



قائمة الاسئلة 2025-04-29 06:01

تشخيص الدم - التخصص مختبرات - المستوى الدراسي الرابع - درجة هذا الاختبار (38)

اسم مدرس المادة بشرى عبد الرحمن العبسي

- 1) Prolongation of all PT, PTT and TT, may indicate deficiency of _____
 - 1) - (A) factor VII
 - 2) - (B) factor VIII
 - 3) - (C) factor II
 - 4) + (D) factor I
- 2) Action of heparin is done by _____
 - 1) - (A) inhibition of platelet function
 - 2) - (B) inhibition of vitamin K
 - 3) + (C) activation of antithrombin
 - 4) - (D) activation of plasmin
- 3) Prothrombin time can be used as a test for
 - 1) - (A) platelet function
 - 2) - (B) factor VIII
 - 3) + (C) liver function in acute stage
 - 4) - (D) HMWK
- 4) PT prolongs first before PTT in case of
 - 1) + (A) warfarin therapy
 - 2) - (B) aspirin therapy
 - 3) - (C) heparin therapy
 - 4) - (D) none all of the above
- 5) A 30-year-old man had multiple purpuras of the skin. His both PT and PTT were prolonged. His platelet count was 10,000/microliter. His D-Dimer test is high. Which of the following is the most likely diagnosis?
 - 1) - (A) Hemophilia A
 - 2) - (B) Afibrinogenemia
 - 3) + (C) DIC
 - 4) - (D) Vitamin K deficiency
- 6) A 25-year-old male patient presents with complaint of fatigue for the past month. The patient says he has noticed he gets tired very much easier than he used to when walking up of stairs. During examination you note small cracks in the side of his mouth as well as brittle looking nails that have an upward curve to them like a spoon. You run a CBC and these are his results: WBC 8,000, RBC 3.5, Hemoglobin 9, hematocrit 37, MCV 75, RDW 17, MCHC 28. What other findings would you expect to find?
 - 1) - (A) Serum iron is high
 - 2) - (B) Serum transferrin is low
 - 3) - (C) Serum ferritin is high
 - 4) + (D) TIBC is high
- 7) A 40-year-old man has excessive bleeding following tooth extraction. There is a family history of similar problems. His mother had a history of menorrhagia. His sister has frequent nosebleeds. Laboratory studies on this man show he has a normal PT, prolonged PTT, and normal platelet count. His bleeding time is prolonged. Which of the following is the most likely diagnosis?
 - 1) - (A) Vitamin K deficiency
 - 2) - (B) Liver cirrhosis
 - 3) + (C) von Willebrand disease
 - 4) - (D) Hemophilia A
- 8) A 12-year-old boy has had worsening problems with joint mobility involving his arms and legs, particularly his knees and ankles. On physical examination he has no areas of purpura. Laboratory studies show that his

