

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकीसंस्थान, तिरुवनंतपुरम्-11
SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY
THIRUVANANTHAPURAM—695 011

ENTRANCE EXAMINATION - ACADEMIC SESSION JANUARY 2018

PROGRAMME: DM/PDCC Cardiothoracic and Vascular Anaesthesia

Time: 90 Minutes

Max. Marks: 100

(Select the most appropriate answer)

(There are **no negative** marks for wrong answers)

1) A patient is being ventilated with a set tidal volume of 750 mL at a rate of 10 breaths/min. The patient is making no inspiratory effort. The measured minute ventilation is 6 L and the peak airway pressure is 30 cm H₂O. What is the compression factor for this ventilator delivery circuit?

- A. 2 mL/(cm H₂O)
- B. 3 mL/(cm H₂O)
- C. 4 mL/(cm H₂O)
- D. 5 mL/(cm H₂O)

2)* Which one of the following respiratory parameters is increased in neonates compared with adults?

- A. Tidal volume (mL/kg)
- B. Alveolar ventilation (mL/kg/min)
- C. Functional residual capacity (mL/kg)
- D. PaCO₂

3) Which of the following is normal value for a healthy 6-month-old, 7-kg infant?

- A. Hemoglobin 17 g/dL
- B. Heart rate 90 beats/min
- C. Respiratory rate 30 breaths/min
- D. Systolic blood pressure of 60 mmHg

4) An acute increase in PaCO₂ of 10 mm Hg will result in a decrease in pH of:

- A. 0.01 pH unit
- B. 0.02 pH unit
- C. 0.04 pH unit
- D. 0.08 pH unit

5) Frozen erythrocytes can be stored for:

- A. 1 year
- B. 3 years
- C. 5 years
- D. 10 years

6) A patient with known Wolff-Parkinson-White (WPW) syndrome develops a wide complex tachycardia during a hernia operation under general anesthesia. Vital signs are stable and pharmacologic treatment is desired. Which of the following drugs is **MOST** likely to be successful in controlling heart rate in this patient?

- A. Verapamil
- B. Esmolol
- C. Adenosine
- D. Procainamide

7) Useful therapy for hypercyanotic "tet spells" in patients with Tetralogy of Fallot might include any of the following **EXCEPT**

- A. Esmolol
- B. Morphine
- C. Phenylephrine
- D. Isoproterenol

8) The pressure gauge on a size "E" compressed-gas cylinder containing O₂ reads 1600 psi. How long could O₂ be delivered from this cylinder at a rate of 2 L/min?

- A. 90 minutes
- B. 140 minutes
- C. 250 minutes
- D. 320 minutes

9) After induction and intubation with confirmation of tracheal placement, the O₂ saturation begins to fall. The O₂ analyzer shows 4% inspired oxygen. The oxygen line pressure is 65 psi. The O₂ cylinder on the back of the anesthesia machine has a pressure of 2100 psi and is turned on. The oxygen saturation continues to fall. The next step should be to

- A. Exchange the cylinder
- B. Replace pulse oximeter probe
- C. Disconnect O₂ line from hospital source
- D. Extubate and start mask ventilation

10) The maximum leakage allowed in operating room equipment is:

- A. 10 μ A (micro Ampere)
- B. 100 μ A (micro Ampere)
- C. 1 μ A (micro Ampere)
- D. 0.1 μ A (micro Ampere)

11. Liquid oxygen must be stored well below its critical temperature because gases can be liquefied by pressure only if stored below their critical temperature. What is its critical temperature?

- A. -119°C
- B. 0°C
- C. -150°C
- D. -180°C

12. Which of the following conditions would be associated with the **LEAST** risk of venous air embolism during removal of a central line?

- A. Spontaneous breathing, head up
- B. Spontaneous breathing, flat
- C. Spontaneous breathing, Trendelenburg
- D. Mechanical ventilation, Trendelenburg

13. Which of the following muscle of the larynx is innervated by the external branch of the superior laryngeal nerve?

- A. Vocalis muscle
- B. Thyroarytenoid muscles
- C. Posterior cricoarytenoid muscle
- D. Cricothyroid muscle

14. Which of the following would hasten the onset and increase the clinical duration of action of a local anesthetic, and provide the **GREATEST** depth of motor and sensory blockade when used for epidural anesthesia?

