28/2014

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. The most commonly used fixative for biopsy specimens is :

   (A) Alcohol (B) Xylene

   (C) Formalin (D) 10% buffered formalin

2. For Frozen section tissue should be sent to the Lab as under :

   (A) In carnoys fixative (B) In formalin

   (C) In saline (D) Fresh unfixed

3. The most sensitive method of Hb estimation is :

   (A) sahlis acid hematin (B) cyanmetHb

   (C) alkali hematin (D) specific gravity method

4. Tissues for Electron microscopy are fixed in :

   (A) 10% buffered formalin (B) Carnoy's fixative

   (C) Normal saline (D) 4% glutaraldehyde

5. The nucleated cell best used for chromosomal study is :

   (A) Polymorphs (B) Lymphocyte

   (C) Fibroblast (D) Epithelial cell

6. Which of the following complications is likely to result after several units of blood have been transfused?

   (A) Metabolic alkalosis (B) Metabolic acidosis

   (C) Resp. alkalosis (D) Resp. acidosis

7. Anticoagulant of choice for ESR by Wintrobes method :

   (A) Citrate (B) Heparin

   (C) Oxalate (D) EDTA

8. The shelf life of blood stored in CPD-A is :

(A) 28 days (B) 30 days

(C) 35 days (D) 42 days

9. The anticoagulant for coagulation studies is :

(A) EDTA (B) Heparin

(C) Sodium citrate (D) Sodium fluoride

10. The EDTA of choice for blood counts is :

(A) Disodium EDTA (B) Trisodium EDTA

(C) Dipotasium EDTA (D) Tripotasium EDTA

11. The following are Romanowsky stains except :

(A) Leishmans stain (B) Giemsa stain

(C) Wrights stain (D) Toluedene blue stain

12. Urine for microscopy is fixed in:

(A) Alcohol (B) Acetone

(C) Formalin (D) Toluene

13. The following are cytological fixatives except :

(A) Ethyl Alcohol (B) Formalin

(C) Isopropyl Alcohol (D) Ether

14. One of the following is a clearing agent :

(A) Alcohol (B) Acetone

(C) Chloroform (D) Bouins fluid

15. The ideal thickness of microtome sections is :

(A) 1-2 microns (B) 2-3 microns

(C) 3-4 microns (D) 4-5 microns

16. The special stain for hemosiderin is :

(A) PAS (B) Reticulin

(C) Trichrome (D) Perls Prussian blue

17. WBC pipette is used for the following, except :

(A) Sperm count
(B) CSF count
(C) Absolute Eosinophil count
(D) Platelet count

18. One of the following ova does not float in saline :

(A) Taenia solium ova
(B) Echinococcus ova
(C) Unfertilized ova of Ascaris
(D) Fertilized ova of Ascaris

19. Paraaminodimethyl benzaldehyde in conc.HCl is :

(A) Fouchets reagent
(B) Ehrlichs reagent
(C) Benedicts reagent
(D) Gerhards reagent

20. Envelope shaped crystals in urine microscopy are :

(A) calcium oxalate
(B) calcium phosphate
(C) calcium urate
(D) triple phosphate

21. Heterozygous sickle cell anemia gives protection against :

(A) G6PD
(B) Malaria
(C) Thalassemia
(D) Dengue fever

22. PNH is associated with a deficiency of :

(A) DAF
(B) MIRL
(C) GPI Anchored protein
(D) All of the above

23. All of the following conditions are associated with Coombs positive hemolytic anemia except :

(A) Thrombotic Thrombocytopenic purpura (TTP)
(B) Scleroderma
(C) SLE
(D) PAN

24. All are features of megaloblastic anemia except :

(A) pancytopenia
(B) elevated LDH
(C) low serum ferritin
(D) unconjugated hyperbilirubinemia

25. All are features of hemolytic anaemia except :

(A) Urine urobilinogen absent
(B) Hemosiderinuria
(C) Decreased haptoglobin
(D) Raised indirect bilirubin

26. Low serum haptoglobin in hemolysis is masked by :

(A) Pregnancy
(B) Liver disease
(C) Bile duct obstruction
(D) Malnutrition

27. The following protein defects can cause hereditiary spherocytosis except :

(A) Ankyrin
(B) Palladin
(C) Glycophorin C
(D) Anion transport protein

28. Maturation defect in RBC is seen in :

(A) Folic acid and B_{12} deficiency
(B) Vit. C deficiency
(C) Vit. D deficiency
(D) Essential FA deficiency

