

AUI

PROVISIONAL ANSWER KEY

Name of the post	Anaesthetist, Class-1, (Employees State Insurance Scheme)
Advertisement No.	113/2020-21
Preliminary Test held on	23-06-2021
Question No.	001 - 200
Publish Date	24-06-2021
Last Date to Send Suggestion(s)	01-07-2021

Instructions / સૂચન

Candidate must ensure compliance to the instructions mentioned below, else objections shall not be considered: -

- (1) All the suggestion should be submitted through **ONLINE OBJECTION SUBMISSION SYSTEM** only. Physical submission of suggestions will not be considered.
- (2) Question wise suggestion to be submitted in the prescribed format (proforma) published on the website / online objection submission system.
- (3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key (Master Question Paper), published herewith on the website / online objection submission system. Objections should be sent referring to the Question, Question No. & options of the Master Question Paper.
- (4) Suggestions regarding question nos. and options other than provisional answer key (Master Question Paper) shall not be considered.
- (5) Objections and answers suggested by the candidate should be in compliance with the responses given by him in his answer sheet. Objections shall not be considered, in case, if responses given in the answer sheet /response sheet and submitted suggestions are differed.
- (6) Objection for each question should be made on separate sheet. Objection for more than one question in single sheet shall not be considered.

ઉમેદવારે નીચેની સૂચનાઓનું પાલન કરવાની તકેદારી રાખવી, અન્યથા વાંધા-સૂચન અંગે કરેલ રજૂઆતો ધ્યાને લેવાશે નહીં

- (1) ઉમેદવારે વાંધા-સૂચનો ફક્ત ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ દ્વારા જ સબમીટ કરવાના રહેશે. રૂબરૂ અથવા ટપાલ દ્વારા આયોગની કચેરીએ મોકલવા આવેલ વાંધા-સૂચનો ધ્યાને લેવામા આવશે નહીં જેની ખાસ નોંધ લેવી.
- (2) ઉમેદવારે વાંધા-સૂચનો રજૂ કરવા વેબસાઇટ / ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ પર પ્રસિધ્ધ થયેલ નિયત નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ કરતા તમામ વાંધા-સૂચનો વેબસાઇટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર)ના પ્રશ્ન ક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.
- (4) માસ્ટર પ્રશ્નપત્રમાં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચનો ધ્યાને લેવામાં આવશે નહીં.
- (5) ઉમેદવારે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદવારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદવારે સૂચવેલ જવાબ અને ઉત્તરવહીનો જવાબ ભિન્ન હશે તો ઉમેદવારે રજૂ કરેલ વાંધા-સૂચનો ધ્યાનમા લેવાશે નહીં.
- (6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચનો પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

Website link for online objection submission system : http://150.129.165.5/GPSC_Suggestion/Online Objection System start from Dt.25.06.2021, 12:00 pm

001. The ideal method of opening the airway of a patient in cardiac arrest who is suspected to have cervical spine injury
(A) Head tilt, Chin lift (B) Jaw thrust
(C) Abdominal thrust (D) Finger sweep
002. In preventing and controlling the transmission of infections, the single most important technique is
(A) hand hygiene (B) use of disposable gloves
(C) use of isolation precaution (D) sterilization
003. All of the following nerves are blocked by an ankle block, except
(A) Sural (B) Superficial peroneal
(C) Deep peroneal (D) Anterior tibial
004. The most common cause of bronchiectasis is
(A) Cigarette smoking (B) Air pollution
(C) Alpha 1 antitrypsin deficiency (D) Recurrent bronchial infections
005. Which of the following is the preferred intravenous agent of induction of anesthesia for maintaining spontaneous breathing and airway tone?
(A) Midazolam (B) Propofol
(C) Ketamine (D) Diazepam
006. Postoperative bleeding following tonsillectomy occurs most commonly
(A) During first 6 hours (B) 6 - 24 hours after surgery
(C) 3rd postoperative day (D) 7th postoperative day
007. Hunt and Hess classification is used to prognosticate
(A) Head injury (B) Subarachnoid hemorrhage
(C) Stroke (D) Meningitis
008. Which of the following drugs does not pass the placenta
(A) Etomidate (B) Ephedrine
(C) Atropine (D) Glycopyrrolate
009. A supraclavicular approach for brachial plexus blockade would deposit local anesthetics at which of the following anatomical levels of the plexus?
(A) Branches (B) Trunks/Divisions
(C) Cords (D) Roots
010. Nitrous oxide should be avoided in patients with
(A) Subdural hematoma (B) Brain tumor
(C) Closed head injury (D) Pneumocephalus
011. The fastest measure to decrease intracranial pressure (ICP) in a patient is
(A) Mannitol (B) Dexamethasone
(C) Furosemide (D) Hyperventilation
012. All of the following drugs can be given through endotracheal tube, except
(A) Epinephrine (B) Lidocaine
(C) Atropine (D) Calcium

