

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – April 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 x 10 = 20 Marks**

1. Define arterial blood pressure. Briefly explain the regulation of arterial blood pressure.
2. Draw the structure of a triad and describe its role in muscle contraction.
3. Define synapse. Discuss the properties of synapse.

#### SHORT ESSAYS (Answer any Twelve)

**12 x 5 = 60 Marks**

4. Tabulate any three differences between skeletal muscle, cardiac muscle and smooth muscle
5. Describe the Intrinsic mechanism of coagulation
6. Define cardiac cycle. Explain the phases of cardiac cycle taking place in the ventricles
7. Explain stretch reflex with the help of a diagram
8. Discuss the different phases of menstrual cycle with their hormonal basis
9. Functions of hypothalamus
10. Briefly explain the oxygen dissociation curve
11. Trace the pathway for fine touch
12. Describe the countercurrent mechanism taking place in the renal medullary interstitium
13. Enumerate the functions of plasma proteins
14. Phases of gastric juice secretion
15. Define anemia. Discuss the clinical classification of Anemia
16. Action of parathyroid hormone
17. Functions of middle ear

#### SHORT ANSWERS

**10 x 2 = 20 Marks**

18. State Starling's law of force of contraction
19. List the functions of Juxta-glomerular apparatus
20. Define Osmosis
21. Name the neuroglial cells. What is function of astrocytes
22. Enumerate the functions of angiotensin II
23. Intrapulmonary pressure and its normal value
24. Name the contractile proteins
25. Define dead space. Mention the types of dead space
26. Draw and label the normal ECG waves
27. Define muscle tone.