

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

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

Examination

B.Sc. Medical Laboratory Technology

Time : 2.30 Hrs.

Paper-I

[Max. Marks : 80]

Subject: Applied aspects of Biochemistry

Q.P Code : J6060

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

LONG ESSAY

2 X 10 = 20 Marks

1. What are the various pre analytical and analytical and post analytical errors? Add a note on quality control.
2. What is chromatography? Write different types of chromatography. Explain any one type of chromatography in detail.

SHORT ESSAY (Answer any six)

6 X 5 = 30 Marks

3. Describe the procedure and importance of GTT.
4. List 5 acute phase proteins. Mention their functions.
5. Classify Liver function tests & add a note on the synthetic functions of Liver.
6. Define & explain Mean, Median & Mode with an example.
7. What is Vandenberg reaction? Explain the principle & write its significance
8. Explain any two methods of protein purification
9. Describe different electrophoresis bands of separation of lipoproteins.
10. Describe the biochemical parameters analyzed in CSF and its clinical significance

SHORT ANSWERS (Answer any ten)

10 X 3 = 30 Marks

11. Mention any two techniques to separate proteins.
12. What is Glycated Hemoglobin? Write its importance.
13. Give the Biological reference range of (1) SGOT (2) SGPT (3) Alkaline Phosphatase
14. Define Accuracy and precision.
15. Mention any two applications of SDS -PAGE.
16. What is Light's Criteria?
17. Write the principle of Colorimeter.
18. Write the principle of ELISA.
19. Mention any three enzymes of Liver function tests.
20. List 3 causes for hypoproteinemias.
21. List any 3 devices used in POCT.
22. List different types of laboratory audit.

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

September 2021 Examination

B.Sc. Medical Laboratory Technology

Time : 2.30 Hrs.

Paper-II

[Max. Marks : 80]

Subject: Applied aspects of Microbiology

Q.P Code : J6070

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

LONG ESSAY

2 X 10 = 20 Marks

1. Enumerate the pathogens that cause respiratory tract infections. Describe the clinical manifestations and laboratory diagnosis of Tuberculosis. (3+2+5)
2. List the blood borne infections acquired by the laboratory staff. Discuss the laboratory diagnosis of any one.

SHORT ESSAY (Answer any six)

6 X 5 = 30 Marks

3. Laboratory diagnosis of Tuberculosis
4. Culture Methods
5. Antibiotic sensitivity testing methods
6. Hot air oven – Principle, articles sterilized
7. Safe injection practices.
8. Urine culture
9. ELISA – Principle and its applications.
10. Blood Spill management.

SHORT ANSWERS (Answer any ten)

10 X 3 = 30 Marks

11. Define Enrichment media with examples
12. Name 3 uses of Sodium hypochlorite.
13. Draw a neat labelled diagram of Autoclave
14. Name 3 Catalase positive organisms.
15. Name 3 gram positive cocci.
16. Personal Protective Equipments
17. Name 3 virus causing diarrhoea
18. Draw a neat labelled diagram of ova of round worm.
19. Mention 3 applications of PCR
20. Name 3 capsulated organisms
21. Name 3 motile gram negative bacilli.
22. Mention the method by which following articles are sterilized Thermometer, Syringe, Culture media.

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

September 2021 Examination

B.Sc. Medical Laboratory Technology

Paper-III

[Max. Marks : 80]

Time : 2.30 Hrs.

Subject: Applied aspects of Pathology

Q.P Code : J6080

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

LONG ESSAY

2 X 10 = 20 Marks

1. Describe different modes of sample collections, transport, preservation and processing of body fluids.
2. Mention the source of cerebrospinal fluid (CSF) sample. Discuss CSF cytology in Inflammatory, Benign and Malignant diseases of the central nervous system.

SHORT ESSAY (Answer any six)

6 X 5 = 30 Marks

3. Discuss in brief functions of T and B lymphocytes.
4. Define biomedical waste management. Discuss their safe management of it.
5. Describe collection, preparation and staining of sputum for cytology.
6. Describe Delayed hypersensitivity reactions with example.
7. Preservation of fluids in cytology
8. Define benzidine test. Describe the procedure.
9. Describe urine analysis by strip method.
10. Describe pathogenesis of thyroiditis.

SHORT ANSWERS (Answer any ten)

10 X 3 = 30 Marks

11. Mention three conditions which show casts in urine.
12. Mention three delayed transfusion reactions.
13. Mention three antigen antibody mediated diseases.
14. What is Autoimmune disease.
15. What is warm antibody disease.
16. Mention three body fluids
17. Name 3 different modes of urine sample collections
18. What is arthus reactions.
19. Name the parts of Antigen.
20. Name the antibodies present in Pernicious anemia.
21. Name the principle of Ziehl Neelsen stain
22. Name 3 colour coding for biomedical waste management.