INDIAN SOCIETY OF ANESTHESIOLOGIST - CHENNAI CITY BRANCH

QUIZ - PRELIMS - ALL THE BEST

College_____

TIME – 30 MIN

11/11/2017

I PART

KINDLY WRITE "TRUE" OR "FALSE" FOR THE FOLLOWING STATEMENTS

s no	STATEMENT	TRUE FALSE	or
1.	Tyrosine is natural precursor of adrenaline	Т	
2.	Tramadol can be safely given to patients receiving MAO inhibitors	F	
3.	Nitrous oxide has no effect on pulmonary vascular resistance	F	
4.	Blood flow in right coronary artery is increased by intra coronary potassium	Т	
5.	In transdermal drug administration passage across subcutaneous fat is the rate limiting step for drug uptake	F	
6.	Coaxial Lack circuit has the expired gases passing in the outer tubing	F	
7.	Concerning pain pathwaysA-delta and C fibres have cell bodies within the dorsal root ganglion	Т	
8.	Organophosphorous compounds inhibit acetylcholinesterses by phosphorylation of the anionic site of the enzyme.	F	
9.	Intravenous regional anaesthesia (Bier's block) provides good post operative analgesia	F	
10	The right main bronchus is more easily intubated inadvertently in the neonate than in adult	F	

II PART

WRITE ANSWER FOR THE QUESTION IN SPACE PROVIDED

SNO	QUESTION	ANSWER
1.	Maximum rate of infusion of potassium should not	
1.	exceed	40 m
		mol/hr
2.	In Pulse oximeter , Readings below are	70%
	extrapolated rather than from direct reference data, and are therefore unreliable.	
3.	A fall ofmmHg in systolic BP defines pulsus parodoxus	10
4.	The echocardiogram report shows left ventricular end-diastolic volume of 125ml and end-systolic volume of 50ml. What is left ventricular ejection fraction?	60%
5.	ECG shows progressive lengthening of the PR interval until a ventricular beat is dropped. What is the conduction abnormality ?	Mobitz type1
6.	Half life of Clotting factor VII	6 hrs
7.	mg of hydrocortisone is equivalent to 20mg prednisolone	80 mg
8.	A pH of $7 = 100$ nmol/L of H+ ions. Which of the following concentrations of hydrogen ions is equivalent to a pH of 9?	1 nmol/L
9.	A young male patient has a haemoglobin concentration of 10g/dL and his peripheral oxygen saturation (SpO2) is 100%. The oxygen carrying capacity of his blood would be:	13.4 ml/dL
10	. which is the end point of ketamine induction	Nystagmus

III Part

Choose the best answer – write option in the space provided

Sno	Question	Option
1.	What is the flow rate required to deliver 28% oxygen	1
	through a venturi mask?	
	1. 4L/minute.2. 6L/minute.	
	3. 8L/minute.4. 10L/minute.	
2.	Which one of the following drugs would be most	4
Ζ.	effective in the prevention and treatment of ischaemic	т
	neurological deficits in this patient with subarachnoid	
	haemorrhage?	
	1. Nifedipine .2. Amlodipine.	
	3. Nicorandil. 4.,Nimodipine.	
3.	Which of the following is correct with regard to rapid	1
	sequence induction	
	1.Cricoid pressure is applied with a force of 40	
	Newtons	
	2.Cricoid pressure should never be released until the tracheal tube is correctly placed and cuff inflated	
	3. Misting in the catheter mount is an indicator of	
	correct placement of the tube	
	4.The lungs should be manually inflated with 100%	
	oxygen till intubation is achieved	
4.	With regard to Smooth muscle, all are true except	1
	1 .Has a longer action potential than cardiac muscle	
	2. Can be tetanized	
	 Is a syncytium Has pace maker cell 	
	The pace maker cell	
5.`	Which of the following volatile agents causes the	2
	least cerebral vasodilatation?	
	1. Isoflurane.2. Sevoflurane.	
	3 Desflurane. 4 Halothane.	

6.	 A newly developed local anaesthetic drug is said to have very high lipid solubility. In practical terms this translates to: 1. Prolonged duration of action. 2. Rapid onset of action. 3. More sensory block than motor block. 4. Higher potency. 	4
7.	 Achilles tendon repair and pinning of a medial malleolar fracture under a popliteal fossa block. Which of the following nerves is MOST likely to require supplemental blockade? 1.Deep peroneal nerve 3. Saphenous nerve 4.Superficial peroneal nerve 	3
8.	The man credited with the earliest documented use of diethyl ether for painless surgery is 1.Henry Hill Hickman2. Crawford W. Long 4.Horace Wells	2
9.	KETAMINE interacts with all of the following receptorsexcept1.NMDA2.GABA3.Muscarinic4.Monoaminergic	2
10	Which of the following IV anesthetic agents has highest degree of plasma protein binding 1.Thiopental 3.Methohexital2.Propofol 4.Etomidate	2
11	Rank the following induction agent in order of their degree of cardiovascular depression 1.Propofol > etomidate > thiopental 2.thiopental > propofol > etomidate 3.Propofol > thiopental > etomidate 4.thiopental > etomidate > propofol	3
12	Achille Dogletti described what anesthetic technique ? 1.Intravenous regional anesthesia of thr arm 2.Loss of resistance to identify the epidural space 3.Blind nasotracheal intubation 4.Cervical spinal anesthesia	2

