# HLS
# Final Exam

2024-جزء

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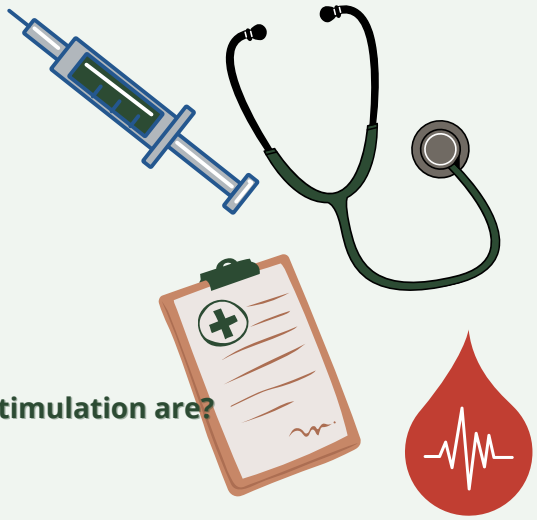


1. In the process of hematopoiesis, myeloblasts give rise to
a. Erythrocytes.
b. Basophils.
c. Lymphocytes.
d. Monocytes.
e. Platelets.

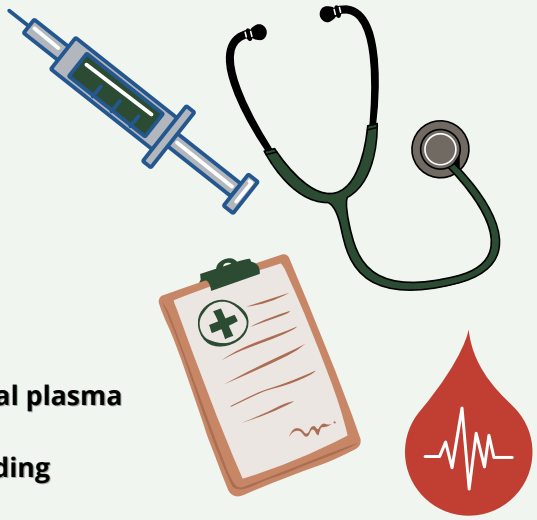
Ans: B
2. The leucocytes which can proliferate by mitosis in response to stimulation are?
a. Basophils.
b. Neutrophils.
c Lymphocytes.
d. Eosinophils.
e. Monocytes.

Ans: C
3. Erythrocytes Ghost occur in-----?
a. in hypertonic solution.
b. in slow circulation.
c. Defect in hemoglobin.
d. Hypotonic solution.
e. increase in size of RBC.
Ans: D

4. Blood thymic barrier is achieved by:
a. Perivascular space filled with macrophages
b. Thin basement membrane
c. Perivascular space filled with lymphocytes
d. Fenestrated endothelial cells
Ans: A

5. All the following are correct except
A. Lymphoma staging stage ll is described by: two or more lymph nodes regions on the same side of the diaphragm
B. Birbeck granules: langerhans cell histocytoses
C. Proliferating langerhans cells express one of the following: CD1a
D. Langerin is a lipid found in Birbeck granules
Ans: D

6. one is incorrectly matched:
A. neutrophilia/ burns
B. basophilia/ CMV
C. lymphocytosis/ TB
D. eosinophilia/ parasitic or allergy
E. monocytosis/ inflammatory bowel disease
Ans: B



**7. About DIC that is widespread all are correct except:**
**A. obstetric complications**
**B. deposition of AntiG/ AntiB**
**C. meningococcal infection**
**D. burn trauma**
**Ans: A**

**8. Regarding hemophilia A and B all are correct except:**
**A. Prolonged PTT not corrected by mixing patient's plasma with normal plasma**
**B. X linked**
**C. hemophilia A is the most common hereditary cause of serious bleeding**
**D. identical clinical symptoms**
**E. normal PT**
**Ans: a**

**9. Zinc is a cofactor for?**
**A. Carbonic anhydrase**
**B. Lactate dehydrogenase**
**C. Glycogen synthase**
**Ans: A**

