

B.Sc. IN MEDICAL LABORATORY TECHNOLOGY

Term-End Examination

June, 2014

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

Time : 3 Hours

Maximum Marks : 70

PART - A

1. (a) Fill in the blanks. 1x5=5
- (i) Cold antibodies usually react best at _____ °C.
 - (ii) The substance used for subgrouping for 'A' group is called _____ .
 - (iii) The volume of CPD - A solution for collecting 350 ml of blood is _____ .
 - (iv) Antibodies are produced by _____ cell.
 - (v) IgM is _____ antibody.
- (b) Write **True/False** for the following statements : 1x5=5
- (i) Mother who is 'A' group and father 'B' group can have children of all four blood group.
 - (ii) In an emergency a healthy donor can donate blood every month.
 - (iii) Blood stored in CPDA solution at 4°C can be used for transfusion even after 21 days.
 - (iv) Rouleaux formation can give false compatibility test.
 - (v) The blood component of choice for a burn case is whole blood.

2. Write short notes on the following : 2x5=10
- (a) Citrate Phosphate Dextrose Adenine (CPD-A)
 - (b) Reverse blood group typing
 - (c) Direct coombs test
 - (d) Universal precautions
 - (e) Lectin
3. Write short notes on **any four** of the following : 5x4=20
- (a) Naturally occurring antibody
 - (b) Rh-typing
 - (c) Factors which can lead to false agglutination in cross match
 - (d) Platelet - Rich Plasma
 - (e) Different features of ABO HDN (Hemolytic Disease of New Born)
 - (f) Autologus transfusion

PART - B

- Answer **any three** questions. 10x3=30
4. (a) What is the principle of donor screening in Blood Bank ? 1
 - (b) List the various laboratory tests you would do to screen the blood donor. Give reasons for each. 4
 - (c) Describe briefly the cross match procedure. 5
 5. (a) Mention the a anticoagulants and preservative used in Blood Bank. 2
 - (b) Describe procedure of blood storage and disposal by giving examples of each case. 8
 6. (a) Enumerate different Blood components prepared in Blood Bank. 2
 - (b) Describe preparation of packed cells. 8
 7. Describe the organisation and planning of a Blood Bank. 10