GENESIS

(Post Graduation Medical Orientation Centre)

Friday Mega Batch

Total Number- 100 | **Topics:** Blood & Hematology | **Time: 40 Min**

Pass Mark- 70 | Question 31-50 is based on Single answers | **Date: 17/01/20**

1. Site of haematopoiesis during development
a) Yolk sac
b) Liver
c) Spleen
d) Vertebra
e) Clavicle
TTTTT [Davidson 23rd edition, Pg: 914]

2. Regarding stem cells
a) Comprise 1% of total bone marrow
b) Stem cell plasticity present
c) Adult stem cell multipotent
d) Always lineage specific
e) Labile cell contains stem cells
FTTFT [Davidson 23rd edition, Pg: 914 and Sheet, Pg: 6]

3. Plasma contains NPN substance are
a) Albumin
b) Glucose
c) Cholesterol
d) Creatinine
e) Xanthine
FFFTT [Sheet, Pg: 4]

4. In comparison between plasma and serum
a) Plasma: Cellular fluid portion of blood
b) Serum: Fluid portion of blood after removal of clot
c) Plasma: Contains all clotting factor
d) Serum: Contains only 1,2,5,8 factor
e) Plasma: Straw color
FTTFF [Sheet, Pg: 5]

5. Following are crystalloid
a) Na^+
b) K^+
c) Albumin
d) Dextrain
e) Cl^-
TTFFT [Sheet, Pg:6]

6. Regarding reticulocyte
a) Mature red cell
b) Normal count 5%
c) Stained by Leishmann stain
d) Decreased in Fe therapy
e) Decreased in any deficiency anemia
FFFFT [Sheet, Pg:12]

7. Causes of decreased transferin
a) Liver disease
b) Pregnancy
c) Nephrotic syndrome
d) OCP
e) Acute phase response
TFTFT [Sheet, Pg:21]

8. Causes of raised MCV
a) Hyperthyroidism
b) Myxedema
c) Smoking
d) Reticulocytosis
e) Myelodysplasia
FTTTT [Sheet, Pg:17]

9. Howell-Jolly bodies present in PBF
a) Hypothyroidism
b) Hyposplenism
c) CLD
d) Post splenectomy
e) Dyshematopoiesis
FTFTT [Davidson 23rd edition, Pg: 921]

10. Normoblast present in PBF –
a) IDA
b) Thalassemia
c) CLD
d) Leukemia
e) Hemolysis
FFFTT [Davidson 23rd edition, Pg: 921]

11. Protozoal causes of splenomegaly
a) Malaria
b) Typhoid
c) Brucellosis
d) Histoplasmosis
e) Trypansomiosis
TFFFT[Davidson 23rd edition, Pg: 928]

12. Regarding autologous HSCT
a) Best for hematological malignancy
b) Most common indication lymphoma and myeloma
c) Stem cells collect from HLA identical sibling
d) GVHD is a common complication
e) No requirement of immunosuppression
FTFFT[Davidson 23rd edition, Pg: 937,938]

13. Regarding spherocytosis
a) Autosomal recessive disorder
b) Due to deficiency ofspectrin
c) Absolute indication of splenectomy
d) In clinical course aplastic crisis occurs due to parvovirus infection
e) Common cause of massive splenomegaly
FTTTF [Davidson 23rd edition, Pg: 947]

14. Management of splenectomised patient
a) Life-long prophylactic azithromycin indicated
b) Pneumocaoccal vaccine should be given annually
c) No need of vaccination after emergency surgery
d) always vaccinate before 2-3 months of surgery in elective case
e) Overwhelming sepsis is usually a common complication
TFFFT [Davidson 23rd edition, Box 23.37 Pg: 948]

15. Regarding sickle cell anemia –
a) Autosomal dominant inheritance
b) Dactylitis is a presentation
c) Hyposplenism may develop
d) Hb electrophoresis is confirmatory test
e) Hydroxycarbamide is a treatment option

FTTTT [Davidson 23rd edition, Pg: 953]

16. Regarding warm Antibody
a) They are usually IgM
b) They usually bind with RBC at 4^{0} C
c) Penicillin can produce it
d) Can cause HUS
e) Can be detected by Coomb's test
FFTFT [Davidson 23rd edition, Pg: 946]

17. Drugs can cause neutropenia –
a) Penicillin
b) Cephalosporin
c) Phenytoin
d) Quinidine
e) Naproxene
TTTTT [Davidson 23rd edition, Box 23.10 Pg: 926]