013. Which fluid is hypotonic
 (A) 5 % Dextrose in water (B) Normal Saline
 (C) Ringer lactate (D) Plasmalyte
014. Normal fetal heart rate is
 (A) 60-100 beats/min (B) 90-130 beats/min
 (C) 110-160 beats/min (D) 150-200 beats/min
015. The most common side effect of intraspinal narcotics in the obstetric population is
 (A) Pruritus (B) Nausea and Vomiting
 (C) Respiratory depression (D) Urinary retention
016. A combination of Oxygen 50% and Nitrous Oxide 50% is called as
 (A) Xenon (B) Equanox
 (C) Ozone (D) None of the above
017. What material is a endotracheal tube made of
 (A) Copper (B) Brass
 (C) Polyvinylchloride (D) Tin
018. A face mask may be made up of
 (A) Black rubber (B) Clear Plastic
 (C) Elastomeric Material (D) All of the above
019. Which one of the following is not a criteria for difficult mask ventilation
 (A) Lack of teeth (B) History of snoring
 (C) History of sleep apnea (D) Age more than 55 years
020. Which of the following size is Not available in classic LMA
 (A) Size 1 (B) Size 2.5
 (C) Size 3.5 (D) None of the above
021. Concerning neonates during surgical procedures:
 (A) Hypothermia (less than 35°C) is associated with apnea
 (B) Elective surgery can be carried out in the first 45 weeks post-conceptual age
 (C) Transcutaneous oxygen electrodes accurately reflect PaO₂
 (D) None of the above
022. Metoclopramide
 (A) Accelerates gastric emptying (B) Decreases pre anaesthetic gastric volume
 (C) Neutralizes acid pH of gastric contents (D) None of the above
023. The bronchoconstriction produced by the parasympathetic irritant reflex may be blocked by each of the following EXCEPT:
 (A) Local anaesthetics (B) Inhalational anaesthetics
 (C) Ketamine (D) Thiopental
024. In an otherwise healthy 20-year old man after an automobile accident, arterial blood gases on room air are PaO₂: 100 mmHg, PaCO₂: 40 mmHg, and pH: 7.41. Haemoglobin level is 10 gm/dl. Oxygen content can be increased to normal levels (20 to 21 ml/dl) by increasing:
 (A) Haemoglobin to 12 gm/dl. (B) Haemoglobin to 15 gm/dl.
 (C) FiO₂ to 1.0 (D) FiO₂ to 0.5

025. A 55-year old man has to undergo transurethral resection of the prostate for benign prostatic hypertrophy. On admission he is cyanotic and plethoric; haematocrit is 51%, PaO₂ is 49 mmHg, PaCO₂ is 48 mmHg, and pH is 7.36. He has a history of heavy smoking, chronic cough, and purulent sputum production in the morning. The most likely diagnosis is:
- (A) Pan lobular emphysema (B) Sarcoidosis
(C) Goodpasture's syndrome (D) Chronic Bronchitis
026. Pulmonary diffusion capacity is:
- (A) Measured using carbon monoxide
(B) Measured using oxygen
(C) Decreased in the presence of interstitial pulmonary edema
(D) All of the above
027. The tip of an endotracheal tube moves closer to the carina when the:
- (A) Neck is flexed
(B) Patient is placed in the trendelenburg position
(C) Patient is moved from the supine to the sitting position
(D) All of the above
028. Hyperalgesia;
- (A) Is a part of the triple response in acute injury.
(B) Primary hyperalgesia is due to increased sensitivity of A β receptors.
(C) Allodynia is not mediated by interleukins.
(D) Secondary hyperalgesia is seen at the spinal level.
029. Which one of the following about NSAIDs is FALSE
- (A) First line analgesics for acute nociceptive pain.
(B) Single dose of these drugs may be effective.
(C) Are more effective for somatic nociceptive pain especially involving inflammation.
(D) Combination of two NSAIDs gives better results.
030. Liposomal bupivacaine:
- (A) Produces long plasma levels. (B) Is free of side effects.
(C) Can be repeated within 24 h. (D) Can be given along with Lidocaine
031. Which opioid amongst the following is most potent
- (A) Fentanyl (B) Morphine
(C) Pentazocine (D) Hydromorhone
032. Dibucaine number denotes
- (A) Percentage of inhibition of pseudocholinesterase activity
(B) Percentage of inhibition of anticholinesterase activity
(C) Percentage of inhibition of cholinesterase activity
(D) Percentage of activation of cholinesterase activity
033. Suggamadex is a
- (A) Gamma cyclodextrin (B) Sigma cyclodextrin
(C) Alpha cyclodextrin (D) Kappa cyclodextrin

034. Ester local anaesthetics are metabolized by
 (A) Pseudocholinesterase (B) Microsomal P - 450 enzymes
 (C) Cholinesterase (D) Dibucaine
035. Relative contraindication to the use of LMA are all except
 (A) Full stomach (B) Pharyngeal abscess
 (C) Mouth opening > 3 finger breadth (D) Low pulmonary compliance
036. The amount of oxygen dissolved in blood can be derived from
 (A) Poissuilles law (B) Grahams law
 (C) Boyles law (D) Henrys law
037. Pin index safety system is adopted to
 (A) To discourage incorrect vaporizer attachments
 (B) To discourage incorrect cylinder attachments
 (C) To discourage incorrect monitor attachments
 (D) To discourage incorrect lead attachments
038. The following are the component of sodalime except
 (A) Calcium hydroxide (B) Sodium hydroxide
 (C) Barium hydroxide (D) Pottassium hydroxide
039. All of the following arteries can be cannulated for percutaneous catheterization except
 (A) Radial artery (B) Dorsalis pedis artery
 (C) Posterior tibial artery (D) Carotid artery
040. Features of spinal hematoma:
 (A) It is mostly intrathecal.
 (B) It becomes symptomatic within a matter of minutes.
 (C) Only large hematomas develop symptoms.
 (D) Female gender is a risk factor for spontaneous hematomas.
041. Which one of the following is FALSE about post dural puncture headache
 (A) Diplopia is mostly unilateral.
 (B) Intrathecal catheter insertion is associated with increased headache.
 (C) Symptoms are due to loss of CSF volume.
 (D) Nerves involved are ophthalmic branch of the facial nerve.
042. Pulmonary complications of regional anaesthesia:
 (A) There is no effect on FVC after interscalene block.
 (B) Lung volumes may be affected for up to 6 h after brachial plexus block.
 (C) Most pulmonary complications are seen with infraclavicular approach to brachial plexus.
 (D) Paravertebral block has a high incidence of Pneumothorax.
043. Site of action in epidural analgesia
 (A) Cortex (B) Substantia Gelatinosa
 (C) Ventral horn (D) Sensory nerve ending
044. Which one of the following local anesthetics belongs to the ester group?
 (A) Procaine (B) Bupivacain
 (C) Lignocaine (D) Mepivacaine

