

M.Sc.(Microbiology) (CBCS Pattern) Sem-III  
**PSMBT-09 - Paper-I : Genetics and Molecular Biology**

P. Pages : 1

Time : Three Hours



**GUG/W/22/11291**

Max. Marks : 80

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1. Explain the process of DNA replication in details. **16**

**OR**

Write in detail about DNA repair process.

2. Explain in detail about translation process in prokaryotes. **16**

**OR**

Explain the process of transcription in details.

3. Explain the regulation gene expression by Lac operon. **16**

**OR**

Explain the regulation gene expression by trp operon.

4. Write in details about the transduction process. **16**

**OR**

Describe the process of mapping by transformation.

5. Write notes on **16**

a) Gene within gene

b) Chaperons

c) P32 gene

d) Retroposons.

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