18. Jak-2 mutaion occurs in
a) Cml
b) Cll
c) Prv
d) Mds4
e) Myelofibrosis
FFTFT[Davidson 23rd edition]

19. Regarding myelodysplastic syndrome –
a) Pre lymphoma condision
b) Can convert to aml
c) Blast cell in bone marrow > 20%
d) Chromosome abnormality occurs in 9
e) Patient may present with bone marrow failure
FTFFT [Davidson 23rd edition, Pg: 960]

20. Regarding Essential Thrombocytopenia
a) Can transfer acute leukemia
b) Is a myeloproliferative disorder
c) No need of treatment in Low risk patient
d) Inhibitor of megakarocyte maturation is used
e) Low-dose aspirin is benefited
TTTTT [Davidson 23rd edition, Pg:969]

21. Potent platelet activators
a) ADP
b) Epinephrine
c) Collage
d) Thrombin
e) Ca^{2+}
FFTTF[Sheet, Pg: 70]

22. Thrombocytopenia due to decreased production
a) CLD
b) Gaucher disease
c) Fanconi's anemia
d) ITP
e) TTP
TTFFF [Davidson 23rd edition, Box 23.14 Pg: 929]

23. Regarding LMWH
a) Short half life
b) Cent percent bioavailability
c) No need of monitoring with low body weight patient
d) Common side effect HIT
e) Can be used outdoor basis
FTFFT [Davidson 23rd edition, Pg:938]

24. Regarding ITP
a) Is a autoimmune disease
b) Ab against Ib receptor
c) Commonly affect male
d) Maybe associated with HIV
e) First line therapy is splenectomy
TFFTF [Davidson 23rd edition, Pg:971]

25. Regarding platelet –
a) Alpha granules contain hydrolase
b) Source of serotonin secretion
c) Nucleated irregular shape
d) Releases VWF
e) Deficiency occurs in TTP
FTFTT [Sheet, Pg: 68,70]

26. Causes of normal platelet count with BT raised
a) DIC
b) VWD
c) Thrombasthenia
d) TTP
e) ITP
FTTFF [Sheet, Pg: 87]

27. Regarding hemophilia
a) Autosomal recessive disease
b) Most common clotting factor disorder
c) BT raised , CT normal
d) Can be treated with vasopressin
e) Joint bleeding is hallmark
FTFTT [Davidson 23rd edition, Pg:972]

28. Electrolyte imbalance in storage blood
a) Hypokalemia
b) Hypocalcemia
c) Hyponatremia
d) Metabolic alkalosis
e) Iron overload
FTFFT [Sheet, Pg: 100]

29. Regarding transfusion related acute drug injury
a) Typically 48 hours of transfusion
b) Breathlessness productive cough is a feature
c) Chest X ray shows bilateral nodular infiltration
d) 100% O2 is a treatment option
e) Severe hypoxaemia can result
FFTTT [Davidson 23rd edition, Pg:935]

30. Protozoa transmitted through blood transfusion
a) Coxiella
b) Rickettsii
c) Babesia
d) Trypansoma
e) Trepenoma
FFTTF [Sheet, Pg: 103]

Each question below contains five suggested answers- choose the <u>one best</u> response to each question (31-50)

31. Major site for thrombopoietin
a) Kidney
b) Lung
c) Brain
d) Liver
e) Testes
D [Davidson 23th edition p 918]

32. Which electrolyte is important for coagulation
a) K+
b) Na+
c) Ca2+
d) SO4-
e) PO4-
C [Davidson 23th edition p 918]

33. Non nucleated cell of following erythroid series
a) Reticulocyte
b) Normoblast
c) Basophil erythroblast
d) Pro-erythroblast
e) Polychromatic erythroblast
A [de gruchy 5th Edition p 5]

34. Erythropoietin is a hormone which is a
a) Protein hormone
b) Polypeptide hormone
c) Steroid hormone
d) Thyrosine derivative
e) Glycoprotein
E [de gruchy 5th Edition p 11]

35. A known case of CKD patient came to you with anemia) You are going to treat the patient by erythropoietin. Before starting erythropoietin therapy, which levels should you correct?
a) Vitamin B12
b) Thyroid hormone
c) Iron
d) Folic acid
e) Growth hormone
C [Davidson 23th Edition p 418]

