

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

**Term-End Examination**

**December, 2013**

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

*Time : 3 Hours*

*Maximum Marks : 70*

**PART - A**

1. (a) Fill in the blanks. 1x5=5
- (i) In back typing, agglutination with 'A' cells identifies the individual as group \_\_\_\_\_.
  - (ii) Blood for transfusion purpose should be stored at \_\_\_\_\_°C.
  - (iii) A D<sup>U</sup> positive donor should be considered as \_\_\_\_\_.
  - (iv) \_\_\_\_\_ antibody can pass placental barrier.
  - (v) The 'ABO' blood groups were discovered by \_\_\_\_\_.
- (b) Write True/False for the following statements. 1x5=5
- (i) ABO antigen is found on RBC.
  - (ii) Commercial anti A grouping sera is yellow colour.
  - (iii) Genotyping is the study of genetic makeup derived from father and mother.
  - (iv) Bombay group has anti 'H' antibody in serum.
  - (v) The indirect antihuman globulin test uses patients serum.

2. Write short notes on the following : 2x5=10
- (a) Subgroup of 'A'
  - (b) D<sup>U</sup> typing
  - (c) Cryoprecipitate.
  - (d) Cold antibodies.
  - (e) Equipment needed in blood bank.
3. Write short notes on *any four* of the following : 4x5=20
- (a) Quality control in Blood Bank.
  - (b) Indirect coombs test
  - (c) Naturally occurring antibodies.
  - (d) Donor screening tests.
  - (e) Different features of Rh HDN.(Hemolytic Disease of Newborn)
  - (f) Lectin.

### PART-B

Answer *any three* questions. Each question carries

10 marks :

10x3=30

4. 2
- (a) What are ABO blood groups ?
  - (b) Describe the procedure of ABO grouping. 5
  - (c) Explain the advantages of reverse blood grouping. 3
5. 1
- (a) Define compatibility testing in blood bank.
  - (b) What are the different type of cross matches ? Describe any one in detail. 6
  - (c) List the possible causes of false agglutination in cross match. 3
6. 2
- (a) Enumerate different components prepared in Blood Bank.
  - (b) Describe preparation of Fresh Frozen Plasma (FFP). 8

7. Following blood transfusion, a patient has passed red coloured urine. The doctor suspect that the patient is having transfusion reaction.
- (a) Define transfusion reaction. 2
  - (b) Explain how will you investigate the cause of this reaction and interpret the results. 8
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