- A. Increasing the volume of local anesthetic
- B. Increasing the concentration of local anesthetic
- C. Increasing the dose
- D. Placing the patient in the head-down position

15. By what percentage is tissue metabolic rate reduced during cardiopulmonary bypass at 30° C?

- A. 10%
- B. 25%
- C. 50%
- D. 75%

16. Which one of the following best describes the mode of ventilation that changes the number of mandatory breaths and pressure support level according to the patient's breathing pattern?

- A. Automatic tube compensation
- B. Volume ventilation plus
- C. Adaptive support ventilation
- D. Volume-assured pressuresupport

17. In pressure-regulated volume control mode, the peak inspiratory pressure is kept at a lowest level possible by altering the _____ in response to changing airway or compliance characteristics.

- A. peak flow and tidal volume
- B. peak flow and inspiratory time
- C. plateau pressure and tidal volume
- D. plateau pressure and inspiratory time

18. What is Nesiritide?

- A. Angiotensin converting enzyme inhibitor
- B. Recombinant B-type natriuretic peptide
- C. Racemic mixture of four diastereomers
- D. Selective dopamine-1 receptor agonist

19. When CPAP is in use, the total amount of work of breathing is provided by the:

- A. patient
- B. ventilator
- C. patient and ventilator
- D. pressure level of CPAP

20. What is the estimated airway resistance of a patient whose peak inspiratory pressure is 25 cm H₂O and whose plateau pressure is 10 cm H₂O. The ventilator flow rate is set at 60 L/min (1 L/sec).

- A. 4 cm H₂O/L/sec
- B. 15 cm H₂O/L/sec
- C. 6 cm H₂O/L/sec
- D. 2.4 cm H₂O/L/sec

21. What is the normal duration of the QRS complex of Electrocardiogram?

- A. 0.06 to 0.10 s
- B. 0.12 and 0.20 s
- C. 0.2 to 0.4 s
- D. 0.44 to 0.46 s

22. Each of the following is cited as an advantage of calcium hydroxide lime (Amsorb Plus, Dräger sorb) over soda lime **EXCEPT**:

- A. Compound A is not formed
- B. CO is not formed
- C. More absorptive capacity per 100 g of granules
- D. It does not contain NaOH or KOH

23. When electrocardiogram (ECG) electrodes are placed for a patient undergoing a magnetic resonance imaging (MRI) scan, which of the following is true?

- A. Electrodes should be as close as possible and in the periphery of the magnetic field
- B. Electrodes should be as close as possible and in the center of the magnetic field
- C. Placement of electrodes relative to field is not important as long as they are far apart
- D. ECG cannot be monitored during an MRI scan

24. Which of the following arrangements of rotameters on the anesthesia machine manifold is safest with left-to-right gas flow?

- A. O₂, CO₂, N₂O, air
- B. CO₂, O₂, N₂O, air
- C. Air, CO₂, O₂, N₂O
- D. Air, CO₂, N₂O, O₂

25. The minimal ventricular fibrillation threshold of current applied to the skin is:

- A. 1 mA
- B. 10 mA
- C. 100 mA
- D. 500 mA

26. Which anesthetic agent is associated with the highest level of carbon monoxide formation?

- A. Halothane
- B. Sevoflurane
- C. Isoflurane
- D. Desflurane

27. Gas from an N₂O compressed-gas cylinder enters the anesthesia machine through a pressure regulator that reduces the pressure to

- A. 60 psi
- B. 45 psi
- C. 30 psi
- D. 15 psi

28. All the following are true regarding cleaning and sterilizing the Laryngeal Mask Airway (LMA) **EXCEPT**:

- A. It should first be washed with detergent and water
- B. The LMA can be sterilized by using the steam autoclave
- C. Ethylene oxide should not be used to sterilize the LMA
- D. The LMA can be soaked in liquid chemical agents for up to 30 minutes

