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Reg. No. :	MAVELIKARA PIN: 690110
Name :	PIN: 690110 B

# Third Semester B.Sc. Degree Examination, January 2023 Career Related First Degree Programme under CBCSS

## Group 2(a) - Botany and Biotechnology

Vocational Course V

**BB 1372: ANIMAL PHYSIOLOGY AND ANATOMY** 

(2019 Admission onwards)

Time: 3 Hours Max. Marks: 80

#### SECTION - A

- Answer all the questions.
  - 1. Name the bacteria that inhabit the colon of man.
  - 2. In which form of the major part of CO<sub>2</sub> is transported.
  - 3. Name the left auriculo-ventricular valve.
  - 4. Define Ornithine cycle.
  - 5. Which is the blood vessel that carries blood towards the glomerulus.
  - 6. Name the blood cells that secrete histamine.
  - 7. What is the product of fermentation in muscle cells.
  - 8. Which is the lymph vessel present inside the intestinal villus.

- Name the electro-chemical excitation waves on the membrane of stimulated nerves.
- 10. Write the function of parathyroid hormone.

 $(10 \times 1 = 10 \text{ Marks})$ 

#### SECTION - B

### 1. Answer any eight questions from the following..

- 11. Name the hormones secreted by the anterior pituitary.
- 12. What are prostaglandins?
- 13. What is Cori cycle?
- 14. What is Urecotellic excretion? Give an example.
- 15. What is glomerulus?
- 16. Describe the structure of human sperm.
- 17. What is cardiac cycle?
- 18. What is a muscle fatigue?
- 19. What are red muscle fibers?
- 20. What is blood transfusion? How blood antigen associated with it?
- 21. What is a synapse?
- 22. What is threshold stimulus in neuronal transmission?
- 23. What is vasa recta?
- 24. Mention the different stages in spermatogenesis.
- 25. What are the driving forces behind glomerular filtration?
- 26. Describe the chemical composition of hemoglobin.

 $(8 \times 2 = 16 \text{ Marks})$ 

- III. Answer any six questions from the following..
- 27. What is Na-K pump?
- 28. Describe the structure of a medullated nerve fibre.
- 29. What is a muscle twitch? Describe it with the help of a diagram.
- 30. What are the chemical components of blood?
- 31. Mention the difference between open and closed circulatory system.
- 32. What is all-or-none law with respect to muscle contraction?
- 33. What is dialysis? Mention its clinical significance.
- 34. What are respiratory pigments? Mention two examples.
- 35. Describe the ultrastructure of a striated muscle fibre.
- 36. Describe the structure of human kidney.
- 37. What is oxygen-hemoglobin dissociation curve?
- 38. What is tubular reabsorption during urine formation

 $(6 \times 4 = 24 \text{ Marks})$ 

- IV. Answer any Two from the following.
- 39. Explain the mechanism of muscle contraction.
- 40. With the help of a labelled diagram, describe the structure of a nephron.
- 41. Write an essay on human digestion.
- 42. Describe the structure of human heart with the help of a line diagram.

- 43. Explain the counter current mechanism during urine concentration.
- 44. Discuss the mechanism of impulse transmission on a medullated neuron.

 $(2 \times 15 = 30 \text{ Marks})$