JEMAS(PG)-2022 QB No: 2101900001

Subject: M. Sc. in Perfusion Science (M. Sc PS)

Duration: 90 minutes **No of MCQ: 100** **Full Marks: 100**

Instructions

1. All questions are of objective type having four answer options for each, carry 1 mark each and only one option is correct. In case of incorrect answer or any combination of more than one answer, ¼ mark will be deducted.
2. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D. Question booklet series code (A, B, C, or D) must be properly marked on the OMR.
3. Use only **Black/Blue ball point pen** to mark the answer by complete filling up of the respective bubbles.
4. Write question booklet number and your roll number carefully in the specified locations of the **OMR**. Also fill appropriate bubbles.
5. Write your name (in block letter), name of the examination center and put your full signature in appropriate boxes in the OMR.
6. The OMR is liable to become invalid if there is any mistake in filling the correct bubbles for question booklet number/roll number or if there is any discrepancy in the name/ signature of the candidate, name of the examination center. The OMR may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
7. Candidates are not allowed to carry any written or printed material, calculator, pen, log-table, wristwatch, any communication device like mobile phones etc. inside the examination hall. Any candidate found with such items will be **reported against** and his/her candidature will be summarily cancelled.
8. Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
9. Hand over the OMR to the invigilator before leaving the Examination Hall.

1. All of the following cause microcytic hypochromic anaemia, except,
   (A) Lead poisoning
   (B) Thalassemia
   (C) Iron deficiency anaemia
   (D) Fanconi'sanaemia

2. Elevated serum ferritin, serum iron and percent transferrin saturation are most consistent with the diagnosis of :
   (A) Iron deficiency anaemia
   (B) Anemia of chronic disease
   (C) Hemochromatosis
   (D) Lead poisoning

3. All are true regarding Anemia of Chronic Diseases, except:
   (A) Decreased serum Iron
   (B) Decreased Ferritin
   (C) Decreased Total Iron Binding capacity
   (D) Increased Bone Marrow Iron

4. Which of the following is not seen in a chronic case of sickle cell anaemia:
   (A) Hepatomegaly
   (B) Pulmonary hypertension
   (C) Cardiomegaly
   (D) Myopathy

5. Most iron is stored in combination with:
   (A) Haemoglobin
   (B) Ferritin
   (C) Transferrin
   (D) Ascorbic acid

6. Increased osmotic fragility is seen in :
   (A) Sickle cell anaemia
   (B) Alpha Thalassemia
   (C) Hereditary spherocytosis
   (D) Non – Hodgkin's lymphoma

7. Microcytic anemia is seen cases of:
   (A) Sprue
   (B) Pernicious anemia
   (C) Iron deficiency
   (D) Latum infestation

8. Cold antibodies are seen in all except:
   (A) Syphilis
   (B) Mycoplasma
   (C) Infectious mononucleosis
   (D) Lymphoma

9. All of the following are seen in multiple myeloma except:
   (A) Renal failure
   (B) M- spike
   (C) Gum hypertrophy
   (D) Good response to Melphalan

10. Treatment of hairy cell leukaemia is:
   (A) Steroid
   (B) Multiple transfusion
   (C) Splenectomy
   (D) Pentostatin

11. Decreased serum iron and decreased total iron binding capacity is seen in :
   (A) Iron deficiency anemia
   (B) Anemia of chronic disease
   (C) Thalassemia
   (D) Sideroblastic anemia

12. Hairy cell leukemia is:
   (A) T cell disorder
   (B) B cell disorder
   (C) Both of the above
   (D) None of the above

13. The characteristic ECG change in hypothermia is:
   (A) T wave inversion
   (B) 'J ' wave
   (C) PR prolonged
   (D) ST segment depressed

14. The most effective treatment of atrial flutter is:
   (A) IV lignocaine
   (B) Low dose phenytoin
   (C) Atrial septal defect
   (D) Constrictive pericarditis

15. The best treatment for Wolff – Parkinson – White syndrome is:
   (A) Carotid massage
   (B) IV verapamil
   (C) Cardioversion
   (D) Surgical excision of the tract

16. In mitral stenosis the left ventricle undergoes:
   (A) Eccentric hypertrophy
   (B) Concentric hypertrophy
   (C) Irregular hypertrophy
   (D) No hypertrophy

17. Constrictive pericarditis is not caused by :
    (A) Tuberculosis
    (B) Pyogenic infection
    (C) Rheumatic fever
    (D) None of them

