

B.Sc. IN MEDICAL LABORATORY TECHNOLOGY

Term-End Examination

December, 2015

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

Time : 3 hours

Maximum Marks : 70

Note : *Part-A contains two objective questions.*

Part-B contains one short answer questions which is compulsory.

Part-C contains one short notes, which is compulsory.

Part-D contains four essay questions, answer any three of them.

PART - A

1. Fill in the blanks : 1x5=5

(a) ABO blood group was discovered by _____ .

(b) Blood containing treponema pallidum if transfused to recipient develops _____ .

(c) The volume of ACD needed to collect 500 mL of blood is _____ mL.

(d) The genotype of group A is AA or _____ .

(e) D^u positive donor should be considered as Rb _____ .

2. Write True or False : 1x5=5

- (a) Most of immune antibodies are 1 gM
- (b) O blood group contain A and B antibody in the serum.
- (c) In ICT, the sample used is red cells.
- (d) The platelet concentrates should be kept at 20 - 24°C.
- (e) Rouleaux formation can give false agglutination.

PART - B

3. Write briefly about following : 2x5=10

- (a) A₁ lectin.
- (b) Direct coomb's test.
- (c) Minor cross match.
- (d) Haemapheresis.
- (e) Delayed transfusion reaction.

PART - C

4. Write short notes on **any four** of the following :

- (a) Reverse Grouping Methods. 5x4=20
- (b) Citrate Phosphate Dextrose - Adenine (CPD-A).
- (c) Antibody titre.
- (d) Blood components.
- (e) Naturally occurring antibodies.
- (f) Equipments used in Blood Bank.

PART - D

Answer any three questions :

10x3=30

5. (a) Define compatibility testing in blood bank. 1
(b) What are the different types of cross matches ? Describe in detail any one. 6
(c) List the causes of false agglutination in cross match. 3
6. (a) What is the cause of HDN ? 3
(b) Name the different types of HDN. Write the main findings in the blood of mother and baby in these cases. 7
7. Following a blood transfusion, a patient passed dark brown coloured urine :
(a) What are the possible causes for the above patient ? 4
(b) How will you investigate and interpret the results ? 6
8. (a) What are ABO blood groups ? 1
(b) Describe the procedure for ABO grouping. 6
(c) Write the procedure of reverse blood grouping. 3
-