

Code :R7422305

1

**IV B.Tech II Semester(R07) Regular Examinations, April 2011**  
**BIOPHARMACEUTICAL TECHNOLOGY**  
(Biotechnology)

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE questions**  
**All questions carry equal marks**

\*\*\*\*\*

1. Explain about different sources of drugs and different routes of drug administration.
2. Write a short notes on:
  - (a) Mechanism of drug action
  - (b) Drug receptors.
3. Give an account on biotransformation and bioavailability of drugs.
4. Write a brief note on:
  - (a) Sources of biopharmaceuticals
  - (b) Good manufacturing practices.
5. Give an account on production of biopharmaceuticals.
6. Write a short notes on:
  - (a) Interferons
  - (b) Nucleic acids.
7. Explain various applications of biopharmaceuticals.
8. Write a short notes on:
  - (a) Liposome mediated drug delivery
  - (b) Drug delivery methods for therapeutic proteins.

\*\*\*\*\*

Code :R7422305

2

**IV B.Tech II Semester(R07) Regular Examinations, April 2011**  
**BIOPHARMACEUTICAL TECHNOLOGY**  
**(Biotechnology)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE questions**  
**All questions carry equal marks**

\*\*\*\*\*

1. Explain about the physiological receptors and drug receptors.
2. (a) Define the drug.  
(b) Explain different dosage forms of drug.
3. Write about the drug absorption and factors that affect the absorption of drugs.
4. Explain the good manufacturing practices and manufacturing facilities.
5. Write a note on analysis of biopharmaceuticals.
6. Give an account on:  
(a) Therapeutic proteins.  
(b) Interleukins.
7. Write about the role of biopharmaceuticals in treatment of various health disorders.
8. Write a short note on:  
(a) Biomaterials.  
(b) Drug delivery systems.

\*\*\*\*\*

Code :R7422305

3

**IV B.Tech II Semester(R07) Regular Examinations, April 2011**  
**BIOPHARMACEUTICAL TECHNOLOGY**  
**(Biotechnology)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE questions**  
**All questions carry equal marks**

\*\*\*\*\*

1. Give an account on:
  - (a) Different dosage forms.
  - (b) Routes of drug administration.
2. Explain the physico-chemical principles of pharmacodynamics.
3. Write a short note on:
  - (a) Distribution of drugs.
  - (b) Biotransformation of drugs.
4. Explain the sources of biopharmaceuticals.
5. Write a brief note on:
  - (a) Production of biopharmaceuticals.
  - (b) Analysis of biopharmaceuticals.
6. Explain about the production of hormones and cytokines.
7. Write a brief note on applications of biopharmaceuticals.
8. Explain about the:
  - (a) Controlled and sustained delivery of drugs.
  - (b) Liposome mediated drug delivery.

\*\*\*\*\*

Code :R7422305

4

**IV B.Tech II Semester(R07) Regular Examinations, April 2011**  
**BIOPHARMACEUTICAL TECHNOLOGY**  
**(Biotechnology)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE questions**  
**All questions carry equal marks**

\*\*\*\*\*

1. Define drug and write about different sources of drugs.
2. Explain the mechanism of drug action and drug receptors.
3. Write a short note on:
  - (a) Drug absorption
  - (b) Bioavailability of drugs.
4. Give an account on:
  - (a) Manufacturing facilities.
  - (b) Sources of Biopharmaceuticals.
5. Write a brief note on production of biopharmaceuticals.
6. Write a short note on:
  - (a) Tumor necrosis factor
  - (b) Cytokines
7. Explain the role of biopharmaceuticals in treatment of various health disorders.
8. Write a note on:
  - (a) Drug delivery methods for therapeutic proteins.
  - (b) Liposome mediated drug delivery.

\*\*\*\*\*