

FACULTY OF PHARMACY

B. Pharmacy 4/4 II-Semester (Main) Examination, April 2017

Subject : Pharmaceutical Biotechnology

Time : 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

- 1 (a) Give a brief account of :
(i) Cloning strategies
(ii) DNA ligases
(iii) Restriction endonucleases
- OR**
- (b) Explain the manufacture of Insulin by rDNA technology.
- 2 (a) Explain the principle involved in microbiological assay of Antibiotics. Add a note on one level and two level factorial assay.
- OR**
- (b) Define Immobilization. Explain the methods for immobilization of Enzymes. Add a note on its applications.
- 3 (a) Give an account of preparation and standardization of Bacterial vaccines.
- OR**
- (b) Give a brief account of :
(i) Viral vaccines
(ii) Immunodiagnostics
- 4 (a) Give an account of collection, processing and storage of whole human blood. Add a note on the preparation of dried human plasma.
- OR**
- (b) What are the ideal requirements of plasma substitute? Write the preparation of DEXTRAN.
- 5 (a) Give an account of microbial Transformation of steroids.
- OR**
- (b) Give a brief account of :
(i) Animal cell culture Techniques
(ii) Hybridoma Technology

FACULTY OF PHARMACY**B. Pharmacy 4/4 II-Semester (Main) Examination, April 2017****Subject: Hospital and Clinical Pharmacy****Time : 3 Hours****Max. Marks: 70*****Note: Answer all questions. All questions carry equal marks.***

- 1 (a) Define hospital pharmacy and mention its organization and objectives. (7)
(b) Mention the role of pharmacist in hospital pharmacy. (7)
OR
(c) What is the significance of hospital drug policy? Explain the general factors to be considered while framing the hospital drug policy. (14)
- 2 (a) Write the organization, content, preparation and distribution of hospital formulary. (14)
OR
(b) Explain the procedure involved in procurement and distribution of alcohol in hospital pharmacy.
- 3 (a) Describe the steps involved in therapeutic drug monitoring along with their importance. (14)
OR
(b) Explain the role of pharmacist in patient data analysis. (7)
(c) Discuss about Adverse drug Reaction identification and reporting methods. (7)
- 4 (a) Explain different pharmacodynamics drug interactions and the induced diseases along with examples. (14)
OR
(b) Describe the role of pharmaco-genetics in therapeutics preventing adverse reactions.
- 5 (a) Write the patho-physiology and etiology of HIV infection and hepatitis and cirrhosis. (14)
OR
(b) Describe the critical analysis and therapy of hypertension, Rheumatism and gout.

FACULTY OF PHARMACY

B. Pharmacy 4/4 II-Semester (Main) Examination, April 2017

Subject : Cosmetic Technology

Time : 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

- 1 (a) (i) With a neat sketch describe the structure of Skin.
(ii) Write a note on Regulatory requirements related to cosmetics.
OR
(b) (i) Classify Colors according to their sources with examples.
(ii) Write a note on role of Antioxidants used in Cosmetic preparations.
- 2 (a) (i) Write a note on formulation of Cleaning creams.
(ii) Give the formulation and evaluation of Baby Shampoo.
OR
(b) (i) Discuss about the additives used in formulation of face Powder.
(ii) Write short notes on Mascars and Eye shadows.
- 3 (a) (i) Write about the formulation and evaluation of Bleaching preparation.
(ii) Differentiate between Lather shaving cream and Brushless shaving cream.
OR
(b) (i) Write about formulation and manufacture of Deodorants.
(ii) Write a note on Nail preparations.
- 4 (a) (i) Write about the formulation of Depilatories and Epilatories.
(ii) Write short notes on Hairs creams.
OR
(b) (i) Write a note on evaluation of shampoos.
(ii) Write in detail the formulation and manufacture of Mouth washes.
- 5 (a) (i) Discuss about the formulation and manufacturing of Moisturising Lotions.
(ii) Discuss the additives used in Herbal shampoos with examples.
OR
(b) (i) What are Herbal Cosmetics? Write about the formulation of Herbal Hair Conditioners.
(ii) Discuss the formulation and manufacture of Herbal Face packs.

