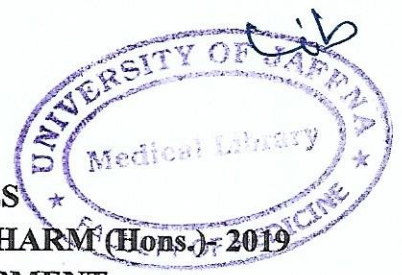


UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FOURTH YEAR SECOND SEMESTER EXAMINATION IN B. PHARM (Hons.) - 2019
PHADD 4223 DRUG DISCOVERY AND DEVELOPMENT



Date: 19/05/2021

Time: 03 Hours

Answer All SIX Questions.

1. 1.1 List down common drug targets that are used in the drug discovery and development. (10 Marks)
- 1.2 Write down the desirable features of a promising target of drug discovery. (40 Marks)
- 1.3 Explain types of target identification methods. (50 Marks)
2. 2.1 List down the stake holders who could be considered in target selection for drug discovery and development. (20 Marks)
- 2.2 Briefly explain the target selection criteria that are commonly used for selection of target by pharmaceutical companies. (30 Marks)
- 2.3 Discuss on target specificity and selectivity of antimicrobial drugs. (30 Marks)
- 2.4 Explain target specificity and selectivity within the body. (20 Marks)
3. 3.1 List the types of assays used in the process of drug discovery. (20 Marks)
- 3.2 Briefly explain any two types of assays that are mentioned in 3.1. (40 Marks)
- 3.3 Explain briefly on assay detection methods. (40 Marks)
4. 4.1 Write down advantages and disadvantages of *in vitro* pharmacological profiling. (30 Marks)
- 4.2 Discuss the importance of toxicological studies in various stages of drug discovery and development process. (70 Marks)
5. 5.1 Write a short note on
 - 5.1.1 exploratory toxicology. (25 Marks)
 - 5.1.2 regulatory toxicology. (25 Marks)
- 5.2 Discuss on optimization approaches in toxicological studies. (50 Marks)
6. 6.1 Explain how pharmaceutical companies could be encouraged for drug discovery of orphan disease. (20 Marks)
- 6.2 Briefly explain different phases of clinical trials. (80 Marks)