Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2009

Time : 3 Hrs. [Max. Marks : 100]

ANATOMY - PAPER I (Revised Scheme II)

QP Code: 1075

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

LONG ESSAY **2 X 10 = 20 Marks**

1. Name the intrinsic muscles of larynx. Give the a) Origin b) Insertion c) Nerve supply d) Actions of cricothyroid muscle. Add a note on movements of vocal cords
2. Define Mediastinum. Mention the contents of posterior mediastinum. Describe the thoracic part of Esophagus. Add a note on its applied anatomy

SHORT ESSAY **10 X 5 = 50 Marks**

3. Lymphatic drainage of tongue
4. Carotid sheath
5. Corpus callosum
6. Falx cerebri
7. Typical intercostal space
8. Cavernous sinus
9. Pronation & supination
10. Yolk sac
11. Microscopic structure of elastic cartilage
12. Microscopic structure of palatine tonsil

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SHORT ANSWERS **10 X 3 = 30 Marks**

13. Superficial plamar arch
14. Enumerate muscles of hypothenar eminence
15. Roof of IVth ventricle
16. Development of face
17. Meckels cartilage
18. Parotid duct
19. Draw and label microscopic structure of elastic artery
20. Stratified squamous epithelium
21. Transverse sinus of pericardium
22. Archicerebellum

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Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2009

Time : 3 Hrs. [Max. Marks : 100]

ANATOMY – PAPER II (Revised Scheme II)

QP Code: 1076

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

LONG ESSAY **2 X 10 = 20 Marks**

1. Describe the interior of rectum and anal canal. Add a note on it's
   a) Development b) Applied anatomy
2. Name the arches of the foot. Describe the medial longitudinal arch. Add a note on its applied anatomy

SHORT ESSAY **10 X 5 = 50 Marks**

3. Y chromosome
4. Karyotyping
5. Boundaries of popliteal fossa with neat diagram
6. Cruciate ligaments of knee joint
7. Lymphatic drainage of stomach
8. Paramesonephric duct
9. Rotation of gut
10. Microscopic structure of liver
11. Microscopic structure of vas deferens
12. Hepatorenal pouch

SHORT ANSWERS **10 X 3 = 30 Marks**

13. Contents of adductor canal
14. Anserine bursa
15. Draw and label microscopic structure of urinary bladder
16. Draw and label microscopic structure of duodenum
17. Descent of testis
18. Ectopic pregnancy
19. Enumerate supports of urinary bladder
20. Enumerate branches of celiac trunk
21. Femoral sheath
22. Kline Felter syndrome

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Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2009

Time: 3 Hrs. [Max. Marks: 100]

PHYSIOLOGY - PAPER I (Revised Scheme II)

QP Code: 1077

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

LONG ESSAY **2 X 10 = 20 Marks**

1. Enumerate the important Gastro-intestinal hormones. Discuss briefly their various actions on the G.I Tract
2. With a neat flowchart, describe in detail the steps of coagulation of blood. Enumerate the various coagulation factors. Add a note on anticoagulants

SHORT ESSAY **10 X 5 = 50 Marks**

3. Innervations of the heart
4. Standard limb leads
5. Water – Hammer pulse
6. Coronary circulation
7. Rennin-Angiotensin system
8. Chloride shift
9. Glomerular filtration rate
10. Cough reflex
11. Dead space
12. Role of Adenosine in blood flow regulation

SHORT ANSWERS **10 X 3 = 30 Marks**

13. Factors causing hypo effective heart
14. Nephrotic syndrome
15. Bicarbonate buffer system
16. Functions of Hemoglobin
17. Alkaline tide
18. Periodic breathing
19. Oxygen dissociation curve
20. Positive 'G'
21. Swallowing
22. Vitamin K

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Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2009

Time : 3 Hrs. [Max. Marks : 100]

PHYSIOLOGY - PAPER II (Revised Scheme II)

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**

1. With the help of a suitable diagram, describe the mechanisms of action of growth hormone. Describe the functions of growth hormone
2. Describe the role of spinal cord and medulla in the control of movement and posture

SHORT ESSAY **10 X 5 = 50 Marks**

3. Physiology of puberty in females
4. Role of calcium in muscle contraction
5. Ionic basis of nerve action potential
6. Effects of thyroxine on body metabolism
7. Physiological basis of differences in cardiovascular effects of adrenaline & noradrenaline
8. Functions of spinocerebellum
9. Neuromuscular blockers
10. Pathways for fast and slow pain
11. Cardiovascular changes on exposure to cold
12. Mechanisms of colour vision

