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Ph.D. ENTRANCE EXAMINATION - 2020

Subject : Pathology
Date : 06.01.2020
Max Marks: 60

Duration: 01:30 Hrs.
Place : Dehradun

Student Name:

Invigilator Name:

Signature:

Signature:

1. Coagulative necrosis is:
   a. Characteristic of focal bacterial infections.
   b. Characteristic of hypoxic death.
   c. Characteristic by loss of tissue architecture.
   d. None of the above.

2. Dytrophic calcification are calcifications seen in:
   a. Skin layers
   b. Salivary glands
   c. Normal tissues
   d. Dead tissue

3. Diabetic gangrene is caused by:
   a. Vasospas
   b. Peripheral neuritis
   c. Atheroslerosis
   d. None of the above

4. Liquefation necrosis is commonly seen in:
   a. Brain
   b. Lung
   c. Liver
   d. Spleen

5. Stain used for demonstration of amyloid is:
   a. Congo red
   b. Masson's toichrome
   c. Vonkosa
   d. Reticulin

6. Physiologic programmed cell death is termed as:
   a. Apoptosis
   b. Lysis
   c. Autolysis
   d. Autopsy

7. Amyloidosis is commonly associated with:
   a. Chronic osteomyelitis
   b. Periostitis
   c. Acute osteomyelitis
   d. Multiple myeloma

8. Metastatic calcifications are seen in:
   a. Hypoparathyroidism
   b. Vitamin D deficiency
   c. Hypercalcemia
   d. All of the above

9. Which of the following is correctly matched
   a. Coagulation necrosis tuberculosis
   b. Caseation yellow fever
   c. Fat necrosis pancreatitis
   d. Gumma infarction

10. Cellular swelling and fatty change are example of :
    a. Reversible injury
    b. Irreversible injury
    c. Both a and b
    d. None of the above

11. Hypoxic death leads to:
    a. Liquefactive necrosis
    b. Coagulative necrosis
    c. Caseous necrosis
    d. Fat necrosis

12. Pyknosis is characterized by:
    a. Nuclear basophilia
    b. Nuclear shrinkage
    c. Nucleus disintegration
    d. Nucleolus disintegration

13. Which of the following is correct
    a. Pyknosis- shrinkage of nucleus
    b. Karyolysis- dissolution of nucleus
    c. Karyorrhexis- fragmentation of nucleus
    d. All of the above

14. Gangrene is the death of a part accompanied by:
    a. Suppuration
    b. Putrefaction
    c. Calcification
    d. Coagulation

15. The hormone dependent shedding of endometrium is an example of:
    a. Necrosis
    b. Autolysis
    c. Apoptosis
    d. None of the above

16. Maltory's degeneration seen in alcoholic liver disease is a form of:
    a. Hyaline degeneration
    b. Amyloid degeneration
    c. Hydropic degeneration
    d. Fatty degeneration

17. A reduction in the total leucocyte count is called:
    a. Leucocytosis
    b. Leucopenia
    c. Leucorrhoea
    d. Leukemia

18. Reduced number of platelet is found in all the conditions except:
    a. Disseminated intravascular coagulation.
    b. Aplastic anaemia
    c. Acute myelocytic leukemia
    d. Von willebrand disease

19. In hemephilic patient which of the following should not be given:
    a. Factor VIII concentrate
    b. Cryoprecipitate
    c. EACA
    d. Platelet factor

20. Normal adult haemoglobin contains:
    a. One alpha and one beta chain
    b. One alpha and two beta chains
    c. One beta chains and two alpha chains
    d. Two alpha chains and two beta chains

21. In megaloblastic anaemia the cells are:
    a. Macrocytic hyperchromic
    b. Macrocytic hypochromic
    c. Macroytic normochromic
    d. None of the above

22. Pernicious anaemia is associated with the deficiency of:
    a. Folic acid
    b. Vitamin B1
    c. Vitamin B6
    d. Vitamin B12

23. A patient reports with dyspnoea on slight exertion. He also has multiple spots and spontaneous hemorrhage. His RBC count is less than one lakh/mm^3 his hematocrit and haemoglobin is low. Most probable diagnosis is:
    a. Pernicious anemia
    b. Thalassemia
    c. Aplastic anemia
    d. Sprue

24. A patient with a bleeding disorder with increased bleeding time and normal clotting time is suffering from:
    a. Classic haemophilia
    b. Christmas disease
    c. Vitamin K deficiency
    d. Idiopathic thrombocytopenic purpura

25. Gingive are enlarged in leukemia because of:
    a. Capillary dilation
    b. Erythrocyte engorgement
    c. Edema
    d. WBC infiltration

26. Oedema may be caused by any of the following EXCEPT:
    a. An increase in the plasma protein concentration
    b. An increase in the capillary hydrostatic pressure
    c. An increase in the capillary permeability
    d. Lymphatic obstruction

27. The most common site of origin for venous thrombi leading to pulmonary embolism is:
    a. Ascending oaorta
    b. Portal vein
    c. Deep leg veins
    d. Right atrium

28. Edema is due to:
    a. Increased albumin in blood and decreased globin
    b. Decreased albumin conc. in blood
    c. Increased osmotic pressure
    d. None of the above

29. Anasarca means:
    a. Abnormal inflammatory process
    b. Severe generalized swelling
    c. Absence of proliferation of vessels following inflammation
    d. Presence of pus

