

### ACTIVITY 3: BLOOD TYPING

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

##### A. Slide Method



Reaction:     + Positive agglutination            No agglutination            + Positive agglutination  
Antigen/s detected: A and Rh  
ABO & Rh Blood Group: A+

#### POST-LABORATORY QUESTIONS:

1. What is an antiserum?  
- *Blood serum contains antibodies against an infectious agent or a toxic agent. It serves in ABO typing, which is used to identify blood groups.*
2. What kind of antigen will anti-A detect? Anti-B?  
- *Anti A serum detects A antigen and Anti B serum detects B antigen.*
3. When is blood typing ordered?  
- *When a person becomes a candidate for an organ, tissue, or bone marrow transplant, or when a person decides to become a donor, it may require blood typing. It's one of the first of many tests done to see whether a possible donor and receiver are a good match.*
4. Name the common causes of false positive and false negative results in ABO Testing.
  - **False Negative Results**
    - i. *High Concentrations of A or B blood group substance in the serum can neutralize the reagents used and cause false negative reactions*
    - ii. *Testing before reaching detectable levels of hCG will yield false negative results.*
    - iii. *Undiluted serum specimens because of high levels of CRP (antigen excess)*
  - **False Positive Results**
    - i. *Patients can occasionally present with antibodies to the dyes used for the forward typing reagents which may cause false positive reactions*
    - ii. *Serum specimens are lipemic, hemolyzed or heavily contaminated with bacteria.*
    - iii. *If the reaction time is longer than 2 minutes, a false positive result may also be produced from a drying effect*

5. What is Rh Typing?

- *Rhesus (Rh) typing determines if you have a protein on the outer layer of your red blood cells called the Rh factor. You are Rh negative if you do not have Rh factor in your blood. You are Rh positive if you have Rh factor in your blood. The majority of individuals are Rh positive.*

## **Blood Typing**

Name of Patient: Altair John R. Egos

Date of Birth: 09/22/2002

Age: 19

Sex: Male

Name of test: Blood Typing

Result: "A" Rh D Positive

Reference range: A positive (+, 0 , +)

Interpretation: The red blood cells has A antigens with anti-B antibodies in the plasma. Rh antigen is present.

Name of Medical Technologist: Radelene Espraguera

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Time performed: 04:36 PM