Seat No. : _____

AA-124

April-2019

B.Sc., Sem.-IV

CC-205 : Bio-chemistry

Time : 2:30 Hours] **[Max. Marks : 70**

Instructions : (1) All questions are compulsory.
(2) Figure on the right indicate marks.
(3) Mention clearly the option you attempt.

1. (a) Explain in detail oxygen dissociation curve and the factors affecting it. **14**

OR

Answer the following :

(i) Explain internal and external respiration. **7**

(ii) Discuss the transport of carbon dioxide in our body. **7**

(b) Answer the following (any **four**) briefly. **4**

(1) Define Tidal Volume.

(2) What is Bohr's effect ?

(3) What is the function of Epiglottis ?

(4) What is deoxy Hemoglobin ?

(5) What is the normal residual volume of lungs in a healthy person ?

(6) What is respiratory Acidosis ?

2. (a) Discuss the digestion and absorption of Proteins in detail. **14**

OR

Answer the following :

(i) Write a note on Intestinal Putrefaction. **7**

(ii) Describe composition and functions of Bile. **7**

(b) Answer the following (any **four**) briefly. **4**

(1) Define Digestion.

(2) Name the mechanism of absorption of sugar and amino acids in our body.

(3) State the role of Enterokinase.

(4) Name the hormones of Pancreatic juice.

(5) State mechanical role of Saliva.

(6) Define Intestinal Fermentation.

3. (a) Describe the structure of Nephron with a labelled diagram. Discuss Glomerular Filtration in Nephrons. **14**

OR

Answer the following :

(i) Discuss Tubular load and Plasma clearance in Renal tubules. **7**

(ii) Discuss any five abnormal constituents of urine. **7**

(b) Answer the following (any **three**) briefly. **3**

(1) Define GFR.

(2) Name any two normal constituents of Urine.

(3) What is T_{max} ?

(4) What is obligatory reabsorption in Renal tubules ?

(5) Name two hormones which play an important role in urine formation.

4. (a) Discuss the entire process of blood coagulation in detail. **14**

OR

Answer the following :

(i) Discuss briefly any seven functions of Blood. **7**

(ii) Draw and describe different types of WBCs. **7**

(b) Answer the following (any **three**) briefly. **3**

(1) Name the Plasma proteins.

(2) What is the normal count of Platelets ?

(3) What is Haematopoiesis ?

(4) According to the ABO system, how many types of Blood Groups are there ?

(5) Name any one physiological condition when the RBC count is high.
