

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

P. Pages : 1

Time : Three Hours



**GUG/W/24/11226**

Max. Marks : 80

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- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Illustrate your answer with suitable diagram wherever necessary.

- 1. Write a detailed account on type of DNA damages and excision repair system. 16**

**OR**

Write notes on-

- a) Structure of DNA
- b) Organelle genomes

- 2. Give an account of prokaryotic translation. 16**

**OR**

Write notes on-

- a) Attenuation phage strategies
- b) Genetic code

- 3. Write an essay on molecular mechanism of antisense molecular. 16**

**OR**

Write notes on-

- a) Sanger's dideoxy method
- b) Gene replacement

- 4. Write a detailed notes on hybridoma technology and monoclonal antibodies. 16**

**OR**

Write notes on-

- a) Genetic counseling
- b) Single cell proteins

- 5. Attempt the following. 16**

- i) Double strand break repair
- ii) P-element
- iii) Restriction enzymes
- iv) Bio-insecticides

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