

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination - 30-May-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. What is erythropoiesis? With the help of the diagrams, describe the morphological changes that occur at the different stages of erythropoiesis. Name two important factors which regulate it
2. Name the different phases of the gastric secretion in the stomach. Explain the regulation in each phase of secretion

OR

Name the visual receptors. Describe the visual pathway with a labelled diagram

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Describe erythroblastosis fetalis (Haemolytic disease of newborn)
4. Draw a spirogram. Define the lung volumes and capacities. Write their values
5. What is venous return? Write any three factors which help in the venous return of the heart
6. Draw a labelled diagram of the conducting system of the heart. What is the role of sinoatrial node in the heart?
7. Explain the defecation reflex
8. What is a sensory receptor? Write any three properties of the same
9. Write the cause and list the clinical features of Cushing's syndrome
10. Explain the sliding filament mechanism of skeletal muscle contraction

OR

Name the thyroid hormones. Write any three functions of thyroid hormones

11. Write the changes that occur in male and female at puberty
12. Name the primary taste sensation. Draw and describe the pathway for taste sensation

SHORT ANSWER (Question No 15 & 20 choice)

10 x 3 = 30 Marks

13. Enumerate the functions of plasma proteins
14. Name the plasma proteins. Write the function of any one
15. Define and give the normal value of a) Arterial blood pressure b) Cardiac output

OR

What is Gastrin? Write its function

16. What is a pulmonary surfactant? Give the source of the same
17. Write three functions of kidney
18. What is EEG? List the name waves of EEG
19. Define the terms a) Menarche b) Menopause
20. Write three functions of cerebellum

OR

What is sleep? Write the features of Rapid Eye Movement (REM) sleep

21. Tabulate three differences between skeletal and cardiac muscle
22. Write any three maternal changes that occur during pregnancy