Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (M.L.T) Degree Examination – APRIL 2015

Time: Three Hours **Max. Marks: 80 Marks**

ANATOMY (RS-2)

Q.P. CODE: 1226

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Classify Epithelial tissue with examples.
2. Name the Parts of Respiratory system. Describe anatomy of left lung.
3. Describe coronary supply of Heart. Add a note on its applied aspect.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Microstructure of the ovary
5. Second part of the duodenum
6. Typical intercostal nerve
7. Blood supply of thyroid gland.
8. Great saphenous vein
9. Location, surfaces and borders in relations to kidneys.
10. Bone forming & movements at shoulder joint
11. Formation, termination and tributaries of thoracic duct

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Anatomical position of the body
13. Major openings of diaphragm
14. Name the muscles of soft palate.
15. Name the parts of uterus.
16. Name the parts of brain stem.
17. Name all the salivary glands.
18. Name the coverings of the testis.
19. Name the quadrants of abdomen.
20. Name the parts of male urethra.
21. Name all the tarsal bones.
22. Ligaments of spleen
23. Name the structures at porta hepatis

*****

1601_9999_9_S047

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. M.L.T. Degree Examination – APRIL 2015

Time: Three Hours **Max. Marks: 80 Marks**

ANATOMY – (Revised Scheme)

Q.P. CODE: 1601

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Name the parts of male reproductive system. Describe the testis briefly
2. Name the chambers of the heart. Describe the right atrium in detail
3. Name the parts of the nervous system. Describe the gross anatomy of spinal cord

SHORT ESSAYS **8 x 5 = 40 Marks**

4. Histology of T.S of compact bone
5. Scapula bone – Location, muscle attachment and applied aspect
6. Arterial supply of long bones
7. Shoulder joint
8. Adrenal gland of right side – histology
9. Interior of anal canal
10. Pericardium
11. Nasopharynx

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

12. Name four positions of appendix
13. Name four features of Ileum
14. How is portal vein formed?
15. List the parts of extra hepatic biliary apparatus
16. Name the bones of thoracic cage
17. Name the types of Epiphysis
18. Name the muscles of arm
19. Name the ventricles of brain
20. Name the different parts of aorta
21. Name the parts of sternum

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (M.L.T) Degree Examination – APRIL 2015

Time: 3 Hours **Max. Marks: 40 Marks**

Physiology

Q.P. Code: 1602

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

(Note: Both QP Codes 1602 and 1603 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Name the ascending tracts. Explain the anterior spinothalamic pathway.
2. Explain the role of pancreatic hormones in blood glucose regulation.

SHORT ESSAYS (Answer any Four) **4 x 5 = 20 Marks**

3. Brief note on surfactant
4. Ionic basis of Action potential
5. Explain oxygen dissociation curve.
6. Phases of gastric juice secretion
7. Define coagulation. Explain the intrinsic mechanism of coagulation.

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Name various lung volumes and capacities.
9. Extrinsic mechanism of coagulation
10. Define GFR. Give normal value.
11. List the functions of Saliva.
12. Myopia and its correction

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (M.L.T) Degree Examination – APRIL 2015

Time: 3 Hours **Max. Marks: 40 Marks**

Biochemistry

Q.P. Code : 1603

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

(Note : Both QP Codes 1602 and 1603 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Draw a neatly labeled diagram of a chemical balance. What are the precautionary measures to be taken while weighing chemicals? Give the stepwise procedure to weigh 100 mg of glucose to prepare a standard solution
2. Name the purine and pyrimidine bases, give their importance. Explain the Watson – crick model of DNA structure

SHORT ESSAYS (Answer any Four) **4 x 5 = 20 Marks**

3. p^H meter
4. Principle and procedure of Biuret test and Molisch's test
5. Primary structure of proteins
6. Mention one use of (a) Waterbath (b) Measuring cylinder (c) Pipette (d) Incubator (e) Magnetic stirrer
7. Classify Lipids.

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Note on indicators
9. Define molarity and normality.
10. Biomedical importance of carbohydrates
11. What are buffers? Give two examples
12. Heteropolysaccharides

*****

Rajiv Gandhi University of Health Sciences

First year B.Sc. MLT Degree Examination - APRIL 2015

[Time: 3 Hours] [Max. Marks: 40]

PATHOLOTY

Q P Code : 1604 – Section-A [40 Marks]

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

I LONG ESSAY (Answer any One) **(1X10=20)**

1. Describe processing of tissue for paraffin sectioning.
2. Describe in detail CSF Analysis.

II SHORT ESSAY (Answer any Four) **(4X5=20)**

3. Semen Analysis
4. Types of Fixatives
5. Importance of Record keeping in Laboratory
6. Decalcification
7. Proteinuria

III SHORT ANSWERS **(5X2=10)**

8. Mordants
9. Types of Microtomes
10. Four differences between Transudate and Exudate
11. Mention the types of Hematoxylins.
12. Glycosuria.

* * * * *

Rajiv Gandhi University of Health Sciences, Karnataka

I year B.Sc. (M.L.T) Degree Examination – APRIL 2015

Time: 3 Hours **Max. Marks: 40 Marks**

Microbiology
Q.P. Code: 1605
Section - B

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

(Note: Both QP Codes 1604 and 1605 are to be answered within total duration of 3 hours)
(Use separate Answer books for Section A and Section B)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Define sterilization. Write in detail the methods of sterilization by using moist heat. Add a note on sterilization indicators.
2. Draw a neat labelled diagram of a bacterial cell. Add a note on the capsule.

