

# Dry Biochemistry



The Department has a well equipped Clinical Biochemistry laboratory attached to Saveetha Medical College Hospital, which provides quality and timely reports to the various out and in patients attending SMCH.

Clinical Biochemistry lab runs Quality control and routine laboratory procedures to ensure quality reports. The laboratory services run 24x7 throughout the year. Advanced methods like Dry Chemistry, Wet chemistry, Immunochemistry, ion selective electrodes

and HPLC are used to analyse various parameters. The turnaround time is less than 2 hours for most of the analytes performed in the laboratory to ensure patient care is not delayed and treatment is offered on the same day.

The VITROS® 5600- Ortho Clinical Diagnostics- Chemistry, Immunoassay, and Integrated systems reduce potential for error and the need for repeat testing to increase first pass yield, decrease costs, and improve turnaround time. VITROS® Systems do not require water, reducing costs and waste disposal while remaining environmentally friendly. 96.5% first pass yield (delivering results without user intervention). Integrated system is designed to help you efficiently consolidate critical testing to deliver quality and timely results to the physicians and patients who depend on you. It provides a comprehensive clinical chemistry and immunoassay menu on a single integrated platform, delivering high quality and productivity.

**Laboratory services offered:**

S.No.	Health Profiles	Parameters included in the profile
1	Basic biochemistry investigations	Random ,Fasting & Post prandial glucose, Urea, Creatinine, uric acid, Liver function tests, Lipid profile, Calcium, Phosphorous, Thyroid profile , CK – Total, CK –MB, Electrolytes, GTT
2	Diabetic Profile	Fasting blood sugar, Post prandial blood sugar, HbA1c

3	<b>Renal function tests (RFT)</b>	<b>Urea, Creatinine, uric acid</b>
4	<b>Liver function tests (LFT)</b>	<b>Total bilirubin, Direct Bilirubin, Total Protein, Albumin, ALT, AST, ALP, Albumin/Globulin ratio</b>
5	<b>Lipid Profile</b>	<b>Total Cholesterol, TGL, HDL, VLDL, LDL</b>
6	<b>Electrolytes</b>	<b>Sodium, Potassium, Chloride, Bicarbonate</b>
7	<b>Thyroid profile</b>	<b>TSH, fT3, fT4</b>
8	<b>Urine examination</b>	<b>24hrs urine protein, spot urinary creatinine, Sodium, Potassium, Calcium</b>
9	<b>ABG – Arterial Blood Gas analysis</b>	<b>Blood pH, SpO<sub>2</sub>, PCO<sub>2</sub>, Bicarbonate</b>

**Special investigations done in Biochemistry laboratory:**

<b>Hormones</b>	<b>FSH , LH, Beta HCG, Prolactin , fasting Insulin</b>
<b>Tumor markers</b>	<b>CA 125, PSA , Calcitriol</b>
<b>Cardiac markers</b>	<b>Toptal CK, CK MB, Troponin I Quantification.</b>
<b>Special investigations</b>	<b>Folic acid, B12, Vitamin D, Ferritin</b>
<b>Stone analysis</b>	<b>Gall stones, renal calculi, pancreatic, submandibular for the presence of cholesterol, calcium, oxalates, uric acid, bilirubin, phosphates.</b>
<b>Urine examination</b>	<b>Urine micro albumin , urine cortisol</b>
<b>Other body fluids</b> <b>CSF, Pleural fluid, peritoneal fluid, pericardial fluid, synovial fluid</b>	<b>Glucose, protein, albumin, creatinine, uric acid, amylase, lipase, adenosine deaminase.</b>