Code No. D-8313/CBCS

FACULTY OF PHARMACY

B. Pharmacy (CBCS) VIII Semester (Backlog) Examination, July 2022

Subject: Pharmaceutical Biotechnology

Time: 3 Hours **Max. Marks: 70**

Note: Answer any five questions. **(5 x 14 = 70 Marks)**

1 Explain in detail about pUC and pBR322 vectors.

2 Define Fermentation. Explain Batch and Continuous fermentation process.

3 What is Microbiological assay? Explain organism, media and procedure in Microbiological assay of Streptomycin by diffusion method.

4 What are Vaccines? Explain Manufacturing, Standardization, storage, labeling and Applications of Diphtheria Vaccine.

5 What is Immobilization? Mention types of Immobilization. Explain methods of Immobilization and advantages and disadvantages.

6 What are plasma substitutes? Write Ideal Properties of Plasma substitutes. Explain the method of Production of Dextran.

7 Explain method of Isolation of pure substances from pancreas and Thyroid glands.

8 Explain about maintenance and development of Industrial Micro organisms.

9 What are Monoclonal antibodies? Explain Production of monoclonal antibodies. Write their applications.

10 Give the general composition of media used in animal cell culture and applications.

* * *

Code No: D-8317/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII – Semester (CBCS) (Backlog) Examination, July 2022

Subject: Current Good Manufacturing Practice (Elective)

Time: 3 Hours **Max. Marks: 70**

Note: Answer any five questions. **(5 x 14 = 70 Marks)**

1. Explain different principles of cGMP as per schedule M.
2. Explain the regulation applicable to import of Pharmaceuticals.
3. Explain procedures involved in selection and purchase of equipment and raw materials.
4. Describe labeling requirements of solid orals and semisolid dosage forms.
5. Describe salient features of ISO 9000 quality systems applicable in pharmaceutical Industry.
6. Explain different elements of Total quality management
7. Explain the general principles of analytical method validation
8. a) Explain steps involved in calibration of pH meter
   b) Enlist different good warehouse practices.
9. a) Describe different types of validations.
   b) Write the role of batch formula and master formula records.
10. Explain the concepts applicable to validations of water systems.

****

Code No. D-8318/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII Semester (CBCS) (Backlog) Examination, July 2022

Subject: Pharmacovigilance (Open Elective)

Time: 3 Hours **Max. Marks: 70**

Note: Answer any five questions. **(5 x 14 = 70 Marks)**

1 (a) Discuss the importance of safety monitoring of medicine.
(b) Write in brief about methods severity and seriousness assessment.

2 (a) Write a note on types of adverse drug reactions with examples.
(b) Describe the methods to assess predictability and preventability.

3 (a) Explain about the WHO drug dictionary.
(b) Write a note on importance of pharmacovigilance national programme.

4 (a) Write in brief about MeDRA.
(b) Write a note on international classification of diseases.

5 (a) Describe about the surveillance programme for vaccine failure.
(b) Write note on cross sectional studies and case series.

6 (a) Explain in brief about stimulated reporting system.
(b) Write a note on drug event monitoring system.

7 (a) Discuss about the individual case safety reports.
(b) Write a note on expedited reporting system.

8 (a) Explain the post approval safety data generation.
(b) Write a note on periodic safety update reports.

9 (a) Explain the role of genetic related drug elimination process with example.
(b) Write a note on role of schedule-Y in pharmacovigilance process.

10 (a) Explain about the CIOMS.
(b) Write a note on drug safety evaluation in pediatrics.

* * *

Code No.D-8316/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII Semester (CBCS) (Backlog) Examination, July 2022

Subject: Hospital and Clinical Pharmacy

Time: 3 Hours **Max. Marks: 70**

Note: Answer any five questions. **(5 x 14 = 70 Marks)**

1 (a) Write a note on hospital and its organization.
(b) Explain the role of hospital pharmacist in hospital committees.

