

M.Sc. 2nd Semester Examination, 2011

BIOMEDICAL LAB. SCI AND MANAGEMENT

PAPER— 202 (Unit-11)

Full Marks : 40

Time : 2 hours

Answer all questions

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

MODULE— 1

1. Answer any *five* of the following : 1 × 5

(a) What is super antigen ?

(b) What is reverse grouping ?

(c) What are NK cells ?

(Turn Over)

- (d) Write the full form of TNF- α .
- (e) Write down one indication for use of factors VIII.
- (f) If the father is AB and the mother is 'O' what are the possible genotype of the children?
- (g) What is innate immunity?

2. (a) What is plasma cell?
- (b) How the primary immune response takes place inside our body?
- (c) Briefly describe about the different types of immunoglobulins. 1 + 4 + 3

Or

- (a) What are the causes of false positive and false negative results in ABO grouping?
- (b) What is D^u? How it is determined? 4 + (1 + 3)

3. (a) Describe the causes of erythroblastosis foetalis.

(b) What do you mean by ABO compatible blood group?

(c) Write down the procedure of 'Direct Coombs test'. 2 + 1 + 4

Or

Write short notes on the following : $3 + 1\frac{1}{2} + 2\frac{1}{2}$

(i) H antigen

(ii) MN group

(iii) Bombay 'O' group.

MODULE—2

4. Answer any *five* of the following : 1 x 5

(a) Name any two diseases which are transmitted through blood transfusion.

(b) What do you mean by hemolytic diseases due to transmission of blood?

- (c) What do you mean by cross matching ?
 - (d) Write the names of any two conditions where blood transfusion is require ?
 - (e) When thrombocytes transfusion is require ?
 - (f) What is cross matching ?
 - (g) What is antibody screening test ?
 - (h) What do you mean by mismatched blood transfusion ?
5. (a) How the collected blood is stored ?
- (b) What types of changes take place after storage of blood ?
- (c) What is shelf life of stored blood ? 5 + 2 + 1

Or

- (a) On what ground donors are rejected and why ?
- (b) Write down when packed red cells and platelet are transfused. 4 + 4

6. Why blood test is important before marriage?
Describe the different hazards of mismatched blood transfusion.

4 + 3

Or

Write short notes on :

$3\frac{1}{2} + 3\frac{1}{2}$

- (i) Anti human globulin test
(ii) Cold agglutination test.
-