29. How can the low-pressure system in all anesthesia machines be checked for leaks?

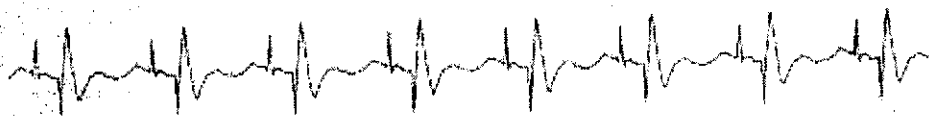
- A. Positive pressure from the breathing system test
- B. Elapsed time pressure test
- C. Fresh gas line occlusion test
- D. A negative pressure test

30. What does this ECG show?



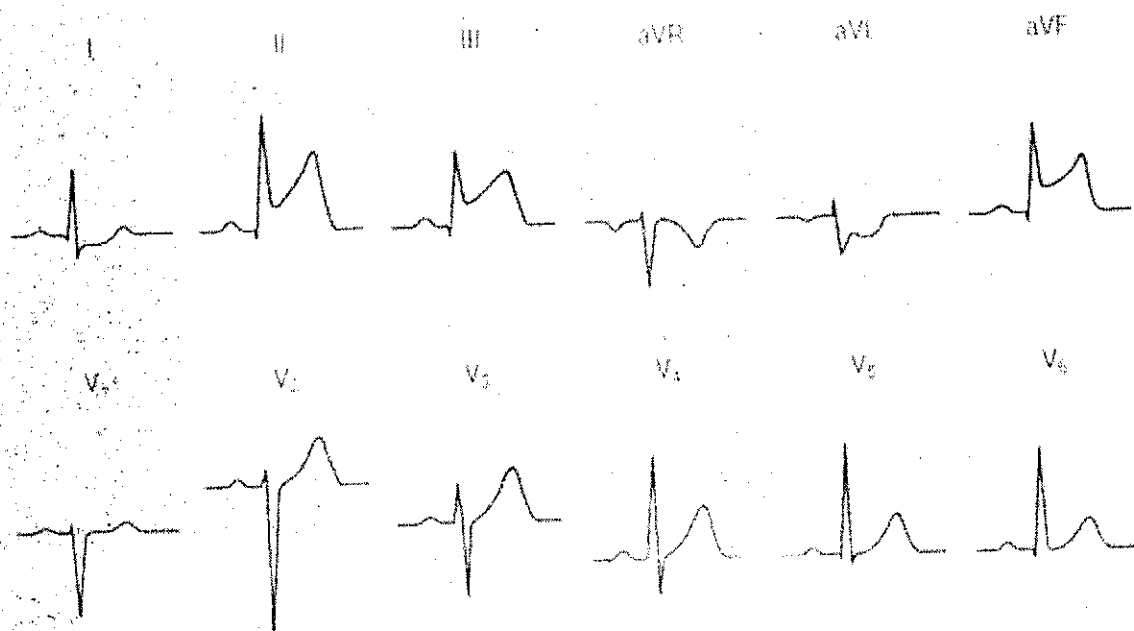
- A. Mobitz Type II
- B. Wenckebach Block
- C. Complete Heart Block
- D. Sinus arrest

31. What does this ECG show?



- A. Atrial pacing
- B. Atrial ectopics
- C. Ventricular pacing
- D. DDD pacing

32. What is the diagnosis?



- A. Anterior wall Myocardial infarction
- B. Lateral wall Myocardial infarction
- C. Inferior wall Myocardial infarction
- D. Antero-septal Myocardial infarction

33. All the following are true regarding changes in the cardiovascular system during pregnancy **EXCEPT**:

- A. Intravascular fluid volume Increased 35%-45%
- B. Erythrocyte volume Increased 20%-30%
- C. Stroke volume Increased 25%-30%
- D. Systemic vascular resistance Increased 20%

34. A 12-hour-old, 1800-g neonate, 30 weeks post-gestational age, is noted in the ICU to begin making twitching movements. Blood pressure is 45 mm Hg systolic, blood glucose is 50 mg/dL, and urine output is 5 mL/hr. The O₂ saturation on pulse oximeter is 88%. The **MOST** appropriate course of action to take at this point would be:

- A. Administer calcium gluconate (2 mL of 10% solution)
- B. Glucose 10 mg IV over 5 minutes (2 mL of D5W)
- C. Hyperventilate with 100% O₂
- D. Administer a 20-mL bolus of 5% albumin

35. The pulmonary vascular resistance in newborn decreases to that of adult by the age:

- A. 1 to 2 days
- B. 1 to 2 weeks
- C. 1 to 2 months
- D. 1 year

36. What volume of packed red blood cells (PRBCs) with an Hematocrit of 60 is needed to raise the Hct from 20 to 28 in a 10-kg, 11-month-old?