29. Osmotic fragility is increased in :

(A) Sickle cell anaemia
(B) Thalassemia
(C) Hereditary spherocytosis
(D) Chronic lead poisoning

30. The most common cause of AD Hereditary Sphero cytosis is :

(A) mutation in band 3
(B) mutation in ankyrin
(C) mutation of alpha spectrin
(D) mutation of beta spectrin

31. The most common cause of BETA thalassemia is :

(A) Mutations leading to aberrant slicing
(B) Promoter region mutations
(C) Chain terminator mutations
(D) Gene mutations

32. Autoimmune haemolytic anemia is seen in :

(A) ALL
(B) AML
(C) CLL
(D) CML

33. Which is not seen in Iron deficiency anaemia?

(A) Hyper-segmented neutrophils
(B) Microcytosis preceeds hypochromia
(C) MCHC < 50%
(D) Commonest cause of anaemia in India

34. Howel-Jolly bodies may be seen after :

(A) Hepatectomy
(B) Splenectomy
(C) Pancreatectomy
(D) Cholecystectomy

35. The earliest sign of iron deficiency anaemia :

(A) Increase in iron binding capacity
(B) Decrease in serum ferritin level
(C) Decrease in serum iron level
(D) All the above

36. The peripheral blood smear of a patient who presented with anaemia, shows features of thalasemia. Family history is also +ve. The investigation done to establish the diagnosis is :

(A) ESR estimation
(B) Blood spherocyte estimation
(C) Bone marrow aspiration
(D) Hb-electrophoresis

37. The mother has sickle cell disease; Father is normal; Chances of children having sickle cell disease and sickle cell trait respectively are :

(A) 0 and 100%
(B) 25 and 25%
(C) 50 and 50%
(D) 10 and 50%

38. All are features of intravascular hemolysis except :

(A) hemoglobinemia
(B) hemosiderinuria
(C) increased serum haptoglobulin
(D) methemoglobinemia

39. D.I.C is seen in :

(A) Acute promyelocytic leukemia
(B) Acute myelomonocytic leukemia
(C) Chronic Myeloid Leukemia
(D) Autoimmune hemolytic anemia

40. Which of the following are characteristic markers for Hodgkin's Lymphoma?

(A) CD15 and CD30
(B) CD15 and CD45
(C) CD30 and CD68
(D) CD15 and CD3

41. Non specific esterase is positive in all the categories of AML, except :

(A) AML-M3
(B) AML-M4
(C) AML-M5
(D) AML-M6

42. Which of these is true regarding CML?

(A) Size of splenomegaly indicates prognosis

(B) Phagocytic activity of WBC is reduced

(C) Sudan black stain is specific for myeloblast

(D) Myeloblast, granuloblast and lymphoblast are PH chromosome +ve

43. The most common cause of Monoclonal Gammopathy is :

(A) Multiple myeloma (B) Amyloidosis

(C) MGUS (D) Waldenstorms macroglobulinemia

44. The following bleeding disorders have Normal platelet count, BT, PT, APTT except :

(A) Scurvy (B) Ehler Danlos syndrome

(C) Bernard soulier syndrome (D) Henoch schonlein purpura

45. Prolonged BT with low platelet count characteristically seen in :

(A) Bernard soulier syndrome (B) Glanzmanns Thrombasthenia

(C) Immune Thrombocytopenia (D) Von Willibrand's disease

46. Bernard soulier syndrome is cha. by all except :

(A) deficiency of platelet membrane GP complex 1b-9

(B) defective adhesion

(C) defective aggregation

(D) normal platelet count

47. Qualitative defect in VWF is a feature of :

(A) Type 1 Von Willibrand's disease (B) Type 2 Von Willibrand's disease

(C) Type 3 Von Willibrand's disease (D) All the above

48. The false statement regarding Glanzmanns thrombasthenia is :

(A) Defective platelet aggregation (B) Autosomal recessive

(C) Deficiency of GP 2b-3a (D) Defective adhesion

49. The factor whose deficiency is not known to cause bleeding is :

(A) factor 3 (B) factor 10

(C) factor 12 (D) factor 13

50. All are true about Hemophilia except :

(A) normal BT
(B) normal PT
(C) prolonged PT
(D) prolonged PTT

51. Small sized platelets are a feature of :

(A) Wiskott Aldrich syndrome
(B) Bernard Soullier syndrome
(C) Immune Thrombocytopenia
(D) Glanzman's thrombasthenia

