Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - June / July 2012

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. Describe the palatine tonsil under the following headings:
   a) Position (b) relations (c) Blood supply (d) Applied anatomy
2. Describe the brachial plexus under the following headings:
   a) Roots (b) Trunks (c) Cords (d) Branches. Add a note on ERB's paralysis

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

3. Microscopic structure of elastic cartilage
4. Floor of the fourth ventricle
5. Lateral wall of middle ear
6. Interatrial septum and its development
7. Fertilization and its effects
8. Pleural recesses
9. Draw and label cross sections of medulla oblongata at the level of pyramidal decussation
10. Temporalis – attachments, nerve supply, actions
11. Cephalic vein
12. Hypobranchial eminence

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

13. Branches of basilar artery
14. Development of hyoid bone
15. Mention the nerve supply and actions of trapezius muscle
16. Microscopic structure of tongue
17. Bones forming hard palate
18. Draw and labe microscopic structure of cardiac muscle
19. What is black eye? Give reasons
20. Dermatome
21. Glenohumeral ligaments
22. Mention the features of Horner's syndrome

* * * * *

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination – June / July 2012

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

ANATOMY - PAPER II
(RS 2 & RS 3)

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 extra hepatic biliary apparatus
2. Describe the HIP joint in detail. Add a note on its applied anatomy

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

3. Microscopic structure of kidney
4. Ischio – rectal fossa
5. Blood supply and lymphatic drainage of stomach
6. Portal vein
7. Levator ani muscle
8. Second part of the duodenum – extent, relations, blood supply and development
9. Tibial nerve
10. Great saphenous vein
11. Paramesonephric duct
12. Abnormalities of chromosomes

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

13. Microscopic structure of testis-Draw and label only
14. X – chromosome
15. Prenatal diagnosis
16. Development of supra renal gland
17. Recto – uterine pouch
18. Microscopic structure of fundus of stomach-Draw and label only
19. Pelvic part of ureter
20. Perineal membrane
21. Cloaca
22. Microscopic structure of fallopian tube- Draw and label only

* * * * *

Rajiv Gandhi University of Health Sciences, Karnataka

MBBS PHASE I Degree Examination – June / July 2012

Time: Three Hours **Max. Marks: 100 Marks**

PHYSIOLOGY – I
(RS 2 & RS 3)
Q.P. CODE: 1077

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. Describe the mechanism of blood coagulation. Add a note on haemophilia
2. Describe in detail the neural regulation of respiration

SHORT ESSAYS **10 x 5 = 50 Marks**

3 What is the composition and functions of pancreatic juice?

4 Describe the Sino – Aortic reflex

5 Describe the mechanism of HCL secretion in stomach

6 Describe the renal tubular handling of sodium

7 Describe the forms in which carbon dioxide is transported in blood? Add a note on chloride shift

8 Explain the Entero – hepatic circulation. Give its importance

9 Describe the ionic basis of cardiac pacemaker potential

10 Write briefly on Erythrocyte Sedimentation Rate

11 Enumerate different modes of transport across cell membrane. Describe primary active transport with an example

12 Describe the cardiovascular changes during muscular exercise

SHORT ANSWERS **10X3=30 Marks**

13 Mention the properties of cardiac muscle

14 Give the laboratory classification of anaemia with an example for each

15 What is Bombay blood group?

16 Draw a labeled diagram of a Nephron

17 List three differences between first and second heart sounds

18 Define tidal volume and residual volume. Give their normal values

19 What is Achalasia cardia? What is its cause?

20 What is Windkessel effect? What is its significance?

21 What is GFR? Give its normal value. How is it measured?

22 List the functions of CCK – PZ

****

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - June / July 2012

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

PHYSIOLOGY - PAPER II
(RS 2 & RS 3)
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. Trace the pathway for touch sensation with the help of diagram. What are the effects of "Tabes Dorsalis" on sensory functions
2. Describe the structure of Neuro Muscular Junction and the mechanism of transmission of impulse across neuromuscular junction of skeletal muscle

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

3. Describe the causes and clinical manifestations of cushing's syndrome
4. Describe any five functions of Estrogens
5. What are the waves of EEG (Electro Encephalogram)and their characteristics? What is alpha block?
6. Contents and functions of middle ear
7. Describe the endometrial changes during menstrual cycle
8. Describe the Errors of refraction and their correction
9. Describe Milk Ejection Reflex
10. Principal actions of Insulin
11. Describe clinical features of cerebellar lesion
12. Describe colour blindness

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

13. Define and explain "Capacitation" of sperms
14. Describe briefly about attenuation reflex/ Tympanic reflex and its significance
15. What is the mechanism of action of oral contraceptives?
16. List the functions of skin
17. List the clinical features of cretinism
18. What are the changes after bilateral vasectomy?
19. What is aphasia? What are its types
20. What is impedence matching?
21. Describe any two tests to evaluate thyroid function
22. Describe the babinski's sign and its cause

* * * * *

Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – Dec 2012

Time: Three Hours **Max. Marks: 100 Marks**

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 ESSAYS **2 x 10 = 20 Marks**

1. Describe the boundaries, parts and contents of posterior triangle of neck.
2. Describe the parts, microstructure and blood supply of stomach.

