

Date:03-03-2022

Registration number:

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**BSc. ZOOLOGY- III SEMESTER**

**END SEMESTER EXAMINATION: OCTOBER 2021**

**(Examination conducted in January-March 2022)**

**ZO 318 - Human Anatomy and Physiology- I**

Time- 2 ½ hrs Max Marks-70

This question paper contains 2 printed pages and four parts

Draw labelled diagrams wherever necessary

**Part A**

**Answer the following questions 7×1 =7**

1. The natural pacemaker of the human heart is \_\_\_\_\_\_\_\_\_\_\_\_.

2. \_\_\_\_\_\_\_\_\_\_\_\_\_ is a foramen on the zygomatic bone

3. \_\_\_\_\_\_\_\_ is the position at which the trachea splits into bronchi.

4. The theory of muscle contraction was proposed by \_\_\_\_\_\_\_\_

5. The ovary is attached to the peritoneum by \_\_\_\_\_\_\_\_\_\_\_\_\_ ligament.

6. The \_\_\_\_\_\_\_\_\_\_\_ layer of the skin is closest to the subcutaneous fat and muscle layer.

7. The ---------- is an area of closely packed specialized cells lining the wall of the distal tubule of the nephron.

**Part B**

**Answer the following questions 4×2=8**

8. Give any 4 features of the reticular layer of the human skin.

9. What are the parts of the temporal bone?

10.Name the valves between the Auricles and ventricles and the base of the aorta and pulmonary veins.

11. What is deamination

**Part C**

**Answer ANY 5 of the following questions 5×5=25**

12. Draw and label the Ethmoid bone.

13. a) with a neat labelled diagram briefly describe the dimensions, areas and the tissues of the uterine wall and uterine tubes.

b) What are homeotherms?

14. Describe the structure of the human lungs and draw a neat labelled diagram of an alveolus.

15. What are the components seen at the renal hilus?

16 a. Draw and label a neat diagram of human heart.

b. What are the features of the frontal bone?

17. Describe the components of pancreatic secretions and their role in protein digestion.

18. a) Give the characters of the human hair

b) Explain briefly what happens during a ‘power stroke’.

**Part D**

**Answer ANY 3 of the following questions 3×10=30**

19. a) Name the major arteries on the Upper limb and the lower limbs.(5 marks)

b) Depict with a flowchart, the glucose control in the human body. (5 marks)

20. With neat illustrations explain the Bohr’s effect and add a note on four factors affecting the oxygen transportation.

21. a) Draw and explain the features of the Axis (5m)

b) Draw the femur bone (3m)

c) What are true ribs? (2m)

22. Describe the anatomy of small and large intestine.