FACULTY OF PHARMACY

B. Pharmacy 4/4 II – Semester (Makeup) Examination, September 2017

Subject : Pharmaceutical Biotechnology

Time : 3 hours

Max. Marks : 70

Note : Answer all questions. All questions carry equal marks.

- 1 a) Explain the manufacture of interferons by rDNA technology.
OR
b) Explain the following :
i) Cloning strategies
ii) Interleukins
iii) Gene Expression in Recombinant DNA
- 2 a) Give an account of methods for the immobilization of enzymes. Add a note on their applications.
OR
b) i) Explain the fermentative production of streptomycin. 10
ii) Write a short note on Biomass. 4
- 3 a) Explain the manufacture, purification and standardization of Diphtheria antitoxin.
OR
b) Write the preparation of
i) DPT vaccine
ii) Polio vaccine
- 4 a) What are the properties of an ideal plasma substitute? Give an account of preparation of dextran.
OR
b) Explain the preparation of extracts from
i) Pituitary gland ii) Pancreas
- 5 a) Give an account of Microbial transformation of steroids.
OR
b) Explain the method of preparation of monoclonal antibodies. Add a note on their applications.

FACULTY OF PHARMACY

B. Pharmacy 4/4 II – Semester (Makeup) Examination, September 2017

Subject : Cosmetic Technology

Time : 3 hours

Max. Marks : 70

Note : Answer all questions. All questions carry equal marks.

- 1 a) i) Discuss various additives used in cosmetics.
ii) Write a note on structure and function of Skin.
OR
b) i) Write a note on role of Antioxidants used in Cosmetic preparations.
ii) Write a note on Regulatory requirements related to cosmetics.
- 2 a) i) Discuss formulation, manufacturing and labeling of Vanishing creams.
ii) Write a note on formulation of baby lotions.
OR
b) i) Write briefly about formulation of face powders.
ii) Write a note on Eye Shadows.
- 3 a) i) Write the formulation, manufacturing and labeling of Body Creams.
ii) Differentiate between Lather shaving cream and Brushless shaving cream.
OR
b) i) Write a note on formulation of talcum powders.
ii) Write a note on Nail preparations.
- 4 a) i) Write the formulation and manufacturing of Hair conditioners.
ii) Write about formulation and labeling of Mouthwashes.
OR
b) i) Write a note on evaluation of shampoos.
ii) Write briefly about formulation of Tooth powders.
- 5 a) i) Write a note on formulation, manufacturing and labeling of Herbal face packs.
ii) Write a note on Herbal shampoos.
OR
b) i) What are Herbal Cosmetics? Write about the formulation of Herbal Hair conditioners.
ii) Discuss the formulation and manufacture of Herbal oils.

FACULTY OF PHARMACY**B. Pharmacy 4/4 II-Semester (Makeup) Examination, September 2017****Subject : Pharmacoinformatics****Time : 3 Hours****Max. Marks: 70*****Note: Answer all questions. All questions carry equal marks.***

