

M.Sc.(Botany) CBCS Pattern Semester-III
PSDBOTT11-2 - (DSE-I) Paper-XI
Molecular Biology and Plant Biotechnology-I

P. Pages : 1

Time : Three Hours



GUG/W/23/11245

Max. Marks : 80

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

1. Describe DNA replication in prokaryotic organism. 16
OR
Write note on.
a) Factors responsible for DNA damage. 8
b) DNA repair system. 8
2. Write an essay on DNA manipulation enzymes. 16
OR
Write note on.
a) Recombinant DNA libraries. 8
b) Nucleic Acid Hybridization. 8
3. Define PCR. Explain principle and types of PCR. 16
OR
Write note on.
a) Expression Vector. 8
b) Transformation and transfection. 8
4. Define Genomics. Describe Microarray technology and give its applications. 16
OR
Write note on.
a) Dot Plots. 8
b) Sequence similarity. 8
5. Write short note on:
a) Direct Repair. 4
b) Western Blotting. 4
c) Ligation 4
d) Proteomics 4