18. The infracted myocardium is replaced by scar tissue in:
    (A) 2 weeks
    (B) 4 weeks
    (C) 6 weeks
    (D) 10 weeks

19. Drug of choice in ventricular arrhythmia in MI is:
    (A) Phenytoin
    (B) Tocainide
    (C) Lignocaine
    (D) Disopyramide

20. Treatment of hypertensive emergency is:
    (A) Hydralazine
    (B) Glucokinase
    (C) Propanolol
    (D) Furosemide

21. Dicortic pulse is seen in:
    (A) Cardiac tamponade
    (B) Aortic regurgitation
    (C) Dilated cardiomyapathy
    (D) Restrictive cardiomyopathy

22. Valsalva manoeuvre increase loudness of murmur in:
    (A) Aortic stenosis
    (B) Aortic regurgitation
    (C) Mitral stenosis
    (D) Hypertrophic cardiomyopathy

23. Tortuous bronchial arteries are seen in:
    (A) Coarctation of aorta
    (B) Tetralogy of Fallot
    (C) VSD
    (D) AS

24. Sudden death is common in:
    (A) Mitral stenosis
    (B) Arterial VSD
    (C) Aortic stenosis
    (D) PDA

25. Hemopericardium is seen in:
(A) Chest injury
(B) MI
(C) Ruptured Aortic aneurysm
(D) All

26. The one organism which may be responsible for coronary artery disease:
(A) Chlamydia
(B) Klebsiella
(C) E. coli
(D) Mycoplasma

27. Following are true for unstable angina except :
(A) ST elevation or depression
(B) Enzymes (transaminases) are elevated
(C) Rest pain
(D) Recent onset angina

28. Coronary bypass surgery is advised for:
(A) Aortoarteritis
(B) Multiple vessel disease
(C) Aortic stenosis
(D) Angina pectoris

29. Most of the deaths after a myocardial infarction are seen within the first –
(A) 1 hr.
(B) 6 hr.
(C) 24 hr.
(D) One week

30. The most common tumour of myocardium is:
(A) Myxoma
(B) Rhabdomyoma
(C) Sarcoma
(D) Fibroma

31. The hallmark of generalised obstructive lung disease is:
(A) Reduced tidal volume
(B) Reduced residual volume
(C) Reduced timed vital capacity
(D) Reduced vital capacity

32. Nasal allergy is most often due to:
(A) Pollen grains
(B) Animal dust
(C) House dust
(D) Automobile dust

33. Causes of hypersensitivity pneumonitis is/are:
    (A) Silicosis
    (B) Farmer 's lung
    (C) Anthracosis
    (D) Asbestosis

34. Which of the following disease coexist with silicosis
    (A) Sarcoidosis
    (B) Tuberculosis
    (C) Lymphoma
    (D) Rheumatoid arthritis

35. Mycoplasma infection stimulates:
    (A) Pneumococcal pneumonia
    (B) Viral pneumonia
    (C) Pulmonary oedema
    (D) Pulmonary infarction

36. Most unlikely cause of pleural effusion is:
    (A) Thyroid tumors
    (B) Bronchial carcinoma
    (C) Carcinoma breast
    (D) Lymphoma

37. Which of the following is characteristic of pulmonary embolism:
    (A) Respiratory alkalosis
    (B) Right axis deviation
    (C) Normal A-a Gradient
    (D) Left Ventricular strain

38. Total minute volume of normal lung is:
    (A) 2 L
    (B) 4 L
    (C) 4.5 L
    (D) 7 L

39. Miliary motting of lung is seen in all except:
    (A) Silicosis
    (B) Aspergillosis
    (C) Hemosiderosis
    (D) Tuberculosis

40. Best position to reveal small pleural effusions on chest X- ray is:
    (A) AP view
    (B) PA view
    (C) Lateral view
    (D) Lateral decubitus view

41. Tubular breathing is seen in:
    (A) Pleural effusion
    (B) Consolidation
    (C) Pleurisy
    (D) Tuberculous cavity

42. Pneumothorax could be a complication of:
    (A) Staphylococcal pneumonia
    (B) Pneumococcal pneumonia
    (C) Klebsiella pneumonia
    (D) Viral pneumonia

43. Kartagener 's syndrome is not associated with:
    (A) Situs inversus
    (B) Subluxation of lens
    (C) Bronchiectasis
    (D) Sinusitis

