

Clinical Hematology

MCQ Collection

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Introduction

Welcome to **Clinical Hematology MCQ**, a comprehensive question bank designed to enhance your understanding of microbiology. This ebook contains over 1200 multiple-choice questions (MCQs) covering a wide array of topics within the field of Pathology.

Whether you're a medical student preparing for exams, a postgraduate aspirant aiming for success in competitive entrance tests, or a healthcare professional looking to refine your expertise, this book will serve as an invaluable resource in your learning journey. The questions in this ebook are structured to reflect the patterns seen in major medical entrance exams such as NEET PG, USMLE, AIIMS, and others, making it a perfect tool for self-assessment and revision.

Purpose

The primary goal of this ebook is to provide a reliable and extensive resource that students and professionals can use to test their knowledge, improve their diagnostic skills, and solidify key microbiological concepts. With the included detailed answers and explanations, this book goes beyond just helping you answer questions — it enables you to understand the reasoning behind each answer, facilitating deeper learning.

How This Ebook Can Help You

- **For Students**: The MCQs in this book are designed to match the rigor and format of real exam questions. By practicing regularly, you'll not only enhance your knowledge but also gain confidence in approaching exam challenges.
- **For Professionals**: This ebook helps professionals stay updated with the latest developments in carbohydrates in medical science and refresh critical concepts required in day-to-day practice.
- **For Educators**: Teachers and educators can use this collection to formulate quizzes, exams, or as supplementary teaching material for their students.

Compilation and Sources

This ebook is a compilation of publicly available online content. Each question has been carefully selected and curated to ensure relevance and accuracy. While this material is sourced from multiple platforms, it has been reorganized and edited to provide a streamlined learning experience.

We hope this book becomes an essential part of your academic and professional toolkit, helping you achieve your goals in Biochemistry.

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1: PT

1-: Test used for factor VIII deficiency identification is-

Questions

2: APTT 3: D dimer 4: FDP 2-: Which of the following drug crosses placenta 1: Heparin 2: Warfarin 3: Dicumarol 4: Nicoumalone 3-: Bence jones proteinuria is derived from? 1: Alpha globulins 2: Light chain globulins 3: Gamma globulins 4: Delta globulins 4-: Factor Xa is necessary for conversion of prothrombin to thrombin 1: Only in the extrinsic pathway 2: Only in the intrinsic pathway 3: As part of both extrinsic and intrinsic pathways

4: Only if the normal blood clotting cascade is inhibited

5-: Anticoagulant of choice for prophylaxis of venous thromboembolism in patient with cancer surgery is: -	
1: Heparin sulfate	
2: Protamine sulfate	
3: Low molecular weight heparin	
4: Warfarin	
6-: Reed sternberg cells are found in-	
1: Hodkin's disease	
2: Sickle cell anaemia	
3: Thalassemia	
4: CML	
7-: Die is commonly seen in -	
1: MlAML	
2: M2AML	
3: M3AML	
4: M4AML	
8-: Treatment of Hodgkin&;s disease -	
1: CHOP	
2: MOPP	
3: ABVD	
4: None	

9-: DIC is seen most commonly seen in which ANIL type?

1: M2	
2: M3	
3: M4	
4: M5	
10-: Which of the following does not predispose to leukemia?	
1: Genetic disorder	
2: Alcohol	
3: Smoking	
4: Chemical exposure	
11-: Most common site of histiocytosis is -	
1: Bone	
2: Skin	
3: Lung	
4: Liver	
12-: Features of histocytosis are all except -	
1: Antigen processing cells	
2: CD1a marker present	
3: CD127 marker	
4: Osteolytic lesions	
13-: Most sensitive and specific test for diagnosis of iron deficiency is -	
1: Serum iron levels	
2: Serum ferritin levels	

	<u> </u>
3: Serum transferrin receptor population	
4: Transferrin saturation	
14-: Compared to the other leukemias, hairy cell leukemia is associated w following infections -	vith which of the
1: Parvovirus D19	
2: Mycoplasma	
3: HTLV2	
4: Salmonella	
15-: Sideroblastic anemia is seen in chronic poisoning of	
1: Lead	
2: Arsenic	
3: Copper	
4: Mercury	
16-: Macrocytic anemia is seen in all EXCEPT -	
1: Vitamin B12 deficiency	
2: Hemolytic anemia	
3: Post hemorrhagic anemia	
4: Anemia of chronic disease	
17-: Von Willebrand&;s factor is synthesized in which one of the followin	.g -
1: Vascular endothelium	
2: Macrophages	

3: Liver

- 4: Eosinophils
- 18-: An 18-year-old man moves from sea level to an elevation of 2,400 m to train as a skier. The increased requirement for oxygen delivery to tissues at the higher elevation stimulates the synthesis of a renal hormone (erythropoietin), which targets hematopoietic stem cells in the bone marrow. Erythropoietin promotes the survival of early erythroid progenitor cells primarily through which of the following mechanisms?
 - 1: Altered cell-matrix adhesion
 - 2: Downregulation of p53
 - 3: Enhanced glucose uptake
 - 4: Inhibition of apoptosis
- 19-: Hemosiderin contains -
 - 1: Calcium
 - 2: Iron
 - 3: Magnesium
 - 4: None
- 20-: All of the following are true about multiple myeloma except -
 - 1: Osteolytic bone disease
 - 2: (18-14) translocation
 - 3: Light chain proliferation
 - 4: Bence-Jones proteins in urine
- 21-: The most common extranodal site for non-hodgkin lymphoma is
 - 1: Stomach
 - 2: Brain
 - 3: Intestine

	4: Tonsils
22-	: Thrombocytopenia is caused by: -
	1: Aspirin
	2: Acyclovir
	3: DIC
	4: Henoch-schonlein purpura (HSP)
23-	: In which of the following Arbiskov cells are seen?
	1: Myelodysplastic syndrome
	2: Multiple myeloma
	3: Granulocytic sarcoma
	4: Leukemia cutis
24-	: Indication for intramuscular iron therapy?
	1: Pregnancy
	2: Postpartum period
	3: Emergency surgery
	4: Oral iron intolerance
25-	: Lymphoplasmacytoid lymphomas may be associated with
	1: IgG
	2: IgM
	3: IgA
	4: IgE

26-: Drug (s) used in the treatment of multiple myeloma is/are-1: Boezomib 2: Methotrexate 3: Hydroxyurea 4: Ketoconazole 27-: D.I.C. is seen in-1: Acute promyelocytic leukemia 2: Acute myelomonocytic leukemia 3: CMC 4: Autoimmune hemolytic anemia 28-: Which of these are seen on Romanowsky stain 1: Cabot ring 2: Basophilic strippling 3: Howell_jolly bodies 4: All of the above 29-: Which of the following is not a minor diagnostic criteria for multiple myeloma? 1: Lytic bone lesions 2: Plasmacytosis greater than 20% 3: Plasmacytoma on biopsy 4: Monoclonal globulin spike on serum electrophoresis of > 2.5 g/dl for IgG, >1.5 g/dl

30-: Microspherocytosis in peripheral blood smear are seen in-

for IgA

- 1: Congenital spherocytosis
- 2: Autoimmune acquired haemolytic anaemia
- 3: Thalassemia
- 4: All of the above
- 31-: A young child presented with history of passage of dark colored with urine with reduced urine output. He has a past history of abdominal pain, fever, and bloody diarrhea for 4 days which resolved on its own. There is absence of peripheral edema or rashes. Investigations show anemia, thrombocytopenia, and elevated blood urea nitrogen and serum creatinine. Which of the following findings is most expected finding in this patient?
 - 1: Elevated haptoglobin level
 - 2: Elevated serum indirect bilirubin
 - 3: Elevated thrombin and prothrombin time
 - 4: Low fibrinogen and elevated D-dimer level
- 32-: Gaisbock syndrome is better known as?
 - 1: Primary familial polycythemia
 - 2: High-altitude erythrocytosis
 - 3: Spurious polycythemia
 - 4: Polycythemia vera
- 33-: 1729. A 28 yr old female presented with malaise and generalised weakness since 6 month. Her appetite Is reduced and she has giddiness and palpitations on and off. There was no organomegaly. Laboratory Study showed normochromic to hypochromic anaemia and MCV-80. What Is the diagnosis
 - 1: Thalassemia minor
 - 2: Iron deficiency anaemia
 - 3: Chronic malaria
 - 4: Folate deficiency

34-: The difference between leukemia and leukemoid reaction is done by -1: Leukocyte alkaline phosphatase 2: Immature cells 3: Total leukocyte count 4: E.S.R. 35-: Which of the following is the mechanism of action of Fondaparinux 1: Factor Xa inhibition and Thrombin inhibition 2: Factor Xa inhibition 3: Antithrombin inhibitor 4: Thrombin inhibition 36-: If a fibrinolytic drug is used for the treatment of acute myocardial infarction, the adverse effect most likely to occur is: 1: Acute renal failure 2: Development of antiplatelet antibodies 3: Encephalitis secondary to liver dysfunction 4: Hemorrhagic stroke 37-: Direct fibrinolytics are/is: 1: R4prourokinase 2: Alfimiprase 3: rtpA

4: All

38-: Person having heterozygous sickle cell trait is protected from infection of: 1: P. falciparum 2: P. vivax 3: Pneumococcus 4: Salmonella 39-: Sideroblastic anemia is caused by all except -1: Collegen vascular disease 2: Iron deficit 3: Lead poisoning 4: Cutaneous porphyria 40-: The earliest sign of iron deficiency anaemia -1: Increase in iron binding capacity 2: Decrease in serum ferritin level 3: Deorease in serum iron level 4: All the above 41-: Diagnosis of beta Thalassemia is established by 1: NESTROFT Test 2: Hb A1c estimation 3: Hb electrophoresis 4: Target cells in peripheral smear 42-: Reticulocytes are stained by 1: Methylviolet

2: Brilliant cresyl blue 3: Sudan black 4: Indigo carmine 43-: Not affected in multiple myeloma -1: IgG 2: IgA 3: IgM 4: IgD 44-: Bite cells are characteristic of -1: G6PD deficiency 2: Thallasemia 3: Hereditary spherocytosis 4: Sideroblastic anaemia 45-: A 27 year old female having a family history of autoimmune disease presents with the complaints of a skin rash and recurrent joint pains 3 months after delivering a baby. She is most likely to have which of the following disorders? 1: Megakaryocytic thrombocytopenia 2: Amegakaryocytic thrombocytopenia 3: Functional platelet defect 4: Acquired Factor VIII inhibitors 46-: Autoimmune hemolytic anaemia is seen in: 1: All

2: AML

3: CML
4: CLL
47-: 20-year-old female present with features of anemia. Blood tests: Hb-5g/dL, MCV - 52 fl MCH-22 pg, PCV - 15%. Diagnosis?
1: Phenytoin toxicity
2: Fish tapeworm infection
3: Hookworm infection
4: Blind loop syndrome
48-: Which of the following drugs inhibit platelet cyclooxygenase reversibly?
1: Alprostadil
2: Aspirin
3: Ibuprofen
4: Prednisolone
49-: Deficiency of the 'Intrinsic factor of Castle 'causes-
1: Megaloblastic anemia
2: Pernicious anemia
3: Cooley's anemia
4: Aplastic anemia
50-: t(2,8) is associated with:
1: T cell ALL
2: B cell ALL

3: CML

- 4: CLL
- 51-: Host receptor for streptococcus pyogenes is?
 - 1: CD4
 - 2: CD21
 - 3: CD44
 - 4: CD46
- 52-: Anemia in chronic renal failure is due to
 - 1: Decreased erythropoietin production
 - 2: Iron deficiency
 - 3: Hypoplastic bone marrow
 - 4: Decreased folate levels
- 53-: All of the following can cause megakaryocytic thrombocytopenia, except:
 - 1: Idiopathic thrombocytopenia purpura
 - 2: Systemic lupus erythematosus
 - 3: Aplastic anemia
 - 4: Disseminated intravascular coagulation (DIC)
- 54-: Apixaban is a new drug that acts by
 - 1: Inhibiting TNF alpha
 - 2: Inhibiting coagulation factor Xa
 - 3: Inhibiting platelet aggregation
 - 4: Activating plasminogen

55-: Commonest site for extranodal lymphoma is
1: Liver
2: Stomach
3: Small intestine
4: Large intestine
56-: A person is having painless lymphadenopathy. On biopsy, binucleated owl shaped nuclei with clear vacuolated area is seen. On IHC CD 15 and CD 30 were positive. What is the most probable diagnosis?
1: Nodular sclerosis
2: Large granular lymphocytic lymphoma
3: Lymphocyte depletion type
4: Lymphocyte predominant HD
57-: Which of the following is universal donor blood group -
1: A
2: B
3: AB
4: 0
58-: Differential diagnosis for pancytopenia with cellular bone marrow include the following except -
1: Megaloblastic anemia
2: Myelodysplasia
3: Paroxysmal Nocturnal Hemoglobinuria

4: Congenital dyserythropoietic anemia

59-: Bleeding time is not prolonged in-
1: Von Willebrand's disease
2: Christmas disease
3: Haemophilia
4: Polycythemia
60-: A 7 year old boy presented with sudden onset petechiae and purpura. There was a history of URTI 2 weeks back. On examination, there was no hepatosplenomegaly. He is most probably suffering from:
1: ALL
2: Acute viral infection
3: ITP
4: Aplastic Anemia
61-: Malignant tumor associated with Waldenstrom macroglobulinemia includes -
1: Smoldering myeloma
2: Primary effusion lymphoma
3: Mycosis fungoides
4: Lymphoplasmacytic lymphoma
62-: Multiple myeloma-all are true except?
1: Proteinuria
2: Visual disturbance
3: Bleeding
4: Dystrophic calcification

- MedicalMCQ.in 1: Microcytic hypochronic anemia 2: Sideroblastic anemia 3: Megaloblastic anemia 4: Hemolytic anemia 64-: Which of the following is an indication for the use of folinic acid? 1: Prophylaxis of neural tube defects in the offspring of women receiving anticonvulsant medications 2: Counteracting toxicity of high dose methotrexate therapy 3: Pernicious anemia 4: Anemia associated with renal failure 65-: First change of improvement noted after iron therapy is initiated 1: Decreased irritability 2: Reticulcytosis 3: Increase in serum iron levels 4: Replenishment of iron stores 66-: Most common ALL subtype: 1: Pre B cell 2: Pre T cell 3: T cell

4: B cell

- 67-: D1C is common in which AML-
 - 1: Monocytic (M5)

2: Promyelocytic (M3)	
3: Erythrocytic (M6)	
4: Megakaryocytic (M7)	
68-: CD marker of histiocytosis is-	
1: CD IA	
2: CD 1B	
3: CD1C	
4: CD1D	
69-: Most sensitive indicator of iron deficiency anemia	
1: Packed cell volume	
2: Hemoglobin	
3: Serum ferritin	
4: Serum iron	
70-: A 40 year old man has megaloblastic anemia and early signs of neurological abnormality. The drug most probably required is:	
1: Folic acid	
2: Iron sulphate	
3: Erythropoietin	
4: Vitamin B12	
71-: Which of the following is a Longer acting Erythropoietin derivative?	
1: Sargramostim	
2: Darbepoetin alfa	

- 3: Dornase alfa
- 4: Oprelvekin

72-: A 56-year-old woman with a history of breast cancer that was treated 5 years ago with lumpectomy and radiation but with no chemotherapy returns with bone pain, fatigue, and weakness. A complete blood count reveals severe anemia, as well as decreased white blood cells and platelets. Examination of a peripheral blood smear reveals small numbers of nucleated red cells, as well as an occasional "blast" cell and myelocyte. A likely cause of the hematologic abnormalities is

- 1: chloramphenicol.
- 2: Diphyllobothrium latum infestation.
- 3: megaloblastic anemia.
- 4: myelophthisic anemia.

73-: Which of the following malignancy is associated with underlying progression and spreads characteristically in a stepwise fashion and hence staging the disease is an impoant prognostic factor? -

- 1: Hodgkin's lymphoma
- 2: Multiple myeloma
- 3: Mature T cell NHL
- 4: Mature B cell NHL

74-: Which of the following drug will cause hemolysis in G6PD patients:

- 1: Cephalosporins
- 2: Ampicillin
- 3: Chloroquine
- 4: Erythromycin

75-: 5-year old male child presented to AIIMS pediatrics OPD with severe transfusion requiring anemia and Jaundice. On examination Liver and spleen were palpable 5 cm below the costal margin. Peripheral smear analysis showed the following? What is your diagnosis?

- 1: Nutritional anemia
- 2: Aplastic anemia
- 3: Autoimmune hemolytic anemia
- 4: Thalassemia

76-: All are transmitted by blood except-

- 1: Parvovirus B-19
- 2: Hepatitis B
- 3: Epstein Bar virus
- 4: Cytomegalovirus

77-: A 39-year-old man repos seeing red-colored urine in the morning. The CBC reveals anemia, low serum iron, and an elevated reticulocyte count. Laboratory studies show increased lysis of erythrocytes when incubated with either sucrose or acidified serum. Which of the following is the appropriate diagnosis

- 1: Anemia of chronic renal failure
- 2: Hereditary spherocytosis
- 3: Microangiopathic hemolytic anemia
- 4: Paroxysmal nocturnal hemoglobinuria

78-: 40/F presented to AIIMS OPD with the following findings-Hb-9.8gm%, TLC= 15,700/cumm, Platelet counts 3 lac/cumm. Peripheral smear showed increased neutrophils with 14 % blasts, 15% myelocytes and metamyelocytes with some dysplasia. Cytogenetic study revealed t(8;21). What is your diagnosis?

- 1: AML
- 2: CML

- 3: MDS
- 4: ALL

79-: A 70yr old male has a pathological fracture of femur. The lesion appears a lytic on X-rays film with a circumscribed punched out appearance. The curetting from fracture site is most likely to show which of the following?

- 1: Diminshed and thinned trabecular bone
- 2: Sheets of atypical plasma cells
- 3: Metaplastic prostatic adenocarcinoma
- 4: Malignant cells forming osteoid bone

80-: Chromosomal translocation characteristic in acute promyelocytic leukemia is:

- 1: t (15; 17)
- 2: t (22; 9)
- 3: t (21; 17)
- 4: t (8; 21)

81-: A 40 year old woman is on treatment for CLL. Over the past few months she noticed swellings in the neck and axilla which was rapidly increasing in size. She complains of feeling feverish and experiences weight loss. Which of the following is responsible?

- 1: Richter transformation
- 2: Progression of CLL
- 3: Development of secondary infections
- 4: Immunodeficiency associated hemolytic anemia

82-: Which of the following is feature of reticulocyte?

- 1: Constitute 10% of the red cells
- 2: No nucleus

- 3: Smaller in the size than RBCs
- 4: Mature in lymph nodes

83-: A patient with microcytic hypochromic anemia. Hb-9 g%, serum iron-20 microg/dl, ferritin level-800 ng/ml, transferrin percentage saturation is 64%. What is possible diagnosis?

- 1: Atransferrinemia
- 2: Iron deficiency anemia
- 3: DMT 1 mutation
- 4: Anemia of chronic disorder

84-: BCR-ABL fusion gene is detected by?

- 1: Flow cytometry
- 2: FISH
- 3: Karyotyping
- 4: RT-PCR

85-: Plasmacytoid lymphomas may be associated with increase in

- 1: IgG
- 2: IgM
- 3: IgA
- 4: IgE

86-: Release ferroportin store is controlled by?

- 1: Hepsidin
- 2: Transferrin
- 3: Ferritin

- 4: Hepoxin
- 87-: Oral Factor Xa Inhibitor is
 - 1: Dabigatran etexilate
 - 2: Fondaparinux
 - 3: Bivalirudin
 - 4: Rivaroxaban
- 88-: The classification proposed by the International Lymphoma Study Group for non-Hodgkin&;s lymphoma is known as -
 - 1: Kiel classification
 - 2: REAL classification
 - 3: WHO classification
 - 4: Rappapo classification
- 89-: There is no cyanosis in severe anemia because -
 - 1: Certain min. amount of reduced Hb should be present
 - 2: In anemia, O2 saturation increases
 - 3: Hypoxia stimulates erythropoietin production
 - 4: 02 hemoglobin curve shifts to right
- 90-: Treatment of choice for aplastic anaemia is
 - 1: Blood transfusion
 - 2: Oxymethalone
 - 3: Bone marrow transplantation
 - 4: Azathioprine

91-: In CML serum vitamin B12 level is:
1: Slightly decreased
2: Normal
3: Markedly decreased
4: Increased
92-: A 50-year-old male presented with left upper quadrant pain. On examination, the spleen was palpable 10 cm below left costal margin. Peripheral smear is shown below. Which of the following IHC is used for diagnosis of the condition?
1: CD23
2: CD21
3: Annexin A1
4: Cyclin D1
93-: "Stary sky" appearance is seen in -
1: Burkitt's lymphoma
2: Mantle cell lymphoma
3: Extra nodal marginal Zone B-cell lymphoma of MALT type
4: Chronic myeloid leukemia
94-: Enzyme used in Leukemia-
1: Asparginase
2: Lipase
3: Amylase

4: Transminase

Clinical Hematology MCQ MedicalMCQ.in 95-: Anticoagulant effect of Warfarin is increased by all of the following EXCEPT: 1: Cimetidine 2: Phytonadione 3: Amiodarone 4: Phenylbutazone 96-: Following are features of polycythemia rubra vera except -1: Increased red cell mass 2: Normal aerial oxygen sturation 3: High leucocyte alkaline phosphatase score 4: None 97-: A patient underwent Bhadrenalectomy in views of B/L pheochromocytoma 1 day later developed lethargy fatigue low BP and pulse normal No signs of volume deficit likely course 1: Addisonian Crisis 2: SIADH 3: DI 4: Cerebral salt wasting DISEASE 98-: Microangiopathic hemolytic anaemia (MAHA) is a component of all of the following, except: 1: Thrombotic thrombocytopenic purpura (TTP) 2: Hemolytic uremic syndrome (HUS)

3: Hemolysis with elevated liver enzymes and low platelet (HELLP) syndrome

4: Paroxysmal nocturnal hemoglobinuria

- 1: DIC 2: Swallowed Maternal blood
- 3: Haemorrhagic disease of Newborn
- 4: Neonatal Thrombocytopenic purpura
- 100-: Which of the following is absent in hemolytic anemia?
 - 1: Increased indirect bilirubin
 - 2: Increased direct bilirubin
 - 3: Increased reticulocyte count
 - 4: Jaundice
- 101-: For which procedure is the following instrument used?
 - 1: Bone marrow examination
 - 2: Liver biopsy
 - 3: Pleural biopsy
 - 4: Lumbar puncture
- $102\hbox{-:} Most \ immunogenic \ RBC \ blood \ group \ system \ out \ of \ the \ given \ options \ is:-$
 - 1: Kell
 - 2: Duffy
 - 3: Kidd
 - 4: Lewis antigen
- 103-: Which fibrinolytic agent selectively activate fibrin bound plasminogen rather than circulating plasminogen
 - 1: Streptokinase

- 2: Urokinase
- 3: Alteplase
- 4: Both 'A' and 'C'

104-: Mantle cell lymphoma shows-

- 1: CD5 +, CD25
- 2: CD 5 +, CD 10 +
- 3: CD 5+, CD23+
- 4: CD 5+, CD 23 -

105-: The quantity of globin chain synthesis is reduced in

- 1: HbS
- 2: Thalassemia
- 3: HbC
- 4: HbF

106-: Bence Jones proteins are derived from-

- 1: Alpha globulins
- 2: Beta globulins
- 3: Gamma globulins
- 4: Delta globulins

107-: Dohle bodies are seen in-

- 1: Multiple myeloma
- 2: May-Hegglin anomaly
- 3: Waldenstorm Macroglobulinemia

- 4: Lymphoma
- 108-: Patient with hemophilia A have bleeding disorder because of:
 - 1: Lack of platelet aggregation
 - 2: Lack of reaction accelerator during activation of factor X in coagulation cascade
 - 3: Neutralization of antithrombin III
 - 4: Release of Thromboxane A2
- 109-: Mechanism of action of aspirin is inhibition of:
 - 1: Thromboxane A2 synthesis
 - 2: Phosphodiesterase
 - 3: HMG-CoA reductase
 - 4: Pancreatic lipase
- 110-: Which of the following is not a feature of sickle cell disease?
 - 1: Autosplenectomy
 - 2: Heterozygous individuals are at increased risk of Plasmodium falciparum infection
 - 3: Ischemic tissue damage
 - 4: Hydroxyurea is used as a therapeutic agent
- 111-: Hemophia A due to deficiency of -
 - 1: Factor VIII
 - 2: Factor IX
 - 3: Factor X
 - 4: Factr XI

- 112-: Which of the following is the most common manifestation of hemophilia?
 - 1: Hemoptysis
 - 2: Hemarthrosis
 - 3: Hematemesis
 - 4: Mucosal bleeding
- 113-: HbA2 is -
 - 1: Alhpa2Beta2
 - 2: Alpha 2 Gamma 2
 - 3: Beta 2 Gamma 2
 - 4: Alpha 2 Delta 2
- 114-: Adult patient presents with generalized lymphadenopathy and blood film shows 70percent immature looking lymphocytes. What should be the next best investigation?
 - 1: Genotyping/karyotyping
 - 2: Immunophenotyping
 - 3: Bone marrow
 - 4: Peripheral smear study
- 115-: A 25-year-old woman is being evaluated for chronic fatigue. She has a history of heavy menstrual periods since menarche and also recalls frequent nosebleeds as a child. Her past medical history is otherwise insignificant and she takes no medications. Laboratory studies show normal prothrombin time (PT), activated paial thromboplastin time (APTT), platelet count and fibrinogen levels. Which of the following is the most likely diagnosis?
 - 1: Hypofibrinogemia
 - 2: Factor IX deficiency
 - 3: Immune thrombocytopenia
 - 4: Von Willebrand disease type 1

- 116-: The initial response to iron therapy in a child suffering from iron-deficiency anemia is
 - 1: Reticulocytosis
 - 2: Replacement of intracellular iron enzymes
 - 3: Initial bone marrow response
 - 4: Erythroid hyperplasia
- 117-: A 40 years old male had undergone splenectomy 20 years ago. Peripheral blood smear examination would show the presence of:
 - 1: Dohle bodies
 - 2: Hypersegmented neutrophils
 - 3: Spherocytes
 - 4: Howell-Jolly bodies
- 118-: Eosinophilic abscess in lymph node is characteristically seen in -
 - 1: Kimura's disease
 - 2: Hodgkin's lymphoma
 - 3: Tuberculosis
 - 4: Sarcoidosis
- 119-: "Smudge cells" in the peripheral smear are characteristic of:
 - 1: Chronic myelogenous leukemia
 - 2: Chronic lymphocytic leukemia
 - 3: Acute myelogenous leukemia
 - 4: Acute lymphoblastic leukemia

120-: 1930. The first-line drug therapy in chronic myeloid leukemia is -

- 1: Hydroxycarbamide
- 2: Alpha-interferon
- 3: Busulphan
- 4: Imatinib

121-: A 15 year-old boy presented with one day history of bleeding gums, subconjunctival bleed and purpuric rash. Investigations revealed the following results: Hb -6.4 gm/dL; TLC - 26, 500 mm3; Platelet -35, 000/ mm3; prothrombin time -20 sec with a control of 13 sec; paial thromboplastin time-50 sec; and Fibrinogen 10 mg/dL. Peripheral smear was suggestive of acute myeloblastic leukaemia. Which of the following is the most likely?

- 1: Myeloblastic leukemia without maturation
- 2: Myeloblastic leukemia with maturation
- 3: Promelocytic leukemia.
- 4: Myelomoncytic leukemia

122-: An 18-year-old man is rushed to the emergency room in shock following a motor vehicle accident. He is transfused with 5 U of blood. Following the transfusion the patient complains of fever, nausea, vomiting, and chest pain. Laboratory data show elevated indirect serum bilirubin, decreased serum haptoglobin, and a positive Coombs test. Which of the following is the most likely diagnosis?

- 1: Autoimmune hemolytic anemia
- 2: Disseminated intravascular coagulation
- 3: Hemolytic transfusion reaction
- 4: Hemolytic uremic syndrome
- 123-: Freezing point of normal human plasma is
 - 1: 4degC
 - 2: 0degC

3: 0.54degC 4: _1.54degC 124-: Most common cause of DIC 1: Obstetric complications 2: Cyanotic heart disease 3: Malignancies 4: Extensive bums 125-: Flowcytometry of an AML patient showed CD41 and CD61 positivity, it belongs to which FAB classification? 1: M0 2: M3 3: M5 4: M7 126-: All of the following are true regarding enoxaparin EXCEPT: 1: It has higher and predictable bioavailability 2: It act by inhibiting both factor Ila and factor Xa 3: Monitoring is not required 4: It has more favorable pharmacokinetics 127-: Which of the following statements about platelet function defects is true? -1: Normal platelet count with prolonged bleeding time 2: Thrombocytopenia with prolonged bleeding time

3: Thromobocytosis with prolonged bleeding time

- 4: Normal platelet count with normal bleeding time
- 128-: All are true for multiple myeloma except -
 - 1: Hypercalcemia
 - 2: Hyperuricemia
 - 3: Serum alkaline phosphatase
 - 4: Monoclonal M band
- 129-: True about iron deficiency anemia
 - 1: Microcytic hypochromic anemia
 - 2: Decreased TIBC
 - 3: Increased ferritin
 - 4: Bone marrow iron decreased earlier than serum iron
- 130-: In sickle cell anemia all are true except:
 - 1: Sickle cells
 - 2: Target cells
 - 3: Howell jolly bodies
 - 4: Ringed sideroblast
- 131-: Apixaban is classified as
 - 1: Parenteral Direct Thrombinn Inhibitor
 - 2: Oral Direct Thrombin Inhibitor
 - 3: Oral factor Xa inhibitor
 - 4: Parenteral factor Xa Inhibitor

- 132-: Multiple myeloma is diagnosis by-
 - 1: 24 hour urine protein
 - 2: Kidney biopsy
 - 3: >10% plasmacytoma
 - 4: Rouleaux formation in blood
- 133-: In sickle cell anemia all are true except -
 - 1: Sickle cells
 - 2: Target cells
 - 3: Howell jolly bodies
 - 4: Ringedsideroblast
- 134-: 1715. True regarding anaemia of chronic ds. are A/E -
 - 1: Decreased TIBC
 - 2: Increased macrophage iron in marrow
 - 3: Decrease serum ferritin level
 - 4: Decreased serum iron levels
- 135-: Drug not used for multiple myeloma is -
 - 1: Boezonib
 - 2: Lenalidomide
 - 3: Methotrexate
 - 4: Prednisone

136-: 1722. A patient presents with macroglossia and atrophy of tongue papilla. His Hb Is 11.5 and MCV is 100. What should be the next step in Investigating this patient?

- 1: B12 estimation
- 2: Brush biopsy of the lesion
- 3: Fluconazole treatment
- 4: Incision biopsy
- 137-: A patient presents with mediastinal mass with sheets of epithelial cells giving arborizing pattern of reactivity along with interspersed lympoid cells. The apt diagnosis would be $\frac{1}{2}$
 - 1: Thymoma
 - 2: Thymic carcinoid
 - 3: Primary mediastinal lymphoma
 - 4: Non-Hodgkin lymphoma
- 138-: Which of the following lymphomas is associated with HTLV virus infection?
 - 1: Burkitt's lymphoma
 - 2: B-Cell lymphoma
 - 3: Adult T cell leukemia and lymphoma
 - 4: Hodgkin's disease
- 139-: Pure red cell aplasia is associated with all except?
 - 1: ABO incompatibility after renal transplant
 - 2: 5q-syndrome
 - 3: Drugs
 - 4: Large granular lymphocytic leukemia
- 140-: A 62-year-old man presents with pallor, fatigue, and dyspnea on exeion. A complete blood count reveals microcytic hypochromic anemia. The likely cause of this hematological finding is?

- 1: Increased iron requirement
- 2: Gastrointestinal bleeding
- 3: Hypersplenism
- 4: Hemolytic anemia
- 141-: Normal platelet count is found in:
 - 1: Wiskott Aldrich syndrome
 - 2: Henoch Schonlein purpura
 - 3: Immune thrombocytopenia
 - 4: Dengue fever
- 142-: A 12-year-old child with acute kidney injury after a bout of dysentery. Not seen is:
 - 1: M.A.H.A
 - 2: Schistocytes
 - 3: Normal serum haptoglobin
 - 4: Thrombocytopenia
- 143-: Anemia of chronic disease is characterized by
 - 1: Increased sideroblasts
 - 2: Increased TIBC
 - 3: Increased bone marrow iron
 - 4: Increased protoporphyrin
- 144-: True about blood transfusion reaction -
 - 1: Complement mediated severe haemolysis
 - 2: Renal blood flow is decreased

- 3: Transfusion should not be stopped
- 4: Death is not seen
- 145-: True about iron deficiency anemia in children
 - 1: Iron absorption from terminal ileum
 - 2: Cow milk contain less iron than breast milk
 - 3: Serum ferritin depletes first
 - 4: Decreased aleness
- 146-: POEMS syndrome includes all except-
 - 1: Polyneuropathy
 - 2: Endocrinopathy
 - 3: Ovarian dysgenesis
 - 4: Monoclonal gammopathy
- 147-: Beta 2 microglobulin is a tumour marker for:
 - 1: Multiple myeloma
 - 2: Lung cancer
 - 3: Colonic neoplasm
 - 4: Choriocarcinoma
- 148-: A 5 year old boy comes with overnight petechial spots 2 weeks back he had history of abdominal pain and no hepatosplenomegaly. Diagnosis is
 - 1: Aute lymphatic leukemia
 - 2: Aplastic anemia
 - 3: Idiopathic thrombocytopenis purpura

- 4: Acute viral infection
- 149-: In sickle cell anaemia defect is in which chain -
 - 1: Alpha-chain
 - 2: Beta-chain
 - 3: Both the chains
 - 4: None of these
- 150-: True about acute ITP
 - 1: More common in female
 - 2: Specific anti platelet antibodies detected
 - 3: Viral infection predisposes as seen after vaccination
 - 4: 80% cases transforms to chronic
- 151-: Drug which may lead to hemolysis in a child with G6PD deficiency is
 - 1: Penicillin
 - 2: Primaquine
 - 3: Ceftriaxone
 - 4: Erythromycis
- 152-: Contraindication for platelet transfusion are all except:-
 - 1: Flavivirus infection
 - 2: Thrombotic thrombocytopenic purpura
 - 3: Immune thrombocytopenic purpura
 - 4: Heparin induced thrombocytopenia

153-: Macrophages are found in:

- 1: Phase of scar formation
- 2: Phase of repair
- 3: Late phase of inflammation
- 4: Early phase of inflammation

154-: The following can be used to antagonise the action of heparin in case of overdose

- 1: Heparan sulfate
- 2: Dextran sulfate
- 3: Ancrod
- 4: Protamine sulfate

155-: An old woman is required to receive 4 cycles of cancer chemotherapy. After her first cycle, she developed chemotherapy induced thrombocytopenia. Then in the next cycle, it would be appropriate to give this patient:

- 1: Darbopoietin alpha
- 2: Filgrastim (G-CSF)
- 3: Iron dextran
- 4: Oprelvekin (IL-11)

156-: Leukocyte common antigen is:

- 1: CD 45
- 2: CD 20
- 3: CD 19
- 4: CD 41

157-: A patient Seeta is diagnosed to be having iron deficiency anemia. The agent that can be used to improve the absorption of iron is:

- 1: Antacids
- 2: Tetracyclines
- 3: Phosphates
- 4: Ascorbic acid

158-: Unconjugated hyperbilirubinemia with increased urobilinogen is seen in:

- 1: Hemolytic anemia
- 2: Liver cirrhosis
- 3: Bile duct obstruction
- 4: Sclerosing cholangitis

159-: Hypersegmented neutrophils are seen in

- 1: Thalassemia
- 2: Iron deficiency
- 3: Megaloblastic anemia
- 4: All

160-: Platelet transfusion is indicated in all Except

- 1: Dilutional thrombocytopenia
- 2: ITP
- 3: Aplastic anemia
- 4: DIC

161-: Iron absorption is increased in all except

- 1: Iron deficiency 2: Pregnancy 3: Alkaline pH of stomach 4: Ferrous iron salts 162-: All of the following are used in management of acute severe bleeding due to warfarin overdose except:-1: Withhold the anticoagulant 2: Vitamin K1 3: Protamine sulphate 4: Fresh frozen plasma 163-: All are true regarding Thrombotic Thrombocytopenic Purpura except: 1: Normal ADAMTS levels 2: Microangiopathic hemolytic anemia 3: Thrombocytopenia 4: Thrombosis 164-: Which of the following is the best parameter for assessment of body iron stores? 1: Serum iron 2: Serum TIBC 3: Serum ferritin 4: Serum transferrin
- 165-: Blood group antigens chemically are made up of?
 - 1: Carbohydrate

- 2: Glycoprotein
- 3: Phospholipids
- 4: Polysaccharide

166-: Leptocyte in blood smears seen in?-

- 1: Sickle cell anemia
- 2: Thalassemia
- 3: Post splenectomy
- 4: Uremia

167-: True for Hodgkin&;s stage IAi s -

- 1: Chemotherapy is best
- 2: Radiotherapy is best
- 3: Total radiation therapy is best treatment
- 4: Fever and wt loss is always present

168-: von Willebrand factor is produced by -

- 1: Liver
- 2: Platelets
- 3: Endothelial cells
- 4: Spleen

169-: Filgrastim is a.

