

BCM

PROVISIONAL ANSWER KEY (CBRT)

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THE LINK FOR ONLINE OBJECTION SYSTEM WILL START FROM 11-12-2021; 04:00 PM ONWARDS

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 : www.safevaults.in/login

001. The Point where the recoil of chest wall equals the elastic recoil of lung is called
(A) Expiratory reserve Volume (B) Inspiratory reserve volume
 (C) Functional Residual Capacity (D) Closing Capacity
002. How many hours after a cardiac ischemia event would one expect to reliably find a positive troponin?
 (A) 6 hrs (B) 8 hrs
(C) 10 hrs (D) 12 hrs
003. The transpulmonary pressure measurement using esophageal balloon may be beneficial in all of following patients EXCEPT
(A) Obesity (B) Abdominal compartment Syndrome
(C) After abdominal surgery (D) Neurosurgical procedures
004. 54-year-old man presents with 6 hours of acute substernal chest pain. He has an ECG within the first 10 minutes of arrival. He has 4 mm acute ST-segment elevation in leads V2– V5. Which one of the following would be most appropriate reperfusion strategy as per American College of Cardiology (ACC) and American Heart Association (AHA) recommendations?
(A) Primary PCI in < 90 minutes (B) Primary PCI in < 120 minutes
(C) Thrombolysis in < 90 minutes (D) Thrombolysis in < 120 minutes
005. The mechanisms for increased work of breathing WOB in COPD patients are all EXCEPT
(A) Force needed to overcome airway resistance
(B) Flattening and shortening of diaphragm
(C) Reduced oxygen delivery
 (D) Hypertrophy of the respiratory muscles
006. Which one of the following is not associated with situational syncope?
(A) Micturition (B) Defecation
(C) Extreme coughing. (D) Wearing of a constricting collar
007. An asthmatic pregnant woman has been admitted with acute exacerbation. Following is true for use of medication in pregnancy
(A) Theophylline precipitates premature labor
(B) Parenteral beta agonist precipitate premature delivery
 (C) Reduced doses of corticosteroids should be used
(D) Erythromycin increases the serum concentration of theophylline.
008. Which one of the following is usually the first symptom in aortic stenosis?
 (A) Dyspnea on exertion (B) Chest pain on exertion
(C) Syncope on exertion (D) Paroxysmal nocturnal dyspnea
009. In the presence of excessive airway resistance , what will happen to the expiratory flow and expiratory time respectively
(A) Increased, prolonged (B) Decreased, Prolonged
(C) Increased, shortened (D) Decreased, shortened

010. Which of the following features distinguishes neurogenic claudication from intermittent vascular claudication?
- (A) Leg and buttock pain
 - (B) Relieved by lumbar flexion
 - (C) Triggered by exercise
 - (D) Worsened by upright posture
011. How will you classify a comatose patient who is quadriplegic has lower cranial nerve palsy, no speech, no facial or pharyngeal movements? He seems to be aware of surroundings, vertical eye movement are present, and is able to blink
- (A) Vegetative state
 - (B) Catatonia
 - (C) Akinetic mutism
 - (D) Locked – in syndrome
012. As per DeBakey classification of aortic dissection, type III dissection is best described as?
- (A) Involvement of the ascending and descending aortas
 - (B) Involvement of only the ascending aorta
 - (C) Involvement of only the descending aorta
 - (D) Involvement of descending aorta with involvement of abdominal aorta
013. SEDAN Score is calculated by using following criterias , EXCEPT:
- (A) Gender
 - (B) Early infarct sign
 - (C) Dense Artery sign
 - (D) NIHSS Score
014. Which one of the following sentences is false regarding aortic dissection?
- (A) CT scan with IV contrast is the imaging modality of choice
 - (B) Transesophageal echocardiograms are 97% to 100% sensitive and 97% to 99% specific.
 - (C) Treatment should be initiated with vasodilator agents before starting beta adrenergic antagonists.
 - (D) Hypertension and tachycardia are common than hypotension.
015. Use of corticosteroids in treatment of acute spinal cord injury in adults has been shown to
- (A) Dramatically increase motor function in patients 6 month after injury
 - (B) Increase risk of systemic complication , sepsis , pneumonia
 - (C) Should be given only in severe cases of Spinal Cord Injury
 - (D) Shows Benefit to patients if administered between 24 to 72 hours of Injury
016. What is the most common abnormal ECG finding in patients with a Pulmonary Embolism?
- (A) Normal ECG
 - (B) S1 Q3 T3
 - (C) Sinus tachycardia
 - (D) T-wave inversions in leads V1–V4
017. Which ONE of the following clinical features is LEAST likely to be associated with an embolic stroke?
- (A) Previous transient neurological deficits involving more than one vascular distribution area
 - (B) Current intravenous drug use
 - (C) Fluctuating severity of neurological deficit
 - (D) A recent ST segment elevation myocardial infarction (STEMI) treated with primary angioplasty