44. Static lung compliance is decreased in:
    (A) Asthma
    (B) Radiation fibrosis
    (C) Emphysema
    (D) None

45. Most common symptoms of pulmonary embolism is:
    (A) Chest pain
    (B) Dyspnoea
    (C) Haemoptysis
    (D) Cough

46. Pulmonary embolism is diagnosed by:
    (A) Ultra sound
    (B) X – ray chest PA view
    (C) Ventilation perfusion scan
    (D) CT scan

47. Bilateral malignant pleural effusion most often seen:
    (A) Ca breast
    (B) Ca lung
    (C) Mesothelioma
    (D) Lymphoma

48. The most common posterior mediastinal mass is:
    (A) Neurogenic tumour
    (B) Lymph nodes
    (C) Parasitic cyst
    (D) Teratoma

49. Curshmann 's spirals in sputum are seen in:
(A) Tuberculosis cavity
(B) Asthma
(C) Bronchitis
(D) Bronchiectasis

50. Cotton dust is associated with:
(A) Byssinosis
(B) Asbestosis
(C) Bagassosis
(D) Silicosis

51. Dialysis patients are prone to develop:
(A) Lead toxicity
(B) Iron toxicity
(C) Aluminium toxicity
(D) Zinc toxicity

52. Membranous glomerulonephritis can be caused by:
(A) Penicillin
(B) Sulfonamide
(C) Gold
(D) Rifampicin

53. What percentage of cardiac output passes through the kidney normally:
(A) 1%
(B) 5%
(C) 20%
(D) 30%

54. All the following are causes of Acute Pancreatitis except:
(A) Gall Stones
(B) Alcohol
(C) Hemochromatosis
(D) Hypercalcemia

55. The area of colon which is least visualized by barium studies:
(A) Sigmoid
(B) Hepatic flexure
(C) Splenic flexure
(D) Caecum

56. Dumping syndrome is due to:
(A) Vagotomy
(B) Small stomach
(C) Hypertonic fluid contents in bowel
(D) None of the above

57. Hypomotility of small intestine is a feature of:
(A) Diabetes
(B) Lymph node hyperplasia
(C) Irritable bowel hyperplasia
(D) Cholera

58. Organism which causes pancreatitis:
(A) Measles
(B) Mumps
(C) Influenza
(D) Herpes

59. Incubation period of hepatitis B is:
(A) 6 weeks to 6 months
(B) 6 days to 6 weeks
(C) 6 months to 6 years
(D) More than 6 years

60. Delta virus is associated with:
(A) HBV
(B) HAV
(C) Non-a non-b
(D) Obstructive jaundice

61. All the following drugs are used in hepatic encephalopathy except:
(A) Mannitol
(B) Metronidazole
(C) Lactulose
(D) Phenobarbitone

62. Tumor marker form medullary carcinoma thyroid is:
(A) T3
(B) T4
(C) TSH
(D) Calcitonin

63. Drug used in severe hypercalcemia:
(A) Frusemide
(B) Prednisolone
(C) Pamidronate
(D) All

64. Most common tumour of pituitary is:
(A) Prolactinoma
(B) GH secreting adenoma
(C) ACTH secreting adenoma
(D) TSH secreting adenoma

65. TSH infusion test is used to detect:
(A) LH
(B) ACTH
(C) FSH
(D) GH reserve

66. Most common cause of hyperparathyroidism is:
(A) Solitary adenoma
(B) Chief cell hyperplasia
(C) Multiple adenoma
(D) Werner's syndrome

67. Migraine causes the following except:
(A) Paraesthesia
(B) Blurring of vision
(C) Dysphagia
(D) Hypertonia

68. The commonest site of cerebral hemorrhage in hypertension is:
(A) Pons
(B) Cerebrum
(C) Putamen
(D) Thalamus

69. With which of the following signs is not suggestive of a cervical spinal cord injury:
(A) Flaccid paralysis
(B) Hyperactive stretch reflex
(C) Spasticity
(D) Muscular incoordination

70. Most common cause of intracranial hemorrhage is:
(A) Sub arachnoid hemorrhage
(B) Intracerebral hemorrhage
(C) Subdural hemorrhage
(D) Extradural hemorrhage

71. Alzheimer's Disease is associated with:
(A) Delerium
(B) Delusion
(C) Dementia
(D) Depression

72. Subdural empyema is most commonly caused by:
(A) H influenza
(B) Staphylococcus aureus
(C) Streptococcus pneumoniae
(D) E. Coli