2 (a) Write objectives of hospital pharmacy and explain practice of rational drug therapy.
(b) Write about Pharmacy and Therapeutics Committee.

3 (a) Write about preparation and distribution of formulary content.
(b) Write a short note on
(i) Storage and handling of radio isotopic pharmaceuticals
(ii) Budget planning.

4 (a) Explain dispensing of drugs to inpatient.
(b) Briefly explain manufacturing of bulk and sterile supplies.

5 (a) Explain in detail Investigational use of drugs.
(b) Write a note on liver function tests.

6 (a) Write about adverse drug reaction management.
(b) Give the definition and differences between Generic and Prescription drugs.

7 (a) Write a note on unit dose drug distribution system.
(b) Write a note on dermatological drug induced diseases.

8 (a) Explain mechanism of Pharmacokinetic interactions.
(b) Write a note on therapeutic aspects of pharmacogenetics.

9 Write the etiology and pathophysiology of Peptic ulcer and Syphilis.

10 Write pharmacotherapy and critical analysis of rational use of drugs in cardiovascular diseases.

****

Code No.D-8315/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII - Semester (CBCS) (Backlog) Examination, July 2022

Subject: Cosmetic Technology

Time: 3 Hours **Max. Marks: 70**

Note: Answer any five questions. **(5 x 14 = 70 Marks)**

1. (a) Draw a well labelled diagram of human skin, and explain the layers of skin in detail.
   (b) Explain applications of surfactants in cosmetic formulations.

2. (a) Discuss Indian regulations for cosmetics.
   (b) Define cosmetics, classify them based on various criteria.

3. (a) Discuss about the formulation additives for face powder. Emphasize on the properties they impart to powder.
   (b) Elaborate the evaluation tests for lipsticks.

4. (a) Discuss the types of: (i) Eye shadows (ii) Baby cosmetics.
   (b) Outline the general manufacturing process for creams.

5. (a) Describe the evaluation tests for: (i) shaving cream (ii) Talcum powder.
   (b) Explain mechanism of action of antiperspirants.

6. (a) Discuss formulation ingredients and process for preparing body lotions.
   (b) Enlist the ideal properties for: (i) Nail lacquer (ii) Talcum powder.

7. Discuss the formulation and evaluation of shampoos.

8. Discuss the formulation and evaluation of tooth paste.

9. (a) Describe the herbal surfactants and emulsifiers for hair conditions.
   (b) Explain the regulatory aspects for herbal cosmetics.

10. (a) Discuss applications of any five herbal ingredients that can be used in cosmetics.
    (b) Enlist the advantages of herbal cosmetics.

* * *

Code No. D-8314/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII Semester (CBCS) (Backlog) Examination, July 2022

Subject: Pharmacoinformatics

Time: 3 Hours **Max. Marks: 70**

Note: Answer any five questions. **(5 x 14 = 70 Marks)**

1. (a) Explain Codd Rules.
   (b) Write in detail about Normalization.

2. (a) Define database and explain different types of databses.
   (b) Write about Data mining and KDD.

3. (a) What is sequence alignment. Differentiate between local and global alignment.
   (b) Explain Dynamic programming methods for sequence alignment.

4. (a) Write a note on database querying, key work searching and search machines.
   (b) Write about Bio-Perl.

5. (a) What are drug information resources. Explain different types of drug information resources with examples.
   (b) Explain in detail the evaluation of drug information using verbal and written reports.

6. (a) Write a short note on critical evaluation of drug information and literature.
   (b) Write a brief note on coding of information and bar codes.

7. (a) What is DNA sequencing. Explain in detail Maxam-Gilbert method and Sanger method for DNA sequencing.
   (b) Write about Gene bank and cosmid libraries.

8. (a) Write a note on protein sequence databases
   (i) SWISSPORT (ii) PIR (iii) INTERPRO
   (b) Differentiate between BLAST and FASTA

9. Explain the following factors affecting bioactivity of drugs.
   (i) Resonance effect (ii) Inductive effect (iii) Isosterism (iv) Bioisosterism

10. (a) Explain briefly drug receptor theories with examples.
    (b) Classify QSAR parameters. Explain the significance of partition coefficient in drug activity.

