Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (Allied Health Sciences) Degree Examination - Aug / Sep 2011

Time: Three Hours | Max. Marks: 80 Marks

BIOCHEMISTRY (RS-2)

(MLT, O.T. Technology, Cardiac Care Technology, Perfusion Technology, Neuro Sciences Technology, Renal Dialysis Technology, Respiratory Care Technology, Medical Imaging Technology & Radiotherapy Technology)

Q.P. CODE: 1228

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

LONG ESSAY — 2 x 10 = 20 Marks

1. Define normality and molality. Write briefly preparation of 1 N Na_2CO_3 solution
2. What are carbohydrates? Classify them and give example of each class

SHORT ESSAY (Any Six) — 6 x 5 = 30 Marks

3. Electronic configuration
4. Calorific value of carbohydrate, proteins and lipids
5. Define and write properties of acid and base with examples
6. Vitamins
7. Precision and specificity
8. Collection of blood
9. pH meter
10. Liver function tests

SHORT ANWERS (Any Ten) — 10 x 3 = 30 Marks

11. Conventional and SI units
12. Accuracy
13. Bicarbonate buffers
14. Normal values of fasting blood sugar, pH, serum proteins
15. Calibration of pipettes
16. Dessicator
17. Dalton's theory
18. Common renal diseases
19. Anticoagulants
20. Sodium regulators
21. Respiratory acidosis
22. Nitrogen balance

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (Allied Health Sciences) Degree Examination - Aug / Sep 2011

Time: Three Hours Max. Marks: 80 Marks

PHYSIOLOGY – RS-2

(MLT, O.T. Technology, Cardiac Care Technology, Perfusion Technology, Neuro Sciences Technology, Renal Dialysis Technology, Respiratory Care Technology, Medical Imaging Technology & Radiotherapy Technology)

Q.P. CODE: 1227

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

LONG ESSAY 2 x 10 = 20 Marks

1. Describe glomerular filtration rate. Give its normal value. How it is measured?
2. What are the physiological effects of growth hormone? Describe the effects of excess and deficiency of growth hormone

SHORT ESSAY (Any Six) 6 x 5 = 30 Marks

3. Extrinsic mechanism of blood co-agulation
4. What is mismatched blood transfusion? Write the complications of mismatched blood transfusion
5. Write the phases of deglutition
6. What is normal body temperature? What are the means of heat gain and loss?
7. Pregnancy tests
8. Write the functions of cerebellum
9. Spermatogenesis
10. Mechanism of hearing

SHORT ANWERS (Any Ten) 10 x 3 = 30 Marks

11. Differential white blood cell count
12. Rh incompatability
13. Isometric relaxation period
14. Define apnoea. What are causes for apnoea
15. Conditioned and un conditioned reflex
16. Functions of gall bladder
17. Functions of dorsal spinothalamic tract
18. Enumerate hormones secreted by testis
19. Contractile elements of skeletal muscle
20. Functions of oestrogen
21. Define tidal volume. What is its normal value?
22. Name muscle proteins

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (Allied Health Sciences) Degree Examination - Aug / Sep 2011

Time: Three Hours Max. Marks: 80 Marks

PATHOLOGY (RS-2)

(Clinical Pathology & Heamatology & Blood Banking)

(MLT, O.T. Technology, Cardiac Care Technology, Perfusion Technology, Neuro Sciences Technology, Renal Dialysis Technology, Respiratory Care Technology, Medical Imaging Technology & Radiotherapy Technology)

Q.P. CODE: 1229

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

LONG ESSAY 2 x 10 = 20 Marks

1. Classify fixatives. What is ideal fixative? Write briefly on formalin
2. Describe the various methods of urine collection. Write briefly on tests used for glucose

SHORT ESSAY (Any Six) 6 x 5 = 30 Marks

3. Proteinuria
4. Differences between hematuria and haemoglobinuria
5. Urine sediments
6. Write a note on record keeping in laboratory
7. How do you take care to see that you don't get infected during handling samples in laboratory?
8. Write briefly about staining of paraffin sections with hemotoxylin and eosin stain
9. Dehydration in tissue processing
10. Write briefly about sputum examination

SHORT ANWERS (Any Ten) 10 x 3 = 30 Marks

11. How do you decalcify bone?
12. E.S.R. – What is the name of the instruments and anticoagulants used in estimation of E.S.R and its normal value in males and females?
13. Precautions in handling cerebro spinal fluid
14. Microscopic examination of pleural fluid
15. Occult blood in faeces
16. Name the uses of rectified spirit
17. Steps in cleaning a microscope
18. Name four permanent mounting media
19. Add a note on bleeding time
20. Name the three normal constituents of blood. Describe the reticulocyte
21. Name various body fluids
22. Describe various blood groups