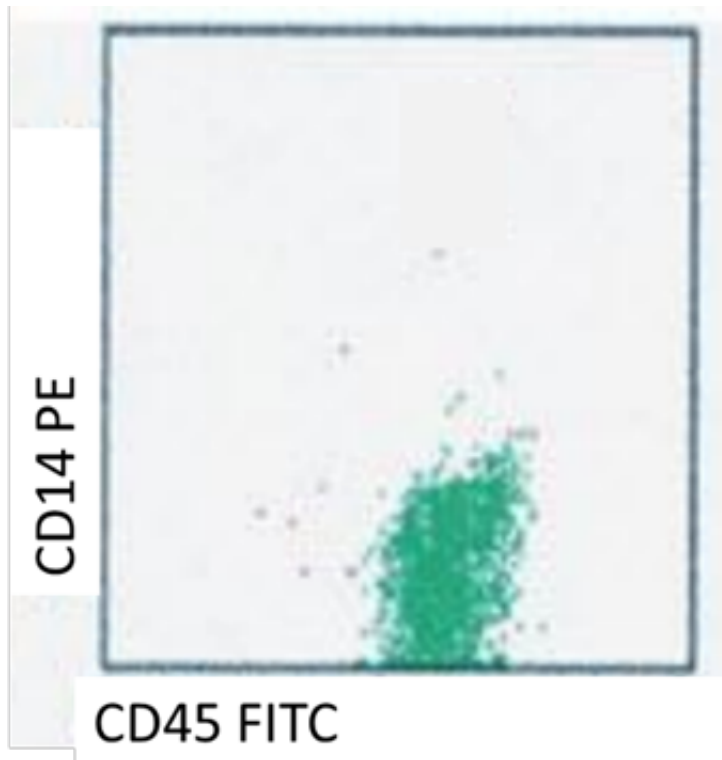


PT is 12 seconds, PTT is 52 seconds and his bleeding time is normal. His Hb is 12.9 g/dL, platelet count 238,500/microliter, and WBC count 6620/microliter. Which of the following is the most correct statement regarding his clinical condition:

- 1) ☒ (A) There is family history for this condition
 - 2) ☐ (B) He has liver disease
 - 3) ☐ (C) He has Bernard-Soulier syndrome
 - 4) ☐ (D) Transfusion of factor VII concentrate is the best treatment
- 9) A 39-year-old man undergoes a surgical operation. He has no history of bleeding disorder. Laboratory studies show Hb 13.8 g/dL, Hct 40 %, MCV 92 fL, WBC count 8500/microliter, and platelet count 275,000/microliter. His PT is normal, and his PTT is prolonged. A deficiency of which of the following coagulation factors is most likely to be present in this man?
- 1) ☒ (A) XII
 - 2) ☐ (B) V
 - 3) ☐ (C) IX
 - 4) ☐ (D) VII
- 10) A 46-year-old man has noted increasing areas of purple discoloration on his skin over the past 5 months. On physical examination there are areas of purpura. Laboratory studies show Hb 12.5 g/dL, Hct 37.4%, MCV 85 fL, platelet count 251,300/microliter, and WBC count 8140/microliter. His PT is 22 seconds, PTT is 25 seconds and his bleeding time is normal. Which of the following is most likely to explain his findings?
- 1) ☐ (A) Aspirin therapy
 - 2) ☒ (B) Factor VII deficiency
 - 3) ☐ (C) Severe vonWillebrand disease
 - 4) ☐ (D) Factor XI deficiency
- 11) Patients with massive transfusion will have
- 1) ☐ (A) prolonged PT
 - 2) ☐ (B) prolonged bleeding time
 - 3) ☐ (C) prolonged PTT
 - 4) ☒ (D) all of the above
- 12) Pagophagia is a craving (اكل في رغبة) for ice, is present in roughly 50% of patients with
- 1) ☐ (A) aplastic anemia
 - 2) ☒ (B) iron-deficiency anemia
 - 3) ☐ (C) anemia of chronic inflammation
 - 4) ☐ (D) anemia of chronic kidney disease
- 13) In case of pancytopenia, the decrease of blood cells in peripheral blood will start with:
- 1) ☐ (A) RBCs then WBCs and after that PLTs
 - 2) ☐ (B) PLTs then WBCs and after that RBCs
 - 3) ☐ (C) WBCs then RBCs and after that PLTs
 - 4) ☒ (D) none all of the above
- 14) If reticulocyte count percentage is 5 % and PCV is 30 %, the interpretation of the result is
- 1) ☐ (A) reticulocytosis
 - 2) ☐ (B) reticulocytopenia
 - 3) ☒ (C) false reticulocytosis
 - 4) ☐ (D) false reticulocytopenia
- 15) In the case of acute bleeding, the body response after 24 hour is
- 1) ☐ (A) a decrease in platelet count
 - 2) ☒ (B) a decrease in Hb
 - 3) ☐ (C) an increase in reticulocyte count
 - 4) ☐ (D) an increase of neutrophils
- 16) If a patient with neutrophil count 8000/uL and lymphocyte count 1000/uL, mortality rate is