*****

Code No.12004/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Backlog) Examination, July 2021
Subject: Hospital & Clinical Pharmacy

Time: 2 Hours **Max. Marks: 70**

Note: Answer any four questions. **(4 x 17 ½ = 70 Marks)**

1. (a) Define hospital pharmacy and write its objectives and functions.
   (b) Explain the organization and functions of pharmacy and therapeutics committee.

2. (a) Explain the role of hospital pharmacist in hospital committees.
   (b) Write a note on practice of rational drug therapy.

3. (a) Define hospital formulary. Explain the contents preparation of a hospital formulary.
   (b) Explain in detail about dispensing of ancillary and controlled substances.

4. Describe the approaches for purchasing and inventory control in hospital pharmacy department.

5. (a) Write a note on therapeutic drug monitoring with examples.
   (b) Write a note on drug and poison information.

6. (a) Explain the methods of patient counseling and its significance.
   (b) Define and differentiate generic and prescription drugs and write about liver function lists.

7. (a) Explain unit dose drug distribution system and central sterile services.
   (b) Write a note on drug induced teratogenicity.

8. (a) Write the classification and surveillance methods of adverse reaction of drugs.
   (b) Write a note on drug induced toxicity.

9. Write the symptoms, manifestation, pathophysiology and symptoms of
   (i) Peptic Ulcer (ii) Syphilis

10. Explain the critical analysis and rational use of drugs in gastro-intestinal disorders.

* * *

Code No.12003/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Backlog) Examination, July 2021

Subject: Cosmetic Technology

Time: 2 Hours **Max. Marks: 70**

Note: Answer any four questions. **(4 x 17 ½ = 70 Marks)**

1. (a) What are the requirements of factory premises for manufacturing of cosmetics.
   (b) Explain the need of preservatives in cosmetic formulations.

2. (a) Discuss the labelling requirements for cosmetics as per EU and Indian regulations.
   (b) Illustrate the layers of epidermis of human skin. Discuss their functions.

3. (a) Describe formulation additives and process for lipstick manufacturing.
   (b) Explain the mechanism of action of cold cream and vanishing cream.

4. (a) Discuss the evaluation tests required for eye cosmetics.
   (b) In what aspects do the baby cosmetics, differ from other cosmetics.

5. (a) Elaborate the uses of: (i) Antiperspirants (ii) After shave preparations
   (b) Explain formulation additives and process for nail lacquer manufacturing.

6. (a) Discuss the bleaching agents used in skin whitening cosmetics.
   (b) Describe evaluation tests for deodorants and antiperspirants.

7. (a) elaborate the additives required for formulating depilatories.
   (b) Elaborate the additives required for formulating hair conditions.

8. (a) Explain the evaluation tests for shampoo.
   (b) Write a note on mouth wash.

9. (a) Explain the mechanism of action of herbal face packs and face masks.
   (b) What are the advantages and disadvantages associated with herbal cosmetics.

10. (a) Discuss the herbal ingredients for preparing herbal shampoos.
    (b) Differentiate between herbal face pack and face mask.

* * *

Code No. 12001 / CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (Backlog) Examination, July 2021

Subject : Pharmaceutical Biotechnology

Time: 2 Hours **Max. Marks: 70**

Note: Answer any four questions. **(4 x 17 ½ = 70 Marks)**

1 Write note on
a) Restriction Endonuclease b) Vector
c) DNA Ligase d) DNA replication

2 a) List out the various application of rDNA technology.
b) Explain the Production of Human Growth hormone by rDNA technique.

3 a) Define fermentation. Write ideal properties of fermenter.
b) Explain the fermentative production of any **one** antibiotic in detail.

4 a) Write detail account on microbiological assay of vitamin B12.
b) Explain the various methods for immobilization.