018. Which one of the following factors is/are included in Pulmonary Embolism Rule-Out Criteria Rule?
- (A) No surgery or trauma requiring endotracheal or epidural anesthesia within the last 6-8 weeks
- (B) Pulse >100 beats per minute during ED stay
- (C) No dyspnea
- (D) Age <50 years
019. Regarding a first seizure in a 36-year-old man with human Immunodeficiency virus (HIV) infection, all of the following statements are correct EXCEPT:
- (A) Cerebral lymphoma is a recognised cause
- (B) MRI is the first-line investigation and may avoid the need for lumbar puncture
- (C) Non-contrast head CT may miss a small lesion due to cerebral toxoplasmosis
- (D) The majority of patients don't have an identifiable cause
020. A 37-year-old male presents to the ED with altered mental status. He was found unconscious in the bathroom at work. On exam, he is arousable to painful stimulus, muttering incoherently. His airway is intact and he has bilateral breath sounds. His initial vital signs are blood pressure (BP) 100/60, Pulse rate- 110, respiratory rate (RR) 28, O₂% 97% on room air, Temperature- 99.4. He has dry mucus membranes. Finger-stick glucose is 396. Lab work reveals a normal CBC, 3 + acetone, Na- 121, Cl - 97, HCO⁻ 3.9, K- 3.0, Mg-2.9, Phos-1.5, AG-29. Which of the following is the first priority in caring for this patient?
- (A) IV bicarbonate
- (B) IV insulin
- (C) IV potassium
- (D) IV saline
021. In considering a patient with diabetes with unstable blood glucose, which ONE of the following statements is TRUE?
- (A) Octreotide reverses hypoglycaemia secondary to insulin toxicity
- (B) Excess nocturnal insulin may result in reactive hyperglycaemia
- (C) Acarbose stabilises blood glucose levels by promoting intracellular intake
- (D) Strict glycaemic control (BSL126mg/dl) has been shown to reverse early vascular disease
022. A 52-year-old male with no past medical history complains of tremulousness and increased irritability. His primary care provider sent him to the ED because on exam, his sodium was 161 mEq/L, urine osmolality was 226, and his serum osmolality was 283. Which of the following is the most appropriate next step in diagnosis?
- (A) Aldosterone level
- (B) Cortisol level
- (C) Corticotrophin stimulation test
- (D) Water deprivation test
023. In the management of alcoholic ketoacidosis, which ONE of the following is TRUE?
- (A) Intravenous insulin infusion is required to support resolution of metabolic changes
- (B) Intravenous glucose resolves metabolic disturbances more rapidly than saline alone
- (C) Rapid intravenous saline may induce metabolic alkalosis
- (D) Vitamin B6 administration prevents subsequent Wernicke's encephalopathy
024. Which of the following causes high anion gap acidosis solely by the production of lactate?
- (A) Ethylene glycol
- (B) Iron toxicity
- (C) Ketoacidosis
- (D) Methanol