- 1: T-cell stimulating factor
- 2: GnRH analogue
- 3: G-CSF

4: GM-CSF

T. UM-G51
170-: Which of the following is not the cause of macrocytic anaemia ?-1: Orotic aciduria2: Abetalipoproteinemia3: Lesh nyhan disease
4: Transcobalamine deficiency
171-: Which of the following acts at site A? 1: Aspirin 2: Vorapaxar 3: Abciximab 4: Ticagrelor
172-: Iron absorption is increased by which of the following? 1: Phytates
O. M

- 2: Tannates
- 3: Plant foods
- 4: Ascorbic acid
- 173-: Platelet adhesion to vessel wall is due to?
 - 1: Factor IX
 - 2: Fibrinogen
 - 3: vWF
 - 4: Fibronectin

174-: Alpha granules of platelets contain all Except		
1: Fibronectin		
2: Platelet factor-4		
3: Platelet-derived growth factor		
4: Serotonin		
175-: Specific stain for myeloblasts -		
1: Sudan black		
2: PAS		
3: Myeloperoxidase		
4: LAP		
176-: Lymphoplasmacytoid lymphoma is associated with:		
1: igG		
2: igA		
3: igD		
4: igM		
177-: Low molecular weight heparin affects which factor:		
1: Factor X		
2: Anti-thrombin		
3: Factor Xa		
4: Factor IX		
178-: All of the following are pre-leukemic conditions except		
1: Paroxysmal nocturnal hemoglobinuria		

- 2: Paroxysmal cold hemoglobinuria
- 3: Aplastic anemia
- 4: Myelodysplastic syndrome
- 179-: Shape of RBC is biconcave due to?
 - 1: Ankyrin
 - 2: Spectrin
 - 3: Band protein
 - 4: Glycophorin C
- 180-: Seen in chronic inflammatory anemia is -
 - 1: Serum iron |S. ferritin | and transferrin |
 - 2: Serum iron |S. ferritin | and transferrin |
 - 3: Serum iron | S. ferritin | and transferrin |
 - 4: Serum iron |S. ferritin | and transferrin |
- 181-: The following statements about Fanconi's anaemia are true except
 - 1: Progressive pancytopenia
 - 2: Increased predisposition to malignancy
 - 3: Autosomal dominant inheritance
 - 4: Associated skeletal abnormalities involving thumb and radius
- 182-: Increased PT is seen with -
 - 1: Warfarin administration
 - 2: Heparin administration
 - 3: Factor 8 deficiency

- 4: Factor 9 deficiency
- 183-: Iron absorption is increased by
 - 1: Phytates
 - 2: Tannates
 - 3: Plant food
 - 4: Ascorbic acid
- 184-: Triad of Plummer Vinson syndrome includes all of the following except:
 - 1: Iron Deficiency Anaemia
 - 2: Dysphagia
 - 3: Atrophic Glossitis
 - 4: Koilonychia
- 185-: Which of the following indicates hemolysis?
 - 1: Target cells
 - 2: Schistocytes
 - 3: Acantocytes
 - 4: Basophilic stippling
- 186-: t (2;8) is characteristically seen with -
 - 1: Pre B cell lymphoma
 - 2: Pre T cell lymphoma
 - 3: Burkitt's lymphoma
 - 4: Montel cell lymphoma

- 187-: Absolute contraindication to thrombolytic therapy is
 - 1: Pregnancy
 - 2: History of hemorrhagic stroke in past one year
 - 3: Patients on nitrates
 - 4: Hypertension
- 188-: All of the following are actions of factor II, except:
 - 1: Conversion of fibrinogen into fibrin
 - 2: Platelet activation
 - 3: Formation of plasmin
 - 4: Activation of Factor XI
- 189-: An elderly male presents with anemia and fatigue. O/E splenomegaly-2 cm palpable below costal margin. Hemogram showed Pancytopenia. Which is the most common etiology?
 - 1: Hairy cell leukemia
 - 2: CML
 - 3: Thalassemia
 - 4: Follicular lymphoma
- 190-: Osmotic fragility is increased in -
 - 1: Sickle cell anaemia
 - 2: Thalassemia
 - 3: Hereditary spherocytosis
 - 4: Chronic lead poisoning
- 191-: Which of the following drugs does not cross placenta?

- 1: Heparin
- 2: Warfarin
- 3: Dicumarol
- 4: Nicoumalone
- 192-: Marker for intrinsic pathway is:
 - 1: Prothrombin Time (PT)
 - 2: Bleeding time (BT)
 - 3: Clotting time (CT)
 - 4: Activated paial thromboplastin time (aPTT)
- 193-: A 24-year-old woman with sickle cell disease is seen in the emergency room for an acute upper respiratory tract infection. Laboratory findings reveal severe, normocytic anemia. The patient develops a rapid drop in the hemoglobin level. However, the reticulocyte count is very low (<0.1%). This finding most likely reflects which of the following conditions?
 - 1: Bone marrow failure due to repeated infarction
 - 2: Expected result for the patient's underlying anemia
 - 3: Parvovirus B19 infection
 - 4: Retroperitoneal hemorrhage
- 194-: Cause of ITP is-
 - 1: Vasculitis
 - 2: Antibody to vascular epithelium
 - 3: Antibody to platelets
 - 4: Antibody to clotting factors

195-: Streptokinase was infused in a patient for the management of deep vein thrombosis, following which the patient developed hematemesis. Which of the given agents can be chosen to manage this episode of hematemesis?

- 1: Vitamin K
- 2: Noradrenaline
- 3: Epsilon amino caproic acid
- 4: Rutin

196-: 1718. A patient presents with increased serum ferritin, decreased TIBC, increased serum iron, % saturation increased. Most probable diagnosis is -

- 1: Anemia of chronic disease
- 2: Sideroblastic anemia
- 3: Iron deficiency anemia
- 4: Thalassemia minor

197-: Plasmacytoid lymphomas may be associated with an increase in

- 1: IgG
- 2: IgM
- 3: IgA
- 4: IgE

198-: All of the following are true regarding chronic myeloid leukemia, except?

- 1: Philadelphia chromosome
- 2: Tyrosine kinase inhibitors (TKIs) are the drug of choice
- 3: Most cases present in blast phase
- 4: Sea-blue histiocytes are seen in the bone marrow

199-:	: Microcytic hypochromic RBC is/are seen in all except -
1	: Iron deficiency anaemia
2	2: Sideroblastic anemia
3	3: Sickle cell anemia
4	Hereditary spherocytosis
200-:	: The best screening test for hemophilia -
1	: PT
2	2: CT
3	B: PTT
4	ł: BT
	: Five year old child presents with oliguria. There is history of bloody diarrhea 2 weeks Coagulation tests are normal. Peripheral smear is given. What is your diagnosis
1	: Thrombotic thrombocytopenic purpura
2	2: Idioppathic thrombocytopenic purpura
3	3: G6PD deficiency
4	l: Hemolytic uremic syndrome
202-:	: Auer rods are formed from?
1	: Primary granules
2	2: Secondary granules
3	3: Myeloperoxidase
4	H: All of these

203-: Decrease in serum iron, decrease TIBC is seen in-

- 1: Iron deficiency anemia
- 2: Thallasemia
- 3: Anemia of chronic disease
- 4: Sideroblastic anemia

204-: In a patient suffering from chronic myeloid leukemia, Hb falls from llg% to 4g% in a sho span of time, and splenomegaly occurs. The cause could be -

- 1: Accelerated phase
- 2: CML in blast crisis
- 3: Ineffective erythropoiesis
- 4: Myelofibrosis

205-: Which one of the following is not raised in intravascular hemolysis?-

- 1: Bilirubin
- 2: LDH
- 3: Reticulocyte count
- 4: Haptoglobin

206-: Ectopic rest of tissue is known as

- 1: Choristoma
- 2: Hamaoma
- 3: Pseudo tumour
- 4: Lymphoma

207-: 1752. Which does&;t cause hemolysis in G 6 PD deficiency -

1: Oestrogen

- 2: Salicylates
- 3: Primaquine
- 4: Nitrofurantoin

208-: Isolated deletion of which chromosome causes Myelodysplastic syndrome?

- 1: 2q
- 2: 5q
- 3:8q
- 4: 11q

209-: Low serum iron and low serum ferritin is seen in

- 1: Iron deficiency anaemia
- 2: Chronic kidney disease
- 3: Sideroblastic anaemia
- 4: Fanconi anaemia

210-: Mechanism of action of Abciximab?

- 1: Inhibitor of GPIIb/IIIa
- 2: Inhibitor of adenosine reuptake
- 3: Anti-thrombin III inhibitor
- 4: All of the above

211-: Hodkin lymphoma treatment -

- 1: ABVD is more commonly used regimen
- 2: Sterility is common in ABVD regimen
- 3: WBC > $16 * 109 \ L$ is good prognostic factor

- 4: None
- 212-: True about CLL is-
 - 1: Can present as acute leukaemia
 - 2: Diagnosed in routine blood test
 - 3: Leukocytosis
 - 4: More T lymphocytes seen
- 213-: All the following features precipitate sickling of HbS except:
 - 1: Hypoxia
 - 2: Dehydration
 - 3: Infections
 - 4: Alkalosis
- 214-: A 56-year-old man presents with a 2-week history of fatigue. The patient's past medical history is significant for aoic and mitral valve replacement 5 months ago. A CBC shows moderate anemia with an increased reticulocyte count. Which of the following best explains the pathogenesis of anemia in this patient?
 - 1: Complement-mediated hemolysis
 - 2: Decreased blood flow
 - 3: Direct red cell trauma
 - 4: Sludging of erythrocytes
- 215-: Megaloblastic anemia due to folic acid deficiency is commonly due to
 - 1: Inadequate dietary intake
 - 2: Defective intestinal absorption
 - 3: Absence of folic acid binding protein in serum

- 4: Absence of glutamic acid in the intestine
- 216-: Bad prognosis in AML Is indicated by
 - 1: Monosomy
 - 2: Deletion of X or Y chromosome
 - 3: T(8:21)
 - 4: Nucleophosmin mutation
- 217-: Most common cause of hereditary spherocytosis?
 - 1: Actin
 - 2: Glycophorin
 - 3: Spectrin-Ankyrin complex
 - 4: Band 4
- 218-: For oral iron supplements used for iron deficiency anemia:
 - 1: Tolerable dose will deliver 40 to 60 mg of iron per day
 - 2: Mass of total salt is impoant in determining daily dose
 - 3: Treatment should be stopped as soon as normal hemoglobin level is reached
 - 4: Desired rate of hemoglobin improvement is 05 mg per day
- 219-: CD10 is seen in:
 - 1: ALL
 - 2: CLL
 - 3: GCL
 - 4: CML

220-: ABVD regimen is used for
1: CLL
2: ALL
3: NHL

221-: True about reticulocyte is?

4: Hodgkins lymphoma

- 1: Stained by supravital staining
- 2: Myeloid cell
- 3: Romanowsky stains are used
- 4: 5% is normal
- 222-: In which of the following clinical conditions, use of anticoagulants provide maximum benefit?
 - 1: Prevention of recurrences of myocardial infarction
 - 2: Prevention of venous thrombosis and pulmonary embolism
 - 3: Cerebrovascular accident
 - 4: Retinal aery thrombosis
- 223-: Warfarin embryopathy manifests characteristically as -
 - 1: Chondrodysplasia punctata
 - 2: Dysplastic hips
 - 3: Auditory sensineuronal hearing loss
 - 4: Gastrointestinal atresias
- 224-: In an ablated animal, myeloid series cells are injected. Which of following is sen after incubation period -

- 1: RBC
- 2: Fibroblast
- 3: T lymphocytes
- 4: Hematopoetic stem cell

225-: A 15-year-old boy presented with one day history of bleeding gums, subconjunctival bleed and purpuric rash. Investigations revealed the following results: Hb-6.4 gm/dL; TLC-26,500/mm3 Platelet 35,000 mm3; prothrombin time-20 sec with a control of 13 sec; paial thromboplastin time-50 sec; and Fibrinogen 10mg/dL. Peripheral smear was suggestive of acute myeloblastic leukemia. Which of the following is the most likely?

- 1: Myeloblastic leukemia without maturation
- 2: Myeloblastic leukemia with maturation
- 3: Promyelocytic leukemia
- 4: Myelomonocytic leukemia

226-: Which of the following conditions is most likely to lead to a dry tap during bone marrow aspiration-

- 1: Acute lymphoblastic leukemia
- 2: Multiple myeloma
- 3: Megaloblastic anaemia
- 4: Idiopathic myelofibrosis

227-: Blood smear of patient of G6PD shows?

- 1: Howell jolly bodies
- 2: Heinz bodies
- 3: Cabot rings
- 4: Pelger-Huet anomaly

228-: A child presents with hypochromic microcytic anemia, with normal levels of free erythrocyte protoporphyrin. The most likely diagnosis is

- 1: Iron deficiency anemia
- 2: Lead toxicity
- 3: Thalassemia
- 4: Anemia of chronic disease
- 229-: All arc true about Wiskott-Aldrich syndrome except-
 - 1: Bloody diarrhea during infancy
 - 2: Low IgM and elevated IgA and IgE
 - 3: Large size platelets
 - 4: Atopic dermatitis
- 230-: Cyanosis is not seen in severe anemia because?
- 1: Anemic hemoglobin has greater oxygen carrying capacity per unit gram of hemoglobin
 - 2: Critical concentration of reduced hemoglobin is required
 - 3: Increased RBC number counter-balances the oxygen shoage
 - 4: Blood flow through the skin is decreased in anemia
- 231-: In Burkitts lymphoma, translocation seen is chromosome -
 - 1: 12 -14 translocation
 - 2:8 -14 translocation
 - 3: 4 8 translocation
 - 4: 12-18 translocation
- 232-: A low mean corpuscular volume with a normal and cell distribution width suggests -

- 1: Iron deficiency anemia
 2: B thalassemia trait
 3: Anemia of chronic disease
 4: Sideroblastic anemia
 -: Types of anaemia seen in ch
- $233\mbox{-:}\ Types\ of\ anaemia\ seen\ in\ chronic\ renal\ failure\ is$
 - 1: Microcytic
 - 2: Normocytic
 - 3: Macrocytic
 - 4: All the above
- 234-: Peripheral smear with small pale red cells, anisocytosis and poikilocytosis is suggestive of:
 - 1: Aplastic anemia
 - 2: Iron deficiency anemia
 - 3: Hereditary spherocytosis
 - 4: Megaloblastic anemia
- 235-: The lymphocytic and histiocytic variant of Reed-Sternberg cell is seen in -
 - 1: Follicular center lymphoma
 - 2: Lymphocyte depleted Hodkin's disease
 - 3: Nodular sclerosis Hodkin's disease
 - 4: Lymphocyte predominant Hodkin's disease
- 236-: In sickle cell crisis bone pain is due to:-
 - 1: Bone infarction

- 2: Osteroporosis3: Osteomalacia
- 4: Periosteal reaction
- 237-: Warfarin therapy is monitored by:
 - 1: PT INR
 - 2: apTT
 - 3: Vit K levels
 - 4: PT
- 238-: What is the mode of inheritance of Hereditary spherocytosis?
 - 1: Autosomal dominant
 - 2: Autosomal recessive
 - 3: X-linked recessive
 - 4: X-linked dominant
- 239-: Normal platelet count is found in
 - 1: Wiskott Aldrich syndrome
 - 2: Henoch schonlein purpura
 - 3: Immune thrombocytopenia
 - 4: Dengue fever
- 240-: All of the following are seen in clotting factor deficiency EXCEPT:
 - 1: Large hematomas after trauma
 - 2: Prolonged bleeding after surgery
 - 3: Spontaneous purpura

- 4: Haemahrosis
- 241-: The following are the fetures of ss thalassemia major except
 - 1: Bone marrow hyperplasia
 - 2: Hair-on-end appearance
 - 3: Splenomegaly
 - 4: Increased osmotic fragility
- 242-: Which one of the following is the likely diagnosis based on the smear given above:
 - 1: Acute myelogenous leukemia
 - 2: Acute lymphoblastic leukemia
 - 3: Hairy cell leukemia
 - 4: Chronic lymphocytic leukemia
- 243-: Orally acting direct thrombin inhibitor is?
 - 1: Bivalirudin
 - 2: Ximelgatran
 - 3: Lepirudin
 - 4: Argatroban
- 244-: A patient, on treatment for leukemia, develops the pain, pulmonary infiltrates and pleural effusion. The cause is -
 - 1: Daunorubicin
 - 2: Hydroxyurea
 - 3: Cytarabine
 - 4: Tretinoin

- 245-: All of the following are true about anemia of chronic failure except
 - 1: Normocytic normochromic anemia
 - 2: Erythropoietin improves the symptom
 - 3: Dialysis worsens anemia of renal failure
 - 4: Anemia is propoional to the kidney disease
- 246-: Aplastic anemia can progress to all except:
 - 1: AML
 - 2: Myelodysplastic anemia
 - 3: Pure red cell aplasia
 - 4: Paroxysmal nocturnal hemoglobinuria
- 247-: Glanzmann disease is characterised by which of the following?
 - 1: Congenital defect of RBCs
 - 2: Defect of neutrophils
 - 3: Congenital defect of platelets
 - 4: Clotting factor deficiency
- 248-: All of the following statements about iron deficiency anemia are true except?
 - 1: Latent iron deficiency is most common presentation in India
 - 2: Transferrin saturation is less than 16%
 - 3: Serum ferritin is the earliest marker
 - 4: It can present without detectable abnormalities
- 249-: Features of hemolytic anemia are all except?

- 1: Hemoglobinemia
- 2: Bilirubinemia
- 3: Reticulocytosis
- 4: Haptoglobin increased

250-: Which of the following statements about Transfusion-Related Acute Lung Injury(TRALI) is true:

- 1: Is more common if blood is donated by a multiparous women
- 2: Is most common after red cell transfusion
- 3: Is usually seen between 12 and 24 hours after transfusion
- 4: Is associated with high pulmonary aery wedge pressures

251-: Which of the following gene mutations is most commonly associated with systemic mastocytosis?

- 1: CALR
- 2: JAK2
- 3: KIT
- 4: MPL

252-: 1730. A nine month old boy of Sindhl parents presented to you with complaints of progressive lethargy, Irritability & pallor since 6 months of age. Examination revealed severe pallor. Investigation showed Hb-3.8 mg%; MCV-58fl; MCH-19.4 pg/cell. Blood film shows osmotic fragility Is normal (target cells and normoblasts). X-ray skull shows expansion of erythroid marrow. Which of the following Is the most likely diagnosis

- 1: Iron deficiency anemia
- 2: Acute lymphoblastic anemia
- 3: Hemoglobin D disease
- 4: Hereditary spherocytosis

- 253-: Which of the following statements on lymphoma is not True
- 1: A single classification system for Hodgkin's disease (HD) is almost universally accepted
- 2: HD more often tends to remain localized to a single group of lymph nodes and spreads by contiguity
 - 3: Several types of non Hodgkin's lymphoma (NHL) may have a leukemic phase
 - 4: In general follicular (nodular)NHL has worse prognosis compared to diffuse NHL
- 254-: Which of the following leukemia is associated with a convent girl appearance?
 - 1: Chronic myleogenous leukemia
 - 2: Chronic lymphocytic leukemia
 - 3: Hairy cell leukemia
 - 4: Diffuse large B cell lymphoma
- 255-: The subtype of hodgkin lymphoma characterized by L and H cells
 - 1: Nodular sclerosis
 - 2: Mixed cellularity
 - 3: Lymphocyte depletion
 - 4: Lymphocyte predominance
- 256-: Thalassemia gives protection against-
 - 1: Filaria
 - 2: Kala-azar
 - 3: Malaria
 - 4: Leptospirosis

Clinical Hematology MCQ	MedicalMCQ.	
257-: Cold agglutinin disease can be associated with all of the following, except:		
1: Mycoplasma pneumoniae infection		
2: Waldenstrom macroglobulinemia		
3: SLE		
4: EBV infection		
258-: Stage of Hodgkins lymphoma with right sided neck no without fever -	odes and left inguinal node	
1: Ia		
2: IIa		
3: IIIa		
4: IVa		
259-: First sign of improvement in oral iron therapy is?		
1: Reticulocytosis		
2: Raise of hemoglobin		
3: Raise in RBC count		
4: Increase in ESR		
260-: 1772. A patient presents with macroglossla and loss of and MCV Is 100. What shuld be the next step In investigating		
1: B12 estimation		
2: Brush biopsy of the lesion		
3: Fluconazole treatment		

261-: The following X-ray findings in skull can be a manifestation of?

4: Incision biopsy

- 1: Acute Myeloid Leukemia
- 2: Iron deficiency anaemia
- 3: Megaloblastic Anemia
- 4: Thalassemia

262-: A 6 years old child belonging to Punjabi family with past history of blood transfusions presented with hemoglobin-3.5 gm/dL, MCV-30 fL. Peripheral smear findings of microcytic hypochromic anemia with target cell and reduced osmotic fragility. The probable diagnosis of patient:

- 1: Alpha thalassemia
- 2: Beta thalassemia
- 3: Sickle cell anemia
- 4: G6PD deficiency

263-: All of the following are true of ss thalassemia major, except

- 1: Splenomegaly
- 2: Target cells on peripheral smear
- 3: Microcytic hypochromic anemia
- 4: Increased osmotic fragility

264-: Haemoglobin F is raised in -

- 1: Juvenile chronic myeloid leukemia
- 2: Hereditary spherocytosis
- 3: Congenital red cell aplasia
- 4: Myasthenia gravis

265-: The Common site of hematopoiesis in the fetus is

- 1: Liver
- 2: Spleen
- 3: Bone marrow
- 4: Gut

266-: Which of the following metabolic reactions require vitamin B12 but not folate?

- 1: Conversion of malonic acid to succinic acid
- 2: Conversion of homocysteine to methionine
- 3: Conversion of serine to glycine
- 4: Thymidylate synthesis
- 267-: Lepirudin is used in:-
 - 1: Heparin overdose
 - 2: Warfarin overdose
 - 3: Heparin induced thrombocytopenia
 - 4: Warfarin induced dermal vascular necrosis
- 268-: Eosin-5- Maleimide flow cytometry is used for diagnosis of:-
 - 1: G6PD
 - 2: Hereditary spherocytosis
 - 3: Sickle cell anemia
 - 4: Alpha thalassemia
- 269-: AML is characterized by -
 - 1: Philadelphia chromosome
 - 2: Auer rods

- 3: Hemolytic anemia
- 4: Dohle bodies

270-: Abciximab is

- 1: Antithrombin III inhibitor
- 2: Gp IIb/IIIa antibody
- 3: Alanine analogue
- 4: P2YAC Purine receptor antagonist

271-: Incoagulable states are -

- 1: Snake envenomation
- 2: Acute-promyelocytic leukemia
- 3: Abruptio placenta
- 4: Heparin overdose
- 272-: Progressive transformation of germinal centres is a precursor lesion of:
 - 1: Hodgkins lymphoma ,nodular sclerosis
 - 2: Hodgkins lymphoma, mixed cellularity
 - 3: Anaplastic large cell lymphoma
 - 4: Peripheral T cell lymphoma

273-: A 29-year-old woman was found to have Hb of 7.8mg/dl with a reticulocyte count of 0.8%. The peripheral blood smear showed microcytic hypochromic anemia. On HPLC, Hb A2 and Hb F was 2.4% and 1.3% respectively. The serum iron and TIBC were 15mg/dl and 420 micro g/dl respectively. The most likely cause of anemia is:

- 1: Iron deficiency anemia
- 2: Beta thalassemia minor

- 3: Sideroblastic anemia
- 4: Anemia due to chronic infection

274-: Which of the following conditions is associated with microcytic hypochromic anemia

- 1: Sickle cell anemia
- 2: Thalassemia
- 3: Fanconi's anemia
- 4: Hereditary spherocytosis

275-: "Smudge cells" in the peripheral smear are characteristic of

- 1: Chronic myelogenous leukemia
- 2: Chronic lymphocytic leukemia
- 3: Acute myelogenous leukemia
- 4: Acute lymphoblastic leukemia

276-: In which of the following conditions that cause polycythemia is the serum erythropoietin extremely low -

- 1: Dehydration
- 2: Renal cell carcinoma
- 3: Renal cell carcinoma
- 4: Polycythemia vera

277-: MCHC criteria to diagnose iron deficiency anemia:

- 1: <32
- 2: <34
- 3: <28

4: <30	
278-: Shelf life of	f gamma irradiated pRBC is
1: 21 days	
2: 28 days	
3: 35 days	
4: 42 days	
279-: Leptocyte	in blood smears seen in?
1: Sickle cell	anemia
2: Thalassen	nia
3: Post splen	nectomy
4: Uremia	
280-: Which of the following surface glycoprotein is most often expressed in human hematopoietic stem cells	
1: CD22	
2: CD40	
3: CD15	
4: CD34	
281-: Person hav	ring heterozygous sickle cell trait is protected from infection of -
1: Plasmodiı	ım falciparum
2: P.vivax	
3: Pneumoco	occus

4: Salmonella

282-: In Hereditary spherocytosis an inherited abnormality is seen in which of the following red blood cell component-

- 1: A-globin chain
- 2: a-globin chain
- 3: Phosphatidylinositol glycan A
- 4: Spectrin

283-: Unconjugated hyperbilirubinemia with increased urobilinogen in -

- 1: Hemolytic anemia
- 2: Liver cirrhosis
- 3: Bile duct obstruction
- 4: Sclerosing cholangitis

284-: Marker for hairy cell leukaemia is?

- 1: CD30
- 2: CD 103
- 3: CD 1
- 4: CD4

285-: Prolonged PT and Normal PTT may be seen in:

- 1: Thrombocytopenia
- 2: DIC
- 3: Vit. K deficiency
- 4: Aspirin toxicity

286-: Which organ is the primary site of hematopoiesis in the fetus before midpregnancy

- 1: Bone
- 2: Liver
- 3: Spleen
- 4: Lung

287-: Which among the following is a parentral iron forumalation

- 1: Iron hydroxy polymaltose
- 2: Ferrous fumarate
- 3: Ferric ammonium citrate
- 4: Iron sorbitol citric acid complex

288-: An afro-american kid of 6 years of age presented with abdominal pain, chronic hemolysis and abnormal RBC shape on peripheral smear. Most likely disorder responsible for this condition

- 1: Trinucleotide repeat
- 2: Point mutation
- 3: Antibiodise against RBC membrane
- 4: Genetic imprinting

289-: Which of the following is not true about chronic myelogenous leukemia?

- 1: BCR-ABL fusion is involved in the oncogenesis
- 2: Pseudo Gaucher cells may be present in the bone marrow examination
- 3: Blast crisis in the disease may have lymphoblasts
- 4: BM biopsy is essential for confirmation of diagnosis

290-: RBC contains?

1: Iron 2: Folic acid 3: Vitamin C 4: Biotin 291-: Thrombocytopenia due to increased platelet destruction is seen in -1: Aplastic anemia 2: Cancer chemotherapy 3: Acute leukemia 4: Systemic lupus erythematosus 292-: Good prognosis of ALL 1: Hyperdiploidy 2: Hypodiploidy 3: T cell line 4: Philadelphia chromosome 293-: Spontaneous bleeding usually occurs when the platelet counts fall below 1: 20000/uL 2: 50000/uL 3: 100000/uL 4: 120000/uL 294-: Intermediate form of Non hodgkin&;s lymphoma is -1: Small noncleaved cell

2: Diffuse, small cleaved cell

- 3: Lymphoblastic
- 4: Large cell immunoblastic

295-: A patient presents with bone pain. X ray reveals destructive lesions. Lab investigations show shypercalcemia. Serum electrophoresis shows M spike, while Bone marrow shows 35% plasma cells. What is your diagnosis?

- 1: MGUS
- 2: Smoldering myeloma
- 3: Multiple myeloma
- 4: Plasma cell leukemia

296-: Anticoagulant of choice in pregnancy

- 1: Warfarin
- 2: Vitamin K
- 3: Tranexamic acid
- 4: Heparin

297-: The best suited anticogulant for osmotic fragility test is:

- 1: Heparin
- 2: EDTA
- 3: Trisodium citrate
- 4: Potassium oxalate

298-: A single nucleotide change in a codon on chromosome 11 that causes valine to replace glutamic acid at the sixth position of the b chain of hemoglobin.peripheral blood film of the patient is given

- 1: a thalassemia
- 2: Hereditary spherocytosis

- 3: Paroxysmal nocturnal hemoglobinuria
- 4: Sickle cell anemia

299-: Which of the following is a 2nd generation antihistaminic?

- 1: Fexofenadine
- 2: Dimenhydrinate
- 3: Promethazine
- 4: Pheneramine

300-: Heparin is the commonly used anticoagulant in cardiac surgery. All of the following are true about heparin EXCEPT:

- 1: Weakest acid found in living being
- 2: Most commercial preparations of heparin are derived from pig intestine
- 3: Acts antithrombin activation
- 4: Produce thrombocytopenia

301-: Normal transferrin is saturated with iron

- 1:20%
- 2: 35%
- 3:50%
- 4: 70%

302-: Translocation of bcr-abl gene is characteristically seen in-

- 1: Chronic myeloid leukemia
- 2: Acute myeloid leukemia
- 3: Chronic lymphatic leukemia

- 4: Acute lymphatic leukemia
- 303-: Blood when stored at 4degC can be kept for-
 - 1: 7 days
 - 2: 14 days
 - 3: 21 days
 - 4: 28 days
- 304-: WHO cut-off for diagnosis of anemia in non-pregnant females is?
 - 1: 7 g%
 - 2: 10 g%
 - 3: 11 g%
 - 4: 12 g%
- 305-: In polycythemia vera, all are raised except
 - 1: Hematocrit
 - 2: Platelet count
 - 3: RBC
 - 4: Erythropoietin
- 306-: Ritcher transformation, CLL transforms to
 - 1: Diffuse large B-cell lymphoma
 - 2: Anaplastic Large Cell Lymphoma
 - 3: Burkitt lymphoma
 - 4: Multiple myeloma

307-: Two days after receiving the antimalarial drug primaquine, a 27-yearold black man develops sudden intravascular hemolysis resulting in a decreased hematocrit, hemoglobinemia, and hemoglobinuria. Examination of the peripheral blood film is given. The most likely diagnosis is

- 1: Hereditary spherocytosis
- 2: Glucose-6-phosphate dehydrogenase deficiency
- 3: Paroxysmal nocturnal hemoglobinuria
- 4: Microangiopathic hemolytic anemia

308-: True regarding prothrombin time measurement? -

- 1: Platelet rich plasma is required
- 2: Activate with kaolin
- 3: Should be measured within 2 hours
- 4: Immediate refrigenation to preserve coagulation factor bility

309-: Which one of the following is not a feature of multiple myeloma?

- 1: Hypercalcemia
- 2: Anemia
- 3: Hyperviscosity
- 4: Elevated alkaline phosphatase

310-: bcl2 in B-cell lymphoma the translocation involving-

- 1: t (8:14)
- 2: t (8:12)
- 3: t(14:18)
- 4: t(14:22)

- 311-: Asprin is not given in a patient who is already on heparin because aspirin causes:
 - 1: Platelet dysfunction
 - 2: Aspirin inhibits the action of heparin
 - 3: Enhanced hypersensitivity of heparin
 - 4: Therapy of heparin cannot be monitored
- 312-: A 20-year-old carpenter with a wound infection on his left thumb presents with an enlarged and tender lymph node in the axilla. A lymph node biopsy shows follicular enlargement and hyperemia. The sinuses are filled with neutrophils. Which of the following is the most likely diagnosis?
 - 1: Suppurative lymphadenitis
 - 2: Castleman disease
 - 3: Interfollicular hyperplasia
 - 4: Sinus histiocytosis
- 313-: Russel bodies are seen in -
 - 1: Lymphocytes
 - 2: Neutrophils
 - 3: Macrophages
 - 4: None of the above
- 314-: Thalassaemia major manifests in
 - 1: Childhood
 - 2: Pubey
 - 3: Adolescence
 - 4: Middle age

- 315-: Mutation of which of the following gene is most impoant in paroxysmal nocturnal hemaglobinuria-
 - 1: Decay accelerating factor (DAF)
 - 2: Membrane inhibitor of reactive lysis (MIRL)
 - 3: Glycosyl phosphatidyl inositol (GPI)
 - 4: CD8 binding protein
- 316-: Blood when stored at 4degC can be kept for -
 - 1: 7 days
 - 2: 14 days
 - 3: 21 days
 - 4: 28 days
- 317-: Antidote of heparin is
 - 1: CaNaEDTA
 - 2: Protamine sulfate
 - 3: Deferiprone
 - 4: d penicillamine
- 318-: Which of the following is not a major criteria for diagnosis of multiple myeloma?
 - 1: Lytic bone lesions
 - 2: Plasmacytoma on tissue biopsy
 - 3: Bone marrow plasmacytosis > 30%
 - 4: M' spike > 3g% for 1g G, > 2g% for IgA
- 319-: AML bad prognostic factor is?

- 1: Preceding MDS
- 2: Inv 16
- 3: Auer rods
- 4: Type M4
- 320-: Low molecular weight heparin mainly inhibits which factor?
 - 1: Factor IIIa
 - 2: Factor VIIIa
 - 3: Factor Xa
 - 4: Factor XIIa
- 321-: A four year old boy was admitted with a history of abdominal pain and fever for two months maculopapular rash for ten days, and dry cough. dyspnea and wheezing_ for three days. On examination Ii er and spleen were enlarged 4 cm and 3 cm respecimey bekm the eastal ntargin. His hemoglobin vas 10.0 gidl. platelet count $3.7 \times 10\%$ and total leukocyte count $70 \times 10\%$, which included 80% eosinophils Bone marrow examination revealed a cellular marrow comprising of 45% blasts and 34% Eosinophils and cosinophill precursors. The blasts stained negative for my eloperoxidase and non-specific esterase and were positive for CD19. CD 10, CD22 and CD20. Which one of the following statements is not true about disease?
 - 1: Eosinophils are not put of the Neoplastic clone.
 - 2: t(5:14) rearrangement may be detected in blasts.
 - 3: Penphcral blood eosinophilia may normalize with chemotherapy
 - 4: Inv (16) is often detected in the blasts and the eosinophils
- 322-: Which of the following is a membrane receptor defect -
 - 1: Thalassemia
 - 2: Sickle cell disease
 - 3: Familial hypercholesterolemia

- 4: Henoch Schonlein purpura
- 323-: All are reduced in iron deficiency anemia EXCEPT:
 - 1: Total iron binding capacity
 - 2: Percentage saturation of Transferrin
 - 3: Hemoglobin level
 - 4: Serum ferritin
- 324-: Which of the following haemoglobin (Hb) estimation will be diagnostically helpful in a in a case of beta thalassemia triat
 - 1: Hb-F
 - 2: HP1-C
 - 3: Hb-A2
 - 4: Hb-H
- 325-: Thrombolytic therapy with streptokinase is contraindicated in all of the following except
 - 1: Supraventricular tachycardia
 - 2: Recent trauma
 - 3: Recent cerebral bleeding
 - 4: Recent surgery
- 326-: Hemophilia B is due to deficiency of -
 - 1: Factor VIII
 - 2: Factor VII
 - 3: Factor IX
 - 4: factor X

- 327-: Warfarin induced skin necrosis is more common in patients with
 - 1: Protein C deficiency
 - 2: Sickle cell anemia
 - 3: Factor V leiden deficiency
 - 4: Antithrombin 3 deficiency
- 328-: A35 yr old lady with normal PT and increased aPTT. 2 year back, she was operated for cholecystectomy & did not have any bleeding episoe. What is next investigation for clinical diagnosis -
 - 1: Factor VIII assay
 - 2: Anti viper venom assay
 - 3: Platelet aggregation test
 - 4: Ristocetin Cofactor assay
- 329-: All of the following are good prognostic factors for childhood ALL except-
 - 1: Female sex
 - 2: Hyperdiploidy
 - 3: t(12:21) translocation
 - 4: Pre B cell ALL
- 330-: Most common symptom of Henoch Schnolein purpura Is?
 - 1: Intussception
 - 2: Purpura
 - 3: Edema
 - 4: Vomiting

- 331-: Burkitt&;s lymphoma is -
 - 1: B cell lymphoma
 - 2: 6.14 translocation
 - 3: PAS positive in cytochemistry
 - 4: Radiotherapy is used in treatment
- 332-: Heparin does not cause
 - 1: Osteoporasis
 - 2: Factor V inhibition
 - 3: Thrombocytopenia
 - 4: Prolongation of a PTT
- 333-: Hemoglobin H disease is caused by deletion
 - 1: Single a globin chain
 - 2: Two a globin chains
 - 3: Three a globin chains
 - 4: All a globin chain
- 334-: Thrombocytopenia due to increased platelet destruction is seen in-
 - 1: Aplastic anemia
 - 2: Cancer chemotherapy
 - 3: Acute leukemia
 - 4: Systemic lupus erythematosus
- 335-: Not true about hereditary spherocytosis -
 - 1: Defect in ankyrin

2: Decreased MCV 3: Decreased MCHC 4: Reticulocytosis 336-: Activated protein C inhibit clotting mechanism by inactivating which of the following clotting factors: 1: Factor IIIa and Factor VIIIa 2: Factor VIIIa and Factor IXa 3: Factor Va and Factor VIIIa 4: Factor Va and Factor VIIa 337-: Which of the following is the least common presentation of multiple myeloma? 1: Anemia 2: Hyperviscocity 3: Bone pains 4: Infection 338-: Chromosomal translocation seen in CML is? 1:2:08 2:8:14 3: 9:22 4: 15:17 339-: Which of the following is NOT an advantage of low molecular weight heparin over unfractionated heparin? 1: Higher efficacy in aerial thrombosis

2: Less frequent dosing

- 3: Higher and more consistent subcutaneous bioavailability
- 4: Laboratory monitoring of response not required
- 340-: Glycoprotein II b / III a receptor antagonists is
 - 1: Clopidogrel
 - 2: Abeiximab
 - 3: Tranoxaemic-acid
 - 4: Ticlopidine
- 341-: Haemolysis in G6PD (glucose 6 phosphate dehydrogenase) enzyme deficiency may occur with all of the following drugs except:
 - 1: Primaquine
 - 2: Phenacetin
 - 3: Probenecid
 - 4: Penicillin
- 342-: Which of the following is most likely to be used in a young child with chronic renal insufficiency?
 - 1: Cyanocobalamin
 - 2: Desferrioxamine
 - 3: Erythropoietin
 - 4: Filgrastim (G-CSF)
- 343-: Neoplastic cells with multilobulated nuclei ('clover leaf' or flower cells) are seen in which of the following?
 - 1: Diffuse large B cell lymphoma (DLBCL)
 - 2: Adult T-cell leukemia (ATLL)

3: Anaplastic large cell lymphoma (ALCL) 4: Mycosis fungoides 344-: CD marker specific for myeloid series -1: CD34 2: CD45 3: CD99 4: CD117 345-: Which of the following antibodies is most frequently seen in Antiphospholipid Syndrome? 1: Beta 2 microglobulin antibody 2: Anti-nuclear antibody 3: Anti-centromere antibody 4: Anti- beta 2 glycoprotein antibody 346-: Schistocytes in peripheral smear is seen in all except: 1: DIC 2: Sickle cell anemia 3: TTP 4: HUS 347-: Autoimmune destruction of platelets is seen in 1: SLE

2: PAN

3: RA

- 4: Sarcoidosis
- 348-: Most common myeloproliferative disorder is
 - 1: Polycythemia rubra vera
 - 2: CML
 - 3: CLL
 - 4: Myelofibrosis
- 349-: What is true about acquired disorder of coagulation?
 - 1: Shows specific clotting deficiency
 - 2: Shows defect in platelets as well
 - 3: Less frequent that inherited disorder
 - 4: Hemahrosis is specifically seen
- 350-: Which of the following statements is false about sickle cell disease?
 - 1: Sickle cell trait confers protective effect against malaria
 - 2: Replacement of glutamic acid by valine at b6 position
 - 3: Hyposthenuria
 - 4: Hemolysis is predominantly intravascular
- 351-: Warfarin embryopathy is due to action of:
 - 1: Osteophysin
 - 2: Osteotensin
 - 3: Osteocalcin
 - 4: Osteogenin

352-: Which of the following does not secrete interleukin 1 alpha
1: Lymphocyte
2: Monocyte
3: Macrophage
4: Neutrophil
353-: Spleniculi means
1: Splenic calculi
2: Splenic atrophy
3: Splenic malignancy
4: Accessory spleen
354-: Dohle bodies are seen in
1: Multiple myeloma
2: May-hegglin anomaly
3: Waldenstrom macroglobulinemia
4: Lymphoma
355-: Bone Marrow Showing Positive Staining With Periodic Acid Schiff .Likely Diagnosis is
1: AML-M2
2: AML-M3

356-: Which of the following surface glycoproteins is most often expressed in human

4: ACUTE LYMPHOBLASTIC LEUKEMIA

3: AML-M6

hematopotetic stem cell?