5 Describe manufacturing, standardization, storage, labeling and application of BCG.

6 Give an account on
a) Viral Vaccine b) Immunodiagnostic

7 Explain the preparation, collection and storage of
a) Dried Human Serum
b) Whole Human Blood
c) Human normal immunoglobins

8 Give a detail account on
a) Plasma substituents b) Dextran 40 c) PVP

9 Define Biotransformation. Explain the various type of microbial transformation of steroid with example.

10 a) Explain Hybridoma technology. Discuss the various steps involved in production of monoclonal antibody with diagram.
b) Write note on animal cell culture.

*****

Code No.12002/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII -Semester (CBCS) (Backlog) Examination, July 2021

Subject: Pharmacoinformatics

Time: 2 Hours **Max. Marks: 70**

Note: Answer any four questions. **(4 x 17 ½ = 70 Marks)**

1. (a) What is Database Architecture? Explain about it in detail.
   (b) Explain about phylogenetic tree and its applications.

2. (a) What is KDD? Explain about KDD and its applications.
   (b) Explain about Bibliographic databases and library catalogs.

3. (a) Write about Dot Matrix method and Dynamic programming of sequence alignment.
   (b) What is pattern matching? Write in detail about pattern matching.

4. (a) What is Homology Modelling? Explain advantages of Homology Modeling.
   (b) Explain about Multiple Sequence alignment in detail.

5. (a) Write a note on preparation of written and verbal reports.
   (b) Explain about pharmacy automation.

6. (a) What are Drug information Resources? Explain about it in detail.
   (b) Mention the databases useful in the treatment of poisoning and write the applications of Bar coding in pharmacy.

7. (a) What is Genomics? Explain about Sanger and Maxam & Gilbert methods of sequencing.
   (b) Explain about EMBOSS.

8. (a) Mention the preparation of Cosmid libraries.
   (b) Write a note on Scop and GENE BANK.

9. (a) Explain the difference between SAR & QSAR. Write about Hansch method and Free Wilson methods of Analysis.
   (b) Mention the forces involved in Drug Receptor interactions.

10. (a) What is Local and Global Minimization? Explain the method for determination of partition coefficient.
    (b) Write about Molecular Dynamic Simulations.

* * *

Code No:6216/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, Sept / Oct 2020

Subject : Pharmacoinformatics

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions
(4 x $17^{1/2}$ = 70 Marks)

1) a) Define Database? Write about various types of databases.
   b) Write about Codd's rules.

2) a) Write about database normalization.
   b) Write about Phylogenetic analysis?

3) What is sequence alignment? Explain dynamic programming method for sequence alignment.

4) a) Write about storage and retrieval of information.
   b) Write about Hidden Markov Models and its applications.

5) a) Write about various types of drug information resources available. Explain with examples.
   b) Write a note on Barcodes.

6) a) What is Pharmacy Automation? Write its application in medication dosage. Filling & packaging, medication distribution and inventory control
   b) Write a note on emergency treatment of poisoning.4

7) a) Write about i) Genbank ii) Cosmid Libraries
   b) What are DNA sequencing methods? Write about Maxam Gilbert and Senger method for DNA sequencing.

8) Write a note on following protein databases
   i) Prosite ii) PDB iii) SCOP iv) CATH

9) a) What is SAR and QSAR? Write in detail about Hansch analysis and Free-Wilson analysis for drug
   b) Write a note on docking.

10) a) Explain drug receptor theories with examples.
   b) Write a note on i) Energy minimization ii) Bioisosterism.

****

Code No: 6219/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, Sept / Oct 2020

Subject : Current Good Manufacturing Practice (cGMP) (Elective)

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions. **(4 x $17^{1/2}$ = 70 Marks)**

1) a) Write a note on principles of cGMP
   b) Write about Schedule M.

2) a) Write about USFDA guidelines on pharmaceutical manufacturing.
   b) Write a note on Import and Export of pharmaceutical products.