SHORT ESSAYS (Answer any Four) **4 x 5 = 20 Marks**

3. Louise Pasteur
4. Transport media
5. Albert's stain
6. Bacterial growth curve
7. Antibiotic susceptibility testing

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Pasteurization of milk
9. Bacteriological analysis of water
10. Disinfections used in the hospital
11. Oxidase and Catalase test
12. Blood culture

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. M.L.T. Degree Examination – SEPTEMBER 2015

Time: Three Hours **Max. Marks: 80 Marks**

ANATOMY – (Revised Scheme)

Q.P. CODE: 1601

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Name the parts of respiratory system. Describe the lungs in detail.
2. Name the parts of male reproductive system. Describe the prostate in detail.
3. Draw a diagram of the digestive system. Describe the stomach under the following headings: parts, relations and blood supply.

SHORT ESSAYS **8 x 5 = 40 Marks**

4. Oesophagus
5. Derivatives of midgut
6. Portal circulation
7. Histology of L/S of peripheral nerve
8. Broca's area
9. Diagram of T/S at T4-T5 junction
10. Liver and its blood supply
11. Interior of right ventricle

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

12. Name the ventricles of brain.
13. Movements at Subtalar joint
14. Coverings of brain
15. Parts of phárynx
16. Name two pronator muscles.
17. Name the last six cranial nerves.
18. Parts of humerus
19. Movements occurring at hip joint
20. Branches of external carotid artery
21. Olfactory nerve

*****

Rajiv Gandhi University of Health Sciences

First year B.Sc. MLT Degree Examination SEPTEMBER 2015

[Time: 3 Hours] [Max. Marks: 40]

PHYSIOLOGY

[Old Scheme]

Q P Code : 1602 – Section-A [40 Marks]

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

I LONG ESSAY (Answer any One) **(1X10=20)**

1. Describe the regulation of respiration.
2. Name the hormones of the Anterior pituitary gland and describe the functions of growth hormone.

II SHORT ESAAY (Answer any Four) **(4X5=20)**

3. Describe the waves of an ECG with a neat diagram.
4. Trace the pathway for pain with the help of a diagram.
5. Describe the steps of spermatogenesis.
6. Describe the oxygen dissociation curve.
7. Classify blood groups. Explain the complications of mismatched transfusion.

III SHORT ANSWERS **(5X2=10)**

8. Define GFR. Give its normal value.
9. List the functions of middle ear.
10. List the functions of saliva.
11. List any 4 features of Acromegaly.
12. Three contraceptive methods in females

* * * * *

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (M.L.T) Degree Examination – SEPTEMBER 2015

Time: 3 Hours **Max. Marks: 40 Marks**

Biochemistry

Q.P. Code: 1603

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1602 and 1603 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Explain Henderson-Hasselbach equation. List the various buffer systems in the body. How is it involved in pH regulation?
2. Classify Protein with suitable example.

SHORT ESSAYS (Answer any Four) **4 x 5 = 20 Marks**

3. Define buffers. Mention their uses.
4. Principle of chemical balance and list the types of chemical balance.
5. Note on Invert sugar
6. Classify carbohydrate.
7. Define normality and molarity.

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Note on epimers
9. Define Atomic weight.
10. Define acids.
11. Note on rancidity
12. Structure of tRNA

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I year B.Sc. (M.L.T) Degree Examination – SEPTEMBER 2015

Time: 3 Hours **Max. Marks: 40 Marks**

Pathology

Q.P. Code: 1604

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

(Note: Both QP Codes 1604 and 1605 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Describe the steps involved in tissue processing in detail.
2. Describe in detail physical and microscopic examination of urine. Add a note on precautions to be taken for semen collection and transportation.

SHORT ESSAYS (Answer any Four) **4 x 5 = 20 Marks**

3. Describe significance and methods of detection of Proteinuria.
4. Record keeping in the laboratory
5. Classify fixatives with examples. Enumerate the features of an ideal fixative.
6. Decalcifying agents
7. Urinary casts and crystals

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Enumerate different types of moulds that can be used for embedding tissue.
9. Clearing agents
10. Give examples for preservatives of urine.
11. Enumerate different methods of detection of end-point of decalcification.
12. Mention the methods of detection of ketonuria. Give an example of condition associated with ketonuria.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I year B.Sc. (M.L.T) Degree Examination – SEPTEMBER 2015

Time: 3 Hours **Max. Marks: 40 Marks**

Microbiology

Q.P. Code: 1605

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

(Note: Both QP Codes 1604 and 1605 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Draw a neat, labelled diagram of Bacterial cell. Add a note on Cell wall.
2. Define sterilization. Describe principle, functioning, uses and sterilization control of autoclave.

SHORT ESSAYS (Answer any Four) **4 x 5 = 20 Marks**

3. Waste segregation and disposal
4. Gram stain
5. Bacteriology of water
6. Antibiotic susceptibility testing
7. Growth curve

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Define disinfection. Name one high level disinfectant.
9. Method of urine collection for culture
10. Name two enriched media.
11. Pasteurization
12. Define mesophilic bacteria. Give an example.

*****