045. Malignant hyperthermia is seen with
 (A) Gallamine (B) Lignocaine
 (C) Succinylcholine (Sch) (D) Bupivacaine
046. Hyperkalemia due to Scoline is seen in all except:
 (A) Muscular Dystrophy (B) Crush injury
 (C) Abdominal Sepsis (D) None of the above
047. Mendelson syndrome is due to:
 (A) Aspiration pneumonitis (B) Chemical pneumonitis
 (C) Oesophagitis (D) Oesophageal spasm
048. Diffusion hypoxia is seen during:
 (A) Induction of anaesthesia (B) Recovering anaesthesia
 (C) Preoperatively (D) Postoperatively
049. Incubator heat is delivered by except:
 (A) Conduction (B) Convection
 (C) Radiation (D) Evaporation
050. The most common cause of morbidity and mortality in patients undergoing major vascular surgery is:
 (A) Renal complications (B) Thrombo embolic phenomenon
 (C) Coagulopathies (D) Cardiac complications
051. Damage to which nerve leads to wrist drop
 (A) Radial (B) Axillary
 (C) Median (D) Ulnar
052. Which among the following is a lipophilic opioid
 (A) Sufentanil (B) Tramadol
 (C) Morphine (D) Pentazocine
053. Remifentanil is metabolized primarily by
 (A) Kidneys (B) Liver
 (C) Esterase (D) Pseudocholinesterase
054. Cushings triad is the presence of
 (A) Respiratory depression, hypotension, bradycardia
 (B) Respiratory depression, hypertension, tachycardia
 (C) Respiratory depression, hypertension, bradycardia
 (D) Respiratory depression, hypotension, tachycardia
055. The value of ICP above which treatment is recommended according to the brain trauma foundation guidelines (BTF, 4th edition) guidelines
 (A) > 20 mm Hg (B) > 15 mmHg
 (C) > 22 mm Hg (D) > 18 mmHg
056. All of the following are side effects of mannitol except
 (A) Hypotension (B) Pre renal azotemia
 (C) Hyperkalemia (D) Hyponatremia

057. The loading dose of phenytoin to treat status epilepticus is
 (A) 15 - 20 mg/kg (B) 25 - 30 mg/kg
 (C) 30 - 35 mg/kg (D) 35 - 40 mg/kg
058. Mount Fuji sign in a CT scan is seen in
 (A) Venous air embolism (B) Paradoxical air embolism
 (C) Tension Pneumocephalus (D) Acute subdural hematoma
059. The type of edema associated with brain tumours is
 (A) Cytotoxic edema (B) Interstitial edema
 (C) Osmotic edema (D) Vasogenic edema
060. Lucid interval is seen in
 (A) Hemorrhagic stroke (B) Epidural hematoma
 (C) Subarachnoid hemorrhage (D) Acute ischemic stroke
061. Which statement is correct about subdural hematoma
 (A) The source of bleeding is middle meningeal artery
 (B) Subdural hematoma is limited by suture line
 (C) Subdural hematoma is crescent shaped on a CT scan
 (D) Subdural hematoma does not cross midline
062. The ideal agent to decrease ICP in a head injured patient presenting with haemorrhagic shock is
 (A) Mannitol (B) Normal Saline
 (C) Hetastarch (D) Hypertonic Saline
063. The drug used to treat vasospasm after subarachnoid bleed is
 (A) Nimlodipine (B) Nimodipine
 (C) Verapamil (D) Dexmedetomidine
064. The most common type of brain tumour in adults is
 (A) Glioma (B) Meningioma
 (C) Pituitary adenoma (D) Craniopharyngioma
065. Which among the following is a cerebral vasodilator
 (A) Propofol (B) Isoflurane
 (C) Thiopentone (D) Fentanyl
066. The inhalational agent of choice for maintenance of anaesthesia in neurosurgical practice is
 (A) Isoflurane (B) Enflurane
 (C) Sevofluranc (D) Entonox
067. The most sensitive diagnostic modality to diagnose venous air embolism
 (A) Transesophageal echocardiography (B) Doppler ultrasound
 (C) End Tidal CO₂ (D) Exhaled gas analysis
068. Treatment of Traumatic spine injuries (TSI) includes all except:
 (A) Stress ulcer prophylaxis (B) Indwelling urinary catheter
 (C) High dose steroids (D) Correct hypotension

