



Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2019

First Degree Programme Under CBCSS

Elective

CH 1661.4/IC 1661.4

BIOCHEMISTRY

(2013 Admission Onwards)

(Common for CBCSS Chemistry and Career Related Group 2 (a))

Chemistry and Industrial Chemistry)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Each question carries **one** mark. Answer **all** questions. Answer in **one** word/ **two** sentence.

1. Which is the oxidation state of iron in the haemoglobin ?
2. What is meant by Bohr effect ?
3. Name the basic functional unit of kidney.
4. Define respiratory quotient.
5. What are lipases ?
6. What is meant by a carrier gas ?
7. What is meant by respiration ?
8. What is glycosuria ?
9. What is the main function of albumins ?
10. Name the largest fraction of plasma proteins.

(10×1=10 Marks)

P.T.O.



SECTION - B

Short answer type. (Not to exceed **one** paragraph) **each**. Answer **any eight** questions from the following. **Each** question carries **two** marks.

11. What is the role of blood platelets in the coagulation of blood ?
 12. Write a short note on ion exchange chromatography.
 13. What is oxygen dissociation curve ? Give its significance.
 14. What are the normal constituents of urine ?
 15. Define calorific value of food.
 16. What are carbohydrases ? Give any one example.
 17. Write any two important uses of column chromatography.
 18. Write a short note on the structure of Haemoglobin.
 19. What is hypoxia ? What are its causes ?
 20. What is meant by renal threshold ? Give its significance.
 21. Explain the principle involved in affinity chromatography.
 22. Why the calorific value of proteins are less than that calculated by the bomb calorimeter ?
- (8×2=16 Marks)**

SECTION - C

Short essay. (Not to exceed **120** words). Answer **any six** questions from the following. **Each** question carries **four** marks.

23. Write a short note on normal constituents of urine.
24. Explain the principle and application of TLC.
25. How will you determine the BMR ?
26. Discuss the role of Bile acids and Bile salts in the digestion of food.
27. Explain the interrelationship between oxygen and Carbon dioxide transport.



28. What are lipoproteins ? How do they function in the body ?
29. Illustrate the term total caloric requirement of a body.
30. Discuss the steps involved in the conversion of fibrinogen to fibrin.
31. Write a short note on the transport of carbon dioxide by blood. (6×4=24 Marks)

SECTION - D

Answer **any two** questions from the following. **Each** question carries **fifteen** marks.

32. Write an account of the principle, technique and the important applications of paper chromatography.
 33. Briefly discuss the various factors which controls the coagulation of blood.
 34. Illustrate various constituents of urine.
 35. Discuss the active and simple diffusion process of absorption of carbohydrates. (2×15=30 Marks)
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