73. Melphalan is used in:
(A) Wilm's tumor
(B) Retinoblastoma
(C) Multiple myeloma
(D) Nephroblastoma

74. Which is not a feature of multiple myeloma:
(A) Bony lesions
(B) Renal failure
(C) 'M' Spike
(D) Cutaneous nodules

75. Low serum iron is seen in:
(A) Iron deficiency anaemia
(B) Sideroblastic anemia
(C) Thallassaemia traits
(D) Sickle cell anaemia

76. Loud first heart sound is heard in:
(A) Mitral stenosis
(B) MR
(C) MV prolapsed
(D) Calcified mitral leaflet

77. Varying pulse pressure with normal rhythm is seen in:
(A) Asthma
(B) Respiratory failure
(C) Cardiac tamponade
(D) Left ventricular failure

78. Which of the following is not used to treat acute pulmonary edema:
(A) IV fluids
(B) IV morphine
(C) IV furosemide
(D) Oxygen

79. Sine wave pattern in ECG is seen in:
(A) Hypokalemia
(B) Hyperkalemia
(C) Hyponatremia
(D) Hypernatremia

80. The causes of pericarditis include all except:
(A) Uraemia
(B) Hypertension
(C) Rheumatic fever
(D) Tuberculosis

81. The most common type of cardiomyopathy is:
(A) Dilated cardiomyopathy
(B) Hypertrophic cardiomyopathy
(C) Restrictive cardiomyopathy
(D) All of the above

82. The most common aerobic organism causing lung abscess is:
(A) Pneumococcus
(B) Staphylococcus
(C) Klebsiella
(D) E. coli

83. Hypercalcemia occurs in which type of lung cancer:
(A) Oat cell
(B) Giant cell
(C) Squamous cell
(D) Alveolar cell

84. The following are feature of early stages of adult respiratory distress syndrome except:
(A) Hypoxia
(B) Hypercapnia
(C) Pulmonary oedema
(D) Stiff lungs

85. Respiratory alkalosis is seen in:
(A) Morphine poisoning
(B) Ethanol poisoning
(C) Salicylate poisoning
(D) Barbiturate poisoning

86. Silent chest is seen in:
(A) Very severe asthma
(B) Chronic bronchitis
(C) Emphysema
(D) Bronchiectasis

87. Most common clinical sign of pulmonary embolism is:
(A) Tachypnoea
(B) Tachycardia
(C) Cyanosis
(D) Sweating

88. In haemoptysis blood usually comes from:
(A) Bronchial veins
(B) Pulmonary embolism
(C) Bronchial arteries
(D) Pulmonary arteries

89. Respiratory alkalosis occurs in:
(A) Diabetic ketosis
(B) Pyloric stenosis
(C) Primary aldosteronism
(D) Excessive ventilation

90. Renal papillary necrosis can be caused by:
(A) Phenacetin
(B) Sulphonamides
(C) Gentamicin
(D) Penicillin

91. All can be manifestation of polycystic kidney except:
(A) Acute retention
(B) Renal hypertension
(C) Renal failure
(D) Heamaturia

92. In nephrotic syndrome the vaccine given:
(A) Hemophilus vaccine
(B) Polyvalent pneumococcal vaccine
(C) Meningococcal vaccine
(D) Tetanus toxoid

93. Recurrent hematuria in a deaf and mute is seen in:
(A) Fanconi 's anemia
(B) Alport 's syndrome
(C) Renal cysts
(D) Nephrotic syndrome

94. In chronic renal failure there is:
(A) Decreased anion gap
(B) Normal anion gap
(C) Increased anion gap
(D) Metabolic alkalosis

95. Which of the following is normal cast in urine:
(A) Granular
(B) Waxy
(C) Epithelial
(D) Hyaline

96. Polycystic kidney is not associated with cysts in:
(A) Liver
(B) Pancreas
(C) Brain
(D) Lungs

97. The most common cause of chronic renal failure is:
(A) Diabetes mellitus
(B) Hypertension
(C) Glomerular diseases
(D) Interstitial diseases

98. Common type of Hepatitis in India is:
(A) Hepatitis B
(B) Hepatitis A
(C) Hepatitis D
(D) Hepatitis C

99. Fatty change in liver is seen with use of:
(A) Tetracycline
(B) Erythromycin
(C) Chlorpromazine
(D) Acetoaminophen

100. Commonest type of kidney disease seen among the children is :
(A) Post-streptococcal glomerulonephritis
(B) Membranous glomerulonephritis
(C) Membrano-proliferative glomerulonephritis
(D) Minimal change glomerulonephritis