069. Which of the following is not found in the low pressure circuit on an anaesthesia machine:
 (A) Flowmeters (B) Vaporisers
 (C) Vaporiser check valve (D) Oxygen failure alarm
070. PLMA stands for
 (A) Perilaryngeal LMA (B) Proseal LMA
 (C) Preseal LMA (D) Prelaryngeal LMA
071. Which among the following is cuffless device
 (A) PLMA (B) I- gel
 (C) Air-Q (D) AMBU LMA
072. Which among the following is a double lumen device
 (A) LMA - Classic (B) LMA -Unique
 (C) Elisha Airway device (D) Proseal LMA
073. Which agent increases the gastric pH most quickly before induction in emergency caesarean section
 (A) Sodium citrate (B) Ranitidine
 (C) Metoclopramide (D) All of the above
074. Parkinsonism is associated with
 (A) Loss of dopaminergic neurons alone
 (B) Loss of cholinergic neurons alone
 (C) Loss of cholinergic and increase in dopaminergic activity
 (D) Loss of dopaminergic and increase in cholinergic activity
075. Berlin's criteria is used to define
 (A) Acute respiratory distress syndrome (B) Sepsis and Septic shock
 (C) Brain injury (D) Sub arachnoid haemorrhage
076. The following are true of dobutamine administration EXCEPT:
 (A) Left ventricular end-diastolic pressure (LVEDP) is reduced.
 (B) It is contraindicated in patients with known ischaemic heart disease.
 (C) Systemic vascular resistance is reduced.
 (D) Cardiac index is increased.
077. Regarding the fluid resuscitation in trauma patient which statement is FALSE?
 (A) Resuscitation with large volumes of crystalloid increases the incidence of abdominal compartment syndrome.
 (B) Hypertonic saline has been shown to increase survival compared with crystalloid.
 (C) Arterial base deficit is a better indicator of adequacy of fluid resuscitation than urine output.
 (D) Serum lactate is a better indicator of adequacy of fluid resuscitation than urine output.
078. Which of the following features is NOT typical of the neuroleptic malignant syndrome?
 (A) Tachycardia. (B) Hyperthermia.
 (C) Autonomic instability. (D) Rapid onset over a few hours.
079. Which statement regarding transfusion-related acute lung injury (TRALI) is TRUE?
 (A) Volume overload is the principal problem.
 (B) Mortality ranges from 5-25%.
 (C) It is an immunological diagnosis.
 (D) TRALI is physiologically distinct from acute lung injury.

080. Regarding the pharmacology of morphine which of the following statements is TRUE?
- (A) It undergoes minimal first pass metabolism.
 - (B) It is metabolised to weakly active metabolites in the liver.
 - (C) It inhibits neurotransmission in the central nervous system.**
 - (D) Peak effect is reached within 5 minutes of intravenous injection.
081. Which one of the following statements regarding amiodarone is FALSE?
- (A) It is 98% protein-bound.
 - (B) It does not require dose adjustment in renal failure.
 - (C) It has no effect on heart rate if the patient is in sinus rhythm.**
 - (D) It has a volume of distribution greater than 2L/kg.
082. Which is the TRUE statement regarding the anaesthetic management of a patient with major burns?
- (A) Awake fiberoptic intubation is the technique of choice in the patient with stridor following inhalational injury.
 - (B) A high ventilator minute volume will be required.**
 - (C) Intramuscular morphine is ideal supplemental analgesia for burns dressing changes.
 - (D) Non-depolarising muscle relaxants should be given in small doses.
083. A Non diverting (mainstream) ETCO₂ monitor measures the gas concentration at
- (A) Sampling site**
 - (B) Remote site from the sampling site.
 - (C) Transports a portion of the gas being measured from the sampling site through a sampling tube to the sensor
 - (D) None of the above
084. All of the following can be measured with Infrared analyzers EXCEPT
- (A) Carbon dioxide
 - (B) Nitrous oxide
 - (C) Oxygen**
 - (D) Inhalational agents
085. The Tec 6 vaporizer is designed for use
- (A) Sevoflurane
 - (B) Isoflurane, sevoflurane, desflurane
 - (C) Desflurane only**
 - (D) Halothane, enflurane, isoflurane and desflurane
086. What colour change is seen with Ethyl violet indicator when the absorption capacity is exhausted
- (A) White to purple**
 - (B) White to pink
 - (C) Red to yellow
 - (D) Orange to yellow
087. Which of the following does not represent a significant anaesthetic problem in the morbidly obese patient?
- (A) Difficulties in endotracheal intubation
 - (B) Suboptimal arterial oxygen tension
 - (C) Increased metabolism of volatile agents
 - (D) Decreased cardiac output relative to total body mass**

088. Sodium nitroprusside infusion may result in:
(A) Hypertension (B) Pulmonary oedema
(C) Cyanide toxicity (D) Heart block
089. The most sensitive and practical technique for detection of myocardial ischemia in the perioperative period is -
(A) Magnetic Resonance Spectroscopy
(B) Radio labeled lactate determination
(C) Direct measurement of end diastolic pressure
(D) Regional wall motion abnormality detected with the help of 2D transoesophageal echocardiography
090. Thiopentone is contraindicated in:
(A) Acute intermitent porphyria (B) Induction of GA
(C) CHF (D) GI disease
091. The ideal muscle relaxant used for a neonate undergoing porto-enterostomy for biliary atresia is:
(A) Atracurium (B) Vecuronium
(C) Pancuronium (D) Rocuronium
092. In volume cycled ventilation the inspiratory flow rate is set at
(A) 140-160L/min (B) 110-130 L/min
(C) 60-100 L/min (D) 30-50 L/min
093. The following modes of ventilation may be used for weaning off patients from mechanical ventilation EXCEPT:
(A) Controlled Mechanical ventilation (CMV).
(B) Synchronized intermittent mandatory ventilation (SIMV).
(C) Pressure support ventilation (PSV).
(D) Assist-control ventilation (ACV).
094. The most common cause of hypoxia during one lung ventilation is -
(A) Malposition of the double lumen tube (B) Increased shunt fraction
(C) Collapse of one lung (D) Soiling of lung by secretions
095. During laryngoscopy and endo-tracheal intubation which of the maneuver is not performed:
(A) Flexion of the neck.
(B) Extension of Head at the atlanto-occipital joint.
(C) The laryngoscope is lifted upwards levering over the upper incisors.
(D) In a straight blade laryngoscope, the epiglottis is lifted by the tip.
096. Train of four fade is a characteristic feature of:
(A) Depolarizing block
(B) Non depolarizing block
(C) Both depolarizing and non-depolarizing block
(D) Malignant hyperthermia

