

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FOURTH YEAR FIRST SEMESTER EXAMINATION IN BPharmHons- 2022
PHADD 4122 DRUG DISCOVERY AND DEVELOPMENT

Date: 06/03/2024

Time: 02 Hours

Answer All Questions

1.

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| 1.1 | Define lead. | (10 Marks) |
| 1.2 | List the lead identification methods. | (10 Marks) |
| 1.3 | Explain the methods of lead identification mentioned in 1.2. | (40 Marks) |
| 1.4 | Briefly discuss the factors to consider in choosing a cell-based assay. | (40 Marks) |

2.

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| 2.1 | Write down the rationale for conducting pharmacological profiling in drug discovery process. | (10 Marks) |
| 2.2 | Discuss the advantages of <i>in-vitro</i> profiling. | (40 Marks) |
| 2.3 | Briefly explain <i>in-vivo</i> pharmacological profiling in animals. | (25 Marks) |
| 2.4 | Write down the alternative approaches that can be used for animal models. | (25 Marks) |

3.

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| 3.1 | List the types of toxicity studies. | (25 Marks) |
| 3.2 | Write down the clinical signs of toxicity observed in animal studies. | (35 Marks) |
| 3.3 | Briefly discuss the <i>in-vitro</i> models for specific toxicity testing. | (40 Marks) |

4.

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| 4.1 | Briefly explain the clinical study design. | (35 Marks) |
| 4.2 | Write the objectives of each phase in clinical trials. | (40 Marks) |
| 4.3 | List the functions of the clinical trial regulatory division in National Medicine Regulatory Authority (NMRA). | (25 Marks) |