

# Rajiv Gandhi University of Health Sciences, Karnataka

## I Year B.Sc. Allied Health Sciences Degree Examination - 22-Nov-2024

**Time: Three Hours**

**Max. Marks: 100**

### PHYSIOLOGY

(RS-3 – B.Sc Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Neuro Sciences Technology, Anesthesia Technology, Operation Theatre Technology, Emergency and Trauma Care Technology)

(RS-4 – B.Sc Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology)  
Anesthesia and Operation Theatre Technology

### Q.P. CODE: 3262

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

#### LONG ESSAYS (Second Question Choice)

**2 x 10 = 20 Marks**

1. Explain oxygen transport in the blood. Describe oxygen hemoglobin dissociation curve. Add a note on  $P_{50}$
2. Name the hormones of adrenal gland. Describe the actions of cortisol

**OR**

Describe gastric juice under the following a) Composition b) Functions c) Phases of secretion  
d) Regulation of secretion

#### SHORT ESSAYS (Question No 5 & 10 choice)

**10 x 5 = 50 Marks**

3. Define Hypoxia. Explain the types of hypoxia
4. Differentiate between upper and lower motor neuron lesion
5. Describe the stages of spermatogenesis

**OR**

Chemical regulation of respiration

6. Erythroblastosis fetalis
7. Define blood pressure. Give the normal value. Describe the regulation of blood pressure by Baroreceptor
8. Give the normal value of blood calcium level. Briefly explain its hormonal regulation
9. Name the posterior pituitary hormones. Describe their physiological actions
10. Describe the micturition reflex

**OR**

Functions of hypothalamus

11. Define deglutition. Describe the second phase of deglutition
12. Explain the functions of kidney

#### SHORT ANSWER (Question No 15 & 20 choice)

**10 x 3 = 30 Marks**

13. Draw a neat labelled diagram of nephron
14. List the functions of liver
15. Artificial respiration

**OR**

Define diffusion. Mention the types

16. List the functions of platelets
17. Define Jaundice. Mention the types
18. Importance of blood grouping
19. Draw a neat labelled diagram of ECG. Write the cause of each wave
20. List the functions of blood

**OR**

Contraceptive methods in male

21. Define anticoagulant. Write the mechanism of action of any one
22. Define dead space. List the types of dead space. Give its normal value

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