- A. 55 mL
- B. 105 mL
- C. 155 mL
- D. 200 mL

37. During the first minute of apnea, the PaCO₂ will rise by:

- A. 2 mm Hg/min
- B. 4 mm Hg/min
- C. 6 mm Hg/min
- D. 8 mm Hg/min

38. The primary determinant of local anesthetic potency is

- A. pKa
- B. Molecular weight
- C. Lipid solubility
- D. Protein binding

39. The artery of Adamkiewicz **MOST** frequently arises from the aorta at which spinal level?

- A. T1-T4
- B. T5-T8
- C. T9-T12
- D. L1-L4

40. A 31-year-old patient has been in the ICU on a ventilator for 24 hours after a motor vehicle accident. The patient does not open his eyes to any stimulus and has no verbal or motor response. The Glasgow Coma Scale corresponding to this patient would be

- A. 0
- B. 1
- C. 2
- D. 3

41. Which one of the following is the calculated rapid shallow breathing index when the spontaneous respiratory rate is 14 breaths/min and tidal volume is 0.5 L (500ml).

- A. 7
- B. 28
- C. 14.5
- D. 13.5

42. During surgery for correction of scoliosis, somatosensory evoked potential (SSEP) monitoring is employed. An increase in SSEP latency and a decrease in amplitude could be explained by each of the following **EXCEPT**

- A. Anterior spinal artery syndrome
- B. Propofol infusion (200 $\mu\text{g}/\text{kg}/\text{min}$)
- C. Hypotension
- D. 2 MAC isoflurane anesthesia

43. Which of the following properties of epidurally administered local anesthetics determines the extent to which epinephrine will prolong the duration of blockade?

- A. Molecular weight
- B. Lipid solubility
- C. pKa
- D. Concentration

44. Manifestations of Hypocalcemia include all the following **EXCEPT**:

- A. QT shortening
- B. Hyperreflexia
- C. Peripheral vasodilatation
- D. Laryngospasm

45. During manual Cardio-pulmonary Resuscitation for an average adult, rescuers should perform chest compression to a depth of at least:

- A. 5 cm
- B. 4 cm
- C. 6 cm
- D. 2.5 cm

46. According to 2015 AHA Guidelines for Cardio-pulmonary Resuscitation, in adult victims of cardiac arrest, it is reasonable for rescuers to perform chest compressions at a rate of:

- A. 100 -120/minute
- B. 60 -70/minute
- C. 100 -120/minute
- D. 100 -120/minute

47. Failure to achieve an ETCO₂ of _____ mmHg by waveform capnography after 20 minutes of Cardio-pulmonary Resuscitation has been associated with an extremely poor chance of Return of Spontaneous Circulation and survival.

- A. 10
- B. 15
- C. 20
- D. 25

48. The major accessory muscles of inspiration include all the following **EXCEPT**:

- A. Scalene muscles
- B. Sternocleidomastoid muscles
- C. Pectoralis major muscles
- D. Internal intercostal muscles

49. Cartilage is found in which of the following structures of the tracheobronchial tree?

- A. Bronchioles
- B. Respiratory bronchioles
- C. Segmental bronchi
- D. Terminal bronchioles