3) Write the selection, purchase and maintenance of stores for raw materials and pharmaceutical equipments as per cGMP.

4) Write about cGMP complied packaging, documentation and labeling requirements of regulated and non – regulated markets for various dosage forms.

5) Write a note on ISO 9000 and 14000 series in guidance to pharmaceutical manufacturing facilities.

6) a) Write a note on documentation practices.
   b) Write a note on principles of Total Quality Management (TQM)

7) Write about i) General principles of validation
   ii) Importance and scope of validation
   iii) General principles of analytical method validation

8) Write a note on i) Types of validation
   ii) Validation Master Plan (VMP)
   iii) Good warehousing practice

9) a) What is validation? Write the types and approaches of validation.
   b) Write a brief note on qualification of HVAC systems.

10) a) Write a brief note on handling of return goods recalling and waste disposal.
   b) Write a note on i) Batch and Master formula record
   ii) Common technical document and Drug master files.

****

Code No.6220/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, September 2020

Subject: Pharmacovigilance (Open Elective)

Time: 2 Hours **Max. Marks: 70**

Note: Answer any four questions. **(4x17½=70 Marks)**

1. (a) Describe about the WHO international drug monitoring programme.
   (b) Write a note on history of pharmacovigilance.

2. (a) Write a note on predictability and preventability assessment of ADR.
   (b) Explain about the management of ADR.

3. (a) Explain about the MeDRA and daily defined doses.
   (b) Write a note on establishment of pharmacovigilance centre in CRO.

4. (a) Write in brief about basic drug information resources.
   (b) Write a note on international non-proprietary names for drugs.

5. (a) Describe about the targeted clinical investigations.
   (b) Write a note on spontaneous reporting system.

6. (a) Explain in brief about active surveillance.
   (b) Write a note on vaccination failure.

7. (a) Describe the role of clinical phase in safety data generation.
   (b) Write a note on post approval expedited reporting.

8. (a) Explain the good clinical practice in pharmacovigilance.
   (b) Write a note on pharmacovigilance planning.

9. (a) explain about the schedule-Y of drugs and cosmetic act.
   (b) Write a note on CIOMS working groups.

10. (a) Explain about the drug safety evaluation in pediatrics.
    (b) Write a note on necessary requirements for Indian pharmacovigilance programme.

* * *

Code No: 6217/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, September 2020

Subject : Cosmetic Technology

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions
(4 x $17^{1/2}$ = 70 Marks)

1) a) Define cosmetics. Explain the structure and functions of skin
   b) Discuss in detail the importance of cosmetic applications in day-to-day life.

2) a) Enlist the labeling requirements for cosmetics products.
   b) Enumerate different types of colouring agents that are used in cosmetic preparations.

3) a) Discuss about the raw materials used in manufacturing of Vanishing creams with two examples of preparations.
   b) Write in detail about the various stages involved in the manufacture of lipsticks.

4) a) Enlist baby specialty products giving marketed examples for each and add a note on formulation and manufacture of baby shampoo.
   b) Write a note on formulation of eye shadows and mascaras.

5) a) Mention the differences between lather shaving cream and brushless shaving cream write about the formulation of a lather shaving cream.
   b) Discuss about nail preparations.

6) a) Discuss about formulation. Manufacturing and evaluation of bleaching preparations.
   b) Discuss about quality control of Talcum powders.

7) a) Discuss about formulation and evaluation of shampoos.
   b) Write a note on quality control of tooth paster.

8) a) Classify Hair dye preparations. Discuss about formulation of hair dyes
   b) Write a note on Hair creams

9) a) Discuss about formulation and preparation of Herbal conditioners
   b) Write a note on Herbal face packs.

10) a) Define Herbal cosmetics. Discuss about herbal body oils.
    b) Discuss the formulation and manufacture of herbal moisturizing lotions.

