



GAZ-494

Seat No. _____

B. Sc. (Sem. VI) Examination

March / April - 2017

Microbiology

(Hematology & Blood Banking) (Subject Elective)

Time : 2 Hours]

[Total Marks : 50

1 Answer the Following MCQs: 6

- (1) Which of the Following is an Example of Anticoagulant?
 - (A) $MgSO_4$
 - (B) $HgCl_2$
 - (C) EDTA
 - (D) KCl
- (2) Which of the following White Blood Cell plays an important role in Allergic Reactions?
 - (A) Eosinophils,
 - (B) Neutrophils,
 - (C) Lymphocytes,
 - (D) Monocytes
- (3) What is the Life Span of RBCs?
 - (A) 2 Years,
 - (B) 365 Days,
 - (C) 124 Days,
 - (D) 180 Days
- (4) What is Leucopenia?
 - (A) Increase in RBCs,
 - (B) Increase in WBCs,
 - (C) Decrease in RBCs,
 - (D) Decrease in WBCs

- (5) Which of the following Blood Group Individuals are known as "Universal Recipients"?
- (A) AB,
 - (B) A,
 - (C) B,
 - (D) O
- (6) The Metal ion present as a nucleus in the Hemoglobin is _____.
- (A) Fe,
 - (B) Cd,
 - (C) Mg,
 - (D) Mn

2 Answer ANY FIVE from the following in brief: **10**

- (1) Define: Hematopoiesis.
- (2) What are Agranulocytes? Mention the types of WBCs grouped as Agranulocytes.
- (3) Mention the Functions of Hemoglobin.
- (4) Mention the Normal Values of Different Types of WBCs.
- (5) Which Blood Group Individuals are known as "Universal Donors"?
- (6) What is "Bombay Blood Group"?
- (7) What are Thrombocytes? Mention their importance & functions in brief.

3 Discuss ANY THREE from the following in detail: **18**

- (1) What are Anticoagulants?
- (2) Different Methods for the Collection and Storage of Blood
- (3) What is the difference between Plasma and Serum?
- (4) Rh System of Blood Grouping and Its Significance
- (5) Discuss: Blood Transfusion Reactions

4 Write Short Notes on ANY TWO from the

16

Following:

- (1) Hemolytic Disease of the Newborn
 - (2) Red Blood Cells; Structure and Functions
 - (3) Classification and Functions of WBCs
 - (4) ABO Blood Grouping and Its Importance
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