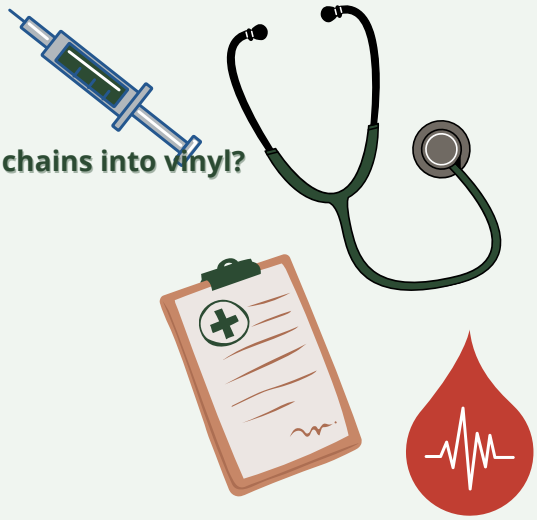
**10. ATP generated in RBCs is utilized in reactions catalyzed by ?**
**A. Phosphoglucose isomerase**
**B. PFK_1,Hexokinases**
**C. Fructose-bisphosphate aldolase**
**Ans: B**

**11. false about 2,3DPG ?**
**A. Increased in high altitude**
**B. Ease the anemia of PK deficiency**
**C. Higher than ATP**
**D. Negative allosteric regulator**
**E. Increased in Pk_1 deficiency**
**Ans: E**

**12. Which set of plasma proteins is a marker of multiple myeloma?**
**A. Haptoglobin & ceruloplasmin**
**B. Alpha-2 macroglobulin & bence Johns proteins**
**C. Beta-2 microglobulin & paraproteins**
**D. Bence Johns proteins & haptoglobin**
**E. Cryoglobulin & transferrin**
**Ans: c**

**13. Which set of plasma proteins is formed of carbohydrate and protein moeities?**
**A. Albumin & transferrin**
**B. Transferrin & haptoglobin**
**C. Haptoglobin & transthyretin**
**D. Haptoglobin & ceruloplasmin**
**E. Alpha-1 antitrypsin & ceruloplasmin**
**Ans: D**

**14. which pathway gives a substance used in heme degradation to bilirubin ?**
**A. Pentose phosphate pathway**
**B. Glycolysis**
**D. Kreb's cycle**
**Ans: A**



15 which of the following causes intrahepatic jaundice ?
A Drug induced hapatitis*

16 Which enzyme in heme synthesis converts two of propionyl side chains into vinyl?
A. Uroporphyrinogen 3 synthase
B. Uroporphyrinogen decarboxylase
C. Coproporphyrinogen oxidase
D. Protoporhyrinogen oxidase
E. Ferrocheletase
Ans: C

17 )false about porphyria cutanea tarda?
A Caused by deficiency of last cytosolic enzyme
B Iron intake precipitate the disease
C Estrogen precipitate the disease
D Erythrocytic isocoproporphrin Characterize the disease
E Motor neuropathy and photocutaneous sensitivity
Ans: E

18) Choose the wrong statement about hepcidin:
A. Is upregulated in response to iron to induce degredation of ferroportin
B. Is upregulated in response to iron in to induce more synthesis of ferroportin
C. Is synthesized by the liver
Ans: b

19) HgD trait and cooleys anemia genetic composition?
A HbA/D , B+1 B +1
B Hb A , B0 B0
Ans: A

20) which of following is needed for normal blood coagulation ?
VitK intake
VitC intake
Heparin inhibitions
Plasmin inhibition
Ans: a

21 PT in prolonged in all ot the following except?
A Factor XII inhibition
B VII inhibition
C Liver disease
D VitK deficiency
E Factor X deficiency
Ans:a

22 genetic insufficiency in.....results in hydrops fetalis?
A 4 deletions of Alpha genes
B 2 deletions of B genes
Ans: A

23 Regarding Von Willebrand disease one is incorrect:
A autosomal dominant
B patients have compound defects in platelet function and coagulation mostly platelet defect produces clinical findings
C the major source of vWF is the liver
D vWF is stored in cytoplasmic Weibel-Palade bodies
Ans: c

24. A 16-year-old African-American man, who has recently taken a drug, passes dark reddisha brown urine. His past medical history was free. On physical examination, he is afebrile, and there is mild jaundice. CBC shows a mild norrnocytic anemia, but the peripheral blood smear shows precipitates of denatured globin (Heinz bodies) with "bite cells" in the population of RBCs. Which of the following is the most likely diagnosis?
a. RBC membrane abnormality.
b. Beta-Thalassemia minor.
c. Autoimmune hemolytic anemia.
d. Glucose-G-phosphate dehydrogenase deficiency.
e. Sickle cell disease.
Ans:D

