Rajiv Gandhi University of Health Sciences, Karnataka

Second Year M.Sc. (MLT) Degree Examination - 29-May-2024

BIOCHEMISTRY - PAPER - I (RS3)

Q.P. CODE: 8037

Clinical Biochemistry Paper-I [8037]

Marks: 100 Duration: 200 mins.

BIOCHEMISTRY

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

Answer All The Questions

1 Discuss biliary tract diseases and write in detail about laboratoryanalysis of gall stones. (10)

2 Discuss laboratory evaluation of CSF. (10)

3 Describe about toxic agents. (10)

4 Write in detail about renal calculi and its laboratory analysis. (10)

5 Discuss biological reference intervals. (10)

6 **Explain total quality management.** (10)

7 Explain laboratory information system. (10)

8 Discuss hormonal assay and clinical significance thyroid hormones.Add a note on usefulness of anti-TPO

antibodies in thyroidabnormalities. (10)

9 Clinical utility of cardiac markers in diagnosis and management. (10)

10 Explain the laboratory diagnosis of porphyrias and add a note onmyoglobinuria. (10)

Rajiv Gandhi University of Health Sciences, Karnataka

Second Year M.Sc. (MLT) Degree Examination - 03-JUN-24

BIOCHEMISTRY - PAPER - II (RS3)

Q.P. CODE: 8038

Clinical Biochemistry Paper-II [8038]

Marks: 100 Duration: 200 mins.

BIOCHEMISTRY

Answer all the questions.

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

Answer All The Questions

1 Write about separation of serum protein by slide agarose gelelectrophoresis. (10)

2 Write the source, RDA, function, digestion, absorption, deficiencydisorders of vitamin K (10)

3 Diagnosis of inborn errors of amino acid metabolism by qualitativeand chromatographic techniques. (10)

4 Write the biosynthesis of purine nucleotides. Add a note on salvagepathway. (10)

5 Define and write about the role of oncogenes. Add a note on use ofenzymatic markers and drugs for the treatment of cancer. (10)

6 Explain about the screening and diagnosis of gestational diabetesmellitus. (10)

7 Write the biosynthesis and regulation of cholesterol. Add note onatherosclerosis. (10)

8 Elucidate the pathway of glycogenesis. Add a note on glycogenstorage diseases. (10)

9 Classify enzymes. Write briefly on enzyme inhibition. (10)

10 Write the metabolism, functions and deficiency of calcium. (10)

Rajiv Gandhi University of Health Sciences, Karnataka

Second Year M.Sc. (MLT) Degree Examination - 29-May-2024

HAEMATOLOGY and BLOOD TRANSFUSION - PAPER - I (RS3)

Q.P. CODE: 8042

Haematology and blood transfusion paper- I [8042]

Marks: 100 Duration: 200 mins.

HAEMATOLOGY and BLOOD TRANSFUSION

Answer all the questions.

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

Answer All The Questions

1 Write principle, procedure and clinical significance of RBC count. (10)

2 Flowcytometry - principle, diagram and indication. (10)

3 Etiology, clinical features and laboratory investigations **in negaloblastic anemia**. (10)

4 Discuss organization of a haematology laboratory. (10)

5 Write briefly on iron deficiency anemia with laboratoryinvestigation. (10)

6 Peripheral smear picture in different phases of chronic **myeloid Leukemia**. (10)

7 Pathogenesis and test for **G6PD deficiency**. (10)

8 Discuss about haematopoiesis and nutritional **requirement of crythropoiesis**. (10)

9 Osmotic fragility test - indication and methods. (10)

10 Enlist the causes of thrombocytopenia. Discuss the laboratory diagnosis of Essential thrombocythemia (10)

Rajiv Gandhi University of Health Sciences, Karnataka

Second Year M.Sc. (MLT) Degree Examination - 03-JUN-2024

HAEMATOLOGY and BLOOD TRANSFUSION - PAPER - II (RS3)

Q.P. CODE: 8043

Haematology and blood transfusion paper- II [8043]

Marks: 100 Duration: 200 mins.

PAPER II

Answer all the questions. Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Answer All The Questions

1 Define transfusion reaction. Elaborate on non-hemolytic transfusionreaction (10)

2 Methods of bleeding donors. Add a note on adverse donor reaction (10)

3 Paternity testing (10)

4 Du test and its clinical significance (10)

5 Quality assurance in blood bank (10)

6 Transfusion transmitable infectious desease with laboratory diagnosis.

7 Name different blood group system. Explain methods of bloodgrouping (10)

8 Autologous Transfusion.

9 Direct coombs test. Write its application (10)

10 Cryoprecipitate preparation, application and its storage (10)

Rajiv Gandhi University of Health Sciences, Karnataka

Second Year M.Sc. (MLT) Degree Examination - 29-May-2024

MICROBIOLOGY - PAPER - I (RS-3)

Q.P. CODE: 8047

Microbilogy paper-I [8047]

Marks: 100 Duration: 200 mins.

PAPER I

Answer all the questions.

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

Answer All The Questions

1 Biomedical waste management (10)

2 Mechanisms of innate immunity (10)

3 Mechanism and application of precipitation reaction (10)

4 Laboratory diagnosis of tuberculosis. Add a note on RNTCP (10)

5 Diarrheagenic E.coli (10)

6 Non sporing anaerobes (10)

7 MRSA - significance and detection (10)

8 Principle, procedure and application of hybridoma technology (10)

9 Laboratory diagnosis of cholera (10)

10 Laboratory diagnosis of whooping cough. Add a note on itsprophylaxis (10)

Rajiv Gandhi University of Health Sciences, Karnataka

Second Year M.Sc. (MLT) Degree Examination - 03JUN24

MICROBIOLOGY - PAPER- II (RS3)

Q.P. CODE: 8048

Microbilogy paper-II [8048]

Marks: 100 Duration: 200 mins.

MICROBIOLOGY

Answer all the questions.

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Answer All The Questions

1 Write in detail about Mycotoxicosis. (10)

2 Classify systemic mycosis. Explain in detail pathogenesis andlaboratory diagnosis of Histoplasmosis. (10)

3 Morphology, life cycle, pathogenesis and laboratory diagnosis ofGiardia lamblia. (10)

4 Concentration techniques of stool examination for ova and cyst. (10)

5 Explain pathogenesis, laboratory diagnosis and prophylaxis of Poliovirus. (10)

6 Write in detail Morphology, pathogenesis and laboratory diagnosisof HIV. (10)

7 Write in detail about morphology, pathogenesis and laboratorydiagnosis of Influenza virus. (10)

8 Enumerate arboviral diseases. Write in detail pathogenesis andlaboratory diagnosis of Chikungunya. (10)

9 Write in detail Life cycle and clinical symptoms and laboratorydiagnosis of Ascaris lumbricoides. (10)

10 Write in detail Life cycle, pathogenesis and laboratory diagnosisof Leishmaniasis. (10)