



The VitaFlash Laboratory is a secondary-category laboratory that performs tests under clinical microscopy, hematology, clinical chemistry, microbiology, and immunohematology.

LABORATORY TESTS AVAILABLE

HEMATOLOGY:

❖ **Routine Hematology (CBC)**

- The complete blood count (CBC) is one of the most common blood tests. It is often done as part of a routine checkup. This test measures many different parts of your blood, including red blood cells, white blood cells, and platelets. This can help give an indication of your general health, as well as provide important clues about certain health problems you may have.

❖ **Hemoglobin Test**

- Hemoglobin is a protein found in red blood cells that transports oxygen to your organs and tissues while also transporting carbon dioxide from your organs and tissues back to your lungs. A hemoglobin test measures the amount of hemoglobin in your blood. The test is most commonly used to detect anemia (lower than normal hemoglobin levels), which might make you feel fatigued, dizzy or weak.

❖ **Red Cell Morphology**

- Red cell morphology, the physical characteristics and appearance of red blood cells (erythrocytes) when examined under a microscope. It involves the assessment of the size, shape, color, and other structural features of these blood cells. Red cell morphology is an important aspect of laboratory analysis, particularly in the field of hematology, and it provides valuable information for diagnosing and monitoring various blood disorders and systemic conditions.

❖ **Qualitative platelet determination**

- Qualitative platelet determination involves assessing the function and characteristics of platelets in the blood. This is typically done through additional laboratory tests, such as platelet aggregation studies or flow cytometry, to evaluate platelet adhesion, activation, and aggregation. These tests help identify any abnormalities or functional defects in platelets that may affect their ability to clot properly.

CLINICAL MICROSCOPY

❖ **Semenalysis Test**

- The quantity and quality of semen and sperm are measured by a semen analysis, often known as a sperm count. A semen study can determine

whether your vasectomy was successful and whether an issue with sperm or semen is likely the cause of your infertility.

❖ **Routine Urinalysis**

- The purpose of a urinalysis test is to check for abnormalities in the appearance or composition of your urine. It is commonly used for screening, diagnosing, and monitoring different health conditions, such as kidney problems, diabetes, or UTIs. A urinalysis is a test that checks several components of a urine sample. Visual, chemical, and microscopic tests are all part of a complete urinalysis.

❖ **Routine Fecalalysis**

- Routine Fecalalysis is a standard diagnostic procedure integral to comprehensive health assessments. This analysis evaluates stool composition, including blood, mucus, parasites, bacteria, and undigested food particles. By assessing these parameters, healthcare professionals gain insights into gastrointestinal health, aiding in the early detection of potential issues. This non-invasive test is routinely performed to monitor overall health, allowing for proactive intervention and effective management of gastrointestinal conditions.

CLINICAL CHEMISTRY

❖ **Electrolyte Panel Test**

- An electrolyte panel is a blood test that measures the levels of essential electrolytes in the body such as sodium, potassium, and chloride. These electrolytes are vital for maintaining proper fluid balance, nerve function, muscle contraction, and overall cellular activity. This test assesses the body's hydration status and identifies any imbalances that may indicate underlying health issues.

❖ **Cholesterol Determination Test (Lipid Panel)**

- Low-density lipoprotein, or "bad" cholesterol, is measured by the cholesterol test. Elevated low-density lipoprotein (LDL) cholesterol can cause plaque accumulation in the arteries, ultimately leading to heart disease or stroke.

❖ **Blood Urea Nitrogen Test**

- An assessment of your blood urea nitrogen (BUN) level provides vital information about the health of your kidneys. Your blood's level of urea nitrogen is determined by a BUN test.

MICROBIOLOGY

❖ **CSF Culture**

- Cerebrospinal fluid (CSF) culture is a laboratory test performed to detect and identify the presence of microorganisms, such as bacteria or fungi, in the cerebrospinal fluid that surrounds the brain and spinal cord. CSF is a

clear, colorless fluid that circulates in and around the brain and spinal cord, providing essential support and protection for these structures.

❖ **KOH Mount Test**

- The KOH mount test is conducted for the diagnosis of fungal infections of the skin or nails. The afflicted area's cells are taken out, put on a slide with a potassium hydroxide solution, and inspected under a microscope for indications of fungus.

❖ **Gram Stain**

- Gram stain is a method of staining used to classify bacterial species into two large groups: gram-positive bacteria and gram-negative bacteria. The bacteria are differentiated through a series of staining and decolorization steps.

IMMUNOHEMATOLOGY

❖ **Blood Typing**

- Blood typing is a method to determine what blood type you have. The purpose of blood typing is to enable safe blood donation and transfusion. Knowing your type and compatibility is crucial if you ever need a transfusion