25. Level I nodes ?
A)submental and submandibular triangles
B)superior mediastinum.
C)posterior triangle of the neck
Ans: A

26. splenic artery:
A. 5-6 branches
B. 3-4 branches
C. 1-2 branches
D. 10 branches
Ans: A

27. node in the digastric triangle :
A. submandibular
B. submental
C. occipital
D. mastoid
E. preauricular
Ans: A

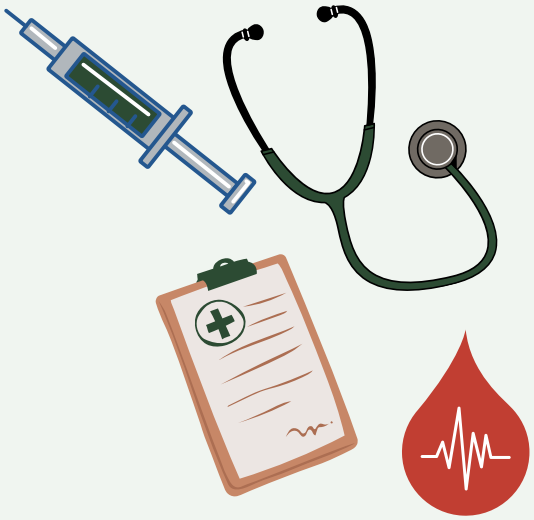
28.drug consist of inorganic metal complex?
Cisplatin
29.drug of choice in mantle cell lymphoma ?
IXa..(mib) انتهى ب mib

30. false about oral iron therapy?
A. Contraindicated in pregnancy and lactating
B. Increase absorption with deficiency
C. May obscure with gi bleeding because black stool
D. Percipitate with tea
Ans: A

31. false about treatment of acute transplant rejection?
A. Anti D immunoglobulin is used to treat it
B. Muromunab-CD3 prevent acute rejection
C. Anti-thymocyte
Ans: A

32. treatment of anemia due to atrphic gastritis(pernicious anemia)?
A. IM hydroxycobolamin
B. Oral VitB12
Ans: A

33) patient develops thrombocytopenia due to unfractionated heparin and still need parentral anticoagulant?
A. Lepirudin
B. Warfarin
C. Abctiximab
Ans: A



34) The wrong statement about fondaparinux is:
A. Renal elimination
B. 100% bioavailability
C. Administered orally
D. Not a heparin product
Ans: C

35) all of the following increase WARFARIN activity except?
A. phenobarbital
B. Clofibrate
C. Sulphonamides
Ans: A

36) which of the following antineoplastic drugs has a cardiotoxic effects which limits its use?
A. Doxorubicin
B. Methotrexate
C. Mitomycin C
Ans: A

37 boy complain from fever and sore throt for two weeks . Test show that he has low Hb , leukocytosis & lymphocytosis . Smear shows that there are atypical cells , monospot test positive . What are these cells ??
A ) B memory
B ) CD8+ cytotoxic
C ) CD4+ helper
D ) CD8+ regulator
Ans: B

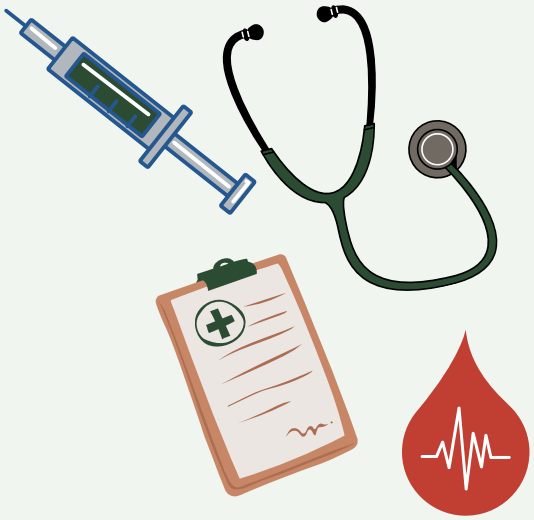
38 A) aplastic anemia
B)erythema infectionsum
C) fifth disease
D) hydrops fetalis
E) all of above
Ans: E

