Rajiv Gandhi University of Health Sciences, Karnataka

2902_2012_1_S185

Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. (M.L.T) Degree Examination – Feb / Mar 2012

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

MICROBIOLOGY – III (RS-2)

Q.P. CODE: 2902

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. Describe the structure and properties of each of the immunoglobulin class.
2. Enumerate the organisms causing pyogenic meningitis. Describe the morphology, cultural characteristics, and pathogenicity of Neisseria meningitides. Outline its laboratory diagnosis.
3. Describe the morphology, cultural characteristics and pathogenicity of Mycobacterium tuberculosis. Mention the laboratory diagnosis of pulmonary tuberculosis.

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

4. Artificial acquired active immunity
5. Major histocompatibility complex
6. Type III hypersensitivity
7. Cytokines
8. Toxins produced by Staphylococcus aureus
9. Virulence tests for Corynebacterium diphtheria
10. Enterotoxigenic Escherichia coli
11. Polymerase chain reaction

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

12. Define and give an example of Hapten
13. Memory T cells
14. Name three waterborne diseases
15. Graft vs Host reaction
16. Interferons
17. Write three differences between Streptococcus pneumonia and Streptococcus viridians
18. Hide Porter's disease
19. Tetanospasmin
20. Salmonella food poisoning
21. Milk ring test
22. Lyme disease
23. List the arthropod vectors involved in rickettsial diseases

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Rajiv Gandhi University of Health Sciences, Karnataka

1611_2012_1_S221

Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. (M.L.T) Degree Examination – Feb / Mar 2012

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

BIOCHEMISTRY – III (Revised Scheme)

Q.P. CODE: 1611

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. Describe the role of kidney in the regulation of blood P^H
2. How is phenyl alanine metabolized in the body? write the disorders associated with cholesterol metabolism
3. What is Jaundice? Classify jaundice. Give an account of the biochemical tests which will help differentiating the types of jaundice

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

4. Cardiac markers
5. Regulation of serum calcium level
6. Name the kidney function tests. Explain any one of test
7. Urea cycle
8. ELISA
9. Ultra micro techniques
10. Pentagastrin stimulation test
11. Write a short note on diagnostic application of radioactivity
12. Define accuracy, precision, specificity and sensitivity
13. DNA replication

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

14. Calculi
15. Function of phosphorous
16. Biologically important compounds formed form glycito
17. Reference ranges of (A) AST & (B) ALT
18. Define free & total acidity of gastric juice
19. RIA
20. Normal serum levels of (A) Urea and (B) Creatinine
21. Hypokalemia
22. Tetany
23. Clinical significance of LDH

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2903_2012_1_S223

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – Feb / Mar 2012

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

PATHOLOGY - III
(RS-2)

Q.P. CODE: 2903

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. Describe criteria for ideal blood bank. Add a note on blood bank organization
2. Describe normal cell structure and function
3. Describe the method of collection of specimen, preparation of smears and staining of respiratory tract

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

4. Hormonal cytology of female genital tract and cytological indices
5. Describe anatomy and histology of gastrointestinal tract
6. Cytology of effusion in malignant and non-malignant conditions
7. Quality control in blood bank
8. Oncogenes
9. Preparation of monoclonal antibodies
10. Types and significance of coomb's test
11. Cross matching techniques

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

12. Aceto – orcein stain
13. Radiation changes in cervical cytology
14. Cytology of endometrium in malignant and non-malignant conditions
15. Cytology of CSF
16. Anatomy of thyroid gland
17. Name methods of preservation of immortalized cell lines
18. Chromosomes in neoplasia
19. Methods of blood grouping
20. FNAC of breast
21. Transfusion transmitted diseases
22. Preparation of cell block
23. Cytological stains

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Rajiv Gandhi University of Health Sciences, Karnataka

1609_2012_1_S050

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – Feb / Mar 2012

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

PATHOLOGY – III (Revised Scheme)

