

## **BIOTECHNOLOGY (MINOR)-2<sup>ND</sup> SEM**

### **RECOMBINANT DNA TECHNOLOGY**

#### **UNIT-I**

- CONCEPT OF RECOMBINANT DNA TECHNOLOGY
- CLONING VECTOR; PBR322

#### **UNIT-II**

- RESTRICTION ENDONUCLEASE
- APPLICATIONS: BT- COTTON; GOLDEN RICE AND FLAVR SAVR TOMATOES.
- 

#### **UNIT-III**

- PCR AND ITS APPLICATION
- DNA FINGERPRINTING

#### **UNIT-IV**

- TRANSGENIC ANIMALS
- PRODUCTION OF HUMULIN.

## **BIOTECHNOLOGY (MINOR)-4<sup>TH</sup> SEM**

### **FUNDAMENTAL OF MICROBIOLOGY AND IMMUNE SYSTEM**

#### **UNIT-I**

- PIONEER MICROBIOLOGISTS: LOUIS PASTUER, ROBERT KOCH AND ALEXENDER FLEMMING
- FIVE KINGDOM CLASSIFICATION

#### **UNIT-II**

- STRUCTURE OF VIRUS( HIV AND INFLUENZA)
- VIRAL DISEASES: AIDS AND COVID-19.

#### **UNIT-III**

- STRUCTURE OF BACTERIAL CELL
- BACTERIAL DISEASES:TETANUS AND CHOLERA

#### **UNIT-IV**

- INNATE AND ACQUIRED IMMUNITY
- ANTIGEN AND ANTIBODIES