1: CD22
2: CD4D
3: CD15
4: CD34
357-: The most suitable test to assess iron stores is
1: Serum iron
2: Serum ferritin
3: TIBC
4: Transferrin saturation
358-: Intracorpuscular hemolytic anemia is seen in-
1: Autoimmune hemolytic anemia
2: TTP
3: Thalassemia
4: Infection
359-: A 35 year old female presents with cervical and axillary lymphadenopathy. There is history of fever and drenching night sweats. She is diagnosed to have hodgkin's lymphoma What is the stage of the disease?
1: II-A
2: II-B
3: IIE-A
4: IIE-B
360-: All the following cause microcytic hypochromic anemia, except
1: Lead poisoning

2: Thalassemia
3: Iron deficiency
4: Fanconi's anemia
361-: Defect in Bernard soulier lies in -
1: Gplb-IX
2: GpIIIa-IIb
3: Gplla-Iilb
4: GpIIIb-IIa
362-: Most common extranodal site for non-hodkin&;s lymphoma is -
1: Stomach
2: Brain
3: Intestines
4: Tonsils
363-: Heterozygous sickle cell anemia give protection against -
1: G6PD
2: Malaria
3: Thalassemia
4: Dengue fever
364-: 1711. All are true regarding Anaemia of Chronic Diseases, except -
1: Decreased serum Fe
2: Decreased Ferritin
3: Decreased Total Fe Binding Capacity

- 4: Increased Bone Marrow Fe
- 365-: A patient with microcytic hypocromic anemia. Hb-9% serum iron-20micro/dl,ferritin-64.What is possible diagnosis?
 - 1: Atransferrinemia
 - 2: Iron deficiensy anemia
 - 3: DMT 1 mutation
 - 4: Hemochromatosis
- 366-: The size of the red blood cells is measured by -
 - 1: MCV
 - 2: MCHC
 - 3: ESR
 - 4: MCH
- 367-: Most common Non Hodgkins lymphoma is
 - 1: Diffuse large B cell lymphoma
 - 2: Follicular lymphoma
 - 3: Anaplastic large cell lymphoma
 - 4: Large T-cell leukemia/lymphoma
- 368-: All of the following are minor criteria for multiple myeloma except -
 - 1: Plasmacytosis 20%
 - 2: Multiple lytic lesion
 - 3: IgA < 100 mg/dl and IgG < 600 mg/dl
 - 4: Plasmacytoma on tissue biopsy

- 369-: Which of the following pathway does aPTT measure
 - 1: Intrinsic pathway
 - 2: Extrinsic pathway
 - 3: Both intrinsic and extrinsic
 - 4: Complement pathway
- 370-: CD marker of MALT lymphoma is? -
 - 1: CD 3
 - 2: CD 5
 - 3: CD 20
 - 4: CD 40 1467.
- 371-: All the following are indications of intravenous iron administration, except
 - 1: Intermittent gastrointestinal blood loss
 - 2: Iron malabsorption
 - 3: Inability to tolerate oral iron
 - 4: Patients on erythropoietin therapy
- 372-: Anemia of chronic renal failure -
 - 1: Normocytic normochromic anaemia
 - 2: Erythropoietin improves the symptoms
 - 3: Dialysis causes severe anemia
 - 4: Anemia is propoional to the kidney disease
- 373-: Which of the following is downregulated by Hepcidin?

- 1: Ferropoin 2: Transferrin 3: DMT 1 4: Haphaestin 374-: A patient presented with painless b/1 proptosis. What is the next investigation to diagnose it as chloroma? 1: Blood haemoglobin 2: Peripheral smear 3: Platelets 4: Bone marrow (reticulin) 375-: Pelger Huet anamoly shows presence of -1: Hyposegmented neutrophil 2: Hypersegmented neutrophil 3: Unsegmented neutrophil 4: None of the above 376-: Which of the following drugs is not recommended in septic shock: 1: Normal saline 2: Activated protein C 3: Steroids 4: Rituximab
- 377-: Low iron & low TIBC is seen in:
 - 1: Anaemia of chronic disease

- 2: Sideroblasticanaemia
- 3: Iron deficiency anaemia
- 4: Aplastic anemia

378-: Hematuria with dysmorphia RBC 's are seen in

- 1: Acute glomerulonephritis
- 2: Renal TB
- 3: Renal calculi
- 4: Chronic renal failure

379-: Patients with hemophilia A has bleeding disorder because of-

- 1: Lack of platelet aggregation
- 2: Lack of reaction accelerator during activation of factor X in coagulation cascade
- 3: Neutralization of antithrombin III
- 4: Release of Thromboxane A2

 $380\mbox{-:}\ A\ 23\ year\ old\ asymptomatic\ female\ pilot\ has\ MCV-70,\ FERRITIN-100g/L\ Hb-10gm\%$ what is the cause

- 1: Thalassemia trait
- 2: Vit B12 deficiency
- 3: Folate deficiency
- 4: Iron deficiency

381-: All the following conditons cause thrombocytopenia EXCEPT-

- 1: Giant hemangioma
- 2: Infectious mononucleosis

- 3: HIV infection
- 4: Iron deficiency anemia
- 382-: Which of the following tumor is associated with abscopal effect?
 - 1: Chronic myeloid leukemia
 - 2: Chronic lymphocytic leukemia
 - 3: Acute lymphoblastic leukemia
 - 4: Acute myelogenous leukemia
- 383-: All the following are causes of iron deficiency anemia except
 - 1: Chronic renal failure
 - 2: Celiac sprue
 - 3: Hookworms
 - 4: Carcinoma colon
- 384-: The presence of the philadephia chromosome is associated with a worse prognosis in patients with which of the following diseases?
 - 1: Acute lymphoblastic leukemia
 - 2: Acute myelogenous leukemia
 - 3: Chronic lymphocytic leukemia
 - 4: Chronic myelogenous leukemia
- 385-: A 45-year-old patient on hemodialysis for one week has noted that his BP is more difficult to control. He repos good compliance with his medications, which include erythropoietin, ferrous sulfate, vancomycin, and vitamin D. His BP is 180/99 mm Hg. Most likely cause for the worsening control of his BP is
 - 1: Erythropoietin
 - 2: Ferrous sulfate

- 3: Vancomycin
- 4: Vitamin D

386-: The agent of choice for controlling heparin induced bleeding is -

- 1: Protamine sulphate
- 2: Injectable vitamin K
- 3: Whole blood
- 4: Fresh frozen plasma

387-: Birbeck granules in the cytoplasm is characteristic of-

- 1: Neutrophil
- 2: Natural killer cells
- 3: Eosinophil
- 4: Langerhans cells

388-: Folinic acid is specifically indicated for

- 1: Anaemia associated with renal failure
- 2: Pernicious anaemia
- 3: Counteracting toxicity of high dose methotrexate
- 4: Prophylaxis of neural tube defect in the offspring of women receiving anticonvulsant medication

389-: Poor prognostic indicator in ALL-

- 1: Age <2 year
- 2: TLC4000-10,000
- 3: Presence of testicular involvement at presentation

- 4: Presence of blasts in peripheral smear
- 390-: In sickle cell anemia all are true except-
 - 1: Sickle cells
 - 2: Target cells
 - 3: Howell jolly bodies
 - 4: Ringed sideroblast
- 391-: CAPLACIZUMAB is used for treatment of?
 - 1: Acquired Thrombotic Thrombocytopenic Purpura (aTTP)
 - 2: Plaque Psoriasis
 - 3: Breast cancer
 - 4: Bladder cancer
- 392-: A newborn baby presented with profuse bleeding from the umbilical stump after bih. Rest of the examination and PT, APTT are within normal limits. Most of probable diagnosis is -
 - 1: Factor X deficiency
 - 2: Glanzmann thrombasthenia
 - 3: Von willebrand disease
 - 4: Bernad soulier disease
- 393-: Which of the following has least on life expectancy since point of diagnosis?
 - 1: Chronic myeloid leukemia
 - 2: Chronic lymphoid leukemia
 - 3: Acute myeloid leukemia
 - 4: Acute lymphoid leukemia

394-: Commonest acute presentation of sickle cell anemia is
1: Priapism
2: Bone pain
3: Fever
4: Splenomegaly
395-: A 60-year-old man presents with a 6-month history of increasing fatigue. Physical examination reveals marked pallor, and a CBC shows a macrocytic anemia. Which of the following is the most likely cause of anemia in this patient?
1: Alcoholism
2: Chronic disease
3: Iron deficiency
4: Renal disease
396-: All are seen in sickle cell anemia EXCEPT -
1: Target cells
2: Jaundice
3: Reticulocytosis
4: High hematocrit
397-: Which of the following is the indicator for body iron stores?
1: Ferretin
2: Transferrin
3: TIBC
4: Serumiron levels

398-: Patient with DVT on therapeutic dose of Warfarin came with complaints of breathlessness and hypotension. True statement regarding this:

- 1: Warfarin to be continued for 6 months
- 2: Maintain INR at 3.5 and continue
- 3: Maintain INR at 2 and continue
- 4: Discontinue warfarin

399-: True regarding multiple myeloma are all except

- 1: Plasmacytosis less than 10%
- 2: increased IgG
- 3: ANA antibody
- 4: Incrased M spikes

400-: Defect in hereditory spherocytosis lies in -

- 1: Membrane cytoskeleton
- 2: Hemoglobin
- 3: Enzyme
- 4: None

401-: Which of the following findings is diagnostic of iron deficiency anemia -

- 1: Increased TIBC, decreased serum ferritin
- 2: Decreased TIBC, decreased serum ferritin
- 3: Increased TIBC, increased serum ferritin
- 4: Decreased TIBC, increased serm ferritin

402-: Hemophilia B is due to deficiency of:

- 1: Factor VIII
- 2: Factor VII
- 3: Factor IX
- 4: Factor X

403-: Pick the most likely subtype of leukemia associated with the following finding?

- 1: B cell ALL
- 2: AML-M3
- 3: AML-M4
- 4: AML-M5

404-: Lymphohistiocytic variant of Reed Sternberg cells are typically seen in which of the following variants of Hodgkin&;s Lymphoma:

- 1: Nodular Sclerosis
- 2: Lymphocyte Rich
- 3: Lymphocyte Predominant
- 4: Lymphocyte Depleted

405-: Which is not true regarding Bernard syndrome-

- 1: Ristocetin aggregation is normal
- 2: Aggregation with collagen and ADP is normal
- 3: Large platelets
- 4: Thrombocytopenia

406-: All of the following are anticoagulant, except

1: Phytonadione

- 2: Warfarin
- 3: LMW heparin
- 4: Lepirudin

407-: ALL L3 morphology is a malignancy arising from which cell lineage?

- 1: Mature B xell
- 2: Precursor Bcell
- 3: Immature T cell
- 4: Mixed B cell and T cell

408-: AML causing Gum hyperophy -

- 1: M1
- 2: M2
- 3: M3
- 4: M4

409-: Hemolysis in G6PD may be caused by all except

- 1: Primaquine
- 2: Chloroquine
- 3: Pyrimethamine
- 4: Quinine

410-: A 40-year-old woman complains of fatigue and nausea of 3 months in duration. Physical examination reveals numerous pustules on the face, as well as splenomegaly and hepatomegaly. Laboratory studies show hemoglobin of 6.3 g/dL and platelets of 50,000/mL. A peripheral smear shows malignant cells with Auer rods (arrow). The patient develops diffuse purpura, bleeding from the gums, and laboratory features of disseminated intravascular coagulation (DIC). Which of the following is the appropriate diagnosis?

- 1: Acute lymphoblastic leukemia
- 2: Acute megakaryocytic leukemia
- 3: Acute promyelocytic leukemia
- 4: Chronic myelogenous leukemia
- 411-: Extrinsic pathway of clotting factors is measured by?
 - 1: Prothrombin time
 - 2: Activated partial thromboplastin time
 - 3: Bleeding time
 - 4: Clotting time
- 412-: The coagulation profile in a 13 year old girl with menorrhagia having von Willebrand&;s disease is
 - 1: Isolated prolonged PTT with a normal PT
 - 2: Isolated prolonged PT with a normal PTT
 - 3: Prolongation of both PT and PTT
 - 4: Prolongation of thrombin time
- 413-: Poorest prognosis in AML is seen in which cyiogcnetic abnormality-
 - 1: Monosomy 7
 - 2: No cytogenetic abnormality
 - 3: t(l5,i7)
 - 4: inv, 16
- 414-: The treatment for CNS leukaemia is
 - 1: Intrathecal methotrexate

- 2: Vincristine and prednisolone
- 3: Intrathecal vincristine
- 4: IV prednisolone
- 415-: Aplastic anemia can progress to all except
 - 1: AML
 - 2: Myelodysplastic anemia
 - 3: Pure red cell aplasia
 - 4: Paroxysmal nocturnal hemoglobinuria
- 416-: The translocation seen in follicular lymphoma is
 - 1: T(11,14)
 - 2: T(14,18)
 - 3: T(9,22)
 - 4: T(8,14)
- 417-: Bone marrow in lead poisoning contains?
 - 1: Ringed siderocytes
 - 2: Giant metamyelocytes
 - 3: Dwarf megakaryocytes
 - 4: Fibrotic changes
- 418: 35,000 mm3; prothrombin time-20 sec with a control of 13 sec; paial thromboplastin time-50sec; and Fibrinogen 10mg/dL. Peripheral smear was suggestive of acute myeloblastic leukemia. Which of the following is the most likely?
 - 1: Myeloblastic leukemia without maturation
 - 2: Myeloblastic leukemia with maturation

- 3: promyelocytic leukemia
- 4: Myelomonocytic leukemia
- 419-: Patients with sickle cell anaemia can have infection with all except
 - 1: H. streptococcus pneumonia
 - 2: H. influenza -B
 - 3: Myco tuberculosis
 - 4: All of the above
- 420-: Ba&;s hydrops fetalis is lethal because
 - 1: Hb Ba's cannot bind oxygen
 - 2: The excess a globin form insoluble precipitates
 - 3: Hb Ba's cannot release oxygen to fetal tissues
 - 4: Microcytic red cells become trapped in the placental
- 421-: The following protein defects can cause hereditiary spherocytosis except -
 - 1: Ankyrin
 - 2: Palladin
 - 3: Glycophorin C
 - 4: Anion transpo protein
- 422-: Which is the most common subtype of classical Hodgkin lymphoma?
 - 1: Mixed-cellularity type
 - 2: Lymphocyte-depleted type
 - 3: Nodular sclerosis type
 - 4: Lymphocyte-rich type

423-: Which of the following is a poor prognostic factor in Acute Lymphoblastic Leukemia (ALL) - $\,$

- 1: Hyperdiploidy
- 2: t (9;22); t (4; 11)
- 3: 2-8 years of age
- 4: WBC count < 50,000

424-: Schistocyte is/are found in -

- 1: TTP
- 2: DIC
- 3: both option 1 and option 2
- 4: March hemoglobinuria

425-: In which leukemia, autoimmune hemolytic anemia is most common -

- 1: ALL
- 2: AML
- 3: CML
- 4: CLL

426: All of the following are the good prognostic features for Hodgkin&;s disease except -

- 1: Haemoglobin > $10 \text{ gm} \backslash dl$
- 2: WBC count < 15000\/mm3
- 3: Absolute lymphocyte count < $600 \/ul$
- 4: Age < 45 yrs

- 427-: In HbM the position of point mutation
 - 1: b chain, 87th codon, Histidine Tyrosine
 - 2: a chain, 87th codon, Histidine Tyrosine
 - 3: b chain, 6th codon, Glutamine Valine
 - 4: b chain, 6th codon, Glutamine Lysine
- 428-: In hereditary spherocytosis mutation not seen is?
 - 1: Ankyrin
 - 2: Spectrin
 - 3: Band-3
 - 4: Na+ Cl-. channel protein
- 429-: Basophillic leucocytosis occurs in --
 - 1: AML
 - 2: ALL
 - 3: CML
 - 4: CLL
- 430-: Poor prognostic factors for Hodgkin&;s disease are all except -
 - 1: Younger age
 - 2: Systemic manifestations
 - 3: Lymphocyte depletion
 - 4: stomach involvement
- 431-: A 15-year-old boy presented with one day history of bleeding gum, subconjunctival bleed and purpuric rash. Investigations revealed following results: Hb- 6.4 gm/dL; TLC-1,00,000/microlitre, platelet 35,000/cubic millimetre; prothrombin time-20 sec with a

control of 13 sec; paial thromboplastin time-50sec; and Fibrinogen lOmg/dL. Peripheral smear was suggestive of acute myeloblastic leukemia. Which of the following is the most likely?

- 1: myeloblastic leukemia without maturation
- 2: Myeloblastic leukemia with maturation
- 3: Promyelocytic leukema
- 4: Myelomonocytic leukemia
- 432-: In patients with Chronic Myeloid Leukemia
 - 1: ABL gene on Chr. 22 is trans-located to BCR gene on Chr.9
 - 2: The fusion gene bcr-abl forms a protein with tyrosine kinase activity
 - 3: Splenomegaly is unusual
 - 4: Philadelphia chromosome positive patients respond poorly to Imatinib
- 433-: Pegylated Filgrastim is used for treatment of:
 - 1: Anaemia
 - 2: Neutropenia
 - 3: Thrombocytopenia
 - 4: Pancytopenia
- 434-: Which of the following drugs inhibits plasminogen activation?
 - 1: Aspirin
 - 2: Tranexaemic acid
 - 3: Alteplase
 - 4: Streptokinase
- 435-: Not a cause of microcytic hypochromic anemia -

- 1: Sickle cell disease
- 2: Aplasic anemia
- 3: Iron deficiency anemia
- 4: Hereditary spherocytosis
- 436-: All of the following are characteristic features of treatment of iron deficiency anemia with oral iron supplements, except:
 - 1: If 200-300 mg elemental iron is consumed, about 50 mg is absorbed
 - 2: The propoion of iron absorbed reduces as hemoglobin improves
- 3: The reticulocyte count should begin to increase in two weeks and peak in 4 weeks -- this suggests good response to treatment
- 4: The treatment should be discontinued immediately once hemoglobin normalizes to prevent side effects of iron.
- 437: A 60 yr old female with history 8 blood transfusions in 2yrs.Her Hb-60g/I , TLC-5800, platelet-3.4 Iakhs, MCV-60, RBC-2.1 lakhs/mm3. She is having hypochromic microcytic anemia. Which investigation is not needed?-
 - 1: Evaluation for pulmonary hemosiderosis
 - 2: Urinary hemosiderin
 - 3: Bone marrow examination
 - 4: G1 endoscopy
- 438-: A 25-year-old female presented in December month with chronic fatigue and cyanosis with bluish lips and arthralgia. Peripheral blood film is shown below. What is the likely cause?
 - 1: Cold AIHA
 - 2: Warm AIHA
 - 3: Hemoglobinopathy
 - 4: G6PD Deficiency

- 439-: Aspirin acts by inhibiting which of the following enzymes?
 - 1: Cyclooxygenase
 - 2: Lipoxygenase
 - 3: Phospholipase
 - 4: None of the above
- 440-: Which of the following is not a type of peripheral T-cell neoplasm according to 2017 WHO classification?
 - 1: Lymphoplasmacytic lymphoma
 - 2: Mycosis fungoides
 - 3: Large granular lymphocytic leukemia
 - 4: Anaplastic large cell lymphoma
- 441-: All the following conditions cause thrombocytopenia except
 - 1: Giant hemangioma
 - 2: Infectious mononucleosis
 - 3: HIV infection
 - 4: Iron deficiency anemia
- 442-: Which one the following drugs is a Parenteral Direct Thrombin Inhibitor?
 - 1: Enoxaparin
 - 2: Apixaban
 - 3: Dabigatran
 - 4: Argatroban

443-: Differential diagnosis for pancytopenia with cellular bone marrow include the following except-

- 1: Megaloblastic anemia
- 2: Myelodysplasia
- 3: Paroxysmal Nocturnal Hemoglobinuria
- 4: Congenital dyserythropoietic anemia

444-: Poor prognostic factor for ALL is

- 1: Female sex
- 2: Leukocyte factor < 50,000
- 3: Age greater than 1 year
- 4: Hypodiploidy

445-: A 48 year old women was admitted with a history of weakness for two months. On examination, cervical lymph nodes were found enlarged and spleen was palpable 2 cm below the costal margin. Her hemoglobin was $10.5 \, \text{g/dl}$, platelet count $2.7 \, \text{x} \, \text{lO'/L}$ and total leukocyte count $40 \, \text{x}$ WfL, which included 80% mature lymphoid cells with coarse clumped chromatin. Bone marrow revealed nodular lymphoid infiltrate. The peripheral blood lymphoid cells were positive for CD 19, CD 5, CD20 and CD23 and were negative for CD 79 B and FMC - 7. The histopathological examination of the lymph node in this patient will most likely exhibit effacement of lymph node architecture by -

- 1: A pseudofollicular pattern with proliferation centers
- 2: A monomorphic lymphoid proliferation with a nodular pattern
- 3: A predominantly follicular pattern
- 4: A diffuse proliferation of medium to large lymphoid cells with high mitotic rate.

446-: Invovled in Hereditiary spherocytosis -

- 1: Troponin
- 2: Ankyrin

	3: Pyrin
	4: Actin
447	-: Routine Rh typing includes testing?
	1: A antigen
	2: B antigen
	3: C antigen
	4: D antigen
	-: A 2 year old child presents with scattered lesions in the skull. Biopsy revealed gerhans giant cells. The most commonly associated is marker with this condition will be
	1: CD 1a
	2: CD 57
	3: CD 3
	4: CD 68
449.	-: True about aplastic anemia -
	1: Splenomegaly
	2: Nucleated RBC in peripheral blood
	3: Reticulocytopenia
•	4: Thrombocytopenia
450-	-: BCR ABL gene mutation is seen in?
	1: CML
	2: AML
	3: CLL

- 4: ALL
- 451-: Which of the following is most common haemoglobinopathy
 - 1: Thalassemia
 - 2: Sickle cell anemia
 - 3: Haemoglobin C
 - 4: Spherocytosis
- 452-: All of the following are true of thalassemia major, EXCEPT:
 - 1: Splenomegaly
 - 2: Target cells on peripheral smear
 - 3: Microcytic hypochromic anemia
 - 4: Increased osmotic fragility
- 453-: A 60-year-old man with unstable angina is treated with an intravenously administered glycoprotein IIb-IIIa inhibitor. The mechanism of action of this agent is the ability to
 - 1: Dilate coronary aeries.
 - 2: Inhibit atherogenesis.
 - 3: Inhibit platelet adhesion.
 - 4: Inhibit platelet aggregation.
- 454-: All of the following are major complications of massive transfusion, except -
 - 1: Hypokalemia
 - 2: Hypothermia
 - 3: Hypomagnesemia
 - 4: Hypocalcemia

455-: CLL is differentiated from Mantle Cell Lymphoma by
1: CD 5
2: CD 17
3: CD22
4: CD 23
456-: A 2 year old child presents with scattered lytic lesions in the skull. Biopsy revealed Langerhans giant cells. The most commonly associated marker with this condition will be
1: CD 1a
2: CD57
3: CD3
4: CD68
457-: All of the following are B cell markers except -
1: CD 10
2: CD 19
3: CD 20
4: CD 34
458-: Chromosomal translocation in CML is
1: T(2,8)
2: T(9,22)
3: T(15,17)
4: T(8,14)

- 459-: Doc for Heparin induced thrombocytopenia is?
 - 1: Argatroban
 - 2: Warfarin
 - 3: Low molecular weight heparin
 - 4: Dabigatran
- 460-: Heparin acts as an anticoagulant by:-
 - 1: Activating antithrombin III
 - 2: Inactivating antithrombin III
 - 3: Activating thrombin
 - 4: Activating factor Xa
- 461-: Most Common extranodal site of Lymphoma in HIV is?
 - 1: CNS
 - 2: GIT
 - 3: Retroperitoneum
 - 4: Mediastinum
- 462-: Best investigation for BCR-ABL
 - 1: Flow cytometry
 - 2: Fluorescent in situ hybridization
 - 3: EISA
 - 4: Polymerase chain reaction
- 463-: Fibrinogen degradation products help in detection of:
 - 1: Haemophilia

- 2: DIC
- 3: TTP
- 4: Thrombosthenia

464-: Intrinsic cell wall defect of RBCs is feature of -

- 1: Paroxysmal nocturnal hemoglobinuria
- 2: Sickle cell anemia
- 3: Hemophilia
- 4: All of the above

465-: Causes of iron deficiency anemia are all except -

- 1: CRF
- 2: Young female
- 3: Celiac sprue
- 4: Hook worm

466-: Which of the following medications would be prescribed most frequently to patients suffering from chronic atrial fibrillation?

- 1: Lidocaine
- 2: Bretylium
- 3: Warfarin
- 4: Adenosine

467-: Atypical lymphocytes in infectious mononucleosis are made up of: (E. REPEAT 2006)

- 1: CD4+ T cells
- 2: CD8 + T cells

- 3: Plasma cells
- 4: NK cells

468-: Which is the following agents is a prerequisite for Prothrombin time (PT) assay?

- 1: Tissue thromboplastin
- 2: Kaolin
- 3: Glass beads
- 4: Silica

469-: True about nodular lymphocytic predominant Hodgkin&;s lymphoma

- 1: Consists predominantly of classical RS cells
- 2: CD 15 & CD 30 positive
- 3: Made up of T lymphocytes
- 4: Have good prognosis

470-: A 5 year old child presents with history of fever off - and-on for past 2 weeks and petechial spots all over the body and increasing pallor for past 1 month. Examination reveals splenomegaly of 2 cm below costal margin. The most likely diagnosis is -

- 1: Acute leukemia
- 2: Idiopathic thrombocytopenic purpura
- 3: Hypersplenism
- 4: Aplastic anemia

471-: Anemia which is associated with pancytopenia is

- 1: Hemolytic
- 2: Iron deficiency
- 3: Megaloblastic

- 4: All
- 472-: The pathogenesis of hypochromic anemia in lead poisoning is due to -
 - 1: Lead blocks transferrin receptors of erythroid precursors
 - 2: Binding of lead to transferrin, inhibiting the transpo of iron
 - 3: Inhibition of enzymes involved in heme biosynthesis
 - 4: Inhibiting breakdown of ferritin into hemosiderin
- 473-: Pancytopenia with cellular bone marrow is seen in all except:
 - 1: Megaloblastic Anemia
 - 2: MDS
 - 3: PNH
 - 4: G6PD deficiency
- 474-: Most sensitive marker for iron deficiency anemia is?
 - 1: Increase in iron binding capacity
 - 2: Decrease in serum ferritin level
 - 3: Decrease in serum iron level
 - 4: Increased serum free transferrin
- 475-: True about a-thalassemia trait -
 - 1: Increased HbF
 - 2: Increased HbA
 - 3: Microcytosis
 - 4: Severe anemia

476-: Drug of choice for warfarin toxicity:	
1: Protamine sulfate	
2: Vitamin K	
3: Dipyridamole	
4: Ticlopidine	
477-: Cut off value for anemia at 6 months to 6 years is	
1: 10 gm/dl	
2: 11 gm/dl	
3: 12 gm/dl	
4: 13 gm/dl of venous blood	
478-: Hemolytic anemia may be characterized by all except	
1: Hyperbilirubinemia	
2: Reticulocytosis	
3: Hemoglobinuria	
4: Increased plasma haptoglobin level	
479-: Not a component of POEMS syndrome -	
1: Polyneuropathy	
2: Organomegaly	
3: Endocrinopathy	
4: Multiple osteolytic lesions	
480-: Autosplenectomy is seen in:	
1: Hereditary spherocytosis	

- 2: Sickle cell disease
- 3: Thalassaemia
- 4: Autoimmune anemia
- 481-: Glycoprotein IIb-IIIa complex is deficient in -
 - 1: Bernard-Soulier syndrome
 - 2: Glanzmann's disease
 - 3: Gray platelet syndrome
 - 4: Von-Willebrand disease
- 482-: Fohowing are common features in multiple myeloma
 - 1: Body ache and pain
 - 2: Elevated serum globulin
 - 3: Renal failure
 - 4: Hypocalcemia
- 483-: Glycoprotein IIb/IIIa receptor antagonist is:
 - 1: Clopidogrel
 - 2: Abciximab
 - 3: Tranexamic acid
 - 4: Ticlopidine
- 484-: Anti phospholipid antibody syndrome is characterized by all the following features except -
 - 1: Thrombocytosis
 - 2: Aerial and venous thrombosis

- 3: Recurrent aboions
- 4: Livedo reticularis

485-: Military policy dictates that flight personnel in Iraq receive primaquine chemoprophylaxis for Plasmodium vivax malaria on redeploying to a non-malarious area. Several days after beginning such a regimen, a 26-year-old African-American pilot develops anemia, hemoglobinemia, and hemoglobinuria. Special studies will likely reveal an abnormality in which of the following?

- 1: Duffy antigen
- 2: G6PD
- 3: Intrinsic factor
- 4: PIG-A

486-: In Von willebrand disease, there is -

- 1: Factor VII deficiency
- 2: Factor VIII C deficiency
- 3: Factor X deficiency
- 4: Defects in vWF

487-: Which of the following is associated with Bence Jones myeloma?

- 1: y chain disease
- 2: a chain disease
- 3: X chain disease
- 4: p. chain disease

488-: Which of the following is not seen on haemoglobin electrophoresis in homozygous sickle cell anemia?

1: HbA

2: HbA2	
3: HbF	
4: HbS	
89-: Ring sideroblast in myelodysplastic syndrome is associated with which gene autation?	
1: ASXL1	
2: EZH 2	
3: TET 2	
4: SF3B1	
490-: All are antiplatelets drugs EXCEPT:	
1: Aspirin	
2: Clopidogrel	
3: Dipyridamol	
4: Warfarin	
491-: All are features of hemolytic anaemia except -	
1: Thrombocytopenia	
2: Hemosiderinuria	
3: Decreased haptoglobin	
4: Raised indirect bilirubin	
492-: Anemia with reticulocytosis is seen in-	
1: Hemolysis	
2: Iron deficiency anemia	

- 3: Vitamin B12 deficiency
- 4: Aplastic anemia
- 493-: G6PD help in maintaining the integrity of RBC by:
 - 1: Controlling oxidative stress on RBC
 - 2: Controlling reduction stress on RBC
 - 3: Maintaining flexibility of cell membrane
 - 4: Component of electron transport chain
- 494-: Which of the following Iron is used for Parenteral Iron Therapy?
 - 1: Iron dextran
 - 2: Ferrous sulphate
 - 3: Ferrous fumarate
 - 4: Ferrous gluconate
- 495-: Color of hemosiderin is?-
 - 1: Black
 - 2: Brown
 - 3: Blue
 - 4: Yellow
- 496-: Which of the following is true about anemia of chronic disease
 - 1: Increased TIBC
 - 2: Normal serum iron levels
 - 3: Normal or increased serum ferritin
 - 4: Increased transferrin saturation

497-: Activated protein C is used therapeutically in: 1: Abnormal PT\/PTT 2: Ml 3: Fungal infection 4: Sepsis 498-: Which of the metabolic abnormality is seen in multiple myeloma?-1: Hyponatremia 2: Hypokalemia 3: Hypercalcemia 4: Hyperphosphatemia 499-: Bleeding disorders with it APTT andt PT: 1: Factor 13 deficiency 2: Severe liver disease 3: Immune thrombocytopenic purpura 4: Leiden (Factor V) deficiency 500-: Megaloblastic anemia should be treated be with both folic acid & vitamin Bl2 because 1: Folic acid alone causes improvement of hematologic symptoms but worsening of neurological symptoms 2: It is a Co factor

3: It is enzyme

4: None of the above

501-: Reticulocytosis is seen in all except -

- 1: P.N.H.
- 2: Hemolysis
- 3: Nutritional anemia
- 4: Dyserythropoietic syndrome

502-: False about HUS -

- 1: Thrombocytopenia
- 2: Schistocytes seen in peripheral blood
- 3: Caused by E coli
- 4: Renal failure is not seen

503-: Which one of the following red cell abnormalities is most indicative of hemolysis? -

- 1: Target cells
- 2: Acanthocytes
- 3: Schistocytes
- 4: Basophilic stippling

504-: C-MYC translocation is seen in which of the following tumors?

- 1: Burkitt lymphoma
- 2: Neuroblastoma
- 3: Malignant melanoma
- 4: Breast cancer

505-: The primary defect which leads to sickle cell anemia is -

1: An abnormality in porphyrin part of hemoglobin

- 2: Replacement of glutamate by valine in b-chain of HbA
- 3: A nonsence mutation in the b-chain of HbA
- 4: Substitution of valine by glutamate in the a-chain of HbA

506-: Which propey of hemoglobin is affected in sickle cell anemia?

- 1: Stability
- 2: Function
- 3: Affinity
- 4: Solubility

507-: A newborn baby presented with profuse bleeding from the umbilical stump after birth. Rest of the examination and PT, APTT are within normal limits. Most probable diagnosis is-

- 1: Factor X deficiency
- 2: Glanzmann thrombasthenia
- 3: Von willebrand disease
- 4: Bernard soulier disease

508-: A 45 year old male presents to OPD with a bony pain. There is no history of trauma or drug abuse. Investigations revealed ESR of 140 and Hb -6 gm/dL. Peripheral smear is shown below . What type of chromosomal abnormality is associated with a ourable prognosis in this patient?

- 1: t (14:16)
- 2: t (4:14)
- 3: t(11,14)
- 4: Loss of 13q14

509-: ALL, morphology is a malignancy arising from which cell lineage -

Clinical Hematology MCQ MedicalMCQ.in 1: Mature B cell 2: Precursor B cell 3: Immature T cell 4: Mixed B cell & T cell 510-: Prolonged prothrombin time is seen in? 1: Haemophilia A 2: Haemophilia B 3: Thrombocytopenia 4: Factor VII deficiency 511-: All the following are target specific oral anticoagulants except 1: Betrixaban 2: Apixaban 3: Dabigatran 4: Rivaroxaban 512-: Intermediate grade of NHL are all except -1: Diffuse small cell cleaved 2: Diffuse large cell 3: Follicular ,predominantly small cleaved cell. 4: Diffuse mixed

- 1: TTP
- 2: Factor XII deficiency

- 3: Vitamin K deficiency
- 4: Antithrombin III deficiency
- 514-: Leiden mutation is?
 - 1: Non sense mutation
 - 2: Mis-sense mutation
 - 3: Frame shift mutation
 - 4: Tri nucleotide repeat mutation
- 515-: Polycythemia is not caused by -
 - 1: Renal carcinoma
 - 2: Liver carcinoma
 - 3: Cerebellar hemangioma
 - 4: Lung carcinoma
- 516-: Which is the most common red cell defect without Hb abnormality?
 - 1: Elliptocytosis
 - 2: Spherocytosis
 - 3: Poikilocytosis
 - 4: Sickle cell disease
- 517-: Glycoprotein IIb-IIIa complex is deficient in
 - 1: Bernard soulier syndrome
 - 2: Glanzmann disease
 - 3: Von willibrand disease
 - 4: Gray platelet syndrome

518-: Most common plasma cell tumor is -	
1: Plasmacytoma	
2: Waldenstorm's macroglobinemia	
3: Multiple myeloma	
4: Primary amyloidosis	
519-: Which of the following drugs is used in heparin-induced thrombocytopenia	
1: Warfarin	
2: Coumarin	
3: Lepirudin	
4: Enoxaparin	
520-: Oral iron chelating agent -	
1: Penicillamine	
2: Desferrioxamine	
3: Deferiprone	
4: Ca Na EDTA	
521-: Localised langerhans cells histiocytosis affecting head & neck is -	
1: Letterer-siwe disease	
2: Pulmonary langerhans cell histiocytosis	
3: Hand-schuller-christian disease	
4: Eosinophilic granuloma	

522-: Direct Coomb's test is positive in hemolytic anemia due to:

- 1: Paraxysmal cold hemoglobinuria
- 2: Paroxysmal nocturnal hemoglobinuria
- 3: Idiopathic thrombocytopenic purpura
- 4: Hemolytic uremic syndrome

523-: All of following are anti platelet EXCEPT:

- 1: Aspirin
- 2: Clopidogrel
- 3: Abciximab
- 4: Tranexamic acid

524-: A 40 year old male patient is hospitalised with huge splenomegaly, marked sternal tenderness, and a total leucocyte count of 85,000 per cubic millimetre with large percentage of myelocytes and meta myelocytes, which one of the following drugs is best indicated for his disease?

- 1: Cyclophosphamide
- 2: Chlorambucil
- 3: Melphation
- 4: Hydroxyurea

525-: MCHC is increased in

- 1: Iron deficiency anaemia
- 2: Spherocytosis
- 3: Thalassemia
- 4: All

526-: What type of RBC seen in chronic renal failure? -

1: Microcytic 2: Macrocytic 3: Normocytic 4: None 527-: Which of the following is most common hemoglobinopathy? 1: Thalassemia 2: Sickle cell anemia 3: Haemoglobin C 4: Christmas disease 528-: True about iron deficiency anemia -1: Microcytic hypochromic anemia 2: Decreased TIBC 3: Increased ferritin 4: Bone marrow iron decreased earlier than serum iron 529-: Increased Prothrombin time results from deficiency of -1: Factor IX 2: Fibrinogen 3: Factor VI 4: Factor XI 530-: Best treatment for Sickle cell anemia is? 1: Hydroxyurea

2: Sulphonamide

- 3: Iron Injection
- 4: Blood transfusion
- 531-: Hepcidin is secreted by which of the following?
 - 1: Kidney
 - 2: Bone marrow
 - 3: Duodenum
 - 4: Liver
- 532-: Myelofibrosis leading to a dry tap on bone marrow aspiration is seen with which of the following conditions?
 - 1: Burkitts lymphoma
 - 2: Acute erythroblastic leukemia
 - 3: Acute megakaryocytic leukemia
 - 4: Acute undifferentiated leukemia
- 533-: Which of the following is not a minor diagnositic criteria for multiple myeloma?
 - 1: Lytic bone lesions
 - 2: Plasmacytosis greater than 20%
 - 3: Plasmacytoma on biopsy
- 4: Monoclonal globuline spike on serum electrophoresis of> 2.5 g/dl for IgG, > 1.5 g/dl for IgA
- 534-: In hereditary spherocytosis, an inherited abnormality is seen in which of the following red blood cell component?
 - 1: a-globin chain
 - 2: b-globin chain

- 3: Phosphatidyl inositol glycan A
- 4: Spectrin
- 535-: X-linked recessive disease in male with clotting defect is -
 - 1: Hemophilia A
 - 2: ITP
 - 3: Von-Willebrand disease
 - 4: None
- 536-: Megaloblastic anaemia may be caused by all of the following except
 - 1: Phenytoin
 - 2: Methotrexate
 - 3: Pyrimethamine
 - 4: Amoxicillin
- 537-: A young female has the following lab values s MCV-70 Hb 10 gm% serum Iron 60, serum ferltin 100, the diagnosis Is
 - 1: Thalassemia trail
 - 2: Chronic iron deficiency anemia
 - 3: Megaloblastic anemia
 - 4: Anaemia of chronic infection
- 538-: Which one of the following is not a feature of multiple myeloma -
 - 1: Hypercalcemia
 - 2: Anemia
 - 3: Hyperviscosity

- 4: Elevated alkaline phosphatase
- 539-: An old woman, Nanda suffered stroke for which she was given alteplase. She improved considerably. To prevent the recurrence of stroke, this patient is most likely to be treated indefinitely with:
 - 1: Aspirin
 - 2: Warfarin
 - 3: Urokinase
 - 4: Enoxaparin
- 540-: A newborn with ABO incompatibility, the characteristic feature on peripheral smear is the presence of:
 - 1: Microspherocytes
 - 2: Fragmented RBC
 - 3: Polychromasia
 - 4: Elliptocytosis
- 541-: True about Bence-Jones protein:
 - 1: Made of light chain
 - 2: Reappears at 100degC
 - 3: Dissolve at 100degC
 - 4: Amyloid light chain in urine
- 542-: Generalized necrotising lymphadenopathy is-
 - 1: Kimura disease
 - 2: Kukuchi disease
 - 3: Non--Hodgkin's lymphoma

- 4: Castleman's disease
- 543-: Megaloblastic anaemia due to folic acid deficiency is commonly due to -
 - 1: Inadequate dietary intake
 - 2: Defective intestinal absorption
 - 3: Absence of folic acid binding protein in serum
 - 4: Absence of glutamic acid in the Intestine
- 544-: Parameter which should be tested before staing heparin therapy is:-
 - 1: Serum bleeding time
 - 2: Serum clotting time
 - 3: Prothrombin time
 - 4: Activated paial thromboplastin time
- 545-: Treatment of choice in a patient big acute pulmonary embolism with right ventricular hypokinesia and a compromised cardiac output but normal blood pressure is
 - 1: Thrombolytic agent
 - 2: Low molecular weight heparin
 - 3: IV filters
 - 4: Warfarin
- 546-: A 7-year-old child from West Bengal presented with high grade fever with chills and rigor. Peripheral smear examination revealed Plasmodium vivax. He was given treatment for the same. But he again presented with jaundice, and a repeat peripheral smear showed following. What is your diagnosis?
 - 1: Viral Hepatitis
 - 2: Sickle cell Anemia
 - 3: Hemolytic uremic syndrome

- 4: Glucose 6 Phosphate dehydrogenase deficiency
- 547-: Bence jones proteins are -
 - 1: Heavy chain IgG
 - 2: Present in bone marrow
 - 3: Seen in lymphoma
 - 4: Light chain IgG
- 548-: The following condition is not associated with an Anti phospholipid syndrome -
 - 1: Venous thrombosis
 - 2: Recurrent foetal loss
 - 3: Thrombocytosis
 - 4: Neurological manifestation
- 549-: Hb is a good buffer because of
 - 1: Histidine residues
 - 2: Protein nature
 - 3: Acidic nature
 - 4: Iron molecules
- 550-: Examination of a peripheral blood smear demonstrates leukemia composed of small mature lymphocytes without blast forms. Which of the following is the most likely age of this patient?
 - 1: 1 year
 - 2: 20 years
 - 3: 45 years
 - 4: 65 years

551-: Gamma Gandy bodies contains hemosiderin and -	
1: Na+	
2: Ca++	
3: Mg++	
4: Cl-	
552-: Iron is stored in-	
1: Bone marrow	
2: Liver	
3: Spleen	
4: All of the above	
553-: Russel bodies are found in which of the following conditions:	
1: Multiple myeloma	
2: Gonadal tumour	
3: Parkinsonism	
4: Intracranial neoplasms	
554-: Which of the following conditions is associated with Coomb's positive hemolytic anaemia -	
1: Thrombotic thrombocytopenic purpura	
2: Progressive systemic sclerosis	
3: Systemic lupus erythematosus	
4: Polyaeritis nodosa	

555-: Ba's hydrops fetalis is lethal because:

- 1: Hb Ba's cannot bind oxygen
- 2: The excess a-globin form insoluble precipitates
- 3: Hb Ba's cannot release oxygen to fetal tissues
- 4: Microcytic red cells become trapped in the placental

556-: Which of the following drugs inhibit thromboxane A2 synthase?