097. Which one of the following muscle relaxant has the maximum duration of action?
 (A) Atracurium (B) Vecuronium
 (C) Rocuronium (D) Doxacurium
098. The following combination of agents are the most preferred for short day care surgeries
 (A) Propofol, fentanyl, isoflurane (B) Thiopentone sodium, morphine, halothane
 (C) Ketamine, pethidine, halothane (D) Propofol, morphine, halothane
099. Anaesthetic agent of choice in renal failure is:
 (A) Methoxyflurane (B) Isoflurane
 (C) Enflurane (D) None of the above
100. Which one of the common side effects is seen with fentanyl?
 (A) Chest wall rigidly (B) Tachycardia
 (C) Pain in abdomen (D) Hypertension
101. The most abundant electrolyte in human body is:
 (A) Sodium (B) Potassium
 (C) Phosphorus (D) Calcium
102. The most important buffering system in the body is
 (A) Haemoglobin (B) Plasma proteins
 (C) Phosphate (D) Bicarbonate
103. Signs and symptoms of intracranial hypertension include
 (A) Papilledema (B) Headache
 (C) Nausea and vomiting (D) All of the above
104. All of the following are treatment strategies of vasospasm except
 (A) Hypertension (B) Hemodilution
 (C) Calcium channel blockers (D) Diuretics
105. Cardiac tamponade is associated with
 (A) Pulsus alterans (B) Pulsus tardus
 (C) Pulsus parvus (D) Pulsus paradoxus
106. Which of the following is not included in tetralogy of Fallot:
 (A) Patent ductus arteriosus (B) Right ventricular hypertrophy
 (C) Ventricular septal defect (D) Overriding aorta
107. Glasgow coma Scale has all except
 (A) Verbal response (B) Motor response
 (C) Sensory impairment (D) Eye opening
108. Electroencephalography is
 (A) Recording of electric potentials generated by cells in myocardium
 (B) Recording of electric potentials generated by cells in cerebral cortex
 (C) Recording of electric potentials generated by cells in nephron
 (D) Recording of electric potentials generated by cells in alveoli
109. Which among the following is an indication for evoked potential monitoring
 (A) Spinal fusion surgeries (B) Gall bladder surgeries
 (C) Endoscopic third ventriculostomy (D) Total knee replacement

110. Train of four stimulation denotes
(A) Four successive 200 μ s stimuli in 2 secs (B) Two successive 200 μ s stimuli in 2 secs
(C) Four successive 100 μ s stimuli in 2 secs (D) Two successive 100 μ s stimuli in 2 secs
111. Dexmedetomidine is a
(A) Alpha 2 agonist (B) Beta 1 agonist
(C) Beta 2 agonist (D) Alpha 1 agonist
112. Rapid induction and emergence of anaesthesia by desflurane is due to its
(A) High solubility in blood and tissues (B) Low solubility in blood and tissues
(C) Absent solubility in blood and tissues (D) Medium solubility in blood and tissues
113. Which among the following is an excellent choice of induction in pediatric patients
(A) Halothane (B) Isoflurane
(C) Sevoflurane (D) Enflurane
114. Diffusion hypoxia is associated with the use of
(A) Nitrous oxide (B) Halothane
(C) Desflurane (D) Isoflurane
115. Which among the following is considered as a noble gas to possess anaesthetic properties
(A) Entonox (B) Xenon
(C) Nitrous oxide (D) Desflurane
116. Flumazenil is a
(A) Opioid antagonist (B) Barbiturate antagonist
(C) Propofol antagonist (D) Benzodiazepine antagonist
117. Acute intermittent porphyria in susceptible individuals is associated with the use of
(A) Thiopentone (B) Propofol
(C) Ketamine (D) Midazolam
118. Ketamine is a
(A) Phencyclidine derivative (B) Barbiturate derivative
(C) Imidazoline derivative (D) Opioid derivative
119. Adrenocortical suppression is associated with
(A) Thiopentone (B) Etomidate
(C) Propofol (D) Ketamine
120. Which among the following has highest lipid solubility
(A) Morphine (B) Meperidine
(C) Remifentanyl (D) Fentanyl
121. Which of the following acid base disturbances is the least well compensated
(A) Metabolic alkalosis (B) Respiratory alkalosis
(C) Increased anion gap metabolic acidosis (D) Normal anion gap metabolic acidosis
122. A disadvantage of using propofol for prolonged sedation of intubated patients in the TCU
(A) Acidosis (B) Tachyphylaxis
(C) Hyperglycemia (D) Bradycardia

123. Which of the following drugs is the best choice for treating hypotension in the setting of severe acidemia
- (A) Norepinephrine (B) Epinephrine
(C) Phenylephrine (D) Vasopressin
124. Sedation with which of the following drugs resembles normal sleep
- (A) Propofol (B) Midazolam
(C) Dexmedetomidine (D) Ketamine
125. Which of the following intravenous anesthetics is converted from water soluble to a lipid soluble drug after exposure to the bloodstream
- (A) Propofol (B) Midazolam
(C) Ketamine (D) None of the above
126. Atropine causes each of the following except
- (A) Decreased gastric acid secretion
(B) Inhibition of salivary secretion
(C) Increased lower esophageal sphincter tone
(D) Mydriasis
127. The best agent for decreasing post-operative shivering is
- (A) Morphine (B) Meperidine
(C) Tramadol (D) Fentanyl
128. Which of the following mechanisms is most frequently responsible for hypoxia in the recovery room
- (A) Ventilation perfusion mismatch (B) Hypoventilation
(C) Hypoxic gas mixture (D) Intracardiac shunt
129. The most sensitive early sign of malignant hyperthermia during general anaesthesia is:
- (A) Tachycardia (B) Hypertension
(C) Fever (D) Increased end expiratory co₂ tension
130. Allergic reactions occurring during the immediate perioperative period are most commonly attributable to administration of
- (A) Muscle relaxants (B) Local anaesthetics
(C) Antibiotics (D) Opioids
131. Which of the following parenteral agents is the initial preferred agent for blood pressure management in patients with acute aortic dissection?
- (A) Hydralazine (B) Enalapril
(C) Labetalol (D) Nicardipine
132. About capnography which one is TRUE
- (A) Phase I is expiratory upstroke
(B) Phase II is inspiratory baseline
(C) The very last portion of Phase III, is referred to as the end-tidal point.
(D) The angle between Phases III and IV is called the a
133. In which of the following block ulnar nerve is spared
- (A) Supraclavicular (B) Interscalene
(C) Axillary (D) Infraclavicular

