

## SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY THIRUVANANTHAPURAM—695 011, INDIA.

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P&A.I/X/68/Syllabus/FCP/SCTIMST/2013

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## NOTICE

The syllabus for written test for selection to the post of **Technical Assistant (Lab)** - **Biochemistry** as approved by the Director is notified for the information of all concerned.

- 1. Sources and solutions for pre-analytical errors in patient sample analysis
- 2. Hemoglobin normal and abnormal types
- 3. Red cells and anemia
- 4. WBC count Significance in diseases
- 5. ESR Methods of measurement and significance
- 6. Blood smear staining methods
- 7. Buffers, pH, percentage solutions, molarity definition and preparation of solutions of defined molarity
- 8. Blood glucose assay principles, clinical significance of hyperglycemia
- 9. Renal and liver function test parameters estimation and interpretation
- 10. Assays of serum electrolytes methods and clinical significance
- 11. Blood gases assay methods and clinical interpretation
- 12. PT and APTT definition and measurements: Significance of INR.
- 13. Principles of centrifugation, calorimetry, spectro photometry, microscopy.
- 14. Internal and external quality control, Levy Jennings plot, coefficient of variation
- 15. Urine analysis and interpretation
- 16. Serum electrophoresis for immunoglobulin and clinical significance
- 17. Enzyme linked immune sorbent assay (ELISA), Immuno turbidimetry Principles
- 18. Lipoproteins as cardiac risk factors: LDL, HDL and Lp(a) normal levels and significance of variations
- 19. Reference values for biological variables; methods of calibration; definition of: accuracy, precision, sensitivity and specificity.

ACTING DY. DIRECTOR (ADMN.

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