UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FOURTH YEAR FIRST SEMESTER EXAMINATION IN BPharmHons- 2023
PHADD 4122 DRUG DISCOVERY AND DEVELOPMENT

Date: 04.12.2024   Time: 02 Hours

Answer All Four (04) Questions

1. 1.1 Define the following

    1.1.1 Target deconvolution   (10 Marks)

    1.1.2 Target discovery   (10 Marks)

    1.2 Briefly discuss the properties of an ideal drug target.   (30 Marks)

    1.3 Briefly explain five (05) target identification methods.   (50 Marks)

2. 2.1 List five (05) *in-silico* methods used in the drug discovery process.   (10 Marks)

    2.2 Briefly explain the each *in-silico* methods mentioned in **2.1**.   (50 Marks)

    2.3 Discuss high through put screening.   (40 Marks)

3. 3.1 What are laboratory animal models?   (10 Marks)

    3.2 Briefly explain the 3R concept used in animal studies.   (60 Marks)

    3.3 Discuss the novel alternatives for animal models.   (30 Marks)

4. 4.1 Explain the phase 1 clinical trial.   (20 Marks)

    4.2 Discuss the importance of toxicological studies in various stages of the drug discovery and development process.   (20 Marks)

    4.3 Describe different optimization approaches used in toxicological studies.   (60 Marks)