39 Pediculus corporis vector for
rickettsia prowazekii

40 the most complication of brucellosis is :
A- liver failure
B- heart attack
C- kidney failure
D- lymphoma
Ans: A

41 atypical lymphocytes associated with
A EBV *

42 Indian patient have Lymph node enlargment , spleenohepatomegaly , intermettint fever , pancytopenia : The causative organism is
A- Leshmania donovani
B- trypanosoma Rhodesian
C trypanosoma gambiense
Ans: A



**43. drug of choice for pregnant women with Toxoplasma**
**A- spiramycin**
**chylomycin**
**Ans: A**

**44. mode of transmission of wuchereia**
**A- bite**
**B- blood transfusion**
**C- transplant**
**D- inhalation**
**E- digestion**
**Ans: A**

**45. One the following not associated with intravascular hemolysis**
**A- cold antibody**
**B- iron deficiency anemia**
**C hemoglobinemia**
**D Hemosiderinuria**
**E Hemoglobinuria**

**46. All the following mainly extravascular hemolysis except**
**A- G5PD deficiency**
**B- left shift of hemoglobin curve**
**C- methemoglobinemia**
**D- pyruvate kinase deficiency**

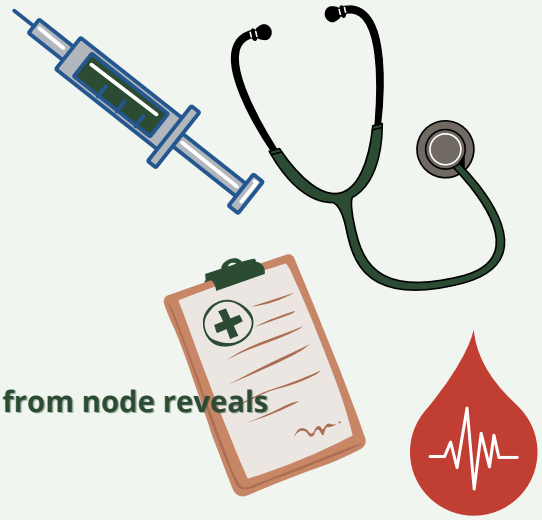
**47. Correct about Cold Antibody Immunohemolytic Anemia:**
**A) Binding by high-affinity ab**
**B distal parts of the body (e.g., ears, hands, and toes) in extreme hot weather.**
**C)intravascular hemolysis**
**D) mycoplasma infection and infectious mononucleosis**
**E) coombs test negative**
**Ans: D**

**48. Wrong match about MDS:**
**A) Megakaryocyte...pawn ball**
**B) Myeloid...Pseudo-Pelger-Hüet cells**
**C) Erythroid.... Abnormal nuclear abnormalities**
**D) Erythroid (ring sideroblasts)**
**E) Myeloid.... iron deposits**
**Ans: E**

**49. old-aged woman suffers from pitechial hemorrhage and easy brusing. Medical investigations reveal mild anemia, leukocytosis and thrombocytosis, so bone biopsy is taken which shows hypercellularity and increased number of megakaryocytes. What is the most likely diagnosis?**
**A. Chronic lymphocytic leukemia**
***B. Myeloproliferative neoplasms**
**C. Thalassemia**
**Ans: B**

**50. DIC with**
**A) AML with t(15;17)**
**B) AML with (t[8;21]**
**C)AML with inv[16]**
**Ans: A**

**51. phlebotomy done in**
**polycythemia vera**



52. CD 10 with all except:
A)B-ALL
B ) Burkitt Lymphoma
C) follicular lymphoma
D) Diffuse Large B Cell Lymphoma
E)mantle
Ans: E

53.Patient complained from cervical lymphadenopathy . Biopsy from node reveals that there are cells CD30 &CD15
A Hodgkin Lymphomas
B Burkitt Lymphoma
Ans: A

