## B. Pharmacy IV-Year II-Semester (Main) Examination, April 2016

## Subject : Pharmaceutical Biotechnology

## Time : 3 Hours

## Max. Marks: 70

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

- 1 (a) (i) Describe in detail about pET vector.
  - (ii) Discuss Manufacturing of interferons by rDNA technology.

#### OR

- (b) What are vectors? Write in detail about YAC and BAC.
- (a) Explain about development and maintenance of industrial microorganism.

## OR

- (b) Explain about microbiological assay of Vitamin B<sub>12</sub>.
- 3 (a) Classify vaccines. Write in detail about manufacturing, standardization and storage of Polio Vaccine.

## OR

- (b) Discuss Manufacturing, standardization and storage of Diphtheria anti toxins.
- 4 (a) Explain in detail about preparation of Dried human plasma and Dried human serum.

## OR

- (b) What are ideal requirements of plasma substitutes and explain production of plasma substitutes.
- 5 (a) Explain the techniques used in the cultivation of adherent animal cells.
- (b) Explain in detail about production of Monoclonal antibodies.

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## B. Pharmacy 4/4 II – Semester (Main) Examination, April 2016

## Subject: Cosmetic Technology

Time: 3 Hours

Max.Marks: 70

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

- 1 a) i) Define cosmetics and classify cosmetic preparations.
  - ii) Write a note on regulatory requirements related to cosmetics.

#### OR

- b) i) Classify colours according to their sources with examples.ii) Write a note on preservatives used in cosmetic preparations.
- 2 a) i) Differentiate between vanishing creams and cleansing creams.
  - ii) Give the formulation and evaluation of baby shampoo. **OR**
  - b) i) Discuss about the additives used in formulation of face powders.
    ii) Write short notes on Mascaras and eye shadows.
- 3 a) i) Write about the formulation and evaluation of body creams.ii) Differentiate between lather shaving cream and brushless shaving cream.

OR

OR

- b) i) Write about formulation and manufacture of talcum powders.
  - i) Write a note on nail preparations.
- 4 a) i) Differentiate between depilatories and epilatories.ii) Write in detail the formulation and manufacture of tooth paste.
  - b) i) Write a note on evaluation of shampoos.ii) Write short notes on tooth powders.
  - a) i) Discuss about the formulation and manufacturing of moisturizing 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.

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#### B. Pharmacy 4/4 II – Semester (Main) Examination, April 2016

## Subject: Hospital and Clinical Pharmacy

#### Time: 3 Hours

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

1	a) b)	Mention the objectives and functions of Hospital Pharmacy. What is drug exchange program and mention its advantages. OR	7 7
	c) d)	Explain the organization and functions of Pharmacy and Therapeutic Committee. Explain the role of pharmacist in Pharmacy and Therapeutic Committee.	7 7
2	a)	Discuss the preparation and importance of Hospital Formulary and role of Pharmacist.	14
	b)	Describe different types of budgets and explain the procedures of purchasing and	14
3	a)	Write the parameters of patient history review and mention the approaches to improve the patient compliance.	14
	b)	Describe different liver and kidney function tests for common diseased states and	14
4	a) b)	Write various drug-food interactions and mention their significance. Explain the concept of essential drug therapy. OR	7 7
	c)	Explain the drug distribution systems for out-patients and in-patients in hospital	14
5	a)	Explain the symptoms and patho-physiology of Angina pectoris and liver cirrhosis. OR	
	b)	Describe the procedure of critical analysis and selection of drugs for infectious diseases arrhythmia.	
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## B. Pharmacy IV-Year II-Semester (Main) Examination, April 2016

## Subject : Pharmacoinformatics

Ti	me : 3 Hours Max. Marks:	Max. Marks: 70		
Note: Answer all questions. All questions carry equal marks.				
1	<ul> <li>(a) Write briefly about database normalization and database architecture.</li> <li>(b) Write about Drug Information databases.</li> <li>OR</li> </ul>	(10) (4)		
	<ul><li>(c) What is Phylogenetic analysis? Write about methods of Phylogenetic analysis.</li><li>(d) Write about Cood's Rules.</li></ul>	(9) (5)		
2	<ul> <li>(a) What is sequence alignment? Explain algorithms for sequence alignment.</li> <li>(b) Write a short note on Search machines and Complex searching.</li> </ul>	(8) (6)		
	<ul> <li>(c) Explain briefly about :</li> <li>(i) Database querying</li> <li>(ii) Key work searching</li> </ul>	(9)		
	(d) Write about Bio-Perl.	(5)		
3	<ul> <li>(a) Describe in detail about the Drug information services and resources available.</li> <li>(b) Write a short note on critical evaluation of drug information and literature.</li> </ul>	(9) (5)		
	<ul><li>(c) Write about emergency treatment of poisoning.</li><li>(d) What is pharmacy automation? Explain applications of automation in medication</li></ul>	(5)		
	dosage, distribution, management and inventory control.	(9)		
4	<ul><li>(a) What are the biological databases? Explain Swissprot, Pfam and PDB of protein databases.</li><li>(b) Write short note on BLAST.</li></ul>	(9) (4)		
	OR (c) What are the biological databases? Explain protein databases	(14)		
C	(i) Swissprot (ii) Pfam (iii) CATH (iv) PDB	(1-7)		
5	(a) Write differences between SAR and QSAR. Explain Free-Wilson analysis for drug design.	(9)		
	(b) Write a brief note on factors affecting on bioactivity of drugs. OR	(5)́		
	(c) What are the theories for drug – receptor interactions? Write briefly about factors affecting on drug – receptor interactions.	(7)		
	(d) Write a short note on : (i) Energy minimization (ii) Docking	(7)		