

**B.Sc. IN MEDICAL LABORATORY
TECHNOLOGY (BMLT)**

Term-End Examination

June, 2016

00049

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

Time : 3 hours

Maximum Marks : 70

Note : *Part A contains ten objective questions. Part B contains five short answer questions. Attempt **all** the questions. Part C contains six short notes. Answer any **four** questions. Part D contains four essay questions. Answer any **three** questions.*

PART A

1. (a) Fill in the blanks. $5 \times 1 = 5$
- (i) Coomb's serum is also called _____ .
 - (ii) _____ antibody can pass placental barrier.
 - (iii) Differentiation of A_1 and A_2 group is made by using _____ .
 - (iv) Minimum total area required for blood bank is _____ square metres.
 - (v) Haemolysins require the presence of _____ to lyse the red cells.

2. Answer *true* or *false* for the following :

5×1=5

- (i) Naturally occurring antibodies react at room temperature.
- (ii) Rh antigen is found on RBC.
- (iii) Complement is present in stored blood.
- (iv) O blood group having high titre A and B antibodies can be transfused in emergency.
- (v) While drawing blood from donor the BP cuff should be inflated to a pressure of 70 – 80 mm Hg.

PART B

3. Write briefly about the following :

5×2=10

- (a) Cold Antibody
- (b) Sub-group of A
- (c) Donor Screening Test
- (d) Coomb's Serum
- (e) Fresh Frozen Plasma

PART C

4. Write short notes on any *four* of the following : $4 \times 5 = 20$

- (a) Indirect Coomb's Test
- (b) Bombay Blood Group
- (c) Antigen
- (d) Cryoprecipitate
- (e) Blood Grouping Antisera
- (f) QC in Blood Bank

PART D

Answer any **three** questions.

3×10=30

5. (a) Define transfusion reaction. Classify the different types of transfusion reactions.
- (b) How will you investigate a transfusion reaction under the following headings ?
- (i) Samples needed
 - (ii) Procedure
 - (iii) Interpretation
- 7+3=10
6. (a) Name the various components which can be prepared from whole blood and mention the uses of each component.
- (b) Describe the preparation of Platelet Concentrate and Fresh Frozen Plasma. 4+6=10
7. (a) Describe Rh system.
- (b) List the different methods for Rh typing and explain any one in detail. 3+7=10
8. (a) Enumerate the blood donation selection criteria in a blood bank.
- (b) Write the various laboratory procedures you would do to screen the donor. Give reasons for each. 3+7=10