2404E377

Candidate's Seat No :_____

B.Sc. (NEP) Sem.-4 Examination

DSC-C-242

Biochemistry

Time : 2-00 Hours] **April-2025** **[Max. Marks : 50**

Q1. (A)	Define digestion. Discuss the digestion taking place in oral cavity.	**(6)**
(B)	Discuss the functions of HCl	**(4)**
	OR	
Q1. (A)	Discuss the digestion and absorption of proteins in detail	**(6)**
(B)	List the four major steps in the formation of feces.	**(4)**
Q2. (A)	Discuss the different types of WBC's and list its functions.	**(6)**
(B)	Define blood clotting.List the different clotting factors.	**(4)**
	OR	
Q2. (A)	Write a brief note on structure, chemistry and functions of hemoglobin.	**(7)**
(B)	Define: 1. Anemia 2. ESR 3. Blood grouping	**(3)**
Q3. (A)	Explain the different changes in the cardiac cycle along with the occurrence of heart sounds.	**(7)**
(B)	Name and define the two types of circulation in the human body	**(3)**
	OR	
Q3. (A)	Explain in detail oxygen dissociation curve with a labelled diagram. List the factors affecting it.	**(6)**
(B)	What is Bohr's effect & Haldane's effect?	**(4)**
Q4. (A)	Describe the functions of kidney.	**(7)**
(B)	What are the steps involved in urine formation	**(3)**
	OR	
Q4. (A)	Differentiate between obligatory and facultative reabsorption of water in renal tubules.	**(6)**
(B)	Draw and label the structure of nephron	**(4)**
Q5.	**Attempt any TEN out of the following:**	**(10)**
1.	What is absorption and give its importance	
2.	What is the function of Bile and where is it stored.	
3.	Define intestinal putrefaction	
4.	Give one hazard of incompatible blood transfusion.	
5.	Name the plasma proteins and give the function of any one plasma protein	
6.	Give the normal value and function of platelets.	
7.	Define blood pressure and give its value in a normal healthy adult.	
8.	Define IRV and ERV and give its values in a normal healthy person.	
9.	Name the junctional tissues of the heart.	
10.	Define tubular maxima	
11.	Calculate the tubular load of a substance whose plasma concentration is 100mg/ 100ml and GFR is 125 ml/100ml.	
12.	Name any two normal and abnormal constituents of urine.	