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 x 10 = 20 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 x 5 = 60 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 x 2 = 20 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 strength-duration curve and label rheobase and chronaxie.
23. Define PCV (Haernatocrit). 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.