Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 28-Dec-2020

Time: Three Hours | Max. Marks: 80 Marks

Basic Anatomy (Including Histology)

(RS3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology
RS2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

Q.P. CODE: 3151

(QP contains two pages)

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

SHORT ESSAYS (Answer any Eight) — 8 x 5 = 40 Marks

1. Cavernous sinus
2. Lateral wall of Nose
3. Histology of skeletal muscle
4. Lacrimal apparatus
5. Fertilization
6. Cerebrospinal fluid
7. Thoracic duct
8. Thyroid gland – coverings, relations, blood supply and applied aspects
9. Diaphragm
10. Pleura

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

11. Meninges
12. Draw the structure of a mature spermatozoon.
13. uterus
14. Transitional epithelium
15. Coeliac trunk
16. Parts of the extrabiliary apparatus
17. Appendix
18. Blood supply of Brain
19. Name the extra ocular muscles
20. Parts of long bone
21. Branches of external carotid artery
22. Fibrous joint

TO THE POINT ANSWERS (Answer any Five) — 5 x 2 = 10 Marks

23. Name any four cranial nerves.
24. Name the papillae on the dorsum of the tongue.
25. Name the ear ossicles.
26. Name the hormones of anterior pituitary.
27. Parts of brain stem
28. Name any two pneumatic bones.
29. Mention the parts of fallopian tube.

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 30-Dec-2020

Time: Three Hours Max. Marks: 80 Marks

PHYSIOLOGY

(RS3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology RS2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

Q.P. CODE: 3152

(QP contains two pages)

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

1. Describe the nervous regulation of respiration.
2. Explain the extrinsic mechanism of clotting.
3. Mode of transmission along neuromuscular junction
4. Actions of cortisol hormones
5. Define shock, types of shock and explain each.
6. Write a note on ascending pathways.
7. Tubular reabsorption of glucose
8. Describe Defaecation reflex.
9. Enumerate the properties of Cardiac muscle. Explain Refractory period in detail.
10. Endometrial changes during menstrual cycle

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

11. Iron deficiency anaemia
12. Factors affecting glomerular filtration rate
13. Stages of Oogenesis
14. Hypoxic hypoxia
15. Functions of platelets
16. Trace the taste pathway
17. List the errors of refraction and explain one of them.
18. Functions of skin
19. Factors affecting Erythropoiesis
20. Draw the Oxygen Dissociation Curve.
21. Sarcomere
22. Contents of middle ear

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 04-Jan-2021

Time: Three Hours | Max. Marks: 80 Marks

BIOCHEMISTRY

(RS3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology
RS2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

Q.P. CODE: 3153

(QP contains two pages)

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

SHORT ESSAYS (Answer Any Eight) 8 x 5 = 40 Marks

1. Write the structural classification of amino acids with examples.
2. Briefly explain the principle and working of a colorimeter.
3. Define solutions. Write the types of solutions with example and add a note on part dilution.
4. Define acids and bases. Write the properties of acids.
5. Write the principle of centrifugation and write different types of rotor heads.
6. Write the precautionary measures while handling chemical balances.
7. Explain the management of needle stick injury.
8. Briefly explain the care and cleaning of glass wares.
9. Write the functions of carbohydrates.
10. What is molarity and explain how to prepare 1M NaOH?

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

11. Responsibilities of health care personal
12. Significance of borosilicate glass
13. Write the uses of a) Conical flask b) Cuvette c) Bunsen burner
14. Write the electrodes in pH meter.
15. How to take care of water bath and incubator?
16. Different types of bottles used in a laboratory
17. Write any three functions of amino acids.
18. Name three blood buffers
19. Diagram and use of standard flask
20. Write the uses of a) Centrifuge tube b) Wire gauze c) Tripod stand.
21. Explain the electrical hazards in a laboratory.
22. Uses of Cyclomixer and reflux condenser

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 06-Jan-2021

Time: Three Hours | Max. Marks: 80 Marks

PATHOLOGY

(RS3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology
RS2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

Q.P. CODE: 3154

(QP contains two pages)

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

SHORT ESSAYS (Answer Any Eight) 8 x 5 = 40 Marks

1. Describe the basic organisation of a histopathology laboratory.
2. Describe the different methods of urine collection and their appropriate chemical tests.
3. Describe the chemical theory of staining.
4. Classify the methods of Hemoglobin estimation and describe Sahli's method.
5. Examination of Pleural fluid
6. Describe principle and procedure of Benedict's test.
7. Describe the steps in tissue processing.
8. Coagulation cascade
9. Classify anticoagulants and mention their appropriate uses.
10. How do you collect a sputum sample?

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

11. Enlist three methods of Packed cell volume estimation.
12. Mention three causes and remedies of faulty histopathology sections.
13. Describe Landsteiner's Law.
14. Enlist RBC indices and their normal value.
15. Describe the test for bleeding time and its normal value.
16. Describe the advantages of Frozen sections.
17. Tests for proteinuria.
18. Draw a neat labeled diagram of Neutrophil.
19. Describe the colour coding in biomedical waste management.
20. Describe three modes of transmission of disease.
21. Enlist three adverse blood transfusion reactions.
22. Enlist three laboratory safety guidelines.

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 08-Jan-2021

Time: Three Hours Max. Marks: 80 Marks

MICROBIOLOGY

(RS3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology
RS2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

Q.P. CODE: 3155

(QP contains two pages)

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

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

1. Briefly explain the various methods opted for the sterilization by dry heat method.
2. Blood culture for Typhoid fever
3. Diseases caused by ascaris lumbricoides.
4. Passive immunity
5. Bacterial capsule
6. Laboratory diagnosis of Shigellosis
7. Morphology and laboratory diagnosis of Human Immunodeficiency (HIV) Virus
8. Laboratory diagnosis of Cryptococcosis
9. Write a note on Enriched media and differential media.
10. Laboratory diagnosis of Pulmonary tuberculosis

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

11. Coagulase test
12. Stroke culture method
13. Describe any 3 modes of transmission of infections
14. Sterilization by filtration
15. Contributions of Robert Koch towards microbiology
16. Transport media
17. Live attenuated vaccines
18. Name any three Fungal stains
19. Name any three general properties of viruses
20. List the methods used for the cultivation of Virusus
21. Black water fever
22. Pasteurization