Name; JacksonAbara Emmanuella Odegwa Department;Nursing Matric No; 18/MHS07/027 Course code;PHS 212 Assignment; Write a short note in 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, diabetes, or liver disease. A urinalysis is also called a "urine test."

Because toxins and excess fluid are removed from the body in urine, analysis of urine can provide important health clues. Urinalysis can be used to detect certain diseases, such as diabetes, gout, and other metabolic disorders, as well as kidney disease. It can also be used to uncover evidence of drug abuse. Accurate urinalysis may require a 'clean catch' of urine. Before a person gives a urine sample, he or she should drink plenty of fluids and wait until 1 or 2 seconds into the flow of urine before catching the urine in the receptacle. For some tests it is important to get the first urine of the day, which contains the highest concentration of toxins and other substances to be analyzed. For other tests, a 24-hour collection of urine may be needed.

A urine test can include three parts:

- Visual exam; 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 exam; 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).

- Dipstick test; A dipstick is a thin, plastic stick with strips of chemicals on it. It is dipped into the urine. The strips change color if a substance is present at a level that is above normal. . Some of the things a dipstick examination can check for include:
 - 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.