*NAME: HAMZA*

*ID NO 14081*

*DEPARTMENT ALLIED HEALTH SCIENCE(BS MLT6th.Smstr*

*PAPER BLOOD BANKING*

*SUBMITTED TO Mam Huma Imtiaz*

Q No.1.

ANSWER.1

*The RBCs destruction occur due to blood transfusion when the mother blood RH is negative and father RH is positive blood, so her immune system will make antibodies which attack all people have different blood group and different RH ( A,B.AB or O )*

*OR*

*The RH group of lady caroline is negitive while her husband RH group is positive mean there RH blood are incompatible that cases baby death in the fetus and Reaction occur due to RH incompatibility*

*So there can be a problem if the mother and father have separate blood group and different RH the RBC destruction will be occur .when the mother RH is negative and while the father RH is positive . if the baby RBC cross the placenta if the RH negative mother immune see the RH positive baby RBCs .so her antibodies make to fight destruction occur and also fetal death .*

Q No.2. 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 donor*
* *single* I*n random donor platelet concentrate produce from one unit of blood collected from a donor*
* *( RDP )random donor platelets is collected from the whole blood as known is random donor platelets*
* *Volume up to 50 ml*
* *And storage temperature is 22 degree centigrade to 24 degree centigrade*
* *Each unit of platelets may elevated from five thousand to ten thousand ul.*
* *Platelets are removing from whole blood through centrifugation with in four hours after donation.*

# SINGLE DONOR CONCENTRATION:

* *(SDP) single donor platelets are more progressive then RDP.*
* *one unit of single donar platelet is equal 6……8 unit of random donor platelet.*
* *Only platelets are collected from a donor by a aphaeresis process and aphaeresis is machine it is used different type of cell separation .*
* *But the storage temperature of single donor platelets 22 C……24c .*
* *shelf life of five days.*

*INDICATION:*

* *A dysfunction*
* *leukemia*
* *mylodysplasia*
* *Or a plastic anemia etc.*

*Q No. 3:Solve the following table.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Reaction of cell tested with* | | *Reaction of serum tested against* | | *ABO groups* |
|  | | *Anti .A* | *Anti. B* | *A cells* | *B cells* |  |
| *1* | | *0* | *0* | *+* | *+* | *O* |
| *2* | | *+* | *0* | *0* | *+* | *A* |
| *3* | | *0* | *+* | *+* | *0* | *B* |
| *4* | | *+* | *+* | *0* | *0* | *AB* |

*while in the reverse method is present the corresponding antigen must be absent.*

*By the forward method which antigen is present the corresponding antibody must be absent*