SHORT ANSWERS **10 X 3 = 30 Marks**

13. Role of cyclic GMP as a second messenger
14. Functions of inhibin
15. Alpha-gamma colinkage
16. Functions of prolactin
17. Physiological basis of use of a drug in the treatment of stroke
18. Rheobase
19. Role of vitamin D in the prevention of osteoporosis
20. Functions of parietal lobe of the brain
21. Mechanism of increased BMR in hyperthyroidism
22. Physiological basis of use of a drug in relieving inflammatory pain

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M.B.B.S. PHASE - I Degree Examination - January 2009

Time: 3 Hours [Max. Marks: 10C

BIOCHEMISTRY (Revised Scheme II)

QP Code: 1079 – PAPER I (Max. Marks: 50)

Your answer shall be specific to question asked. Draw neat and labelled diagrams wherever necessary. **Use separate answer books for section A and section B.**

LONG ESSAY **1 X 10 = 10 Marks**

1. Explain in detail the β oxidation of palmitic acid with its energetics

SHORT ESSAY **5 X 5 = 25 Marks**

2. Function of carbohydrates
3. Competitive inhibition and its importance in medicine
4. Metabolic changes in diabetes mellitus
5. Fatty liver and lipotropic factors
6. Disorders of sulphur containing aminoacids

SHORT ANSWERS **5 X 3 = 15 Mark**

7. Mention two isotopes and mention their application in medicine
8. Mention four tumor markers with their significance
9. Role of cytochrome P_{450} in detoxification reaction
10. Biologically important compounds derived from Tyrosine
11. What is Reactive oxygen species (ROS)? How are they formed?

QP Code: 1080 – PAPER II (Max. Marks: 50)

Use separate answer book

LONG ESSAY **1 X 10 = 10 Mark**

1. Describe in detail biosynthesis of protein and discuss its regulation

SHORT ESSAY **5 X 5 = 25 Mark**

2. Name 5 Heme proteins and their functions
3. Unconjugated hyperbilirubinemia
4. Lesch-Nyhan syndrome
5. Tests based on metabolic and excretory function of liver
6. Applications of recombinant DNA technology

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SHORT ANSWERS **5 X 3 = 15 Mark**

7. What is the difference between endonuclease and restriction endonuclease? Give two examples restriction endonuclease
8. Deficiency manifestation of Vit A
9. Role of dietary fibre in the body
10. Biochemical role of pyridoxine
11. Name the trace elements. Explain the biochemical role of any two trace elements

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M.B.B.S. PHASE - I Degree Examination - June/July 2009

Time: 3 Hrs. [Max. Marks: 90]

ANATOMY - PAPER I (Old Scheme)

QP Code: 1001

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

LONG ESSAY **2 X 10 = 20 Marks**

1. Describe inversion & Eversion. Name the joints in which these movements occur and name the muscles producing these movements, with their attachments and nerve supply.
2. Describe the Tongue under the following headings: a) Parts, b) Nerve supply, c) Lymphatic drainage, d) Development

SHORT ESSAY **10 X 5 = 50 Marks**

3. Cubital fossa
4. Circumflex nerve
5. Facial artery
6. Supinator
7. Long Saphenous vein
8. Carotid sheath
9. Histology of aorta
10. Coracoid process of scapula
11. Amnion
12. Flexor retinaculum of hand

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

13. Name the muscles of first Pharyngeal arch
14. Name the parts of pituitary
15. Labeled diagram of Graafian follicle
16. Name the paranasal air sinuses
17. Name the branches of facial nerve in face
18. Name the structures passing through foramen ovale
19. Name adductors of hip joint
20. Superficial branches of femoral artery in the thigh
21. Claw hand
22. Boundaries of posterior triangle of neck

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M.B.B.S. PHASE - I Degree Examination - June/July 2009

Time: 3 Hrs. [Max. Marks:

PHYSIOLOGY - PAPER I (Old Scheme)

QP Code: 1003

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

LONG ESSAY

2 X 10 = 20 Marks

1. Where are the chemoreceptors located? Explain the chemical regulation of respiration
2. Discuss the mechanism of concentration of urine

SHORT ESSAY

10 X 5 = 50 Marks

3. Explain the mechanism of HCl secretion with the help of a diagram
4. List **any four** properties of cardiac muscle. Explain **any one** property
5. What is respiratory distress syndrome? Explain the mechanism
6. Enumerate the factors regulating venous return. Explain the role of **any one factor** in detail
7. Explain the peculiarities of coronary circulation
8. Draw the diagram of a cardiac pace maker potential and explain the ionic basis
9. Explain the role of enteric nervous system in the gut
10. Explain the physiological basis of artificial kidney
11. Explain biofeedback mechanism with an example
12. What is immunity? Name the types and explain **any one** in detail