134. Patient with controlled diabetes, and BP 190/90, mallampati III is
(A) ASA I (B) ASA II
(C) ASA III (D) ASA IV
135. Horner's syndrome, all true except:
(A) Ptosis (B) Miosis
(C) Sweating (D) Conjunctival injection
136. The most important carrier of CO₂ in blood is:
(A) Plasma HCO₃ (B) Red cells HCO₃
(C) Dissolved CO₂ (D) Plasma proteins
137. In neonates, spinal cord ends at:
(A) L1 (B) S5
(C) L3 (D) L4
138. 2 litre reservoir bags
(A) Arc antistatic
(B) Hold 2 litres when fully distended
(C) Are designed to allow the internal pressure to reach no more than 80 cm H₂O
(D) Often have a loop on the end in order to help drying after cleaning
139. Which one the following is FALSE about mivacurium chloride
(A) Is a mixture of three stereoisomers in approximately equal proportions
(B) Can cause significant release of histamine
(C) Can be associated with facial erythema, tachycardia and hypotension
(D) Has no effect on autonomic ganglia at clinical doses
140. Nifedipine
(A) Has a structure similar to verapamil
(B) Is absorbed more rapidly when given sublingually compared to intra-nasally
(C) Undergoes extensive first pass metabolism in the liver
(D) Is metabolised to inert products
141. Dystrophica myotonica
(A) Is an inherited condition with autosomal dominant transmission
(B) Is exacerbated by heat and exertion
(C) May be treated with procyclidine
(D) Neostigmine, if used in the reversal of non-depolarising neuromuscular blockade, causes prolonged weakness
142. All of the following are true about the neuroleptic malignant syndrome EXCEPT
(A) Can be precipitated by droperidol
(B) Is potentially fatal
(C) Is characterised by dystonia, rigidity and hypothermia
(D) Can result in autonomic lability

143. Which one of the following is FALSE about pulse oximetry
- (A) The SpO₂ is determined by the absorbance of light of wavelengths 660 nm and 940 nm
 - (B) Methaemoglobin causes the SpO₂ to approach 85%
 - (C) Oxyhaemoglobin absorbs better at the longer wavelength
 - (D) Fetal haemoglobin gives an inaccurately high reading of saturation**
144. In recovery
- (A) One nurse for every two patients is acceptable
 - (B) Spontaneously breathing patients should be transferred to recovery with oxygen by facemask**
 - (C) Oliguria is best treated by a small dose of a loop diuretic
 - (D) Dermatomal level of regional analgesia need not be recorded as long as the patient is pain-free
145. Which one of the following cannot be measured with Spirometry
- (A) Tidal volume
 - (B) Vital capacity
 - (C) Functional residual capacity**
 - (D) Expiratory reserve volume
146. Restrictive lung disease is characterized by
- (A) A fall in FEV₁**
 - (B) A rise in arterial PO₂
 - (C) A fall in FEV₁/FVC ratio
 - (D) Carbon dioxide retention
147. The following are early signs of inadvertent oesophageal intubation
- (A) ST depression on electrocardiogram (ECG)
 - (B) Bradycardia
 - (C) Absence of waveform on capnograph**
 - (D) Oxyhaemoglobin desaturation detected on pulse oximetry
148. Halothane hepatitis
- (A) Occurs more commonly in males
 - (B) Has a mortality of about 30%
 - (C) Occurs with a maximum susceptibility when there has been about one month between exposures**
 - (D) Has an onset most commonly beginning about 2 weeks after exposure
149. All of the following are true about nitrous oxide EXCEPT
- (A) Was discovered by Humphry Davy in 1772**
 - (B) Has been available in metal cylinders since the 1860's
 - (C) Supports combustion
 - (D) Has a solubility in blood similar to that of desflurane
150. A disposable endotracheal tube
- (A) Is described by its external diameter
 - (B) Is marked with a code showing the place and date of manufacture
 - (C) Has a 15 mm connector for attachment to the anaesthetic circuit**
 - (D) Has a cuff that is impervious to gases
151. Electrocardiographic changes associated with hyperkalemia include
- (A) Increased P wave amplitude
 - (B) Shortened PR interval
 - (C) Non-owed and peaked T waves**
 - (D) Increased U wave amplitude