50. Which of the following states that the rate of gas diffusion is inversely proportional to the weight of the gas?

- A. Graham's law
- B. Charles' law
- C. Henry's law
- D. Gay-Lussac's law

51. The Maximum Voluntary Ventilation in normal healthy men aged 20 to 30 years is:

- A. 60 L/min
- B. 100 L/min
- C. 170 L/min
- D. 240 L/min

52. The mean intraluminal pressure in the pulmonary capillaries is

- A. 5 mm Hg
- B. 10 mm Hg
- C. 15 mm Hg
- D. 20 mm Hg

53. The value of the pK in the Henderson-Hasselbalch equation is:

- A. 1.0
- B. 6.1
- C. 7.4
- D. 20.1

54. Under normal circumstances, about _____ mL of oxygen are consumed by the tissues during 1 minute.

- A. 100
- B. 250
- C. 150
- D. 75

55. Which of the following has the most powerful effect on the respiratory components of the medulla?

- A. Decreased O_2
- B. Increased H^+
- C. Decreased CO_2
- D. Increased pH

56. Which of the following will readily diffuse across the blood-brain barrier?

- A. CO_2
- B. H^+
- C. HCO_3^-
- D. H_2CO_3

57. During which phase of action potential does the inward flow of Ca^{++} into the heart cells stop?

- A. Phase 3
- B. Phase 2
- C. Phase 4
- D. Phase 1

58. Normal value of Mixed venous O_2 content in the adult is:

- A. 13–16mL/dL
- B. 18–20mL/dL
- C. 4–5.5mL/dL
- D. 19–21mL/dL

59. Thermodilution cardiac output measurement is prone to errors by all except:

- A. Rapid fluid blouses
- B. Tricuspid regurgitation
- C. Ventricular septal shunts
- D. Mitral regurgitation

60. Which one of the following is **INCORRECT** regarding a person with AB blood group?

- A. No antibodies in plasma
- B. Can receive RBC from persons with blood group A, B, AB, O
- C. Can receive plasma from persons of AB group
- D. Can receive plasma from persons with blood group A, B, AB, O

61. The normal duration of the P-R interval is no longer than:

- A. 0.12 second
- B. 0.15 second
- C. 0.20 second
- D. 0.50 second

62. Mixed-venous oxygen saturation (SVO_2) is increased by all of the following **EXCEPT**:

- A. Sepsis
- B. Arterio-venous fistula
- C. Cyanide poisoning
- D. Acidosis

63. A brittle diabetic would be an ASA class

- A. II
- B. III
- C. IV
- D. I

64. Anion gap metabolic acidosis is seen in all of the following **EXCEPT**:

- A. Diabetic ketoacidosis
- B. Diarrhoea
- C. Lactic acidosis
- D. Starvation

65. Spot the **INCORRECT**. Minimum Alveolar Concentration (%) of inhaled agent:

- A. Desflurane 3
- B. Isoflurane 1.15
- C. N_2O 104
- D. Sevoflurane 1.71

66. Contraindications for the use of an Intra-Aortic Balloon Pump (IABP) include all the following **EXCEPT**:

- A. Severe aortic regurgitation
- B. Major coagulopathy
- C. Sepsis
- D. Impending myocardial infarction

67. Spot the wrong statement regarding Regional anaesthesia using a nerve stimulator:

- A. DC current is used to locate the nerve
- B. A current of up to 5 mA is needed to locate the nerve
- C. Paraesthesia is not required for successful blocks
- D. 50 Hz frequency stimuli are used

68. An end-tidal carbon dioxide waveform which does not return to the baseline during inspiration indicates which one of the following?

- A. Chronic obstructive airway disease
- B. Pulmonary embolism
- C. Rebreathing
- D. Positive End-Expiratory Pressure

69. Spot the wrong statement.

- A. 0.1 to 0.2 msec square wave stimulus of frequency 0.1 to 1 Hz applied to a peripheral nerve is the most precise method of assessing partial neuromuscular block.
- B. Post-tetanic facilitation is used to assess profound degrees of neuromuscular block.
- C. Double burst stimulation allows a more accurate visual assessment than Train-of-four for residual neuromuscular blockade.
- D. To use Train-of-four (TOF), 4 twitches of 2 Hz each is applied over 2 seconds, with a gap of 10 seconds between each TOF

