

C 80154

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, MARCH 2020

(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. What are cisternae ?
2. Who discovered lysosome ?
3. What is the function of rough endoplasmic reticulum ?
4. Name a basic amino acid.
5. What is meant by apoenzyme ?
6. Which phase of meiosis is characterized by formation of chiasmata ?
7. What are microtubules ?
8. Name two pentose sugars.
9. Expand MUFA ?
10. Name the purine bases present in DNA .

(10 × 1 = 10 marks)

Section B

Answer all questions.

Each question carries 2 marks.

11. What are histones ?
12. Differentiate between nucleotide and nucleoside.
13. What is meant heterochromatin ?
14. Write a note on balbini rings ?
15. Explain any two functions of lysosomes ?
16. "Vacuoles are no more considered to be inert storage bags" comment.

Turn over

17. What are isoenzymes ?
18. Mention any four functions of plasma membrane.
19. What is meant by peptide bond ?
20. Write a note on essential fatty acids.

(10 × 2 = 20 marks)

Section C

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

21. Explain the structure and function of lysosomes.
22. Write a note on nuclear pore complex.
23. Describe the structure of Chloroplast.
24. Explain the structure of phospholipids.
25. Write a note on alkaloids.
26. Explain classification of sugars.
27. Write a note on quaternary structure of protein.
28. What is meant by competitive inhibition ?

(6 × 5 = 30 marks)

Section D

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

29. Give a detailed account on structural aberrations of chromosome, and add a note on their meiotic consequences.
30. Mention the important properties of enzymes. Give a brief account of the classification of enzymes
31. Give an account on chemical composition and organization of Chromosomes.

(2 × 10 = 20 marks)