54. Wrong about Tonsils
A) Partially encapsulated
B ) along lymphatic vessels
C) crypt
Ans: b

55. The cell that give all components of blood element:
A- myeloid
B- lymphoid
C reticulocytes
Ans: A

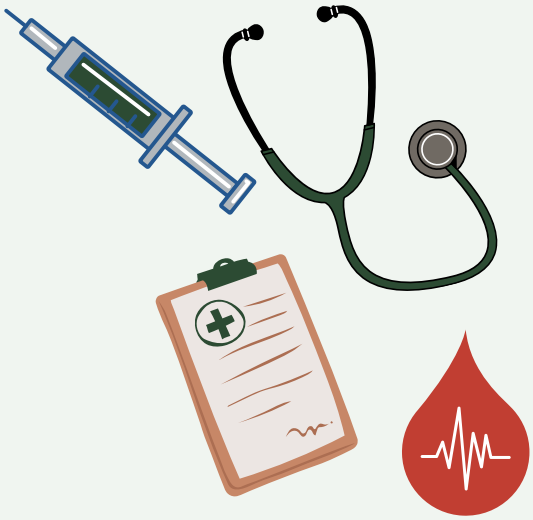
56. Spleen lymphatic nodules
A) White pulp
B ) red pulp
C)Billroth
Cords
Ans: A

57. Kid with hemorrhage, normal pt & ptt and blood element , improve after corticosteroids what is the cause
antibody against platelet

58. Tender lymph node under microscope
A- secondary follicle with germinal center

59 Erythropoiesis involves the following stages of maturation EXCEPT?
A. Colony forming erythrocytes.
b. Promyelocytes.
c Basophilic erythroblast.
d. Normoblasts.
e. Reticulocytes
Ans: B

60. cause incompatability in Rh :
A ) mother Rh -ve , father Rh +ve , baby Rh -ve
B ) mother Rh +ve , father Rh +ve , baby Rh -ve
C ) mother Rh -ve , father Rh +ve , baby Rh +ve
Ans: C



61. not related to fibrin :
A ) triggered by thrombin
B ) cause by fragmentation of peptide by proteolyitic enzymes
C ) fibrin monomer polymerizes
D ) heparin depress fibrin formation
E ) reversed by plasmin ( fibrinolysis )
Ans: D

62. One is incorrect about bleeding from small cut in skin :
A)vascular spasm reduce it
B)factorVIII prolong bleeding
C)need 5 min
D)it's greater in warm than in Cold
E)reduce when limb affected elevated
Ans: B

63. Pregnant women with low retics,low Hb,High MVC :
A)anemia of B12 def
B)anemia of folic acid
C)iron deficiency anemia
Ans: B

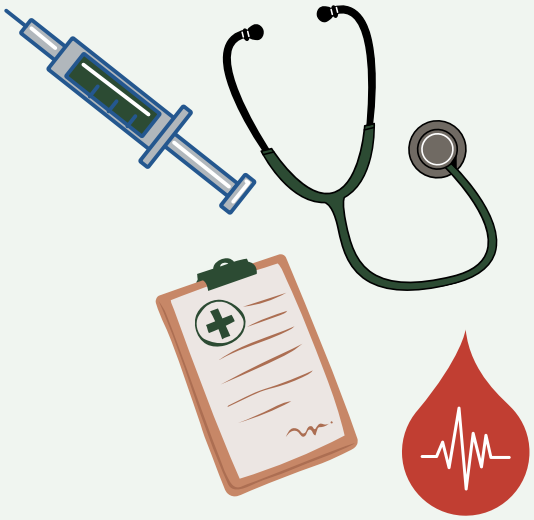
64. Anemia of chronic inflammation:
A)low FE
B)low TIBC
C)microcytic
D)high ferretin
E)transfusion therapy

65. Extravascular hemolysis except :
A)Fenton reaction
B)methglobin
C)G6PD deficiency
D)puyrvate kinase deficiency
E)left shift curve

66. All intravascular except :
A)Cold Abs
B)G6PD deficiency
C)iron deficiency

67. One of the following is not helpful in anemia prevention:
A. Children immunization
B. Physical exercise
C. Food fortification
D. Medical iron tablets
E. Breast-feeding
Ans: B

68. Choose the correct answer about iron deficiency anemia prevalence in Jordan:
A. Accounts for 68% of anemic females in Jordan
B. Is predominantly moderate in Jordan
C. Accounts for severe pregnant prevalence of 65%
D. Accounts for severe male prevalence of 81%
E. No difference of prevalence among pregnant and non-pregnant women
Ans: A



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**وتظل تسعى جاهدًا في همةٍ**
**والله يعطي من يشاءُ اذا شكر**