

### ACTIVITY 3: BLOOD TYPING

#### I. ABO FORWARD GROUPING AND RH TYPING

##### A. Slide Method



Reaction:                  +                                0                                +        
Antigen/s detected:       A antigen        
ABO & Rh Blood Group:       A Rh Positive or A+      

#### POST-LABORATORY QUESTIONS:

1. What is an antiserum?

- It is a serum commonly used in blood typing and has three variations with different antibodies: anti-A, anti-B, and anti-D. These antibodies react with the antigens of a blood sample's red blood cells. If it triggers agglutination or not, it relatively indicates a positive or negative reaction—proving what blood type the patient has.

2. What kind of antigen will anti-A detect? Anti-B?

- Anti-A will detect an A antigen, while anti-B will detect a B antigen.

3. When is blood typing ordered?

- Checking a donor and patient's blood types is done prior to any kind of donation such as blood and organ donation. This is to confirm whether the donor's blood or any organ is compatible or not to the patient.

4. Name the common causes of false positive and false negative results in ABO Testing.

- A false positive result can be acquired by either of, but not limited to the following: contaminated equipment, anti-sera or blood sample, improperly stored or hemolyzed blood sample, over-centrifugation or under-centrifugation, and wrongly interpreted and recorded result.

On the other hand, false negative results are caused by wrong blood cell to serum antibody ratio, improperly stored or hemolyzed blood samples, over-centrifugation or under-centrifugation, and wrongly interpreted and recorded results.

## 5. What is Rh Typing?

- In Rhesus (Rh) typing, a blood sample is confirmed whether it contains an Rh factor or not. Rh factor is a genetically inherited protein attached to some patients' red blood cell surface. If a patient's RBC has it, he or she is Rh positive (+). Otherwise, he or she is Rh negative (-). This is observed in the blood type name after ABO blood groups like A+, B-, O+, and many more.