

# Rajiv Gandhi University of Health Sciences, Karnataka

I Semester B.O.T Degree Examination – 24-

Nov-2023

Time: Three Hours

Max. Marks: 100 Marks

## Human Physiology – I (RS)

**Q.P. CODE: 3412**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

### LONG ESSAYS (Answer any Two)

**2 x 10 = 20 Marks**

1. Define Respiration and state its types. Discuss non-respiratory functions of respiratory tract
2. What is cell adaptation? Discuss different types of cellular adaptations
3. Discuss types of exercises and effects of exercises on cardiovascular system

### SHORT ESSAYS (Answer any Ten)

**10 x 5 = 50 Marks**

4. What is blood transfusion? Discuss precautions to be taken before transfusion of blood and hazards of blood transfusion
5. Discuss factors affecting rate of diffusion of substances through cell membrane
6. Discuss atrial events of cardiac cycle
7. Discuss functions of kidney
8. Define acclimatization and changes during acclimatization
9. Discuss gallstones with respect to its causes of formation, diagnosis, features and treatment
10. Discuss causes and characteristics of heart sounds
11. Discuss structure of DNA with a diagram
12. Discuss differences between RBCs and WBCs
13. Discuss functions of gastric juice
14. Discuss structure of Juxtaglomerular apparatus
15. Discuss lung capacities

### SHORT ANSWERS (Answer any Ten)

**10 x 3 = 30 Marks**

16. Define bleeding time, clotting time and prothrombin time
17. Draw a neat and labelled diagram showing structure of nephron
18. Discuss refractory period as a property of cardiac muscles and its types
19. Discuss signs and symptoms of Anemia
20. Draw a neat and labelled diagram showing waves of normal ECG. State uses of ECG.
21. Discuss functions of large intestine
22. Discuss Cardiac murmur and state its causes
23. Discuss functions of bile salts
24. Define Glomerular filtration and glomerular filtration rate, state its normal value
25. Define immunity and its types
26. Define lung volume and its types
27. Discuss functions of skin

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