

Q.P.Code:

Reg.no.:.....

Third year BSc MLT Degree Examinations 2013

BACTERIOLOGY - Paper X

Time: 3 Hours

Total Marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays:

(2x10=20)

1. Enumerate the bacteria causing pyogenic meningitis. Write in detail the Laboratory diagnosis of Pneumococcal meningitis (2+8=10)
2. Classify the serological tests used to diagnose syphilis. How do you diagnose a case of syphilis in a laboratory (2+8=10)

Short notes:

(10x5=50)

3. CAMP test
4. Gas gangrene
5. Diarrhoeogenic Escherichia coli
6. Disc diffusion method of sensitivity tests
7. Laboratory diagnosis of Cholera
8. Processing of sputum for isolating Mycobacterium tuberculosis
9. Helicobacter pylori
10. Selective and Enrichment media for salmonella and Shigella
11. Preservation of bacteria.
12. Mycoplasma pneumoniae.

Answer briefly:

(10x3=30)

13. McFaydean reaction.
14. Diene Phenomenon
15. Significant bacteriuria
16. Chigger borne typhus
17. Rat bite fever
18. Sulphur granules
19. Lyme disease
20. Cell wall active antimicrobial agents
21. Lepromin test
22. ASO test

Q.P.Code:

Reg.no.:.....

Third year BSc MLT Degree Examinations 2013

BIOCHEMISTRY III – Paper IX

Time: 3 Hours

Total Marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays:

(2x10=20)

1. Discuss the basic principle of Chromatography. Write the detailed procedure for separation of urinary Amino acid by Chromatography. (2 + 8 = 10)
2. Describe the biosynthesis of Heme synthesis. Add a note on its regulation (8 + 2 = 10)

Short notes:

(10x5=50)

3. Bohr effect
4. Isoenzymes of Alkaline phosphatase
5. SDS-PAGE
6. Estimation of serum Bilirubin
7. Co-enzymes
8. Acute intermittent porphyria
9. Factors affecting the electrophoretic mobility
10. Common laboratory investigations for porphyrias
11. Affinity Chromatography
12. Urinary calculi analysis

Answer briefly:

(10x3=30)

13. Glucose -6-phosphate dehydrogenase
14. K_m Value of enzymes
15. Active site of enzymes
16. Suicide inhibition
17. Creatine kinase
18. Isoelectric focussing
19. Foetal Haemoglobin
20. Significance of Transaminases
21. Crigler-Najjar syndrome
22. Fluorescent immunoassay

Q.P.Code:

Reg.no.:.....

Third year BSc MLT Degree Examinations 2013
CYTOLOGY & TRANSFUSION TECHNOLOGY -Paper XI

Time:3Hours

TotalMarks:100

- Answer all questions
- Draw diagrams wherever necessary

Essays:

(2x10=20)

1. Explain the techniques of collection of various samples from respiratory tracts. Enumerate the advantages & disadvantages of each sample. (5+5=10)
2. Mention different components used in blood bank. Explain preparation & use of FFP. (3+ 7=10)

Short notes:

(10x5=50)

3. Cell block
4. Storage of blood in blood bank
5. FNAC
6. Fixatives used in cytology
7. Plasma pheresis
8. Papanicolaou staining
9. Bombay blood group
10. Cross matching
11. Blood grouping sera
12. Quality control in cytology

Answer briefly:

(10x3=30)

13. Lectins used in blood bank
14. Cell cycle
15. Mailing of smears in cytology
16. LISS
17. DU Antigen
18. Processing of fluids in cytology
19. Transfusion transmitted diseases
20. Pre-fixation of cytological specimens
21. Dangerous O group
22. Cytocentrifuge

Q.P.Code:

Reg.no.:.....

Third year BSc MLT Degree Examinations 2013

**ELECTRONICS, COMPUTER SCIENCE & BIOMEDICAL INSTRUMENTATION
TECHNOLOGY - Paper XII**

Time: 3 Hours

Total Marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays:

(2x10=20)

1. What is amplification. Explain the working of CE and CB configurations of amplifiers. (2+4+4=10)
2. What is the principle of Spectrophotometer. Explain its working with a neat block diagram. Write two differences between Spectrophotometer & colorimeter (3+5+2=10)

Short notes:

(10x5=50)

3. Electroencephalograph.
4. Blood gas analyzer.
5. Biological amplifier.
6. Surgical Diathermy.
7. Haemodialysis.
8. SPECT.
9. Audiometers.
10. Scintillation Detector.
11. Heart-Lung machine.
12. Defibrillators.

Answer briefly:

(10x3=30)

13. Two input devices.
14. LAN.
15. Refrigerators.
16. Hot air oven.
17. Multimeter.
18. Centrifuge.
19. Bridge Rectifier.
20. Radioactivity.
21. EMG.
22. ECG leads.
