State Exam Syllabus in Clinical Biochemistry and Endocrinology for Medical Laboratory Technicians

1. **Knowledge of the major cellular metabolic processes:** sugars, proteins, lipids and nucleotides

2. **Knowledge of the various tests performed at the laboratory,** with reference to the various stages of analysis: pre-analytical, analytical and postanalytical, as detailed below:

   2.1. **Pre-analytical stage:**
   - 2.1.1. Patient preparation
   - 2.1.2. Sample collection and handling
   - 2.1.3. Sample types
   - 2.1.4. Tube types and criteria for sample acceptance or rejection

   2.2. **Analytical stage:**
   - 2.2.1. Tests for diagnosis and follow up of diabetes and sugar metabolism
   - 2.2.2. Tests for evaluation of protein and lipid metabolism
   - 2.2.3. Tests for evaluation of renal function
   - 2.2.4. Tests for evaluation of liver function
   - 2.2.5. Pancreas
   - 2.2.6. Gallbladder
   - 2.2.7. Tests for determination of metal levels in the body fluids
   - 2.2.8. Tests for determination of blood gases
   - 2.2.9. Urinalysis
   - 2.2.10. Biochemical tests of CSF
   - 2.2.11. Common tests for evaluation of thyroid function
   - 2.2.12. Fertility tests
   - 2.2.13. Tests for evaluation of adrenal and hypophyseal function
   - 2.2.14. Biochemistry and endocrinology tests defined as urgent
   - 2.2.15. Rerun, Reflex tests

   2.3. **Post-analytical stage:**
   - 2.3.1. Reporting critical life threatening results
   - 2.3.2. Approval of results
2.3.3. Delta check

2.4. **Quality control**

2.4.1. Principles and monitoring of internal quality control in biochemistry and endocrinology tests.

**Bibliography**