- 1: Dazoxiben
- 2: Daltroban
- 3: Sultroban
- 4: Lamifiban

557-: Which laboratory determinations would be most helpful in distinguishing iron deficiency anemia from anemia of chronic disease?

- 1: Erythrocyte: granulocyte ratio in bone marrow
- 2: Presence or absence of polychromatophilic target cells
- 3: Presence or absence of stippled erythrocytes
- 4: Serum ferritin

558-: Which does not cause sideroblastic anaemia-

- 1: INH
- 2: Chloramphenicol
- 3: Myelodysplastic anaemia
- 4: Mercury

559-: A patient comes with bleeding due to warfarin overdose, as a treating physician what is the immediate treatment to treat warfarin induced bleeding:

- 1: Cryoprecipitate
- 2: Platelet concentrate
- 3: Fresh frozen plasma
- 4: Vitamin k Injection

560-: Least likely to be Pre-leukemic condition is:

- 1: Paroxysmal nocturnal hemoglobinuria
- 2: Paroxysmal cold hemoglobinuria
- 3: Aplastic anemia
- 4: Myelodysplastic syndrome

561-: The low grade non-Hodgkins lymphoma is -

- 1: Follicular
- 2: Large cell
- 3: Diffuse large cell
- 4: Lymphoblastic

562-: All are antiplatelet drugs except:

- 1: Clopidogrel
- 2: Abciximab
- 3: Ticlopidine
- 4: Aprotinin

563-: Autosplenectomy is seen in

- 1: Sickel cell disease
- 2: ss thalasemia

- 3: CML
- 4: All of the above

564-: Suggested criteria for the clinical diagnosis of Polycythemia vera (PV) include all except -

- 1: Low aerial oxygen saturation
- 2: Elevated red cell mass
- 3: Increased counts of cells of all lineages
- 4: Splenomegaly

565-: Which of the following represents the marked area in the histology of lymph node?

- 1: Mantle zone
- 2: Marginal zone
- 3: Paracortical area
- 4: Germinal centre

566-: Find the false statement regarding megaloblastic anemia.

- 1: Macro-polycytes
- 2: Reduced reticulocyte count
- 3: Hypercellular bone marrow
- 4: MCHC is increased

567-: Iron dextran preparations may be used for all the following conditions except

- 1: Iron deficiency anemia does not responding to oral iron therapy
- 2: Persistent blood loss
- 3: Malabsorption related macrocytic anemia

- 4: Patients on erythropoietin therapy for chronic disease of anemia
- 568-: Features of multiple myeloma are
 - 1: B cell monoclonal proliferation
 - 2: B cell in bone marrow
 - 3: B cell in peripheral blood
 - 4: Plasma cell secretes immunoglobulin
- 569-: Reticulocytosis is NOT a feature of -
 - 1: Paroxysmal nocturnal hemoglobinuria
 - 2: Following acute bleeding
 - 3: Hereditary spherocytosis
 - 4: Anemia in CRF
- 570-: Which of the following is advocated in dicumarol overdose?
 - 1: Warfarin
 - 2: Heparin
 - 3: LMWH
 - 4: Vitamin K
- 571-: Thrombotic event is seen in all of following except:
 - 1: Paroxysmal nocturnal hemoglobinuria
 - 2: Disseminated intravascular coagulation
 - 3: Idiopathic thrombocytopenic purpura
 - 4: Heparin induced thrombocytopenia

572-: Which of the following is the most sensitive and specific initial laboratory test to diagnose iron deficiency?

- 1: Serum iron levels
- 2: Serum ferritin levels
- 3: Serum transferrin receptor population
- 4: Transferrin saturation

573-: Splenectomy is most useful in

- 1: Thrombocytopenia
- 2: Hereditary spherocytosis
- 3: H.S.purpura
- 4: Sickle cell anemia

574-: The anticoagulant activity of warfarin can be potentiated by all of the following except

- 1: Aspirin
- 2: Disulfiram
- 3: Rifampin
- 4: Phenylbutazone

575-: True about vitamin K is:

- 1: It is required for synthesis of factor VII
- 2: Long term use of antimicrobials can cause deficiency of vitamin K
- 3: It is a water soluble vitamin
- 4: DVT is associated with vitamin K deficiency

576-: Failure of clot retraction indicates

- 1: Low platelet count
- 2: Factor VIII deficiency
- 3: Facto XIII deficiency
- 4: Fibrinogen deficiency
- 577-: Hypersegmented neu trop h ills are seen in?
 - 1: Microcytic hypochronic anemia
 - 2: Sideroblastic anemia
 - 3: Megaloblastic anemia
 - 4: Hemolytic anemia
- 578-: The mechanism of action of Apixaban is
 - 1: Direct thrombin inhibitor
 - 2: Factor Xa inhibitor
 - 3: Antithrombin 3 activator
 - 4: Vitamin K antagonist
- 579-: Which of the following drugs is used in sickle cell anaemia?
 - 1: Hydroxyzine
 - 2: Hydroxyurea
 - 3: Hydralazine
 - 4: Hydroxychloroquine
- 580-: Plasma expanders are used in:
 - 1: Severe anemia
 - 2: Severe trauma

- 3: Pulmonary oedema
- 4: Cardiac failure

581-: Iron deficiency anemia is characterized by -

- 1: Increased porphyrin
- 2: Increased MCHC
- 3: Increased ferritin level
- 4: Increased TIBC

582-: Cryoprecipitate contains all except -(

- 1: Factor VIII
- 2: Factor IX
- 3: Fibrinogen
- 4: VWF

583-: A 45-year-old woman presents with marked splenomegaly. Her leukocyte count is increased to 300,000/uL. The differential count reveals the presence of small numbers of myeloblasts and promyelocytes, with a predominance of myelocytes, metamyelocytes, bands, and segmented neutrophils. Basophils are also increased in number, as are platelets. The patient is not anemic. Leukocyte alkaline phosphatase is decreased. Which of the following describes a major characteristic of this disorder?

- 1: 9:22 translocation
- 2: Expansion of mature B lymphocytes within multiple lymph nodes
- 3: Hypogammaglobulinemia
- 4: Neoplastic cells exhibiting hair-like filamentous projections

584-: Granulocyte transfusion is recommended when WBC count is below?

1: 2000/ul

2: 1000/ul 3: 500/ul 4: 150/ul 585-: Vitamin required for bone formation as well as coagulation cascade is: 1: A 2: D 3: E 4: K 586-: Which of these is the most important prognostic factor in ALL? 1: Hyperploidy 2: Total leucocyte count greater than 50,000 3: Age 4: Response to steroids 587-: All are true about Diagnosis of hemolytic anemia except-1: Elevated unconjugated bilirubin in the blood 2: Low LDH in the blood 3: Haptoglobin levels are decreased 4: Direct cooms test is positive 588-: Schistocyte is/are found in all except-1: ITP 2: Severe iron deficiency

3: March hemoglobinuria

4: DIC

589-: Hypercoagulability and dermal vascular necrosis are early appearing adverse effects of:

- 1: Clopidogrel
- 2: Heparin
- 3: Warfarin
- 4: Vitamin K

590-: Thrombocytosis may be seen in the following conditions except -

- 1: Idiopathic myelofibrosis
- 2: Chronic myeloid leukemia
- 3: Essential thrombocythemia
- 4: Hypersplenism

591-: Coombs positive hemolytic anemia is associated with -

- 1: TTP
- 2: Malignant hypeension
- 3: SLE
- 4: HUS

592-: Macrocytic anemia not seen in?

- 1: Folate deficiency
- 2: Anemia of chronic disease
- 3: Previous ileum resection
- 4: Regional enteritis

- 593-: Spur cell anaemia is seen in
 - 1: Drug induced anaemia
 - 2: Hepatocellular disease
 - 3: Renal disease
 - 4: Alcoholism
- 594-: Features of Peutz-Jeghers syndrome are all except
 - 1: Autosomal dominant
 - 2: Mucocutaneous pigmentation
 - 3: Hamaomatous polyp
 - 4: High risk of malignacy
- 595-: All the following are features of hemolytic anemia except
 - 1: Decreased RBC life span
 - 2: Altered erythroid and myeloid ratio
 - 3: Bilirubin in urine
 - 4: Decreased haptoglobin
- 596-: Which of the following statements about warfarin group of oral anticoagulants is FALSE?
 - 1: They interfere with an early step in the synthesis of clotting factors
- 2: Irrespective of the dose administered, their anticoagulant effect has a latency of onset of 1-3 days
 - 3: Their dose is adjusted by repeated measurement of prothrombin time
 - 4: They are contraindicated during pregnancy

597-: Alpha thalassemia is due to -

- 1: Alpha chain deficiency
- 2: Alpha chain excess
- 3: Beta chain deficienc
- 4: Beta chain excess

598-: What is the mechanism of action of Ticagrelor?

- 1: PAR 1 inhibitor
- 2: P2Y 12 inhibitor
- 3: PARI activator
- 4: P2Y 12 activator

599-: True about smoldering myeloma is -

- 1: Monoclonal gammopathy
- 2: Lytic bone lesion
- 3: Hypercalcemia
- 4: Bone marrow plasma cell > 10%

600-: The presence of the Philadelphia chromosome is associated worse with a prognosis in patients with which of the following diseases?

- 1: Acute lymphoblastic leukemia
- 2: Acute myelogenous leukemia
- 3: Chronic lymphocytic leukemia
- 4: Chronic myelogenous leukemia

601-: Leucocyte common antigen

- 1: CD 14
- 2: CD 15
- 3: CD 23
- 4: CD 45

602-: Hot agglutinin is found in all except:

- 1: Mycoplasma infection
- 2: SLE
- 3: Methyl dopa
- 4: Rheumatoid ahritis

603-: All of the following are true about Von willibrand factor except:

- 1: Syntheszied by hepatocytes
- 2: Its deficiency can cause factor 8 defect also
- 3: Its deficiency can cause problem with platelet adhesion
- 4: Its serves as a carrier for the factor 8

604-: Which of the following is NOT an adverse effect of heparin?

- 1: Bleeding
- 2: Thrombocytopenia
- 3: Hypokalemia
- 4: Osteoporosis

605-: A male baby was born in a hospital. After 12 hr of bih, baby was found to be pale. His serum total billirubin level was 20 mg/dl and unconjugated bilirubin was 15 mg/dl, after 36 hr of bih, Hemoglobin was 14 g/dl, and reticulocyte count was high. On peripheral smear, nucleated RBC's and spherocytes are seen. Best possible diagnosis is?

- 1: Pyruvate kinase deficiency
- 2: Sickle cell anemia
- 3: Hereditary spherocytosis
- 4: Rh incompatibility
- 606-: Macrocytic anemia occurs In allexcept -
 - 1: Thiamine deficiency
 - 2: Liver disease
 - 3: Orotic aciduria
 - 4: Copper deficiency
- 607-: Factors affecting sickling in sickle cell anemia are -
 - 1: HbS concentration
 - 2: HbA
 - 3: pH
 - 4: Oxygenation
- 608-: Iron absorption is increased in -
 - 1: Iron deficiency anemia
 - 2: Pregnancy
 - 3: All types of anemia
 - 4: Malignancy
- 609-: In which of the following conditions Downey cells can be seen?
 - 1: Small lymphocytic Lymphoma
 - 2: Acute myeloid leukemia

- 3: Infectious mononucleosis
- 4: Multiple myeloma

610-: A 56-year-old man is surgically treated by a four-vessel coronary aery bypass graft procedure and placed on prophylactic daily aspirin therapy. Aspirin has been shown to prevent recurrent myocardial infarction through its ability to inhibit the synthesis of

- 1: Adenosine diphosphate (ADP).
- 2: Leukotriene B4 (LTB4)
- 3: Nitric oxide (NO).
- 4: Thromboxane A2 (TXA2)
- 611-: Necrotizing lymphadenitis is seen in -
 - 1: Hodkin 's disease
 - 2: Kikuchi disease
 - 3: Kimura disease
 - 4: Sarcodiosis
- 612-: Response to iron deficiency anemia is denoted by
 - 1: Restoration of enzymes
 - 2: Reticulocytosis
 - 3: Increase in iron binding capacity
 - 4: Increase in hemoglobin
- 613-: True about Immune Thrombocytopenic purpura (ITP)
 - 1: Intracranial bleed is a rare complication
 - 2: Splenomegaly is prominant
 - 3: More common in female

- 4: Acute is Self-limiting condition
- 614-: Which of the following diseases characteristically causes fatty change in liver
 - 1: HBV infection
 - 2: Wilson's disease
 - 3: HCV infection
 - 4: Chronic alocoholism
- 615-: Which of the following is a cause of extravascular hemolysis-
 - 1: Falciparum malaria
 - 2: Sickle cell disease
 - 3: Mismatched blood transfusion
 - 4: Microthrombi in circulation
- 616-: In langerhans cell hystiocytosis, the characteristic abnormality seen on microscopy is:
 - 1: Birbecks granules
 - 2: Foamy macrophages
 - 3: Giant cells
 - 4: Plasma cells
- 617-: Most common post operative complication in polycythemia vera-
 - 1: Infection
 - 2: Cardiopulmonary complication
 - 3: Hemolysis
 - 4: Uremia

618-: A useful thrombolytic agent that leads to plasmin activation is:
1: Vitamin K
2: Heparin
3: Streptokinase
4: Aspirin
619-: All of the following features are true regarding multiple myeloma except-
1: Proteinuria
2: Bleeding tendency
3: Visual disturbances
4: Dystrophic calcification
620-: Toll-like receptors are expressed in all except
1: Macrophages
2: Dendritic cells
3: B cells
4: T cells
621-: Disseminated intravascular coagulation (DIC) is characterized by the following except
1: Widespread bleeding\/thrombosis
2: Prolongation of prothrombin time\/paial thromboplastin time
3: High levels of fibrin degradation products
4: High platelet count
622-: The earliest manifestation of megaloblastic anemia is

1: Macrocytosis

- 2: Hypersegmented neutrophils
- 3: Basophilic stippling
- 4: Cabot ring
- 623-: The cause of the severe hemorrhage in Acute Promyelocytic Leukemia is?
 - 1: Disseminated intravascular coagulation
 - 2: Immune complex deposits on blood vessels
 - 3: Thrombocytopenia
 - 4: Thrombocytosis
- 624-: All are B cell lymphomas except -
 - 1: Burkitt's lymphoma
 - 2: Mycosis fungoides
 - 3: Mantle cell lymphoma
 - 4: Follicular cell lymphoma
- 625-: In the management of pulmonary emboli, alteplase (-PA) is infused for:-
 - 1: 1-3 hours
 - 2: 4-6 hours
 - 3: 7-9 hours
 - 4: 10-12 hours
- 626-: Decreased osmotic fragility is seen in -
 - 1: Hereditary spherocytosis
 - 2: Sickle cell ds
 - 3: Autoimmune hemolytic anemia

- 4: Thalassemia
- 627-: The most common type of acute myeloid leukemia is-
 - 1: Hypergranular promyelocytic leukemia
 - 2: Monocytic leukemia
 - 3: Myeloblastic leukemia
 - 4: Erythroleukemia
- 628-: Acid phosphastase cytochemical staining is used in the diagnosis of which of the following hematological neoplasms?
 - 1: Chronic myeloid leukemia
 - 2: Acute myeloid leukemia
 - 3: B-cell acute lymphoblastic leukemia
 - 4: T-cell acute lymphoblastic leukemia
- 629-: How long can blood be stored with CPD-A -
 - 1: 21 days
 - 2: 28 days
 - 3: 35 days
 - 4: 42 days
- 630-: Gp deficiency is seen in -
 - 1: Glanzmann's thrombasthenia
 - 2: Bemard-Soulier syndrome
 - 3: Platelet storage pool disorders
 - 4: GPillb

- 631-: Causes of Vit. B12 deficiency megaloblastic anemia-
 - 1: Fish tap worm infestation
 - 2: Dilantin therapy
 - 3: Gastrectomy
 - 4: Ileal resection
- 632-: Most common ALL subtypes?
 - 1: Pre Bcell
 - 2: Pre T cell
 - 3: T cell
 - 4: B cell
- 633-: The parents of a 13-month-old boy are contacted by a local social agency because the day care repoed them for suspected child abuse based on "too may bruises." The parents deny the abuse and promptly arragne to have their child seen by a medical specialist. The child has multiple large bruises on his legs, anus, and buttocks. No skin abrasions and no "pattern marks" are seen. PTT is prolonged and PT and bleeding time are normal. Which of the following is the most probable
 - 1: Acute myelogenous leukemia
 - 2: Disseminated intravascular coagulation
 - 3: Vitamin K deficiency
 - 4: Von Willebrand disease
- 634-: Congenital cause of hypercoagulable states are all except-
 - 1: Protein C deficiency
 - 2: Protein S deficiency
 - 3: MTHFR mutation

- 4: Lupus antigoagulant
- 635-: A peripheral smear with increased neutrophils, basophils, eosinophils, and platelets is highly suggestive of:
 - 1: Acute myeloid leukemia
 - 2: Acute lymphoblastic leukemia
 - 3: Chronic myelogenous leukemia
 - 4: Myelodysplastic syndrome
- 636-: Characteristic lab findings of hemophilia A are
 - 1: PT
 - 2: aPTT
 - 3: X-linked recessive
 - 4: Presence of 30% of factor level express the disease
- 637-: Pseudo pelger huet cells are seen in?-
 - 1: Hairy cell leukemia
 - 2: Multiple myeloma
 - 3: Hodgkin's lymphoma
 - 4: Myeolo dysplastic syndrome
- 638-: Thrombolytics can provide relative morality reduction in the treatment of acute myocardial infarction if patient comes within
 - 1: 6 hrs
 - 2: 12 hrs
 - 3: 18 hrs
 - 4: 24 hrs

- 639-: Person having heterozygous sickle cell trait is protected from infection of-
 - 1: Plasmodium falciparum
 - 2: P. vivax
 - 3: Pneumococcus
 - 4: Salmonella
- 640-: PNH is associated with a deficiency of -
 - 1: DAF
 - 2: MIRL
 - 3: GPI anchored protein
 - 4: All of the above
- 641-: Most common mutation in hereditary elliptocytosis
 - 1: Spectrin
 - 2: Ankyrin
 - 3: Glycophorin A
 - 4: Band 4.2
- 642-: Direct coomb&;s test detects -
 - 1: Antigen in serum
 - 2: Antibodies in RBC surface
 - 3: Antigen in RBC surface
 - 4: Antibodies in serum

643-: The drug Vorapaxar acts by primarily inhibiting Platelet aggregation caused by which of the following substance ?

- 1: Thromboxane
- 2: ADP
- 3: Thrombin
- 4: Prostacyclin

644-: Pappenheimer bodies are composed of?

- 1: Copper
- 2: Zinc
- 3: Iron
- 4: Lead

645-: Not a feature of multiple myeloma

- 1: Hypercalcemia
- 2: Anemia
- 3: Hyperviscosity
- 4: Elevated alkaline phosphatase

646-: Anemia of chronic disease is differentiated from iron deficiency anemia by the presence of-

- 1: | TIBC
- 2: |TIBC
- 3: | Serum ferritin
- 4: | Bone marrow iron store

647-: Which of the following condition can result in dactylitis?

- 1: Hemophilia
- 2: Von Willebrand disease 1
- 3: Thalassemia
- 4: Sickle cell anemia
- 648-: The given cell is seen in
 - 1: TB
 - 2: SLE
 - 3: Leprosy
 - 4: Malaria
- 649-: 1750. Viral infection with haemolysis is seen in -
 - 1: Hepatitis-B
 - 2: Hepatitis-C
 - 3: Prolong fever
 - 4: Hepatiitis-A
- 650-: The following drug is not associated with pure red cell aplasia:
 - 1: Phenytoin
 - 2: Isoniazid
 - 3: Erythropoietin
 - 4: None of the above
- 651-: Which of the following is true about sickle cells?
 - 1: Sickling occurs equally in both heterozygous and homozygous variants
 - 2: Fetal hemoglobin facilitates sickling

- 3: Sickling is reversible with oxygenation
- 4: Sickling is associated with reduced MCHC

652-: Blood level of which clotting factor declines most rapidly after the initiation of warfarin therapy

- 1: Factor X
- 2: Prothrombin
- 3: Factor VII
- 4: Factor IX

653-: Anemia with reticulocytosis is seen in -

- 1: Hemolysis
- 2: Iron deficiency anemia
- 3: Vitamin B12 deficiency
- 4: Aplastic anemia

654-: All are true about anemia of chronic diseases, except

- 1: Decreased serum iron
- 2: Decreased ferritin
- 3: Decreased TIBC
- 4: Increased bone marrow iron

655-: Inappropriate erythropoietin level is found in all except

- 1: Renal cell carcinoma
- 2: Lung disease
- 3: High altitude

4: Benign liver tumor

 $656\mbox{-:}$ Which of the following antibodies is most frequently seen in Antiphospholipid Syndrome ? -

- 1: Beta 2 microglobulin antibody
- 2: Anti-nuclear antibody
- 3: Anti-centromere antibody
- 4: Anti- beta 2 glycoprotein antibody

657-: All of the following drugs are contraindicated in G6PD EXCEPT:

- 1: Ciprofloxacin
- 2: Primaquine
- 3: Dapsone
- 4: Sulfonamide

658-: Thrombolytics can provide relative moality reduction in the treatment of acute myocardial infarction, if patient comes within:

- 1: 6 hours
- 2: 12 hours
- 3: 18 hours
- 4: 24 hours

659-: Alkaline Phosphatase is elevated in all except

- 1: Rickets
- 2: Hypophosphatemia
- 3: Osteomalacia
- 4: Hypoparathyroidism

660-: Warfarin acts by inhibiting the activation of all the following factors except:-
1: Factor III
2: Factor VII
3: Factor IX
4: Factor X
661-: Which of the following cells will increase in case of parasite infection?
1: A
2: B
3: C
4: D
662-: The likely diagnosis in a child with limb pain and pancytopenia is
1: Aplastic anemia
2: Acute lymphocytic leukemia
3: Rheumatic fever
4: Rheumatoid ahritis
663-: DIC is seen most commonly seen in which AML type?
1: M2
2: M3
3: M4
4: M5

664-: All of the following can cause megakaryocytic thrombocytopenia, except:

- 1: Idiopathic thrombocytopenic purpura
- 2: Systemic lupus erythematosus
- 3: Aplastic anemia
- 4: Disseminated intravascular coagulation
- 665-: Parenteral Iron therapy is indicated only when:
 - 1: Oral Iron intolerance
 - 2: Pregnancy with Hemoglobin less than 8 g/dL
 - 3: Postpaum period with Anemia
 - 4: Emergency surgery suspected of severe blood loss
- 666-: Pseudo-Pelger-Huet cells or seen in -
 - 1: Hairy cell leukemia
 - 2: Multiple myeloma
 - 3: Mylodysplastic syndrome
 - 4: Hodgkin's lymphoma
- 667-:. The pH of the freshly collected blood in CPD solution bag is -
 - 1: 7*1
 - 2: 7*3
 - 3: 7*4
 - 4: 7*6
- 668-: AML with gum infiltration, hepato-splenomegaly is most likely to be:
 - 1: ALL
 - 2: M3

	3: M2
	4: M4
66	9-: Fetal erythropoeis is first occurs at what week of gestation?
	1: 6
	2: 10
	3: 12
	4: 14
67	0-: Secondary granules in neutrophil is
	1: Lactoferrin
	2: Proteolytic enzymes
	3: Nucleotidase
	4: Catalase
67	1-: Commonest site of lytic lesion in multiple myeloma is
	1: Veebral column
	2: Femur
	3: Clavicle
	4: Pelvis
67	2-: Vitamin K is involved in the post-translational modiffication of?
	1: Glutamate
	2: Aspaate
	3: Glycine
	4: GABA

- 673-: What is not associated with DIC -
 - 1: Thrombocytopenia
 - 2: Increased PT
 - 3: Hyperfibrinogenemia
 - 4: Increased FDP
- 674-: Beta globin missense gene mutation seen in?
 - 1: Thalassemia
 - 2: Sickle cell anemia
 - 3: Hb Ba
 - 4: HbH
- 675-: Which of the following causes haemolytic anemia -
 - 1: Hereditary spherocytosis
 - 2: Infection
 - 3: Iron deficiency
 - 4: Sic kle cell anemia
- 676-: Lacunar cells are seen in
 - 1: Lymphocyte predomninat HL
 - 2: Lymphcyte depleted HL
 - 3: Nodular sclerosis
 - 4: Mixed cellularity

677-: Deficiency of this haemophilic factor during early pregnancy will result in neural tube defect:

- 1: Folic acid
- 2: Iron
- 3: Cyanocobalamine
- 4: Antioxidants

678-: Patient with MCV = 60, Hb - 5 gm % MCHC-=20 &PCV = 32 %, causes of anemia in him can be -

- 1: Phenytoin
- 2: Blind loop syndrome
- 3: Hook worm infection
- 4: CRF

679: A 25-year-old woman with a history of systemic lupus erythematosus presents with diffuse petechiae and fatigue. Physical examination demonstrates lymphadenopathy and splenomegaly. Laboratory findings include normocytic anemia (hemoglobin = 6.1 g/dL) and thrombocytopenia (30,000/mL). A peripheral blood smear shows polychromasia with 10% reticulocytes. This patient most likely has which of the following hematologic diseases?

- 1: Anemia of chronic renal failure
- 2: Aplastic anemia
- 3: Hemolytic anemia
- 4: Iron deficiency anemia

680-: A 72-year-old man who has recently had an aoic valve replacement now presents with pallor and fatigue. The red blood cell count is decreased, and schistocytes are repoed on examination of a peripheral blood smear. In addition, his indirect (unconjugated) bilirubin is significantly elevated. The cause of the anemia is likely

- 1: cold agglutinin disease.
- 2: dietary deficiency.

- 3: hereditary spherocytosis.
- 4: mechanical disruption of red cells.

681-: A7 year old presents with fever, weight loss. On examination he was pale and had significant lymphadenopathy. Bone marrow histology is as given below. What is the most probable diagnosis?

- 1: ALL
- 2: AML
- 3: Aplastic anaemia
- 4: juvenile myelomonocyticleukemia

682-: Marker for granulocytic sarcoma:

- 1: CD33
- 2: CD38
- 3: CD117
- 4: CD137

683-: Beta-2 -microglobulin is a tumor marker for

- 1: Multiple myeloma
- 2: Lung cancer
- 3: Colonic neoplasm
- 4: Choriocarcinoma

684-: Which of the following statements is not true regarding hemolytic uremic syndrome?

- 1: It is a microangiopathic hemolytic anemia
- 2: Thrombocytopenia and schistocytes are seen in the peripheral blood smear
- 3: Remal insufficiency is a complication

- 4: Direct coombs test is positive
- 685-: Cabot rings can be seen in which of the following?
 - 1: Megaloblastic anemia
 - 2: Sickle cell disease
 - 3: Iron deficiency anemia
 - 4: Autoimmune hemolytic anemia
- 686-: Primary abnormality in sequence of events leading to DIC is-
 - 1: Fibrin deposits in multiple sites
 - 2: Uncontrolled thrombin generation
 - 3: Abnormal adhesion and consumption ofplatelets
 - 4: Destruction of red cells
- 687-: aPTT is done for assessing?
 - 1: Warfarin toxicity
 - 2: LMW heparin
 - 3: Heparin toxicity
 - 4: Extrinsic coagulation pathway defect
- 688-: Which of the following statements are true about estimation of prothrombin time (PT)?
 - 1: Immediate refrigeration to preserve factor bility
 - 2: Platelet-rich plasma is essential
 - 3: Done preferably within 2 hours of collection
 - 4: Utilises Kaolin

689-: Megaloblastic anemia may be caused by all the following except
1: Liver disease
2: Copper deficiency
3: Thiamine deficiency
4: Orotic aciduria
690-: Burkitt&;s lymphoma is positive for-
1: CD5
2: CD 15
3: CD 20
4· CD 25

691-: Basophils are decreased in-

- 1: Polycythemia
- 2: Basophilic leukemia
- 3: Cushing's syndrome
- 4: CML

692-: A child died soon after bih. On examination there was hepatosplenomegaly and edema all over body. Most probable diagnosis in:

- 1: a-thalassemia
- 2: b-thalassemia
- 3: Hereditary spherocytosis
- 4: ABO incompatibility

693-: Mantle cell lymphomas are positive for all of the following, except -

- 1: CD 23
- 2: CD 20
- 3: CD 5
- 4: CD 43

694-: A 14-year-old boy presents with acute onset of right flank pain, which developed after he helped his father paint the ceiling of his bedroom. Physical examination demonstrates an area of ecchymosis in the right flank that is tender to palpation. The patient has a lifelong history of easy bruising. His brother shows the same tendency. The serum level of clotting factor VIII is less than 2% of normal. Which of the following is the most likely underlying mechanism for bleeding tendency in this patient?

- 1: Circulating antibodies directed against factor VIII
- 2: Decreased hepatic synthesis of multiple coagulation factors
- 3: Deficiency of vitamin K
- 4: Genetic defect involving the factor VIII gene

695-: All are true regarding Hodgkin&;s lymphoma, except -

- 1: CNS is the commonest site of involvement
- 2: Characteristic cell is a Reed Sternberg cell (AI2K)
- 3: Mediastinal involvement is common in nodular sclerosis type
- 4: Eosinophils, plasma cells and neutrophils increase

696-: Ham test is done for detection of which of the following?

- 1: Ankyrin defect
- 2: GPI-linked protein defect
- 3: Spectrin defect
- 4: Mannose binding protein defect

697-: The earliest sign of iron deficiency anemia
1: Increase in iron binding capacity
2: Decrease in serum ferritin level
3: Decrease in serum iron level
4: All the above
698-: Serious infections can occur when absolute neutrophil count decreases below?
1: Less than 500/ul
2: Less than 800/ul
3: Less than 1000/u
4: less than 2000/ul
699-: Which of the following is not seen on hemoglobin electrophoresis in sickle cell anemia
1: HbA
2: HbA2
3: HbF
4: HbS
700-: Linzenmeyer is used to measure:
1: Bleeding time
2: Clotting time
3: Prothrombin time
4: ESR

701-: A patient of more than 70 years, presented with generalized lymphadenopathy. WBC count was 20,000/ mm3 and blood film showed >70% mature looking lymphocytes. Next investigation that should he done:

- 1: LN biopsy
- 2: Peripheral Immunophenotyping
- 3: Bone marrow aspiration
- 4: Peripheral blood cytogenetics

702-: Platelet aggregation is caused by?

- 1: Nitrous oxide
- 2: Thromboxone A2
- 3: Aspirin
- 4: PGE2

703-: The following test may be abnormal in DIC, except:

- 1: PT
- 2: APTT
- 3: D-dimer
- 4: Clot solubility

704-: Post transplant lymphoma occurs due to proliferation of which of the following cells -

- 1: T cell
- 2: B cell
- 3: NK cell
- 4: Monocyte

705-: LAP score is maximum in?

- 1: CML
- 2: AML
- 3: Essential thrombocytosis
- 4: Polycythemia vera

706-: Which of the following is not true regarding pernicious anemia?

- 1: Chronic atrophic gastritis
- 2: Increased red cell MCV
- 3: Increased risk of gastric carcinoma is unlikely
- 4: Elevated serum levels of methyl malonic acid

707-: A 35-year old patient with severe anemia, has a peripheral blood smear with oval macrocytes, hypersegmented neutrophils, and decreased platelets and is found to be a severely malnourished alcoholic. The most likely cause of this disorder is?

- 1: Aberrant intestinal bacterial flora
- 2: Crohn's disease
- 3: Folate deficiency
- 4: Pernicious anemia

708-: A 25-year-old female presented in the month of December with chronic fatigue, cyanosis with bluish lips and ahralgia. Peripheral blood film is shown below. What is the likely cause?

- 1: Cold AIHA
- 2: Warm AIHA
- 3: Hemoglobinopathy
- 4: G6PD Deficiency

709-: Which of the following is false -

- 1: BCL-6: Burkitts lymphoma
- 2: BCL-2: Follicular & mantle cell lymphoma
- 3: CD-10: Mantle cell lymphoma
- 4: CD 34: Diffuse large B cell lymphoma
- 710-: Arrange the drug in decreasing order of antiplatelet potency a. Clopidogrel b. Prasugrel c. Aspirin d. Abciximab
 - 1: b>d>c>a
 - 2: c>d>a>b
 - 3: d>b>a>c
 - 4: a>d>c>b
- 711-: Wich one of the following is the most common immunologic type of multiple myeloma?
 - 1: IgG, Kappa light chain
 - 2: IgA, Kappa light chain
 - 3: IgD, Lambda light chain
 - 4: IgM, type
- 712-: Pearl's stain used to demonstrate the following in tissues -
 - 1: Hemosiderin
 - 2: Fat
 - 3: Reticulin
 - 4: Fibrin
- 713-: An old man, Om prakash presented with anorexia, weakness and paraesthesia. On fuher investigation his hemoglobin came out to be $5.8~\rm g\%$ and the peripheral smear showed the presence of macrocytes and neutrophils having hypersegmented nuclei. His tendon

reflexes also were sluggish. Endoscopy revealed atrophic gastritis. Deficiency of which of the following factors can lead to such a clinical situation?

- 1: Folic acid
- 2: Vitamin B12
- 3: Pyridoxine
- 4: Riboflavin
- 714-: "Smudge cells" in the peripheral smear are characteristic of-
 - 1: Chronic myelogenous leukemia
 - 2: Chronic lymphocytic leukemia
 - 3: Acute myelogenous leukemia
 - 4: Acute lymphoblastic leukemia
- 715-: Which of the following drugs have high plasma protein binding to serum albumin?
 - 1: Lignocaine
 - 2: Warfarin
 - 3: Quinidine
 - 4: All of the above
- 716-: What is the mode of action of warfarin?
 - 1: Factor Xa inhibitor
 - 2: Vitamin K antagonist
 - 3: Activates antithrombin III
 - 4: Activates factor IX
- 717-: An elderly male presented with history of intractable diarrhea. His bone marrow and renal biopsy as shown below. Which of the following is the most appropriate diagnosis?

1: Leishmaniasis 2: Multiple myeloma 3: Lymphoma 4: Urate nephropathy 718-: All of the following are good prognostic factors for pediatric acute lymphoblastic leukemia, except: 1: CNS disease at diagnosis 2: Initial WBC count of 50000/cumm 3: Hyperdiploidy 4: t(12;21) 719-: Features seen in hemolytic anemia are all except-1: Tear drop and Burr cells 2: Reduced haptoglobin 3: Reticulocytosis 4: Hemoglobinuria 720-: Which of the following is not used for throm-bopro phylaxis: 1: Heparin 2: Warfarin 3: Antithrombin III 4: Aspirin 721-: Ferrous sulfate is hydrated salt containing_____ % Iron.

1:20

2: 25
3: 30
4: 35
722-: Which of the following surface glycoproteins is most often expressed in human hematopoietic stem cell (HSC)?
1: CD23
2: CD30
3: CD33
4: CD34
723-: Which of the following antiplatelet drugs is a P2Y12 receptor blocker not effected by CYP2C19 polymorphism:
1: Clopidogrel
2: Prasugrel
3: Epitifibatide
4: Dipyridamole
724-: Antibodies in ITP are-
1: IgG
2: IgM
3: IgE
4: IgD
725-: Neutrophilia caused by -
1: Epinephrine
2: Glucocoicioids

- 3: NSAIDS
- 4: Clozapine

726-: Russel bodies are seen in

- 1: Lymphocytes
- 2: Monocytes
- 3: Macrophages
- 4: Plasma cells

727-: A 30 months old boy is brought to the physician with jaundice and pallor. Investigations show anemia, reticulocytosis, and increased indirect bilirubin. A peripheral blood smear shows red blood cells without central pallor. This patient is most likely to have which of the following additional findings?

