

TEST BANK

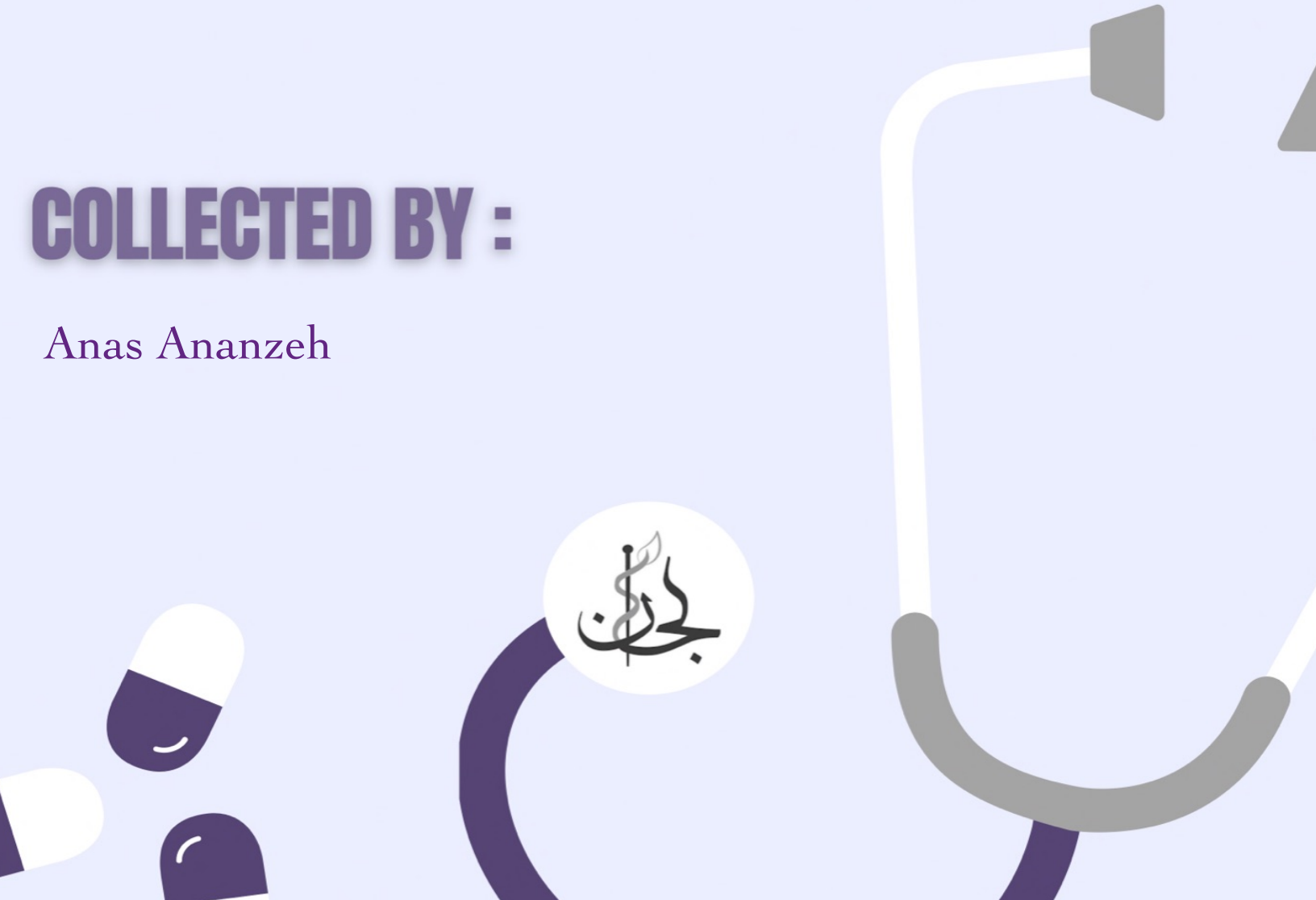
Doctor 2019

SUBJECT:

HLS past papers collected Questions
Physiology - final material

COLLECTED BY :

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Physiology - Final

Q1. Which one of the following substances is found exactly in the same percentage in both plasma and interstitial fluid?

- a. Glucose
- b. Proteins
- c. Lipids
- d. Bicarbonate
- e. Chloride

Answer: A

Q2. which one of the following is not considered as early complication of a blood transfusion:

- a. Hyperkalemia
- b. Allergic reactions to WBCs
- c. Citrate toxicity
- d. Circulatory overload
- e. AIDs disease

Answer: E

Q3. Regarding the possible child's blood types based on the blood type of his/her parents, choose the WRONG match:

- a. Parents: A+ AB → child: A, B, or AB
- b. Parents: B + AB → child: A, B, or AB
- c. Parents: A + B → child: A, B, AB, or O
- d. Parents: AB + AB → child: A, B, or AB
- e. Parents: O + AB → child: A, B, or O

Answer: E

Q4. Regarding the lymphatic system, choose the WRONG statement?