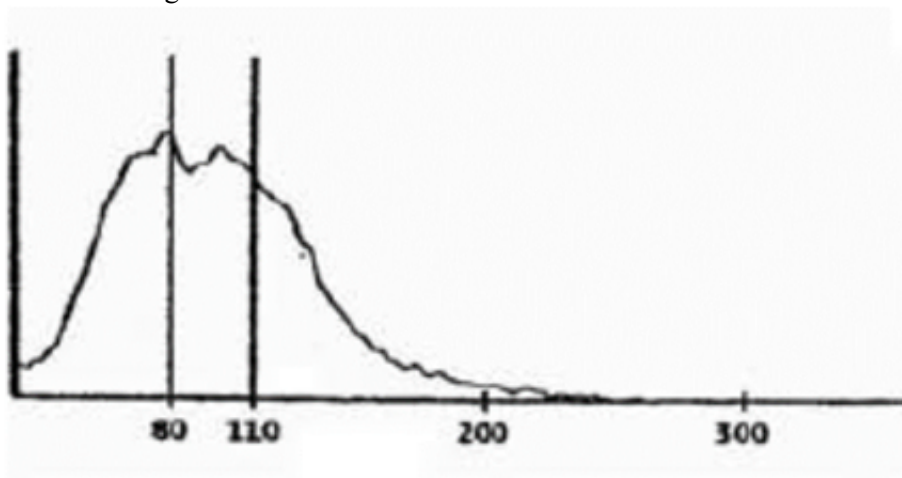
- 1) ☒ (A) increased
 - 2) ☐ (B) decreased
 - 3) ☐ (C) either A or B
 - 4) ☐ (D) none all of the above
- 17) The study of blood film is mandatory in the case of
- 1) ☐ (A) relative lymphocytosis
 - 2) ☐ (B) relative eosinophilia
 - 3) ☒ (C) thrombocytosis
 - 4) ☐ (D) relative monocytosis
- 18) In the flow cytometry, cells with positive CD marker _____
- 1) ☒ (A) produce high bright light
 - 2) ☐ (B) produce dim light
 - 3) ☐ (C) closer to zero (0) origin
 - 4) ☐ (D) all of the above
- 19) Increased platelet count due to splenoectomy
- 1) ☐ (A) a primary hemostatic disease
 - 2) ☐ (B) a secondary hemostatic disease
 - 3) ☒ (C) reactive or responsive effect
 - 4) ☐ (D) none all of the above
- 20) According to this flowcytometry plot, the majority of cells is



- 1) ☒ (A) negative for CD14
 - 2) ☐ (B) positive for CD14
 - 3) ☐ (C) positive for both CD14 and CD45
 - 4) ☐ (D) negative for both CD14 and CD45
- 21) Macrocytosis with other autoimmune disease may be seen in



