Assignment 7: Blood, Chapter 17

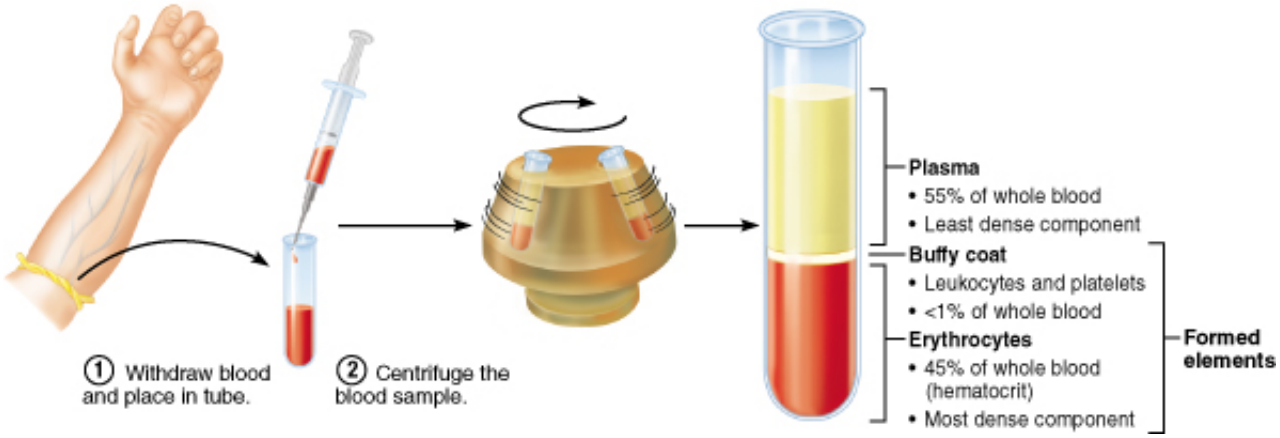
Due: 11:59pm on Wednesday, March 6, 2013

Note: To understand how points are awarded, read your instructor's Grading Policy.

Art Question Chapter 17 Question 3

Part A

What does dark red blood indicate?



ANSWER:

- pH of blood
- saltiness of blood
- oxygen-rich blood
- oxygen-poor blood

Correct

Chapter 17 Reading Quiz Question 1

Part A

In a centrifuged sample of blood, what makes up the buffy coat?

ANSWER:

- white blood cells and platelets
- platelets only
- plasma
- red blood cells

Correct

The buffy coat (the creamy white zone between the yellowish plasma and the red erythrocytes) consists of white blood cells and platelets. It constitutes less than 1% of whole blood.

Chapter 17 Multiple Choice Question 2

Part A

What is the average normal pH range of blood?

ANSWER:

- 8.35–8.45
- 7.35–7.45
- 4.65–4.75
- 7.75–7.85

Correct

Chapter 17 Multiple Choice Question 17

Part A

The plasma protein that is the major contributor to osmotic pressure is _____.

ANSWER:

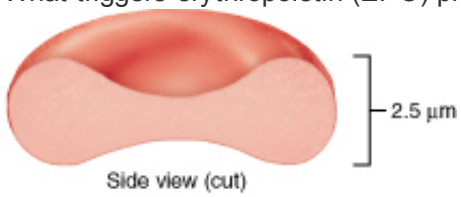
- gamma globulin
- albumin
- alpha globulin
- fibrinogen

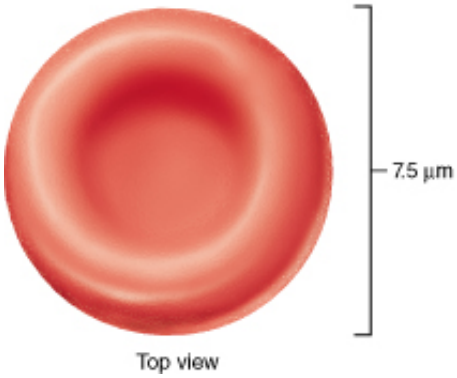
Correct

Art Question Chapter 17 Question 6

Part A

What triggers erythropoietin (EPO) production to make new red blood cells?





