on : (10 x 2 = 20)

13. Lock and key mechanism of enzymes.
14. First order drug elimination.
15. Lipophilic drugs.
16. Salivary excretion of the drugs.
17. Enterohepatic recycling of the drugs.
18. Active tubular secretions.
19. Therapeutic window.
20. Osmolarity.
21. pH of the drugs.
22. Physiological models.
