WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 4th Semester Examination, 2021

PHYACOR09T-PHYSIOLOGY (CC9)

GASTROINTESTINAL FUNCTION

Time Allotted: 2 Hours   Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.

Answer any *five* questions from the following   8×5 = 40

1. (a) How is pepsinogen activated in stomach?   2

   (b) What is the role of mastication in digestion?   2

   (c) Discuss the process of lipid digestion in gastrointestinal tract.   4

2. (a) Discuss the role of SGLT and GLUT2 in carbohydrate absorption.   3+3

   (b) What are choleretics?   2

3. (a) What is the role of gastrin in HCl secretion?   2

   (b) Why does pancreatic amylase can act on both boiled and unboiled starch while   2
       salivary amylase acts only on the boiled starch?

   (c) State the importance of interstitial cells of Cajal.   2

   (d) What is post prandial alkaline tide?   2

4. (a) What is the role of chemoreceptor trigger zone (CTZ) in vomiting?   3

   (b) What is pyloric pump?   2

   (c) Write a note on Zollinger Ellison syndrome.   3

5. (a) What is Heidenhain's pouch?   2

   (b) Discuss the regulation of Gastric secretion.   4

   (c) What is the role of intrinsic factor in the absorption of Vitamin B12?   2

6. (a) Discuss the pharyngeal phase of deglutition.   4

   (b) What is receptive relaxation?   2

   (c) What are lacteals and state their functions?   1+1

7. (a) What are crypts of Lieberkühn?   2

    (b) Write the composition of Succus Entericus.   4

    (c) The ductal cells of pancreas secrete an ion 'X' and the acinar cells secrete a mixture of high molecular weight polymers called 'Y'. State the functions of 'X' and 'Y'.   2

8. (a) What is Auerbach's plexus?   2

    (b) Why is gallbladder bile thicker than liver bile?   2

    (c) What is the function of colipase?   2

    (d) What is haustration?   2

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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