

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

Course ID : 42512      Course Code : SH/PHY/402/C-9(T)

Course Title : **Gastrointestinal Function**

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** questions of the following:

1×5=5

- a) Why is the small intestine best suited for the digestion and absorption of food?
- b) 'Blood becomes alkaline following meals'—Why?
- c) What is chylomicron?
- d) Differentiate between salivary amylase and pancreatic amylase.
- e) Why gall bladder bile is more potent than liver bile?
- f) What are bile salts?

- g) What is Meissner's plexus?
- h) Define lacteal.

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

5×2=10

- a) Draw and describe different types of movements of small intestine. Mention any one proenzyme present in pancreatic juice. 4+1
- b) Briefly describe the mechanism of pancreatic HCO<sub>3</sub> secretion. What is 'Steatorrhoea'? 4+1
- c) Discuss the process of absorption of iron in man. 5
- d) State the role of exocrine pancreas in man. 5

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

10×1=10

- a) Explain the modern concept of HCl secretion. Describe the phases of gastric secretion with experimental evidence. 6+4
- b) What do you mean by enterohepatic circulation of bile? Write the regulatory mechanism of bile secretion. 4+6