SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

September 2021 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. Write the normal blood glucose levels and explain the regulation of blood glucose.
2. Give an account on Principle, different types, instrumentation, procedure and applications of Electrophoresis.

SHORT ESSAY (Answer any six) **6 X 5 = 30 Marks**

3. List any 3 biochemical parameters analysed in pleural fluid and its clinical importance.
4. Classify renal function test & add a note on assessment of glomerular filtrate.
5. Define sensitivity & specificity & give an example.
6. Describe the importance of automation in clinical biochemistry laboratory.
7. Describe different electrophoresis bands of separation of lipoproteins.
8. Describe different biochemical indices used in diabetes mellitus.
9. Explain External Quality Assessment program (EQA) in clinical Biochemistry.
10. Explain Chromatography with respect to principle & application.

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

11 Define Mean & Median.
12 Write the reference range for (1) Serum Urea (2) FBS (3) PPBS
13 Define accuracy & precision.
14 What is Creatinine clearance test? Write its significance.
15 What is Light's Criteria?
16 Define Postanalytical errors and mention any two causes.
17 List any 3 devices used in POCT.
18 List any two techniques to separate proteins.
19 What is Microalbuminuria? List any two causes for microalbuminuria.
20 Define Laboratory audit.
21 Mention two applications of chromatography.
22 Define sensitivity & specificity

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September 2022 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. Define health care associated infection. Add a note on common types of health care associated infections. (2+8)
2. Define sterilization. Classify the sterilization methods and discuss in detail about moist heat sterilization (2+4+4)

SHORT ESSAY (Answer any six) **6 X 5 = 30 Marks**

3. ELISA – Principle and applications
4. Urine culture - Sample processing
5. Name the infections transmitted to health care workers by blood. Mention the preventive measures.
6. Blood spill management.
7. Antibiotic sensitivity testing methods.
8. Culture media – Classification with examples
9. PCR and its applications
10. Cold sterilization.

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

11. Safe injection practices.
12. Name any three standard precautions
13. Name 4 water borne pathogens.
14. Steps of Hand hygiene.
15. Draw a labelled diagram of ova of round worm
16. Name the 3 causative agents of respiratory tract infections among health care workers.
17. Name 3 gram negative bacilli.
18. Name 3 urease positive gram negative bacilli.
19. Name 3 organisms causing skin and soft tissue infections
20. Name 2 acid fast bacilli.
21. Name 3 modes of transmission of HIV.
22. Name 3 anaerobic culture methods.

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

September 2022 Examination

B.Sc. Medical Laboratory Technology

Time : 2.30 Hrs. **Paper-III** **[Max. Marks : 80]**

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 lymphocytes.
4. Define biomedical waste management. Discuss their safe management of it.
5. Describe collection, preparation and staining of sputum for cytology.
6. Describe type 2 hypersensitivity reactions with example.
7. Describe indications, contraindications and interpretation of semen analysis.
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.