

**B.Sc. Semester-IV Examination, 2022-23****ZOOLOGY [Honours]**

Course ID : 42612 Course Code : SH/ZOO/402/C-9

Course Title : Animal Physiology: Life Sustaining Systems

Time : 1 Hour 15 Minutes Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** of the following questions:

1×5=5

- What is zymogen?
- How oxyntic gland cell is involved in Pernicious anemia?
- Define stab cell.
- How pentose sugars absorbed in enterocyte cell?
- What is transferrin?
- What is the role of GPIIb-IIIa receptor in blood coagulation?
- What does P wave indicate in ECG?
- What is the function of TMO?

2. Answer any **two** of the following questions:

5×2=10

- What is Crypts of Lieberkuhn? What is the function of Paneth Cell. Define Peyer's patch.  
1+2+2
- What is Bohr Effect? Briefly describe the oxygen binding pocket of haemoglobin. What is reduced haemoglobin?  
1+3+1
- 'Vasopressin is known as ADH'– explain with proper signaling. What is the role of ANF in regulation of kidney function?  
3+2
- What is coronary circulation? Briefly describe the Branches of Left Cardiac Artery and Right Cardiac Artery.  
1+4

3. Answer any **one** of the following questions:

10×1=10

- Briefly describe the mechanism of platelet plug formation in hemostasis. How does extrinsic pathway activate intrinsic pathway in clot formation?  
6+4
- Describe the mechanism of osmoregulation in marine Teleost fishes. Describe the role of kidney in acid base balance. What is respiratory alkalosis?  
4+4+2