QT—06—2023

FACULTY OF SCIENCE AND TECHNOLOGY

M. Pharm. (Second Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

ADVANCE PHARMACOLOGY–II

Paper–MPL–201T

(Wednesday, 27-12-2023)   **Time : 2.00 p.m. to 5.00 p.m.**

Time—3 Hours   *Maximum Marks—75*

N.B. :— (i)   *All* questions are compulsory.

(ii)   Figures to the right indicate full marks.

(iii)   Answer to the point only.

1.   Answer the following :   10×2=20

(a)   Write on Biological rhythms.

(b)   What is chronopharmacology ?

(c)   What are prokinetics ? Give example.

(d)   Define immunosuppressants. Give example.

(e)   What are oral hypoglycemic agents ? Give example.

(f)   Enlist drugs used in protozoal infections.

P.T.O.

(g) Write a short note on chemotherapy.

(h) Enlist the drugs used in treatment of Alzhiemer's disease.

(i) Enlist the cellular and biochemical mediators involved in immune response.

(j) Enlist the drugs used in chemotherapy of Cancer.
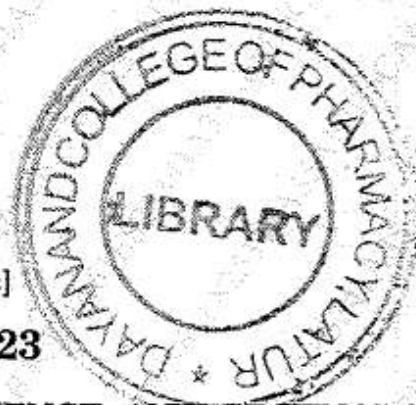
2. Answer any *two* of the following :　　　　　　　　2×10=20

(a) What are antibiotics ? Classify and write on pharmacology of quinolones.

(b) What is Alzhiemer's disease ? Write about its pathogenesis and mechanism of action of cholinesterase inhibitors in its treatment.

(c) What is inflammation ? Discuss about cellular and biochemical mediators involved in allergy and inflammation.

3. Answer any *seven* of the following :　　　　　　　　7×5=35

(a) Write on chemotherapy of drugs used in treatment of Helminthiasis.

(b) Write about Huntington's disease.

(c) What is Diabetes mellitus ? Write on recent advances in its treatment.

(d) Write a note on Immunostimulants.

(e)   Write about application of chemotherapy of cardiovascular disease.

(f)   Write in detail about chemotherapy of Tuberculosis.

(g)   Explain pharmacology of alkylating agents in cancer chemotherapy.

(h)   What are oral contraceptives ? Explain the main types of oral contraceptives.

(i)   Explain various drugs used in peptic ulcer.

QT—26—2023

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

M.Pharm. (CBCS PCI) (Second Semester) EXAMINATION

JANUARY, 2024

PRINCIPLES OF DRUG DISCOVERY

Paper MPL-203T

(Monday, 1-1-2024)   **Time : 2.00 p.m. to 5.00 p.m.**

Time—Three Hours   *Maximum Marks—75*

N.B. :— (i) *All* questions are compulsory.

       (ii) Figures to the right indicate full marks.

       (iii) Answers to the point only.

1. Answer the following questions :   10×2=20

     (a) Write stages of drug discovery process.

     (b) Write properties of secondary protein structure.

     (c) Define transgenic animals with example.

     (d) Define lead and target with example.

     (e) Compare steps of traditional *Vs.* rational drug design.

     (f) Define pharmacophore with example.

     (g) Write different types of QSAR.

     (h) What is Regression Analysis ?

     (i) Write role of prodrug in improving patient acceptability.

     (j) Enlist *four* drugs which has been discovered by CAD.

P.T.O.

2. Answer any *two* of the following : 2×10=20

   (a) Define and explain lead identification and lead optimization. Add a note on different softwares used for the same.

   (b) Add a detailed note on virtual screening techniques in terms of pharmacophore based screening and mapping.

   (c) Enlist and explain different physicochemical parameters and analysis techniques in QSAR.

3. Answer any *seven* of the following : 7×5=35

   (a) Write a note on Threading and Homology modeling.

   (b) Explain in brief about drug likeliness screening techniques.

   (c) Explain combinatorial chemistry approach.

   (d) Give the steps involved in COMFA and COMSIA.

   (e) Write principle and applications of DENOVO drug design.

   (f) Write working and principle of nucleic acid micro-array.

   (g) Define Bioinformatics. Enlist different softwares used for the same. Write example of drugs which has been discovered by the same.

   (h) Explain the screening HT.

   (i) Write a note on assay development for hit identification.

QT—36—2023

FACULTY OF SCIENCE AND TECHNOLOGY

M.Pharm. (CBCS PCI) (First Year) (Second Semester) EXAMINATION

JANUARY, 2024

CLINICAL RESEARCH AND PHARMACOVIGILANCE

MPL—204T

(Wednesday, 03-01-2024)	Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours | *Maximum Marks—75*

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Answer to the point only.

1. Answer the following : 20

(a) What is spontaneous reporting ?

(b) Define Pharmacovigilance.

(c) Enlist various phases of clinical trials.

(d) Differentiate between passive and active surveillance.

(e) Give objectives of ICH guidelines.

(f) Define adverse drug reaction with example.

(g) What are ICMR and IAEC ?

P.T.O.

(h) Define case control study.

(i) Write aim and objectives of Pharmacovigilance.

(j) What is MedDRA ?

2. Answer any *two* of the following : 20

(a) Write in detail about WHO international drug monitoring programme.

(b) Define ADR. Explain the detection and reporting methods of ADR.

(c) Write in detail pharmacovigilance program of India (PVPI).

3. Answer any *seven* of the following : 7×5=35

(a) Write a note on experimental study in clinical trials.

(b) Write in detail about active and passive surveillance.

(c) Write a note on Detection and Reporting of ADR.

(d) Write in detail about roles and responsibilities in Pharmacovigilance.

(e) Explain management of adverse drug reactions.

(f) Write a note on informed consent report process.

(g) Explain about pharmacoepidemiology.

(h) Write a note on methods of pharmaco-economics.

(i) Write in detail about history and progress of pharmacovigilance.