



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Bachelor of Science in Medical Lab Technology

Course Name – Basic Hematology

Course Code - BMLT204

(Semester II)

Time allotted : 1 Hrs.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) Which of the following are likely to increase in quantities when the body is under attack from bacteria?

a) Erythrocytes	b) Leukocytes
c) Thrombocytes	d) None of these
- (2) Most of the volume of normal human blood is composed of:

a) Red cells	b) Hemoglobin
c) Plasma	d) White cells
- (3) Blood is _____

a) Acidic	b) Slightly alkaline
c) Composed mostly of white blood cells & platelets	d) Cooler than body temperature
- (4) Which single feature of normal RBC's is most responsible for limiting their life span?

a) Loss of mitochondria	b) Increased flexibility of the cell membrane
c) Reduction of Hb iron	d) Loss of nucleus
- (5) When blood clumps or forms visible islands in the still liquid plasma, it is called:

a) Clotting	b) Agglutination
c) Precipitation	d) None of the above
- (6) Which of the following statements is true of antigen-antibody interactions?

a) They are used by our bodies only to identify blood types.	b) They are used to identify and reject microorganisms, such as viruses and bacteria, that invade our bodies.
c) They are the way our blood clots when we are bleeding from an open wound.	d) B and C
- (7) Which blood cells secrete antibody?

a) Eosinophils	b) Monocytes
c) Lymphocytes	d) Neutrophils
- (8) What anticoagulant is used for most coagulation tests?

a) Heparin	b) EDTA
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- c) Warfarin
d) Apixaban
- (9) What are the steps in fibrin formation?
a) "Tissue factor" or thromboplastin is released from endothelial wall
b) Contact of blood with collagen
c) Clots bind thromboxane A2
d) A & B
- (10) Which of the following factors is present in serum?
a) Factor IX
b) Fibrinogen
c) Prothrombin
d) Factor VIII
- (11) The blood for coagulation studies is collected in trisodium citrate in the ratio of (citrate to blood ratio):
a) 1:2
b) 1:4
c) 1:8
d) 1:9
- (12) Why can't Heparin be administered orally?
a) It is large
b) It is negatively charged
c) Both A and B
d) It contains too much Mg⁺⁺
- (13) Which of the following will not coagulate when placed separately on four slides?
a) Blood serum
b) Blood plasma
c) Blood from pulmonary vein
d) Blood from lymphatic tissue
- (14) What prevents clotting of blood in blood vessels?
a) Serotonin
b) Fibrinogen
c) Heparin
d) Fibrin
- (15) The formation of a blood clot is known as which of the following?
a) Coagulation
b) Chemotaxis
c) Leucopoiesis
d) Erythropoiesis
- (16) Anticoagulant used for HbA1c Test is
a) Sodium fluoride
b) Heparin
c) EDTA
d) Sodium citrate
- (17) Anticoagulants are also called as
a) Blood thinners
b) Blood thickeners
c) Vasodilators
d) Blood coagulators
- (18) Which Anticoagulant is used for LFT, KFT & Lipid Profile?
a) Trisodium Citrate
b) EDTA
c) Heparin
d) No Anticoagulant Required as Serum Specimen is preferred for the given tests
- (19) Anticoagulant suitable for storing blood for transfusion is
a) Dextrose, phosphate and citrate
b) Glucose, phosphate and oxalate
c) Dextrose, heparin and citrate
d) Dextrose, EDTA and saline
- (20) The most common type of protein found in the cell membrane is:
a) Lipoprotein
b) Mucoprotein
c) Glycoprotein
d) Nucleoprotein
- (21) Platelets are formed from what type of cell?
a) Melanocytes
b) Astrocytes
c) Macrophages
d) Megakaryocytes
- (22) Where does haematopoiesis take place?
a) Bone marrow
b) Liver
c) Pancreas
d) Lungs
- (23) The most common cause of macrocytosis is _____

- (53) What squares are used when counting red blood cells?
- a) The corner squares
 - b) The 3 squares on the left & the 3 squares on the right
 - c) The middle top square & middle bottom square
 - d) The middle square
- (54) High cost, low volume items requires
- a) No inspection
 - b) Little inspection
 - c) 100% inspection
 - d) Intensive inspection
- (55) The percent of the sample means will have value that are within ± 3 standard deviations of the distribution mean is
- a) 95.5
 - b) 96.7
 - c) 97.59999999999999
 - d) 99.7
- (56) Anticoagulant used for HbA1c Test is:
- a) Sodium fluoride
 - b) EDTA
 - c) Heparin
 - d) Sodium citrate
- (57) Platelets are formed from what type of cell:
- a) Melanocytes
 - b) Macrophages
 - c) Megakaryocytes
 - d) Astrocytes
- (58) For Karyotyping blood is collected in
- a) Heparin tube
 - b) Gel tube
 - c) None of these
 - d) EDTA tube
- (59) Hemoglobin is type of
- a) Glycoprotein
 - b) Pigment
 - c) Isoenzymes
 - d) Allosteric protein
- (60) Carboxyhemoglobin formed by
- a) Binding with CH₂
 - b) Binding with Cl
 - c) Binding with CO
 - d) Binding with CO₂