Rajiv Gandhi University of Health Sciences

II Year M.Sc. (MLT) Degree Examination - APRIL-2018

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

BIOCHEMISTRY – II

Paper - I (Revised Scheme – 2)

Q.P. CODE: 9814

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.
Section A and section B are to be written in same Answer Book

Section A - Clinical Biochemistry [50 marks]

LONG ESSAY 1 X 20 = 20 Marks

1. Give an account of renal function tests.

SHORT ESSAY 3 X 10 = 30 Marks

2. Laboratory examination and clinical significance of analysis of FSH, LH and PRL
3. Write a note on pediatric clinical biochemistry.
4. Synthesis of porphyrins and laboratory evaluation of porphyrias

Section B – Laboratory Management [50 marks]

LONG ESSAY 1 X 20 = 20 Marks

5. Comment on total quality management in a clinical laboratory.

SHORT ESSAY 3 X 10 = 30 Marks

6. Laboratory accreditation
7. Write a note on sources, route of entry, metabolism and analysis of Arsenic and Lead.
8. Point of care testing

Rajiv Gandhi University of Health Sciences

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II Year M.Sc. (MLT) Degree Examination - April 2018

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

BIOCHEMISTRY – II

Paper – II (Revised Scheme – 2)

Q.P. CODE: 9815

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

LONG ESSAY 2 X 20 = 40 Marks

1. Discuss Iron metabolism under the following headings (a) Daily requirement (b) Absorption and transport (c) Functions (d) Clinical disorders.
2. Describe the metabolism of Phenylalanine and Tyrosine. Mention the biologically important compounds derived from Tyrosine. Add a note on inborn errors associated with its metabolism.

SHORT ESSAY 6 X 10 = 60 Marks

3. Isoenzymes and their clinical significance
4. Turbidimetry and Nephelometry
5. Explain the steps of β – oxidation of fatty acids. Describe the energetic of Palmitic acid oxidation. Add a note on α and ω oxidation of fatty acids.
6. Biochemical functions and deficiency manifestations of Vitamin D.
7. Describe (a) PKU (b) Lesch Nyhan syndrome (c) Alkaptonuria (d) Homocystinuria.
8. Describe the structure of DNA and different types of RNA with neat diagrams.

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II Year M.Sc. (MLT) Degree Examination - APRIL-2018

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

Microbiology – II

Paper – I (Systematic Bacteriology, Applied Microbiology and Immunology)

(Revised Scheme – 2)

Q.P. CODE: 9816

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

LONG ESSAY 2 X 20 = 40 Marks

1. Describe the pathogenesis, laboratory diagnosis and prevention of tetanus.
2. Define immune response. Discuss in detail cell mediated immune response.

SHORT ESSAY 6 X 10 = 60 Marks

3. Laboratory diagnosis of gonorrhea
4. Pathogenicity and laboratory diagnosis of leptospirosis
5. Mechanism and detection of Methicillin resistant Staphylococcus aureus
6. Structure of MHC and its role in antigen presentation
7. Antimicrobial susceptibility testing
8. Laboratory diagnosis of urinary tract infection

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Rajiv Gandhi University of Health Sciences

II Year M.Sc. (MLT) Degree Examination - APRIL-2018

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

Microbiology – II

Paper – II (Virology, Mycology and Parasitology)

(Revised Scheme – 2)

Q.P. CODE: 9817

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

LONG ESSAY 2 X 20 = 40 Marks

1. Describe the morphology, pathogenicity and laboratory diagnosis of HIV. Add a note on universal precautions.
2. Describe the life cycle, pathogenicity and laboratory diagnosis of Echinococcus granulosus.

SHORT ESSAY 6 X 10 = 60 Marks

3. Life cycle and pathogenesis of Wuchereria bancrofti
4. Rhinosporidiosis
5. Blastomycosis
6. Kyasanur forest disease
7. Life cycle and pathogenesis of Toxoplasma gondii
8. Prophylaxis of polio virus

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II Year M.Sc. (MLT) Degree Examination - APRIL 2018

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

Haematology and Blood Transfusion – II

Paper – I

(Revised Scheme – 2)

Q.P. CODE: 9818

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

LONG ESSAY 2 X 20 = 40 Marks

1. Write the classification of coagulation disorder. Discuss clinical features, pathology, lab diagnosis of hemophilia.
2. Discuss in detail about etiology, pathology, and laboratory investigation of DIC.

SHORT ESSAY 6 X 10 = 60 Marks

3. Glanzmanns thrombosthenia
4. Structure and function of platelet
5. Automation in haematology
6. Antiphospholipid antibody syndrome
7. Antithrombin III deficiency
8. Flow cytometry

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Rajiv Gandhi University of Health Sciences

II Year M.Sc. (MLT) Degree Examination - APRIL-2018

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

Haematology and Blood Transfusion – II

Paper – II

(Revised Scheme – 2)

Q.P. CODE: 9819

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

LONG ESSAY 2 X 20 = 40 Marks

1. Write in detail about organization of blood bank. Add a note on Quality control.
2. Discuss in detail about non-infectious blood transfusion reaction, their investigation and management.

SHORT ESSAY 6 X 10 = 60 Marks

3. Enumerate different type of blood group system.
4. Autologous transfusion
5. Hemolytic disease of newborn
6. Anticoagulants used in store blood. Changes occurring in stored blood.
7. Name the transfusion transmitted disease. Explain the screening of blood for infective material.
8. Method of bleeding the donors

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