

M.Sc. (Botany) (CBCS Pattern) Semester-III
PSCBOTT10 - Paper-X - Cell and Molecular Biology-II

P. Pages : 1

Time : Three Hours



GUG/S/25/11242

Max. Marks : 80

-
- Notes : 1. All questions are compulsory and carry equal marks.
2. Illustrate your answers with diagrams & suitable examples.

1. Explain in details on transcription of prokaryotic and eukaryotic cells. 16
OR
Write notes on-
a) rRNA biosynthesis. 8
b) Structure and role of tRNA. 8
2. Write in details on the regulation of gene expression in eukaryotes. 16
OR
Write notes on-
a) Protein targeting to plastids and mitochondria. 8
b) Introns and their significance. 8
3. Explain in details genome organization in prokaryotes. 16
OR
Write notes on-
a) Independent assortment and crossing over. 8
b) Construction of molecular maps. 8
4. What is the Cell cycle? Explain role of cyclins and cyclin dependent kinases. 16
OR
Write notes on-
a) Diversity in protein kinases and phosphatases. 8
b) Electrophoresis and immunotechniques. 8
5. Write short notes on-
a) Splicing. 4
b) Coat proteins. 4
c) Role of Rec A. 4
d) G-proteins. 4
