

**B TECH**  
**(SEM VIII) THEORY EXAMINATION 2017-18**  
**BIOTECHNOLOGY IN HEALTH CARE**

Time: 3 hours

Max marks: 100

**SECTION- A**

**1: Attempt all parts. All parts carry equal marks****(2x10=20)**

1. What is primary culture?
2. Define DNA vaccines.
3. Define ribozyme.
4. What is hybridoma technology?
5. Describe the term Si RNA.
6. **Define the term** Glycoprotein.
7. **What do you understand by homeostatic agents?**
8. Explain the term radiosensitizers.
9. Name any four Synthetic antibacterial agents.
10. Name any two antiamoebic drugs.

**SECTION- B**

**2: Attempt any three questions from this section.****(10x3=30)**

1. Define the term gene therapy and discuss various vectors for gene transfer.
2. Give a list of antiamoebic drugs with special comments on their activity spectrum.
3. Discuss Hybridoma technology in production of monoclonal antibodies and their applications.
4. Discuss about lactam antibiotics giving proper examples.
5. Write an essay on the pulmonary drug delivery strategies.

**SECTION- C**

**Note: Attempt all questions.****(10x5=50)****3. Attempt any one part****(10 marks)**

- a) What is antiviral therapy? Discuss about the mode of action of some common antiviral.
- b) Discuss the role of Recombinant DNA technology and its application in production of vaccines.

**4. Attempt any one part****(10 marks)**

- a) Write a note on Brain-specific drug targeting strategies.
- b) Discuss various Radiosensitizers and Radioprotective agents.

**5. Attempt any one part****(10 marks)**

- a) Describe various approaches to carbohydrate-based cancer vaccines.
- b) What is the importance of stem cell therapy in Alzheimer's disease?

**6. Attempt any one part.****(10 marks)**

- a) Give a detailed account on Female sex hormones and analogs.
- b) What are the various agents affecting the immune response?

**7. Attempt any one part.****(10 marks)**

- a) Write a note on Cell-Specific Drug Delivery systems.
- b) Explain Anthelminthic agents in detail.