13	In a patient with BMI of 49 change in which of the following parameters confers the greatest advantage when pre-oxygenating her in the sitting (rather than supine) position? 1 Vital capacity. 3.Closing capacity. 2.Tidal volume 4. Functional residual capacity	4
14	The induction dose of propofol is best calculated based on for a patient with a body mass index of 48: 1. Actual body weight. 2 Ideal body weight. 3 Lean body mass. 4. Ideal body weight + 20% total	2
15	 A 35-year-old , a suspected amitriptyline overdose, has a GCS of 6 and her blood pressure is 90/46mmHg. A 12-lead ECG is highly likely to show: 1. Atrial fibrillation. 2. Sinus bradycardia with a prolonged QRS complex. 3. Sinus tachycardia with a prolonged QRS complex. 4. Complete heart block. 	3
16	 In extrinsic compression of the mid-trachea, which of the following statements best describes the reason for administering heliox in this patient? 1. It decreases the density of the gas mixture. 2. It decreases the viscosity of the gas mixture. 3. It decreases the Reynold's number. 4. It converts turbulent flow into laminar flow. 	1
17	Following is the most suitably sized LMA for 16 kg child? 1. Size 1 ¹ / ₂ 2. Size 2. 3.Size 2 ¹ / ₂ . 4.Size 3	2
18	 A 4-week baby with a history of projectile vomiting for the last few days has been diagnosed with pyloric stenosis. Which one of the following parameters is most likely to suggest severe volume depletion? 1. Urine output of 0.5ml/hour. 2. Serum sodium 129mmol/L. 3 Metabolic alkalosis with alkaline urine. 4. Metabolic alkalosis with acidic urine. 	4

19	A 65-year-old male patient undergoing an arthroscopic procedure on the right shoulder under general anaesthesia and an interscalene block in the sitting position develops bradycardia and hypotension during the intra-operative period. The interscalene block was performed using 20ml of 1% lidocaine with epinephrine. The most appropriate treatment is: 1. Ephedrine. 2. Glycopyrrolate. 3. Atropine. 4. Metaraminol.	1
20	 You have administered 2L of colloid solution to an anaesthetised 43-year-old healthy male. Which one of the following blood vessels will best accommodate the change in circulatory volume? 1. Systemic arteries. 2. Systemic veins. 3. Systemic capillaries. 4. Pulmonary veins 	2
21	 Which of the following muscle relaxants is most suitable for rapid sequence induction in a patient with family h/o Scoline apnea and dibucaine no 20 ? 1. Suxamethonium 1mg/kg .2. Rocuronium 0.9mg/kg. 3. Rocuronium 0.3mg/kg. 4. Rocuronium 0.6mg/kg. 	2
22	Inhalational anaesthetic agents affect systemic vascularresistance (SVR). Which one of the following agentshas the least effect on SVR?1. Isoflurane.2. Sevoflurane.3.Desflurane.4. Halothane.	4
23	 Which one of the following sequences correctly indicates thelevel of protein binding of local anaesthetics in a decreasing order? 1. Procaine > bupivacaine > lignocaine > prilocaine. 2. Bupivacaine > lignocaine > prilocaine > procaine. 3 Prilocaine > bupivacaine > lignocaine > prilocaine. 4.Lignocaine > bupivacaine > prilocaine > procaine. 	2
24	 In which of the following areas is the airway resistance greatest? 1. Trachea. 2. Terminal bronchioles. 3 Medium-sized bronchi. 4. Alveoli. 	3

25	Which of the following peripheral nerve blocks is MOSTappropriate for rotator cuff repair?1. Axillary2. Cervical plexus3. Infraclavicular4. Interscalene	4
26	Which of the following BEST characterizes the syndrome of inappropriate antidiuretic hormone (SIADH) secretion? 1.High serum osmolality 2. Hypernatremia 3. Low urine osmolality 4High urine sodium	4
27	Which of the following is MOST likely to be the first manifestation of classic malignant hyperthermia during a general anesthetic?1.Tachycardia2. Hypotension 4. Hypocalcemia	1
28	 Which of the following is MOST likely to be a useful landmark for placement of an infraclavicular block in a patient? 1.Sternocleidomastoid muscle 2. External jugular vein 3. Coracoid process 4. Ipsilateral nipple 	3
29	Which of the following is MOST likely to cause a decrease in P50 (the Po2 at which hemoglobin is 50% saturated)?1.Hypothermia2. Acidosis3. Isoflurane4. Fentanyl	1
30	A patient develops vasospasm following aneurysmal subarachnoid hemorrhage and "triple-H" therapy is instituted. Which of the following is a component of this therapy? 1.Hypothermia 2. Hypovolemia 3Hypertension 4. Hyperventilation	3