****

Code No: 6217/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, September 2020

Subject : Cosmetic Technology

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions
(4 x $17^{1/2}$ = 70 Marks)

1) a) Define cosmetics. Explain the structure and functions of skin
   b) Discuss in detail the importance of cosmetic applications in day-to-day life.

2) a) Enlist the labeling requirements for cosmetics products.
   b) Enumerate different types of colouring agents that are used in cosmetic preparations.

3) a) Discuss about the raw materials used in manufacturing of Vanishing creams with two examples of preparations.
   b) Write in detail about the various stages involved in the manufacture of lipsticks.

4) a) Enlist baby specialty products giving marketed examples for each and add a note on formulation and manufacture of baby shampoo.
   b) Write a note on formulation of eye shadows and mascaras.

5) a) Mention the differences between lather shaving cream and brushless shaving cream write about the formulation of a lather shaving cream.
   b) Discuss about nail preparations.

6) a) Discuss about formulation. Manufacturing and evaluation of bleaching preparations.
   b) Discuss about quality control of Talcum powders.

7) a) Discuss about formulation and evaluation of shampoos.
   b) Write a note on quality control of tooth paster.

8) a) Classify Hair dye preparations. Discuss about formulation of hair dyes
   b) Write a note on Hair creams

9) a) Discuss about formulation and preparation of Herbal conditioners
   b) Write a note on Herbal face packs.

10) a) Define Herbal cosmetics. Discuss about herbal body oils.
    b) Discuss the formulation and manufacture of herbal moisturizing lotions.

****

Code No: 6219/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, Sept / Oct 2020

Subject : Current Good Manufacturing Practice (cGMP) (Elective)

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions. **(4 x $17^{1/2}$ = 70 Marks)**

1) a) Write a note on principles of cGMP
   b) Write about Schedule M.

2) a) Write about USFDA guidelines on pharmaceutical manufacturing.
   b) Write a note on Import and Export of pharmaceutical products.

3) Write the selection, purchase and maintenance of stores for raw materials and pharmaceutical equipments as per cGMP.

4) Write about cGMP complied packaging, documentation and labeling requirements of regulated and non – regulated markets for various dosage forms.

5) Write a note on ISO 9000 and 14000 series in guidance to pharmaceutical manufacturing facilities.

6) a) Write a note on documentation practices.
   b) Write a note on principles of Total Quality Management (TQM)

7) Write about i) General principles of validation
   ii) Importance and scope of validation
   iii) General principles of analytical method validation

8) Write a note on i) Types of validation
   ii) Validation Master Plan (VMP)
   iii) Good warehousing practice

9) a) What is validation? Write the types and approaches of validation.
   b) Write a brief note on qualification of HVAC systems.

10) a) Write a brief note on handling of return goods recalling and waste disposal.
   b) Write a note on i) Batch and Master formula record
   ii) Common technical document and Drug master files.

****

Code No: 6215/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main & Backlog) Examination, September 2020

Subject : Pharmaceutical Biotechnology

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four questions. **(4 x 17½ = 70 Marks)**

1) Describe in detail about pBR 322 vector and DNA replication

2) What are Restriction Endonucleases, DNA Ligases, DNA polymerases, SI nucleases, Alkaline Phosphatases, Terminal transferases and explain how they used for DNA cloning?

3) Explain in detail about culture, media and production conditions of *Lactobacillus sporogenes.*

4) Explain about microbiological assay of any one antibiotic by Diffusion method.

5) Classify vaccines. Write in detail about manufacturing. Standardization, storage of Diphtheria vaccine.

6) Write in detail manufacturing of live attenuated bacterial vaccines.

7) What are ideal requirements of plasma substitutes and explain production of plasma substitutes.

8) Describe the isolation and purification of pure substances from pituitary and Adrenal glands.

9) (i) Give the general composition of media used in animal cell culture.
(ii) Applications of animal cell culture.

