

M.Sc. (Zoology) (CBCS Pattern) Semester-II  
**PSCZOOT07 - Paper-VII - Molecular Biology and Biotechnology**

P. Pages : 1

Time : Three Hours



**GUG/S/25/11226**

Max. Marks : 80

- 
- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Draw diagrams wherever necessary.

1. Describe in Detail types of DNA damage. 16

**OR**

Write notes on:

- a) Forms of DNA 8
- b) Double strand break repair. 8

2. Write an essay on Prokaryotic transcription. 16

**OR**

Write notes on:

- a) Lac operon. 8
- b) Transposable Element. 8

3. Give and Detail account on Sanger's Dideoxy method of DNA sequencing. 16

**OR**

Write notes on:

- a) Mi RNA 8
- b) Restriction enzymes. 8

4. Write an essay on Hybroma technology and production of Monoclonal Antibodies. 16

**OR**

Write notes on:

- a) Biofertilizers 8
- b) Single Cell Proteins. 8

5. Attempt to the following. 16

- a) DNA polymerase.
- b) Ribosome.
- c) Phagemids.
- d) Biogas.

\*\*\*\*\*