70. Spot the **INCORRECT** statement regarding sources of error in pulse oximetry.

A. HbF – No significant clinical change

B. MetHb – False low reading

C. CoHb – False highreading

D. Methylene blue – False high reading

71. Spot the **INCORRECT** statement regarding Electrocardiogram.

A. The bipolar leads measure voltage differences between 2 electrodes.

B. The unipolar (V1-6) measure voltage at different electrodes relative to a zero point.

C. Positioning of electrodes on bony prominences should be avoided (to prevent artifacts).

D. The CM5 configuration is able to detect 89% of S-T segment changes due to ventricular ischaemia.

72. Spot the **INCORRECT** statement regarding Milrinone.

A. Increases cardiac output

B. Decreases systemic vascular resistance and pulmonary vascular resistance

C. Increases intracellular concentrations of cAMP

D. Usual maintenance dose is 0.5 mg/kg/minute

73. Spot the **INCORRECT** statement regarding Sodium Nitroprusside.

- A. Does not affect hypoxic pulmonary vasoconstriction
- B. Risk of increased intracranial pressure
- C. Has pulmonary vasodilator effects
- D. Signs of nitroprusside toxicity include cyanosis and decreased mixed venous PO_2

74. Spot the **INCORRECT** statement regarding Levosimendan

- A. Increases heart rate
- B. Increases cardiac output
- C. Decreases systemic vascular resistance
- D. Increases intracellular Ca^{++}

75. The most sensitive indicator of a successful resuscitation to each step in a neonate is an increase in

- A. Oxygen saturation
- B. End-tidal CO_2
- C. Heart rate
- D. Respiratory rate

76. The recommended dose of naloxone for reversal of opioid overdose in neonates is:

- A. 0.1 mg/kg
- B. 0.4 mg/kg
- C. 1 mg/kg
- D. 0.01 mg/kg

77. Major plasma proteins in Cryoprecipitate include all the following **EXCEPT**:

- A. Factor VIII
- B. Factor XIII
- C. Factor X
- D. Fibrinogen

78. The most valid single test for post-thoracotomy respiratory complications is the:

- A. Residual Volume / Total lung Capacity
- B. Predicted postoperative FEV₁
- C. Forced Vital capacity
- D. FEV₁ %

79. Which one of the following is **NOT** a guideline of the Surviving Sepsis Campaign?

- A. Norepinephrine should be the first vasopressor of choice.
- B. Colloids should be the initial fluid of choice in the resuscitation of severe sepsis and septic shock.
- C. Hydrocortisone is not indicated if fluid therapy and vasopressor restores hemodynamic stability.
- D. Glucose management in the ICU to maintain glycemia < 180 mg/dL is indicated.

80. PulsusParvus and PulsusTardus are characteristics of which of the following condition?

- A. Hypertrophic cardiomyopathy
- B. Systolic left ventricular failure
- C. Cardiac tamponade
- D. Aortic stenosis

81. All of the following are normal cardiovascular pressures

EXCEPT:

- A. Mean right atrial pressure of 1 to 5 mm Hg
- B. End-diastolic Right Ventricular pressure of 1 to 7 mm Hg
- C. Mean left atrial pressure of 12 to 19 mm Hg
- D. End-diastolic Left Ventricular pressure of 5 to 12 mm Hg

82. Spot the **INCORRECT** statement regarding the relation of central venous waveform component and phase of cardiac cycle.

- A. c wave in Early systole
- B. x descent in Mid-systole
- C. v wave in Mid-late diastole
- D. a wave in End-diastole

83. Spot the **INCORRECT** statement regarding the relation of central venous waveform component and the mechanical event.

- A. c wave related to isovolumic ventricular contraction
- B. v wave related to filling of ventricle
- C. x descent related to atrial relaxation
- D. y descent related to early ventricular filling

84. Spot the **INCORRECT** statement regarding characteristics of the abnormal conditions mentioned below.

- A. Tricuspid stenosis: Dominant x descent, Steep y descent
- B. Tricuspid regurgitation: Tall systolic c-v wave, Loss of x descent
- C. Right ventricular ischemia: Tall a and v waves, Steep x and y descents
- D. Atrial fibrillation: Prominent c wave, Loss of a wave

85. Factors increasing pulmonary vascular resistance include all the following **EXCEPT**:

- A. Atelectasis
- B. Hypercarbia
- C. Catecholamines
- D. High FiO_2

86. Identify the **INCORRECT** Blood/Gas Partition Coefficient.

- A. Desflurane: 2.4
- B. Sevoflurane: 0.65
- C. N_2O : 0.47
- D. Isoflurane: 1.4