ANSWER:

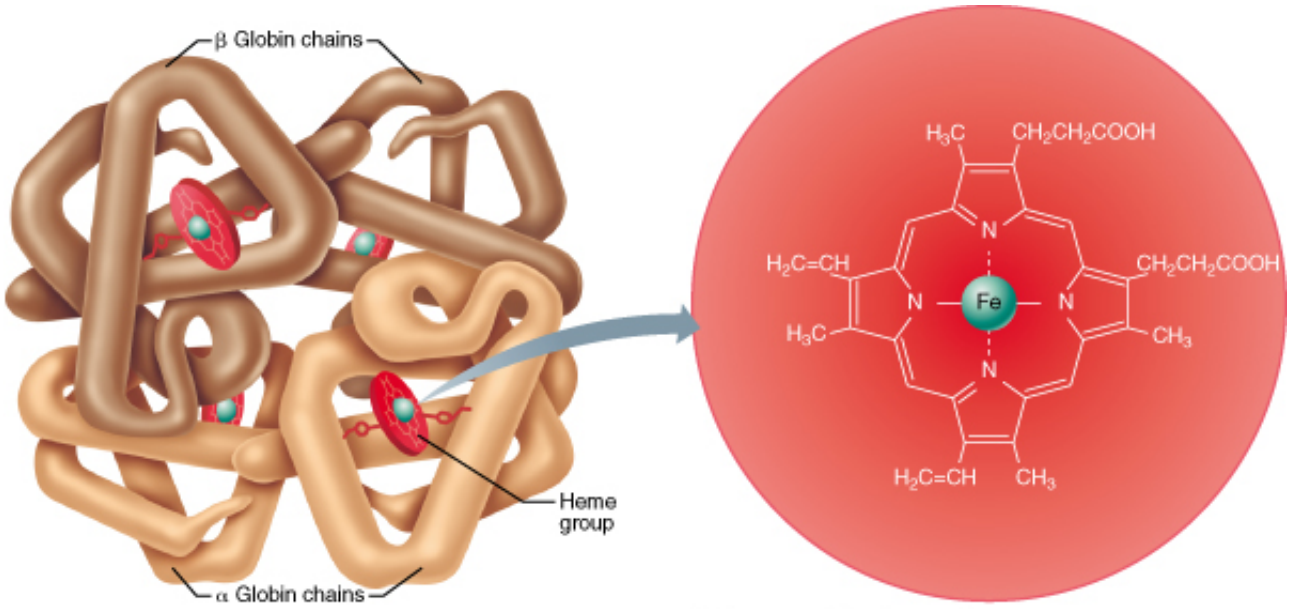
- too many erythrocytes
- excess oxygen in the bloodstream
- reduced availability of oxygen
- too many platelets

Correct

Art Question Chapter 17 Question 7

Part A

Which part of the hemoglobin molecule binds carbon dioxide for transport?



(a) Hemoglobin consists of globin (two alpha and two beta polypeptide chains) and four heme groups.

(b) Iron-containing heme pigment.

ANSWER:

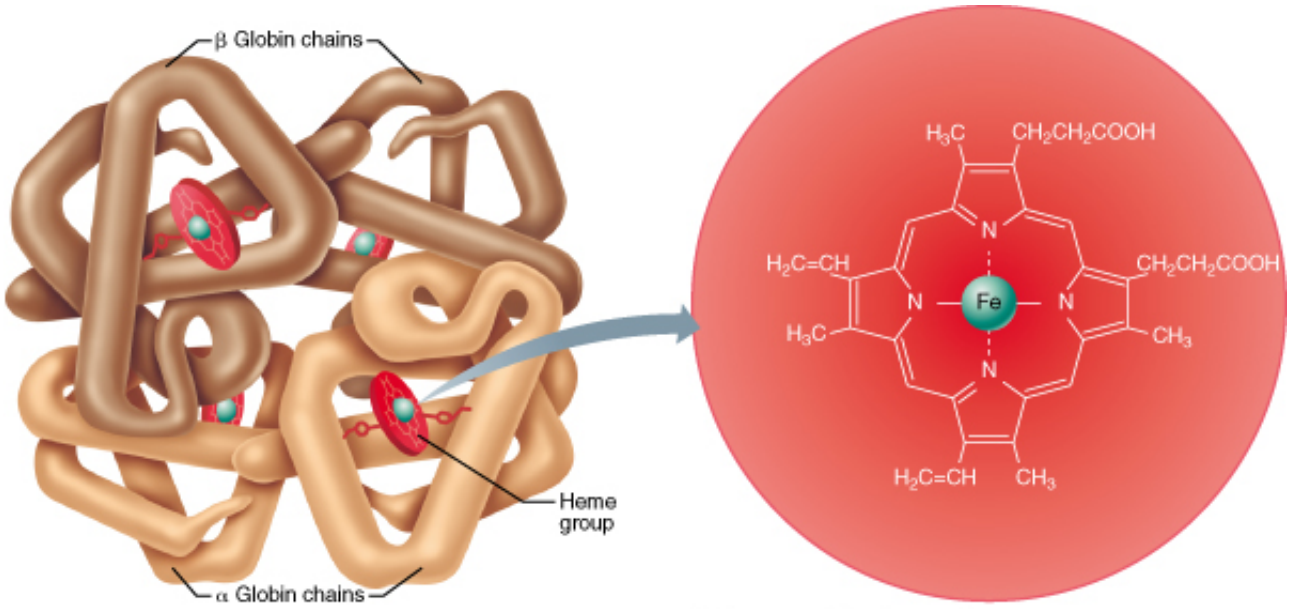
- heme group
- spectrin
- iron
- amino acids of globin