- 1: Decreased lactate dehydrogenase
- 2: Increased mean corpuscular hemoglobin concentration
- 3: Increased mean corpuscular volume
- 4: Red blood cell inclusions

728-: Coomb's + ve Hemolytic Anaemia is seen in all except -

- 1: Alcoholic cirrhosis
- 2: Chronic active hepatitis
- 3: Primary biliary cirrhosis
- 4: Primary sclerosing cholangitis

729-: vWF is useful in:

- 1: Platelet adhesion
- 2: Platelet aggregation

- 3: Clot formation
- 4: Fibrinolysis
- 730-: Which of the following is true about CML in children?
 - 1: Translocation between long arm of chromosome 9 and sho arm of chromosome 22
 - 2: Protein tyrosine kinase inhibitors are used in treatment
 - 3: Commonly presents as blast crisis
 - 4: 2nad most common leukemia in children
- 731-: A newborn baby presented with profuse bleeding from the umblical stump after bih.Rest of the examination and PT,APTT are within normal limits.Most likely diagnosis is which of the following:
 - 1: Factor X deficiency
 - 2: Glanzmanns thrombasthenia
 - 3: Von willevrand disease
 - 4: Bernard soulier disease
- 732-: B ALL is due to-
 - 1: T cells
 - 2: Immature B cells
 - 3: Immature T cells
 - 4: Both T & B cells
- 733-: KleihauerBetke test is used to detect
 - 1: Ferning pattern in follicular phase
 - 2: Cephalopelvic disproportion
 - 3: Fetomaternal blood leak

- 4: Sperm-cervical mucus interaction
- 734-: Chromosomal translocation wen in CMS?
 - 1:2:08
 - 2:8:14
 - 3: 9:22
 - 4: 15:17
- 735-: Most common translocation in burkitt's lymphoma is:
 - 1: t (9;22)
 - 2: t (8;21)
 - 3: t (8;14)
 - 4: t (11;22)
- 736-: Triad of hairy cell leukemia includes all Except
 - 1: Splenomegaly
 - 2: Pancytopenia
 - 3: Erythema nodosum
 - 4: Hypercellular marrow
- 737-: All of the following immunohistochemical markers are positive in the neoplatic cells of granulocytic sarcoma, except -
 - 1: CD45 RO
 - 2: CD 43
 - 3: Myeloperoxidase
 - 4: Lysozyme

738-: B ALL is due to -1: T cells 2: Immature B cells 3: Immature T cells 4: Both T & B cells 739-: In Beta thalassemia, there is -1: Increase in beta chain ,decrease in alpha chain 2: Decrease in beta chain ,increase in alpha chain 3: Decrease in beta chain ,decrease in alpha chain 4: Increase in beta chain, increase alpha chain 740-: Which of the following is not true regarding CLL/SLL? 1: The tumour cells are positive for CD5 and CD20 2: Transformation to Richter syndrome is commonly seen 3: ZAP-70 expression is a poor prognostic marker 4: Proliferation centers in lymph nodes are pathognomonic 741-: Coomb&;s positive hemolytic anemia associated with -1: TTP 2: PAN

742-: Which of the following is a cause of intravascular hemolysis

3: SLE

4: HUS

- 1: Cold agglutinin disease
- 2: Warm type autoimmune hemolytic anaemia
- 3: PNH
- 4: Both bc
- 743-: True regarding felty's syndrome is all, except -
 - 1: Splenomegaly
 - 2: Rheumatoid ahritis
 - 3: Neutropenia
 - 4: Nephropathy
- 744-: Vitamin K dependent clotting factors are
 - 1: Factor IX and X
 - 2: Factor IV
 - 3: Factor XII
 - 4: Factor I
- 745-: Which of the following is affected by platelet count-
 - 1: Bleeding time
 - 2: Prothrombin time
 - 3: Patial thromboplastin time
 - 4: Thrombin time
- 746-: Megaloblastic anaemia may be caused by all of the following, except
 - 1: Dilantin toxicity
 - 2: Vitamin B12 deficiency

- 3: Folic acid deficiency
- 4: Long term aspirin intake

747-: TRALI occurs within how many hours of transfusion?

- 1:6 hours
- 2: 12 hours
- 3: 48 hours
- 4: 72 hours

748-: CD 15+/CD30+ lymphoma among the following are?

- 1: Mixed cellularity Hodgkin lymphoma
- 2: Mantle cell lymphoma
- 3: Diffuse T- cell lymphoma
- 4: NLPHL

749-: AML with worst prognosis

- 1:8/21 translocation
- 2: Inversion 16
- 3: Normal cytogenetics
- 4: Monosomy 7

750-: A 60 yr old female with H/O 8 blood transfusion In 2 years. Her II b- 60g/l ,, TLC-5800, plutelet-3.4 lakhs, MCV 60, RBC-2.1 Inkhs/mnul. He Is having hypochromic microcytic anemia. Which Investigation Is not needed -

- 1: Evaluation for pulmonary hemosiderosis
- 2: Urinary hemosiderin
- 3: Bone marrow examination

- 4: Q1 endoscopy
- 751-: BCL-2 is the marker for-
 - 1: Follicular lymphoma
 - 2: Mycosis fungoides
 - 3: B-Cell lymphoma
 - 4: Mantle cell lymphoma
- 752-: The stain used for demonstrating Auer rods in blasts is -
 - 1: Periodic Acid Schiff(PAS
 - 2: Myeloperoxidase
 - 3: Leucocyte alkaline phosphatase
 - 4: Non-specific esterase
- 753-: Which of the following cells are involved in the process of "efferocytosis"?
 - 1: Macrophages
 - 2: T lymphocytes
 - 3: B lymphocytes
 - 4: NK cells
- 754-: All of the following are true regarding G-6PD deficiency except
 - 1: A recessive X-linked trait
 - 2: Females are commonly affected
 - 3: Oxidative stress causes hemolysis
 - 4: Protective against Palsmodium falciparum malariae

755-: In chronic myeloid leukemia CML, serum vitamin B12 level is: 1: Slightly decreased 2: Normal 3: Markedly decreased 4: Increased 756-: All of the following ,are seen with heparin therapy except 1: Skin necrosis 2: Thrombosis and thrombocytopenia 3: Osteoporosis 4: Alopecia 757-: Which of the following substance can be used as an antidote to fibrinolytics 1: Epsilon amino caproic acid 2: Protamine 3: Alteplase 4: Dabigatran 758-: The anticoagulant of choice in pregnancy is 1: Heparin 2: Warfarin 3: Dicumarol 4: Phenindione

759-: Abciximab is:

1: Antibody against Ilb\/Illa receptors

- 2: Antibody against Ib\/IX receptors
- 3: Topoisomerase inhibitor
- 4: Adenosine inhibitor

760-: In Anemia of chronic disease, what is seen?

- 1: TIBC |
- 2: S. Iron |
- 3: BM iron |
- 4: S. ferritin |

761-: Increased iron absorption is seen in -

- 1: Iron deficiency anaemia
- 2: Hypoxia
- 3: Inflammation
- 4: Antacids

762-: Which of the following is not seen in iron deficiency anemia?

- 1: Hyper-segmented neutrophils
- 2: Microcytosis and hypochromia in red cells
- 3: Low serum ferritin
- 4: Commonest cause of anemia in India

763-: Which of the following is the least common feature of Multiple Myeloma -

- 1: Bone pain
- 2: Normocytic Normochromic Anemia
- 3: Susceptibility to bacterial Infection

- 4: Hyperviscosity syndrome
- 764-: Which of the following has proved antithrombotic
 - 1: Gelatin
 - 2: Dextran 40
 - 3: Dextran 100
 - 4: Hetastarch
- 765-: All of the following are true about nodular sclerosis of Hodgkin&;s disease except -
 - 1: Well formed fibrous stands
 - 2: CD 15 +
 - 3: CD 20 +
 - 4: Infiltration by plasma cells
- 766-: PNH due to defect in -
 - 1: CD 59
 - 2: CD 15
 - 3: CDIOO
 - 4: CD20
- 767-: Burr cell is seen in "I -
 - 1: Uremia
 - 2: Hepatocellular carcinoma
 - 3: Gastric carcinoma
 - 4: Ovarian carcinoma

768-: Hemoglobin H disease is caused by deletion of-

- 1: A single a globin gene
- 2: Two a globin genes
- 3: Three a globin genes
- 4: All four a globin genes

769-: The use of desmopressin is best indicated for therapy in which of the following bleeding disorders?

- 1: Severe hemophilia A
- 2: Severe hemophilia B
- 3: Von Willebrand disease (VWD)
- 4: Glanzmann thrombasthenia

770-: The RBC morphology in a peripheral blood smear in thalassemia trait resembles that of -

- 1: Vitamin B12 deficiency anemia
- 2: Folate deficiency anemia
- 3: Hereditary spherocytosis
- 4: Iron deficiency anemia

771-: Echinocytes are types of -

- 1: RBC's
- 2: Lymphocytes
- 3: Monocytes
- 4: Platelets

772-: The shape of RBC is biconcave due to

- 1: Ferrous state of Iron
- 2: Spectrin
- 3: Band protein
- 4: Glycophorin C
- 773-: All are seen in sickle cell anemia EXCEPT:
 - 1: Target cells
 - 2: Jaundice
 - 3: Reticulocytosis
 - 4: High hematocrit
- 774-: Which of the following is a feature of disseminated intravascular coagulation (DIQ)?
 - 1: Normal prothrombine time
 - 2: Reduced plasma fibrinogen
 - 3: Normal platelet count
 - 4: Normal clotting time
- 775-: Shaswat, A 67-year-old male comes to the physician's office complaining of severe pain in the right foot with paleness of right toe. The patient had a history of receiving unfractionated heparin 7 days back. The hemogram of the patient is as shown below: Hb 13.2 g/dL WBC 10000/mm3 Platelet 50000/mm3 Which of the following should be used to treat this condition?
 - 1: High dose of Heparin
 - 2: Platelet infusions
 - 3: Argatroban
 - 4: Warfarin
- 776-: The number of platelets in a single bag of SDP is

- 1:1*10^11
- 2: 2 * 10^11
- 3:1*10^12
- 4: 2 * 10^12
- 777-: Which of the following statements about prasugrel is true as compared to clopidogrel?
 - 1: It is slower acting than clopidogrel
 - 2: Due to higher risk of bleeding, prasugrel is contraindicated in stroke
 - 3: It is reversible antagonist of ADP receptors
 - 4: It is effective orally unlike clopidogrel
- 778-: Which of the following is derived from CFU-E?
 - 1: Red blood cell
 - 2: Lymphocyte
 - 3: Platelet
 - 4: Neutrophil
- 779-: The following set of finding is seen in DIVC
- 1: Increased fibrinogen, increased antithrombin III increased thrombin-antithrombin III comolexes
 - 2: Increased FDP, decreased PT, increased antithrombin III
 - 3: hicreased FDP, prolonged PT, increased thrombin- antithrombin complexes
 - 4: Increased FDP, prolonged PT, reduced platlets
- 780-: Which of the following is not associated with a high reticulocyte count?
 - 1: Acute bleed

- 2: Hemolytic anemia
- 3: Megaloblastic anemia
- 4: Response to treatment in nutrition deficiency anemia

781-: A 48-year-old alcoholic man presents with a 6-day history of productive cough and fever. The temperature is 38.7degC (103degF), respirations are 32 per minute, and blood pressure is 126/86 mm Hg. The patient's cough worsens, and he begins expectorating large amounts of foul-smelling sputum. A chest X-ray shows a right upper and middle lobe infiltrate. A CBC demonstrates leukocytosis (WBC = 38,000/mL), with 80% slightly immature neutrophils and toxic granulation. Laboratory studies reveal elevated leukocyte alkaline phosphatase. Which of the following best describes this patient's hematologic condition?

- 1: Acute myelogenous leukemia
- 2: Chronic lymphocytic leukemia
- 3: Chronic myelogenous leukemia
- 4: Leukemoid reaction

782-: BCRABL gene mutation is seen in?

- 1: CML
- 2: AML
- 3: CLL
- 4: ALL

783-: Massive splenomegaly with pancytopenia-

- 1: CLL
- 2: Pure red cell aplasia
- 3: CML
- 4: Myelofibrosis

784-: Drug used in heparin overdose is:

- 1: Protamine sulfate
- 2: Phylloquinone
- 3: Ticlopidine
- 4: Clopidogrel

785-: Best marker for iron deficiency is

- 1: Serum iron
- 2: Serum ferritin
- 3: Total iron binding capacity
- 4: Transferrin saturation

786-: The peripheral smear of Hereditiary spherocytosis will show spherocytes -

- 1: Usually of same size as RBCs
- 2: Reticulocytosis absent
- 3: Anemia is negligible
- 4: Smaller size than RBCs

787-: Urgent reversal of warfarin induced bleeding can be done by the administration of

- 1: Cryoprecipitate
- 2: Platelet concentrates
- 3: Fresh frozen plasma
- 4: Packed red blood cells

788-: Which of the following is not a feature of APLA?

1: Haemolytic anemia

- 2: False positive VDRL
- 3: Thrombocytopenia
- 4: Decreased PT with increased APTT
- 789-: Treatment of choice for Hairy cell leukaemia?
 - 1: IFNX
 - 2: Splenectomy
 - 3: Cladribine
 - 4: None
- 790-: All endothelial cells produce thrombomodulin except those found in -
 - 1: Hepatic circulation
 - 2: Cutaneous circulation
 - 3: Cerebral microcirculation
 - 4: Renal circulation
- 791-: ABO antigens are not found in -
 - 1: CSF
 - 2: Plasma
 - 3: Saliva
 - 4: Semen
- 792-: Which of the following is not a myeloproliferative disease -
 - 1: Polycythemia vera
 - 2: Acute myeloid leukemia
 - 3: Chronic myelogenous leukemia

4: Essential thrombocytosis

793-: Reticulocyte level in newborn is ?

- 1: 0.2-1.5%
- 2: 1-1.6%
- 3: 2.5-6%
- 4: 6-10.2%

794-: In multiple myeloma following are seen -(

- 1: Increase Calcium
- 2: Bone pain
- 3: Renal failure
- 4: All of the above

795-: Cause of DIC does not include

- 1: Falciparum malaria
- 2: Trauma
- 3: Carcinoma pancreas
- 4: AML M1

796-: Most common cancer in children is

- 1: AML
- 2: ALL
- 3: CML
- 4: CLL

797-: Warm antibody hemolytic anemia is seen in?

- 1: Methyldopa
- 2: EBV infection
- 3: Quinine
- 4: Mycoplasma infection

798-: A 30 years old female, RBC Counts 4.5 million, MCV 55 fl, Tc 8000, no history of blood transfusion?

- 1: Iron deficiency
- 2: Thalassemia major
- 3: Thalassemia minor
- 4: Megaloblastic anemia

799-: Which of the following anticoagulants is an oral direct Xa inhibitor?

- 1: Fondaparinux
- 2: Dabigatran
- 3: Rivaroxaban
- 4: Lepirudin

800-: Badprognosis is multiple myeloma is indicated by -

- 1: WBC > 20000
- 2: Azotemia
- 3: Hypocalcemia
- 4: Low or normal M component production

801-: CD 19 positive, CD22 positive, CD103 positive monoclonal B-cells with bright kappa positivity were found to comprise 60% of the peripheral blood lymphoid cells on flow

cytometric analysis in a 55 year old man with massive splenomegaly and a total leucocyte count 3.3×109 /L. Which one of the following is the most likely diagnosis -

- 1: Splenic lymphoma with villous lymphocytes
- 2: Mantle cell lymphoma
- 3: B-cell prolymphocytic leukemia
- 4: Hairy cell leukemia
- 802 -: Cause of fragmented RBC in peripheral blood -
 - 1: Microangiopathic hemolytic anemia
 - 2: D.I.C.
 - 3: Option 1,2&4
 - 4: Malignant hypeension
- 803-: MYD88 L265P mutation is seen in?
 - 1: Hairy cell leukemia
 - 2: Waldenstrom Macroglobulinemia
 - 3: Multiple Myeloma
 - 4: AML
- 804-: Heparin is contraindicated in patients suffering from the following diseases except
 - 1: Bleeding due to defibrination syndrome
 - 2: Pulmonary tuberculosis
 - 3: Subacute bacterial endocarditis
 - 4: Large malignant tumours
- 805-: Thrombosis seen in which stage of lupus nephritis?

- 1: Class I
- 2: Class II
- 3: Class III
- 4: Class IV

806-: True about low molecular weight heparin except:

- 1: Predictable bioavailability
- 2: Inhibit factor Ela and Xa
- 3: Favorable pharmacokinetics
- 4: PT, apt monitoring not required.

807-: Normal leucocyte count is -

- 1:8000-15000
- 2: 4000-11000
- 3: 5000 8000
- 4: 7000 14000

808-: What type of RBC seen in chronic renal failure ?-

- 1: Microcytic
- 2: Macrocytic
- 3: Normocytic
- 4: None

809-: A young female patient presented with symptoms related to anemia. Peripheral blood smear showed neutrophil hypersegmentation and bone marrow aspirate smear showed giant myelocytes. Which of the following is the likely etiology?

1: Sideroblastic anemia

2: Iron deficiency anemia 3: Thalassemia 4: Folic acid deficiency 810-: College girl appearance of leukocytes are seen in 1: CLL 2: CML 3: ALL 4: Hodgkins lymphoma 811-: Anti-coagulant of choice for heparin induced thrombo.. Cytopenia is? 1: Lepirudin 2: Aprotinin 3: Abciximab 4: Plasminogen 812-: All of the following stem cell populations are found within the bone marrow, except -1: Endothelial Progenitor cells 2: Myoblast Progenitor cells 3: Mesenchymal stem cells 4: Hematopoietic stem cells 813-: Tranexaemic acid is a specific antidote of 1: Fibrinolytic drugs 2: Heparin

3: Barbiturates

4: Organophosphates

- 814-: Progressive transformation of germinal centers (PTGC) is a precursor lesion of -
 - 1: Hodgkins lymphoma, nodular sclerosis
 - 2: Hodgkins lymphoma, mixed cellularity
 - 3: Hodgkins lymphoma, lymphocytic predominant
 - 4: Peripheral T cell lymphoma
- 815-: All decrease in iron deficiency anemia except?
 - 1: Ferritin
 - 2: TIBC
 - 3: Iron
 - 4: Transferrin
- 816-: All are seen in PNH except-
 - 1: Aerial thrombosis
 - 2: Venous thrombosis
 - 3: Aplastic anemia
 - 4: Hemolytic anemia
- 817-: B-Thalessemia trait what is elevated? -
 - 1: T HbF
 - 2: T HbA2
 - 3: Microcytosis
 - 4: Severe anaemia

- 818-: Response to iron in iron deficiency anemia is denoted by -
 - 1: Restoration of enzymes
 - 2: Reticulocytosis
 - 3: Increase in iron binding capacity
 - 4: Increase in hemoglobin
- 819-: Which is not seen in iron deficiency anaemia -
 - 1: Hyper-segmented neutrophils
 - 2: Hypochromia precedes microcytosis
 - 3: MCHC<50%
 - 4: Commonest cause of anaemia in India
- 820-: Antidote for heparin is: (1995)
 - 1: Protamine
 - 2: EDTA
 - 3: Vitamin K
 - 4: Desferrioxamine
- 821-: All are ADP inhibitors except -
 - 1: Ticlopidine
 - 2: Tirofiban
 - 3: Clopidogrel
 - 4: Prasugel
- 822-: All the following are true about beta thalassemia trait except
 - 1: Microcytic hypochromic picture

MedicalMCQ.in 2: Increased HbA2 3: Increased HbF 4: Patient requires blood transfusion 823-: Coomb's positive hemolytic anemia associated with -1: TTP 2: PAN 3: SLE 4: HUS 824-: Spherocytosis in peripheral blood smear is seen in which of the following? 1: Post-transfusion 2: Hereditary spherocytosis 3: Hemolytic disease of newborn 4: All of the above 825-: 1925. Causes of secondary polycythemia may include 1: Chronic cor pulmonale 2: Renal carcinoma 3: Cerebellar haemangioblastoma 4: All of the above 826-: Splenomegaly is least likely associated with -

1: CML

2: Polycythemia rubra vera

3: Idiopathic myelofibrosis

- 4: Primary thrombocytosis
- 827-: Cold haemagglutinin is associated with-
 - 1: Anti Ig M
 - 2: Anti Ig G
 - 3: Anti Ig A
 - 4: Donath Landsteiner antibody
- 828-: Acanthocytes are seen in
 - 1: Abetalipoproteinemia
 - 2: Hanup disease
 - 3: Whipple disease
 - 4: None
- 829-: Warfarin skin necrosis is caused by-
 - 1: Protein C/Protein S deficiency
 - 2: APLA
 - 3: Vitamin K deficiency
 - 4: Fibrinogen deficiency
- 830-: Feature of fetal R.B.C. -
 - 1: Alkali denaturation resistant
 - 2: Small in size
 - 3: Has more 2,3 DPG level
 - 4: More iron than adult RBC

- 831-: RAVULIZUMAB is a new drug approved for treatment of?
 - 1: PAROXYSMAL NOCTURNAL HEMOGLOBINURIA
 - 2: SICKLE CELL ANEMIA
 - 3: ACUTE HEPATIC PROPHYRIA
 - 4: MENINGOCOCCAL INFECTIONS
- 832-: A 60 year old man presented with fatigue, weight loss and heaviness in left hypochondrium for 6 months. The hemogram showed Hb. 10gm/dL,TLC 5 lakhs/mm3, platelet count 4 lakhs/mm3, DLC: neutrophil 55%, lymphocytes 4%, monocytes 2%, basophils 6%, metamyelocytes 10%, myelocytes 18%, promyelocytes 2% and blasts 3%. The most likely cytogenetic abnormality in this case is -
 - 1: t (1:21)
 - 2: t (9:22)
 - 3: t (15:17)
 - 4: Trisomy 21
- 833-: Which of the following blood system have Carbohydrate antigen
 - 1: Rh
 - 2: Kell
 - 3: Lewis
 - 4: Duffy
- 834-: Neutropenia after chemotherapy is treated by?
 - 1: Leucovorin
 - 2: Filgrastim
 - 3: Ondansetron
 - 4: Darbepoetin

835-: Macrocytic anemia is noted with all of the following except

- 1: Phenytoin
- 2: Methotrexate
- 3: Pyrimethamine
- 4: Ciprofloxacin

836-: 20-year-old female present with features of anemia. Blood tests: Hb-5g/dL, MCV-52 fL, MCHC-20 g/dL, PCV-32%. Diagnosis

- 1: Phenytoin toxicity
- 2: Fish tape worm infection
- 3: Hook worm infection
- 4: Blind loop syndrome

837-: A 17-year-old boy presented with TLC of 138×109 L with 80% blasts on the peripheral smear. Chest X-ray demosnstrated a large mediastinal mass. Immunophenotyping of this patient&;s blasts would most likely demonstrate -

- 1: No surface antigens (null phenotype)
- 2: An immature T cell phenotype (Tdt/D34/CD7 positive)
- 3: Myeloid markers, such as CD 13, CD33 and CD 15
- 4: B cell markers, such as CD 19, CD20 and CD22

838-: In an adult man, there is about how much grams of hemoglobin in the circulating blood

- 1:350
- 2:500
- 3:900
- 4: 1000

839-: Which plasma protein is necessary for adhesion of platelets to subendothelialfibres?

- 1: Glycoprotein IIb
- 2: Von Willebrand factor
- 3: Platelet factor 3
- 4: Factor X

840-: Increase in alkaline phosphatase is seen in:

- 1: Chronic myeloid leukemia
- 2: Leukemoid reaction
- 3: Eosinophilia
- 4: Malaria

841-: What is the chromosomal translocation in AML M3 -

- 1: T (18,21)
- 2: T (15,17)
- 3: T (8, 21)
- 4: T (9,11)

842-: The presence of small sized platelets on the peripheral smear is characteristic of:

- 1: Idiopathic thrombocytopenic purpura
- 2: Bernard soulier syndrome
- 3: Disseminated intravascular coagulation
- 4: Wiskott aldrich syndrome

843-: Investigation to distinguish between pregnancy acquired hemophilia A and lupus anticoagulant?

- 1: Factor 8 assay
- 2: dRVVT
- 3: von Willlebrand Factor assay
- 4: aPTT
- 844-: With respect to ticlopidine, clopidogrel:
 - 1: Is more likely to cause formation of antiplatelet antibodies
 - 2: Is less likely to cause neutropenia
 - 3: Is more likely to cause severe bleeding
 - 4: Has a greater antiplatelet effect
- 845-: Late onset hemorrhagic disease of newborn is chaacterized by all of the following features except
 - 1: Usually occurs in cow milk fed babies
 - 2: Onset occurs at 4-12 week of age
 - 3: Intracranial hemorrhage can occur
 - 4: Intramuscular vitamin K prophylaxis at bih has a protective role
- 846-: Bernard Soulier syndrome is due to defect in
 - 1: GP IB/IX
 - 2: GP IIB/IIIa
 - 3: Fibrinogen
 - 4: vWF
- 847-: The evaluation in a newly diagnosed case of acute lymphoid leukaemia (ALL) should routinely include all of the following except
 - 1: Plasma viscosity

- 2: Bone marrow biopsy
- 3: Cellsurface phenotyping
- 4: Complete metabolic panel

848-: All of the following are adverse effects of unfractionated heparin except:-

- 1: Alopecia
- 2: Osteoporosis
- 3: Thrombocytosis
- 4: Bleeding

849-: In sickle cell anaemia, the mutational event responsible for the mutation for beta chain is -

- 1: Crossing over
- 2: Point mutation
- 3: Inseion
- 4: Deletion

850-: Classical markers for Hodgkin&;s disease-

- 1: CD 15 and CD 30
- 2: CD 15 and CD 22
- 3: CD 15 and CD 20
- 4: CD 20 and CD 30

851-: Maltoma is positive for-

- 1: CD 3
- 2: CD 10

Clinical Hematology MCQ 3: CD 23 4: CD 5 852-: Ratio of fat cells and blood cells in bone marrow is-1:1:04 2: 1:02 3: 1:01 4: 2:01 853-: Vitamin K-dependent clotting factors include all the following except -1: Factor II 2: Factor VIII 3: Factor IX 4: Factor X

854-: Which of the following anticoagulants does not require routine laboratory coagulant profile monitoring?

- 1: Warfarin
- 2: Dabigatran
- 3: Argatroban
- 4: Heparin

855-: A patient of thrombosis if veins has been receiving coumarin therapy for three years. Recently she developed bleeding tendency .how will you reverse the effect of coumarin therapy

- 1: Protamine injection
- 2: Vitamin K injection

- 3: Infusion of fibrinogen
- 4: Whole blood transfusion

856-: Bone marrow transplant is indicated in all Except

- 1: Osteopetrosis
- 2: Mucopolysaccharidosis
- 3: Hemochromatosis
- 4: Beta thalassemia

857-: Mantle cell lymphoma shows

- 1: CD 5+, CD 25 -
- 2: CD5+, CD 10+
- 3: CD5+, CD 23+
- 4: CD5+, CD 23 -

858-: Non specific esterase is positive in all the categories of AML except-

- 1: M3
- 2: M4
- 3: M5
- 4: M6

859-: Uses of platelet activating factor (PAF) are all EXCEPT

- 1: Rupture of mature graffian follicle and implantation
- 2: Haemostasis and thrombosis
- 3: Bronchial asthma
- 4: Congestive heart failure

860-: Diagnostic criteria of Hodgkin&;s disease are A/E -

- 1: RS cells
- 2: Atypical cells in background
- 3: Sclerosing pattern
- 4: CD 30 present

861-: &; Auer rods &; are seen in -

- 1: Lymphoblast
- 2: Myeloblast
- 3: Erythroblast
- 4: Megakaryoblast

862-: All of the following stem cell populations are found within the hone marrow, except-

- 1: Endothelial Progenitor cells
- 2: Myoblast Progenitor cells
- 3: Mesenchymal stern cells
- 4: Hernatopodic stkem cells

863-: Which of the following drugs should not be administered concomitantly with warfarin as it decreases the effect of oral anticoagulants?

- 1: Broad spectrum antibiotic
- 2: Cimetidine
- 3: Aspirin
- 4: Oral contraceptive

864-: Which propey of haemoglobin is affected in sickle cell anaemia

- 1: Stability
- 2: Function
- 3: Affinity
- 4: Solubility

865-: HbH is characterized by -

- 1: Deletion of three alpha chain genes
- 2: Deletion of three alpha chains and one beta chain genes
- 3: Deletion of two alpha and two beta chain genes
- 4: Deletion of four alpha chain genes

866-: Why is clopidogrel preferred over ticlopidine?

- 1: Lower incidence of neutropenia and thrombocytopenia
- 2: Lower incidence of dyslipidemia
- 3: Lower incidence of hyperglycemia
- 4: Lower incidence of postural hypotention

867-: Highest LAP score is seen in:

- 1: CML
- 2: Polychthemia vera
- 3: PNH
- 4: Pregnancy

868-: Which of the following statements is true

1: Chronic myeloid leukemia occurs beyond 50 years of age

- 2: Hairy cell leukemia in less than 50 years has a good prognosis
- 3: Acute lymphoid leukemia in less than 1 year has a poor prognosis
- 4: Chronic lymphocytic leukemia occurs in less than 50 years of age
- 869-: Burkitt&;s lymphoma is positive for?
 - 1: CD 5
 - 2: CD 15
 - 3: CD 20
 - 4: CD 25
- 870-: Poor prognostic factor in ALL are -
 - 1: Philadelphia chromosome
 - 2: Male sex
 - 3: High WBC count
 - 4: Hyperploidy
- 871-: Heparin is the commonly used anticoagulant in cardiac surgery. All of the following are true about heparin except
 - 1: Weakest acid found in living beings
 - 2: Most commercial preparations of heparin are derived from pig intestine
 - 3: Acts antithrombin activation
 - 4: Produce thrombocytopenia
- 872-: Schistocytes are-
 - 1: Malarial parasite
 - 2: WBC

- Clinical Hematology MCQ 3: Broken RBC 4: Schizont 873-: Gamma Gandy bodies contains hemosiderin and-1: Na+ 2: Ca++ 3: Mg ++ 4: Cl--1: Multiple myeloma 2: Leukemia
- 874-: Best candidate for Autologus bone marrow transplant?
 - 3: Thalassemia
 - 4: Congenital Immunodeficiency
- 875-: Neutropenia is caused by all of the following except-
 - 1: Coicosteroids
 - 2: Cephalosporins
 - 3: Ranitidine
 - 4: Phenytoin
- 876-: Pure red cell aplasia is associated with:
 - 1: Thymoma
 - 2: Renal cell carcinoma
 - 3: Hepatocellular carcinoma
 - 4: Prostate carcinoma

877-: Cold agglutinins are directly against which of the following RBC antigens?

1: P antigen

2: I antigen

3: Le antigen

4: Rh antigen

878-: Least likely to be Pre-leukemic condition is

1: Paroxysmal nocturnal hemoglobinuria

2: Paroxysmal cold hemoglobinuria

3: Aplastic anemia

4: Myelodysplastc syndrome

879-: Burkitt's lymphoma arises from

1: T cell

2: B cell

3: Pre B cell

4: NK cell

880-: CD 59 deficiency leads to:-

1: Chediak Higashi disease

2: TTP

3: PNH

4: Burkitt's Lymphoma

881-: Anemia of chronic disease is characterized by all, except -

- 1: Decreased serum iron
- 2: Increased total iron binding capacity (TIBC)
- 3: Increased serum ferritin
- 4: Increased macrophage iron in bone marrow
- 882-: All of the following NHL involve the white pulp of spleen Except
 - 1: Hairy cell leukemia
 - 2: Burkitt lymphoma
 - 3: Follicular lymphoma
 - 4: Mantle cell lymphoma
- 883-: All of the following statements about unfractionated heparin are true except:-
 - 1: It is a powerful anticoagulant only in vivo
 - 2: Protamine sulfate is the antidote
 - 3: It should not be given by intramuscular route
 - 4: It acts by inhibiting factor IIa and Xa
- 884-: Which of the following is an example of low molecular weight heparin?
 - 1: Alteplase
 - 2: Lepirudin
 - 3: Enoxaparin
 - 4: Hirudin
- 885-: Direct globulin test is positive in?
 - 1: PNH
 - 2: Sickle cell anemia

- 3: Thalassemia
- 4: Paroxysmal cold hemoglobinuria

886-: Treatment of choice in a patient of acute pulmonary embolism with right ventricular hypokinesia and a compromised cardiac output but normal blood pressure is:

- 1: Thrombolytic agent
- 2: Low molecular weight heparin
- 3: IV filters
- 4: Warfarin

887-: In haemorrhagic disease of newborn which of the following is prolonged

- 1: PT
- 2: aPTT
- 3: TT
- 4: None of the above

888-: Vascular dermal necrosis is seen with

- 1: Warfarin
- 2: Hirudin
- 3: Dabigatran
- 4: Rivaroxiban

889-: PTT is prolonged in all except:-

- 1: Hemophilia A
- 2: Von Willebrand disease
- 3: Christmas disease

4: ITP
890-: Gamna-Gandy bodies contains hemosiderin along with?
1: Na+
2: Ca++
3: Mg ++
4: Cl-
891-: CD marker specific for myeloid series-
1: CD34 b
2: CD45
3: CD99
4: CD117
892-: The anticoagulant of choice in pregnancy is:
1: Heparin
2: Warfarin
3: Dicumarol
4: Phenindione
893-: A newborn baby presented with profuse bleeding from umbilical stump after bih. Probable diagnosis is
1: Factor XIII deficiency
2: VWF deficiency

3: Factor XII deficiency

4: Glanzmann thrombosthenia

894-: A 50 years old male presents with massive splenomegaly. His differential diagnosis will include all, except:

- 1: Chronic myeloid leukemia
- 2: Polycythemia rubra vera
- 3: Hairy cell leukemia
- 4: Aplastic anemia

895-: A 60-year-old woman complains of weakness and hematuria. Physical examination shows marked pallor, hepatosplenomegaly, and numerous ecchymoses of the upper and lower extremities. A CBC reveals a normocytic normochromic anemia, thrombocytopenia, neutropenia, and a marked leukocytosis, which is composed mainly of myeloblasts. The major clinical problems associated with this patient's condition are most directly related to which of the following?

- 1: Avascular necrosis of bone
- 2: Disseminated Intravascular Coagulation
- 3: Hypersplenism
- 4: Suppression of Hematopoiesis

896-: All of the following statements about Hairy cell leukaemia are true except

- 1: Splenomegaly is conspicuous
- 2: Results from an expansion of neoplastic T lymphocytes
- 3: Cells are positive for Taarate Resistant Acid phosphatase
- 4: The cells express CD25 consistently

897-: Comment on type of anemia in peripheral smear:

- 1: Pernicious anemia
- 2: Iron deficiency anemia

- 3: Sickle cell anemia
- 4: Hereditary spheroctosis

898-: A 10 year old boy presents with mucosal bleeding of 1 week duration. The investigation of choice that will be most useful in him is

- 1: Prothrombin time
- 2: Clotting time
- 3: Paial thromboplastin time
- 4: Platelet count

899-: All are true regarding Thrombotic Thrombocytopenia Purpurs (TTP), except-

- 1: Normal complement levels
- 2: Microangiopathic hemolytic anemia
- 3: Thrombocytopenia
- 4: Thrombosis

900-: The peripheral blood smear of an anemic 1-year-old child is shown in the illustration. The most likely diagnosis is

- 1: anemia of chronic disease.
- 2: aplastic anemia.
- 3: hereditary spherocytosis
- 4: iron deficiency anemia.

901-: Megaloblastic anemia is seen in-

- 1: ileal resection
- 2: Crohn's disease
- 3: Intestinal lymphatic ectasia

- 4: Mentrier's disease
- 902-: An old lady came with complaint of pain in left calf region. A diagnosis of deep vein thrombosis (DVT) was made and she was put on warfarin therapy. After 3 months, she was brought to hospital with complaint of nose bleed which automatically stopped in few minutes. Her lab repos show INR of 7.0. To avoid hemorrhage, what to do next in addition to discontinuation of the drug?
 - 1: Desmopressin
 - 2: Vitamin K1
 - 3: Factor VIII
 - 4: Protamine sulfate
- 903-: Secondary hemochromatosis is associated with all except:
 - 1: Thalassemia
 - 2: Sideroblastic anemia
 - 3: Multiple blood transfusions
 - 4: Paroxysmal nocturnal hemoglobinuria
- 904-: A 25 year old women presents with recurrent abdominal pain and anaemia. Peripheral blood smear shows basophilic stippling of the RBCs. What is the most likely diagnosis?
 - 1: Coeliac disease
 - 2: Hookworm disease
 - 3: Sickle cell disease
 - 4: Lead poisoning
- 905-: Hemophilia B is due to deficiency of-
 - 1: Factor VIII

2: Factor VII 3: Factor IX 4: factor X 906-: Haemochromatosis affects all of the following organs Except 1: Liver 2: Pancreas 3: Hea 4: Salivary glands 907-: B cell marker are all except: 1: CD 19 2: CD 20 3: CD 10 4: CD 135 908-: Aspirin prolongs bleeding by inhibiting the synthesis of which of the following? 1: Adenosine receptors 2: Cyclic AMP 3: Prostacyclin 4: Thromboxane A2 909-: A 40-year-old female presented with acute painful swelling of left leg. USG of left leg

showed deep venous thrombosis. Which of the following abnormality is least likely to be involved in this condition?

- 1: Factor V Leiden mutation
- 2: Prothrombin gene mutation

- 3: Hypohomocysteinemia
- 4: Protein C deficiency
- 910-: Thrombotic event is seen in all of following except -
 - 1: PNH
 - 2: Die
 - 3: ITP
 - 4: Heparin induced thrombocytopenia
- 911-: Cells charcteristic of Hodgkin&;s disease are -
 - 1: Lacunar cells
 - 2: Reed Sternberg cells
 - 3: Giantcells
 - 4: Eosiphils
- 912-: Which of the following is a recently approved monoclonal antibody for treatment of Hemophilia A?
 - 1: Emicizumab
 - 2: Sarilumab
 - 3: Abaloparatide
 - 4: Durvalumab
- 913-: A 50 years old male presents with massive spleenomegaly. His differential diagnosis will include, except $\,$
 - 1: CML
 - 2: Polycythemia vera
 - 3: Hairy cell leukemia

4: Aplastic anemia

914-: Cut off value for Anemia at 6 years is _____

- 1: 10 gm/dl
- 2: 11 gm/dl
- 3: 12 gm/dl
- 4: 13 gm/dl of venous blood

915-: Anemia of chronic disease is due to -

- 1: Vit B12 deficiency
- 2: Folate deficiery
- 3: Decreased utilization of stored iron
- 4: Chronic blood loss

916-: A 9 year old boy with elevation in both PT and A PTT. What is the diagnosis? -

- 1: Defect in extrinsic pathway
- 2: Defect in intrinsic pathway
- 3: Platelet function defect
- 4: Defect in common pathway

917-: Marker of myeloid cancers:

- 1: S100
- 2: HMB45
- 3: Common leucocyte antigen
- 4: Cyto-keratin

Clinical Hematology MCQ	MedicalMCQ.
918-: The lymphocytic and histiocytic variant of Reed-Sternberg cell is see	en in-
1: Follicular center lymphoma	
2: Lymphocyte depleted Hodgkin's disease	
3: Nodular sclerosis Hodgkin's disease	
4: Lymphocyte predominant Hodgkin's disease	
919-: In lymphoplasmacytoid lymphoma which of the following monoclor immunoglobulin is seen ?	ıal
1: IgA	
2: IgD	
3: IgG	
4: IgM	
920-: NESTROFT test is used in the screening of	
1: Thalassemia	
2: AIHA	
3: Aplastic anemia	
4: G6PD deficiency	
921-: Triad of leukoerythroblastosis, tear drop erythrocytes and large pla	telets is seen in
1: Essential thrombocytosis	
2: Primary myelofibrosis	

3: Myelodysplastic syndrome

4: Langerhan cell histiocytosis

- 1: DIC
- 2: Von willebrand's disease
- 3: Microangiopathic hemolytic anemia
- 4: Spleenomegaly
- 923-: At what stage neutrophil appears in peripheral blood
 - 1: Myeloblast
 - 2: Promyelocyte
 - 3: Myelocyte
 - 4: Band forms
- 924-: Felty syndrome
 - 1: Splenomegaly and neutropenia
 - 2: Nodules in upper lobe of lung and difficulty in breathing
 - 3: Digital ulceration and gangrene
 - 4: Multiple finger deformities
- 925-: Pawn ball megakaryocytes are characteristic of-
 - 1: Myelodysplastic syndrome
 - 2: idiopathic thrombocytopenic purpura
 - 3: Thrombotic thrombocytopenic purpura
 - 4: Chloramphenicol toxicity
- 926-: Following test is used to assess the warfarin dose?
 - 1: BT
 - 2: CT

- 3: APTT
- 4: PT/INR

927-: You are working in a PHC and have to send a sample for blood glucose estimation. Which of the following anticoagulant will you use for sending your sample?