152. A healthy patient in labor has which of the following ASA classification?
 (A) I (B) II
 (C) III (D) IV
153. A 2-year-old child is to undergo tonsillectomy. The child had formula milk 2 hours ago. As per ASA guidelines, optimal NPO status would be to wait another _____ before proceeding to surgery:
 (A) No waiting, since it is a child (B) 2 hours
 (C) 4 hours (D) 6 hours
154. The narrowest segment of a 14-day old child's upper airway is located at the:
 (A) Hyoid bone (B) Thyroid cartilage
 (C) Vocal cords (D) Subglottic region
155. As per American Society of Regional Anaesthesia (ASRA) guidelines, intravenous infusion of unfractionated heparin should be stopped how long prior to a planned epidural?
 (A) 1 to 1.5 hours (B) 2 to 4 hours
 (C) At least 12 hours (D) At least 24 hours
156. All of the following are risk factors for obstructive sleep apnea, except
 (A) Obesity (B) Short neck
 (C) Enlarged tonsils (D) Female gender
157. A patient with a history of severe asthma is scheduled for an appendectomy. Which of the following induction agents will cause the least respiratory depression?
 (A) Ketamine (B) Propofol
 (C) Etomidate (D) Thiopental
158. Effect of combined administration of midazolam and fentanyl is
 (A) Additive (B) Synergistic
 (C) Competitively antagonistic (D) Noncompetitively antagonistic
159. Smoking cessation for 24 hours before a scheduled surgery will lead to
 (A) Improvement of ciliary function (B) Decrease in mucous production
 (C) Decrease in airway irritability (D) Decrease in level of carboxyhemoglobin
160. The artery of Adamkiewicz arises from the aorta at which spinal level
 (A) T1-T4 (B) T5-T8
 (C) T9-T12 (D) L1-L4
161. Which of the following agents is associated with the highest incidence of hepatitis postoperatively?
 (A) Halothane (B) Isoflurane
 (C) Desflurane (D) Sevoflurane
162. The antiemetic effect of propofol is thought to occur due to
 (A) Depressant effect on the chemoreceptor trigger zone
 (B) Inhibition of dopamine activity
 (C) Inhibition of glutamate release
 (D) All of the above
163. Ondansetron causes its antiemetic effect by acting as an
 (A) Agonist at 5-HT₂ receptors (B) Antagonist at 5-HT₂ receptors
 (C) Agonist at 5-HT₃ receptors (D) Antagonist at 5-HT₃ receptors

164. Overdose with dexmedetomidine results in
 (A) Hypertension (B) Bradycardia
 (C) Hypertension and bradycardia (D) Hypotension and bradycardia
165. The most common complication of inserting a central venous catheter is
 (A) Carotid artery puncture (B) Thrombosis
 (C) Cardiac arrhythmias (D) Air embolism
166. The stellate ganglion lies adjacent to which artery
 (A) Common carotid artery (B) Internal carotid artery
 (C) Aorta (D) Vertebral artery
167. Para aminobenzoic acid is a metabolite of
 (A) Mepivacaine (B) Ropivacaine
 (C) Bupivacaine (D) Procaine
168. All of the following are symptoms of a developing epidural hematoma except
 (A) Radicular back pain (B) Bowel and Bladder dysfunction
 (C) Motor deficits (D) Fever
169. Tachyphylaxis to local anaesthetics is related to
 (A) Speed of injection (B) Dosing interval
 (C) Volume of local anaesthetic (D) pH of solution
170. A patient is undergoing craniotomy for subdural hematoma. During the procedure, the surgeon requests lowering the intracranial pressure. All the following can be used, except
 (A) Mannitol (B) Hyperventilation
 (C) Steroids (D) Furosemide
171. In the management of an acute head injury
 (A) Steroids are useful in reducing cerebral oedema
 (B) Lumbar puncture should be used for determination of intracranial pressure (ICP)
 (C) Amnesia is an indication for computerised axial tomography of the brain (CT)
 (D) Hartmann's solution should be avoided
172. Labetolol
 (A) Acts on alpha and beta receptors with equal affinity
 (B) Causes significant postural hypotension
 (C) Is contraindicated in pregnancy because it causes fetal bradycardia
 (D) Has no intrinsic sympathomimetic activity (ISA)
173. Intravenous regional anaesthesia (Bier's block)
 (A) Can safely be performed using 0.25% bupivacaine without adrenaline
 (B) Provides good quality postoperative analgesia
 (C) Depends on the use of a double-cuff tourniquet inflated to 50 mmHg above systolic pressure
 (D) The tourniquet can safely be deflated 20 minutes after injection.

174. All are true about Phenoxybenzamine EXCEPT
- (A) Is a non-selective alpha-adrenergic antagonist
 - (B) Acts predominantly on post-synaptic alpha-1 receptors
 - (C) May result in nasal stuffiness
 - (D) Is useful in the management of craniopharyngioma**
175. In the rapid sequence induction
- (A) Cricoid pressure is applied with a force of 40 Newtons**
 - (B) Cricoid pressure must never be released until the tracheal tube is correctly located and the cuff inflated
 - (C) Misting in the catheter mount is a reliable indicator of correct placement of the tracheal tube
 - (D) The lungs should be manually inflated with 100% oxygen until intubation is achieved
176. Mannitol
- (A) Is readily absorbed from the gastrointestinal tract
 - (B) Is a six carbon sugar
 - (C) Enters cells by an active transport mechanism
 - (D) Increases urinary excretion of water, sodium, chloride and bicarbonate**
177. Which one of the following is FALSE about midazolam
- (A) Is active in its water soluble form**
 - (B) Is more lipophilic than the other benzodiazepines
 - (C) Is extensively protein bound
 - (D) Has a bimodally distributed elimination half life with about 6% having a half life of greater than 8 hours
178. Concerning sevoflurane
- (A) It is a poly-fluorinated ether**
 - (B) Less than 1% is metabolised
 - (C) It has physical properties resembling desflurane
 - (D) It is not degraded by soda-lime
179. An anaesthetist orders a new attendant to bring the oxygen cylinder. He will ask the attendant to identify the correct cylinder by following colour code:
- (A) Black cylinders with white shoulders** (B) Black cylinders with grey shoulders
 - (C) White cylinders with black shoulders (D) Grey cylinder with white shoulders
180. When setting up a ventilator to provide intermittent positive pressure ventilation in theatre
- (A) If a circle system is in use the fresh gas flow must not exceed 3l/min
 - (B) The tidal volume may be calculated as 7-10 ml/kg in the adult**
 - (C) When using a minute volume divider the fresh gas flow should exceed the required minute volume by 10%
 - (D) End-tidal carbon dioxide provides an accurate indication of the adequacy of ventilation