Correct

Art Question Chapter 17 Question 8

Part A

How many oxygen molecules can be transported by one hemoglobin molecule?



(a) Hemoglobin consists of globin (two alpha and two beta polypeptide chains) and four heme groups.

(b) Iron-containing heme pigment.

ANSWER:

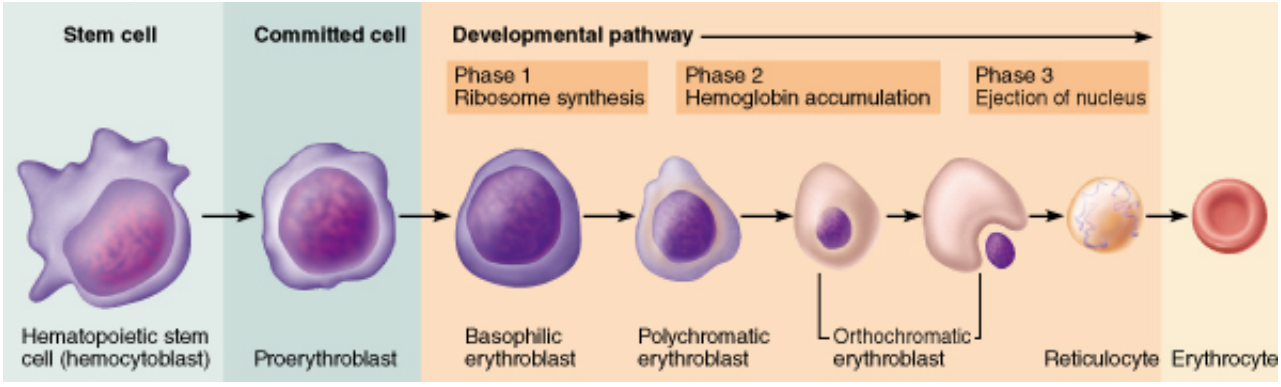
- eight
- four
- two

Correct

Art Question Chapter 17 Question 10

Part A

Specifically, what is the production of red blood cells called?



ANSWER:

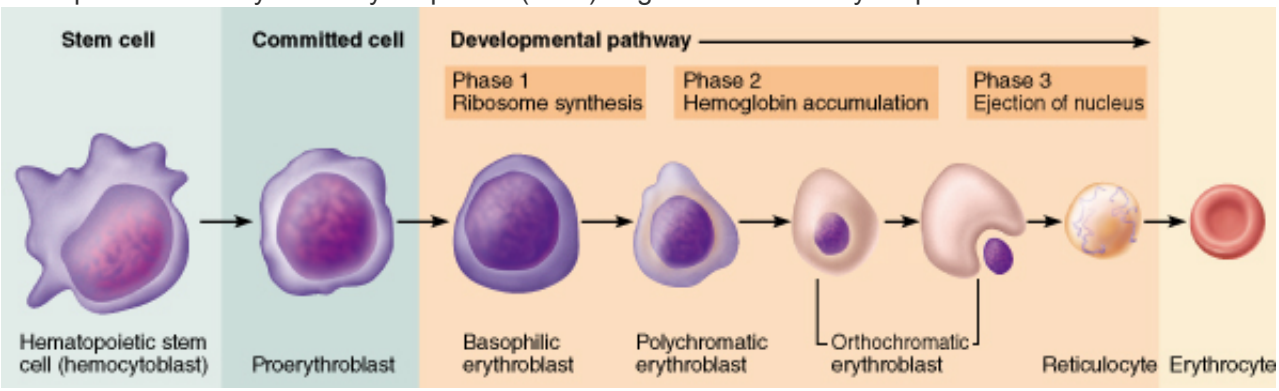
- hemostasis
- leukopoiesis
- thalassemia
- erythropoiesis