30. All of the following are typically associated with loss of 40% of the circulating blood volume except:
    a. A decrease in the blood pressure
    b. A decrease in the central venous pressure
    c. A decrease in the heart rate
    d. A decrease in the urine output

31. Which of the following is common in all forms of shock?
    a. Sepsis
    b. Hypovolemia
    c. Vasoconstriction
    d. Impaired tissue prefusion

32. In hypovolemic shock:
    a. The central venous pressure ins high
    b. The extremities are pale, cold and sweating
    c. There is always s site of bleeding
    d. Urine output is unaffected

33. Shock is a circulatory disturbance characterized by:
    a. Increased blood pressure
    b. Decreased volume of circulation blood
    c. Elevated body temperature
    d. Decreased volume of interstitial fluid

34. Hypovolemic shock develops after loss of:
    a. 10% blood
    b. 20% blood
    c. 30% blood
    d. 40% blood

35. Following is the most important factor in the management of shock:
    a. Blood pressure
    b. Cardiac output
    c. CVP to 8 cm of water
    d. Deficiency of effective circulating blood volume

36. Heart failure cells are:
    a. Fibrocytes in myocardium
    b. Aschoji's giant cells
    c. Heamosiderin laden macrophages in alveoli
    d. Hypertrophic myocardial fibres

37. Synthesis of DNA occurs in Which phase of cell A cycle
    a. Mitosis - M phase
    b. Gap - G2 phase
    c. Gap - G1 phase
    d. Synthesis - S phase

38. The cells which have the capacity to multiply through out their life:
    a. Stable cells
    b. Permanent cells
    c. Labile cells
    d. None of the above

39. Which of the following has least capacity for regeneration:
    a. Cardiac muscle
    b. Skeletal muscle
    c. Neurons
    d. All of the above

40. Granulation tissue contains:
    a. Giant cells
    b. Fibroblasts
    c. Endothelial cells
    d. B&C

41. The first even in primary wound healing:
    a. Epithelial changes
    b. Organization
    c. Formation of blood cloth
    d. Acute inflammatory response

42. Wounds which are clean uninfected and surgically incised, with edge of wounds approxiamated by sutures heal by:
    a. Primary intention
    b. Secondary intention
    c. Cicatrisation
    d. All of the above

43. Large open wounds that are characterized by tissue loss and repaired by formation of granulation tissue in the floor of the wound is characteristic of:
    a. Secondary healing
    b. Primary healing
    c. Cicatrisation
    d. Regeneration

44. Incomplete fractures of the bone are called:
    a. Comminuted fracture
    b. Compound fracture
    c. Simple fracture
    d. Green stick fracture

45. Peripheral nerve regenerates at the rate of ___ mm per day:
    a. 1
    b. 2
    c. 0.5
    d. 5

46. All of the following promotes wound healing except:
    a. Protein
    b. Steroids
    c. Vitamin C
    d. Adequate oxygen supply

47. Correct sequence of cell cycle
    a. Go - G1 - S - G2 – M
    b. Go - G1 - G2 - S - M
    c. Go - M - G2 - S - G1
    d. Go - G1 - S - M - G2

48. Epitheloid cells are seen in all of the following except:
    a. Tuberculosis
    b. Granulation tissue
    c. Syphilis
    d. Sarcoidosis

49. Which of the following statement about fibrinous exudate is FALSE?
    a. It is associated with many types of severe inflammation
    b. It has low protein content
    c. It has fibrin precipitates
    d. It induces connective tissue organization

50. Some micro organisms produce a diffuse spreading inflammatory reaction due to the elaboration of:
    a. Coagulase
    b. Peroxidase
    c. Bradykinin
    d. Hyaluronidase

51. An acute inflammatory focus would attract:
    a. Monocytes
    b. Plasma cells
    c. Neutrophils
    d. Basophils

52. Granuloma is characterized by all of the following except:
    a. A specific type of chronic inflammation
    b. Accumulation of modified macrophages
    c. Initiated by a number of infectious and non infectious agents
    d. A reaction of acute inflammation

53. Which cell releases vasoactive amine so as to increase vascular permeability?
    a. Leukocyte
    b. Marcophage
    c. Mast cell
    d. Fibroblast

54. Prostaglandins are synthesized from:
    a. RNA template
    b. Rough endoplasmic reticulum
    c. Polyunsaturated fatty acids
    d. None of the above

55. Transudate is characterized by:
    a. Associated inflammatory conditions
    b. Low protein content
    c. Tendency to clot
    d. Specific gravity of above 1.018

56. Edema occurs due to:
    a. Increased capilary permeability
    b. Decreased capilary permeability
    c. Decreased interstitial fluid
    d. Decreased blood flow

57. Disappearance of nuclear chromatin is called as:
    a. Pyknosis
    b. Karyolysis
    c. Karyorhexis
    d. None

58. A patient has increased number of columnar cells in lower esophagus. He has which of the following change:
    a. Dysplasia
    b. Anaplasia
    c. Metaplasia
    d. Normal histology

59. Saddle embolus causes sudden death by blocking:
    a. Coronary arteries
    b. Cerebral arteries
    c. Pulmonary arteries
    d. Renal arteries

60. Egg shell calcification of Hilar Lymphnode is associated with:
    a. Silicosis
    b. Asbestosis
    c. Byssinosis
    d. Anthracosis

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