(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 154851

Roll No.

B.TECH.

Theory Examination (Semester-VIII) 2015-16

BIOTECHNOLOGY IN HEALTH CARE

Time: 3 Hours Max. Marks: 100

Section-A

- Ql. Attempt all parts. All parts cany equal marks. Write answer of each part in short. $(2\times10=20)$
 - (a) Describe cell-mediated immunity.
 - (b) Explain the mechanism of action of Ribozyme.
 - (c) Enlist various antiviral agents.
 - (d) Describe about hormone therapy.
 - (e) What are the Dendritic cells?
 - (f) Role of biosensors in diagnostic.

(1) P.T.O.

- (g) How immune response is regulated?
- (h) Name two drug targeting strategies.
- (i) What is SICD?
- (j) Define gene therapy.

Section-B

Q2. Attempt any five parts. All parts carry equal marks. $(5\times10=50)$

- (a) Briefly describe modification of endogenous peptides and proteins.
- (b) Describe the various factors which are considered against selecting a drug against any disease.
- (c) What is anti-sense therapy and how it works?
- (d) Write in brief about antiviral agents.
- (e) Write a short notes on various approaches used for vaccine preparation.
- (f) Describe the properties and mechanism of heparin action.

- (g) What are Lactam antibiotics? Describe mechanism of action of any Lactam antibiotics.
- (h) Give an overview of Central Nervous System Diseases.

Section-C

Note: Attempt any two questions from this section.

 $(2 \times 15 = 30)$

- Q3. What are the carbohydrates based cancer vaccine? Describe various immunotherapy approaches used for cancer treatment.
- Q4. Discuss the role of Biotechnology giving suitable examples to support your view.
- Q5. Write short notes on the following-
 - (a) Female sex hormones and analogs.
 - (b) Pulmonary drug delivery approaches.
 - (c) Synthetic antibacterial agents.