Blood Typing means to determine the blood group of a person. It is determined by the presence of an antigen on the surface of Red Blood cells and the presence or absence of antibodies in the blood.

There are two most widely used blood grouping systems used worldwide; ABO blood group system and RH blood group.

ABO Blood Group system determines the blood group on the basis of presence of two antigens A or B or both on red blood cells surface while RH Blood Group System tells us about the positive or negative of the antigen. There are four Blood Groups based on the interpretation of these systems. These are A, B, AB and O. Blood group A has A antigen, blood group B has B antigen, blood group AB has both A and B antigen while Blood group has no antigen.

These blood groups are important in case of blood transfusion as only same blood group is advised and safe for transfusion. In case of incompatibility adverse transfusion reactions will occur. For example, If a blood group A person receives a blood group B, his body will recognise this blood group B as a foreign agent and will immediately produce antibodies against this foreign intruder and this will result in a severe and adverse reaction in the body.

In order to prevent this preventable and lethal complication, blood groups are matched before transfusions and only same blood is transferred to the recipient.

Universal Donors are the person whose Blood Group is O- and they can donate blood to any other blood group as these have no antigen on their surface. .

Universal Recipient are the person whose Blood Group is AB+ and they can receive blood from any other blood group.

