Human Physiology 1 Exam 2

HUMAN PHYSIOLOGY 1

INSTRUCTIONS.

Answer all the questions

1 Averbach's/ myenteric plexus of the stomach is present
A. In the serosa
B. Between the middle circular muscle layer and mucosa
C. Between the outer longitudinal muscle layer and middle circular muscle layer
D. In the muscularis musoca

2 Which of the following has highest PH?
A. Gastric juice. B. Pancreatic juice.
C. Bile in GB. D. Secretions of intestinal glands.

3 Which of the following is NOT TRUE as regards peristalsis?
A. Peristalsis is a reflex response
B. It occurs in all parts of the GIT except the oesophagus
C. Its occurrence I independent of the extrinsic innervations

4 It is initiated when the gut wall is stretched by the contents of the lumen Secretion of intrinsic factor occurs in?
A. Parietal cells of stomach C. Chief cells of stomach
B. Upper abdomen D. Alpha cells of pancreas

5 Pepsinogen is converted to pepsin by?
A. Gastrin
B. HCL
C. Secretion
D. Somatostatin

6 Fructose is absorbed by?
A. Active transport
B. Facilitated diffusion
C. Osmosis
D. Simple diffusion

7 The conversion of glucose to glycogen is known as?
A. Glycolysis. B. Glycogenesis.
C. Gluconeogenesis. D. Glycogenolysis.

8 Lipid digestion in stomach is mainly brought about by ?
A. Ligual lipase
B. Gastric lipase

C. Pacreotic lipase
D. Collipse
9 Surfactant is secreted by
a) Alveolar cells
b) Pneomocytes II
c) Mucus cells
d) Goblet cells
10 Peristaltic wave called mass movement is seen in?
A. Large intestine B. Stomach
C. Small intestine D. Oesophagus

11 Ventilation perfusion ratio is maximum of
a) Apical region of the lung
b) Middle region of the lung
c) Basal portion of the lung
d) Equal in all the parts of the lung

12 Emulsification of dietary lipids is brought about by?
A. Secretion B. Cholecystokinin
B. Bile salts D. Pepsin

13 Galactose absorption is by?
A. Na dependent active transport process B. Simple diffusion
C. Facilitated diffusion D. Pinocytosis

14 Inspiration causes the enlargement of the thorax by?
A. Movement of the ribs upwards B. Movement of the ribs outwards
C. Descend of the diaphragm D. All the above

15 Most important factor which prevent the collapse of the lungs
A. Intra pleural fluid B. Intra pleural pressure
C. Surface tension of alveolar fluid D. Intra thoracic pressure

16 Carbon dioxide is carried in blood
A. Combination with hemoglobin B. In combination with plasma proteins
C. Mainly as bicarbonate D. All of the above

17 Oxyhemoglobin dissociation curve shift to the right in all except?
a) A. Fall in PH B. Rise in temperature
b) C. Increase in 23 DPG D. All the above

18 Which of the following is not a function of the lungs?
a) Metabolism
b) Serves as a reservoir of blood for the left ventricle
c) It is a filter to protect the systemic vasculature
d) Facilitates the exchange of O2 and CO2 between air and blood
e) All the above are true

19 Which of the following does NOT happen during inspiration

a) The ribs move forward
b) The diaphragm lifts up
c) The artero-posterior dimensions of the chest are increased
d) The transverse dimensions of the thorax are increased

20 During inspiration how does alveolar pressure compare to atmospheric pressure?
a) Alveolar pressure is greater than atmospheric pressure
b) Alveolar pressure is less than atmospheric
c) Alveolar pressure is the same as atmospheric
d) Alveolar pressure is of the few pressures where the reference pressure is not atmospheric

SAQS
1) Name the accessory digestive organs and describe the part they play in the digestion of foot (6 marks)
2) Name the five types of white blood cellsand give a function for each type (6 marks).
3) Briefly discuss the absorption of the products of digestion into the lymphatic and vascular systems(6 marks).
4) Describe the life cycle of red blood cells, and tell how the production of red blood cells is regulated(6 marks).
5) Problems can arise if the mother is which Rh type and the father is which Rh type? Explain why this is so(6 marks).
6) What is cardiac output (CO)? What two factors determine CO? How are these factors regulated? (8 marks)
7) What is the lymphatic system, and what are its three functions? (6 marks)
8) What is the difference between tidal volume and vital capacity? Of the air we inhale, some is not used for gas exchange. Why not? (6 marks)

LEQ
1. What mechanisms assist venous return to the heart? Discuss nervous and hormonal control of blood pressure (15 marks).
2. What is ventilation and how is it controlled ?Explain the volume and pressure changes necessary to inspiration and expiration(15 marks).