# SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

#### (A DEEMED TO BE UNIVERSITY)

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

#### **March 2024 Examination**

**B.Sc. Medical Laboratory Technology** 

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

Subject: Applied aspects of Biochemistry O.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, analytical and post analytical variables. Add a note on the types and advantages of Quality control.
- 2. Give an account on Principle, different types, instrumentation, procedure and applications of Electrophoresis.

#### **SHORT ESSAY** (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$ 

- 3. What are Acute phase proteins? List any 4 with their clinical significance.
- 4. Define clearance test. Explain the various types of clearance tests...
- 5. Define Mean, Median, Mode, Standard Deviation (SD) & Coefficient of variation (% CV).
- 6. Explain briefly the advantages of Laboratory Accreditation
- 7. Give the principle and advantages of ISE
- 8. Describe the Biochemical parameters analyzed in Pleural fluid and give its clinical significance
- 9. Explain the process of Automation in a Clinical Biochemistry Laboratory
- 10. Classify Liver Function tests. Explain any four parameters in detail.

#### **SHORT ANSWERS** (Answer any Ten)

10 X 3 = 30 Marks

- 11. Principle of Flame Photometry
- 12. List 3 devices used in POCT
- 13. Microalbuminuria
- 14. List the parameters in diagnosing thyroid function disorder.
- 15. Mention the advantage of spectrophotometer compared to colorimeter
- 16. Glycated Hemoglobin and its significance
- 17. Write on the types of Audit in a Laboratory
- 18. Creatinine clearance test
- 19. Clinical significance of Ascetic fluid analysis
- 20. Define Mean & Median
- 21. Define Post analytical variables and mention any two of them.
- 22. Give the biological reference range of 1) SGOT 2) ALP 3) Total Bilirubin

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

March 2024 Examination

B.Sc. Medical Laboratory technology (MLT)

Subject: Applied Aspects of Pathology O.P Code: J6080

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

#### **LONG ESSAY**

Time: 2.30 Hrs.

2x10=20Marks

[Max. Marks: 80]

- 1. Mention the source of cerebrospinal fluid (CSF) sample. discuss CSF cytology in inflammatory, benign and malignant diseases of the central nervous system
- 2. Define hypersensitivity reactions. Describe type I hypersensitivity reaction with examples

## **SHORT ESSAY** (Answer any six)

6x5=30Marks

- 3. Describe indications, contraindications and interpretation of pleural fluid analysis
- 4. Describe pathogenesis pernicious anaemia
- 5. Describe collection, preparation and staining of sputum for cytology
- 6. Define biomedical waste management. Discuss their safe management of it
- 7. Describe microscopy of urinary sediment. write a note on urinary casts
- 8. Describe urine analysis by strip method
- 9. Describe pathogenesis of thyroiditis
- 10. Describe microscopy of urinary sediment. write a note on urinary casts

#### SHORT ANSWERS (Answer any ten)

10x3=30Marks

- 11. What are crystals? name the conditions associated with urinary crystals
- 12. List three differences between transudate and exudates
- 13. Mention three delayed transfusion reactions
- 14. Name three haemolytic anaemias
- 15. Define hypersensitivity reaction
- 16. Name the parts of antigen
- 17. What is arthus reaction
- 18. Name three different modes of urine collection
- 19. Name three renal function tests
- 20. Name the antibodies present in thyroiditis
- 21. What is autoimmune disease

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