- a. It returns all filtered proteins
- b. Normally, capillary filtration exceeds reabsorption by about 3 liters per day
- c. It transports absorbed fat
- d. It returns excess filtered fluid
- e. It helps in defense against disease

Answer: A

Q5. Which one of the followings is NOT an indication of blood transfusion

- a. To maintain normal blood volume in healthy individuals
- b. To restore the blood volume, e.g. hemorrhage
- c. To provide RBCS, e.g. erythrocytopenia
- d. To supply plasma proteins in hypoproteinemia
- e. To provide WBCS, e.g. leucopenia

Answer: A

Q6. Edema may result from all the following causes EXCEPT:

- a. Blockage of lymphatic vessels
- b. Decreased concentration of plasma proteins
- c. Increased permeability of capillaries
- d. Increased blood hydrostatic pressure in capillaries
- e. Decreased extracellular fluid volume

Answer: E

Q7. Wrong about lymph (More than one choice):

- a. contain plasma proteins
- b. doesn't contain cells
- c. lymph flow by increases by muscle contractions
- d. increases with muscular activity
- e. fluids filtered are usually less than reabsorbed
- f. it filter the same amount as reabsorbed amount

Answer: B + E + F

Q8. Wrong about ABO blood groups:

- a. ABO antigens are present only on RBCs
- b. Blood transfusion deaths are mainly cause ABO incompatibility
- c. O type are the most type to be at risk of death in blood transfusion
- d. cross matching is done to test compatibility in minor antigens

Answer: A

Q9. Wrong about the osmolarity of the plasma

- a. 0.9% of NaCl
- b. Glucose 5% is an isotonic solution
- c. Na⁺ AND Cl⁻ are the major contributors to the osmolarity of the plasma
- d. this pressure opposes ultrafiltration of fluid in capillaries

Answer: D (difficulty index, many chose B !)

Q10. About ADULT males and females fluid distribution, which of the following is correct

- a. both has the same fluid and fat distribution
- b. Males have more fluid and fat distribution
- c. Females have more water and fat distribution
- d. females have more fat and less water distribution

Answer: D

Q11. Rh⁺ father and rh⁻ mother, choose the right statement

- a. the first Rh⁺ child is at risk of agglutination
- b. the second Rh⁺ child is at risk of agglutination
- c. mild hemolysis in fetus is corrected by giving him -rh from his mother

Answer: B

Q12. We regulate extra cellular fluid because?

- a. to maintain blood pressure
- b. to increase the release of ADH
- c. to prevent cells from shrinkage and swelling

Answer: C

Q13. Choose the incorrect statement:

- a. electrolytes don't affect the Osmolality of plasma
- b. components of clotting factors are component of lymph

Answer: A

Q14. Which of the following is wrong?

- a. water accounts for 10 % of body weight of females and males
- b. osmolality of plasma is 246 mOsmol
- c. sodium chloride contribute by 164 mOsmole

Answer: A

Q15. A fall in sodium plasma concentration:

- a. decreases the freezing point of plasma
- b. increases intracellular fluid volume
- c. is not associated with thirst
- d. can't be caused by excessive (uncontrolled) secretion of ADH (anti- diuretic hormone)
- e. causes edema

Answer: B

Q16. A person with (A Rh-) blood can receive blood transfusion from which of the following?

1. A Rh+
2. B Rh+
3. AB Rh
4. O Rh-
5. A Rh-

- a. 1 only
- b. 4 only
- c. 3 only
- d. 4 + 5
- e. 1 + 5

Answer: D

Q17. Which of the following regarding ABO blood groups is NOT CORRECT?

- a. Full cross match involves reacting donor's plasma with patient's RBCs
- b. most cases of blood incompatibility are due to not cross matching the different blood groups
- c. anti- A and anti-B antibodies are sometimes absent in blood group O

Answer: A

Q18. A man of blood group A has 2 children, plasma from the blood of one of them agglutinates his red cells while that from the other does not, all of the following are TRUE EXCEPT ONE:

- a. mother of 'agglutinating' child could be group B
- b. father must be heterozygous group A
- c. children must have different mothers
- d. 'agglutinating' child could be group O
- e. 'Non-agglutinating' child could be group AB.

