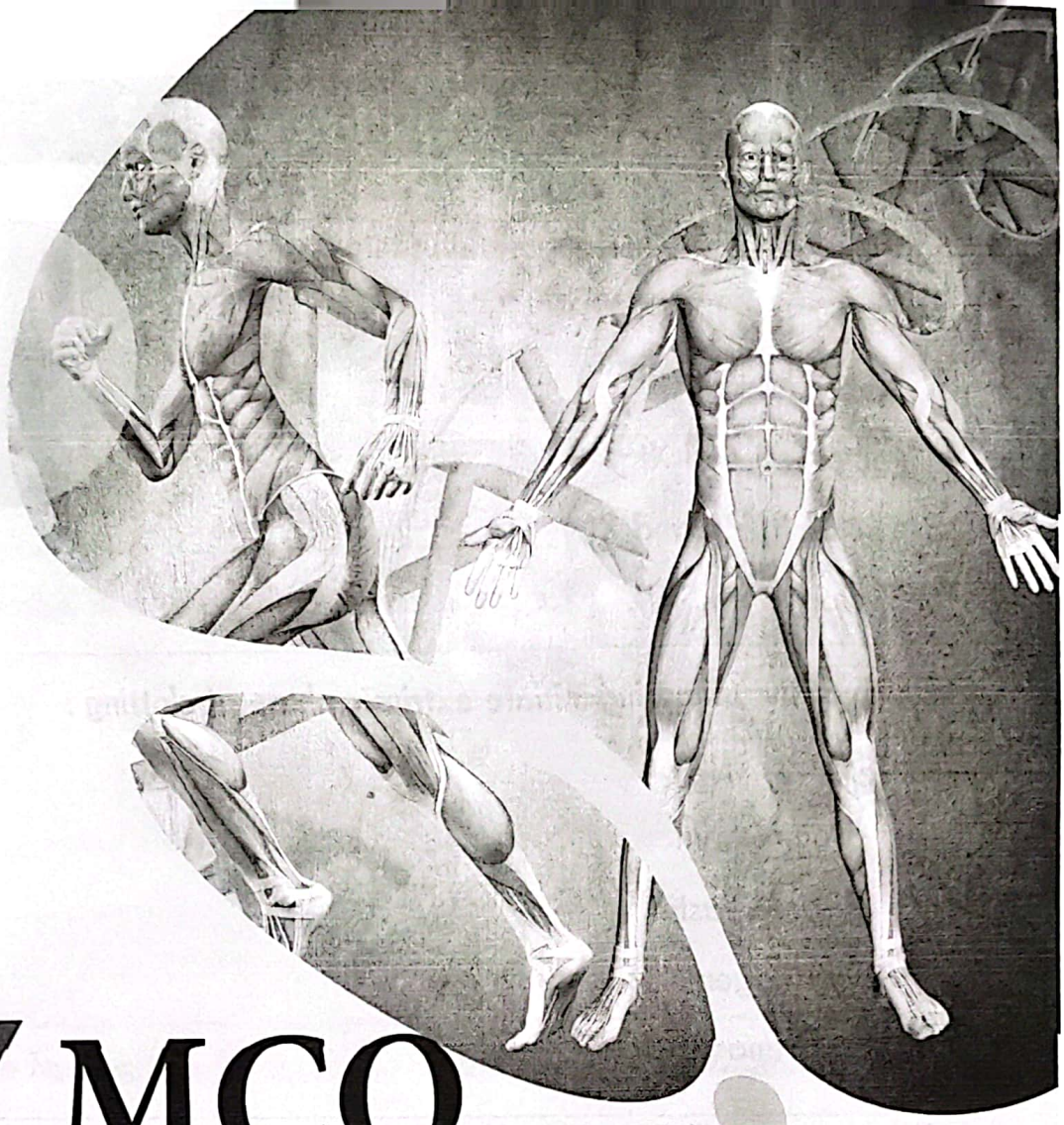
Level (1)
Sem (2)



