

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

P. Pages : 1

Time : Three Hours



GUG/W/23/11242

Max. Marks : 80

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

1. Structure and function of ribosomes. **16**

OR

Write notes on:

- a) Types of RNA and their function. **8**
b) Post translational modifications. **8**

2. Describe regulation of Gene expression in prokaryotes and eukaryotes. **16**

OR

Write notes on:

- a) Protein targeting to Plastids. **8**
b) Introns and their significance. **8**

3. Describe Bacterial gene mapping through Transformation, conjugation and transduction. **16**

OR

Write notes on:

- a) Molecular mechanism of recombination. **8**
b) Correlation of genetic and physical maps. **8**

4. Explain in details regulation of cell cycle at molecular level. **16**

OR

Write notes on:

- a) Calcium -calmodulin cascade. **8**
b) Confocal microscopy. **8**

5. Write short notes on:

- a) RNA Splicing. **4**
b) Cis trans test. **4**
c) Molecular markers. **4**
d) PCD in plants. **4**