Answer: C

Q19. Wrong about electrolytes:

- a. participate in the fluid movement between tissues and capillaries
- b. high capillary pressure leads to filtration of high than normal amount of fluid

Answer: A

Q20. Chose the wrong statement

- a. In hypertonic dehydration, water tends to be drawn from cells
- b. hormones and amino acids are responsible for a significant portion of blood osmolality

Answer: B

Q21. A tissue that has no lymphatic capillaries

- a. GIT
- b. Respiratory tract
- c. CNS
- d. UGT

Answer: C

Q22. Least common blood group in the region

- a. A
- b. O
- c. AB

Answer: C

Q23. One of the following isn't possible to be the blood group of a child whose father blood group is AB and mother blood group is O:

- a. A
- b. O
- c. B

Answer: B

Q24. Which of the following electrolytes has the most effect on osmolality:

- a. K⁺
- b. Na⁺
- c. Cl

Answer: B

Q25. Wrong match about clotting:

Answer: factor XIII is for the intrinsic pathway

Q26. Least important clotting factor

Answer: XII

Q27. Not activated by thrombin

Answer: IX

Q28. Wrong about von Willibrand disease:

Answer: VIII:C is normal

Q29. Which of the following about Hemophilia A and Von-Willibrand inheritance is NOT TRUE?

- A. Von-Willibrand is a hemorrhagic disease
- B. Hemophilia A is usually confined to males
- C. Hemophilia A is inherited as a sex-linked abnormality
- D. Hemophilia A passes from mother to child
- E. Von-Willibrand disease also appears in males only

Answer: E

Q30. Which of the following combinations is NOT TRUE?

	Factor #	Factor name	Pathway involved
A	3	Tissue thromboplastin	Extrinsic pathway
B	10	Stuart factor	Both pathways
C	1	Fibrinogen	Both pathways
D	12	Hageman factor	Intrinsic pathway
E	13	Fibrin stabilizing factor	Intrinsic pathway

Answer: E

Q31. Which of the following combinations is NOT TRUE?

	Hemophilia A	Von-Willibrand disease	
A	Inheritance	Sex-linked	Autosomal
B	Bleeding time	Normal	Prolonged
C	VIII:C	Low	Low
D	VIII:Ag	Normal	Low
E	Aggregation	Normal	Normal

Answer: E

Q32. Which of the following is NOT a function of thrombin?

- A. VIII → VIIIa
- B. Fibrinogen → Fibrin
- C. IX → IXa
- D. XIII → XIIIa
- E. Protein C → Protein Ca

Answer: C

Q33. All of the following regarding the bleeding caused by a small cut wound in the skin are true EXCEPT:

- A. Can be stopped by a vascular spasm
- B. It will stop within a period of 5 minutes
- C. It will be prolonged if Von-Willibrand factor is deficient
- D. It will be prolonged in the case of thrombocytopenic purpura

Answer: It's answered C (but we think it's A)

Q34. Wrong about von Willibrand disease

Answer: recessive inheritance

Q35. Which is wrong:

Answer: Thrombin, urokinase, streptokinase are plasminogen activator

Q36. Which of the following is CORRECT regarding a cross between a hemophilic male and a carrier female?

- A. All of the sons are hemophilic
- B. None of the daughters are hemophilic
- C. All of the daughters are hemophilic
- D. None of the sons are hemophilic
- E. Cannot be determined

Answer: E

Q37. True about phospholipids:

Answer: are only used in intrinsic pathways

Q38. Mismatch:

Answer: Factor X = Christmas Factor

Q39. Which step in the coagulation cascade doesn't need Ca^{+2} ?

Answer: XI → XIa

Q40. A male with hemophilia A married a carrier female, which is true about their kids?

Answer: 50% of males are affected.

NOTE: *There was another choice which could also be true which was "all females are healthy". It is true because homozygosity is fatal (Females are only carriers)

Q41. fibrin stabilizing factor is:

- A. Factor V
- B. Factor VII
- C. Factor X
- D. Factor XIII
- E. Factor II

Answer: D

Q42. wrong about coagulation:

- A. partial thromboplastin time monitors extrinsic pathway while thrombin time monitors intrinsic pathway
- B. neither one of the both pathways can alone cause hemostasis

Answer: A

Q43. regarding hemophilia A, a healthy man has married carrier women, choose the wrong statement regarding their children:

- A. half of males are diseased
- B. half of females are carriers
- C. half of females are healthy
- D. All females are carriers

Answer: D

Q44. Wrong about haemophilia A:

- A. it is sex linked
- B. causes prolonged bleeding

Answer: B

Good luck