

CORE IX [PHYSIOLOGY: LIFE SUSTAINING SYSTEM]

Answer the following questions in 2-3 sentences(1.5marks)

1. Name the organs associated with alimentary canal .
2. What are the major digestive glands present in humans?
3. What is the function of gall bladder?
4. What are villi and write its function?
5. How and where does the absorption of carbohydrates takes place ?
6. What are the hormones associated with GI tract?
7. Define pulmonary ventilation.
8. In what forms Carbon dioxide is transported through blood?
9. In what form oxygen is transported through blood?
10. What is the difference between respiration and breathing?
11. Breathing is controlled by which nervous system? Give the passage of air during inspiration.
12. Which is the structural and function unit of kidney?
13. How does acid base balance takes place in body?
14. What are main functions of haemoglobin?
15. What do you mean by haemopoiesis and where does it occur?
16. Name some blood clotting factors .
17. What is SA node ? write its location and function.
18. What is ECG?
19. Define cardiac output.
20. What is Atherosclerosis?

Answer the following questions in 75 words(2marks)

1. Define the function of pancreas .
- 2.what is hepato-pancreatic duct? Mention its location and function.
- 3.Name the bile pigments and there function.
- 4.What are the layers of GI tract from inside to outside?
- 5.Define mechanism of breathing.
- 6.What is tidal volume?
- 7.What is TLC?
- 8.What are respiratory pigments?
- 9.Write a note on carbon monoxide poisoning.
- 10.Define chloride shift.
- 11.What is Halden effect and how it is different from Bohrs effect?
- 12.Write a note on carbonic anhydrase .
13. Define frank-starling law of the heart.
14. What are the hormones associated with heart rate?
- 15.What are blood group antigen and antibody?
- 16.What do you mean by Rh?
- 17.Draw a standard ECG and explain the different segments in brief .
- 18.What is the meaning of word systole and diastole ?
19. Define cardiac cycle.
- 20.Define coronary circulation.

Answer the following question in 500 words(6marks).

1. Describe the structure and function of GI tract .
2. Elucidate the chemical and mechanical mechanism of digestion .
3. How does absorption of carbohydrates, proteins, lipids takes place?
4. Describe the mechanism of respiration in details.
5. What is dissociation curve and mention the factors affecting it?
6. Explain the mechanism of urine formation.
7. Describe counter current mechanism of urine formation in detail.
8. Explain various component of blood and their function.
9. Describe blood grouping system in details
10. Explain blood clotting system .
11. Draw the label diagram and explain the human heart .
12. Describe the structure and working of conducting myocardial fibers.
13. Explain cardiac cycle in details.
14. Describe regulation of heart rate .
15. Elucidate cardiac output and its output.
16. How do various gases transported across blood?
17. Explain respiratory volume and capacity.
18. Elucidate histology of trachea.
19. Elucidate histology of lungs
20. Give an account and explain the structure of kidney and its functional unit.