181. Characteristic of an ideal gas is:
- (A) Volume is directly proportional to change in pressure
 - (B) Volume is inversely proportional to change in temperature
 - (C) At absolute temp, volume of gas is 1
 - (D) Obeys charles, boyles and avagadro's laws**
182. The potency of an Inhalational anaesthetic depends on:
- (A) Blood gas partition co-efficient
 - (B) Oil-gas partition co-efficient**
 - (C) Gas pressure
 - (D) Blood pressure
183. All of the following factors decrease the Minimum Alveolar Concentration (MAC) of an inhalation anaesthetic agent except.
- (A) Hypothermia
 - (B) Hyponatremia**
 - (C) Hypocalcemia**
 - (D) Anemia
184. Magill circuit is also known as
- (A) Mapleson D
 - (B) Mapleson A**
 - (C) Mapleson E
 - (D) Mapleson B
185. All the following drugs are recommended for treatment of beta blocker induced excessive bradycardia and/or decrease in cardiac output, except:
- (A) Dopamine
 - (B) Dobutamine**
 - (C) Glucagon
 - (D) Calcium chloride
186. A 5 year old boy suffering from Duchenne Muscular Dystrophy and Polymyositis has been fasting for 8 hour and has to undergo tendon lengthening procedure, which Anaesthetics should be used
- (A) Induction by I.V. scoline and N2O halothane for maintenance
 - (B) Induction by I.V. propofol, N2O and O2 for maintenance**
 - (C) Induction by I.V. thiopentone and N2O and halothane for maintenance
 - (D) Inhalational N2O, halothane and O2 for maintenance
187. Atropine as preanesthesia has all effects except
- (A) Decrease secretion
 - (B) Bronchoconstriction.**
 - (C) prevent bradycardia
 - (D) prevent hypotension
188. Hydralazine
- (A) Dilates arterioles and veins equally
 - (B) Increases heart rate, stroke volume and cardiac output**
 - (C) May cause a lupus-like syndrome after a single dose
 - (D) Decreases renin activity
189. Which one is FALSE about Carotid sinus massage
- (A) Causes reflex inhibition of the vasomotor centre
 - (B) Activates the cardio-inhibitory centre
 - (C) Can be complicated by ventricular tachycardia
 - (D) Is still effective in an anaesthetised patient**

190. Awareness under anaesthesia
- (A) The risk of awareness can be reduced with the use of a volatile agent monitor alarm adjusted to a value of 1 MAC
 - (B) The PRST score assesses pressure, lacrimation, movement and sweating on a scale from 0 to 8
 - (C) If awareness is suspected during the course of an anaesthetic, 10 mg midazolam will abolish the recollection of events
 - (D) Awareness can reliably be detected by continuous measurement of the bispectral index (BSI)
191. A patient complains of backache following an epidural anaesthetic. This is most likely the result of:
- (A) Traumatic nerve injury from the needle
 - (B) Neurotoxicity from the local anaesthetic drug
 - (C) Hematoma formation
 - (D) Disruption of ligaments from the epidural needle
192. Which of the following is the most sensitive detector of venous air embolism:
- (A) Pulmonary artery pressure
 - (B) Precordial Doppler
 - (C) Esophageal heart sounds
 - (D) End-tidal carbon dioxide monitor
193. The Oxy-haemoglobin dissociation curve is shifted to the left by:
- (A) Acidosis
 - (B) Anaemia
 - (C) Hypothermia
 - (D) High altitudes
194. Hypothermia is used in all except:
- (A) Neonatal asphyxia
 - (B) Cardiac surgery
 - (C) Hyperthermia
 - (D) Arrhythmia
195. Which of the following agents is used for the treatment of postoperative shivering?
- (A) Thiopentone
 - (B) Suxamethonium
 - (C) Atropine
 - (D) Tramadol
196. Which of the following statements is true regarding Nitric oxide:
- (A) Used in pulmonary hypertension
 - (B) Decreases the dose of anaesthetics
 - (C) Causes systemic hypotension
 - (D) Used as a vasoconstrictor
197. Nerve injury associated with lithotomy position
- (A) Brachial plexus injury
 - (B) Common peroneal nerve
 - (C) Both (A) and (B)
 - (D) None of the above
198. Stage 2 RIFLE classification of acute kidney injury includes
- (A) Increase in serum creatinine to ≥ 1.2 to 2 fold from the baseline
 - (B) GFR decrease by $> 50\%$
 - (C) Complete loss of kidney function for > 4 weeks
 - (D) Increase in serum creatinine to ≥ 3 fold from the baseline

199. Hepatopulmonary syndrome (HPS) is characterized by
- (A) Increased oxygen saturation
 - (B) Increase in the alveolar-to-arterial oxygen gradient.**
 - (C) Decreased or absent intrapulmonary shunting
 - (D) Is found in > 50% of liver transplant candidates
200. Nutrition in critically ill patients
- (A) Total parenteral nutrition is preferred over enteral nutrition
 - (B) Electrolyte abnormalities cannot occur in TPN
 - (C) Overfeeding can lead to reversible cholestatic jaundice.**
 - (D) Should be delayed as much as possible