## Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase - I Degree Examination - JUNE 2016

Time: Three Hours

Max. Marks: 100 Marks

Physiology – I (RS2 & RS3) Q.P. CODE: 1077

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS

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

- Classify T lymphocytes. Explain the mechanism of cellular immunity.
- 2. Briefly describe the transport of oxygen in blood.

#### SHORT ESSAYS

10 x 5 = 50 Marks

- 3. Facilitated diffusion
- 4. Mechanism of Fibrinolysis
- 5. Jugular venous pulse
- 6. Conducting system of the heart
- 7. Regulation of cerebral blood flow
- 8. Caissons disease
- 9. Enterohepatic circulation
- 10. Movements of intestine
- 11. Factors affecting GFR
- 12. Mechanism and regulation of micturition

#### SHORT ANSWERS

10 x 3 = 30 Marks

- 13. List six functions of plasma proteins.
- 14. What is the effect of sympathetic stimulation on pacemaker potential?
- 15. What is Bainbridge reflex?
- 16. What is postural hypotension?
- 17. What is Hering Breuer reflex?
- 18. What is pulmonary edema? Name one condition where it is seen.
- 19. List the functions of Gastrin.
- 20. What is receptive relaxation?
- 21. What is the role of vasa recta in counter current mechanism?
- 22. Functions of large intestine

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### Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - JUNE 2016

Time: 3 Hrs.

[Max. Marks: 100]

# QP Code: 1078

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

- Describe the dorsal column tract and its functions. How its functions are affected in Brown Sequard's syndrome?
- 2. Describe the steps involved in the synthesis of thyroxine. Explain its physiological functions.

SHORT ESSAY

10 X 5 = 50 Marks

- 3. Regulation and actions of aldosterone Clinical features of Cushing's syndrome
- Hormonal functions of placenta
- 6. Dark adaptation and nyctalopia
- 7. Write about storage, release, functions and reuptake of ionic calcium in skeletal muscle.
- 8. Describe the process of neuromuscular transmission in skeletal muscle.
- 9. What is EEG? Discuss normal findings of Electro Encephalogram (EEG) in various sleep stages.
- 10. Difference between Upper Motor Neuron and Lower Motor Neuron lesions
- 11. Functions of middle ear
- 12. Body mechanisms activated with exposure to cold

SHORT ANSWERS

10 X 3 = 30 Marks

- 13. Draw the main connections of neocerebellum with cerebral cortex.
- 14. Enumerate any three functions of vestibular apparatus.
- 15. Name three touch receptors. Enumerate three properties of them.
- 16. Cause and effect of Leutinizing Hormone surge
- 17. Name two methods for detection of pregnancy. Write about their physiological basis.
- 8. Differentiate rods from cones.
- 19. Draw taste pathway from anterior 2/3 of tongue to the cortex.
- 20. Differentiate endolymph from perilymph
- 21. Write two functional differences between cardiac and skeletal muscle.
- 22. Write three differences between A and C type of nerve fibres.

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