STUDENT NAME:……………………………………………

NUMBER:…………………………………………..

**Q1-Chose the correct answer:** [](http://www.google.com.sa/imgres?imgurl=http://www.ksu.edu.sa/sites/KSUArabic/KSUPD/Pic/KSULogo/ksuBlackLogo.jpg&imgrefurl=http://www.ksu.edu.sa/sites/KSUArabic/KSUPD/Pages/download.aspx&usg=__61lwiyLYiB6Kldqbnwr0wc34esc=&h=1181&w=1181&sz=326&hl=ar&start=2&zoom=1&tbnid=j6gQhQ93j3UeLM:&tbnh=150&tbnw=150&ei=X1-ITYKDPIS00QG46InDDg&prev=/images?q=ksu+logo&um=1&hl=ar&safe=active&sa=N&biw=1419&bih=673&tbs=isch:1&um=1&itbs=1)

1-The term used when blood is collected from a patient for medical reasons:

a- directed donor b- autologous donation

c- Therapeutic donation d- volunteer donation

2-SAGM, it is optimal additive solution added to RBCs because:

A-increased period of expired RBCs. b- Allows removal of all plasma

c- Less viscous product. d- All the above.

3- All of the following statements are TRUE regarding the Anti-A1 EXCEPT:

a- prepared from *Dolichos biflorus* seeds b- distinction between A1 and the other subgroups

c- it is based on agglutination of B cells with lectin anti-A1 d-It iscold Antibody.

4-Which of the following results is discrepant? Anti-A= nag; anti-B= 4+; A cells= nag; B cells= nag

a- Negative B cells b- Negative A1 cells

c- No problem with this typing d-all result false.

5-Antibody Elution techniques are used to remove elutes Ab from antigens by:

A-ionic strength b- proteolytic enzymes

C-AHG reagent d-bovine albumin

**Q2- True or False:**

1-albumin is added to closer RBC together so IgG antibodies sensitizing the RBCs & forming agglutination ( )

2-To check Du antigen and confirm the negative Rh cells we can used Coombs test. ( )

3-Rh, Kidd and Lewis antibodies react more easily under low –ionic strength techniques ( )

4- In blood bank they can storage RBCs for a year at -80C ( )

5-the donors with diabetes are permanent rejected ( )

**Q3-compare between direct and indirect antiglobulin techniques?**

**Q4-what is the principle of enzyme technique?**

**Q5- Case study:**

B-55 years man under surgery and he have bleeding ,he need immediately blood transfusion after blood bank technologist doing cross match for him with donor sample the result was as the below table .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **tubes** | **Saline at R.T** | **Saline at 37c** | **Indirect coombs** | **Albumin** |
| **result** | **-ve** | **-ve** | **+ve** | **+ve** |

-We can give him this unit or not, interpretation the result?

**Q6-PRACTICAL PROCEDURE:**

-You are provided with cell suspension from patient X. Identify the genotype. Write the results and comments clearly.

GOOD LUCK ☺