*****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. (Allied Health Sciences) Degree Examination - Aug / Sep 2011

Time: Three Hours | Max. Marks: 80 Marks

MICROBIOLOGY (RS-2)

(MLT, O.T. Technology, Cardiac Care Technology, Perfusion Technology, Neuro Sciences Technology, Renal Dialysis Technology, Respiratory Care Technology, Medical Imaging Technology & Radiotherapy Technology)

Q.P. CODE: 1230

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

LONG ESSAY — 2 x 10 = 20 Marks

1. Mention the difference between Antiseptic and disinfection. Give a detailed account of chemical methods of sterilization
2. Describe the morphology, cultivation, diseases caused and laboratory diagnosis of Salmonella typhi

SHORT ESSAY (Any Six) — 6 x 5 = 30 Marks

3. Bacterial capsule
4. Electron microscope
5. Laboratory diagnosis of gonorrhea
6. Selective media for vibrio cholerae
7. Life cycle of Ascaris lumbricoides
8. Infections caused by herpes simplex viruses
9. Viral capsid
10. Non specific tests in the diagnosis of syphilis

SHORT ANWERS (Any Ten) — 10 x 3 = 30 Marks

11. Coagulase test
12. Oral Polio vaccine
13. Structure of human immunodeficiency virus
14. Mantoux test
15. Cold sterilization
16. Aspergillus niger
17. Botulin toxin
18. Complication of ascariasis
19. Name three spirochaetes
20. Name any three control methods of Nosocomial infection
21. Elek's test
22. Name any three bile stained ova

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. (Allied Health Sciences) Degree Examination - Feb/March 2011

Time: Three Hours | Max. Marks: 80 Marks

ANATOMY
(Including Histology)- RS-2

(MLT, O.T. Technology, Cardiac Care Technology, Perfusion Technology, Neuro Sciences Technology, Renal Dialysis Technology, Respiratory Care Technology, Medical Imaging Technology & Radiotherapy Technology)

Q.P. CODE: 1226

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

LONG ESSAY — 2 x 10 = 20 Marks

1. Describe in detail the extra hepatic biliary system
2. Describe the cerebrum in detail

SHORT ESSAY (Answer any six) — 6 x 5 = 30 Marks

3. External carotid artery
4. Dural venous sinuses
5. Muscles of eyeball
6. Visual pathway
7. Spleen
8. Boundaries of anterior cranial fossa
9. Microscopic features of compact bone
10. Urinary bladder

SHORT ANWERS (Answer any ten) — 10 x 3 = 30 Marks

11. External features of head of pancreas
12. Supports of uterus
13. Blood supply of thyroid gland
14. Right atrium
15. Anterior mediastinum
16. Spermatic cord
17. Boundaries of inguinal canal
18. Branches of brachial artery
19. Parts of respiratory system
20. Borders of the heart
21. Name the ventrscles of the brain
22. Name the carpal bones

*****

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. (Allied Health Sciences) Degree Examination - Feb/March 2011

Time: Three Hours | Max. Marks: 80 Marks

PHYSIOLOGY – RS-2

(MLT, O.T. Technology, Cardiac Care Technology, Perfusion Technology, Neuro Sciences Technology, Renal Dialysis Technology, Respiratory Care Technology, Medical Imaging Technology & Radiotherapy Technology)

Q.P. CODE: 1227

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 origin, course, termination and functions of corticospinal Tract (pyramidal tract) with the help of a labeled diagram.
2. Explain oxygen transport in the blood. Describe oxygen dissociation curve.

SHORT ESSAY (Any Six) — 6 x 5 = 30 Marks

3. Differentiate between upper motor neuron lesion and lower neuron lesion.
4. Describe intrinsic pathway for blood clotting.
5. Explain excitation-contraction coupling with the help of a diagram.
6. Describe the Pharynacil stage of deqlutation.
7. Define G.F.R. (Glomerular Filteration rate)? What is the normal value of G.F.R.? What are the factors that influence G.F.R?
8. Name the anterior pituitary hormones. Describe the functions of growth harmone.
9. Describe the endometrial and Hormonal changes during menstrual cycle .
10. Describe the conducting system of heart with a labeled diagram.

SHORT ANWERS (Any Ten) — 10 x 3 = 30 Marks

11. Mention any three types of anaemia.
12. What is purpura? What is the normal platelet count?
13. Define the terms Chronaxie, Rheobase and Utilization time.
14. Draw labeled diagram of neuromuscular junction.
15. Name any four enzymes present in the pancreatic juice.
16. Name any two gastrointestinal hormones. List any one function of each.
17. List any three functions of kidney.
18. List any three functions of skin.
19. Functions of anti diuretic hormone.
20. Describe Cushing's syndrome.
21. Tests for pregnancy.
22. What is Glaucoma?

*****

Rajiv Gandhi University of Health Sciences, Karnataka