31

1606_2010_1_S51

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. (M.L.T) Degree Examination – Feb - 2010

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

PATHOLOGY – II (Revised Scheme)

Q.P. CODE: 1606

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. Name the commonly used anti coagulants in hematology. What is their mode of action? How do you choose the appropriate anticoagulants for different hematological investigations?
2. Explain the principles of electron microscopy and the technique of preparing slides for the same
3. Describe the procedure of staining of tissue sections by hematoxylin and Eosin method. How do you prepare Harry's Hematoxylin?

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

4. Write briefly about osmotic fragility test
5. Write briefly about indexing and record keeping in laboratory
6. Reticulocyte count
7. List the instruments for grossing specimens
8. Tissue processors
9. Packed cell volume
10. Morphology and functions of neutrophils
11. Microphotography
12. PAS stain
13. Disposal of waste in the laboratory

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

14. Name the types of jars used for mounting specimens
15. Mention the uses of computers in laboratory
16. Preparation of Eosin stain
17. Name decalcifying agents
18. Name metachromatic stains
19. Name different types of cells seen in a normal bone marrow
20. Hemoparasites
21. Heptoglobulin
22. Bombay blood group
23. Fixation of brain

32

1607_2010_1_S47

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. (M.L.T) Degree Examination – Feb - 2010

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

MICROBIOLOGY – II (Revised Scheme)

Q.P. CODE: 1607

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 Morphology of Treponema pallidum. Write in detail the Serodiagnosis of syphilis
2. Describe the morphology, culture character, pathogenicity and laboratory diagnosis of Neisseria Gonorrhoeae
3. Name the species of Entamoeba. Describe the life cycle pathogenecity and laboratory diagnosis of Entamoeba histolytica

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

4. D.P.T
5. Bacterial meningitis
6. Blood culture
7. Prophylaxis against Gas gangrene
8. Hymenolepis nana
9. Balantidium coli
10. Life cycle of Ascaris lumbricoides
11. Differences between Streptococcus viridans and Pneumococci
12. Halophilic vibrio
13. Dracunculus medinensis

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

14. Bubonic plague
15 Cysticercus cellulose
16. Etiologic agent and vector in case of Leishmaniasis
17. Ciliated larvae
18. Acid fast stain
19. Capsule stain
20. Satelletism
21. Plasmodium vivax
22. MacConkey medium
23. Transport media for vibrio cholera

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35

1608_2010_1_S50

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. (M.L.T) Degree Examination – Feb - 2010

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

BIOCHEMISTRY – II (Revised Scheme)

Q.P. CODE: 1608

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 are Enzymes? Explain the factors affecting the role of enzyme catalysed reactions
2. Define Gluconeogenesis. Outline the pathway starting from lactase and mention the key enzymes
3. Explain the principle and uses of Spectrophotometry

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

4. Energetics of aerobic glycolysis
5. Sample collection and preservation
6. Isoenzymes and their clinical significance
7. Biologically important peptides
8. Walds visual cycle
9. Principle and procedure of serum protein electrophosis
10. Explain oral glucose tolerance test
11. Significance of blood urea and serum creatinine estimation
12. Sources, daily requirement and functions of folic acid
13. Amphibilic role of TCA cycle

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

14. Benedicts test
15. Quarternary structure of proteins
16. Define denaturation. Give 2 examples
17. What is glycosidic bond? Indicate the nature of such bond in lactose, sucrose
18. Scurvy
19. Anomers
20. Mention the normal level of serum uric acid. Name the clinical condition under which it is increased
21. Km value
22. Name any 4 B complex vitamins and their coenzyme forms
23. What is conjugate proteins give 4 examples

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33

1232_2009_1_S156

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. (M.L.T) Degree Examination – Feb 2010

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

MICROBIOLOGY – II (RS - 2)

Q.P. CODE: 1232

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. Write in detail on the sample collection and laboratory diagnosis of fungal infections.
2. Describe the life cycle of E. histolytica. How do you diagnose this infection in the laboratory.
3. Classify Hepatitis viruses. Describe the serological tests for Hepatitis B infection.

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

4. Candidiasis
5. Laboratory diagnosis of malaria
6. Life cycle of Leishmania donovani
7. Viral haemorrhagic fevers
8. Envelope proteins of HIV
9. Pneumocystis
10. Pathogenicity and laboratory diagnosis of polio virus.
11. Laboratory diagnosis of Wuchereriasis

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

12. Draw a neat labeled diagram of Giardia Lamblia.
13. Cytomegalovirus
14. Life cycle of strongyloides stercoralis
15 Penicillium
16. MMR vaccination
17. Hydatid cyst
18. Liver fluke
19. Varicella-Zoster virus
20. Dimorphic fungi
21. Interferon
22. Mention any three RNA viruses
23. Sexual spores of fungi.

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30

1231_2009_1_S155

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. (M.L.T) Degree Examination – Feb 2010

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

BIOCHEMISTRY – II (RS - 2)

Q.P. CODE: 1231

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. Explain the steps, regulation, and energetics of glycolysis? How is it linked to citric acid cycle?
2. Role of vitamin D in maintaining mineralization of bone? Explain the deficiency manifestations, sources , and RDA of vitamin D?
3. What is B-oxidation. Enumerate the pathway of B-oxidation of fatty acids. Add a note on its energetics.

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

4. Enzyme inhibition.
5. Synthesis of creatinine and its clinical importance.
6. Atomic absorption spectroscopy.
7. Urea cycle and disorders.
8. Galactosemia.
9. Lesch-nyhan syndrome.
10. HMP shunt pathway.
11. Electrophoretic pattern of norum servum protein.

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

12. Flame photometry
13. Beriberi
14. Nutritional importance of lipids
15 Beer-Lambert's law
16. Viscocity
17. Estimation of Lithium by ISE
18. Pernicious anemia
19. Coenzymes of Niacin
20. Biological Reference Intervab of Servum Electrolytes
21. Abnormal constituents of urine
22. Wald's Visual cycle
23. Importance of dietary ascorbic acid.

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