

B.Sc. 6th Semester (Programme) Examination, October 2020

Subject: PHYSIOLOGY

Course ID: 62510

Course Code: SP/PHY/604/SEC-4 (T)

Course Title: Applied Biochemistry

Full Marks: 20

Time: 1 Hour

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

UNIT I

1. Answer any three of the following questions: (2×3=6)
- (a) What do you mean by Beer's Law?
 - (b) What is anticoagulant? Mention the name of commonly used anticoagulants in your laboratory.
 - (c) Write the difference between reducing sugar and non-reducing sugar.
 - (d) Mention any two functions of plasma proteins.
 - (e) Write the normal range of fasting blood glucose level.
 - (f) Mention any two applications of colorimeter.
 - (g) What is hyperglycemia?
 - (h) What do you mean by optical density?

UNIT II

2. Answer any two of the following questions: (4×2=8)
- (a) Write the principle of Biuret method for total protein estimation. Name any two reagents used in this method. 2+2=4
 - (b) Mention the stepwise preparation of protein free filtrate of blood. 4

- (c) How serum amylase activity is determined by Iodometric method? 4
- (d) Write the clinical significance of plasma albumin globulin ratio. Mention its normal range. 3+1=4
- (e) How standard glucose solution is prepared in Nelson-Somogyi method? 4
- (f) Write the causes of hyperprotenemia. 4

UNIT III

3. Answer *any one* of the following questions: (6×1=6)

- (a) Write the principle of Fiske-Subbarow method. Briefly mention the procedure of this method. 2+4=6
- (b) Write the principle and protocol of blood glucose estimation by Nelson-Somogyi method. 2+4=6