52. The commonest mode of inheritance of Von Willebrand's disease :

(A) *Codominant*
(B) *Autosomal recessive*
(C) *Autosomal dominant*
(D) *X linked recessive*

53. Cause of Immune Thrombocytopenia is :

(A) Vasculitis
(B) Antibody to vascular epithelium
(C) Antibody to platelets
(D) Antibody to clotting factors

54. The best method for blood grouping is :

(A) Slide method
(B) Tube method
(C) Tile method
(D) Back typing

55. One of the following is not a constituent of the semen diluting fluid :

(A) Formalin
(B) Sodium carbonate
(C) Sodium sulphate
(D) Distilled water

56. For karyotyping, the dividing cells are arrested by addition of Colchicine in the following mitotic phase :

(A) Prophase
(B) Metaphase
(C) Anaphase
(D) Telophase

57. Du estimation is indicated in which of the following persons :

(A) Rh positive donor
(B) Rh negative donor
(C) Rh negative recipient
(D) Rh positive recipient

58. A cast which may be present in the urine of a healthy individual is :

(A) Granular cast
(B) Hyaline cast
(C) Red cell cast
(D) Epithelial cast

59. All are crystals found in acidic urine except :

(A) Calcium oxalate
(B) Uric acid
(C) Triple phosphate
(D) Cystine

60. The amount of Anticoagulant used in Blood bags is :

(A) 10 ml / 100 ml
(B) 12 ml / 100 ml
(C) 14 ml / 100 ml
(D) 15 ml / 100 ml

61. Heparin is the Anticoagulant of choice for the following tests, except :

(A) Prothrombin time
(B) Osmotic fragility
(C) Microhematocrit
(D) Arterial blood gas

62. LE cells can be demonstrated in :

(A) Blood
(B) Pleural fluid
(C) CSF
(D) All the above

63. Normal PCV in an adult male is :

(A) 30-35%
(B) 35-47%
(C) 40-54%
(D) 54-68%

64. The special stain for Lymphoblast is :

(A) Myeloperoxidase
(B) Sudan black
(C) Periodic Acid Schiff
(D) Chloroacetate esterase

65. The preservative used for Urine Catecholamine estimation is :

(A) Formic acid
(B) Boric acid
(C) Conc.Hydrochloric Acid
(D) Conc.Sulphuric Acid

66. Musty odour of Urine indicates :

(A) Diabetic ketosis
(B) Phenyl ketonuria
(C) Alkaptonuria
(D) Urinary tract infection

67. Normal Ph of Urine is :

(A) 4.6 – 8 (B) 3 – 5.5

(C) 6.5 – 9 (D) 4.6 – 6

68. The test for ketone bodies in Urine is :

(A) Gerhadts test (B) Rotheras test

(C) Harts test (D) Any of the above

69. The best stain for studying cervical cytology is :

(A) Giemsa (B) Papanicoloau's stain

(C) Haematoxylin and eosin (D) Wright's stain

70. C.S.F cell count in tuberculous meningitis varies between :

(A) 0 to 99 (B) 100 to 499

(C) 500 to 999 (D) 1000 to 5000

71. Isolated prolonged Prothrombin time is seen in :

(A) Factor 2 deficiency (B) Factor 5 deficiency

(C) Factor 7 deficiency (D) Factor 10 deficiency

72. Routine section cutting is done using :

(A) Rocking microtome (B) Rotary microtome

(C) Sliding microtome (D) Base sledge microtome

73. Cross matching is not absolutely indicated for transfusion of the following :

(A) Packed cells (B) Fresh frozen plasma

(C) Platelet concentrate (D) Platelet rich plasma

74. Normal platelet count is :

(A) 1.5 – 2.5 Lakhs (B) 1.5 – 3.5 Lakhs

(C) 1.5 – 4.5 Lakhs (D) 1.5 – 5.5 Lakhs

75. The colour code for citrated vacuitainer is :

(A) purple (B) red

(C) blue (D) white