Correct

Art Question Chapter 17 Question 12

Part A

What part of the body does erythropoietin (EPO) target to increase erythropoiesis?



ANSWER:

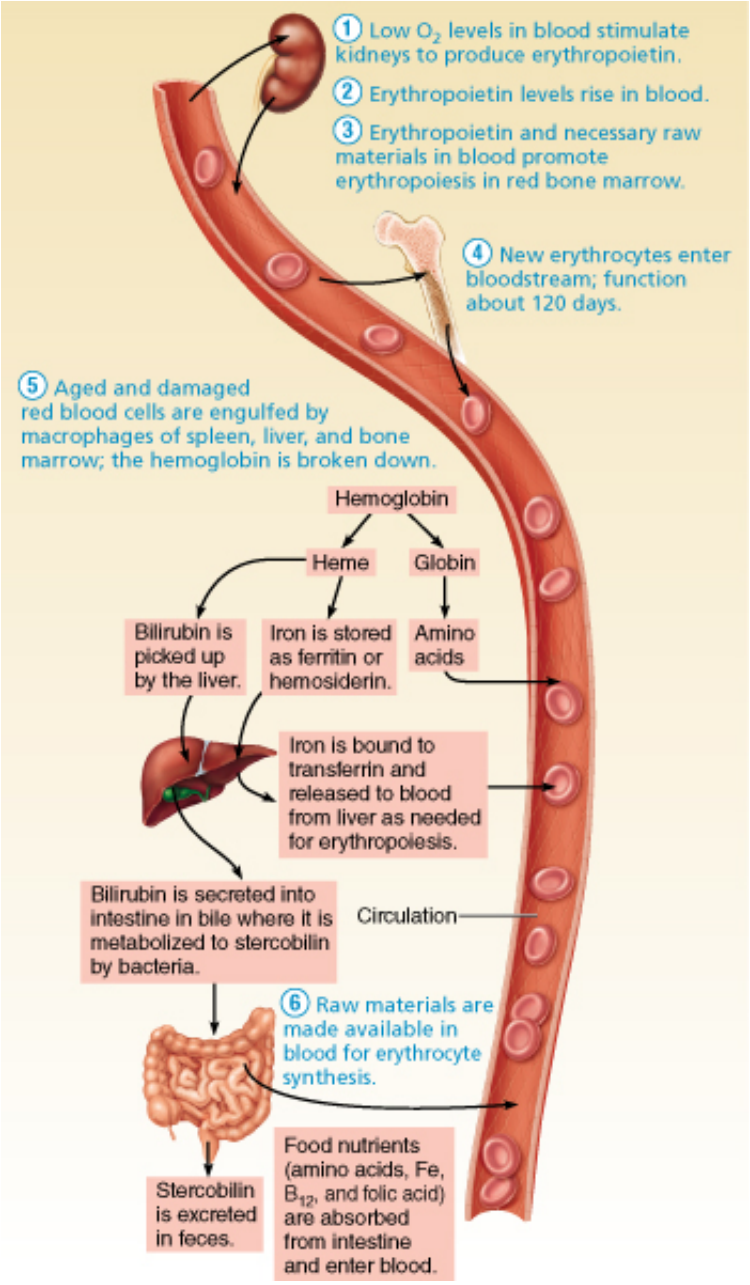
- liver
- bone marrow
- lungs
- kidneys

Correct

Art Question Chapter 17 Question 14

Part A

What erythrocyte production disorder results from an autoimmune disease associated with vitamin B_{12} absorption?



ANSWER:

- hemorrhagic anemia
- pernicious anemia
- renal anemia
- aplastic anemia

Correct

Chapter 17 True/False Question 5

Part A

The normal RBC "graveyard" is the liver.

