Serology, Blood & Bodily Fluids

Blood

circulating tissue which is crucial for tissue protection and structure; transports oxygen and carbon dioxide

Plasma

protein-salt solution; contains cellular blood components

Albumin

protein created by the liver which serves as the main protein of human blood plasma

Proteins

nitrogenous, organic compounds which function as structural components, antibodies and enzymes

Fibrinogen

soluble protein produced by the enzyme thrombin

Globulins

proteins created by the liver or immune system which serve as antibodies and transporters

Serum

liquid blood component which contains hormones, antibodies and antigens

Hormones

regulatory elements which stimulate the body to perform a certain action

Antibodies

proteins produced by the immune system to fight a specific foreign or toxic substance

Antigen

foreign or toxic substances found in the body

Red Blood Cells

transport oxygen and carbon dioxide throughout the body; also known as erythrocytes

Hemoglobin

iron-containing protein responsible for binding to oxygen

White Blood Cells

fight off infection and disease as well as repair cells; also known as leuocytes

Serology, Blood & Bodily Fluids

Neutrophils

fight bacterial infections and creates pus to cleanse the infected area

B-cells/T-cells

create antibodies and regulates the response of the immune system

Natural Killer Cells

circulate the body to destroy cells which do NOT exhibit the appropriate characteristics

Monocytes

assist in the removal of dead or damaged cells

Platelets

serve as a clotting factor to repair damaged blood vessels; also known as thrombocytes

Bone Marrow

substance which fills the inside cavity of bones and produces blood cells

False-positive Reading

results from a presumptive test in which the test tested positive for a specific substance without the substance actually being present

Luminol

solution used to react with the iron in hemoglobin which has been left behind at a crime scene

Florescence

occurs when a material absorbs light and reflects it in a different wavelength

Immunoassay

process of using antigens and antibodies to detect or measure specific proteins found in the blood

Agglutination

clumping together of red blood cells in reaction to being introduced to a specific substance such as anti-sera

Class Evidence

evidence which can connect a suspect to a general group

FTA Paper

used for storing and protecting nucleic acids

Serology, Blood & Bodily Fluids

Saliva

watery liquid found in the mouth which provides lubrication and assists in digestion

Amylase

enzyme found in saliva used for breaking down starch

Glucose

simple sugar which serves as an energy source

Semen

male reproductive fluid which serves as a carrier for spermatozoa; contains proteins, amino acids, hormones, carbohydrates and other organic and inorganic compounds

Urine

watery substance in which bodies eliminate soluble waste products

Vitreous Humor

gel-like fluid found in the eye behind the lens