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L.E

MCQ PHYSIOLOGY HIS

LECTURE (3)

Dr. M.M

MCQ Physio HIS 3

1. Vitamin K dependent coagulation factors are: a. Factor II, VII and X. b. Factor X and XI. c. Factor VII and XI. d. Factor II, VII and XI. e. Factor XI and XII.	**A**
2. Which of the following initiate extrinsic phase of clotting : a) Fibrin b) Prothrombin c) Thromoplastin d) Fibrinogen e) Christmas factor	**C**
3. What convert fibrinogen to fibrin : a) Prothrombin b) Thrombin c) Thromboplastin d) HMW kininogen e) Calcium	**B**
4. Which of the following factor is released from damaged tissue , and initiate a chain of clotting events : a) Prothromin b) Thrombin c) Fibrin d) Tissue thromoplastin e) Fibrinogen	**D**

5. Prothrombin level falls in blood due to lack of : a) Vit b12 b) Vit k c) Phospholipid d) Platelet e) Sodium	**B**
6. Activation of prothrombin into thrombin achieved by : a) Factor Xa b) Factor 111 c) Factor V111 d) Factor 1Xa e) Factor X1a	**A**
7. The platelets produce haemostasis by releasing all the following substances except: a) ADP. b) Platelet factor 3 c) Thromboxane A2. d) Thrombopoietin.	**D**
8. Concerning platelets, all the following is true except: a) Their membranes contain phospholipids that are involved in blood clotting b) They release 5-hydroxytryptamine and thromboxane A2. c) Their aggregation is inhibited by both thrombin and the Von Willebrand factor d) They are concerned with formation of the primary haemostatic plug.	**C**

9. A 2-year-old boy bruises easily and has previously had bleeding gums. The maternal grandfather has a bleeding disorder. His physical examination shows several small bruises on the legs. Of which coagulation factor would you suspect this patient to be deficient? a) Prothrombin activator b) Factor II c) Factor VIII d) Factor X	**C**
10. What is proper pathway for extrinsic clotting pathway? a) Contact of blood with collagen, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads b) Tissue trauma, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads c) Activation of platelets, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads d) Trauma to the blood, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads	**B**
11. Which of these statements concerning clotting is false? a) Both extrinsic and intrinsic clotting pathways form prothrombin activator. b) Clots are composed mostly of plasmin. c) Clotting requires vitamin K and calcium ion. d) The extrinsic pathway is stimulated by contact with a damaged blood vessel. e) Thrombin is required for conversion of fibrinogen into fibrin.	**B**

12. The coagulation pathway that begins with tissue thromboplastin is: a) extrinsic pathway b) intrinsic pathway c) common pathway d) fibrin stabilization	**A**
13. Arrange the following events in the order in which they occur during platelet plug formation: **1. Platelet activation.** **2. Platelet aggregation.** **3. Platelet adhesion.** a) 1,2,3. b) 1,3,2. c) 2,1,3. d) 2,3,1. e) 3,1,2.	**E**
14. The normal hemostatic response to vascular damage depends mainly on a) The red blood cells. b) Stasis of the blood flow. c) Circulating white blood cells. d) Blood coagulation factors. e) Mg++ ions.	**D**
15. Which of the following is the normal count range of platelets/mm3? a) 500,000 to 600,000. b) 150,000 to 300,000. c) 100,000 to 200,000. d) 550,000 to 650,000. e) 50,000 to 150,000.	**B**

16. Choose the correct order for the steps of hemostasis: a) Blood coagulation, platelet plug formation, blood vessel spasm. b) Platelets plug formation, blood coagulation, blood vessel spasm. c) Blood vessel spasm, platelet plug formation, blood coagulation. d) Blood vessel spasm, blood coagulation, platelet plug formation. e) Platelet plug formation, blood vessel spasm, blood coagulation.	**C**
17. Heredity deficiency of coagulation is referred to as: a) Anemia. b) Hemophilia. c) Hemolysis. d) Leukemia. e) Polycythemia	**B**
18. Which of the following ions is required for conversion of prothrombin into active thrombin? a) Ca++. b) Fe++. c) Mg++. d) Mn++. e) Cl-.	**A**
19. Activated platelets release which of the following: a) Serotonin b) ADP c) Thromboplastin d) Fibrin e) Von wilberand factor.	**B**

