

B.Sc. 4th Semester (Honours) Examination, 2021

PHYSIOLOGY

Course ID: 42512

Paper: SH/PHY/402/C-9 (T)

Course Title: Gastrointestinal Function

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the margin indicate full marks.

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

1. Answer any five questions from the following: 1×5=5

- (a) How gastric mucosa is resistant to autodigestion?
- (b) Differentiate between pancreatic amylase and salivary amylase.
- (c) Name the different pro-enzymes secreted in pancreatic juice.
- (d) What do you mean by cholagogue action?
- (e) Name any two GI sphincters.
- (f) What is acid chyme?
- (g) Write the function of Bruner's glands.
- (h) What is lactose intolerance?

2. Answer any two questions from the following: 5×2=10

- (a) Compare liver bile and gall bladder bile. Enumerate the small intestinal movements. 1+4=5
- (b) Briefly discuss the mechanism of carbohydrate absorption in human body. 5
- (c) Describe the mechanism of control of pancreatic secretion. What is steatorrhea? 5
- (d) What is chylomicron? Discuss the role of bile salts in fat digestion. 2+3=5

3. Answer any one question from the following: 10×1=10

- (a) Describe the modern concept of gastric HCl secretion. Mention the phases of gastric juice secretion with experimental evidences. 4+3+3=10
- (b) Briefly discuss the absorption of water soluble vitamins in our body. Mention the sources of salivary juice secretion and state their types. 4+3+3=10