

# Rajiv. Gandhi University of Health Sciences, Karnataka<sup>1</sup> I Year B.P.T. Degree Exzmination - SEP -2016

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)

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Discuss the mechanics of ventilation with a g'aph showing the pressure changes.
- 2. What is reflex and a reflex arc? Discuss the properties of reflexes.

  3Define Action Potential. With a well labeled graph explain the ionic basis of Action Potential

### **SHORT ESSAYS (Answer any Twelve)**

 $12 \times 5 = 60 \text{ Marks}$ 

- **4.** Define GMM. Enumerate the factors affecting GFR and explain any two.
- **5.** Explain the factors affecting erythropiesis
- **6.** Enumerate the properties of cardiac muscle. Explain **the property of refractory** period
- **7. Discuss** the neural regulation of respiration

B.Briefly describe the pharyngeal phase of deglutition

- 9. Differentiate between REM and NREM sleep
- 10. State Landsteiners Law. Enumerate the uses of blood grouping
- 11- Trace the pathway for fine torch
  - 12. Describe the body mechanisms by which it tolerates hot environment
  - **13.** Define arterial blood pressure. Discuss the immediate regulation of blood pressure.
  - **14.** Differentiate between Obligatory and Facultative processes of water reabsorption
  - 15. What is myasthenia gravis? Describe its cause and characteristic features
  - **16.** Action of thyroid hormone
  - **17.** How is image formation altered in myopia and hypermetropia? **HOW** do you correct them?

#### SHORT ANSWERS

 $10 \times 2 = 20 \text{ Marks}$ 

- 18. State Starling's law of force of contraction
- 19. Methods of contraception in males
- 20. Functions of ribosome
- 21. Write any two differences between rods anc cones
- 22. List the actions of calcitonin
- 23. Surfactant It
- **24. what is** a sarcomere?
- **25.** Define dead space. Mention the types-of dead space





- 26. Draw and label the normal ECG waves
- 27. Define saltatory conduction

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