36. Most common symptoms of megaloblastic anemia
a) Breathlessness
b) Parasthesine
c) Malaise
d) Sore mouth
e) Poor memory
C [Davidson 23th Edition p 943]

37. Absolute indication of splenectomy
a) ITP
b) Hereditary spherocytosis
c) Hereditary elliptocytosis
d) Thalassemia major
e) Felly's Syndrome
B [de Gruchy 5th Edition p 358]

38. Narrowest capillary in the circulation are in
a) Liver
b) Kidney
c) Spleen
d) Brain
e) Lung
C [Davidson23thEdition p 947]

39. Most common type of monoclonal (M) protein in case of MM
a) IgG
b) IgA
c) Light chain only
d) IgM
e) IgE
A [Davidson 23th Edition p 967]

40. In case of ITP most often directed antibody against which receptor of platelet
a) Glycoprotein IIb/IIIa
b) Glycoprotein Ib/V/IX
c) Glycoprotein VI
d) Glycoprotein Ia/IIa
e) ADP receptor
A [Davidson 23thEdition p 971]

41. Clopidogrel is an antiplatelet drug in which it binds
a) Glycoprotein IIb/IIIa
b) Glycoprotein Ib/V/IX
c) Glycoprotein VI
d) Glycoprotein Ia/IIa
e) ADP receptor
E [Davidson 23thEdition p 938]

42. A 36 Y old man present with night time cough and wheezing over the previous 2 months. He has a previous history of eczema) What findings in his full blood count would be in fitting with the scenario and help towards the diagnosis.
a) Basophil
b) Eosinophil
c) Lymphocytosis
d) Monocytosis
e) Neutrophilia
B [Davidson self assessment p 263 Q 23.21]

43. A 25 Y old man wishes to be a blood donor. Which of the following will his blood not be screened for evidence of exposure to-
a) Hepatitis A
b) Hepatitis B
c) Hepatitis C
d) HTLV
e) Syphilis
A [Davidson self assessment p 269 Q 23.54]

44. Drug can cause lymphadenopathy
a) Gold
b) Naproxene
c) Phenytoin
d) Sulphanamide
e) Penicillin
C [Davidson 23th edition p 927]

45. A patient is admitted into hospital for Hb-6g/dL, for this purpose this patient was treated with 3 unit fresh human blood) After this procedure patient complains of perioral numbness, paraesthesia,spasm in hand) What is the next possible treatment of this patient
a) Inj. K+
b) Inj. Na+
c) Inj. Calcium
d) I/V saline
e) Inj. Lasix
C

46. A previously well 26 year old woman presents at term, after an uneventful pregnancy. In the late stages of labour. This is her first pregnancy, delivery is uneventful. The baby is well but is noted to have a widespread petechial rash. Blood film shows true thrombocytopenia) What is the most likely cause?
a) DIC
b) ITP
c) Infusion
d) IUGR
e) Neonatal alloimmune thrombocytopenia
E [Davidson self assessment p 268 Q 23.53]

47. A patient, known case of MM comes to emergency department feeling irritable, restlessness. On investigation findings, serum calcium level was high, which is the most immediate treatment of this patient
a) I/V analgesic
b) Bisphonates for hypercalcemia
c) Allopurinol to prevent nephropathy
d) Plasmapheresis for hyperviscosity
e) I/V normal saline
E [Davidson 23thEdition p 967]

48. Rivaroxaban is an oral anticoagulant which acts by

a) Binds with GP IIb/IIIa receptor
b) Phosphodiesterase inhibitor
c) Direct inhibitor Xa
d) Direct thrombin inhibition
e) Binds with ADP receptor

C [Davidson 23thEdition p 938]

49. A child develops oligouria, hypertension, diarrhea, vomiting and pyrexia within 5-14 days after an attack of gateroenteritis. On examination finding patient was anemic and slightly icteric) CBC shows thrombocytopenia, which is most likely diagnosis

a) Cardia hemolytic anemia
b) Henoch-Scholein purpura
c) Thrombotic thrombocytopenic purpura
d) Hemolytic uremic syndrome
e) March hemoglobinuria

D [de gruchy 5th Edition 207]

50. A 30 year old female patient come to you with superficial bruising, epistaxis, menorrhagia) Investigation shows platelet count normal, BT and CT both prolonged) Which is the most likely diagnosis?

a) HemophiliaA
b) Christmas disease
c) Von Willebrand disease
d) DIC
e) Thrombotic thrombocytopenic disorder

C [Davidson 23th edition p 974]