

Roll No.

Total Pages : 3

BT-1/D-18

31003

INTRODUCTION TO BIOTECHNOLOGY

Paper : BT-101-E

Time : Three Hours]

[Maximum Marks : 100

Note : The Candidates are required to attempt five questions in all, selecting at least *one* question from each unit.

UNIT-I

1. Draw the structure of eukaryotic cell with the help of well labelled diagram. Also write the functions of different cell organelles. (20)
2. (a) What are carbohydrates? Write their classification. Give some examples. (10)
- (b) Draw a well labelled diagram of double helical structure of deoxyribonucleic acid. (5)
- (c) What are Enzymes? Write some properties of enzymes. (5)

UNIT-II

3. (a) Write short notes on the following : (5×3=15)
 - (i) Growth Regulators.
 - (ii) Photosynthesis.
 - (iii) Nitrogen Fixation.

31003/3,000/KD/2039

[P.T.O.
22/12

- (b) Draw a well labelled diagram of human digestive system. (5)

4. (a) Describe the circulatory system in human with the help of a diagram. (10)
- (b) Explain how microbes are useful as well as harmful for mankind. (10)

UNIT-III

5. What is Cell Division? Differentiate between mitosis and meiosis with the help of diagrams. (20)
6. (a) Write briefly about the following : (2×5=10)
 - (i) rDNA Technology.
 - (ii) Golden Rice.
 - (iii) Genetically modified organisms.
 - (iv) Plasmids.
 - (v) Restriction Enzymes.
- (b) Explain the following terms : (2½×4=10)
 - (i) Speciation.
 - (ii) Central Dogma.
 - (iii) Bioinformatics.
 - (iv) Cell Division.

31003/3,000/KD/2039

2

http://www.kuonline.in

http://www.kuonline.in

http://www.kuonline.in

http://www.kuonline.in

UNIT-IV

7. **Define Biotechnology. Write the applications of biotechnology in different fields.** (20)
8. (i) **Write a note on public perception of biotechnology.** (10)
- (ii) **What is BT Cotton? Discuss about the issues raised in case of transgenic crops by giving suitable examples.** (10)
-

<http://www.kuonline.in>
Whatsapp @ 9300930012
Your old paper & get 10/-
पुराने पेपर्स भेजे और 10 रुपये पायें,
Paytm or Google Pay से