

C 60079

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2019

(CUCBCSS)

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. What is meant by Centromere ?
2. Name the membrane of vacuole ?
3. What is the significance of mitosis ?
4. Name a neutral amino acid.
5. What are co-enzymes ?
6. Which phase of cell cycle is characterized by formation of bivalents ?
7. What is meant by translocation ?
8. Name two fatty acids.
9. What is meant by essential amino acids ?
10. Name two disaccharides.

(10 × 1 = 10 marks)

Section B

Answer all questions.

Each question carries 2 marks.

11. What are epimers ?
12. Differentiate between aldose and ketose sugars.
13. What is meant by enzyme specificity ?
14. Explain any two functions of golgi bodies.
15. What is crossing over ? What is its significance ?

Turn over

16. Differentiate between deletion and duplication.
17. Comment on K_m value ?
18. Describe any *two* functions of cell membrane.
19. What is meant by ester bond ?
20. Write a note on cytoskeleton.

(10 × 2 = 20 marks)

Section C

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

21. Explain the structure and functions of endoplasmic reticulum.
22. Write a note on lamp brush chromosome.
23. Describe the structure of mitochondria.
24. Write a brief note on classification of enzymes.
25. Write a note on flavonoids and mention their function.
26. Explain the mechanism of enzyme action.
27. Differentiate between cellulose and starch.
28. Write a note on classification of amino acids.

(6 × 5 = 30 marks)

Section D

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

29. Give a competitive account on the structural organization of prokaryotic and eukaryotic cells.
30. Discuss the organization of protein structure.
31. Give a detailed account on numerical aberrations of chromosome. Add a note on their and significance.

(2 × 10 = 20 marks)