Enrollment No……

Master of Pharmacy (Pharmacology)
Second Semester Examination, June-2021
Advanced Pharmacology II [MPL201T]

Time: 3:00 Hrs **Max Marks 75**

Note: Attempt any five questions. All questions carry equal marks.

Q.1 (a) What is free radical brief note on free radical mechanism and role of free radical in etiopathology of various disease.
(b) Write the mode of action of contraceptives pills and their ADR.

Q.2 (a) Write brief notes on cellular mechanism and classification of growth hormone drugs.
(b) Write the molecular mechanism action of insulin hormones and Their pharmacotherapy.

Q.3 (a) Describe rational use of anti microbial agents with at least two examples.
(b) Write the molecular and cellular mechanism action of drug resistance.

Q.4 (a) Describe the classification, MOA, ADR and drug resistance of anti fungal drugs.
(b) Describe the classification, MOA, ADR and drug resistance of anti viral drugs

Q.5 (a)What is the hypersensitive reaction describe the type of hypersensitivity reaction with uses of drugs.
(b) What is chrono-pharmacology ,describe the chrono-pharmacology disease like diabetes and asthma.

Q.6 (a) Describe the classification, MOA, ADR and drug resistance of anti-cancer drug.
(b) Describe Difference between pharmacotherapy of asthma and COPD.

Q.7 (a) Write the basic mechanisms of inflammation and their biochemical mediator
(b) What are Immunosuppressant and Immunostimulants. Explain ?

Q.8 Short notes (Any 3)

a) Drug used in irritable bowel syndrome
b) Anti-emetics drugs
c) Drug used in constipation
d) Recent advances in treatment of cancer drug
e) Antioxidant

Enrollment No……

Master of Pharmacy (Pharmacology)

Second Semester Examination, June-2021

Pharmacological and Toxicological Screening Methods- II [MPL202T]

Time: 3:00 Hrs **Max Marks 75**

Note: Attempt any five questions. All questions carry equal marks.

Q.1 (a) Write define and detail types of toxicology.
(b) Write regulatory guidelines for conducting toxicity studies OECD.

Q.2 (a) Write regulatory guidelines for conducting toxicity studies Schedule Y.
(b) Write the principles of good laboratory practice (GLP)

Q.3 (a) Describe an importance and applications of toxic kinetic studies.
(b) Write a note on Ames Test and HERG assay.

Q.4 (a) Describe in detail the *in vivo* carcinogenicity studies.
(b) Write the history, concept and importance of GLP in drug development .

Q.5 (a) Highlight the acute eye irritation, skin sensitization, dermal irritation & dermal toxicity studies as per OECD.
(b) Write down the female reproductive toxicology (segment I and segment III) studies.

Q.6 (a) Write down the details of Genotoxicity studies.
(b) Write a note on In vitro and in vivo Micronucleus .

Q.7 (a) Write down the definition and importance of IND.
(b) Write down the origin, concepts and importance of safety pharmacology.

Q.8 (a) Describe in detail the Toxic kinetic evaluation in preclinical studies.
(b) Write a note on Tier-1-CVS, CNS and respiratory safety pharmacology.

Enrollment No……

Master of Pharmacy (Pharmacology)
Second Semester Examination, June-2021
Principles of Drug Discovery [MPL203T]

Time: 3:00 Hrs **Max Marks 75**

Note: Attempt any five questions. All questions carry equal marks.

Q.1 (a) What are Virtual Screening techniques, describe Drug likeness screening.
(b) Describe the concept of pharmacophore mapping and pharmacophore based approaches.

Q.2 (a) Describe in detail docking based screening.
(b) Write a note on history and development of QSAR, SAR versus QSAR.

Q.3 (a) Describe pro-drug to improve patient acceptability,
(b) Describe in detail drug solubility, drug absorption and distribution.

Q.4 (a) What is Molecular docking, describe rigid docking, flexible docking and manual docking techniques.
(b) Describe physicochemical parameters, Hansch analysis, Fee Wilson analysis and relationship between them.

Q.5 (a) Describe De novo drug design, in detail.
(b) Write a role of Genomics, Proteomics and Bioinformatics in Target Discovery and validation.

Q.6 (a) Describe 3D-QSAR approaches like COMFA and COMSIA and Pro-drug design- Basic concept.
(b) Rationale of pro-drug design and practical consideration of prodrug design.

Q.7 (a) Write down the application of NMR and X-ray crystallography in protein structure prediction
(b) Write a note on Threading and homology modeling methods.

Q.8 (a) What are quantitative analysis of Structure Activity Relationship.
(b) Write the Protein structure Levels of protein structure in detail.

Enrollment No……

Master of Pharmacy (Pharmacology)
Second Semester Examination, June-2021
Clinical Research and Pharmacovigilance [MPL204T]

Time: 3:00 Hrs **Max Marks 75**

Note : Attempt any five questions. All questions carry equal marks.

Q.1 (a) Describe the Clinical Trials: Types and Design Experimental Study- RCT and Non RCT.
(b) Explain the Ethical Committee: Institutional Review Board.

Q.2 (a) Write about the Clinical Study Report Clinical Trial Monitoring & Safety Monitoring in Clinical Trial.
(b) Discuss about evaluation of medication safety.

Q.3 (a) Describe the classification of diseases, International Nonproprietary names for drugs.
(b) Write note on Establishing pharmacovigilance centres in Hospitals, Industry and National programmes related to pharmacovigilance.

Q.4 (a) Discuss about the WHO international drug monitoring programme, WHO and Regulatory terminologies of ADR.
(b) Describe the Ethical principles governing informed consent process.

Q.5 (a) Explain the Ethical Guidelines for Biomedical Research and Human Participant- Schedule Y.
(b) Explain the History and progress of pharmacovigilance.

Q.6 (a) Describe the Targeted clinical investigations and Vaccine safety surveillance.
(b)Explain the Contract Research Organization and its management.

Q.7 (a) Write note on Spontaneous reporting system and Reporting to regulatory authorities.
(b) Give detail Note on the Passive and Active surveillance, Comparative observational studies

Q.8 Write short note on (Any 3)
(i) Pharmacoepidemiology
(ii) Pharmacoeconomics
(iii) Safety pharmacology
(iv) Pharmacovigilance.