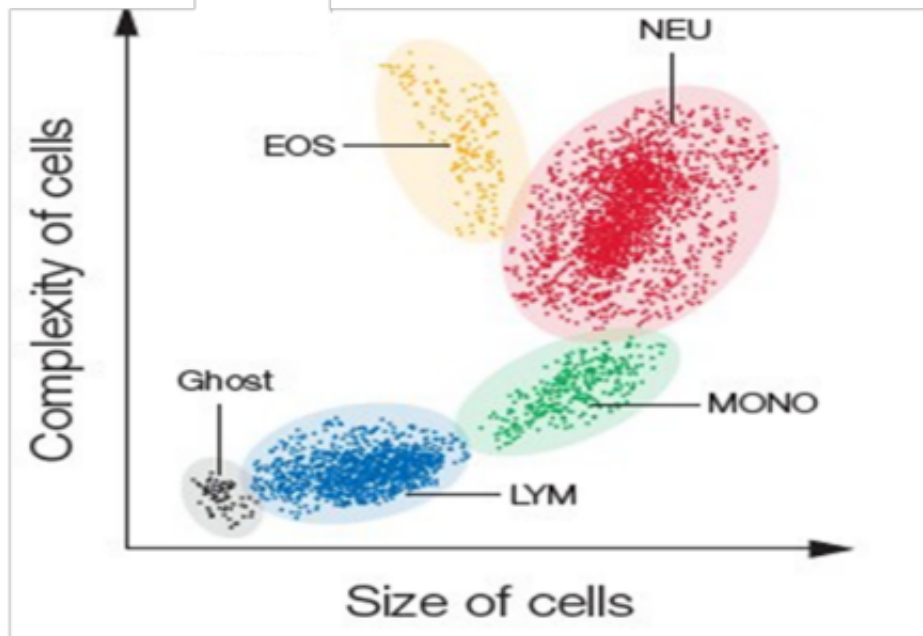
- 1) - (A) vit B12 deficiency
 - 2) - (B) folate deficiency
 - 3) + (C) pernicious anemia
 - 4) - (D) all of the above
- 22) If PCV is 14 %, reticulocytes take _____ for maturation in peripheral blood
- 1) - (A) one day
 - 2) - (B) two days
 - 3) - (C) one day and half
 - 4) + (D) two days and half
- 23) EDTA blood for immunophenotyping should be stored at
- 1) - (A) < 24 hours at 4 °C
 - 2) + (B) < 24 hours at 24 °C
 - 3) - (C) < 24 hours – 20 °C
 - 4) - (D) < 24 hours 37 °C
- 24) When the corrected reticulocyte count is more than 2%, it may indicate
- 1) + (A) blood loss
 - 2) - (B) megaloblastic anemia
 - 3) - (C) anemia of chronic inflammation
 - 4) - (D) iron deficiency anemia
- 25) The Hydrodynamic focusing is the principle working with
- 1) - (A) 3-part differential hematology analyzer
 - 2) + (B) flow cytometry
 - 3) - (C) Coulter impedance hematology analyzer
 - 4) - (D) all of the above
- 26) Reticulate platelets parameter means
- 1) - (A) young platelets
 - 2) - (B) platelets with remnant of RNA
 - 3) - (C) the rate of thrombopoiesis
 - 4) + (D) all of the above
- 27) In Coulter hematology analyzer, the average pulse height determines
- 1) - (A) Hct
 - 2) + (B) MCV
 - 3) - (C) blood cell count
 - 4) - (D) RDW
- 28) This RBC histogram indicates





- 1) - (A) high RDW
- 2) - (B) microcytosis
- 3) - (C) macrocytosis
- 4) + (D) all of the above

29) This scattergram can be generated from



- 1) + (A) 5-part differential analyzer
- 2) - (B) 3-part differential analyzer
- 3) - (C) Coulter analyzer
- 4) - (D) all the above

30) Immature reticulocyte fraction (IRF) is

- 1) - (A) sum of LFR and MFR
- 2) - (B) sum of mature RBCs and reticulocytes
- 3) + (C) sum of HFR and MFR
- 4) - (D) none all of the above

31) In hematology analyzer, the conductivity means using of

- 1) - (A) direct current
- 2) - (B) light scatter
- 3) + (C) electromagnetic current
- 4) - (D) either A or B

32) In WBC histogram, if the peak is only present between T2 and UD, this may indicate to

- 1) - (A) acute leukemia
- 2) + (B) neutrophilia
- 3) - (C) chronic lymphocytic leukemia
- 4) - (D) monocytosis