- 1 (a) What is Database? Classify and write about different types of databases. (7)
(b) What are relational databases? Write about Codd's rules. (7)
- OR**
- (c) Write about Bibliographic databases and Library Catalogs. (7)
(d) Write about Phylogenetic analysis. (7)
- 2 (a) What is sequence alignment? Explain Needleman-Wunsch algorithm for sequence alignment. (9)
(b) Write a brief note on substitution similarity matrices. (5)
- OR**
- (c) Write about storage and retrieval of information from databases. (8)
(d) Write a short note on : (i) Homology search (ii) Pattern matching (6)
- 3 (a) Discuss about drug information resources with merits and demerits. (9)
(b) Write a note on about emergency treatment of poisoning. (5)
- OR**
- (c) What is Pharmacy Automation? Write its application in medication dosage, filing and packaging, medication distribution and inventory control.
- 4 (a) Write about DNA databanks. (6)
(b) Explain BLAST algorithms for proteins and nucleic acids. (8)
- OR**
- (c) Write a note on :
(i) Cosmid libraries (ii) SWISSPROT (iii) SCOP (iv) EMBOSS
- 5 (a) What is SAR and QSAR ? Explain Hansch analysis and Free-Wilson analysis for drug design. (10)
(b) Write about energy minimization. (4)
- OR**
- (c) Explain theories of drug receptor interactions. (7)
(d) Explain : (i) Molecular Docking (ii) Bioisosterism (7)

FACULTY OF PHARMACY**B. Pharmacy 4/4 II-Semester (Makeup) Examination, September 2017****Subject : Hospital and Clinical Pharmacy****Time : 3 Hours****Max. Marks: 70*****Note: Answer all questions. All questions carry equal marks.***

- 1 (a) Define hospital and mention its organization and objectives. (7)
(b) Describe the role of pharmacist in framing hospital pharmacy committees. (7)
OR
(c) Describe the significance of pharmacist in pharmacy and therapeutic committee. (7)
(d) Explain the procedure involved in drug exchange program and write the role of pharmacist in it. (7)
- 2 (a) Describe the procedure involved in handling and storage of radio pharmaceutical in hospital setup. (14)
OR
(b) Explain the different surgical instruments and equipment used in hospital pharmacy along with their significance
- 3 (a) Describe the procedures of adverse drug reaction monitoring and reporting in clinical pharmacy. (14)
OR
(b) Explain the stages involved in patient counselling procedure. (7)
(c) Describe the approaches to find patient medication adherence in hospital pharmacy. (7)
- 4 (a) Explain the concept of essential drugs and mention its role in rational drug therapy. (14)
OR
(b) Describe drug-drug interactions at absorption, distribution, metabolism and excretion with the help of examples. (14)
- 5 (a) Write the patho-physiology and etiology of asthma and Parkinsonism. (14)
OR
(b) Describe the critical analysis and therapy of anemia and microbial infections. (14)

FACULTY OF PHARMACY**B. Pharmacy 4/4 II-Semester (Main) Examination, April 2017****Subject : Pharmacoinformatics****Time : 3 Hours****Max. Marks: 70****Note: Answer all questions. All questions carry equal marks.**

- 1 (a) Write briefly about Data mining and KDD. (8)
 (b) Describe briefly about database architecture (6)
OR
 (c) What are biological databases? Classify and write the importance of biological databases. (8)
 (d) Write about Cheminformatics databases. (6)
- 2 (a) What is Hidden Markov model? Describe briefly about its construction and use in alignment and prediction. (7)
 (b) What is sequence alignment? Write dynamic programming method for sequence alignment. (7)
OR
 (c) Explain briefly about:
 (i) Search machines (ii) Homology searches
 (iii) Pattern matching (iv) Bio-Perl
- 3 (a) Describe in detail about the Drug information resources. (9)
 (b) Write a short note on preparation of written and verbal reports. (5)
OR
 (c) Write about coding of information and bar-codes. (6)
 (d) Explain pharmacy automation applications in medication dosage, distribution, management and inventory control. (8)
- 4 (a) What are DNA sequencing methods? Write about conventional and automated DNA sequencing. (10)
 (b) Write short notes on libraries. (4)
OR
 (c) What are the biological databases? Explain the following databases.
 (i) Genbank (ii) Prosite (iii) SCOP (iv) CATH
- 5 (a) What is SAR and QSAR? Explain QSAR methods for drug design. (10)
 (b) Write a brief note on molecular docking. (4)
OR
 (c) Write and explain the theories for drug-receptor interactions. (7)
 (d) Write a brief note on : (i) Quantum mechanics (ii) Energy minimization (7)