20. Hemophi
a) Factor

20. Hemophilia is mainly caused by deficiency of: a) Factor VII. b) Factor VIII. c) Factor V. d) Factor X. e) Factor III.	**B**
21. ..... are necessary for clot retraction to occur. a) Red blood cells. b) Lymphocytes. c) Platelets. d) Basophils. e) Monocytes.	**C**
22. Given these chemicals: **1. Fibrin,** **2. Fibrinogen,** **3. prothrombin activation** **4. Thrombin,** **5. tissue factor** **Choose the arrangement that lists the chemicals in the order they are active during clot formation.** a. 1,3,4,2,5 b. 2,3,4,51 c. 3,5,1,4,2 d. 4,3,2,5,1 e. 5,3,4,2,1	**E**

23. Normal blood clotting requires: a. Inactivation of heparin b. Inactivation of plasmin c. Inactivation of fibrin d. Calcium ion e. An adequate intake of vitamin C	**D**
24. Hemorrhagic tendency in obstructive jaundice is due to: a. Deficiency of platelets b. Increased serum bile salt concentration c. Deficiency of factor VIII d. Lack of factors II, VII, IX and X e. Deficiency of fibrinogen	**D**
25. Concerning platelets, all are true EXCEPT: a) Their number is 250,000 to 500,000 / mm3 of blood. b) Are produced in the bone marrow. c) They are nucleated cells. d) Are essential for retraction of blood clot. e) A decrease in their number produces an increase in bleeding time.	**C**
26. Which of the following is a function of platelets: a) Release of heparin. b) Formation of antibodies. c) Destroying bacteria. d) Formation of plug. e) Formation of hemoglobin.	**D**

27. Blood platelets functions include the following EXCEPT: a) Releasing factors cause vasoconstriction. b) Releasing factors enhance blood coagulation. c) Stimulation of fibrinolysis. d) Formation of plug.	**C**
28. Most important function of platelets is to bring about: a) Hemolysis. b) Homeostasis. c) Hemopoiesis. d) Hemostasis.	**D**
29. Concerning the platelets: a) Its cytoplasm contains dense granules. b) It has a biconcave shape. c) Its normal number is 5 – 6 X 106 / mm3. d) It releases heparin. e) It is a nucleated cells.	**A**
30. Which of the following is NOT IMPORTANT for hemostasis: a) Formation of platelet plug. b) Vasoconstriction. c) Formation of clot. d) Activation of anticoagulant factors.	**D**
31. Platelet adhesion depends mainly on: a) Thromboxane A2. b) ADP. c) Von willibrand factor. d) Thrombothenin. e) Platelet factor 3 (PF3).	**C**

32. Intrinsic mechanism of blood clotting starts by activation of: a) Factor IX. b) Factor X. c) Factor XI. d) Factor XII. e) Factor XIII.	**D**
33. The extrinsic pathway of blood coagulation is characterized by the following EXCEPT: a) It is responsible for clotting of escaped blood to tissue. b) It takes only 20 seconds. c) It is stimulated by tissue factor. d) It requires factor VIII.	**D**
34. The final step in the clotting of blood is the conversion of: a) Prothrombin to thrombin. b) Prothrombin activator to thrombin. c) Fibrin to fibrinogen. d) Fibrinogen to fibrin.	**D**
35. Activation of factor X is stimulated by: a) Active factor VIII. b) Tissue thromboplastin. c) Calcium. d) All of the above.	**D**
36. Factor VII (stable factor) to be activated needs: a) Factor XIII. b) Fibrin. c) Factor V. d) Factor X. e) Tissue factor (factor III) (TF).	**E**

