St.Joseph's college of arts and science (Autonomous)
Cuddalore-607001

SUBJECT: MOLECULAR PHYSIOLOGY
SUB CODE: PBC1013S
CLASS: II M.Sc BIOCHEMISTRY
STAFF NAME: D.LEEMA ROSE MARY

I. Answer in one sentence:

1. Define cardiac cycle.
2. What is pulmonary ventilation?
3. What is the functional unit of kidney?
4. What is sarcomere?
5. Write about functions of saliva?
6. Define oxyntic cells?
7. What is henle's loop?
8. Expand EEG.
9. What is digestion?
10. Write a role of 2, 3 DPG in respiration.
11. Write the functional unit of skeletal muscle.
12. Name the pigment which helps in transport of O_2& CO_2 in blood?
13. What is deglutition?
14. What is vital capacity?
15. Define ECG.
16. Write the functions of CSF.
17. What is respiration?
18. Define oxygen toxicity.
19. What is GFR?
20. Define synapse.

II. 5 Marks:

1. Write short notes on composition and function of pancreatic juice.
2. Explain the digestion and absorption of lipid?
3. Write in detail about the structure of heart?
4. Explain briefly about oxygen transport in the body?
5. Write a note on Bohr's effect and Chloride shift?
6. Write a mechanism of regulation of acid-base regulation.
7. Write briefly about functions of kidney.
8. What an EEG and its function?
9. Draw a structure of neuron.
10. Give an account on composition and function of salivary secretion.
11. Write detail about the phases of gastric secretion.
12. Explain the human heart with suitable diagram.
13. Write short notes on lungs capacity.
14. Write short notes on regulation of respiration.
15. Write short notes on composition of blood.

16. How renal system helps in acid-base balance?
17. Write in detail account on CSF and its function.
18. Write about function of bile.
19. Explain the function of gastric juice.
20. Write in detail about heart sound.
21. Write about mechanism of blood coagulation.
22. Explain about gas exchange in lungs.
23. Brief notes on mechanism of respiration.
24. Write short notes on synaptic transmission.
25. Write about types of muscle & its importance
26. Write functional anatomy of lungs?
27. Explain EEG and its clinical significance.
28. Write in detail account on contractile element of muscle.

III.10 Marks:

1. Describe the mechanism of digestion and absorption of protein.
2. What is ECG? How to measure it?
3. Elaborate on the functional anatomy of lungs.
4. Give an account on mechanism of urine formation.
5. Describe the structure of kidney and nephron.
6. Give an account of mechanism of muscle contraction.
7. Explain how the digestion of carbohydrate and protein occur.
8. Write a note on various event occur in cardiac cycle.
9. Elaborate on transport of oxygen in blood highlighting sigmoid curve?
10. Give an account on digestive system of man with suitable diagram.
11. Describe the mechanism of synaptic transmission and account on neurotransmitter?
12. Write a briefly about CSF & ECG?
13. What is regulation of acid-base balance?
14. Give an account on mechanism of respiration?
15. Describe a detail in mechanism of blood clotting and its significance.

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