St. Joseph's College of Arts & Science (Autonomous)

Cuddalore- 607 001

PG & Research Department of Biochemistry

Subject: Medical Biochemistry

Subject code: EBC613 B

Class: III B.Sc Biochemistry

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SECTION A

I. ANSWER IN ONE SENTENCE

- 1. What is chemotaxis?
- 2. Define Cardiac output.
- 3. Give examples for bile salts.
- 4. What is Zymogen activation?
- 5. Define po2
- 6. What are threshold substances? Give examples.
- 7. What is synapse?
- 8. Orthodromic conduction.
- 9. What is actin?
- 10. Define Nissl's granules
- 8. Define pacemaker.
- 9. What is Chloride shift?

- 10. Define Absorption.
 11. What is chyme?
 12. Define glomerular filtration Rate.
 13. Define residual volume.
 14. What is Synapse?
 15. Define reflex action.
 16. Define excitability.
 17. What are visceral muscles?
 18 What are arterioles?
 19. What is Rh typing?
 20. Define deglutination.
 21. Give the role of ptyalin.
- 21. Give the role of ptyalin.
 22. Define pleural pressure.
 23. Define Filtration fraction.
 24. What are Nissl Bodies?
 25. Define action potential.
 26. What is lymph?
 27 How to prepare serum from blood?
 28. What is meant by digestion of food?

29. Define the term zymogen

30. Define – Oxyhemoglobin

32. Define – Nerve impulse

33. What is cerebrum?

31. What are the parts of nephron?

- 34. What are myofibres?
- 35. Give the types of troponins
- 36. Which is termed as pacemaker?
- 37. What are agglutinins?
- 38. Write the function of enterokinase.
- 39. Define emulsification
- 40. What is diffusion?
- 41. Define GFR
- 42. Give one example for neurotransmitter.
- 43. Expand CSF.
- 44. How many alpha helices are in myosin?
- 45. What is proteose?
- 46. Define Systole
- 47. What is the purpose of food mastication?
- 48. Give the name of any two pancreatic enzymes.
- 49. Specify the role of pulmonary artery.
- 50. What is GFR?
- 51. Define action potential.
- 52. What is the function of motor nerves?
- 53. What is skeletal muscle?
- 54. Mention the functions of actin filament.
- 55. Define diastole

SECTION B

II. Answer the following

- 1. Write a note on Blood groups
- 2. How bile salts are help for digestion?
- 3. Explain the structure of Nephron.
- 4. Describe the structure of Brain.
- 5. Comment on types of muscle.
- 6. Explain the Bohr's effect.
- 7. Write note on cardiac cycle.
- 8. Explain the process of digestion in small intestine.
- 9. Write a note on chloride shift.
- 10. Discuss the functions of spinal cord.
- 11. Explain the structure of nephron.
- 12. Discuss the type, structure and functions of troponin.
- 13. Write the composition and functions of lymph.
- 14. List out the enzymes and their action on protein digestion.
- 15. Explain the process of water reabsorption in the renal tubules
- 16. Describe the mechanism of synaptic transmission
- 17. Discuss about muscle types and their functions.
- 18. Explain the events in cardiac cycle.
- 19. Describe the role of pancreas in digestion
- 19. Explain chloride shift with a neat diagram.
- 20. Give brief notes on the steps involved in urine formation.
- 21. Discuss the functions of cerebellum.

- 22. Comment on rigor mortis
- 23. Give the composition and functions of Blood.
- 24. Explain the mechanism of secretion of HCl.
- 25. How is O₂ transported?

SECTION C

- 1. Describe about the structure and functions of blood cells.
- 2. Explain the process of digestion of carbohydrates, proteins and lipids.
- 3. Discuss the mechanism of urine formation.
- 4. Explain the structure and functions of cerebellum and cerebral cortex.
- 5. Account on muscle contraction
- 6. Write about the composition and functions of blood.
- 7 Discuss the mechanism of gastric secretion and their role in digestion.
- 8. Describe the mechanism urine formation.
- 9. Elaborate the mechanism of nerve impulse conduction.
- 10. Illustrate the mechanism of skeletal muscle contraction and relaxation.
- 11. Draw the physiological anatomy of heart and highlight its function.
- 12. Explain the digestion and absorption of proteins.
- 13. Describe the events of gaseous transport.
- 14. Elaborate on the synaptic mode of nerve impulse transmission.
- 15. Discuss the role of filaments in muscle contraction.
- 16. Sketch and explain the anatomy of heart and cardiac cycle.
- 17 Explain the complete digestion and absorption of carbohydrates.
- 18. Describe the mechanism of O₂ and CO₂ transport.

- 19. Elaborate the mechanism of nerve impulse conduction.
- 20. Illustrate the ultra structure of muscle skeletal muscle.
- 21. Describe about the digestion and absorption of Proteins.
- 22. Discuss the mechanism of urine formation.
- 23. Explain the mechanism of synaptic transmission.
- 24. Discuss the mechanism of muscle contraction.

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