37. Factor VII activation needs: a) Tissue factor. b) Fibrin. c) Factor (II). d) Factor (XII). e) Factor	**A**
38. The intrinsic pathway is characterized by the following EXCEPT: a) Slow reaction in few minutes. b) Needs factor VII. c) Needs factors XII, XI, IX, VIII. d) Large clot.	**B**
39. Which of the following is normally circulating in the plasma: a) Prothrombin. b) Fibrin. c) Plasmin. d) Thrombin. e) Prothrombinase (prothrombin activator).	**A**
40. Vitamin K is essential for synthesis of: a) Erythrocytes. b) Leukocytes. c) Platelets. d) Hemoglobin. e) Clotting factors VII, XI, and X.	**E**
41. Citrate is a useful anticoagulant because of its ability to: a) Buffer basic groups of coagulation factors. b) Bind factor XII. c) Bind vitamin K. d) Deionizes chelate calcium.	**D**

42. Hemophilia: a) *Is a hypercoagulable disorder.* b) *The A type is due to factor X deficiency.* c) *More common in males.* d) *Is associated with prolonged bleeding time.* e) *Is associated with normal clotting time*	**C**
43. A classic hemophilia is a deficiency of: a) *Aantihemophilic A factor.* b) *Antihemophilic B factor.* c) *Antihemophilic C factor.* d) *Platelet number.* e) *Vitamin K.*	**A**
44. Which of the following combinations of substances present in plasma causes the production of clot: a) *Prothrombin, factor V, factor VIII, platelet factor.* b) *Prothrombin, tissue factor, Ca++, factor V.* c) *Thrombin and fibrinogen.* d) *Factor V, VIII, platelet factor, Ca++, fibrinogen.*	**B**
45. The following are present in circulating blood EXCEPT: a) *Prothrombin.* b) *Fibrinogen.* c) *Thrombin.* d) *Globulin.*	**C**
46. All the following about coagulation factor VII is true except: a) *It is synthesized in the liver.* b) *It is activated by a tissue.* c) *It is important for the intrinsic pathway of blood clotting.* d) *When activated, it activates factor X.*	**C**

47. It is correct to say that: a) Prothrombinaze (prothrombin activator) converts prothrombin into thrombin. b) Thrombin converts plasminogen into plasmin. c) Platelets secrete clotting factor III. d) Heparin is a coagulant factor. e) Basophils are phagocytic cells.	**A**
48. The coagulation pathway that begin with tissue thromboplastin is: A. Extrinsic pathway B. Intrinsic pathway C. Common pathway D. Fibrin stabilization E. None of the above	**A**
49. About intravascular clotting, all the following is true except: a) It occurs by intrinsic system of coagulation. b) It is induced by a decrease in the blood flow rate. c) It related to the clumping of platelets. d) It occurs with accumulation of lipid in arterial walls. e) It does not normally occur because Ca++ is present.	**E**
50. The haemostatic disorder in obstructive jaundice is: a) Due to deficiency of factor IV. b) Caused by insufficient pancreatic secretion. c) Secondary to lack of platelets. d) Characterized by a longer bleeding time than normal. e) Characterized by a longer coagulation time than normal.	**E**

51. What is the normal life span of platelets? a. 1-2 days b. 8-12 days c. 30-35 days d. 1-2 months e. 8-12 months	**B**
52. Which chemical produces vasoconstriction of injured blood vessel? a. Fibrin stabilizing factor b. Plasmin c. Platelets F3 d. Stuart prewar factor e. Thromboxane A2	**E**
53. In obstructive jaundice, the hemorrhagic tendency is due to: a. deficiency of platelets. b. increased serum bile salt concentration c. deficiency of factor VIII d. lack of factors II, VII, IX and X e. deficiency of fibrinogen	**D**
54. What would most likely be used for prophylaxis of an ischemic heart attack? A) Heparin B) Warfarin C) Aspirin D) Streptokinase	**C**
55. The coagulation time is prolonged in: (A) Haemophilia. (B) Anaemia. (C) Polycythemia. (D) Purpura.	**A**

