



AV-1943

Seat No. _____

B. Sc. (Sem. VI) Examination

March / April - 2018

Microbiology

Haematology & Blood Banking

(Subjective Elective)

Time : 2 Hours]

[Total Marks : 50

1 Answer the following Multiple Choice Questions : 6

(1) What would happen to red blood cells if the haem group were removed from haemoglobin?

(A) Red blood cells would not be able to bind oxygen.

(B) Red blood cells would not be able to reproduce.

(C) White blood cells would not be able to reproduce.

(D) Blood clot formation would be inhibited.

(2) Which of the following is the function of white blood cells?

(A) Transport oxygen.

(B) Maintain homeostasis.

(C) Defend against infection.

(D) Produce haemoglobin.

- (3) Which of the following white blood cells is capable of phagocytosis?
- (A) Basophil
 - (B) Eosinophil
 - (C) Lymphocyte
 - (D) Neutrophil
- (4) The relatively clear liquid medium which carries the other cells of blood is called:
- (A) lipid
 - (B) antibody
 - (C) plasma
- (5) Which of the following directly defines the transportation of oxygen?
- (A) hemoglobin
 - (B) oxyhemoglobin
 - (C) reduced hemoglobin
 - (D) red cell count
- (6) Which are the largest of the white blood cells?
- (A) lymphocytes
 - (B) eosinophils
 - (C) basophils
 - (D) monocytes

2 Answer the following questions : (Any Five) 10

- (1) What is the blood?
- (2) What is the molecular composition of hemoglobin?
- (3) What are the other names for erythrocytes? What is the function of these cells?
- (4) Where does hematopoiesis occur?

- (5) What are the main functions of blood?
- (6) What is the function of platelets?
- (7) What is the difference between white and red blood cells? What are leukocytes?

3 Give the detailed notes on the following : 18
(Any **Three**)

- (1) Principal and purpose of cross matching.
- (2) Erythrocytes
- (3) Blood group system
- (4) Thrombocytes
- (5) Mention function of Anticoagulants, and Hemoglobin

4 Discuss the following in detail : (Any **Two**) 16

- (1) Serum and Plasma
 - (2) Leukocytes
 - (3) Minor and Major cross matching
 - (4) The Rh system.
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