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Arterial supply of spinal cord
4. Microscopic anatomy of T/S of peripheral nerve
5. Gastrulation
6. Submandibular ganglion
7. Lymphatic drainage of tongue
8. Draw a neat labeled diagram of midbrain at the level of inferior colliculus
9. Right lung
10. Right atrium
11. Right coronary artery
12. Flexor retinaculum of hand

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

13. Draw a neat labeled diagram of boundaries and contents of cubital fossa
14. Thyroglossal duct
15. Cartilaginous joint
16. Broca's area
17. Pulmonary ligament
18. Constrictions of oesophagus
19. Calcarine sulcus
20. Inlet of larynx
21. Adductor pollicis
22. Superior sagittal sinus

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – Dec 2012

Time: Three Hours **Max. Marks: 100 Marks**

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 ESSAYS **2 x 10 = 20 Marks**

1. Describe formation and contents of rectus sheath.
2. Describe the boundaries and contents of popliteal fossa

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Microscopic anatomy of kidney
4. Vermiform appendix
5. Perineal membrane
6. Omentum
7. Protective mechanism of inguinal canal
8. Coeliac trunk
9. Mention the formation and enumerate the branches of lumbar plexus
10. Ovary
11. Male Urethra
12. Cloaca

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

13. Semimembranosus
14. Bursa around knee joint
15. Descent of testis
16. Hesselbach's triangle
17. Barr body
18. Enumerate the parts of uterus and fallopian tube
19. Meckel's diverticulum
20. Difference between large intestine and small intestine
21. Sigmoid colon
22. Pectinate line

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – Dec 2012

Time: Three Hours **Max. Marks: 100 Marks**

PHSIOLOGY-PAPER I
(RS2 & RS3 SCHEME)
QP Code: 1077

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. Describe the chemical regulation of breathing.
2. Describe the counter current multiplier system. What is its role?

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Define secondary active transport and describe the factors affecting it giving examples.
4. Draw 'carbon dioxide dissociation curve'. Explain 'Haldane Effect'
5. Functions of T-lymphocytes'
6. Erythroblastosis Foetalis.
7. Classify smooth muscles .List the properties of any one
8. Sources of energy for skeletal muscle contraction.
9. Explain 'defecation reflex'
10. Describe the digestion and absorption of carbohydrates.
11. Starling's Law and it application to heart.
12. Venous return

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

13. List two 'peptide' hormones . Explain the mechanism of action of any one.
14. Calculate **MCV** and **MCH**, given;
    PCV= 45%, RBC Count = 5 million/cu.mm, Hb%= 15 Gm%.
15. Myasthenia gravis.
16. Steatorrhea.
17. Factors influencing G.F.R
18. Juxta glomerular apparatus.
19. Sinus arrhythmia.
20. Phonocardiogram
21. Ventilation-Perfusion ratio.
22. Lung Compliance.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – Dec 2012

Time: Three Hours **Max. Marks: 100 Marks**

PHSIOLOGY-PAPER II
(RS2 & RS3 SCHEME)
QP Code: 1078

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. Describe the functions of hypothalamus
2. Describe the hormonal regulation of plasma calcium level. Add a note on hypocalcemic tetany.

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Disorders of growth hormone secretion
4. Cellular mechanism of action of peptide hormones
5. Importance of clinical testing of muscle tone
6. Properties of sensory receptors
7. Visual pigments
8. Taste pathway.
9. Source and actions of dihydrotestosterone
10. Follicular phase of menstrual cycle
11. Myasthenia gravis.
12. Nigrostriatal pathway

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

13. GABA
14. Post rotatory nystagmus.
15. Bitemporal hemianopia
16. Glaucoma
17. Inhibins
18. Semen
19. Electromyogram
20. Absolute refractory period
21. Nonshivering thermogenesis
22. Effects of hypoglycemia

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – Dec 2012

Time: Three Hours **Max. Marks: 100 Marks**

BIOCHEMISTRY (RS2 & RS3)

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

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

Use separate answer books for section A and Section B

LONG ESSAYS **1 x 10 = 10 Marks**

1. Define lipids. Classify lipids with an example for each. Mention the functions of the lipids.

SHORT ESSAYS **5 x 5 = 25 Marks**

2. Discuss the metabolic changes during Diabetes Mellitus. .
3. Absorption and storage of iron
4. Is tyrosine an essential amino acid? Justify. Write the reactions of three important biological products formed from tyrosine.
5. Give a diagrammatic representation of mechanism of steroid hormone action.
6. Drawing a neat diagram of a cell and its organelles', explain the functions of each.

SHORT ANSWERS **5 x 3 = 15 Marks**

7. Glutathione.
8. Serotonin.
9. Give three enzymes and their therapeutic uses.
10. Ionophores.
11. Digestion and absorption of disaccharides

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – Dec 2012

Time: Three Hours **Max. Marks: 100 Marks**

BIOCHEMISTRY (RS2 & RS3)

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

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

Use separate answer books for section A and Section B

LONG ESSAYS **1 x 10 = 10 Marks**

1. Describe the synthesis of pyrimidine and its regulation.

SHORT ESSAYS **5 x 5 = 25 Marks**

2. What is normal serum protein level? Mention **three** important functions of albumin. List conditions when A/G ratio is altered.
3. Discuss the metabolic function of sodium and potassium.
4. Clinical importance of AFP and PSA. Give their normal values.
5. Give the key reactions of renal mechanism in acid base balance.
6. What is Gout? Give its clinical manifestations and line of treatment.

SHORT ANSWERS **5 x 3 = 15 Marks**

7. **Four** important radiation monitoring precautions.
8. **Four** enzymes with copper as integral component.
9. Immunoglobulins.
10. Cause for Xeroderma pigmentosa.
11. SDA and BMR

*****