6. Platelet adhesion is potentiated by which of the following? A) ADP B) Fibrin stabilizing factor C) Thromboxane A2 D) Tissue factor E) Von Willebrand factor	**E**
57. Which factor potentiates (increases) platelet adhesion? a) ADP. b) Fibrin stabilizing factor. c) Thromboxane A2. d) Tissue factor. e) Von Willebrand factor.	**E**
58. The haemostatic disorder in obstructive jaundice is: A. Due to deficiency of factor IV. B. Secondary to lack of platelets. C. Characterized by a longer bleeding time than normal. D. Characterized by a longer coagulation time than normal due to decreased vitamin K reabsorption.	**D**
59. The final reaction in the formation of blood clot: A. The formation of prothrombin activator. B. Thrombin converts fibrinogen to fibrin. C. Prothrombin activator converts prothrombin to thrombin. D. Platelets aggregation.	**B**
60. Extrinsic pathway of blood clotting: A. Starts by activation of factor XII. B. Needs tissue thromboplastin. C. Can occur in a test tube. D. Doesn't need Ca++.	**B**

61. Intrinsic pathway of blood clotting, start by activation of: A. Factor IX. B. Factor X. C. Factor XI. D. Factor XII.	**D**
62. Platelets: A- Are nucleated cells and form the major number of blood cells. B- Form adhesion and aggregation at site of injury. C- Are actively phagocytic cells. D- Have high amount of hemoglobin.	**B**
63. In blood coagulation: A- Factor XII is the initial factor in the extrinsic pathway. B- Factor VII is the initial factor in the extrinsic pathway. C- Fibrinogen is needed for both intrinsic and extrinsic pathways. D- Vitamin K deficiency decreases fibrinogen content of blood.	**B**
64. In the Intrinsic pathway of blood coagulation: A- Longer than the extrinsic pathway (4-8 minutes). B- Need factor VII C- Can occurs In Vivo only. D- Enough RBCs are needed to be completed	**A**
65. Vasoconstriction of the injured blood vessels occurs due to: A- Local vasoconstrictive factors released mainly from the platelets. B- Decrease in the blood volume. C- Increase in the platelets count. D- Accumulation of coagulation factors in the injured area.	**A**

66. Hemostasis: A- Occurs mainly if blood vessels are dilated. B- Means stoppage of bleeding. C- Means keeping internal environment of body constant. D- Is accelerated in hemophilia and purpura.	**B**
67. Platelets: A- Count 5 million/mm3 B- Have no Granules. C- Formed in the liver. D- Life span 7-12 days	**D**
68. Blood coagulation is: A- Conversion of soluble fibrinogen into insoluble fibrin. B- Adhesion of the platelets to the site of blood vessels injury. C- Under the control of WBCs. D- Can occurs inside the body only.	**A**
69. Regarding blood platelets: A. They are formed in the liver. B. Are more numerous than RBCs. C. Needed for hemostasis. D. Number decreases after splenectomy.	**C**
70. The correct sequence of activation of extrinsic pathway of blood coagulation is: A. Tissue thromboplastin activates factor VIII. B. Calcium ions activates factor VII. C. Tissue thromboplastin activates factor VII. D. Tissue thromboplastin activates factor IX.	**C**

71. Factor VII: A. Isn't a factor in the coagulation cascade. B. Initiates the process of coagulation with tissue thromboplastin. C. Is vitamin K independent. D. Is produced by platelets.	**B**
72. The intrinsic pathway of blood coagulation: A. Is activated by a tissue factor. B. Cannot occur in a test tube. C. Is activated by exposed collagen. D. Is more rapid than extrinsic pathway.	**C**
73. The extrinsic pathway of blood coagulation is triggered by: A. Factor XII. B. Tissue factor. C. Collagen. D. - Ve charge of the test tube.	**B**
74. The extrinsic pathway of blood coagulation: A. Is rapid; it lasts after 4-8 minutes. B. Tissue factor activates factor VII which in turn activates factor X. C. Triggered by exposed collagen. D. Activated factor VII by this pathway will activate factor VIII directly.	**B**
75. Contact of the blood with sub-endothelial collagen produces: A. Inhibition of platelets. B. Activation of factor VII. C. Activation of factor XII. D. Activation of factor IX.	**C**

