

# Rajiv Gandhi University of Health Sciences, Karnataka

## I Year B.Sc. Allied Health Sciences Degree Examination – 30-May-2024

Time: Three Hours

Max. Marks: 80

### PHYSIOLOGY (RS-3)

(RS-3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology  
RS-2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis  
Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

#### Q.P. CODE: 3152

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

#### SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

1. List the indications for blood transfusion and add a note on precautions to be taken before blood transfusion
2. Discuss the chemical regulation of respiration
3. What is Cushing's syndrome? Describe its clinical features
4. Draw a neat labelled diagram of a neuromuscular junction. Write the steps in transmission of an electrical impulse across it
5. Define puberty. List the various pubertal changes seen in males and females
6. List and explain the various functions of the hypothalamus
7. Describe the composition and regulation of the secretion of gastric juice and its functions
8. Define Hypoxia. Enumerate and define the types of hypoxia
9. Define anemia. Write the morphological classification of anemia with one example for each type
10. Trace the pathway for carrying the sensation of fine touch

#### SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

11. What are diuretics? Give two examples
12. Define function residual capacity. Write its importance
13. Classify Immunity
14. What is the normal heart rate? Define tachycardia and bradycardia
15. Draw a diagram of the juxta glomerulus apparatus and label its parts
16. Draw a neat diagram of a neuron and label its parts
17. Write the functions of basal ganglia
18. List any three common methods of contraception used in females
19. Define stroke volume. Write its normal value
20. Name the bile salts and bile pigments present in the bile
21. Define menarche and menopause
22. List the actions of insulin hormone on carbohydrate metabolism

#### TO THE POINT ANSWERS (Answer any Five)

5 x 2 = 10 Marks

23. Landsteiner's law of blood grouping
24. Write any two functions of receptors
25. Name the contractile proteins of the skeletal muscle
26. Define all or none property of a nerve fibre
27. Write the normal WBC count
28. What is myopia and hypermetropia?
29. Name any two hormones secreted by kidney

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