

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FOURTH YEAR SECOND SEMESTER EXAMINATION IN BPharmHons - 2023
PHABT 4223 DRUG DISCOVERY AND DEVELOPMENT

Date: 15/08/2024

Time: 03 Hours

Answer All SIX Questions.

1.
 - 1.1 Write down the desirable features of a promising target of drug discovery. (20 Marks)
 - 1.2 Briefly explain target identification methods. (20 Marks)
 - 1.3 Explain the techniques used in target identification. (60 Marks)

2.
 - 2.1 List down the stake holders considered in target selection for drug discovery and development. (20 Marks)
 - 2.2 Briefly explain the difference in the drug discovery process in academia and pharma industries. (50 Marks)
 - 2.3 Discuss on target specificity and selectivity of antimicrobial drugs. (30 Marks)

3.
 - 3.1 Discuss the rationale for conducting pharmacological profiling. (25 Marks)
 - 3.2 List the advantages of *in vitro* profiling. (25 Marks)
 - 3.3 Briefly explain on *in-vivo* pharmacological profiling in animals. (25 Marks)
 - 3.4 Write down the alternative approaches for animal models. (25 Marks)

4. Write short notes on,
 - 4.1 Research & Development blueprint. (20 Marks)
 - 4.2 neglected tropical disease. (30 Marks)
 - 4.3 combinatorial chemistry. (30 Marks)
 - 4.4 exploratory toxicology. (20 Marks)

5.
 - 5.1 Write down the clinical signs of toxicity observed in animals. (50 Marks)
 - 5.2 Discuss the optimization approaches in toxicological studies. (50 Marks)

6.
 - 6.1 Explain how pharmaceutical companies can be encouraged for drug discovery of orphan disease? (30 Marks)
 - 6.2 Briefly explain each phases of clinical trials. (70 Marks)