Q.P. CODE: 1609

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. What is fine needle aspiration cytology? Describe the procedure of papanicolaou's stain
2. What is karyotype and idiogram? How do you obtain cells for Karyotyping of human chromosomes? How do you classify human chromosome
3. What are the methods of collections of samples for cytological examination? Describe in detail all the steps in preparation and staining a vaginal smear

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

4. Component therapy in blood banking
5. Describe briefly ABO and Rh typing
6. Write a note on cytological examination of sputum
7. Chemical sterilization
8. Preparation of monoclonal antibodies
9. Cytological screening programme for cervical cancer
10. Coomb's test
11. Demonstration of barr body in buccal smear

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

12. Screening for Australia antigen
13. Enumerate blood components
14. What are the indications for bone marrow aspiration?
15. Cytology of Adenocarcinoma of lung
16. Cross matching in blood bank
17. Normal cytology of urinary sediment
18. Use and care of microscope
19. Enumerate blood group systems
20. Definition of exfoliative cytology
21. Definition of FNAC

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Rajiv Gandhi University of Health Sciences, Karnataka

1610_2012_1_S046 NEW

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – Feb / Mar 2012

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

MICROBIOLOGY – III (Revised Scheme)

Q.P. CODE: 1610

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. Define and classify immunity. Write in detail on acquired immunity
2. Write in detail, pathogenesis and laboratory diagnosis of Polio myelitis
3. Morphological classification of fungi and write on superficial mycosis

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

4. Type III hypersensitivity
5. Complement Fixation Test (CFT)
6. Agglutination tests
7. Heterophile antigen
8. Cultivation of viruses
9. Arboviruses
10. Labeled diagram of HIV (Human Immunodeficiency virus)
11. Oncogenic viruses
12. Rhinosporidiosis
13. Cryptococcus

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

14. Germ tube test
15. Name four mycotoxins
16. Labeled diagram of immunoglobulin A (IgA)
17. Theories of auto immunity
18. Allograft
19. Co-agglutination
20. List non neural rabies vaccines
21. Interferons
22. Diagrammatic representation of influenza virus
23. Steps of viral replication

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2901_2012_1_S182

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – Feb / Mar 2012

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

BIO-CHEMISTRY – III (RS-2)

Q.P. CODE: 2901

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 jaundice. Write in detail about bilirubin metabolism
2. Enumerate the process of transcription in a prokaryotic cell
3. Write in detail about the different biological effects of radiation on living tissue

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

4. Calcium hemostasis
5. Write short note on buffers of body fluids
6. Wilson's disease
7. ELISA
8. Phenylalanine is both glucogenic and ketogenic. Justify
9. Metabolic acidosis
10. Pentagastrin stimulation test
11. Urine concentration test

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

12. Hyperoxaluria
13. Write the normal serum levels of: Sodium, Calcium and LDH
14. Tetany
15. Write the causes of metabolic acidosis
16. Classify proteins based on functions
17. Fractionation of radioactive doses
18. Immunofluorescence
19. Phenylketonuria
20. Name the test to detect acetone in urine and write its principle
21. Achlorohydria
22. Renal threshold
23. Essential amino acids

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – Sep 2012

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

MICROBIOLOGY – III (Revised Scheme)

Q.P. CODE: 1610

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 picorna viruses. Describe the laboratory diagnosis and prophylaxis in a suspected case of polio myeletes
2. List the antigen –antibody reaction. Describe in detail about precipitation
3. Classify fungi. Write in detail about the morphology and laboratory diagnosis of cryptococcal meningitis

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

4. Candida albicans
5. Dengue virus
6. Stracture of Ig G
7. Major Histo compatibity complex
8. Anaphylaxis
9. T lymphocyte
10. Inclusion bodies
11. Opportunities fungi
12. Dermatophytes
13. Hepatitis B virus

