Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 14-Dec-2022

Time: Three Hours Max. Marks: 100 Marks

HUMAN PHYSIOLOGY (RS - 5) Q.P. CODE: 2732

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

LONG ESSAYS (Second Question choice)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Define a motor unit. With the help of diagrams explain its role in skeletal muscle contraction.
- 2. Discuss briefly the mechanisms in regulating the arterial blood pressure in our body.

Or

Using a diagram describe the structure of a muscle spindle. Tabulate differences between UMNL and LMNL.

SHORT ESSAYS (Question No.3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$

3. Describe the neural regulation of respiration.

Or

With help of a diagram explain briefly the mechanism of Wallerian degeneration.

- 4. List the composition and functions of gastric juice.
- 5. Define Anemia. Briefly explain the clinical classification of Anemia.
- 6. Explain flexion withdrawal reflex with a diagram.
- 7. Explain the functions of middle car.
- 8. Describe the physiological actions of growth hormone on the body.
- 9. Define GFR and give its normal value. Mention the factors regulating GFR
- 10. How is image formation altered in myopia and Hypermetropia? How do you correct them?
- 11. Tabulate the differences between the I and II heart sounds.
- 12. What is referred pain? Give two examples. Explain its basis.

Or

With the help of a diagram compare the impulse transmission in a myelinated and non-myelinated nerve fibre

SHORT ANSWERS 10 x 3 = 30 Marks

- 13. Define triple response. Write its components.
- 14. Write the functions of endoplasmic reticulum and Golgi apparatus.
- 15. State Starling's law of force of contraction.
- 16. Define Cardiac output.
- 17. Write any three functional differences between rods and cones.
- 18. Define dead space and the types of dead space.
- 19. Write the features of diabetes mellitus.
- 20. Define Chronaxie and Rheobase.
- 21. List the functions of kidney.
- 22. What is hypoxia? Enumerate the types of hypoxia.