- 1: EDTA
- 2: Heparin
- 3: Potassium oxalate + sodium fluoride
- 4: Tri Sodium citrate

928-: All of the following cause hypeension except

- 1: NSAID
- 2: L-Dopa
- 3: Cyclosporine
- 4: Erythropoietin

929-: A patient Amit Kumar is suffering from atherosclerosis. Which of the following is the most beneficial drug for prevention of stroke in this patient?

- 1: Aspirin
- 2: Warfarin
- 3: Low dose subcutaneous heparin
- 4: Digoxin

930-: Which of the following is the best test for diagnosis of paroxysmal nocturnal hemoglobinuria?

- 1: Sucrose lysis test
- 2: Ham test

- 3: Flow cytometry
- 4: Bone marrow aspiration
- 931-: Ringed Sideroblasts are seen in-
 - 1: Iron deficiency anemia
 - 2: Myelodysplastic syndrone
 - 3: Thalassemia
 - 4: Anemia of chronic disease
- 932-: A peripheral smear with increased neutrophils basophils, eosinophils, and platelets is highly suggestive of -
 - 1: Actute myeloid leukemia
 - 2: Acute lymphoblastic leukemia
 - 3: Chronic myelogenous leukemia
 - 4: Myelodysplasia syndrome
- 933-: A mother brings her 2-year old boy with sho history of pallor. Examination reveals pallor, petechiae and splenomegaly. Which of the following is the most likely diagnosis?
 - 1: Thalassaemia
 - 2: Acute leukaemia
 - 3: Hodgkin's lymphoma
 - 4: Idiopathic trombocytopenic purpura
- 934-: Heparin acts activation of:
 - 1: Antithrombin III
 - 2: Factor VIII
 - 3: Factor II and X

4: Factor V

935-: Waldenstrom's macroglobulinemia is characterized by all except

- 1: IgE sereting clone of plasma cells
- 2: Hyperviseosity symptoms
- 3: Hepatosplenomegaly
- 4: Lymphadenopathy

936-: Most common defect in hereditary spherocytos is in -

- 1: Spectrin
- 2: Ankyrin
- 3: Band 3
- 4: Band 4.2

937-: Adding glucose to stored blood causes?-

- 1: Prevent hemolysis
- 2: Gives nutrition to cells
- 3: Increase acidosis of blood
- 4: Prevent Hyperkalemia

938-: Heparin inactivates all of the following clotting factors except -

- 1: Ha
- 2: Xa
- 3: XIIa
- 4: VIIa

939-: Which one of the following laboratory tests differentiates leukemoid reaction from chronic myeloid leukemia?

- 1: LAP (leukocyte alkaline phosphatase)
- 2: LCA (leukocyte common antigen)
- 3: MPO (myelo-peroxidase)
- 4: TRAP (tarate resistant alkaline phosphatase)

940-: First sign of improvement in oral iron therapy is?

- 1: Reticulocytosis
- 2: Raise of hemoglobin
- 3: Increase in ESR
- 4: Raise in RBC

941-: Earliest event of vascular trauma is?

- 1: Vasoconstriction
- 2: Platelet adhesion
- 3: Platelet aggregation
- 4: Vasodilatation

942-: Not present in sideroblastic anemia is

- 1: Microcytic anemia
- 2: Decreased transferrin saturation
- 3: Sideroblastic cells in blood smear
- 4: Ineffective erythropoiesis

943-: Which of the following does not indicate megaloblastic anemia?

1: Increased reticulocyte count 2: Raised Bilirubin 3: Mild splenomegaly 4: Nucleated RBC 944-: Calculate iron deficit for a 50 kg person, with Hb-5g/dL. Add 1000 mg for stores. 1: 2150 mg 2: 1650 mg 3: 1150 mg 4: 1575 mg 945-: Which of the following statements is false about unfractionated heparin? 1: It is effective both in-vitro and in-vivo 2: It inhibits factor Xa 3: It inhibit anti-thrombin III 4: It inhibit factor IIa 946-: Common site of haematopoiesis in fetus is -1: Liver 2: Spleen 3: Bone marrow 4: Gut 947-: Non specific esterase is positive in all categories of AML except: 1: M3

2: M4

- 3: M5
- 4: M6

948-: Which of the following is most likely to cause of non Megaloblastic macrocytic anemia

- 1: Vitamin B12 deficiency
- 2: Hypothyroidism
- 3: Thiamine deficiency
- 4: Folic acid deficiency

949-: During the course of evaluation of a case of polycythemia following investigation may be required to establish the cause EXCEPT -

- 1: Ervthropoietin level
- 2: Aerial blood gas analysis
- 3: Bone marrow examination
- 4: Serum iron profile

950-: The following are the myeloproferative disorders except-

- 1: Polycythemia vera
- 2: Essential thrombocytosis
- 3: Chronic myeloid leukemia
- 4: Hairy cell leukemia

951-: Autoimmune hemolytic anemia is associated with malignancy of which lineage -

- 1: T cell
- 2: B cell
- 3: Pre B cell

4: Pre T cell

952-: Prominent reticulocytosis is a feature of:

- 1: Aplastic Anemia
- 2: Hemolytic Anemia
- 3: Nutritional Anemia
- 4: Anemia of chronic disease

953-: Anticoagulant used in coagulation study is?

- 1: Calcium citrate
- 2: EDTA
- 3: Sodium bromide
- 4: Trisodium citrate

954-: Most common cytogenetic abnormality in Multiple myeloma is

- 1: Deletion 13q
- 2: T
- 3: T
- 4: T

955-: The action of Fondaparinux includes?

- 1: Blocks plasminogen action
- 2: Blocks fibrinolysis
- 3: Stimulates fibrinolysis
- 4: Anticoagulation

956-: The classification proposed by the International Lymphoma Study Group for non Hodgkin&;s lymphoma is know as -

- 1: Kiel classification
- 2: REAL classification
- 3: WHO classification
- 4: Rappapo classification

957-: Which of the following drugs does not act by blocking Gp IIb/IIIa receptors?

- 1: Abciximab
- 2: Eptifibatide
- 3: Tirofiban
- 4: Clopidogrel

958-: A diabetic female on INH and rifampicin for TB developed DVT. She was staed on warfarin, PT is not raised, and next step should be:

- 1: Increase the dose of warfarin
- 2: Replace warfarin with acenocoumarin
- 3: Switch ethambutol for rifampicin
- 4: Use LMW heparin

959-: Which coagulation factor is not in circulating form in blood?

- 1: F XI
- 2: F X
- 3: F III
- 4: F XIII

960-: A patient of chronic renal failure maintained on intermittent haemodialysis has anaemia not responding to iron therapy. Which of the following additional drug is indicated

- 1: Cyanocobalamin
- 2: Folic acid
- 3: Pyridoxine
- 4: Erythropoietin

961-: Diagnostic criteria of pure red cell aplasia (PRCA) includes all of the following, except:

- 1: Severe anemia
- 2: Reticulocyte count < 1%
- 3: Normocellular marrow
- 4: Thrombocytopenia

962-: Common site of hematopoiesis in fetus is

- 1: Liver
- 2: Spleen
- 3: Bone marrow
- 4: Gut

963-: Dextran is a good plasma expanders, but it has disadvantage of:

- 1: Interference with blood group matching
- 2: Causes thrombocytopenia
- 3: Decreases microcirculation
- 4: Promote roleaux formation

964-: Mint Common extranodal site of Lymphoma in HIV is?

1: CNS 2: GIT 3: Retroperitoneum 4: Mediastinum 965-: Birbeck granules are seen in the cytoplasm of 1: Mast cells 2: Langerhans cells 3: Thrombocytes 4: Myelocytes 966-: Oral direct Xa inhibitor: 1: Rivaroxaban 2: Dabigatran 3: Fondaparinux 4: Lepirudin 967-: Shape of berbicks granules is -1: Hockey stick 2: Bat 3: Ball 4: Tennis racket

968-: A patient with Hodgkin&;s lymphoma is having a single cervical lymphnode. Biopsy showed lymphocyte: predominant variant Which of the following is the treatment of eboke - $\frac{1}{2}$

1: Chemotherapy with Radiotherapy

- 2: Chemotherapy only
- 3: Radiotherapy only
- 4: No treatment needed

969-: Alteplase acts by -

- 1: Converting plasminogen to plasmin
- 2: Converting fibrin to fibrin degradation products
- 3: Converting fibrinogen to fibrin
- 4: Blocking VEGF receptor

970-: After tonsillectomy, a 9 year old child is having continuous bleeding. Bleeding time and PTT are prolonged. Platelet count and PT are normal. What is your diagnosis

- 1: Von willebrand disease
- 2: Vitamin K deficiency
- 3: Immune thrombocytopenic purpura
- 4: Hemophilia A

971-: Iron deficiency causes-

- 1: Megaloblastic anemia
- 2: Microcytic hypochromic anemia
- 3: Macrocytic hypochromic anemia
- 4: Microcytic hyperchromic anemia

972-: Drugs causing aplastic anaemia include:

- 1: Chlorpromazine
- 2: Allopurinol

- 3: Diclofenac
- 4: All of the above
- 973-: Hemolytic crisis in hereditary spherocytosis is precipitated by
 - 1: Parvovirus B19 infection
 - 2: Infectious mononucleosis
 - 3: Human T-cell leukemia virus
 - 4: Cytomegalovirus
- 974-: Anemia in chronic renal failure (CRF) is due to -
 - 1: Decreased erythropoietin production
 - 2: Iron deficiency
 - 3: Hypoplastic bone marrow
 - 4: Decreased Vit B12
- 975-: Which of the following are features of iron deficiency anemia except
 - 1: Increased RDW
 - 2: Decreased serum iron
 - 3: Decreased TIBC
 - 4: Decreased serum ferritin
- 976-: Elevated ESR is seen in following conditions except:
 - 1: Polymyositis rheumatica
 - 2: Multiple myeloma
 - 3: Temporal aeritis
 - 4: Polycythemia rubra

977-: Which of the following plasminogen activator (fibrinolytic) can be given as bolus dose in patients with acute myocardial infarction:

- 1: Urokinase
- 2: Alteplase
- 3: Reteplase
- 4: None

978-: A 9yr old boy presents with elevation in both PT and aPTT. What is the diagnosis?

- 1: Defect in extrinsic pathway
- 2: Defect in intrinsic pathway
- 3: Platelets function defect
- 4: Defect in common pathway

979-: Which of the following is not compatible with a diagnosis of chronic myelomonocytic leukemia?

- 1: Peripheral blood monocytosis more than 1 x 109/L
- 2: Absence of Philadelphia chromosome
- 3: More than 20% blasts in blood or bone marrow
- 4: Myelodysplasia

980-: Iron deficiency anemia seen in -

- 1: CRF
- 2: Billroth II operation
- 3: Hookworm
- 4: Celiac sprue

	<u> </u>
981-: The normal albumin : globulin (A/G) ratio in blood is	
1: 5:02	
2: 2:01	
3: 1:02	
4: 1:01	
982-: Direct coomb's test positive is seen in all except?	
1: ABO incompatibility	
2: Hemolytic d/s of newborn	
3: Aplastic anemia	
4: Autoimmune hemolysis	
983-: Coumarin necrosis occurs due to:	
1: Heparin	
2: Low molecular weight heparin	
3: Warfarin	
4: Clopidogrel	
984-: Storage form of iron	
1: Ferritin	
2: Transferrin	
3: Hepcidin	
4: Ferropoin	

985-: with worst prognosis-

1:8/21 translocation

- 2: Inversion 16
- 3: Normal cytogenetics
- 4: Monosomy 7

986-: Alteplase differs from streptokinase as it

- 1: Is longer acting
- 2: Is derived from human kidney
- 3: Is cheap
- 4: Activates plasminogen bound to fibrin

987-: Which of the following is not a component of the dense granules of platelets?

- 1: ADP
- 2: Calcium
- 3: Epinephrine
- 4: Platelet factor 4

988-: A 58 year old woman, who had backache and recurrent chest Infections for 6 months, develops sudden weakness of the legs and urinary retention. Her investigations show a hemoglobin of 7.3 gm/dl, serum calcium 12.6 mg/dl, phosphate-2.5 mg/dl, alkaline phosphatase-100u/l, serum albumln- 3 gm/di, globulin - 7.1 gm/dl and urea - 178 mg/d. What is the most likely diagnosis -

- 1: Lung cancer
- 2: Disseminated tuberculosis
- 3: Multiple myeloma
- 4: Osteoporosis

989-: True statements about heparin are all EXCEPT:

1: It prolongs aPTT

- 2: Hyperkalemia is not seen
- 3: It can result in alopecia
- 4: It can cause thrombocytopenia
- 990-: Which is the most common red cell defect without Hb abnormality
 - 1: Elliptocytosis
 - 2: Spherocytosis
 - 3: Poikilocytosis
 - 4: Sickle cell disease
- 991-: A patient comes with increased aPTT and PT with no bleeding tendency. Even at surgery he did not have increased bleeding. Which factor is deficient-
 - 1: V
 - 2: Vn
 - 3: xn
 - 4: X
- 992-: Anemia with reticulocytosis is seen in?
 - 1: Hemorrhage
 - 2: Severe iron deficiency
 - 3: Severe vitamin B12 deficiency
 - 4: Aplastic anemia
- 993-: Kostmann&;s syndrome-treatment is
 - 1: Anti-thymocyte globulin + cyclosporin
 - 2: Anti-thymocyte globuline + cyclosporine + GM-CSF

- 3: G-CSF
- 4: GM-CSF
- 994-: Which of the following statements is true of hereditary spherocytosis -
 - 1: About 50% of affected infants have moderately severe neonatal jaundice
 - 2: Diagnosis can be made in neonatal period easily by examination of a blood film
 - 3: Infra vascular hemolysis is a common feature
 - 4: The disorder is usually due to autosomal recessive inheritance
- 995-: Which of the following statements on lymphoma is not Trne -
- 1: A single classification system for Hodgkin's disease (HD) is almost universally accepted
- 2: HD more often tends to remain localized to a single group of lymph nodes and spreads by contiguity
 - 3: Several types of non Hodgkin's lymphoma (NHL) may have a leukemic phase
 - 4: In general follicular (nodular) NHL has worse prognossis compared to diffuse NHL
- 996-: Patient with bleeding due to platelet function defects has which of the following feautures?
 - 1: Normal platelet count and normal bleeding time
 - 2: Normal platelet count and increased bleeding time
 - 3: Decreased platelet count and increased bleeding time
 - 4: Normal platelet count and decreased bleeding time
- 997-: Folic acid:
 - 1: Is also called as pteroyl glutamic acid
 - 2: Is useful in carriage of one carbon atom moiety

3: Tetrahydrofolate is the active form 4: All of the above 998-: Storage form of iron: 1: Transferrin 2: Ferritin 3: Hepcidin 4: Ferroportin 999-: Dohle bodies can be seen in which of the following? 1: Plasma cell myeloma 2: Sepsis 3: Chronic granulomatous disease 4: Rheumatoid ahritis 1000-: All are examples of microangiopathic hemolytic anemia except-1: TTP 2: HUS 3: DIC 4: ITP 1001-: Tirofiban is a: 1: Monoclonal antibody 2: Antiplatelet drug

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3: Anti-inflammatory drug

4: Antianginal drug

1002-: Laboratory monitoring of which of the following is desirable with low molecular weight heparin therapy in a patient with renal failure?

- 1: aPTT
- 2: CT
- 3: PT
- 4: Anti-factor Xa activity

1003-: All of the following cause microcytic hypochromic anaemia, EXCEPT -

- 1: Lead poisoning
- 2: Thalessemia
- 3: Iron deficiency
- 4: Fanconi anaemia

1004-: Best prognostic type of Hodgkin&;s lymphoma is -

- 1: Lymphocytic predominant
- 2: Lymphocytic depletion
- 3: Mixed cellularhy
- 4: Nodular sclerosis

1005-: In sickle cell anemia defect is in which chain?

- 1: a-chain
- 2: b-chain
- 3: Both the chains
- 4: None of these

- 1006-: Bernard-Soulier syndrome is caused by the deficiency of
 - 1: Glycoprotein complex Ib-IX
 - 2: Glycoprotein complex IIb-IIIa
 - 3: Glycoprotein complex Ib-IIIa
 - 4: Glycoprotein complex IIb-IX
- 1007-: Anemia of chronic disease is characterized by all, except
 - 1: Decreased serum iron
 - 2: Increased TIBC
 - 3: Increased serum ferritin
 - 4: Increased macrophage iron in bone marrow
- 1008-: Birbeck granules in the cytoplasm are seen in-
 - 1: Mast cells
 - 2: Langerhan's cells
 - 3: Thrombocytes
 - 4: Myelocytes
- 1009-: The most effective treatment of CML is
 - 1: Allogenic bone marrow transplant
 - 2: Heterogenic bone marrow transplant
 - 3: Chemotherapy
 - 4: Hydroxyurea and interferon
- 1010-: All of the following are false regarding prasugrel, except:-
 - 1: Not much metabolism in body

- 2: Slow onset of action than clopidogrel
- 3: Reversible inhibitors of ADP
- 4: Contraindicated in cerebrovascular accident

1011-: Which of the following malignancy is associated with underlying progression and spreads characteristically in a stepwise fashion and hence staging the disease is an impoant prognostic factor?

- 1: Hodgkin's lymphoma
- 2: Multiple myeloma
- 3: Mature T cell NHL
- 4: Mature B cell NHL

1012-: Leiden mutation is associated with?

- 1: Factor IV
- 2: Factor V
- 3: Factor VIII
- 4: Factor IX

1013-: Complement deficiency predispose to infection with-

- 1: Pseudomonas aeruginosa
- 2: Cytomegalovirus
- 3: Neisseria meningitidis
- 4: Giardia lamblia

1014-: Causes for DIC are -

- 1: TTP
- 2: Malignancy

- 3: Lymphoma
- 4: Massive blood transfusion
- 1015-: Mechanism of action of aspirin as antiplatelet drug is its inhibitory action on?
 - 1: Prostacyclins
 - 2: PGF 2 alpha
 - 3: Thromboxane A2
 - 4: Phospholipase C
- 1016-: Starry sky appearance is seen in-
 - 1: Burkitts lymphoma
 - 2: CIL
 - 3: Diffuse large B cell lymphoma
 - 4: ALCL
- 1017-: Lifespan of transfused platelets is
 - 1: <24 hours
 - 2: 1-3 days
 - 3: 3-5 days
 - 4: 7-14 days
- 1018-: A patient of thrombosis of veins has been receiving coumarin therapy for three years. Recently she developed bleeding tendency. How will reverse the effect of coumarin therapy?
 - 1: Protamine injection
 - 2: Vit K injection
 - 3: Infusion of fibrinogen

- 4: Whole blood transfusion
- 1019-: Low serum haptoglobin in hemolysis is masked by -
 - 1: Pregnancy
 - 2: Liver disease
 - 3: Bile duct obstruction
 - 4: Malnutriotion
- 1020-: A 60-year-old man is referred because of splenomegaly and generalized lymphadenopathy. The total white blood cell count is markedly elevated, and the differential count reveals a preponderance of mature appearing lymphocytes. Bone marrow examination reveals a diffuse infiltration with similar-appearing lymphocytes. Which of the following statements best characterizes this disorder?
- 1: A progressive increase in the number of myeloblasts and promyelocytes is indicative of acceleration of the disease process.
 - 2: Bacterial infections are common early in the disease due to hypogammaglobulinemia
 - 3: Mean survival is less than 1 year after diagnosis
 - 4: Myelofibrosis is a common complication
- 1021-: Which of the following patients would LEAST likely require a bone marrow examination?
 - 1: Adult with pancytopenia and a normal mean corpuscular volume
 - 2: Adult with a myeloproliferative disease
 - 3: Adult with a monoclonal spike on a serum protein electrophoresis
 - 4: Adult with fever and a WBC of 20,000 cells/l with a left shift
- 1022-: All of the following statements are true about sickle cell disease EXCEPT:
 - 1: Patient may require frequent blood transfusions

- 2: Acute infection is the most common cause of moality before 3 years of age
- $\ensuremath{\mathtt{3:}}$ There is positive correlation between concentration of HbS and polymerisation of HbS
 - 4: Patient presents early in life before 6 months of life
- 1023-: Sideroblastic anemia is seen in chronic poisoning of-
 - 1: Lead
 - 2: Arsenic
 - 3: Copper
 - 4: Mercury
- 1024-: Which of the following drugs may enhance the effect of warfarin and increase the risk of bleeding?
 - 1: Phenobarbitone
 - 2: Ketoconazole
 - 3: Rifampicin
 - 4: Carbamazepine
- 1025-: Which of the following is not seen in a chronic case of sickle cell anemia
 - 1: Hepatomegaly
 - 2: Pulmonary hypeension
 - 3: Cardiomegaly
 - 4: Splenomegaly
- 1026-: A 10 yr old boy with mass in the abdomen. On imaging the paraaortic LN is enlarged. On biopsy starry sky appearance is seen. What is the underlying abnormality?
 - 1: p53 gene mutation

- 2: RB gene mutation
- 3: Translocation involving BCR-ABL genes
- 4: Translocation involving MYC gene
- 1027-: Earliest manifestation of megaloblastic anaemia is
 - 1: Macrocytosis
 - 2: Hypersegmented neutrophils
 - 3: Basophilic stippling
 - 4: Cabot ring
- 1028-: Commonest presentation of sickle cell anaemia is
 - 1: Priapism
 - 2: Bone pain
 - 3: Fever
 - 4: Splenomegaly
- 1029-: All are markers of Mantle cell lymphoma except
 - 1: CD5
 - 2: CD19
 - 3: CD20
 - 4: CD23
- 1030-: Coomb's negative condition with spherocytes on peripheral smear amongst the following is:
 - 1: G6PD Deficiency
 - 2: Paroxysmal nocturnal hemoglobinuria

3: Hemolytic disease of newborn
4: AIHA
1031-: Which disorder is most likely associated with erythroid hyperplasia in the bone marrow?
1: Anemia of chronic disease
2: Thalassemia minor
3: 7 to 10 days after a GI bleed
4: Iron deficiency
1032-: Plasma cell dyscariasis include all the following except
1: Waldenstorms macroglobulinemia
2: Heavychain disease
3: Monoclonal gammopathy
4: Systemic lupus erythematosus
1033-: Which antibody is commonly elevated in walder strom macroglobinemia ?-
1: IgG
2: IgA
3: IgM
4: IgD
1034-: Infectious mononucleosis affects?
1: B-cells
2: T-cells
3: NK cells

4: Macrophages

1035-: The following are the common features of acute idiopathic thrombocytopenic purpura except-

- 1: Epistaxis
- 2: Cutaneous ecchymoses
- 3: Massive splenomegaly
- 4: Thrombocytopenia

1036-: Cryoprecipitate is a source contains following EXCEPT-

- 1: Fibrinogen
- 2: Factor VIII
- 3: Von Willebrand factor
- 4: Albumin

1037-: Person having heterozygous sickle cell trait are protected from infection of:

- 1: P. falciparum
- 2: P. vivax
- 3: Pneumococcous
- 4: Salmonella

1038-: All are antiplatelet drugs Except

- 1: Aspirin
- 2: Clopidogrel
- 3: Dipyridamole
- 4: Warfarin

1039-: Iron metabolism and regulation are important for RBC precursor cell. Which of the following helps in regulation of iron metabolism but is not specific for iron?

- 1: Hepcidin
- 2: DMT-1
- 3: Ferroportin
- 4: Ferritin

1040-: In a-thalassemia with -

- 1: Excess a-chain
- 2: No a-chain
- 3: Excess b-chain
- 4: No b-chain

1041-: Classical 'Rain drop' lesions seen in -

- 1: Burkitt's lymphoma
- 2: Hodgkin's lymphoma
- 3: Multiple myeloma
- 4: Haemophilia

1042-: During a laboratory exercise on coagulation testing, a 23-year-old medical student is found to have a prolonged bleeding time. She has had a long history of "easy bleeding," with frequent bleeding of the gums, epistaxis, cutaneous bleeding, and menorrhagia. Fuher testing revealed a deficiency of Von Willebrand factor. Which of the following thrombogenic processes involving platelets is most directly impaired?

- 1: Adhesion
- 2: Conformational change with activation of phospholipid surface
- 3: Formation of fibrinogen bridges

- 4: Release reaction
- 1043-: The longest living WBC is which one of the following
 - 1: Lymphocytes
 - 2: Eosinophil
 - 3: Neutrophil
 - 4: Monocytes
- 1044-: Isolated rise in aPTT is seen in?
 - 1: Von Willibrand's disease
 - 2: Factor 7 deficiency
 - 3: Vitamin K deficiency
 - 4: Anti phospholipid antibodies
- 1045-: A 68 year old woman was admitted with a history of weakness for two months. On examination, cervical lymph nodes were found enlarged and spleen was palpable 2 cm below the costal margin. Her hemoglobin was $10.5 \, \text{g/dl}$, platelet count $27 \, \text{x} \, 109/\text{L}$ and total leukocyte count $40 \, \text{x} \, 109/\text{L}$, which included $80 \, \%$ mature lymphoid cells with coarse clumped chromatin. Bone marrow revealed a nodular lymphoid infiltrate. The peripheral blood lymphoid cells were positive for CD19, CD5, CD20 and CD23 and were negative for CD79B and FMC-7. The histopathological examination of the lymph node in this patient will most likely exhibit effacement of lymph node architecture by?
 - 1: A monomorphic lymphoid proliferation with admixed proliferation centers
- 2: A polymorphous population of lymphocytes, plasma cells, eosinophils and scattered large binucleated cells
- 3: A predominantly follicular pattern with variably-sized follicles effacing nodal architecture
 - 4: A diffuse proliferation of medium to large lymphoid cells with high mitotic rate.
- 1046-: A crisis in a patient with sickle cell disease is most likely to be caused by

1: Alkalosis 2: Acidosis 3: Increased oxygen concentration 4: Decreased CO2 concentration 1047-: 80 year old, asymptomatic man present with a total leucocyte count of I lakh, with 80% lymphocytes and 20% PMC's. What is the most probable diagnosis? 1: HIV 2: CML 3: CLL 4: IMN 1048-: Which vacutainer is used for electrolyte estimation? 1: Na Citrate 2: EDTA 3: Fluoride 4: Lithium heparin 1049-: Which of the following is true about iron deficiency anemia 1: Increased serum ferritin 2: Increased TIBC 3: Increased transferrin saturation 4: Macrocytic hypochromic anemia

1: Von Willibrand's disease

- 2: Factor 7 deficiency
- 3: Factor 8 deficiency
- 4: Thrombin deficiency

1051-: A 22-year old female has a congenital anemia that required multiple transfusions of red blood cells for many years. She now has no significant findings on physical examination. However, her liver function test results are abnormal. Which of the following findings would most likely appear in a liver biopsy -

- 1: Steatosis in hepatocytes
- 2: Bilirubin in canaliculi
- 3: Glycogen in hepatocytes
- 4: Hemosiderin in hepatocytes

1052-: Most appropriate drug used in the management of chelating iron in beta thalassemia major is

- 1: Oral desferrioxamine
- 2: Oral deferiprone
- 3: Intra muscular EDTA
- 4: Oral succimer

1053-: A patient has subclinical folate deficiency. All of the following drugs can precipitate megaloblastic anemia in this patient except

- 1: Alcohol
- 2: Phenytoin
- 3: chloroquine
- 4: Sulfasalzine

1054-: Anticoagulant of choice for heparin induced thrombocytopenia is?

- 1: Lepirudin
- 2: Low molecular weight heparin
- 3: Abciximab
- 4: Warfarin
- 1055-: Megaloblastic anemia is caused by all EXCEPT:
 - 1: Aspirin
 - 2: primidone
 - 3: Methotrexate
 - 4: N20
- 1056-: Oral hairy leukoplakia occurs in
 - 1: Carcinoma tongue
 - 2: Oral cardidiasis
 - 3: HIV-AIDS
 - 4: Infectious mononucleosis
- 1057-: vWF protects factor?
 - 1: II
 - 2: V
 - 3: VIII
 - 4: X
- 1058-: A 30-yrs old female, RBC count 4.5 million, MCV 55fl, TLC 8000, no history of blood transfusion?
 - 1: Iron deficiency anemia

- 2: Thalessemia major
- 3: Thalessemia minor
- 4: Megaloblastic anemia

1059-: Eltrombopag is a:

- 1: Thrombopoietin agonist
- 2: Thrombopoietin antagonist
- 3: Erythropoietin agonist
- 4: Erythropoietin antagonist
- 1060-: Constitutional pancytopia can be seen in following except
 - 1: Fanconi's anemia
 - 2: Diamond Blackfan syndrome
 - 3: Dyskeratosis congenita
 - 4: Schwachman Diomond syndrome
- 1061-: Christmas disease is treated by
 - 1: Fresh frozen plasma
 - 2: Fresh frozen blood
 - 3: Cryoprecipitate
 - 4: Steroids
- 1062-: Erythropoietin is mainly produced in:
 - 1: Liver
 - 2: Kidney
 - 3: Intestine

4: Bone 1063-: Dohle bodies 1: Dilated Endoplasmic Reticulum in Neutrophils 2: Mitochondria 3: Golgi apparatus 4: Lysosomes

- 1064-: Prologed PT and Normal PTT may be seen in -
 - 1: Thrombocytopenia
 - 2: DIC
 - 3: Vit. K deficiency
 - 4: None
- 1065-: Gum hypertrophy is a clinical feature of -
 - 1: AML
 - 2: MS
 - 3: ALL
 - 4: NHL
- 1066-: All are true regarding fetal RBC&;s Except -
 - 1: Elevated 2,3 DPG
 - 2: Decreased carbonic anhydrase activity
 - 3: Decreased life span
 - 4: High RBC volume

1067-: Histological features of classical hodgkin&;s disease-

- 1: Mixed cellularity seen in the background.
- 2: Neoplastic cells more than non-neoplastic cells
- 3: Both neoplastic & non-neoplastic cells are seen
- 4: CD15 & CD 34 seen

1068-: All are true about warfarin, except

- 1: It inhibits the activation of vitamin K dependent cloting factors
- 2: Its half life is 36 hours
- 3: It can cross placenta
- 4: Its dose is increased in liver disease

1069-: "Macropolycytes" in peripheral smear is a feature of which of the following red cell disorders?

- 1: Hereditary spherocytosis
- 2: Iron deficiency anemia
- 3: Sickle cell anemia
- 4: Megaloblastic anemia

1070-: Thrombospondin is:

- 1: Coagulation protein
- 2: Coagulation promoting protein
- 3: Contractile protein
- 4: Angiogenesis inhibiting protein

1071-: Pattern in peripheral smear in iron deficiency anemia -

- 1: Normocytic normochromic
- 2: Hypochromic normocvtic
- 3: Hypochromic microcytic
- 4: Normochromic microcytic.
- 1072-: Bombay blood group contains
 - 1: Anti H
 - 2: Anti A, Anti B
 - 3: Anti A, Anti B, Anti H
 - 4: H antibody along with H antigen
- 1073-: AU ER rods seen in -
 - 1: Ml AML
 - 2: M3 AML
 - 3: M6AML
 - 4: ALL
- 1074-: The subtype ofHodgkin's disease, which is histogentically distinct from all the other subtypes, is-
 - 1: Lymphocyte predominant
 - 2: Nodular sclerosis
 - 3: Mixed cellularity
 - 4: Lymphocyte depleted
- 1075-: Hematopoisis in first month of life is
 - 1: Medullary

- 2: Hepatic 3: Lymphatic 4: Mesoblastic 1076-: Sickle cell anemia is the clinical manifestation of homozygous genes for an abnormal haemoglobin molecule. The event responsible for the mutation in the b chain is: 1: Inseion 2: Deletion 3: Non-disjunction 4: Point mutation 1077-: Pinch purpura are seen in -1: Secondary amyloidosis 2: Primary systemic amyloidosis 3: Pseudoxanthoma elasticum 4: Toxic shock syndrome 1078-: Most common Non Hodgkins lymphoma of orbit: 1: B cell 2: T cell 3: NK cell 4: Plasma cell
- 1079-: Decreased osmotic fragility is not seen in which of the following conditions?
 - 1: Thalassemia
 - 2: Hereditary spherocytosis

- 3: Sickle cell anemia
- 4: Iron deficiency

1080-: Laboratory evaluation for the differential diagnosis of chronic myeloproliferative disorders includes at the following except.

- 1: Chromosomal evaluation
- 2: Bone marrow aspiration
- 3: Flow-cytometric analysis
- 4: Determination of red blood cell mass

1081-: Hereditary spherocytosis is best tretaed with

- 1: Splenectomy
- 2: Immunoglobulns
- 3: Steroids
- 4: Blood transfusion

1082-: Schistocytes are seen in?

- 1: H.U.S
- 2: H.S.P
- 3: Abetalipoproteinemia
- 4: Myelofibrosis

1083-: Which of the following is a characteristic feature of chronic myeloid leukemia (CML)?

- 1: Auer rods
- 2: Basophilia
- 3: Increased LAP score

4: Bone marrow fibrosis

1084-: Hypercoagulability due to defective factor V gene is called-

- 1: Lisbon mutation
- 2: Leiden mutation
- 3: Antiphospholipid syndrome
- 4: Inducible thrombocytopenia syndrome

1085-: Which of the following is not a platelet associated coagulation factor?

- 1: vWF
- 2: Factor IX
- 3: Factor XI
- 4: Factor XIII

1086-: Examination of a peripheral smear demonstrates leukemia composed of small mature lymphocytes without blast forms.which of the following is most likely age of this patient?

- 1: 1year
- 2: 20 years
- 3: 45 years
- 4: 65years

1087-: In DIC, which is/are seen-

- 1: NormalAPTT
- 2: Increased PT
- 3: Increased factor VIII
- 4: Decreased FDPs

1088-: About Burkitt&;s lymphoma, true is-

- 1: CD34 + ve & Surface Ig +ve
- 2: CD34 + ve & Surface Ig -ve
- 3: CD34- ve & Surface Ig -ve
- 4: CD34 -ve & Surface Ig +ve

1089-: In the coagulation cascade the clot is initiated by negatively charged paicles on the glass bead. It is in-vivo initiated by:

- 1: Tissue factor
- 2: Thrombin
- 3: Endothelin
- 4: vWF

1090-: Leucocyte alkaline phosphatase (LAP) is raised in all conditions except:

- 1: Myelofibrosis
- 2: Essential thrombocythemia
- 3: Chronic myeloid leukaemia
- 4: Polycythemia

1091-: The following is the least useful investigation in multiple myeloma -

- 1: ESR
- 2: X-Ray
- 3: Bone scan
- 4: Bone marrow biopsy

Clinical Hematology MCQ	MedicalMCQ.ii
1092-: Erythropoetin in fetus is secreted by?	
1: Liver	
2: Marrow	
3: Spleen	
4: Kidney	
1093-: The lymphocytic and histiocytic variant of Reed Sternberg cell i	is seen in
1: Follicular center lymphoma	
2: Lymphocyte depleted Hodgkins lymphoma	
3: Nodular sclerosis Hodgkins lymphoma	
4: Lymphocyte predominant Hodgkins diseases	
1094-: Sideroblast seen in-	
1: Thalassemia	
2: Myelofibrosis	
3: Alcoholism	
4: Iron overload	
1095-: BCL-2 is the marker for -	
1: Follicular lymphoma	
2: Mycosis fungoides	
3: B-Cell lymphoma	
4: Mantle cell lymphoma	

1096-: All are seen in Thalassemia major EXCEPT:

- 2: Splenoheptatomegaly
- 3: Ineffective erythropoiesis
- 4: Macrocytic anemia

1097-: CLL is characterised by following except -

- 1: Small lymphocytes in peripheral smear
- 2: Hepatosplenomegaly
- 3: Age > 50 years and usually females
- 4: ZAP-70 is a marker

1098-: Thalassemia shows which kind of inheritance?

- 1: Autosomal recessive
- 2: Autosomal dominant
- 3: X-linked recessive
- 4: X-linked dominant

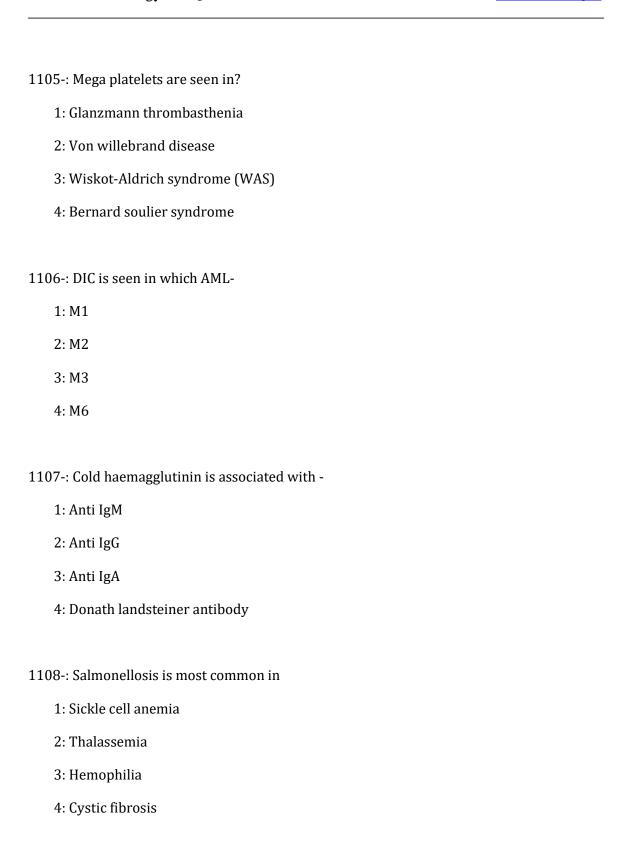
1099-: Megaloblastic anemia In blind loop syndrome Is due to -

- 1: Vitamen Bla malabsorption
- 2: Bacterial overgrowth
- 3: Frequent diarrhoea
- 4: Decrease iron intake

1100-: During the treatment of chronic myeloid leukemia cytogenetic is least likely to occur with which one of the following modalities of treatment?

