

B.Sc. Allied Health Sciences Third Year (Semester-VI)

Medical Laboratory Technology (MLT)

January-2015 Examination

Time : 2.30 Hrs.

[Max. Marks : 80]

BIOCHEMISTRY

Q.P Code: AHS-105

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Discuss Structure and replication of DNA.
2. Describe the principal and types of electrophoresis. Explain the procedure for the separation of plasma proteins and mention its applications.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

3. Genetic code.
4. What is recombinant DNA technology and its application?
5. Radioisotopes of iodine and their clinical application.
6. Renal mechanism in acid base balance.
7. Vanden bergh reaction and its clinical significance.
8. What is hypothyroidism and hyperthyroidism? How is it detected?
9. What is metabolic acidosis? Mention its cause and biochemical findings in metabolic acidosis.
10. Southern blotting technique and application.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Applications of polymerase chain reaction.
12. What is anion gap? Mention 2 causes for increased anion gap.
13. Define creatinine clearance. What is the normal value?
14. Bone profile. Mention any 3 parameters.
15. What are restriction endonucleases? Give 2 examples.
16. Diagnostic enzymes of myocardial infarction.
17. What is Mean, Median and Mode.
18. Beer- lamberts law.
19. What is isoelectric PH? And its application.
20. Biological hazards of radioactivity.
21. Parameters estimated in non selective electrode.
22. Pituitary profile- mention any 3 hormones.

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Time : 2.30 Hrs.

[Max. Marks : 80]

SUBJECT: MICROBIOLOGY

Q.P Code: AHS-109

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

LONG ESSAY

2 X 10 = 20 Marks

1. Classify fungal infections. Describe the pathogenesis, clinical features and laboratory diagnosis of dermatophytic infections.
2. Enumerate the RNA viruses. Describe the pathogenesis, clinical features and laboratory diagnosis of HIV infection.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

3. Slide culture technique.
4. Laboratory diagnosis of hepatitis B infection.
5. Kyasanur forest disease.
6. Mycetoma.
7. Cryptococcus neoformans.
8. Molluscum contagiosum.
9. Cadidiasis.
10. Tissue culture technique.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Name three disinfectants that are virucidal.
12. Name three DNA viruses.
13. Measles vaccine.
14. Germ tube test.
15. Tzanck smear.
16. Negri bodies.
17. Draw a neat labeled diagram of the bacteriophage.
18. Name three species of aspergillus.
19. Haemagglutination inhibition test.
20. Name three viruses causing diarrhoea.
21. Koh mount.
22. Oral polio vaccine.

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Third Year (Semester-VI)

Medical Laboratory Technology (MLT)

January-2015 Examination

Time : 2.30 Hrs.

[Max. Marks : 80]

SUBJECT: PATHOLOGY

Q.P. Code: AHS-107

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

LONG ESSAY

2 X 10 = 20 Marks

1. Describe normal histology of breast. Write the steps involved in the fine needle aspiration of a benign breast lump.
2. List the type of blood groups. Write in details about the criteria of donor selection. Mention the reasons for rejection of a donor.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

3. Cytology of pleomorphic adenoma.
4. Sex chromatin.
5. Principle of flow cytometry and uses.
6. Describe an inverted microscope and mention its uses.
7. What are immortalized cells lines and mention the methods and steps involved in their storage.
8. Describe coomb's test in detail. Mention its indications?
9. Oncogenes.
10. What is antigen retrieval and describe the methods used.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Indications for autologous transfusion.
12. Advantages of fine needle aspiration cytology.
13. Mention three disadvantages of dimethyl sulfoxide in liquid nitrogen for storage of cell lines.
14. Bombay blood group.
15. Mention the parts of a chromosome.
16. Principle of immunofluorescence.
17. Mention advantages of slide method of blood grouping.
18. Mention the different banding techniques.
19. Mention the uses of image analysis software.
20. Mention the shelf life of the different components derived from one unit of whole blood.
21. Causes of positive direct coomb's test.
22. List three acute blood transfusion reactions.

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