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

14. Two examples of Passive immunity
15 Four properties of Exotoxin
16. Widal test
17. Hapten
18. Name two fungi causing mycetoma
19. Antigenic drift in influenza virus
20. List three congenital viral infection
21. List the members of the family herpesviridiae
22. Name 2 viruses causing diarrohaea
23. Name 2 DNA viruses

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. (M.L.T) Degree Examination – Sep 2012

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

BIOCHEMISTRY – III (Revised Scheme)

Q.P. CODE: 1611

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. Describe the different types of analysis of gastric juice. Add a note on their interpretation
2. Define radioactivity. Mention the clinical applications of radioactive isotopes
3. Write briefly on different tests used to assess liver function

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

4. Name the ketone bodies. Mention two conditions causing ketosis
5. Functions of gastric juice
6. Phospholipids and their function
7. Metabolic alkalosis
8. How does estimation of enzymes in serum help in clinical diagnosis? Illustrate with five examples
9. Buffer systems in blood
10. Renal function tests
11. Functions of iron in the body
12. Quality control
13. Analysis of kidney stones

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

14. Lipotropic factors
15 Na^+ -k^+ ATPase pump
16. Two zinc containing proteins
17. Mention two inborn errors of lipid metabolism and indicate the enzyme defect
18. Van den Bergh reaction
19. Functions of copper
20. Rancidity
21. Name the plasma lipoproteins
22. Triglycerides
23. Functions of Sodium

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. (M.L.T) Degree Examination – Sep 2012

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

MICROBIOLOGY – III (RS-2)

Q.P. CODE: 2902

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. Enumerate the bacteria causing sexually transmitted diseases. Describe the morphology cultivation, pathogenicity and laboratory diagnosis of Treponema pallidum
2. Enumerate the organisms causing meningitis. Describe the morphology, cultivation, pathogenicity, laboroatory diagnosis of Neisseria meningitides
3. Define cell mediated immunity. Write in detail about the role of different types of cells in providing CMI

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

4. Define and classify acquired immunity. Give examples for each type
5. Type 2 hypersensitivity
6. Describe the structure and function of IgG
7. Describe the production of monoclonal antibodies
8. Laboratory diagnosis of pneumococcal infections
9. Laboratory diagnosis of anthrax
10. Explain bacillary dysentery. Add a note on its laboratory diagnosis
11. Manifestations of Mycobacterium tuberculosis

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

12. Immune sera
13. List out the features of primary immune response
14. Memory cells
15. Define haptens. Give two examples
16. Haemolytic autoimmune disorders
17. Toxic shock syndrome toxin
18. Diphtheria toxin
19. Enumerate the diseases caused by Clostridium perfringenes
20. Enterotoxigenic E.coli
21. PPA test
22. Name any three enrichement media used in the growth of Vibrio cholerae
23. Enumerate any three tick borne rickettsial infections

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – Sep 2012

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

PATHOLOGY - III
(RS-2)

Q.P. CODE: 2903

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. Cytology of CSF in inflammatory, non malignant and malignant conditions
2. Write about blood bank procedure. Add note on quality control
3. Write about Squamous cell and glandular cell abnormalities of cervix

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

4. Describe the procedure of karyotyping of solid malignant tumor
5. Anatomy, histology and physiology of lymph nodes
6. Preservation of fluids in cytology
7. Nuclear criteria of malignancies
8. Safety measures taken while handling fluids from HIV positive individuals in lab
9. Significance of hormonal cytology
10. Describe the procedures of blood grouping and Rh typing
11. Who is an ideal donor?

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

12. Write on stains used in chromosome studies
13. Difference between complete and incomplete antibodies
14. Preparation of Giemsa stain
15. Significance of peripheral smear in sex chromatin identification
16. Antico-agulents in blood bank
17. Colchicin
18. Landsteiner law
19. Monoclonal antibodies
20. What is Rh incompatibility?
21. Karyotypic analysis for peripherala blood lymphocytes
22. Give examples for biochemical markers in cells
23. Pveservation of cell lines

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Rajiv Gandhi University of Health Sciences, Karnataka