

D 27937

Name.....

Reg. No

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2007

General Biotechnology

GBT 101—CELL BIOLOGY

Maximum : 80 Marks

Time : Three Hours

Section A

Answer any **two** questions.

1. How do cellular metabolism occurs in mitochondria ? Explain. **Ad a**
2. Schematically represent 'Somatic cell division' and explain.
3. Draw and explain the structural organisation of a Prokaryotic cell. (2 x 10 = 20 marks)

Section B

Answer any **ten** questions.

4. List the post transcriptional changes that occur.
5. What is the role of an **ER** in a cell ?
6. What are the various steps that are taking place in a **chloroplast** during light reaction ?
7. How do the nuclear material is present in an **Eukaryotic** cell
8. Write short notes on membrane transport.
9. How ATP molecules are synthesized and transported ?
10. Schematically represent 3D structure of **microtubule**.
11. What do you mean by **Phosphocreatinine** ? Explain.
12. List the various types of pigments present in a plant.
13. How do a Prokaryotic cell differ from an **Eukaryotic** cell ?
14. What are cell cycle check points ? List few and explain their role in cell division.
15. One gene one enzyme hypothesis. How good this statement goes with the present day science. (10 x 5 = 50 marks)

Section C

Answer **all** questions.

16. How do TEM differs from SEM ?
17. What are **exons** and **introns** ?
18. Name the power house and suicidal body of a cell.
19. What do you mean by denaturation of protein ?
20. What are **pili**, **fimbriae** and **flagella** ? What is its role ? (5 x 2 = 10 marks)