87. Features of Malignant Hyperthermia include all the following **EXCEPT**:

- A. Increased CO_2 production
- B. Hypertension, Tachycardia
- C. Increased mixed venous O_2 tension
- D. Hyperkalemia, Hyponatremia

88. Which of the following describes the shift in the CO_2 dissociation curve caused by oxygenation of haemoglobin?

- A. Bohr effect
- B. Double Bohr effect
- C. Haldane effect
- D. Double Haldane effect

89. Which one of the following is an abductor of vocal cords and is innervated by the recurrent laryngeal nerve?

- A. Lateral cricoarytenoid
- B. Posterior cricoarytenoid
- C. Cricothyroid
- D. Vocalis

90. When PO_2 is less than ----- mm Hg, saturation falls steeply, and the amount of Hb uncombined with O_2 increases greatly for a given decrease in PO_2 .

- A. 90
- B. 75
- C. 60
- D. 40

91. The normal mitral valve area is:

- A. 4 to 6 cm^2
- B. 3 to 4 cm^2
- C. 2 to 3 cm^2
- D. 1.5 to 2 cm^2

92. The primary determinants of coronary blood flow are all of the following EXCEPT:

- A. Perfusion pressure
- B. myocardial afterload
- C. Myocardial metabolism
- D. Neurohumoral control

93. DOO is the generic code for:

- A. Dual chamber asynchronous pacing
- B. Dual chamber demand pacing
- C. Single chamber demand pacing
- D. Dual chamber AV sequential pacing

94. To decrease the possibility of adverse effects due to electrocautery in a patient who has a pacemaker in situ one should apply all the following measures **EXCEPT**:

- A. Frequency of electrocautery should be limited to 1-second bursts in every 10 seconds to prevent repeated asystolic periods.
- B. Unipolar cautery should be used as much as possible as it has less Electro-magnetic interference than bipolar cautery.
- C. Pacemaker may be programmed to asynchronous mode by a programmer.
- D. Electrocautery should not be used within 15 cm of pacemaker.

95. Myocardial O₂ demand depends on all of the following **EXCEPT**:

- A. Coronary blood flow
- B. Heart Rate
- C. Afterload
- D. Contractile state

96. The most important cause of non-cardiogenic pulmonary edema is:

- A. ARDS
- B. Flash pulmonary edema
- C. Smoke inhalation
- D. Volume overload

97. Which one of the following is **NOT** a goal of haemodynamic management while providing anaesthesia in patients with valvular heart disease?

- A. Keep the heart rate in the normal to elevated range in patients with mitral regurgitation
- B. Avoid tachycardia in patients with mitral stenosis
- C. Avoid decrease in afterload in patients with aortic regurgitation.
- D. Preload augmentation is necessary to maintain a normal stroke volume in patients with Aortic stenosis

98. Which one of the following is an **INCORRECT** relation between ECG lead and myocardial wall?

- A. Lead 1: Infero-septal
- B. V1: Anteroseptal
- C. aVL: High lateral
- D. V6: Low lateral

99. Spot the **WRONG** statement regarding QT Interval of ECG

- A. "corrected QT interval" (QTc) is independent of heart rate
- B. QTc is calculated by dividing QT interval (in seconds) by the square root of the RR interval (in seconds).
- C. The normal corrected QTc is < 0.44 seconds in men
And < 0.46 seconds in women.
- D. QT Interval is measured from the beginning of the QRS complex to the beginning of the T wave.

100. Which one of the following is the **CORRECT** relationship between ventilation and perfusion in West Zone III of the lung?

- A. Pulmonary arterial pressure $>$ Pulmonary capillary pressure $>$ Alveolar pressure
- B. Alveolar pressure $>$ Pulmonary arterial pressure $>$ Pulmonary capillary pressure
- C. Pulmonary arterial pressure $>$ Alveolar pressure $>$ Pulmonary capillary pressure
- D. Pulmonary capillary pressure $>$ Pulmonary arterial pressure $>$ Alveolar pressure