**NAME: BELEMA SUCCESS**

**MATRIC NO: 18/MHS02/054**

**ASSIGNMENT TITLE: RENAL PHYSIOLOGY**

**QUESTION: WRITE SHORT NOTE ON URINALYSIS**

A urinalysis is a simple test that looks at a small sample of your urine.  It can help find problems that need treatment, including infections or kidney problems.  It can also help find serious diseases in the early stages, like [**kidney disease**](https://www.kidney.org/kidneydisease/aboutckd), [**diabetes**](https://www.kidney.org/atoz/content/Diabetes-and-Your-Eyes-Heart-Nerves-Feet-and-Kidneys), or liver disease.  A urinalysis is also called a “urine test.”

A urine test can include three parts:

**Physical examination:**  The urine will be looked at for color and clearness. Blood may make urine look red or the color of tea or cola. An infection may make urine look cloudy. Foamy urine can be a sign of kidney problems.

**Microscopic examination:**  Microscopic examination of centrifuged sediment of urine is useful in determining the renal diseases. A small amount of urine will be looked at under a microscope to check for things that do not belong in normal urine that cannot be seen with the naked eye, including red blood cells, white blood cells (or pus cells), bacteria (germs), or crystals (which are formed from chemicals in the urine and may eventually get bigger and become kidney stones).

**Chemical Analysis:**  Chemical analysis of urine helps to determine the presence of abnormal constituents of urine or presence of normal constituents in abnormal quantity. Both the findings reveal the presence of renal abnormality. Following are the common chemical tests of urine:

* **Acidity (pH)** is a measure of the amount of acid in the urine. A pH that is above normal may be a sign of kidney stones, urinary infections, kidney problems, or other disorders.
* **Protein** is an important building block in the body. Everyone has protein in their blood.  But it should only be in your blood, not your urine.  Your kidneys play a role in this process.  Healthy kidneys remove waste products and extra water from your blood, but leave behind the things your body needs, like protein.  When kidneys are injured, protein leaks into your urine. Having protein in your urine suggests that your kidney's filtering units are damaged by kidney disease.
* **Glucose (sugar)** is usually a sign of diabetes.
* **White blood cells (pus cells)** are signs of infection.
* **Bilirubin**is a waste product from the breakdown of old red blood cells.  It is normally removed from the blood by the liver.  Its presence in the urine may be a sign of liver disease.
* **Blood** can It can be a sign of an infection, a kidney problem, certain medicines, or even heavy exercise.  Finding blood in the urine requires further testing.  It does not mean you have a serious medical problem.

A urinalysis can help to detect many diseases before you feel symptoms. Finding and treating a problem early can help keep serious diseases from getting worse.