10) Explain in detail about production of Monoclonal antibodies

****

Code No.6220/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, September 2020

Subject: Pharmacovigilance (Open Elective)

Time: 2 Hours **Max. Marks: 70**

Note: Answer any four questions. **(4x17½=70 Marks)**

1. (a) Describe about the WHO international drug monitoring programme.
   (b) Write a note on history of pharmacovigilance.

2. (a) Write a note on predictability and preventability assessment of ADR.
   (b) Explain about the management of ADR.

3. (a) Explain about the MeDRA and daily defined doses.
   (b) Write a note on establishment of pharmacovigilance centre in CRO.

4. (a) Write in brief about basic drug information resources.
   (b) Write a note on international non-proprietary names for drugs.

5. (a) Describe about the targeted clinical investigations.
   (b) Write a note on spontaneous reporting system.

6. (a) Explain in brief about active surveillance.
   (b) Write a note on vaccination failure.

7. (a) Describe the role of clinical phase in safety data generation.
   (b) Write a note on post approval expedited reporting.

8. (a) Explain the good clinical practice in pharmacovigilance.
   (b) Write a note on pharmacovigilance planning.

9. (a) explain about the schedule-Y of drugs and cosmetic act.
   (b) Write a note on CIOMS working groups.

10. (a) Explain about the drug safety evaluation in pediatrics.
    (b) Write a note on necessary requirements for Indian pharmacovigilance programme.

* * *

Code No:6216/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, Sept / Oct 2020

Subject : Pharmacoinformatics

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions
(4 x $17^{1/2}$ = 70 Marks)

1) a) Define Database? Write about various types of databases.
   b) Write about Codd's rules.

2) a) Write about database normalization.
   b) Write about Phylogenetic analysis?

3) What is sequence alignment? Explain dynamic programming method for sequence alignment.

4) a) Write about storage and retrieval of information.
   b) Write about Hidden Markov Models and its applications.

5) a) Write about various types of drug information resources available. Explain with examples.
   b) Write a note on Barcodes.

6) a) What is Pharmacy Automation? Write its application in medication dosage. Filling & packaging, medication distribution and inventory control
   b) Write a note on emergency treatment of poisoning.4

7) a) Write about i) Genbank ii) Cosmid Libraries
   b) What are DNA sequencing methods? Write about Maxam Gilbert and Senger method for DNA sequencing.

8) Write a note on following protein databases
   i) Prosite ii) PDB iii) SCOP iv) CATH

9) a) What is SAR and QSAR? Write in detail about Hansch analysis and Free-Wilson analysis for drug
   b) Write a note on docking.

10) a) Explain drug receptor theories with examples.
   b) Write a note on i) Energy minimization ii) Bioisosterism.

****

Code No: 6218/CBCS

FACULTY OF PHARMACY

B. Pharmacy VIII-Semester (CBCS) (Main) Examination, Sept / Oct 2020

Subject : Hospital and Clinical Pharmacy

Time: 2 Hours **Max. Marks: 70**

Note: Answer any Four Questions. **(4 x $17^{1/2}$ = 70 Marks)**

1) a) Explain in detail organization and functions of Infection control committee and antibiotic committee?
   b) Add a note on hospital drug policy?

2) a) Explain in detail organization, Functions and documentation of research and ethics committee?
   b) Write a note on drug exchange program?

3) a) Describe in detail different types of drug distribution system in a hospital?
   b) What is the role of pharmacist the rapectics committee in a hospital

4) a) Describe how controlled substances are distributed to wards? What are the steps to be taken to control the same?
   b) Write a note on ABC analysis?

5) a) What are drug related problems (DRP). Explain with examples?
   b) Write a note on medication history interview?

6) Explain in detail lab parameters to be determined for kidney and liver disorders.

7) a) What are satellite pharmacy services?
   b) Explain in detail different types of surveillance methods of adverse drug reaction?

8) Describe in detail drug induced skin disorders and teratogenicity?

9) Explain the pathophysiology of Hypertension and Asthma?

10) Explain the pharmacotherapy of tuberculosis and diabetes?

****