- 1: Hydroxyurea
- 2: imatinib mesylate

- 3: Interferon-alpha
- 4: Bone marrow transplantation
- 1101-: All are to access platelet functions except-
 - 1: Prothrombin time
 - 2: Bleeding time
 - 3: Clot retraction time
 - 4: Prothrombin deactivation
- 1102-: Specific stain for myeloblasts is -
 - 1: Sudan black
 - 2: PAS
 - 3: Myeloperoxidase
 - 4: LAP
- 1103-: Most common mutation in hereditary spherocytosis
 - 1: Spectrin
 - 2: Ankyrin
 - 3: Glycophorin A
 - 4: Band 3
- 1104-: Warm antibody hemolytic anemia is seen in all expect-
 - 1: Methyl dopa
 - 2: Penicillin
 - 3: Quinidine
 - 4: Stibophen



1109-: All cause Reticulocytosis EXCEPT:

1: Aplastic anemia
2: Thalassemia
3: Sickle cell anemia
4: Chronic blood loss
1110-: All the following are true about Haemophilia A except
1: PT increased
2: PTT increased
3: Serum levels of factor VIII are decreased
4: Clotting time is increased
1111-: Ringed sideroblasts are seen in:
1: AML
2: MDS
3: Anaemia of chronic disease
4: ALL
1112-: The difference between iron sorbitol-citric acid and iron dextran is that the former:-
1: Cannot be injected i.v.
2: Is not bound to transferrin in plasma
3: Is not excreted in urine
4: Produces fewer side effects
1113-: Dysmorphic RBC with ARF is seen in?-
1: Glomerural disease
2: Renal carcinoma

- Clinical Hematology MCQ 3: Proximal tubule disease 4: Distal tubule disease 1114-: Periodic acid whiff stain shows block positiveity In -1: Myeloblasts 2: Lymphoblasts 3: Monoblasts 4: Megakaryoblasts
- 1115-: Atypical lymphoid cells in infectious moninucleosis -
 - 1: Monocytes
 - 2: CD lymphocytes
 - 3: Killer T cells
 - 4: Lymphoblasts
- 1116-: Intravascular hemolysis causes -
 - 1: Hereditary spherocytosis
 - 2: Acute G6PD
 - 3: Thalassemia
 - 4: PNH
- 1117-: Mechanism of action of apixaban is:
 - 1: Inhibition of factor Xa
 - 2: Inhibition of thrombin
 - 3: Stimulation of antithrombin
 - 4: Vitamin K antagonism

- 1118-: Which of the following is not a type of hypoproliferative anemia?
 - 1: Anemia caused by Parvovirus B19 infection
 - 2: Anemia of chronic disease/inflammation
 - 3: Fanconi anemia
 - 4: G6PD deficiency
- 1119-: Drugs used in acute myocardial infarction are all EXCEPT:
 - 1: Plasminogen activation inhibitors
 - 2: Thrombolytics
 - 3: Antiplatelet drugs
 - 4: Alteplase
- 1120-: DIC in association with giant hemangiomas is seen in
 - 1: Waterhouse-Friderichsen syndrome
 - 2: Kasabach-Merritt syndrome
 - 3: Hemolytic Uremic Syndrome
 - 4: Type 2 von Willebrand disease
- 1121-: An example of chronic myeloproliferative disorder is
 - 1: Neutrophilic leukemoid reaction
 - 2: Essential thrombocythemia
 - 3: Plasmacytosis
 - 4: Hairy cell leukemia
- 1122-: The poor prognostic factor associated with ALL in children is -

- 1: Total leucocyte count 4000-10000
- 2: Age more than 2 years
- 3: Testicular involvement
- 4: Female gender
- 1123-: A 23-year-old African-American man with a history since early childhood of severe anemia requiring many transfusions has non healing leg ulcers and recurrent periods of abdominal and chest pain. These signs and symptoms are most likely to be associated with which of the following laboratory abnormalities?
 - 1: Decreased erythropoietin
 - 2: Increased erythrocyte osmotic fragility
 - 3: Decreased erythropoiesis
 - 4: Sickle cells on peripheral blood smear
- 1124-: A 70-year-old male has a pathologic fracture of femur. The lesion appears a lytic on X-rays film with a circumscribed punched out appearance. The curetting from fracture site is most likely to show which of the following -
 - 1: Diminished and thinned trabecular bone fragments secondary to osteopenia
 - 2: Sheets of atypical plasma cells
 - 3: Metastatic prostatic adenocarcinoma
 - 4: Malignant cells forming osteoid bone
- 1125-: Best prognostic type of Hodgkin's lymphoma is -
 - 1: Lymphocytic predominant
 - 2: Lymphocytic depletion
 - 3: Mixed cellularity
 - 4: Nodular sclerosis

1126: A patient presents with a platelet count of 700x109/L with abnormalities in size, shape and granularity of platelets. WBC count of 12x109 L, hemoglobin of 11g/dl and the absence of the Philadelphia chromosome. The most likely diagnosis would be-

- 1: Polycythemia vera
- 2: Essential thrombocythemia
- 3: Chronic myeloid leukemia
- 4: Leukemoid reaction

1127-: Mechanism of action of apixaban is:-

- 1: Inhibition of factor Xa
- 2: Inhibition of thrombin
- 3: Stimulation of antithrombin
- 4: Vitamin K antagonism

1128-: Causes of esionophilia are:

- 1: Hodgkins disease
- 2: Filariasis
- 3: MI
- 4: HIV infection

1129-: Classical markers for Hodgkin&;s disease is

- 1: CD 15 and CD 30
- 2: CD 15 and CD 22
- 3: CD 15 and CD 20
- 4: CD 20 and CD 30

1130-: All the following are true about sickle cell anemia except

- 1: Mutation in alpha chain
- 2: Symptoms ameliorated by Hbf
- 3: Venoocclusive cries is cause of morbidity
- 4: Bone pain is presenting feature
- 1131-: One of the following leukemia almost never develops after radiation?
 - 1: Acute myeloblastic leukemia
 - 2: Chronic myeloid leukemia
 - 3: Acute lymphoblastic leukemia
 - 4: Chronic lymphocytic leukemia
- 1132-: Most specific marker for myeloid series is:
 - 1: CD34
 - 2: CD45
 - 3: CD99
 - 4: CD117
- 1133-: A 23-year-old female presented with jaundice and pallor for 2 months. Her peripheral blood smear shows the presence of spherocytes. The most relevant investigation to arrive at a diagnosis is which of the following?
 - 1: Tests for PNH
 - 2: Osmotic fragility test
 - 3: Coombs test
 - 4: Reticulocyte count
- 1134-: Intrinsic causes of hemolytic anemia are all except-
 - 1: Hypersplenism

- 2: G6PD deficiency
- 3: Hereditary spherocytosis
- 4: Pyruvate kinase deficiency

1135-: A 23-year-old man of nohern European lineage presents with anemia. His father and paternal aunt had a similar illness that was treated successfully by splenectomy. His peripheral blood smear is similar to that shown in the illustration. Which of the following additional abnormalities is expected?

- 1: Bilirubinuria
- 2: high mean corpuscular volume
- 3: Increased direct (conjugated) serum bilirubin
- 4: Polychromatophilic erythrocytes on peripheral blood smear
- 1136-: 1958. Most malignant form of NHL is -
 - 1: Diffuse large cell
 - 2: Small cell lymphocytic lymphoma
 - 3: Follicular predominantly small cleaved cell
 - 4: Large cell follicular
- 1137-: Abnormally high LAP score is seen in -
 - 1: Polycythemia vera
 - 2: CML
 - 3: PNH
 - 4: All
- 1138-: Blood components are all except -
 - 1: Whole blood

- 2: Platelet concentrate
- 3: Fresh frozen plasma
- 4: RBC concentrate
- 1139-: All the following conditions cause thrombocytopenia except-
 - 1: Giant hemangioma
 - 2: Infectious mononucleosis
 - 3: HIV infection
 - 4: Iron deficiency anemia
- 1140-: In von Willebrands disease there is:
 - 1: Isolated prolonged PTT with normal PT
 - 2: Normal PTT with normal PT
 - 3: Prolongation of both PT and PTT
 - 4: Prolongation of thrombin time
- 1141-: Microspherocytosis in peripheral blood smear are seen in -
 - 1: Sickle cell anemia
 - 2: Autoimmune acquired haemolytic anaemia
 - 3: Thalassemia
 - 4: All of the above
- 1142-: The single most important predictor of survival in multiple myeloma
 - 1: IL-6 levels
 - 2: Bence jones proteinuria
 - 3: CD 138 positivity

- 4: Serum b2-microglobulin
- 1143-: Lacunar variant Reed Sternberg cells are Characteristic of
 - 1: Nodular Sclerosis type
 - 2: Lymphocyte-Rich type
 - 3: Lymphocyte depletion type
 - 4: Lymphocyte predominance type
- 1144-: A 23-year-old male presents with fever and cervical lymphadenopathy. The peripheral smear shows the following finding. Diagnosis is
 - 1: AML
 - 2: ALL
 - 3: Infectious mononucleosis
 - 4: None of the above
- 1145-: Which of the following drug is NOT a Gp IIb/IIIa antagonist?
 - 1: Tirofiban
 - 2: Abciximab
 - 3: Eptifibatide
 - 4: Prasugrel
- 1146-: Which of the following statements about platelet function defects is true?
 - 1: Normal platelet count with prolonged bleeding time
 - 2: Thrombocytopenia with prolonged bleeding time
 - 3: Thromobocytosis with prolonged bleeding time
 - 4: Normal platelet count with normal bleeding time

1147-: A 50-year-old man presents because of a pruritic rash of several years' duration. The rash is characterized by erythematous, eczematoid patches, and raised plaques and is distributed asymmetrically over the chest and abdomen. Biopsy of the plaques reveals atypical CD41 T cells with cerebriform nuclei. Fuher marker studies lead to a diagnosis of mycosis fungoides. Which of the following is true of this disease?

- 1: The disease eventually disseminates to lymph nodes and internal organs.
- 2: The neoplastic cells most commonly display cell markers of CD19 and CD20.
- 3: The skin rash most commonly disappears over time.
- 4: This disease is caused by a chronic fungal infection in the skin.

1148-: A child died soon after bih. On examination, there was hepatosplenomegaly and edema all over the body. Coombs test negative in the mother. Most probable diagnosis

- 1: Beta thalassemia
- 2: Alpha thalassemia
- 3: Hereditary spherocytosis
- 4: ABO incompatibility

1149-: Cerliponase alpha is?

- 1: Recombinant tripepetidyl peptidase 1(TPP-1)
- 2: Recombinant beta glucuronidase
- 3: NMDA receptor blocker
- 4: GLP analogue

1150-: MCV (fl) in infant of 1 month of age is

- 1: 76-80
- 2:80-100
- 3:90-100

- 4: 101-125
- 1151-: Features of hemolytic anemia include all except?
 - 1: Hemoglobinemia
 - 2: Bilirubinemia
 - 3: Reticulocytosis
 - 4: Haptoglobin increased
- 1152-: Multiple myeloma is diagnosed by-
 - 1: 24 hours urine protein
 - 2: Kidney biopsy
 - 3: > 10% plasmacytosis
 - 4: Rouleaux formation in blood
- 1153-: Drug used treatment of Acute promyelocytic leukemia-
 - 1: Arsenic trioxide
 - 2: Tretinoin
 - 3: Gefitinib
 - 4: Dasatinib
- 1154-: A 36-year-old man from China presents with increasing fatigue. He has a 3-year history of tuberculosis, and CBC shows a mild microcytic anemia. Blood work-up demonstrates low serum iron, low iron-binding capacity, and increased serum ferritin. The pathogenesis of anemia in this patient is most likely caused by which of the following mechanisms?
 - 1: Clonal stem cell defect
 - 2: Hypoxemia
 - 3: Impaired utilization of iron from storage sites

- 4: Synthesis of structurally abnormal globin chains
- 1155-: Heinz bodies are seen in -
 - 1: Thalassemia
 - 2: G6PD deficiency
 - 3: Herediatary spherocytosis
 - 4: Paroxysmal nocturnal hemoglobinuria
- 1156-: Smudge cells in the peripheral smear are characteristic of:
 - 1: Chronic myelogenous leukemia
 - 2: Chronic lymphocytic leukemia
 - 3: Acute myelogenous leukemia
 - 4: Acute lymhoblastic leukemia
- 1157-: At what stage neutrophil appear in peripheral blood circulation from bone marrow
 - 1: Myeloblast
 - 2: Promyelocte
 - 3: Myelocte
 - 4: Band form
- 1158-: Infantile polycythemia is seen in
 - 1: Cerebellar hemangioma
 - 2: Retinoblastoma
 - 3: Hepatoblastoma
 - 4: Nesidioblastosis

- 1159-: Marginal lymphoma is type of:
 - 1: B cell lymphoma
 - 2: T cell lymphoma
 - 3: NK cell lymphoma
 - 4: Hodgkins lymphoma
- 1160-: Regarding G6PD deficiency true are
 - 1: Autosomal dominant
 - 2: Bite cell (+)
 - 3: Protects against kala azar
 - 4: Enzyme level directly propoional to age of RBC
- 1161-: A 17 year old boy presented with TLC of 138 x lOV I with 80% blasts on the peripheral smear. Chest X-ray deniosnstrated a large mediastinal mass. Immunophenotyping of this patent's blasts would most likely demonstrate -
 - 1: No surface antigens (null phenotype)
 - 2: An immature T cell phenotype (Tdt/CD34/CD7 positve)
 - 3: Myeloid markers, such as CD 13, CD33 and CD 15
 - 4: B cell markers, such as CD 19, CD20 and CD22
- 1162-: AML with adverse prognosis is:
 - 1: t(8;21)
 - 2: t(15;17)
 - 3: Normal cytogenetics
 - 4: Del 7q
- 1163-: Which among the following is iron chelator:

- 1: EDTA
- 2: Desferrioxamine
- 3: BAL
- 4: Penicillamine
- 1164-: A peripheral smear with increased neutrophils,basophils,esinophils,and paltelets is highly suggestive of:
 - 1: Acute myeloid leukemia
 - 2: Acute lymphoblastic leukemia
 - 3: Chrnoic myelogenous leukemia
 - 4: Myelodysplastic syndrome
- 1165-: A patient was taking warfarin and INR comes out to be 8. Next step would be to stop the drug and:-
 - 1: Resta at a lower dose once the INR is in therapeutic range
 - 2: Give oral vitamin K1
 - 3: Administer fresh frozen plasma
 - 4: Transfuse fresh blood
- 1166-: Hemophilia is associated with -
 - 1: X Chromosome
 - 2: Y Chromosome
 - 3: Chromosome 3
 - 4: Chromosome 16
- 1167-: Bone infarcts are seen in:
 - 1: Iron deficiency anemia

2: Thalassemia 3: Sickle cell anemia 4: Hereditary spherocytosis 1168-: Intrinsic causes of hemolytic anemia are all except: 1: G6PD deficiency 2: Hereditary spherocytosis 3: Hypersplenism 4: Pyruvate kinase deficiency 1169-: Ratio of fat cells and RBC in bone marrow is? -1:1:01 2: 2:01 3: 4:01 4: 6:01 1170-: Glanzman's thromboasthenia is characterized by defective -1: Gp IIB/IIIA 2: Gp IB/IX 3: Gp IB/IIIA 4: GpIIB/IX 1171-: Best test for assessment of iron status is -1: Transferrin

2: Ferritin

3: Serum iron

- 4: Hemoglobin
- 1172-: Which of the following statements is true of hereditary spherocytosis (HS)?
 - 1: Pigment-type of gall stones are common
 - 2: Diagnosis can be made in neonatal period easily by examination of a blood film
 - 3: Intravascular hemolysis is a common feature
 - 4: Autosomal recessive inheritance in majority of the cases
- 1173-: Most sensitive and specific test for diagnosis of iron deficiency is
 - 1: Serum iron levels
 - 2: Serum ferritin levels
 - 3: Serum transferrin receptor population
 - 4: Transferrin saturation
- 1174-: Very low activity of adenosine deaminase in sample of red cells and high levels of dATP is consistent with diagnosis of-
 - 1: Organophosphorus poisoning
 - 2: Severe combined immunodeficiency disease
 - 3: Cyanide poisoning
 - 4: Acquired immunodeficiency disease
- 1175-: Which of the following metabolic abnormality it seen in multiple myelona -
 - 1: Hyponatremia
 - 2: Hypokalemia
 - 3: Hypercalcemia
 - 4: Hyperphosphatemia

- 1176-: All of the following red cell abnormality provides protection against malaria Except
 - 1: G6PD deficiency
 - 2: Thalassemia
 - 3: Sickle cell anaemia
 - 4: Acanthocytosis
- 1177-: A 67-year-old woman with a prosthetic aoic valve develops progressive anemia. Examination of a peripheral blood smear reveals reticulocytosis and schistocytes. What is the appropriate diagnosis?
 - 1: Acanthocytosis
 - 2: Henoch-Schonlein purpura
 - 3: Idiopathic thrombocytopenic purpura
 - 4: Macroangiopathic hemolytic anemia
- 1178-: The coagulation profile in a 13-year old girl with Menorrhagia having von Willebrands disease is
 - 1: Isolated prolonged PTT with a normal PT
 - 2: Isolated prolonged PT with a normal PTT
 - 3: Prolongation of both PT and PTT
 - 4: Prolongation of thrombin time
- 1179-: Reticulocytosis is not a feature of
 - 1: Paroxysmal nocturnal hemoglobinuria
 - 2: Following acute bleeding
 - 3: Hereditary spherocytosis
 - 4: Anemia in CRF

1180-: Which of the following are the features of pernicious anemia?
1: Hyper-segmented neutrophils
2: Subacute combined degeneration of spinal cord
3: Gastric mucosal atrophy
4: All of the above
1181-: Most common mutation in haemophilia is:
1: Intron 1 inversion
2: Intron 22
3: 619 bp deletion
4: 3.7 bp deletion
1182-: AB trans retinoic acid is useful in the treatment of-
1: Myelodysplastic leukemia
2: Promyelocytic leukemia
3: Myelomonocytic leukemia
4: Chronic myelocytic leukemia
1183-: Hemophilia is associated with which chromosome?
1: X
2: Y
3: 13
4: 8

1184-: Kleiheur Bethke test is done for?

- Cephalopelvic disproportion
 Fetomaternal haemorrhage
 Determining karyotype of normal fetus
- 4: Diagnosing fetal infections

1185-: Route of administration of LMWH for prophylaxis of thrombosis in a patient who had undergone surgery few hours back is:

- 1: Subcutaneous
- 2: Intravenous
- 3: Inhalational
- 4: Intramuscular

1186-: Not a B cell lymphoma -

- 1: Mycosis fungoides
- 2: CLL
- 3: Hairy cell leukemia
- 4: Mantle cell lymphoma

1187-: Factor useful for clot stabilization-

- 1: X
- 2: XI
- 3: XII
- **4**: XIII

1188-: Low serum haptoglobin in hemolysis is masked by-

1: Bile duct obstruction

- 2: Liver disease 3: Malnutrition 4: Pregnacy 1189-: In PT test, the addition of Ca2+ & tissue thromboplastin activates which pathway? 1: Extrinsic 2: Intrinsic 3: Fibrinolytic 4: Common 1190-: An Afroamerican boy of 6 years of age presented with abdominal pain, chronic hemolysis and abnormal RBC shape on peripheral smear. Most likely disorder responsible for this condition:(AIIMS November 2014. November 2013) 1: Point mutation 2: Trinucleotide repeat 3: Antibody against RBC membrane 4: Genomic imprinting 1191-: Plasrnacytoid lymphomas may be associated with -1: IgG 2: IgM 3: IgA 4: IgE
- 1192-: Thrombotic event is seen in all of the following, except:
 - 1: Paroxysmal nocturnal hemogloninuria
 - 2: Disseminated intravascular coagulation

- 3: Immune thrombocytopenic purpura
 4: Heparin induced thrombocytopenia
 1193-: Color of hemosiderin is?
 - 1: Black
 - 2: Brown
 - 3: Blue
 - 4: Yellow
- 1194-: How will you differentiate a mediastinal mass being a thymoma or ALL?
 - 1: Cytokeratin
 - 2: CD1a
 - 3: Cd3
 - 4: Tdt
- 1195-: All are features of hemolytic anemia, except -
 - 1: Hemoglobinuria
 - 2: Jaundice
 - 3: Increased haptoglobulin
 - 4: Hemosiderinuria
- 1196-: Aspirin in very low doses inhibits the formation of:-
 - 1: Prostaglandin F2
 - 2: Thromboxane A2
 - 3: Prostaglandin I2
 - 4: All of the above

11	97-: Burr cell is seen in
	1: Uremia
	2: Hepatocellular carcinoma
	3: Gastric carcinoma
	4: Ovarian cancer
11	98-: Heparin therapy should be monitored with intermittent estimation of:
	1: Bleeding time
	2: aPTT
	3: Prothrombin time
	4: All of the above
11	99-: In Iron deficiency anaemia, what is seen?
	1: Increased Protoporphyrin
	2: Increased iron
	3: Increased ferritin
	4: Increased transferrin saturation
12	00-: Which of the following drug is a direct inhibitor of clotting factor Xa?
	1: Apixaban
	2: Argatroban
	3: Fondaparinux
	4: Aspirin

1201-: A patient has Hb 6 gm% , folic acid 8ng/ml, vitamin B12 60 pg/ml, serum iron 130 microg/dl, and MCV-104. The diagnosis is -

- 1: Iron deficiency anaemia
- 2: Vitamin Bl2 deficiency
- 3: Folic acid deficiency
- 4: Pyridoxine deficiency

1202-: Which of the following is associated with highest risk of anaphylaxis

- 1: Iron dextran
- 2: Iron sucrose
- 3: Ferumoxytol
- 4: Iron gluconate

1203-: Which of following is the most common site for extranodal lymphoma?

- 1: Esophagus
- 2: Stomach
- 3: Intestine
- 4: Skin

1204-: Which of the following is positive in Follicular lymphoma

- 1: Bcl 2
- 2: Bcl 6
- 3: Bcl 1
- 4: None of the above

1205-: Howel-Jolly bodies may be seen after -

- 1: Hepatectomy
- 2: Splenectomy
- 3: Pancreatectomy
- 4: Cholecystectomy
- 1206-: Hereditory spherocytosis is due to deficiency of-
 - 1: Ankyrin
 - 2: Actin
 - 3: Selectin
 - 4: Integrin
- 1207-: Type of anaemia caused by pulmonaryTB -
 - 1: Iron-deficiency
 - 2: Megaloblastic
 - 3: Sideroblastic
 - 4: Microcytic Hypochromic anaemia
- 1208-: A 5 year old girl came with history of progressively increasing pallor since bih and hepatosplenomegaly. Which of the following is the most relevant test for achieving diagnosis -
 - 1: Hb electrophoresis
 - 2: Peripheral smear examination
 - 3: Osmotic fragility test
 - 4: Bone marrow examination
- 1209-: In DIC, which is not seen?
 - 1: Fibrinogen decreased

2: Thrombocytopenia 3: Normal APTT 4: PT elevation 1210-: A primiparous D-negative (Rh-negative) mother has just delivered a D-positive child. Administration of which of the following substances would be indicated 1: Anti-D IgG to child 2: Anti-D IgG to mother 3: D-positive red cells to child 4: D-positive red cells to mother 1211-: Burkitt&;s lymphoma shows which translocation? 1:8:14 2:9:22 3:11:14 4: 14:18 1212-: Cell of origin of hairy cell leukemia is -1: B-cell 2: T-cell 3: NK-cell 4: Dendritic reticulum cell 1213-: Factor IX deficiency results in increased -1: PT (Prothrombin Time)

2: PTT (Partial thromboplastin time)

- 3: BT (Bleeding Time)
- 4: TT (Thrombin time)
- 1214-: 33-years-old alcoholicon ATT presents with increased serum iron & increased transferrin saturation. Diagnosis?
 - 1: Iron deficiency anemia
 - 2: Sideroblastic anemia
 - 3: Megaloblastic anemia
 - 4: Anemia of chronic disease
- 1215-: As compared to unfractionated heparin, low molecular weight heparins
 - 1: Are absorbed more uniformly when given subcutaneously
 - 2: Require more frequent laboratory monitoring
 - 3: Cannot be given to patients with heparin induced thrombocytopenia
 - 4: Predispose to a higher risk of osteopenia
- 1216-: Which of the following features is shared in common between lymphocyte rich and lymphocyte predominant types of Hodgkin&;s lymphoma -
 - 1: Paucity of diagnostic RS cells
 - 2: EBV is associated
 - 3: RS cells are CD 20 positive
 - 4: Good prognosis
- 1217-: Which of the following anticoagulant is safest in pregnancy?
 - 1: Warfarin
 - 2: Heparin
 - 3: Phenindione

- 4: Dicumarol
- 1218-: The following are features of polycythemia rubra vera, except -
 - 1: Increased red cell mass
 - 2: Low aerial oxygen saturation
 - 3: Presence of JAK2 mutation
 - 4: Splenomegaly
- 1219-: Marker for granulocytic Sarcoma-
 - 1: CD33
 - 2: CD38
 - 3: CD117
 - 4: CD137
- 1220-: Platelet aggregation is caused by -
 - 1: Nitrous oxide
 - 2: Thromboxone A2
 - 3: Aspirin
 - 4: PGI2
- 1221-: In a case of Plasmodium falciparum malaria, the peripheral blood smear does not demonstrate trophozoites and schizonts. The reason for this is:
 - 1: Apoptosis of red cells because of hemozoin pigments
 - 2: Lysis of red cells with malarial parasite
 - 3: Infested cells are trapped in the spleen
 - 4: Infested red blood cells stick to the capillaries

1222-: Which of the following drug has the least Marrow suppression
1: Cisplatin
2: Vincristine

3: Cyclophosphamide

4: Methotrexate

1223-: Iron overload occurs in all except

1: Thalassemia

2: Myelodysplastic syndrome

3: Polycythemia vera

4: Sideroblastic anemia

1224-: Mycosis fungoides is? -

1: T cell lymphoma

2: B cell lymphoma

3: Mixed

4: Plasma cell tumour

 $1225\mbox{-:}\mbox{ Following gene when mutated, protects tumor cells from Apoptosis}$

1: BCL-2

2: BRCA

3: RB

4: TGF-b

1226-: Patient with bleeding due to platelet function defects has which of the following features?

- 1: Normal platelet count and normal bleeding time
- 2: Normal platelet count and increased bleeding time
- 3: Decreased platelet count and increased bleeding time
- 4: Normal platelet count and decreased bleeding time
- 1227-: True about oral anticoagulant warfarin are all EXCEPT:
 - 1: Acts in vivo
 - 2: Acts both in vivo and in vitro
 - 3: Interferes with synthesis of Vit K
 - 4: Causes Hematuria
- 1228-: In a newborn, Harlequins skin change is due to
 - 1: Polycythemia
 - 2: Septicemia
 - 3: Autonomic dysfunction
 - 4: Ichthyosis
- 1229-: LMW heparin is preferred over unfractionated heparin because:
- 1: LMW heparin directly inhibit thrombin whereas unfractionated heparin acts activation of anti thrombin
 - 2: LMW heparins have higher risk of causing bleeding
 - 3: LMW heparin can be given subcutaneously as well as orally
 - 4: LMW heparin has consistent bioavailability.

1230-: Which of the coagulation factor is least affected in a patient with vitamin K deficiency?

- 1: Factor 10
- 2: Factor 9
- 3: Factor 8
- 4: Factor2

1231-: All of the following statements are true about warfarin except:-

- 1: It inhibits activation of vitamin K dependent clotting factors
- 2: It can cross placenta
- 3: Its half-life is approximately 36 hours
- 4: Its dose should be increased in liver disease

1232-: Which of the following drug is used postop to reverse the effect of heparin used intraoperatively in cardiac surgery?

- 1: Protamine sulfate
- 2: Vitamin K
- 3: Tranexamic acid
- 4: Factor VIII concentrate

1233-: In PML, all of the following are seen except -

- 1: Retinoic acid is used in treatment
- 2: 15/17 translocation may be seen
- 3: CD 15/34 both seen in same cell
- 4: Associated with Disseminated intravascular coagulation (DFVC)

1234-: HbA2 is increased In -

- 1: Alfa-thalassemia
- 2: Iron deficiency anemia
- 3: Beta-thalassemia
- 4: Sickle cell trait
- 1235-: Which of these is the most impoant prognostic factor in ALL?
 - 1: Hyperploidy
 - 2: Total leucocyte count greater than 50,000
 - 3: Age
 - 4: Response to steroids
- 1236-: In sickle cell disease, which of the following does not influence the degree of sickling of red cells?
 - 1: Hereditary persistence of fetal hemoglobin
 - 2: Intracellular pH
 - 3: Intake of primaquine
 - 4: Co-existing a-thalassemia
- 1237-: Which of the following is not expressed in majority of cases of pediatric B-cell acute lymphoblastic leukemia?
 - 1: Terminal deoxynucleotidyl transferase (TdT)
 - 2: CD19
 - 3: CD10
 - 4: CD7
- 1238-: Earliest response to iron supplementation in iron deficiency anemia is denoted by?
 - 1: Increase in serum ferritin

- 2: Increase in reticulocyte count
- 3: Increase in iron binding capacity
- 4: Increase in hemoglobin

1239-: Following investigations are required in initial evaluation of a chronic myeloid leukemia patient EXCEPT -

- 1: Peripheral smear
- 2: Test for Philadelphia chromosome
- 3: Bone marrow testing
- 4: HLA typing

1240-: Cabot's ring is seen in-

- 1: Megaloblastic anemia
- 2: Sickle cell disease
- 3: Iron deficiency anemia
- 4: Autoimmune anemia

1241-: VWF factor deficiency causes:

- 1: | Platelet adhesion
- 2: | Factor VIII in plasma
- 3: Defective platelet adhesion
- 4: All of the above

1242-: A 55-year-old man complains of pain in his back, fatigue and occasional confusion. He admits to polyuria and polydipsia. An X-ray examination reveals numerous lytic lesions in the lumbar veebral bodies. Laboratory studies disclose hypoalbuminemia, mild anemia, and thrombocytopenia. A monoclonal IgG peak is demonstrated by serum electrophoresis.

Urinalysis shows 4+ proteinuria. A bone marrow biopsy discloses foci of plasma cells, which account for 18% of all hematopoietic cells. What is the appropriate diagnosis?

- 1: Acute lymphoblastic lymphoma
- 2: Chronic lymphocytic leukemia
- 3: Extramedullary plasmacytoma
- 4: Multiple myeloma

 $1243\mbox{-:}$ The subtype of Hodgkin&;s disease, which is histogentically distinct from all the other subtypes is -

- 1: Lymphocyte predominant
- 2: Nodular sclerosis
- 3: Mixed cellularhy
- 4: Lymphocyte depleted

1244-: Multiple myeloma is a tumor of?

- 1: B-lymphocyte
- 2: T-lymphocyte
- 3: Lymph nodes
- 4: Plasma cell

1245-: The earliest sign of iron deficiency anaemia-

- 1: Increase in iron binding capacity
- 2: Decrease in serum ferritin level
- 3: Decrease in serum iron level
- 4: All the above

1246-: A 30-year-old woman complains of recent easy fatigability, bruising, and recurrent throat infections. Physical examination reveals numerous petechiae over her body and mouth. Abnormal laboratory findings include hemoglobin of 6 g/dL, WBC of 1,500/mL, and platelets of 20,000/mL. The bone marrow is hypocellular and displays increased fat. What is the appropriate diagnosis?

- 1: Aplastic anemia
- 2: Iron-deficiency anemia
- 3: Megaloblastic anemia
- 4: Leukemia

1247-: All of the following are associated with coombs positive hemolytic anemia except -

- 1: Thrombotic thrombocytopenia purpura (TTP)
- 2: Scleroderma
- 3: SLE
- 4: PAN

1248-: The tumor causing polycythemia due to erythropoietin production is -

- 1: Cerebellar hemangioma
- 2: Medulloblastoma
- 3: Ependymoma
- 4: Ougodendroglioma

1249-: A 9-year-old girl develops widespread pinpoint skin hemorrhages. She recovered from a fl u-like illness 1 week earlier. Laboratory findings reveal a platelet count of 20,000/mL but no other abnormalities. Her bone marrow shows an increased number of megakaryocytes. The platelet count is normal after 2 months. Which of the following is the appropriate diagnosis?

- 1: Antiphospholipid antibody syndrome
- 2: Disseminated intravascular coagulation

- 3: Hemolytic-uremic syndrome
- 4: Idiopathic thrombocytopenic purpura

1250-: 17-year-old boy presented with complain of petechiae. O/E ,sternal tenderness is present. BM biopsy show hypercellularity and more than 20% Lymphoblast. Peripheral smear show ||| TLC and presence of lymphoblast . On X ray. retrosternal mass is seen. All are true about condition patient is suffering except?

- 1: It has good prognosis
- 2: Notch gene mutation present
- 3: An immature T-cell phenotype (Tdt/CD34/CD7 positive)
- 4: Thymic involvement is seen

1251-: A 32-year-old female, asymptomatic, not requiring blood transfusion, presents with Hb 13.0 gm/dl. Her HbF levels are 95%, HbA2, 1.5%. Which of the following is the most likely diagnosis -

- 1: Hereditary persistence of fetal hemoglobin
- 2: Beta homozygous thalassemia
- 3: Thalassemia intermedia
- 4: Beta heterozygous thalasiemia

1252-: The most important investigation in the given case to diagnose if the condition is a neoplasm?

- 1: JAK-2
- 2: EPO level
- 3: PaO2
- 4: Bone marrow aspiration and biopsy

1253-: CD-10 is seen in-

1: ALL	
2: CLL	
3: HCL	
4: CML	
1254-: Burkitts lymphoma shows which translocation-	
1: t (8-14)	
2: t (11-14)	
3: t(14-18)	
4: t (14-21)	
1255-: Which is false about hemolytic anemia?	
1: Decreased LDH	
2: Decreased Haptoglobin	
3: Decreased RBC survival	
4: Increased Uncongugated Bilirubin	
1256-: Drug which inhibits GPIIb/IIIa and is platelet anti Aggregatory:	
1: Clopidogrel	
2: Enoxaparin	
3: Fondaparinux	
4: Tirofiban	
1257-: In G6PD deficiency, which cells are more prone for hemolysis:	
1: Older red cells	
2: Young red cells	

- 3: Reticulocytes
- 4: All are susceptible

1258-: A man presents with fatigue. Hemogram analysis done suggested low Hb, high MCV. The next investigation is?

- 1: Vit B12/folatelevels
- 2: Bone Marrow
- 3: S. Iron studies
- 4: Reticulocyte count

1259-: A young boy came with dyspnea and was found to have a mediastinal mass. Which of the following is known to produce mediastinal lymphadenopathy?

- 1: Diffuse large B cell Lymphoma
- 2: B cell rich T cell lymphoma
- 3: Mediastinal rich B cell lymphoma
- 4: T cell Lymphoblastic ALL

1260-: Which one of the following lymphoma is associated with translocation of c-myc gene on chromosome 8?

