BLOOD PATH MCQS:

1. The most common cause of primary haematopoietic failure with pancytonaenia is

   A: idiopathic aplastic anaemia ✓
   B: idiosyncratic drug reactions
   C: inherited telomerase defects
   D: viral hepatitis

2. Megaloblastic anaemia may be associated with

   A: haemolysis
   B: microcytosis
   C: pancytopaenia ✓
   D: seizures

3. A woman presents with iron deficiency anaemia. She will have a low serum iron level and

   A: high ferritin and high transferrin
   B: high ferritin and low transferrin
   C: low ferritin and high transferrin ✓
   D: low ferritin and low transferrin

4. Anaemia of chronic disease is associated with

   A: decreased absorption of dietary iron
   B: decreased total body iron
   C: increased total iron binding capacity ✓
   D: low serum iron

5. A 40 year old man is referred with fatigue, weight loss and lymphadenopathy. The most common lymphoma in adults is

   A: acute lymphoblastic lymphoma
   B: Burkitt lymphoma
   C: diffuse large B cell lymphoma ✓
   D: Mantle cell lymphoma

6. A patient presents with anaemia, jaundice and splenomegaly. The most likely underlying mechanism is

   A: extravascular haemolysis ✓
   B: intravascular haemolysis
   C: marrow infiltration
   D: severe iron deficiency

7. Hereditary spherocytosis is

A: associated with a RBC lifespan of 100 days
B: autosomal recessive
C: common in Mediterranean countries
D: treated with splenectomy ✓

8. Multiple myeloma usually presents with

A: diffuse bone demineralisation
B: pathological vertebral fractures ✓
C: plasmacytosis in peripheral blood
D: proteinuria with generalised oedema

9: Your patient with fevers has a basophilic leucocytosis.
Your staff are puzzled but you suspect

A: allergic bronchopulmonary alveolitis
B: chronic myelogenous leukaemia ✓
C: lead poisoning
D: tuberculosis

10. A 7 year old has been referred with a fortnight of tiredness, generalised aches and pains, headache, vomiting and abdominal bloating. The haematology lab alerts you to

A: acute lymphoblastic leukaemia ✓
B: aplastic anaemia
C: Hodgkins lymphoma
D: sickle cell crisis

11. A patient is heterozygous for HbS and has sickle cell trait. Their red blood cells contain

A: 40% HbS and 60% HbA ✓
B: 40% HbS and 60% HbF
C: 60% Hbs and 40% HbA
D: 60% HbS and 40% HbC

12. A child with sickle cell disease presents with acute hand pain after an upper respiratory infection. This is die to

A: disseminated intravascular coagulation
B: hyperuricaemia
C: septicaemia
D: vaso-occlusive crisis ✓

13: Serious infections due to neutropenia include

A: disseminated cytomegalovirus
B: invasive aspergillosis ✓
C: pneumocystis jirocevii pneumonia
D: reactivation of toxoplasmosis

14. Your patient with steroid-dependent COPD and cough ?COVID-19 has a leucocytosis. Glucocorticoids cause

A: decreased leucocyte extravasation into tissues
B: decreased margination of leucocytes
C: increased production on leucocytes in marrow
D: increased release of leucocytes from marrow stores ✓

15. Bone marrow fat cells outnumber haematopoietic cells in

A: aplastic anaemia ✓
B: haemolytic anaemia
C: leukaemia
D: metastatic malignancy

16. Accelerated destruction or sequestration of neutrophils occurs in

A: granulomatous disease
B: megaloblastic anaemia
C: meningococcal septicaemia ✓
D: post-splenectomy state

17. A patient with Beta thalassaemia minor will have

A: extramedullary haematopoiesis
B: haemolysis in severe hypoxia
C: mild microcytic anaemia ✓
D: secondary haemochromatosis

18. Paroxysmal nocturnal haemuglobinuria results from

A: deficiency in C5b-C9 membrane attack complex
B: glucose-6-phosphate dehydrogenase deficiency
C: mutation of the PIGA gene ✓
D: mutation of 2 alpha-globin genes

19. Immunohaemolytic anaemia is most commonly due to

A: primary IgA warm type antibodies
B: primary IgG warm type antibodies ✓
C: primary IgM cold agglutinin type antibodies
D: secondary IgM cold agglutinin type antibodies

20. The direct Coombs antiglobulin test detects

A: circulating immune complexes
B: fragmented RBC
C: IgA antibodies in serum
D: immunoglobin or complement on RBC surface ✓