76. Which of the following conditions is associated with a depression of coagulation process and excessive bleeding after surgery? A. Gastrointestinal disease. B. Heart disease. C. Kidney disease. D. Liver disease.	**D**
77. Ghazala was diagnosed as a case of classic hemophilia. The best possibility is that: a. One of her X chromosomes code for deficiency of Factor VIII b. Her mother was a hemophilia carrier c. Her autosomes carry the mutant gene for hemophilia d. She is suffering from von Willebrand's disease e. Her father had hemophilia & mother was a hemophilia carrier	**E**
78. Factor VIII is synthesized in: a. Endothelium. b. Hepatocytes. c. Kupffer cells. d. Histiocytes. e. Platelets.	**B**
79. In haemostasis, which molecule polymerises to become the insoluble blood clot? A. factor X B. thrombin C. fibrin D. plasmin	**C**

80. What substance is produced by the first step in the blood clotting (coagulation) process? A. thrombin B. prothrombin C. factor X D. prothrombinase	**D**
81. In blood clotting, what activates "factor X" A. prothrombinase B. thrombin C. the extrinsic pathway D. tissue plasminogen activator	**C**
82. What substance is the product of the second step in the blood clotting process? A. thrombin B. prothrombin C. prothrombin activator D. fibrin	**A**
83. The role of platelets in blood clotting includes all of the following EXCEPT one. Which one? A. to form a plug in the hole of the damaged blood vessel B. to convert prothrombin to thrombin C. to release chemicals to attract other platelets D. to adhere to exposed collagen fibres in damaged bl vessels	**B**
84. All the following about coagulation factor VII is true except: a) It is synthesized in the liver b) It is activated by a tissue factor. c) It is important for the intrinsic pathway of blood clotting. d) When activated, it activates factor X.	**C**

85. About the coagulation mechanism all the following is true except: a) Platelet factor 3 is required for both the extrinsic and intrinsic systems. b) The intrinsic system occurs both in vivo and in vitro c) Intravascular thrombosis occurs by the extrinsic system. d) The intrinsic system utilizes factors VIII, IX, XI and XII.	C
86. Reduction of the serum Ca level in vivo: a) Does not affect blood coagulation. b) Does not affect the neuromuscular excitability. c) Leads to muscle relaxation. d) Prolongs the bleeding time.	A
87. About intravascular clotting, all following is true except: a) It occurs by the intrinsic system of coagulation. b) It is induced by a decrease in the blood flow rate. c) It is related to the clumping of platelets. d) It does not normally occur because Ca is present.	D
88. A female carrier of haemophilia married to a haemophilic male may produce any of the following except: a) A normal daughter b) A normal son c) A haemophilic daughter. d) A carrier daughter.	A
89. A reduction of the blood level of coagulation factor VIII: a) Increases the bleeding time beyond the normal range. b) Is a hereditary disease due to an abnormal gene on the Y chromosome. c) Causes prolongation of the clotting time. d) is commonly associated with petechial haemorrhages in the skin.	C

90. About bleeding from small skin cut all following is true except: a) *It ceases within about 4 minutes in normal people.* b) *it is prolonged if factor VIII is deficient.* c) *It is normally diminished by local vascular spasm.* d) *Its stoppage depends on the platelet count in the blood.*	**B**
91. Which of the following is the first step in hemostasis? a) *Platelet activation* b) *Coagulation cascade* c) *Vasoconstriction* d) *Platelet aggregation*	**C**
92. The process of clot retraction involves the: a) *Formation of a fibrin meshwork* b) *Conversion of fibrinogen to fibrin* c) *Contraction of platelets within the clot* d) *Dissolution of the clot*	**C**