SHORT ANSWERS

10 X 2 = 20 Marks

13. Enumerate functions of leucocytes
14. Enumerate any four functions of capillary circulation
15. Explain the significance of ventilation / perfusion ratio
16. What is "Cystometrogram"? Name the physical law.
17. What is renal threshold? What is the renal plasma threshold for glucose?
18. What is dietary fibre
19. List the effects of mis matched blood transfusion
20. Explain Donnan's equilibrium
21. What is Von Wille Brand's disease?
22. List the factors that influence peripheral resistance

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Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - June/July 2009

ıe: 3 Hrs. [Max. Marks: 90]

PHYSIOLOGY - PAPER I (Old Scheme)

QP Code: 1003

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

ıG ESSAY **2 X 10 = 20 Marks**

Where are the chemoreceptors located? Explain the chemical regulation of respiration

Discuss the mechanism of concentration of urine

ıRT ESSAY **10 X 5 = 50 Marks**

Explain the mechanism of HCl secretion with the help of a diagram

List **any four** properties of cardiac muscle. Explain **any one** property

What is respiratory distress syndrome? Explain the mechanism

Enumerate the factors regulating venous return. Explain the role of **any one factor** in detail

Explain the peculiarities of coronary circulation

Draw the diagram of a cardiac pace maker potential and explain the ionic basis

Explain the role of enteric nervous system in the gut

Explain the physiological basis of artificial kidney

Explain biofeedback mechanism with an example

What is immunity? Name the types and explain **any one** in detail

RT ANSWERS **10 X 2 = 20 Marks**

Enumerate functions of leucocytes

Enumerate any four functions of capillary circulation

Explain the significance of ventilation / perfusion ratio

What is "Cystometrogram"? Name the physical law.

What is renal threshold? What is the renal plasma threshold for glucose?

What is dietary fibre

List the effects of mis matched blood transfusion

Explain Donnan's equilibrium

What is Von Wille Brand's disease?

List the factors that influence peripheral resistance

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M.B.B.S. PHASE - I Degree Examination - June/July 2009

Time: 3 Hrs. [Max. Marks: 90]

PHYSIOLOGY - PAPER II (Old Scheme)

QP Code: 1004

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

LONG ESSAY **2 X 10 = 20 Marks**

1. With a neat labeled diagram, describe the origin, course, termination and functions of Corticospinal Tract.
2. Describe the Theories of colour vision. Classify colour blindness. Name the tests for colour blindness.

SHORT ESSAY **10 X 5 = 50 Marks**

3. Define synapse. Classify synapses. Describe two properties of synapse.
4. Define speech. Classify Aphasia. Differentiate between Aphaisa and Dysarthria.
5. Define Ovulation. Describe regulation of Ovulation.
6. Hypothermia.
7. Differentiate between Thyroid Dwarf and Pituitary Dwarf.
8. Enumerate the actions of Aldosterone. How is its secretion regulated?
9. Describe the pathway of hearing.
10. Differentiate between Rods and Cones.
11. Functions of skin.
12. Describe the effects of Hemisection of spinal cord below the lesion.

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

13. Reciprocal Innervation.
14. Parkinsonism.
15. Enumerate Extra Pyramidal Tracts.
16. Enumerate stages of spermatogenesis.
17. Mechanism of action of oral contraceptives.
18. Characteristics of conditioned reflex.
19. Draw and lable reflex Arc.
20. Actions of prolactin and Oxytocin on Mammary gland.
21. Define learning and memory.
22. Functions of middle ear.

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M.B.B.S. PHASE - I Degree Examination - June/July 2009

Time : 3 Hrs. [Max. Marks : 90]

Biochemistry [Old Scheme]

QP Code - 1005

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

LONG ESSAY **2 X 10 = 20 Marks**

1. Describe the process of ketogenesis and ketolysis. Write a note on Ketosis
2. Describe the different types of enzyme inhibitions and its role in clinical medicine

SHORT ESSAY **10 X 5 = 50 Marks**

3. Detoxification by conjugation
4. Metabolic changes in prolonged starvation
5. Glucose tolerance test
6. Atherosclerosis
7. Glycosuria
8. Genetic code
9. Niacin
10. Transamination and deamination
11. Antibiotics affecting protein synthesis
12. Galactosemia

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

13. Define and write normal value of insulin clearance
14. Functions of cholesterol
15. Name any two biologically important peptides and write their functions
16. Substrate level phosphorylation
17. How is bilirubin conjugated?
18. Normal level of serum transaminases and their clinical significance
19. Write the components and principle of Colorimeter
20. What are oncogenes? Give two examples
21. What is respiratory acidosis? Give two causes
22. What is transmethylation? Give two examples



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