

Rajiv Gandhi University of Health Sciences

I Year B.H.M.S Degree Examination – OCT-2019

Time: Three Hours**Max. Marks: 100 Marks**

Physiology & Biochemistry - Paper I - (RS3) **QP Code: 1404**

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

LONG ESSAY**2 X 10 = 20 Marks**

1. Define Erythropoiesis? Explain the stages of erythropoiesis? Enumerate the factors influencing the erythropoiesis (2+ 6+ 2)
2. Name the muscles of respiration? Explain the mechanism of breathing in detail?

SHORT ESSAY (Answer any ten)**10 X 5 = 50 Marks**

3. Define Diffusion. What are types of diffusion and factors affecting the diffusion?
4. Classify Reticulo-endothelial system. Explain them in detail.
5. Describe the synthesis of Hemoglobin? Add a note on the types and their differences
6. Define Glomerular Filtration rate? Write in detail the factors influencing Glomerular Filtration rate.
7. What is the content of the middle ear? Explain its functions
8. Electrocardiogram – definition, various leads, waves, segment, intervals and its significance
9. Describe the regulation of body temperature
10. List the plasma proteins? Classify plasma proteins and describe their functions.
11. Explain the counter current mechanism
12. Define blood pressure? Write about the long term regulation of blood pressure
13. Describe the lung volumes in detail.
14. Write a brief note on Microcirculation.

SHORT ANSWERS**10 X 3 = 30 Marks**

15. What is erythroblastosis fetalis? Write its clinical features
16. What is active transport? Write the types with examples
17. What is papillary light reflex? Give a schematic representation of its pathway
18. Mention the cells of the Juxta glomerular apparatus and list its functions.
19. Mention functions of mitochondria.
20. Enumerate the conductive system of the heart with a neat diagram
21. What is dead space? How it is classified? What is the normal value of dead space?
22. Enumerate its functions of lymph. Mention the conditions where it is increased and decreased.
23. What is the normal packed cell blood volume?
24. What is the composition of Aqueous humor?

* * * * *