**Name Muhammad uqail Nawaz**

**ID# 13623**

**Subject blood bank**

**Program BS MLT6th**

**Instructor name Mam Huma Imtiaz**

**Date 21/04/2020**

**Q1: A 25 years old lady, Caroline had just given birth to a still-born child, needed a blood transfusion. Although she was transfused with ABO compatible blood from her husband, Joseph, she still experienced an adverse reaction to the transfusion. The same hemolytic reaction resulted in fetal death. How can you explain this condition? What is the reason behind the child death and RBCs destruction?**

**Answer 1.**

Neonatal death occurs because of RH incompatibility. In the above case it is given that the child blood group is same as that of his father and is in complete contrast of the mother blood group as a result of mother immune system produce Antibodies against child Red blood cells which lead to the destruction of RBCs Known as hemolysis. Due to this Hemolysis the death of baby occurs. In other words this is RH-Incompatibility that causes the death of the baby.

## Q2.

**Explain the concept of single donor platelets and random donor platelets in own words.**

**Answer**

**Random donor Concentration:**

* When platelets are separated from whole blood. Of the donor.
* Platelets are removing from whole blood through centrifugation with in four hours after donation.
* Volume should 50 ml.
* Storage temperature is 22cͦ - 24 cͦ

**Single donor Concentration:**

* When platelets are separated from donor through by a machine Aphaeresis.
* We can obtain 300 ml of platelets from one donor through this process.

And these platelets are called single donor platelets single donor platelets.

* Single donor platelets are more powerful then random donor platelets.
* One unite of single donor platelets is equal to 6 – 8 units of Random donor platelets.

**Q3.**

**Solve the following table.**

Answer:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Reaction of cells tested with | | Reaction of serum tested against | | ABO Group |
|  | Anti-A | Anti-B | A-Cell | B-cell |  |
| 01 | O | O | + | + | ***O*** |
| 02 | + | O | O | + | ***A*** |
| 03 | O | + | + | O | ***B*** |
| 04 | + | + | O | O | ***AB*** |

The End