Ahmedabad University

School of Arts and Sciences

BIO 200 Human Physiology

iMS Life Sciences
Mid Term Examination 2022 (Monsoon Semester)

Total Marks = 20 **Time – 1 hour**

Enrolment Number:.....
Date: 20-09-2022
No. of printed pages: 2

Section-I (All questions are compulsory) **1 X 10 = 10**

1. The nerve plexus present in the submucosal layer of the digestive tract is:
   (a) Muscle nerve plexus
   (b) Serous nerve plexus
   (c) Auerbach's nerve plexus
   (d) Meissner's nerve plexus

2. Parotid glands produce a watery secretion containing a lot of proteins. These glands contain a lot of:
   (a) Serous cells
   (b) Mucous cells
   (c) Oxyntic cells
   (d) Chief cell

3. Secretin is released from:
   (a) Ileum
   (b) Jejumnum
   (c) Duodenum
   (d) Oesophagus

4. Starch can be broken down in the intestinal lumen by amylase to:
   (a) Maltose
   (b) Glucose
   (c) Galactose
   (d) Fructose

5. "Caudal" position means:
   (a) Towards the front
   (b) Towards the head
   (c) Away from the head
   (d) Towards the back

6. The T wave in electrocardiogram represents:
   (a) Depolarization of atria
   (b) Repolarization of atria
   (c) Depolarization of ventricle
   (d) Repolarization of ventricle

7. Deficiency of which of the following may cause nutritional deficiency anaemia?
   (a) Vitamin A
   (b) Vitamin B_{12}
   (c) Vitamin B_6
   (d) Vitamin D

8. Which of the following terms signify an increase in the number of RBCs?
   (a) Polycythemia
   (b) Anisocytosis
   (c) Poikilocytosis
   (d) Leukocytosis

9. Which of the following is the cause of hyperpolarization during an action potential?
   (a) Influx of Na^+ ions
   (b) Efflux of Na^+ ions
   (c) Efflux of K^+ ions
   (d) Influx of K^+ ions

10. Which of the following is not true in the context of the spread of electrical activity in the heart?
   (a) It spreads from SA node towards the AV node
   (b) Septal activation occurs from right to left
   (c) Activation of major portion of ventricular myocardium takes place from endocardium to pericardium
   (d) The posterobasal portion is activated at the last

Section-II (All questions are compulsory)

1. (a) What is alkaline tide?
   (b) Describe how pancreatic secretion is controlled. **[1+4 = 5]**

2. (a) Write the steps involved in prevention of blood loss from the body. **[4+1 = 5]**
   (b) Thrombin catalyzes formation of fibrin from fibrinogen. Which substance catalyzes the formation of thrombin?