Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – SEP-2017

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. Draw a labeled diagram of a synapse. Discuss the properties of a synapse.

2. Define arterial blood pressure. Explain the immediate and long term regulation of blood pressure.

3. Define a triad. Explain its role in muscle contraction.

SHORT ESSAYS (Answer any Twelve)   **12 x 5 = 60 Marks**

4. Describe the body mechanisms by which it tolerates warm environment.

5. Outline the neural regulation of respiration.

6. State Landsteiner's law. Add a note on erythroblastosis foetalis.

7. Describe the functions of bile juice.

8. Tabulate the differences between I and II heart sounds.

9. Discuss the counter-current mechanism taking place in Juxta medullary nephrons.

10. Describe the cardio-vascular changes during muscular exercise.

11. Describe the events and hormonal basis of the different phases of menstrual cycle.

12. Explain accommodation reflex.

13. Describe in detail the structure and functioning of the muscle spindle.

14. Functions of cerebellum

15. Trace the dorsal column tracts and mention its functions.

16. Enumerate the hormones of calcium metabolism. Write the functions of each.

17. Functions of saliva

SHORT ANSWERS   **10 x 2 = 20 Marks**

18. Differentiate between simple and facilitated diffusion.

19. What is GFR? Give its normal value.

20. Define dyspnoea.

21. List the functions of pulmonary surfactant.

22. Define sex determination.

23. Define compliance and give its normal value.

24. Define intrapleural pressure. Give its normal values and the values during respiratory cycle.

25. Differentiate between fast and slow muscles (any three).

26. Define immunity. Mention the types of immunity.

27. Enumerate any four clinical features of Parkinson's disease.

*****