

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – September 2014

Time: Three Hours Max. Marks: 100 Marks

## **HUMAN PHYSIOLOGY (RS-3 & RS-4)**

Q.P. CODE: 2702

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

### LONG ESSAYS (Answer any Two)

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

- With the graph of pressure changes explain the mechanics of ventilation
- 2. Give the formation, circulation and functions of CSF. Add a note on lumbar puncture
- 3. Define motor unit. Describe its relation to muscle contraction

#### **SHORT ESSAYS (Answer any Twelve)**

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

- 4. Explain the functions of saliva
- 5. Briefly describe the regulation of GFR by the kidney
- 6. Describe the features of motor homunculus
- 7. Discuss the factors regulating erythropoiesis
- 8. Enumerate the functions of bile
- 9. Discuss the physiological action of thyroid hormone
- 10. Draw and label the normal ECG waves. Write the cause for each wave
- 11. Describe the functions of thrombocytes
- 12. Explain the phases in the regulation of gastric juice secretion
- 13. Enumerate the posterior pituitary hormones. Write the functions of oxytocin
- 14. Define puberty. Enumerate secondary sexual characteristics in female
- 15. Trace the pathway for fine touch
- 16. What is sleep? Differentiate between REM and NREM sleep
- 17. Describe the mechanisms by which the body adjusts to cold environment

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

- 18. Hormonal basis for ovulation
- 19. What are anti coagulants. List four anti coagulants
- 20. What is acclimatization
- 21. Functions of oligodendrocytes
- 22. Draw a neuron and label its parts
- 23. Define jaundice. List the types of jaundice
- 24. Define a sarcomere
- 25. What is referred pain? Give two examples
- 26. Define shock. Name the types of shock
- 27. Functions of (a) Ribosomes (b) Mitochondria

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