- 1: Burkitt's lymphoma
- 2: Mantle cell lymphoma
- 3: Follicular lymphoma
- 4: Anaplastic large cell lymphoma

1261-: In contrast to heparin, enoxaparin:

- 1: Can be used without monitoring the patient's aPTT
- 2: Is less likely to have a teratogenic effect

- 3: Is more likely to be given intravenously
- 4: Is more likely to cause thrombosis and thrombocytopenia
- 1262-: Howell-Jolly bodies are seen in-
 - 1: Liver disease
 - 2: Postsplenectomy
 - 3: Hemolysis
 - 4: DIC
- 1263-: Which variety of AML is associated with good prognosis -
 - 1: MO
 - 2: M3
 - 3: M6
 - 4: M7
- 1264-: A drug that binds to and inhibits Gp IIb/IIIa glycoprotein and is responsible for platelet antiaggregatory effects is:
 - 1: Clopidogrel
 - 2: Enoxaparin
 - 3: Fondaparinux
 - 4: Tirofiban
- 1265-: True about sickle anemia is?
 - 1: Leucopenia
 - 2: Decreased ESR
 - 3: Microcardia

- 4: Ringedsideroblast
- 1266-: Pernicious anemia associated with -
 - 1: Gastric pathology
 - 2: Renal pathology
 - 3: Esophageal pathology
 - 4: Oral pathology

Answers

Question No	Answer Option	Answer
1	2	APTT
2	2	Warfarin
3	2	Light chain globulins
4	3	As part of both extrinsic and intrinsic pathways
5	3	Low molecular weight heparin
6	1	Hodkin's disease
7	3	M3AML
8	3	ABVD
9	2	M3
10	2	Alcohol
11	1	Bone
12	3	CD127 marker
13	2	Serum ferritin levels
14	3	HTLV2
15	1	Lead
16	3	Post hemorrhagic anemia
17	1	Vascular endothelium
18	4	Inhibition of apoptosis
19	2	Iron
20	2	(18-14) translocation
21	1	Stomach
22	3	DIC

23	3	Granulocytic sarcoma
24	4	Oral iron intolerance
25	2	IgM
26	1	Boezomib
27	1	Acute promyelocytic leukemia
28	4	All of the above
29	3	Plasmacytoma on biopsy
30	4	All of the above
31	2	Elevated serum indirect bilirubin
32	3	Spurious polycythemia
33	2	Iron deficiency anaemia
34	1	Leukocyte alkaline phosphatase
35	2	Factor Xa inhibition
36	4	Hemorrhagic stroke
37	2	Alfimiprase
38	1	P. falciparum
39	2	Iron deficit
40	2	Decrease in serum ferritin level
41	3	Hb electrophoresis
42	2	Brilliant cresyl blue
43	3	IgM
44	1	G6PD deficiency
45	4	Acquired Factor VIII inhibitors
46	4	CLL
47	3	Hookworm infection

48	3	Ibuprofen
49	2	Pernicious anemia
50	2	B cell ALL
51	4	CD46
52	1	Decreased erythropoietin production
53	3	Aplastic anemia
54	2	Inhibiting coagulation factor Xa
55	2	Stomach
56	1	Nodular sclerosis
57	4	0
58	1	Megaloblastic anemia
59	4	Polycythemia
60	3	ITP
61	4	Lymphoplasmacytic lymphoma
62	4	Dystrophic calcification
63	3	Megaloblastic anemia
64	2	Counteracting toxicity of high dose methotrexate therapy
65	1	Decreased irritability
66	1	Pre B cell
67	2	Promyelocytic (M3)
68	1	CD IA
69	3	Serum ferritin
70	4	Vitamin B12
71	2	Darbepoetin alfa

72	4	myelophthisic anemia.
73	1	Hodgkin's lymphoma
74	3	Chloroquine
75	4	Thalassemia
76	3	Epstein Bar virus
77	4	Paroxysmal nocturnal hemoglobinuria
78	1	AML
79	2	Sheets of atypical plasma cells
80	1	t (15; 17)
81	1	Richter transformation
82	2	No nucleus
83	1	Atransferrinemia
84	2	FISH
85	2	IgM
86	1	Hepsidin
87	4	Rivaroxaban
88	2	REAL classification
89	1	Certain min. amount of reduced Hb should be present
90	3	Bone marrow transplantation
91	4	Increased
92	3	Annexin A1
93	1	Burkitt's lymphoma
94	1	Asparginase
95	2	Phytonadione
96	4	None

97	1	Addisonian Crisis
98	4	Paroxysmal nocturnal hemoglobinuria
99	2	Swallowed Maternal blood
100	2	Increased direct bilirubin
101	1	Bone marrow examination
102	1	Kell
103	3	Alteplase
104	4	CD 5+, CD 23 -
105	2	Thalassemia
106	3	Gamma globulins
107	2	May-Hegglin anomaly
108	2	Lack of reaction accelerator during activation of factor X in coagulation cascade
109	1	Thromboxane A2 synthesis
110	2	Heterozygous individuals are at increased risk of Plasmodium falciparum infection
111	1	Factor VIII
112	2	Hemarthrosis
113	4	Alpha 2 Delta 2
114	2	Immunophenotyping
115	4	Von Willebrand disease type 1
116	2	Replacement of intracellular iron enzymes
117	4	Howell-Jolly bodies
118	1	Kimura's disease
119	2	Chronic lymphocytic leukemia
120	4	Imatinib

121	3	Promelocytic leukemia.
122	3	Hemolytic transfusion reaction
123	3	_0.54degC
124	1	Obstetric complications
125	4	M7
126	2	It act by inhibiting both factor Ila and factor Xa
127	1	Normal platelet count with prolonged bleeding time
128	3	Serum alkaline phosphatase
129	1	Microcytic hypochromic anemia
130	4	Ringed sideroblast
131	3	Oral factor Xa inhibitor
132	4	Rouleaux formation in blood
133	4	Ringedsideroblast
134	3	Decrease serum ferritin level
135	3	Methotrexate
136	1	B12 estimation
137	1	Thymoma
138	3	Adult T cell leukemia and lymphoma
139	2	5q- syndrome
140	2	Gastrointestinal bleeding
141	2	Henoch Schonlein purpura
142	3	Normal serum haptoglobin
143	3	Increased bone marrow iron
144	2	Renal blood flow is decreased
145	3	Serum ferritin depletes first

146	3	Ovarian dysgenesis
147	1	Multiple myeloma
148	3	Idiopathic thrombocytopenis purpura
149	2	Beta-chain
150	2	Specific anti platelet antibodies detected
151	2	Primaquine
152	1	Flavivirus infection
153	3	Late phase of inflammation
154	4	Protamine sulfate
155	4	Oprelvekin (IL-11)
156	1	CD 45
157	4	Ascorbic acid
158	1	Hemolytic anemia
159	3	Megaloblastic anemia
160	2	ITP
161	3	Alkaline pH of stomach
162	3	Protamine sulphate
163	1	Normal ADAMTS levels
164	3	Serum ferritin
165	2	Glycoprotein
166	2	Thalassemia
167	2	Radiotherapy is best
168	3	Endothelial cells
169	3	G-CSF
170	3	Lesh nyhan disease

171	2	Vorapaxar
172	4	Ascorbic acid
173	3	vWF
174	4	Serotonin
175	3	Myeloperoxidase
176	4	igM
177	3	Factor Xa
178	2	Paroxysmal cold hemoglobinuria
179	2	Spectrin
180	1	Serum iron S. ferritin and transferrin
181	3	Autosomal dominant inheritance
182	1	Warfarin administration
183	4	Ascorbic acid
184	4	Koilonychia
185	2	Schistocytes
186	3	Burkitt's lymphoma
187	2	History of hemorrhagic stroke in past one year
188	3	Formation of plasmin
189	1	Hairy cell leukemia
190	3	Hereditary spherocytosis
191	1	Heparin
192	4	Activated paial thromboplastin time (aPTT)
193	3	Parvovirus B19 infection
194	3	Antibody to platelets
195	3	Epsilon amino caproic acid

196	2	Sideroblastic anemia
197	2	IgM
198	3	Most cases present in blast phase
199	3	Sickle cell anemia
200	3	PTT
201	4	Hemolytic uremic syndrome
202	1	Primary granules
203	3	Anemia of chronic disease
204	1	Accelerated phase
205	4	Haptoglobin
206	1	Choristoma
207	1	Oestrogen
208	2	5q
209	1	Iron deficiency anaemia
210	1	Inhibitor of GPIIb/IIIa
211	1	ABVD is more commonly used regimen
212	2	Diagnosed in routine blood test
213	4	Alkalosis
214	3	Direct red cell trauma
215	1	Inadequate dietary intake
216	1	Monosomy
217	3	Spectrin-Ankyrin complex
218	1	Tolerable dose will deliver 40 to 60 mg of iron per day
219	1	ALL
220	4	Hodgkins lymphoma

221	1	Stained by supravital staining
222	2	Prevention of venous thrombosis and pulmonary embolism
223	1	Chondrodysplasia punctata
224	1	RBC
225	3	Promyelocytic leukemia
226	4	Idiopathic myelofibrosis
227	2	Heinz bodies
228	3	Thalassemia
229	3	Large size platelets
230	2	Critical concentration of reduced hemoglobin is required
231	2	8 -14 translocation
232	2	B thalassemia trait
233	4	All the above
234	2	Iron deficiency anemia
235	4	Lymphocyte predominant Hodkin's disease
236	1	Bone infarction
237	1	PT INR
238	1	Autosomal dominant
239	2	Henoch schonlein purpura
240	3	Spontaneous purpura
241	4	Increased osmotic fragility
242	1	Acute myelogenous leukemia
243	2	Ximelgatran
244	4	Tretinoin

245	3	Dialysis worsens anemia of renal failure
246	3	Pure red cell aplasia
247	3	Congenital defect of platelets
248	1	Latent iron deficiency is most common presentation in India
249	4	Haptoglobin increased
250	1	Is more common if blood is donated by a multiparous women
251	3	KIT
252	1	Iron deficiency anemia
253	4	In general follicular (nodular)NHL has worse prognosis compared to diffuse NHL
254	2	Chronic lymphocytic leukemia
255	4	Lymphocyte predominance
256	3	Malaria
257	3	SLE
258	3	IIIa
259	1	Reticulocytosis
260	1	B12 estimation
261	4	Thalassemia
262	2	Beta thalassemia
263	4	Increased osmotic fragility
264	1	Juvenile chronic myeloid leukemia
265	1	Liver
266	1	Conversion of malonic acid to succinic acid
267	3	Heparin induced thrombocytopenia

268	2	Hereditary spherocytosis
269	2	Auer rods
270	2	Gp IIb/IIIa antibody
271	1	Snake envenomation
272	1	Hodgkins lymphoma ,nodular sclerosis
273	1	Iron deficiency anemia
274	2	Thalassemia
275	2	Chronic lymphocytic leukemia
276	4	Polycythemia vera
277	2	<34
278	2	28 days
279	2	Thalassemia
280	4	CD34
281	1	Plasmodium falciparum
282	4	Spectrin
283	1	Hemolytic anemia
284	2	CD 103
285	3	Vit. K deficiency
286	2	Liver
287	4	Iron sorbitol citric acid complex
288	2	Point mutation
289	4	BM biopsy is essential for confirmation of diagnosis
290	1	Iron
291	4	Systemic lupus erythematosus
292	1	Hyperdiploidy

293	1	20000/uL
294	2	Diffuse, small cleaved cell
295	3	Multiple myeloma
296	4	Heparin
297	1	Heparin
298	4	Sickle cell anemia
299	1	Fexofenadine
300	1	Weakest acid found in living being
301	2	35%
302	1	Chronic myeloid leukemia
303	3	21 days
304	4	12 g%
305	4	Erythropoietin
306	1	Diffuse large B-cell lymphoma
307	2	Glucose-6-phosphate dehydrogenase deficiency
308	3	Should be measured within 2 hours
309	4	Elevated alkaline phosphatase
310	3	t(14:18)
311	1	Platelet dysfunction
312	1	Suppurative lymphadenitis
313	4	None of the above
314	1	Childhood
315	3	Glycosyl phosphatidyl inositol (GPI)
316	3	21 days
317	2	Protamine sulfate

318	3	Bone marrow plasmacytosis > 30%
319	1	Preceding MDS
320	3	Factor Xa
321	4	Inv (16) is often detected in the blasts and the eosinophils
322	3	Familial hypercholesterolemia
323	1	Total iron binding capacity
324	3	Hb-A2
325	1	Supraventricular tachycardia
326	3	Factor IX
327	1	Protein C deficiency
328	2	Anti viper venom assay
329	1	Female sex
330	2	Purpura
331	1	B cell lymphoma
332	2	Factor V inhibition
333	3	Three a globin chains
334	4	Systemic lupus erythematosus
335	3	Decreased MCHC
336	3	Factor Va and Factor VIIIa
337	2	Hyperviscocity
338	3	9:22
339	1	Higher efficacy in aerial thrombosis
340	2	Abeiximab
341	4	Penicillin

342	3	Erythropoietin
343	2	Adult T-cell leukemia (ATLL)
344	4	CD117
345	4	Anti- beta 2 glycoprotein antibody
346	2	Sickle cell anemia
347	1	SLE
348	1	Polycythemia rubra vera
349	2	Shows defect in platelets as well
350	4	Hemolysis is predominantly intravascular
351	3	Osteocalcin
352	1	Lymphocyte
353	4	Accessory spleen
354	2	May-hegglin anomaly
355	3	AML-M6
356	4	CD34
357	2	Serum ferritin
358	3	Thalassemia
359	2	II-B
360	4	Fanconi's anemia
361	1	Gplb-IX
362	1	Stomach
363	2	Malaria
364	2	Decreased Ferritin
365	1	Atransferrinemia
366	1	MCV

367	1	Diffuse large B cell lymphoma
368	4	Plasmacytoma on tissue biopsy
369	2	Extrinsic pathway
370	3	CD 20
371	1	Intermittent gastrointestinal blood loss
372	1	Normocytic normochromic anaemia
373	1	Ferropoin
374	2	Peripheral smear
375	1	Hyposegmented neutrophil
376	4	Rituximab
377	1	Anaemia of chronic disease
378	1	Acute glomerulonephritis
379	2	Lack of reaction accelerator during activation of factor X in coagulation cascade
380	1	Thalassemia trait
381	4	Iron deficiency anemia
382	2	Chronic lymphocytic leukemia
383	1	Chronic renal failure
384	1	Acute lymphoblastic leukemia
385	1	Erythropoietin
386	1	Protamine sulphate
387	4	Langerhans cells
388	3	Counteracting toxicity of high dose methotrexate
389	1	Age <2 year
390	4	Ringed sideroblast

391	1	Acquired Thrombotic Thrombocytopenic Purpura (aTTP)
392	2	Glanzmann thrombasthenia
393	2	Chronic lymphoid leukemia
394	2	Bone pain
395	1	Alcoholism
396	4	High hematocrit
397	1	Ferretin
398	3	Maintain INR at 2 and continue
399	1	Plasmacytosis less than 10%
400	1	Membrane cytoskeleton
401	1	Increased TIBC, decreased serum ferritin
402	3	Factor IX
403	2	AML-M3
404	4	Lymphocyte Depleted
405	1	Ristocetin aggregation is normal
406	1	Phytonadione
407	1	Mature B xell
408	4	M4
409	1	Primaquine
410	3	Acute promyelocytic leukemia
411	1	Prothrombin time
412	1	Isolated prolonged PTT with a normal PT
413	1	Monosomy 7
414	1	Intrathecal methotrexate

415	3	Pure red cell aplasia
416	2	T(14,18)
417	1	Ringed siderocytes
418	1	Myeloblastic leukemia without maturation
419	3	Myco tuberculosis
420	3	Hb Ba's cannot release oxygen to fetal tissues
421	3	Glycophorin C
422	3	Nodular sclerosis type
423	2	t (9;22); t (4; 11)
424	3	both option 1 and option 2
425	4	CLL
426	3	Absolute lymphocyte count < 600\/ul
427	2	a chain, 87th codon, Histidine - Tyrosine
428	4	Na+ Cl channel protein
429	3	CML
430	1	Younger age
431	3	Promyelocytic leukema
432	2	The fusion gene bcr-abl forms a protein with tyrosine kinase activity
433	2	Neutropenia
434	2	Tranexaemic acid
435	1	Sickle cell disease
436	4	The treatment should be discontinued immediately once hemoglobin normalizes to prevent side effects of iron.
437	1	Evaluation for pulmonary hemosiderosis

438	1	Cold AIHA
439	1	Cyclooxygenase
440	1	Lymphoplasmacytic lymphoma
441	4	Iron deficiency anemia
442	4	Argatroban
443	4	Congenital dyserythropoietic anemia
444	4	Hypodiploidy
445	4	A difiuse proliferation of medium to large lymphoid cells with high mitotic rate.
446	2	Ankyrin
447	4	D antigen
448	1	CD 1a
449	3	Reticulocytopenia
450	1	CML
451	2	Sickle cell anemia
452	4	Increased osmotic fragility
453	4	Inhibit platelet aggregation.
454	1	Hypokalemia
455	4	CD 23
456	1	CD 1a
457	4	CD 34
458	2	T(9,22)
459	1	Argatroban
460	1	Activating antithrombin III
461	1	CNS

462	2	Fluorescent in situ hybridization
463	2	DIC
464	1	Paroxysmal nocturnal hemoglobinuria
465	1	CRF
466	3	Warfarin
467	2	CD8 + T cells
468	1	Tissue thromboplastin
469	4	Have good prognosis
470	1	Acute leukemia
471	3	Megaloblastic
472	3	Inhibition of enzymes involved in heme biosynthesis
473	4	G6PD deficiency
474	2	Decrease in serum ferritin level
475	3	Microcytosis
476	2	Vitamin K
477	3	12 gm/dl
478	4	Increased plasma haptoglobin level
479	4	Multiple osteolytic lesions
480	2	Sickle cell disease
481	2	Glanzmann's disease
482	4	Hypocalcemia
483	2	Abciximab
484	1	Thrombocytosis
485	2	G6PD
486	4	Defects in vWF

487	3	X chain disease
488	1	HbA
489	4	SF3B1
490	4	Warfarin
491	1	Thrombocytopenia
492	1	Hemolysis
493	1	Controlling oxidative stress on RBC
494	1	Iron dextran
495	2	Brown
496	3	Normal or increased serum ferritin
497	4	Sepsis
498	3	Hypercalcemia
499	2	Severe liver disease
500	1	Folic acid alone causes improvement of hematologic symptoms but worsening of neurological symptoms
501	3	Nutritional anemia
502	1	Thrombocytopenia
503	1	Target cells
504	1	Burkitt lymphoma
505	2	Replacement of glutamate by valine in b-chain of HbA
506	4	Solubility
507	2	Glanzmann thrombasthenia
508	3	t(11,14)
509	4	Mixed B cell & T cell
510	4	Factor VII deficiency

511	1	Betrixaban
512	3	Follicular ,predominantly small cleaved cell.
513	2	Factor XII deficiency
514	2	Mis-sense mutation
515	4	Lung carcinoma
516	2	Spherocytosis
517	2	Glanzmann disease
518	3	Multiple myeloma
519	3	Lepirudin
520	3	Deferiprone
521	4	Eosinophilic granuloma
522	1	Paraxysmal cold hemoglobinuria
523	4	Tranexamic acid
524	4	Hydroxyurea
525	2	Spherocytosis
526	3	Normocytic
527	2	Sickle cell anemia
528	1	Microcytic hypochromic anemia
529	2	Fibrinogen
530	1	Hydroxyurea
531	4	Liver
532	3	Acute megakaryocytic leukemia
533	3	Plasmacytoma on biopsy
534	4	Spectrin
535	1	Hemophilia A

536	4	Amoxicillin
537	4	Anaemia of chronic infection
538	4	Elevated alkaline phosphatase
539	1	Aspirin
540	1	Microspherocytes
541	1	Made of light chain
542	2	Kukuchi disease
543	1	Inadequate dietary intake
544	4	Activated paial thromboplastin time
545	1	Thrombolytic agent
546	4	Glucose 6 Phosphate dehydrogenase deficiency
547	4	Light chain IgG
548	3	Thrombocytosis
549	1	Histidine residues
550	4	65 years
551	2	Ca++
552	4	All of the above
553	1	Multiple myeloma
554	2	Progressive systemic sclerosis
555	3	Hb Ba's cannot release oxygen to fetal tissues
556	1	Dazoxiben
557	4	Serum ferritin
558	4	Mercury
559	3	Fresh frozen plasma
560	2	Paroxysmal cold hemoglobinuria

561	1	Follicular
562	4	Aprotinin
563	1	Sickel cell disease
564	1	Low aerial oxygen saturation
565	1	Mantle zone
566	4	MCHC is increased
567	3	Malabsorption related macrocytic anemia
568	1	B cell monoclonal proliferation
569	4	Anemia in CRF
570	4	Vitamin K
571	3	Idiopathic thrombocytopenic purpura
572	2	Serum ferritin levels
573	2	Hereditary spherocytosis
574	3	Rifampin
575	2	Long term use of antimicrobials can cause deficiency of vitamin K
576	1	Low platelet count
577	3	Megaloblastic anemia
578	2	Factor Xa inhibitor
579	2	Hydroxyurea
580	2	Severe trauma
581	4	Increased TIBC
582	2	Factor IX
583	1	9;22 translocation
584	3	500/ul

585	4	K
586	4	Response to steroids
587	2	Low LDH in the blood
588	1	ITP
589	3	Warfarin
590	4	Hypersplenism
591	3	SLE
592	2	Anemia of chronic disease
593	4	Alcoholism
594	4	High risk of malignacy
595	3	Bilirubin in urine
596	1	They interfere with an early step in the synthesis of clotting factors
597	1	Alpha chain deficiency
598	2	P2Y 12 inhibitor
599	1	Monoclonal gammopathy
600	1	Acute lymphoblastic leukemia
601	4	CD 45
602	1	Mycoplasma infection
603	1	Syntheszied by hepatocytes
604	3	Hypokalemia
605	3	Hereditary spherocytosis
606	4	Copper deficiency
607	1	HbS concentration
608	1	Iron deficiency anemia

609	3	Infectious mononucleosis
610	4	Thromboxane A2 (TXA2)
611	2	Kikuchi disease
612	2	Reticulocytosis
613	1	Intracranial bleed is a rare complication
614	4	Chronic alocoholism
615	2	Sickle cell disease
616	1	Birbecks granules
617	4	Uremia
618	3	Streptokinase
619	4	Dystrophic calcification
620	3	B cells
621	4	High platelet count
622	2	Hypersegmented neutrophils
623	1	Disseminated intravascular coagulation
624	2	Mycosis fungoides
625	1	1-3 hours
626	4	Thalassemia
627	3	Myeloblastic leukemia
628	4	T-cell acute lymphoblastic leukemia
629	3	35 days
630	1	Glanzmann's thrombasthenia
631	1	Fish tap worm infestation
632	1	Pre Bcell
633	4	Von Willebrand disease

634	4	Lupus antigoagulant
635	3	Chronic myelogenous leukemia
636	2	аРТТ
637	4	Myeolo dysplastic syndrome
638	2	12 hrs
639	1	Plasmodium falciparum
640	4	All of the above
641	1	Spectrin
642	2	Antibodies in RBC surface
643	3	Thrombin
644	3	Iron
645	4	Elevated alkaline phosphatase
646	2	TIBC
647	4	Sickle cell anemia
648	2	SLE
649	1	Hepatitis-B
650	4	None of the above
651	3	Sickling is reversible with oxygenation
652	3	Factor VII
653	1	Hemolysis
654	2	Decreased ferritin
655	4	Benign liver tumor
656	4	Anti- beta 2 glycoprotein antibody
657	1	Ciprofloxacin
658	1	6 hours

659	4	Hypoparathyroidism
660	1	Factor III
661	3	С
662	2	Acute lymphocytic leukemia
663	2	M3
664	3	Aplastic anemia
665	1	Oral Iron intolerance
666	3	Mylodysplastic syndrome
667	3	7*4
668	4	M4
669	1	6
670	1	Lactoferrin
671	1	Veebral column
672	1	Glutamate
673	3	Hyperfibrinogenemia
674	2	Sickle cell anemia
675	1	Hereditary spherocytosis
676	3	Nodular sclerosis
677	1	Folic acid
678	3	Hook worm infection
679	3	Hemolytic anemia
680	4	mechanical disruption of red cells.
681	1	ALL
682	3	CD117
683	1	Multiple myeloma

684	4	Direct coombs test is positive
685	1	Megaloblastic anemia
686	2	Uncontrolled thrombin generation
687	3	Heparin toxicity
688	3	Done preferably within 2 hours of collection
689	2	Copper deficiency
690	3	CD 20
691	3	Cushing's syndrome
692	1	a-thalassemia
693	1	CD 23
694	4	Genetic defect involving the factor VIII gene
695	1	CNS is the commonest site of involvement
696	2	GPI-linked protein defect
697	2	Decrease in serum ferritin level
698	1	Less than 500/ul
699	1	HbA
700	4	ESR
701	2	Peripheral Immunophenotyping
702	2	Thromboxone A2
703	4	Clot solubility
704	2	B cell
705	4	Polycythemia vera
706	3	Increased risk of gastric carcinoma is unlikely
707	3	Folate deficiency
708	1	Cold AIHA

709	4	CD 34: Diffuse large B cell lymphoma
710	3	d>b>a>c
711	1	IgG, Kappa light chain
712	1	Hemosiderin
713	2	Vitamin B12
714	2	Chronic lymphocytic leukemia
715	2	Warfarin
716	2	Vitamin K antagonist
717	2	Multiple myeloma
718	1	CNS disease at diagnosis
719	1	Tear drop and Burr cells
720	3	Antithrombin III
721	1	20
722	4	CD34
723	2	Prasugrel
724	1	IgG
725	2	Glucocoicioids
726	4	Plasma cells
727	2	Increased mean corpuscular hemoglobin concentration
728	1	Alcoholic cirrhosis
729	1	Platelet adhesion
730	2	Protein tyrosine kinase inhibitors are used in treatment
731	2	Glanzmanns thrombasthenia
732	2	Immature B cells

733	3	Fetomaternal blood leak
734	3	9:22
735	3	t (8;14)
736	3	Erythema nodosum
737	1	CD45 RO
738	2	Immature B cells
739	2	Decrease in beta chain ,increase in alpha chain
740	2	Transformation to Richter syndrome is commonly seen
741	3	SLE
742	3	PNH
743	4	Nephropathy
744	1	Factor IX and X
745	1	Bleeding time
746	4	Long term aspirin intake
747	1	6 hours
748	1	Mixed cellularity Hodgkin lymphoma
749	4	Monosomy 7
750	1	Evaluation for pulmonary hemosiderosis
751	1	Follicular lymphoma
752	2	Myeloperoxidase
753	1	Macrophages
754	2	Females are commonly affected
755	4	Increased
756	1	Skin necrosis
757	1	Epsilon amino caproic acid

758	1	Heparin
759	1	Antibody against Ilb\/Illa receptors
760	4	S. ferritin
761	1	Iron deficiency anaemia
762	1	Hyper-segmented neutrophils
763	4	Hyperviscosity syndrome
764	2	Dextran 40
765	1	Well formed fibrous stands
766	1	CD 59
767	1	Uremia
768	3	Three a globin genes
769	3	Von Willebrand disease (VWD)
770	4	Iron deficiency anemia
771	1	RBC's
772	2	Spectrin
773	4	High hematocrit
774	2	Reduced plasma fibrinogen
775	3	Argatroban
776	3	1*10^12
777	2	Due to higher risk of bleeding, prasugrel is contraindicated in stroke
778	1	Red blood cell
779	4	Increased FDP, prolonged PT, reduced platlets
780	3	Megaloblastic anemia
781	4	Leukemoid reaction

782	1	CML
783	4	Myelofibrosis
784	1	Protamine sulfate
785	2	Serum ferritin
786	4	Smaller size than RBCs
787	3	Fresh frozen plasma
788	4	Decreased PT with increased APTT
789	3	Cladribine
790	3	Cerebral microcirculation
791	1	CSF
792	2	Acute myeloid leukemia
793	3	2.5-6%
794	1	Increase Calcium
795	4	AML M1
796	2	ALL
797	1	Methyldopa
798	3	Thalassemia minor
799	3	Rivaroxaban
800	2	Azotemia
801	4	Hairy cell leukemia
802	3	Option 1,2&4
803	2	Waldenstrom Macroglobulinemia
804	1	Bleeding due to defibrination syndrome
805	3	Class III
806	2	Inhibit factor Ela and Xa

807	2	4000-11000
808	3	Normocytic
809	4	Folic acid deficiency
810	2	CML
811	1	Lepirudin
812	2	Myoblast Progenitor cells
813	1	Fibrinolytic drugs
814	3	Hodgkins lymphoma, lymphocytic predominant
815	2	TIBC
816	1	Aerial thrombosis
817	2	T HbA2
818	2	Reticulocytosis
819	1	Hyper-segmented neutrophils
820	1	Protamine
821	2	Tirofiban
822	4	Patient requires blood transfusion
823	3	SLE
824	4	All of the above
825	4	All of the above
826	4	Primary thrombocytosis
827	4	Donath Landsteiner antibody
828	1	Abetalipoproteinemia
829	1	Protein C/Protein S deficiency
830	1	Alkali denaturation resistant
831	1	PAROXYSMAL NOCTURNAL HEMOGLOBINURIA

832	2	t (9:22)
833	3	Lewis
834	2	Filgrastim
835	4	Ciprofloxacin
836	3	Hook worm infection
837	2	An immature T cell phenotype (Tdt/D34/CD7 positive)
838	3	900
839	2	Von Willebrand factor
840	2	Leukemoid reaction
841	2	T (15,17)
842	4	Wiskott aldrich syndrome
843	2	dRVVT
844	2	Is less likely to cause neutropenia
845	1	Usually occurs in cow - milk fed babies
846	1	GP IB/IX
847	1	Plasma viscosity
848	3	Thrombocytosis
849	2	Point mutation
850	1	CD 15 and CD 30
851	3	CD 23
852	3	1:01
853	2	Factor VIII
854	2	Dabigatran
855	2	Vitamin K injection
856	3	Hemochromatosis

857	4	CD5+, CD 23 -
858	4	M6
859	4	Congestive heart failure
860	2	Atypical cells in background
861	2	Myeloblast
862	2	Myoblast Progenitor cells
863	4	Oral contraceptive
864	4	Solubility
865	1	Deletion of three alpha chain genes
866	1	Lower incidence of neutropenia and thrombocytopenia
867	2	Polychthemia vera
868	3	Acute lymphoid leukemia in less than 1 year has a poor prognosis
869	3	CD 20
870	1	Philadelphia chromosome
871	1	Weakest acid found in living beings
872	3	Broken RBC
873	2	Ca++
874	2	Leukemia
875	1	Coicosteroids
876	1	Thymoma
877	2	I antigen
878	2	Paroxysmal cold hemoglobinuria
879	2	B cell
880	3	PNH

881	2	Increased total iron binding capacity (TIBC)
882	1	Hairy cell leukemia
883	1	It is a powerful anticoagulant only in vivo
884	3	Enoxaparin
885	4	Paroxysmal cold hemoglobinuria
886	1	Thrombolytic agent
887	2	аРТТ
888	1	Warfarin
889	4	ITP
890	2	Ca++
891	3	CD99
892	1	Heparin
893	1	Factor XIII deficiency
894	4	Aplastic anemia
895	4	Suppression of Hematopoiesis
896	2	Results from an expansion of neoplastic T lymphocytes
897	1	Pernicious anemia
898	4	Platelet count
899	1	Normal complement levels
900	4	iron deficiency anemia.
901	1	ileal resection
902	2	Vitamin K1
903	4	Paroxysmal nocturnal hemoglobinuria
904	4	Lead poisoning
905	3	Factor IX

906	4	Salivary glands
907	4	CD 135
908	4	Thromboxane A2
909	3	Hypohomocysteinemia
910	3	ITP
911	2	Reed - Sternberg cells
912	1	Emicizumab
913	4	Aplastic anemia
914	3	12 gm/dl
915	3	Decreased utilization of stored iron
916	4	Defect in common pathway
917	3	Common leucocyte antigen
918	4	Lymphocyte predominant Hodgkin's disease
919	4	IgM
920	1	Thalassemia
921	2	Primary myelofibrosis
922	2	Von willebrand's disease
923	4	Band forms
924	1	Splenomegaly and neutropenia
925	1	Myelodysplastic syndrome
926	4	PT/INR
927	3	Potassium oxalate + sodium fluoride
928	2	L-Dopa
929	1	Aspirin
930	3	Flow cytometry

931	2	Myelodysplastic syndrone
932	3	Chronic myelogenous leukemia
933	2	Acute leukaemia
934	1	Antithrombin III
935	1	IgE sereting clone of plasma cells
936	2	Ankyrin
937	2	Gives nutrition to cells
938	4	VIIa
939	1	LAP (leukocyte alkaline phosphatase)
940	1	Reticulocytosis
941	1	Vasoconstriction
942	2	Decreased transferrin saturation
943	1	Increased reticulocyte count
944	1	2150 mg
945	3	It inhibit anti-thrombin III
946	1	Liver
947	4	M6
948	2	Hypothyroidism
949	4	Serum iron profile
950	4	Hairy cell leukemia
951	2	B cell
952	2	Hemolytic Anemia
953	4	Trisodium citrate
954	1	Deletion 13q
955	4	Anticoagulation

956	2	REAL classification
957	4	Clopidogrel
958	4	Use LMW heparin
959	3	F III
960	4	Erythropoietin
961	4	Thrombocytopenia
962	1	Liver
963	1	Interference with blood group matching
964	1	CNS
965	2	Langerhans cells
966	1	Rivaroxaban
967	4	Tennis racket
968	3	Radiotherapy only
969	1	Converting plasminogen to plasmin
970	1	Von willebrand disease
971	2	Microcytic hypochromic anemia
972	4	All of the above
973	1	Parvovirus B19 infection
974	1	Decreased erythropoietin production
975	3	Decreased TIBC
976	4	Polycythemia rubra
977	3	Reteplase
978	4	Defect in common pathway
979	3	More than 20% blasts in blood or bone marrow
980	1	CRF

981	2	2:01
982	3	Aplastic anemia
983	3	Warfarin
984	1	Ferritin
985	4	Monosomy 7
986	4	Activates plasminogen bound to fibrin
987	4	Platelet factor 4
988	3	Multiple myeloma
989	2	Hyperkalemia is not seen
990	2	Spherocytosis
991	1	V
992	1	Hemorrhage
993	3	G-CSF
994	1	About 50% of affected infants have moderately severe neonatal jaundice
995	4	In general follicular (nodular) NHL has worse prognossis compared to diffuse NHL
996	2	Normal platelet count and increased bleeding time
997	4	All of the above
998	2	Ferritin
999	2	Sepsis
1000	4	ITP
1001	2	Antiplatelet drug
1002	4	Anti-factor Xa activity
1003	4	Fanconi anaemia
1004	1	Lymphocytic predominant

1005	2	b-chain
1006	1	Glycoprotein complex Ib-IX
1007	2	Increased TIBC
1008	2	Langerhan's cells
1009	1	Allogenic bone marrow transplant
1010	4	Contraindicated in cerebrovascular accident
1011	1	Hodgkin's lymphoma
1012	2	Factor V
1013	3	Neisseria meningitidis
1014	2	Malignancy
1015	3	Thromboxane A2
1016	1	Burkitts lymphoma
1017	3	3-5 days
1018	2	Vit K injection
1019	3	Bile duct obstruction
1020	2	Bacterial infections are common early in the disease due to hypogammaglobulinemia
1021	4	Adult with fever and a WBC of 20,000 cells/l with a left shift
1022	4	Patient presents early in life before 6 months of life
1023	1	Lead
1024	2	Ketoconazole
1025	4	Splenomegaly
1026	4	Translocation involving MYC gene
1027	2	Hypersegmented neutrophils
1028	2	Bone pain

1029	4	CD23
1030	1	G6PD Deficiency
1031	3	7 to 10 days after a GI bleed
1032	4	Systemic lupus erythematosus
1033	3	IgM
1034	1	B-cells
1035	3	Massive splenomegaly
1036	4	Albumin
1037	1	P. falciparum
1038	4	Warfarin
1039	2	DMT-1
1040	2	No a-chain
1041	3	Multiple myeloma
1042	1	Adhesion
1043	1	Lymphocytes
1044	4	Anti phospholipid antibodies
1045	1	A monomorphic lymphoid proliferation with admixed proliferation centers
1046	2	Acidosis
1047	3	CLL
1048	4	Lithium heparin
1049	2	Increased TIBC
1050	2	Factor 7 deficiency
1051	4	Hemosiderin in hepatocytes
1052	2	Oral deferiprone

1053	3	chloroquine
1054	1	Lepirudin
1055	1	Aspirin
1056	3	HIV-AIDS
1057	3	VIII
1058	3	Thalessemia minor
1059	1	Thrombopoietin agonist
1060	2	Diamond - Blackfan syndrome
1061	1	Fresh frozen plasma
1062	2	Kidney
1063	1	Dilated Endoplasmic Reticulum in Neutrophils
1064	4	None
1065	1	AML
1066	1	Elevated 2,3 DPG
1067	1	Mixed cellularity seen in the background.
1068	4	Its dose is increased in liver disease
1069	4	Megaloblastic anemia
1070	4	Angiogenesis inhibiting protein
1071	3	Hypochromic microcytic
1072	3	Anti A, Anti B, Anti H
1073	2	M3 AML
1074	1	Lymphocyte predominant
1075	1	Medullary
1076	4	Point mutation
1077	2	Primary systemic amyloidosis

1078	2	T cell
1079	2	Hereditary spherocytosis
1080	3	Flow-cytometric analysis
1081	1	Splenectomy
1082	1	H.U.S
1083	2	Basophilia
1084	2	Leiden mutation
1085	2	Factor IX
1086	4	65years
1087	2	Increased PT
1088	4	CD34 -ve & Surface Ig +ve
1089	1	Tissue factor
1090	3	Chronic myeloid leukaemia
1091	3	Bone scan
1092	1	Liver
1093	4	Lymphocyte predominant Hodgkins diseases
1094	2	Myelofibrosis
1095	1	Follicular lymphoma
1096	4	Macrocytic anemia
1097	3	Age > 50 years and usually females
1098	1	Autosomal recessive
1099	2	Bacterial overgrowth
1100	1	Hydroxyurea
1101	1	Prothrombin time
1102	3	Myeloperoxidase

1103	2	Ankyrin
1104	4	Stibophen
1105	4	Bernard soulier syndrome
1106	3	M3
1107	1	Anti IgM
1108	1	Sickle cell anemia
1109	1	Aplastic anemia
1110	1	PT increased
1111	2	MDS
1112	1	Cannot be injected i.v.
1113	1	Glomerural disease
1114	2	Lymphoblasts
1115	2	CD lymphocytes
1116	2	Acute G6PD
1117	1	Inhibition of factor Xa
1118	4	G6PD deficiency
1119	1	Plasminogen activation inhibitors
1120	2	Kasabach-Merritt syndrome
1121	2	Essential thrombocythemia
1122	3	Testicular involvement
1123	4	Sickle cells on peripheral blood smear
1124	2	Sheets of atypical plasma cells
1125	1	Lymphocytic predominant
1126	2	Essential thrombocythemia
1127	1	Inhibition of factor Xa

1128	1	Hodgkins disease
1129	1	CD 15 and CD 30
1130	1	Mutation in alpha chain
1131	4	Chronic lymphocytic leukemia
1132	4	CD117
1133	3	Coombs test
1134	1	Hypersplenism
1135	4	Polychromatophilic erythrocytes on peripheral blood smear
1136	1	Diffuse large cell
1137	1	Polycythemia vera
1138	1	Whole blood
1139	4	Iron deficiency anemia
1140	1	Isolated prolonged PTT with normal PT
1141	2	Autoimmune acquired haemolytic anaemia
1142	4	Serum b2-microglobulin
1143	1	Nodular Sclerosis type
1144	3	Infectious mononucleosis
1145	4	Prasugrel
1146	1	Normal platelet count with prolonged bleeding time
1147	1	The disease eventually disseminates to lymph nodes and internal organs.
1148	2	Alpha thalassemia
1149	1	Recombinant tripepetidyl peptidase 1(TPP-1)
1150	2	80-100
1151	4	Haptoglobin increased

1152	3	> 10% plasmacytosis
1153	1	Arsenic trioxide
1154	3	Impaired utilization of iron from storage sites
1155	2	G6PD deficiency
1156	2	Chronic lymphocytic leukemia
1157	4	Band form
1158	1	Cerebellar hemangioma
1159	1	B cell lymphoma
1160	2	Bite cell (+)
1161	2	An immature T cell phenotype (Tdt/CD34/CD7 positve)
1162	4	Del 7q
1163	2	Desferrioxamine
1164	3	Chrnoic myelogenous leukemia
1165	2	Give oral vitamin K1
1166	1	X Chromosome
1167	3	Sickle cell anemia
1168	3	Hypersplenism
1169	1	1:01
1170	1	Gp IIB/IIIA
1171	2	Ferritin
1172	1	Pigment-type of gall stones are common
1173	2	Serum ferritin levels
1174	2	Severe combined immunodeficiency disease
1175	3	Hypercalcemia

1176	4	Acanthocytosis
1177	4	Macroangiopathic hemolytic anemia
1178	1	Isolated prolonged PTT with a normal PT
1179	4	Anemia in CRF
1180	4	All of the above
1181	2	Intron 22
1182	2	Promyelocytic leukemia
1183	1	X
1184	2	Fetomaternal haemorrhage
1185	1	Subcutaneous
1186	1	Mycosis fungoides
1187	4	XIII
1188	1	Bile duct obstruction
1189	1	Extrinsic
1190	1	Point mutation
1191	2	IgM
1192	3	Immune thrombocytopenic purpura
1193	2	Brown
1194	1	Cytokeratin
1195	3	Increased haptoglobulin
1196	2	Thromboxane A2
1197	1	Uremia
1198	2	аРТТ
1199	1	Increased Protoporphyrin
1200	1	Apixaban

1201	2	Vitamin Bl2 deficiency
1202	1	Iron dextran
1203	2	Stomach
1204	1	Bcl 2
1205	2	Splenectomy
1206	1	Ankyrin
1207	4	Microcytic Hypochromic anaemia
1208	1	Hb electrophoresis
1209	3	Normal APTT
1210	2	Anti-D IgG to mother
1211	1	8:14
1212	1	B-cell
1213	2	PTT (Partial thromboplastin time)
1214	2	Sideroblastic anemia
1215	1	Are absorbed more uniformly when given subcutaneously
1216	4	Good prognosis
1217	2	Heparin
1218	2	Low aerial oxygen saturation
1219	3	CD117
1220	2	Thromboxone A2
1221	4	Infested red blood cells stick to the capillaries
1222	2	Vincristine
1223	3	Polycythemia vera
1224	1	T cell lymphoma

1225	1	BCL-2
1226	2	Normal platelet count and increased bleeding time
1227	2	Acts both in vivo and in vitro
1228	3	Autonomic dysfunction
1229	4	LMW heparin has consistent bioavailability.
1230	3	Factor 8
1231	4	Its dose should be increased in liver disease
1232	1	Protamine sulfate
1233	3	CD 15/34 both seen in same cell
1234	3	Beta-thalassemia
1235	4	Response to steroids
1236	3	Intake of primaquine
1237	4	CD7
1238	2	Increase in reticulocyte count
1239	4	HLA typing
1240	1	Megaloblastic anemia
1241	4	All of the above
1242	4	Multiple myeloma
1243	1	Lymphocyte predominant
1244	4	Plasma cell
1245	2	Decrease in serum ferritin level
1246	1	Aplastic anemia
1247	1	Thrombotic thrombocytopenia purpura (TTP)
1248	1	Cerebellar hemangioma
1249	4	Idiopathic thrombocytopenic purpura

1250	1	It has good prognosis
1251	1	Hereditary persistence of fetal hemoglobin
1251	1	Hereditary persistence of fetal hemoglobin
1252	1	JAK-2
1253	1	ALL
1254	1	t (8-14)
1255	1	Decreased LDH
1256	4	Tirofiban
1257	1	Older red cells
1258	4	Reticulocyte count
1259	4	T cell Lymphoblastic ALL
1260	1	Burkitt's lymphoma
1261	1	Can be used without monitoring the patient's aPTT
1262	2	Postsplenectomy
1263	2	M3
1264	4	Tirofiban
1265	2	Decreased ESR
1266	1	Gastric pathology