

00292

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY**

**Term-End Examination**

**December, 2011**

**BAHI-003 : IMMUNO-HAEMATOLOGY AND  
BLOOD BANKING**

*Time : 3 hours*

*Maximum Marks : 70*

**PART - A (Marks 40)**

1. (a) Fill in the blanks. **1x5=5**
- (i) \_\_\_\_\_ is injected into the skin for local anaesthesia.
  - (ii) In exchange transfusion due to Rh incompatibility, the cross match can be done using \_\_\_\_\_ instead of Baby's blood.
  - (iii) Coomb's Serum is \_\_\_\_\_.
  - (iv) The optimum storage temperature for FFP is \_\_\_\_\_.
  - (v) \_\_\_\_\_ is the storage life span of platelet concentrate.
- (b) Write **TRUE/FALSE** for the following : **1x5=5**
- (i) Naturally occurring Antibodies are IgM and immune antibodies are IgG
  - (ii) Sodium azide is the preservative of Antisera.

- (iii) In emergency case we can bleed one healthy donor in every month.
- (iv) The removal of antibodies from Red blood cells is accomplished through ilution.
- (v) 22 gauge needle is used for drawing of blood in blood bank from donor.

2. Write short notes on the following : 2x5=10

- (a) Immediate Blood Transfusion Reaction.
- (b) Subgroups of 'A' blood group.
- (c) ABO blood grouping.
- (d) Disposal of blood and laboratory waste material.
- (e) Autologous blood transfusion.

3. Write short notes on *any four* of the following : 5x4=20

- (a) Apheresis
- (b) Rh blood grouping
- (c) Bombay blood group
- (d) Blood grouping antisera
- (e) Erythroblastosis Foetalis (HDN)

**PART - B (Marks 30)**

4. Answer *any three* questions from the following :
- (a) What are the laboratory tests usually done to screen donated blood ? Name atleast five such tests and indicate the reason why each test is done ? 6+2+2=10
  - (b) Name the anticoagulant/preservatives used most commonly for blood collected by blood banks for blood transfusion.
  - (c) Describe the optimum conditions for storage of blood in the blood bank, and the usual maximal period of storage.
5. Describe the organisation and planning of Blood Bank. 10
6. (a) Enlist the available blood components. 2  
(b) Describe preparations of :  
(i) Fresh blood and Fresh components 6  
(ii) Backed cells 2
7. (a) Define compatibility test done before transfusion. 1  
(b) Enlist different types of cross matches. Describe in detail any one method. 5  
(c) List the possible causes of false agglutination in cross match. 2  
(d) List *any four* blood components used for transfusion and give one use of each. 2
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