

D 40072

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2018

(CUCBCSS—UG)

Botany

BOT 6B 11—CELL BIOLOGY AND BIOCHEMISTRY

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer all questions.
Each question carries 1 mark.*

1. Name the cell organelle known as suicidal bag.
2. Give two examples for homo polysaccharides.
3. Define zwitter ions.
4. A protein made up of 500 amino acids. Predict the number of peptide bonds in them.
5. What are isoenzymes ?
6. Define aneuploidy.
7. Name the stage in prophase I of meiosis shows chiasma formation.
8. What is a triglyceride ?
9. What is telomere ?
10. Mention the role of glyoxisomes.

(10 × 1 = 10 marks)

Section B

*Answer all questions.
Each question carries 2 marks.*

11. Differentiate between prokaryotes from eukaryotes.
12. Write the functions of golgi complex.
13. What is the difference between euchromatin from heterochromatin ?
14. Name any *two* essential amino acids ?
15. What are Co-enzymes ?
16. Name the nitrogen bases in deoxyribo nucleotides ?
17. Name the monomers in lactose and maltose sugar.

Turn over

18. What is meant by translocation ?
19. What is fluid mosaic model in plasma membrane ?
20. Write any two significance of polyploidy.

(10 × 2 = 20 marks)

Section C

*Answer any six questions.
Each question carries 5 marks.*

21. Explain the structure and function of endoplasmic reticulum.
22. Describe the chemical composition of chromosomes.
23. Write briefly about phospholipids and sphingolipids.
24. Draw the structure of Glucose.
25. Write the features of metaphase and anaphase of mitosis with diagrams.
26. Describe the ecological significance of secondary metabolites in plants.
27. Write briefly about the competitive inhibition of enzymes.
28. Write the ultra structure of mitochondria.

(6 × 5 = 30 marks)

Section D

*Answer any two questions.
Each question carries 10 marks.*

29. Describe the special type of chromosomes with diagram.
30. Explain the different stages of meiosis in plants with diagram.
31. Describe the protein structure with examples.

(2 × 10 = 20 marks)