ANSWER:

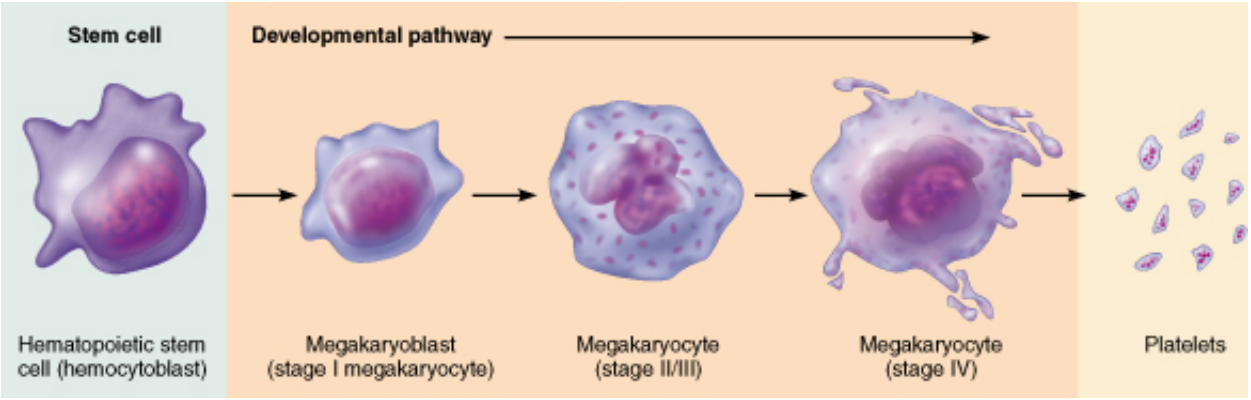
- True
- False

Correct

Art Question Chapter 17 Question 23

Part A

Which of the following is best suited to the clotting process that occurs when blood vessels are ruptured?



ANSWER:

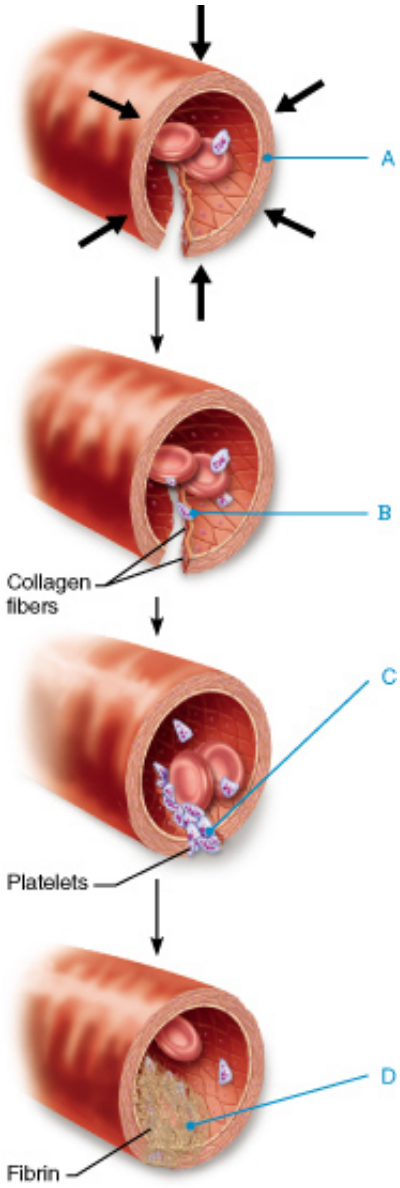
- megakaryocyte
- megakaryoblast
- platelets
- lymphocytes

Correct

Art Question Chapter 17 Question 25

Part A

Which event of hemostasis constricts the damaged artery to reduce blood loss? Select from letters A-D.



ANSWER:

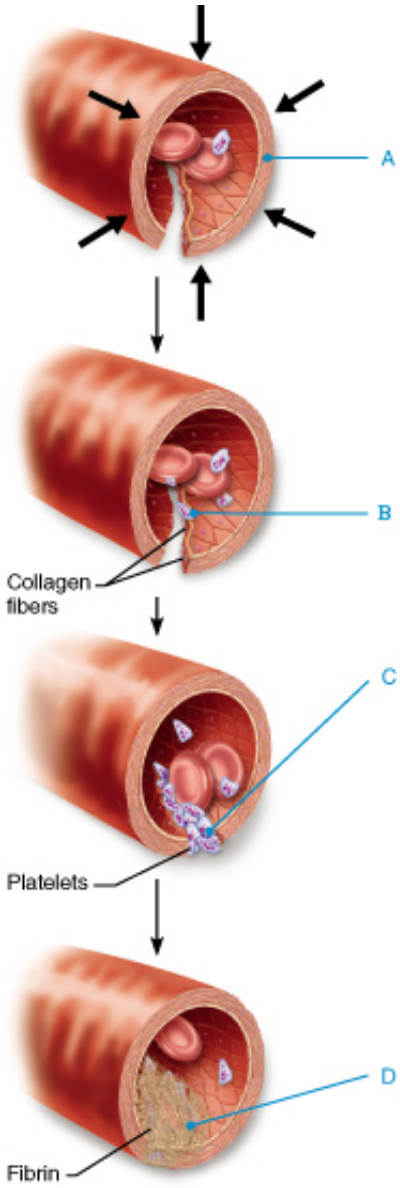
- A
- B
- C
- D

Correct

Art Question Chapter 17 Question 26

Part A

During which event of hemostasis do clotting factors (procoagulants) assist with the transformation of blood from a liquid to a gel? Select from letters A-D.



ANSWER:

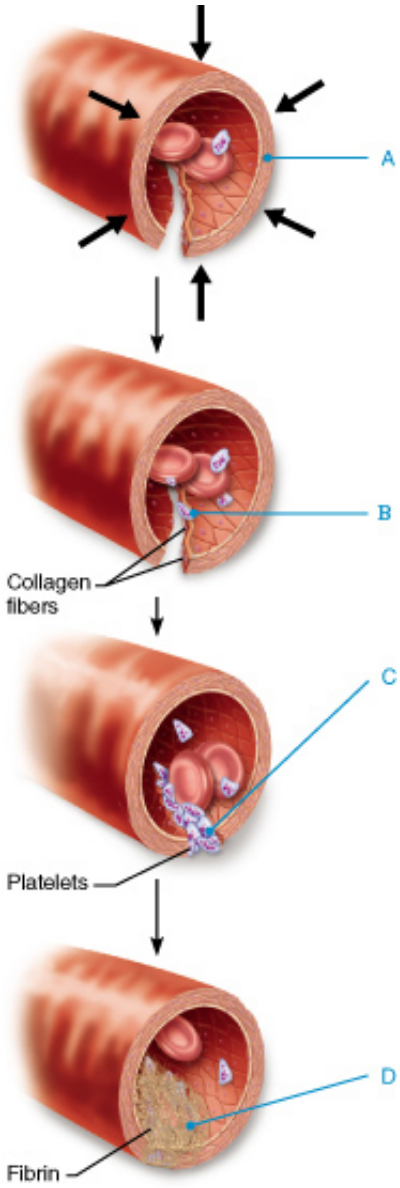
- A
- B
- C
- D

Correct

Art Question Chapter 17 Question 27

Part A

What "clot buster" enzyme removes unneeded clots after healing has occurred during fibrinolysis?



ANSWER:

- fibrin
- thrombin
- plasmin
- plasminogen

Correct

Chapter 17 Chapter Test Question 15

Part A

Which of the following represents a difference between extrinsic and intrinsic blood clotting pathways?

ANSWER:

- One is faster than the other.
- One leads to the production of prothrombin activator and the other does not.
- One is triggered by tissue damage while the other cannot be triggered by tissue damage.
- One involves calcium ions while the other does not.

Correct

The extrinsic pathway is faster than the intrinsic pathway.

Chapter 17 Reading Quiz Question 8

Part A

What protein involved in coagulation provides the scaffolding for tissue repair?

ANSWER:

- fibrin
- fibrinogen
- prothrombin activator
- thrombin

Correct

The final steps in coagulation result in prothrombin activator catalyzing the conversion of prothrombin into thrombin and thrombin catalyzing the conversion of fibrinogen into fibrin. Fibrin serves as the scaffolding for tissue repair.

Chapter 17 Reading Quiz Question 9

Part A

What is an embolus?

ANSWER:

- a protein in the coagulation pathway
- a stroke
- a blood clot that has broken loose and is floating freely in the bloodstream
- an anticoagulant

Correct

An embolus is a blood clot (thrombus) that has broken away from the vessel wall and is floating freely in the bloodstream.

