

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination - SEP-2018

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

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Define arterial blood pressure. Explain the mechanisms involved in its regulation.
2. What is CSF? Enumerate its functions. Add a note on lumbar puncture.
3. Draw a labelled diagram of neuro-muscular junction and explain the steps involved in the transmission of impulses.

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Describe the regulation of secretion of gastric juice in different phases of secretion.
5. Discuss the counter-current mechanism of renal system.
6. Briefly describe the stages of Erythropoiesis. Enumerate the non-dietary factors.
7. Describe the body mechanisms by which it tolerates hot environment.
8. List the properties of Cardiac muscle. Explain any two of them.
9. Give a brief account of chemical regulation of respiration.
10. Define chronaxie and rheobase. Draw a diagram of strength-duration curve.
11. Describe the immunological tests of pregnancy.
12. Enumerate the posterior pituitary hormones. Discuss the physiological action of each.
13. Draw a Spirogram. Explain Timed Vital Capacity and give its significance.
14. List the four functions of the middle ear. Explain any one.
15. What is a synapse? List the different types of synapse and discuss any four properties.
16. Enumerate the functions of basal ganglia.
17. What is color vision? How do you test it clinically? Classify color blindness.

SHORT ANSWERS

10 x 2 = 20 Marks

18. Define the term renal clearance giving its formula.
19. Enumerate any four functions of liver.
20. Differentiate between Exocytosis and Endocytosis.
21. Define dead space. Define the types of dead space.
22. What is a motor unit? Draw a neat labelled diagram.
23. Functions of Nucleus and Microfilaments
24. Define peripheral resistance. Enumerate its factors.
25. Name any four neuro-muscular blockers.
26. What is MCV? Give its normal value.
27. What is the mechanism of actions of neurocrine, autocrine and endocrine?