

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, March 2020

First Degree Programme under CBCSS

Open Course

CH 1661.4/IC 1661.4

BIOCHEMISTRY

**(Common for CBCSS Chemistry (2013-2016 Admission) and Career
Related Group 2(a) Chemistry and Industrial Chemistry
(2013 Admission onwards))**

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. Lipoprotein is a biochemical assembly that contain both _____
and _____
2. Metal present in Haemoglobin is _____
3. pH of blood is _____
4. In gel filtration chromatography separation occurs on the basis
of _____
5. Name one bile pigment.
6. Name the different phases in chromatography.

7. Major component of urine is _____
8. _____ is called good cholesterol
9. The largest fraction of plasma protein is _____
10. The enzyme produced by kidney is _____

(10 × 1 = 10 Marks)

SECTION – B

Answer **any eight** questions. Each question carries **2** marks.

11. Name any four coagulation factors.
12. Define renal threshold.
13. Name the constituents of blood.
14. Write a note on abnormal haemoglobin.
15. Explain the principle behind TLC.
16. Define calorific value.
17. Explain the role of bile in digestion.
18. What is ultra-centrifugation?
19. Draw the structure of haemogroup.
20. What is BMR?
21. Write notes on carbohydrate splitting enzyme.
22. What is elution? Name any two eluents used in chromatography.

(8 × 2 = 16 Marks)

SECTION – C

Answer **any six** questions. Each question carries **4** marks.

23. Explain the structure of hemoglobin.
24. Explain the Oxygen dissociation curve.
25. Explain any three disease associated with kidney function.
26. Briefly explain electrophoresis.
27. Comment on major blood buffers.
28. Explain TLC.
29. Draw the structure of kidney.
30. What is Rf value? How is it calculated using TLC.
31. Briefly describe ion exchange chromatography.

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** questions. Each question carries **15** marks.

32. Describe the principle, technique and application of gas liquid chromatography.
33. What are the functions of kidney? Explain urine formation in kidney.
34. Outline the digestive system in human and explain the functions.
35. Explain the transport of Oxygen in blood.

(2 × 15 = 30 Marks)