025. Regarding ED management of a patient with myxedema crisis (myxedema coma), which ONE of the following is the LEAST appropriate management step?
- (A) 200mg of hydrocortisone intravenously
 - (B) Noradrenaline infusion
 - (C) Commencement of intravenous T4 (levothyroxine) before thyroid function test results are available from the laboratory
 - (D) Active rewarming for hypothermia
026. A 82-year-old man is brought in by ambulance during a summer heat wave unresponsive with a rectal temperature of 41°C and dry skin. No medications were found by emergency medical services (EMS) on the scene. Which of the following is the most appropriate initial management?
- (A) Cooling to body temperature of 37°C by immersion bath
 - (B) CT scan of brain, serum and urine toxicological screens, and cooling blanket
 - (C) Evaporative cooling and fluid resuscitation
 - (D) Thyroid function tests and administration of dantrolene sodium
027. An 18-month-old boy is diagnosed with acute gastroenteritis. On examination he appears miserable but alert, has sunken eyes, dry mucous membranes and reduced skin turgor. His vital signs are normal with good peripheral pulses and capillary refill < 2 seconds. He refuses to drink oral rehydration solution (ORS) offered to him. Which ONE of the following is the MOST appropriate next step?
- (A) He should be offered fruit juice or lemonade to encourage oral intake
 - (B) An intravenous line should be inserted and his deficit replaced over the next 8–12 hours
 - (C) He should receive an intravenous fluid bolus with 10–20mL/kg of 0.9% saline
 - (D) A nasogastric tube should be inserted and the deficit replaced with a hypotonic rehydration solution over 4 hours
028. A 25-year-old male electrical line worker is brought to ED after an 18-foot fall off an electric pole while at work. According to his co-workers at the scene, he was initially unconscious for 2 minutes but is now alert and awake. While in the ED, the patient begins to become combative and then more somnolent. His EMS transport and physical examination for major external injuries is unremarkable. What is the MOST LIKELY diagnosis?
- (A) Electrocutation
 - (B) Epidural hematoma
 - (C) Diffuse axonal injury
 - (D) Post-concussive syndrome
029. A 42-year-old female presents late at night to the ED with right upper quadrant (RUQ) pain. You perform a focused ultrasound of the RUQ to look for biliary disease. Regarding ultrasonographic assessment of the biliary system, which ONE of the following is FALSE?
- (A) A sonographic Murphy's sign refers to pain on compression of the fundus of the gallbladder with the probe tip
 - (B) When measuring gallbladder thickness, the posterior gallbladder wall should be measured
 - (C) Gall bladder wall thickness >3mm is abnormal
 - (D) The common bile duct is typically <6 mm in diameter

030. A 30-year-old man presents with hallucinations, tachycardia, and ataxia after eating some mushrooms his roommate brought home from a camping trip. What is the most appropriate therapy?
- (A) Activated charcoal and monitoring of liver enzymes
 - (B) Neostigmine with Atropine and intravenous fluids
 - (C) Intravenous hydration and antiemetics
 - (D) Supportive care and observation with benzodiazepines if need for sedation
031. Regarding ST elevation myocardial infarction, all of the following
- (A) ST elevation in leads II, III and aVF may be associated with occlusion of the right coronary artery or circumflex artery
 - (B) Posterior infarction, characterised by ST elevation in V1 and V2, is associated with occlusion of the right coronary artery or occasionally the circumflex artery
 - (C) Inferior and posterior infarction may be associated with right ventricular (RV) infarction
 - (D) An early marker of inferior infarction may be ST depression in lead AVL
032. A 55-year-old diabetic woman complains of 1 week of lower anterior molar pain and now with 24 hours of sore throat, difficulty swallowing, and sweats. On physical exam patient is anxious and having difficulty breathing. She has significant trismus and so the pharynx is not visualized. Her tongue appears elevated and she is unable to protrude it beyond her teeth, and the sublingual space is indurated and elevated. What is the next best course of action?
- (A) Administer broad-spectrum antibiotics and drain the submandibular abscess.
 - (B) Perform rapid sequence endotracheal intubation, administer intravenous ampicillin-sulbactam, order a CT scan, and emergent head and neck surgery consultation. (D)
 - (C) Perform rapid sequence endotracheal intubation, administer intravenous fluoroquinolone, order a CT scan, and emergent head and neck surgery consultation.
 - (D) Perform awake fibro-optic endotracheal intubation, administer intravenous ampicillin-sulbactam, order a CT scan, and emergent head and neck surgery consultation.
033. With respect to pericarditis, which ONE of the following is TRUE regarding ECG findings?
- (A) ECG is not useful in the diagnosis of cardiac tamponade
 - (B) The ECG will return to normal within 2–3 days
 - (C) Q waves may be caused by acute pericarditis
 - (D) PR segment depression is useful to discriminate between pericarditis and AMI
034. Which of the following is NOT considered a contraindication to the use of propofol as a sedative in the emergency room for procedural sedation?
- (A) Hypovolemia
 - (B) Lack of ability to intubate and ventilate the patient
 - (C) Milk allergy
 - (D) Soy allergy
035. Regarding VT, which ONE of the following statements is TRUE?
- (A) AV dissociation is the hallmark of VT, and is seen in >50% of cases of VT
 - (B) A QRS axis of “90 to +180 (negative QRS complex in I and aVF) is the only axis that has specificity for VT
 - (C) Right bundle branch block (RBBB) morphology in QRS complex in V1 excludes VT
 - (D) VT never has a rate <140 beats per minute

