

M.Sc.(Biotechnology) (Old / CBCS Pattern) First Semester
BT1-T004 / PSBIT104 - Paper-IV : Molecular Biology

P. Pages : 1

Time : Three Hours



GUG/W/18/11149

Max. Marks : 80

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

1. Give detailed mechanism of DNA replication. Also discuss different enzymes and accessory proteins involved. 16

OR

- a) Write a note on NER & BER. 8
- b) Give different physical mutagens. 8

2. Discuss regulation of transcription with respect to lac operon. 16

OR

- a) Discuss three types of RNA polymerases. 8
- b) Termination of transcription. 8

3. Discuss comparison between prokaryotic and eukaryotic translation. 16

OR

- a) Give a note on post translation modification of protein. 8
- b) Give short note on
Deciphering the genitive code. 8

4. Discuss conjugation in bacteria in detail. 16

OR

- a) Give salient features of E. Coli genetic map. 8
- b) Give note on extrachromosomal inheritance. 8

5. Write note on
- a) Compassion between prokaryotic and eukaryotic DNA replication. 4
 - b) Sigma factors. 4
 - c) Couple transcription translation. 4
 - d) C-value paradox. 4
