

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, March 2020

First Degree Programme Under CBCSS

Chemistry

Elective Course

CH 1661.4 BIOCHEMISTRY

(2017 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions (maximum **two** sentences. Each question carries **1** mark)

1. What is Bohr effect?
2. How does the temperature affects the oxygen dissociation curve?
3. What are the factors which determines the calorie requirements of adults?
4. Name the enzyme that hydrolyse fat into fatty acids and glycerol.
5. What is an eluent? Give one example.
6. Name two diseases associated with kidney function.
7. Define calorogenic action.

8. Distinguish between plasma and Serum.
9. What is a carrier gas?
10. Define electrophoresis.

(10 × 1 = 10 Marks)

SECTION – B

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

11. What is the role of globulin in human body?
12. What are the different types of normal Haemoglobin in adults?
13. Distinguish between internal respiration and external respiration?
14. What is filtration process in urine formation?
15. Why the calorific value of protein obtained by calorimetric method is greater than inside body?
16. How is the body water balance kept constant?
17. What is the role of plasma proteins in the body?
18. How does pH affect the oxygen dissociation curve?
19. How the age and sex affects BMR?
20. Write any two uses of Thin layer chromatography.
21. How does sickle cell haemoglobin differ from normal haemoglobin?
22. Discuss how the pH of the blood is kept a constant.

(8 × 2 = 16 Marks)

SECTION – C

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

23. Write any four important functions of plasma proteins.
24. State the functions of myoglobin.
25. Write a short note on the functions of kidney.
26. What are the basic conditions for measuring BMR?
27. Explain the role of Bile acids in the human body.
28. Briefly write the technique and application of ion exchange chromatography.
29. Distinguish between active transport and passive transport in carbohydrate absorption.
30. Briefly write the technique and application of gel permeation chromatography.
31. Discuss the structure of haemoglobin.

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** (essay) questions. Each question carries **15** marks.

32. Discuss the digestion and absorption of fat and carbohydrate.
33. Discuss various steps in the formation of urine.
34. Discuss the principle, procedure and application of column chromatography and paper chromatography.
35. What is co-operativity of haemoglobin? Explain the role of haemoglobin in the transport of oxygen and carbon dioxide in the human body.

(2 × 15 = 30 Marks)