I: LEUKOCYTES, VOLUME, ERYTHROCYTES, SUSPENDED, THROMBOCYTES, TISSUE, PLASMA

Blood is a specialized biological fluid (technically a TISSUE[1]) consisting of red blood cells (also called RBCs or ERYTHROCYTES[2]), white blood cells (also called WBCs or LEUKOCYTES[3]) and platelets (also called THROMBOCYTES[4]) suspended in a complex fluid medium known as blood PLASMA[5] - it is the liquid component of blood, in which the blood cells are SUSPENDED[6]. It makes up about 55% of total blood VOLUME[7].

II: CLOTTING, HEMOGLOBIN, PATHOGENS, OXYGEN, PREVENT, IMMUNE

Erythrocytes (45.0% of blood volume) contain the blood's HEMOGLOBIN[1] which (when oxygenated) gives blood its red color. They distribute OXYGEN[2].

Leukocytes (1.0% of blood volume) are part of the IMMUNE[3] system; they destroy and remove old or aberrant cells and cellular debris, as well as attack infectious agents (PATHOGENS[4]) and foreign substances.

Thrombocytes (>1.0% of blood volume) are responsible for blood CLOTTING[5] (coagulation), which stops blood from leaving the body and also helps to PREVENT[6] bacteria from entering the body.

III: PRESSURE, BANKS, TRANSFUSION, HEMORRHAGE, COMPATIBLE, ARTERIES, OBSTRUCT, CONDITIONS, WOUNDS, DEFICIENCY

Disorders of volume: HEMORRHAGE/WOUNDS[1] can cause major blood loss. Damage to the internal organs can cause severe internal bleeding or HEMORRHAGE[2]. Anemia is a DEFICIENCY[3] of red blood cells and/or hemoglobin; it can require blood TRANSFUSION[4]. Several countries have blood BANKS[5] to fill the demand for transfusable blood. A person receiving a blood transfusion must have a blood type COMPATIBLE[6] with that of the donor.

Disorders of circulation: atherosclerosis reduces the carrying capacity of ARTERIES[7]. It is a potential consequence of high blood PRESSURE[8] (hypertension), excess of circulating lipids (hyperlipidemia), and diabetes mellitus. Thrombosis is unregulated coagulation which can OBSTRUCT[9] vessels. The consequences of circulatory insufficiency can create many medical CONDITIONS[10] such as ischemia, tissue necrosis and gangrene.

IV: SEPSIS, TRANSMITTED, HEMOPHILIA, MALARIA, HEPATITIS, MINOR

Disorders of coagulation: HEMOPHILIA[1] is a genetic illness that causes dysfunction in one of the blood's clotting mechanisms. This can allow otherwise MINOR[2] wounds to be life-threatening.

Infectious disorders of blood: HIV, the virus which causes AIDS, is TRANSMITTED[3] through contact between blood, semen, or the bodily secretions of an infected person. HEPATITIS[4] B and C are transmitted primarily through blood contact.

Bacterial infection of the blood: this is bacteremia or SEPSIS[5]. Viral infection is viremia. MALARIA[6] is a blood-borne parasitic infection.