Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination - OCT-2019

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 (Answer any Two)

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

- 1. Define cardiac cycle. Explain the different phases of cardiac cycle with their duration.
- 2. Discuss the changes of each stage of erythropoiesis. Add a note on the factors regulating it.
- 3. Trace the pathway for pain sensation. Explain gate theory of pain. Describe referred pain.

SHORT ESSAYS (Answer any Twelve)

 $12 \times 5 = 60 \text{ Marks}$

- 4. Define hypoxia. Tabulate the different types of hypoxias giving examples for each.
- 5. What is flexion withdrawal reflex? Explain its mechanism.
- 6. Function of thalamus
- 7. Explain the mechanism of spermatogenesis.
- 8. Define blood transfusion. Discuss the types of blood transfusion.
- 9. Briefly discuss the functions of middle ear.
- 10. Describe defaecation reflex with a neat labeled diagram.
- 11. Enumerate the function of skin.
- 12. Explain the neural regulation of respiration.
- 13. Functions of testosterone
- 14. Draw a synapse. Describe the synaptic transmission taking place across the synapse.
- 15. Discuss the physiological role of Insulin. Add a note on Diabetes Mellitus.
- 16. Define GFR. Explain any four factors regulating GFR.
- 17. Tabulate the differences between Saltatory conduction and Continuous conduction.

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

- 18. Functions of Golgi apparatus, endoplasmic reticulum.
- 19. Enumerate the contraceptive methods in females.
- 20. Define tachycardia. Mention two conditions in which it occurs.
- 21. Enumerate the functions of ADH.
- 22. Draw a diagram of strength-duration curve and label rheobase and chronaxie.
- 23. Define PCV (Haematocrit). State its significance.
- 24. What is gastrin? Give any two functions.
- 25. List any four Neuro-transmitters.
- 26. Write any two differences between fast and slow muscle.
- 27. List the neuro-endocrine reflexes.