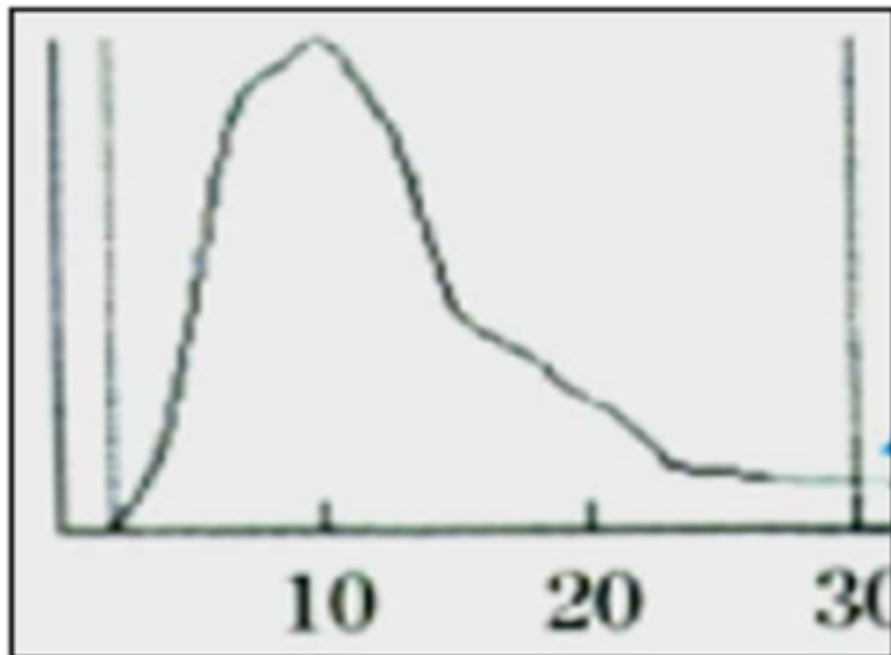
33) The red cell distribution width (RDW) that includes all RBC in its calculation is

- 1) + (A) RDW-SD
- 2) - (B) RDW-CV
- 3) - (C) both A and B
- 4) - (D) none all of the above

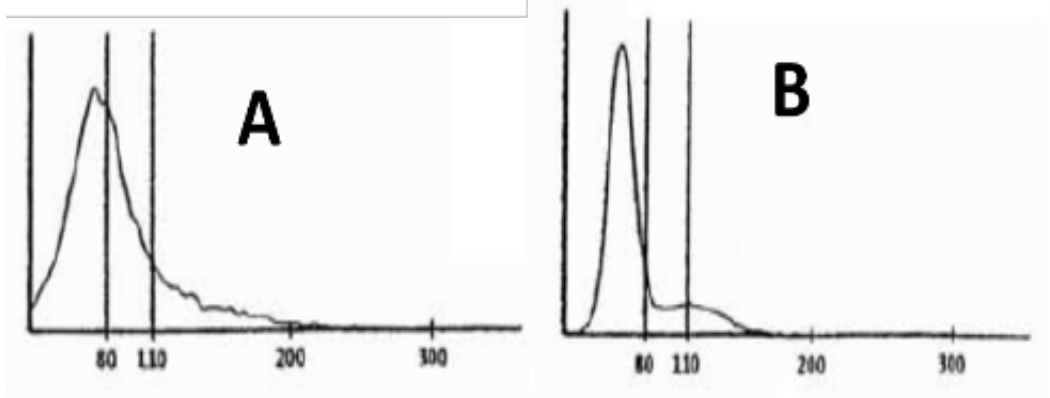
34) Forward scatter light indicates to



- 1) - (A) cell nucleus
2) ☒ (B) cell volume
3) - (C) cytoplasm granules
4) - (D) all of the above
- 35) This equation: $V/VT \times 100$ is used in calculation of
- 1) - (A) MCV
2) ☒ (B) Hct
3) - (C) MCHC
4) - (D) RDW
- 36) This platelet histogram indicates to



- 1) - (A) thrombocytopenia
2) ☒ (B) large platelets
3) - (C) clumping of platelets
4) - (D) all of the above
- 37) If platelet histogram not started from the base line at lower discriminator (LD), the interpretation is
- 1) - (A) nucleated RBCs
2) - (B) lyse-resistant RBCs
3) - (C) platelet clumps
4) ☒ (D) cell fragments
- 38) The main difference between histograms A (thalassemia major) and B (IDA) is



- 1) - (A) MCV is normal for A and low for B
- 2) - (B) RDW is high for A and normal for B
- 3) - (C) RDW is normal for A and high for B
- 4) + (D) none all of the above