

**FACULTY OF PHARMACY**

**B. Pharmacy 4/4 II-Semester (Main) Examination, March / April 2013**

**Subject : Pharmaceutical Biotechnology**

**Time : 3 Hours**

**Max. Marks: 70**

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

1.(a) Give an account of production of Insulin by rDNA technology.

**OR**

(b) Write brief account on :  
(i) Restriction Endonucleases  
(ii) Cloning strategies

2.(a) Give a detailed account of various methods for immobilization of Enzymes. Add a note on their applications.

**OR**

(b) Give a brief account on  
(i) Aeration in fermentors  
(ii) Scale up of fermentors  
(iii) Batch and continuous fermentations

3.(a) Define and classify vaccines. Write the preparation and standardization of any one bacterial vaccine.

**OR**

(b) Give a brief account on  
(i) Preparation and purification of Diptheria antitoxin  
(ii) Immunodiagnostics

4.(a) Give an account of collection, processing and storage conditions of whole Human Blood and concentrated Human RBC. Add a note on the preparation and sterilization of Human Fibrin foam.

**OR**

(b) What are the ideal requirements of plasma substitute? Write the fermentative production of Dextran.

5.(a) Give an account of production of monoclonal antibodies. Add a note on their applications.

**OR**

(b) What is the significance of microbial transformation of steroids? Explain the type and methods of transformation mediated by micro organisms.

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**B. Pharmacy 4/4 II – Semester (Main) Examination, March / April 2013**

**Subject: Cosmetic Technology**

**Time: 3Hours**

**Max.Marks: 70**

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

- 1.(a) i) Write about the labelling and packaging requirements of cosmetic products.  
ii) Explain the role of antioxidants in cosmetic preparations.
- OR**
- (b) i) What are preservatives. Classify them with suitable examples.  
ii) Write about the classification of perfumes with examples.
- 2.(a) i) What are vanishing creams. Explain the formulation and packing of vanishing creams.  
ii) How do you formulate and evaluate a baby shampoo.
- OR**
- (b) i) Discuss about the various raw materials used in the formulation of face powders.  
ii) Write short notes on eye liners and eye shadows.
- 3.(a) i) Write about the formulation and quality control tests for nail lacquers.  
ii) Mention the differences between deodorants and antiperspirants. Write about the formulation of an antiperspirant liquid.
- OR**
- (b) i) Discuss about the formulation and evaluation of nail polish removers.  
ii) Write about talcum powders.
- 4.(a) i) List out the various therapeutic substances used in the formulation of medicated toothpastes. Write about the formulation of fluoride toothpaste.  
ii) How do you formulate and evaluate a depilatory cream.
- OR**
- (b) i) Discuss about the various surfactants used in the formulation of shampoos.  
ii) Write short notes on hair creams and mouth washes.
- 5.(a) i) Discuss about the various ingredients used in the formulation of herbal shampoos.  
ii) How do you formulate and manufacture a body oil with herbal ingredients.
- OR**
- (b) i) Discuss about herbal face packs.  
ii) Write about the formulation and manufacture of herbal hair conditions.

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**FACULTY OF PHARMACY**

**B. Pharmacy 4/4 II-Semester (Main) Examination, March / April 2013**

**Subject : Hospital and Clinical Pharmacy**

**Time : 3 Hours**

**Max. Marks: 70**

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

- 1.(a)(i) Describe the organizational chart of a typical hospital. Discuss about Hospital drug policy.  
(ii) Define and explain the role of hospital pharmacist.

**OR**

- (b) Discuss the purpose, organization and function of pharmacy and therapeutics committee.

- 2.(a)(i) Write a note on pharmacy procedural manual.  
(ii) Explain the procedure for handling and dispensing of ancillary and controlled substances.

**OR**

- (b)(i) Explain the storage and handling of radiopharmaceuticals in a hospital.  
(ii) Write a note on Hospital formulary.

- 3.(a) Write a short note on :  
(i) Drug therapy monitoring      (ii) Medication History Review

**OR**

- (b) Describe the Liver and Renal organ functional tests.

- 4.(a) What are Drug Distribution systems? Explain Unit Dose drug distribution system.

**OR**

- (b) Write a note on Drug induced diseases with examples.

- 5.(a) Describe the symptoms, pathophysiology and etiology of  
(i) Asthma      (ii) Diabetes

**OR**

- (b) Explain the pharmacotherapy and rational use of Drugs  
(i) Gastro intestinal disorders  
(ii) Cardiovascular disorders

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**FACULTY OF PHARMACY**

**B. Pharmacy IV Year II – Semester (Main) Examination, March / April 2013**

**Subject: Pharmacoinformatics**

**Time: 3Hours**

**Max.Marks: 70**

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

- 1.(a) What is database? Write about sequence and structural databases.  
(b) Discuss about drug information databases.  
**OR**  
(c) Write about codd's rules in databases.  
(d) Describe briefly about database normalization and database architecture.
- 2.(a) What is Hidden Markov model? Describe briefly about its construction and use in alignment and prediction.  
**OR**  
(b) What is an algorithm? What are the algorithms used in sequence alignment for proteins and nucleotides?
- 3.(a) Describe in detail about the drug information services and resources available.  
**OR**  
(b) What is pharmacy automation? Write about automated medication dosage, filling and packaging.
- 4.(a) What are biological databases? Write the databases useful for proteins and nucleic acids.  
**OR**  
(b) Write about BLAST and FASTA for homology searches of proteins and nucleic acids.
- 5.(a) What is QSAR? Write about QSAR methods and applications of QSAR.  
**OR**  
(b) What is energy minimization? Write the importance of energy minimization in drug design.  
(c) Write briefly about factors affecting the bioactivity of drugs.

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