

C 22054

(Pages : 3)

Name.....

Reg. No.....

SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION, APRIL 2022

Biochemistry

BCH 2C 02—BIOCHEMISTRY—II

(2021 Admissions)

Time : Two Hours

Maximum : 60 Marks

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

1. Factor III in blood coagulation pathway is
 - a) Fibrinogen.
 - b) Calcium.
 - c) Prothrombin.
 - d) Thromboplastin.
2. Name an acid base indicator.
3. What happens when a cell is put in a hypotonic solution ?
4. Name any two weak interactions.
5. The basic principle behind gel filtration chromatography is _____.
6. Which are the two phases in a colloidal system ?
7. Which among the following plasma protein is responsible for osmotic balance ?
 - a) Globulin.
 - b) Albumin.
 - c) Fibrinogen.
 - d) None of the above.

Turn over

8. Name any two buffers responsible for maintaining body homeostasis.
9. The flow of solvent from a region of lower concentration to a region of higher concentration is called _____.

(9 × 1 = 9 marks)

Section B

*Answer atleast **six** questions.
Each question carries 3 marks.
All questions can be attended.
Overall ceiling 18.*

10. Brief on different glucose transporters.
11. Write short note on special proteins in blood.
12. Differentiate between osmosis and diffusion.
13. Write about principle and applications of immunoelectrophoresis.
14. Discuss about the biological significance of Donnan membrane equilibrium.
15. Define electrophoresis and the basis of separation in SDS-PAGE.
16. Mention the relationship between absorption and transmission of light in photometry.
17. Differentiate between isotonic, hypotonic, and hypertonic solution.

(6 × 3 = 18 marks)

Section C

*Answer atleast **three** questions.
Each question carries 7 marks.
All questions can be attended.
Overall ceiling 21.*

18. Explain the technique of spectrophotometry.
19. Discuss about ascending paper chromatography.
20. Differentiate between active and passive transport.
21. Explain how blood pH is maintained.
22. Give an account of the functions of plasma proteins.

(3 × 7 = 21 marks)

Section D

*Answer any **one** question.
The question carries 12 marks.*

23. Give a detailed account of blood coagulation.
24. Discuss in detail the principle and applications of thin layer chromatography.

(1 × 12 = 12 marks)