



RAN - 2003001105020005

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B. Sc. (Sem. - V) Biotechnology Examination November - 2023

BT-15 : Genetic Engineering

Time: 2 Hours]

[Total Marks: 50

સૂચના : / Instructions

(1) નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:
☛ **B. Sc. (Sem. - V) Biotechnology**

Name of the Subject :
☛ **BT-15 : Genetic Engineering**

Subject Code No.: **2003001105020005**

Seat No.:
□ □ □ □ □ □

Student's Signature

- (2) Figures to the right indicate full marks.
(3) Draw neat and labelled diagrams wherever necessary.

Q. 1. Attempt the following questions in short. (Any Four) [08]

1. Define : Isoshizomers and Neoshizomers
2. What is T_m ? Give Formula of it.
3. Two advantages of pUC18 over pBR322
4. Define Biolistic method.
5. Use of Quencher in RT PCR

Q. 2. Attempt Any Two : [14]

1. Discuss in detail about adapter and linker.
2. What is Gene Cloning? Give its importance.
3. Explain: Vectors based on Phage Lambda

Q. 3. Explain in detail Any Two : [14]

1. What is Vector? Give idea about vectors for yeast and other fungi.
2. Give idea on: Insertional Inactivation and Transformation.
3. How to introduce DNA to nonbacterial cell?

Q. 4. Attempt Any Two of the following :

[14]

1. Two DNA sequencing Techniques.
 2. Write a note on: Primer Designing
 3. What is Hybridization? Explain Colony Hybridization.
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