

**Rajiv Gandhi University of Health Sciences, Karnataka**

I Year B.P.T. Degree Examination – Aug 2013

**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 x 10 = 20 Marks**

1. Name four ascending tracts of the spinal cord. Trace the pathway for fine touch
2. Describe in detail the properties of cardiac muscle
3. With a labelled diagram explain the neuro – muscular transmission

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

4. Describe triple response
5. Enumerate the stages of erythropoiesis and describe the factors affecting them
6. Discuss the functions of bile salts
7. Describe the respiratory changes during muscular exercise
8. Discuss briefly the chemical regulation of respiration
9. Explain the refractive errors of the eye
10. What is a synapse? Draw and label the components of the synapse
11. Discuss the physiological actions of aldosterone
12. Explain the mechanism of spermatogenesis
13. With a neat diagram explain micturition reflex
14. Enumerate the functions of skin
15. Describe the events of the different phases of menstrual cycle with their hormonal basis
16. Describe the events in second phase of deglutition
17. Explain Flexion withdrawal reflex with a diagram

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

18. Name two mechanisms by which the body tolerates cold environment
19. State Starling's law of muscle contraction
20. Enumerate the functions of placental hormones
21. What is facilitatory water reabsorption
22. Define isotonic and isometric contraction in skeletal muscle
23. Draw a cystometrogram
24. Note the action of ADH on kidney
25. List the GI hormones
26. Structure of a taste bud
27. Define jaundice

\*\*\*\*\*