Chapter 17 Multiple Choice Question 32

Part A

All of the following conditions impair coagulation *except* _____.

ANSWER:

- severe hypocalcemia
- liver disease
- vascular spasm
- vitamin K deficiency

Correct

Chapter 17 Chapter Test Question 18

Part A

A person who lacks agglutinogens A and B would have blood type _____.

ANSWER:

- B
- AB
- A
- O

Correct

Agglutinogen are glycoprotein found on the surface of erythrocytes. A person with type O blood lacks agglutinogen A and B on their red blood cells.

Chapter 17 Chapter Test Question 19

Part A

Which of the following scenarios could result in HDN (hemolytic disease of the newborn)?

ANSWER:

- AB^- female pregnant with an AB^- baby
- A^+ female pregnant with a B^- baby
- B^- female pregnant with an AB^+ baby
- O^+ female pregnant with a B^+ baby

Correct

Hemolytic disease of the newborn (HDN) can develop when an Rh^- mother carries an Rh^+ fetus. HDN is unlikely to develop in an Rh^- female's first pregnancy with an Rh^+ baby. Rather, it is in a subsequent pregnancy with an Rh^+ baby that HDN can develop.

Chapter 17 Chapter Test Question 20

Part A

Choose the compatible transfusion.

ANSWER:

- Donate type A blood to a recipient with type B blood.
- Donate type B blood to a recipient with type O blood.
- Donate type O blood to a recipient with type AB blood.
- Donate type AB blood to a recipient with type B blood.

Correct

Type O is the universal donor since these RBCs would lack A and B agglutinogens. People with type O blood can give blood to all the ABO blood groups.

Chapter 17 Chapter Test Question 24

Part A

A person's blood type is genetically determined.

ANSWER:

- True
- False

Correct

Chapter 17 Reading Quiz Question 10

Part A

Which ABO blood type is considered to be the universal donor?

ANSWER:

- O
- B
- A
- AB

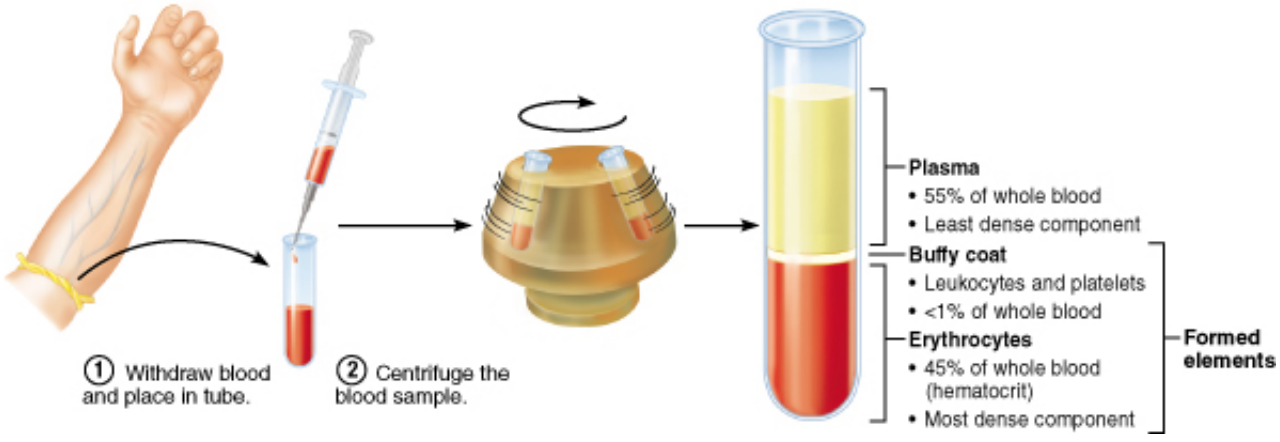
Correct

Type O blood is considered to be the universal donor.

Art Question Chapter 17 Question 2

Part A

What is hematocrit a measure of?



ANSWER:

- Hematocrit is the percentage of formed elements in a whole blood sample.
- Hematocrit is the percentage of plasma in a whole blood sample.
- Hematocrit is the percentage of erythrocytes in a whole blood sample.
- Hematocrit is the percentage of leukocytes and platelets in a whole blood sample.

Correct

Score Summary:

Your score on this assignment is 98.7%.
You received 24.67 out of a possible total of 25 points.