036. Which one of the following statements is not true?
- (A) Wounds located on face or scalp, both highly vascularized areas, are at lower risk for infection.
 - (B) Delayed primary closure after 4 days of open wound management is recommended for wounds with a high risk for infection during the first care encounter.
 - (C) High-pressure irrigation with an appropriate 18-gauge catheter, syringe, and splash guard should be used for uncontaminated wounds in highly vascular areas such as face and scalp
 - (D) Prophylactic antibiotics are recommended for human bites.
037. Regarding preexcitation syndromes, which ONE of the following statements is TRUE?
- (A) Tachycardia associated with Wolff-Parkinson- White syndrome (WPW) is always wide complex
 - (B) Antidromic reentry tachycardia is the most common of the paroxysmal tachycardias seen in WPW
 - (C) Verapamil is indicated for managing rapid atrial fibrillation (AF) with preexcitation in patients without haemodynamic instability
 - (D) Adenosine and beta-blockers may convert a rapid atrial rate to a rapid ventricular rate and precipitate ventricular fibrillation (VF) in atrial fibrillation with preexcitation
038. Which of the following is true regarding vascular injury in trauma?
- (A) An Ankle Brachial Index (ABI) of 1.0 is concerning for arterial injury.
 - (B) Duplex ultrasound is a useful modality to diagnose vascular injury in open fractures.
 - (C) Multidetector CT angiography is safe to use in patients with iodine allergy.
 - (D) Underlying pre-existing vascular disease usually affect the ABI
039. Regarding the hyperoxia test in a neonate with suspected congenital heart disease, which ONE of the following statements is FALSE?
- (A) Pulse oxymetry can reliably substitute for arterial blood gas sampling
 - (B) A passed hyperoxia test means $\text{PaO}_2 > 250\text{mmHg}$ and it excludes hypoxia secondary to congenital heart disease
 - (C) First the neonate should be tested on room air and then tested on 100% oxygen given for 15 minutes
 - (D) A neonate with a failed hyperoxia test should be considered for immediate prostaglandin E1 therapy
040. Which one of the following best describes Parkland Formula for Fluid Resuscitation for children with Ringer Lactate solution?
- (A) $3 \text{ mL} \times \text{weight (kg)} \times \% \text{ BSA burned over initial 24 h plus maintenance. Half over the first 8 h from the time of burn and other half over the subsequent 16 h.}$
 - (B) $4 \text{ mL} \times \text{weight (kg)} \times \% \text{ BSA burned over initial 24 h plus maintenance. Half over the first 8 h from the time of burn and other half over the subsequent 16 h.}$
 - (C) $3 \text{ mL} \times \text{weight (kg)} \times \% \text{ BSA burned over initial 24 h plus maintenance. Half over the first 6 h from the time of burn and other half over the subsequent 18 h.}$
 - (D) $4 \text{ mL} \times \text{weight (kg)} \times \% \text{ BSA burned over initial 24 h plus maintenance. Half over the first 6 h from the time of burn and other half over the subsequent 18 h.}$

041. A 29-year-old female with a liver transplant requires transfusion of blood products in the ED. Which ONE of the following is TRUE?
- (A) Solid-organ transplant recipients are at minimally increased risk of developing transfusion-associated graft-versus-host disease
 - (B) Packed red blood cells should routinely be irradiated
 - (C) Transfusion-associated graft-versus-host disease manifests within 6 hours of transfusion
 - (D) Fresh frozen plasma requires irradiation before administration
042. A 24-year-old woman presents for the second time to your emergency department with the complaint unilateral lower leg swelling and pain. Similar to year ago, the patient is found to have a deep venous thrombosis—this time of the opposite leg. On further questioning, both of her siblings have also had a lower extremity deep vein thrombosis without a clear cause. What is the most common heritable hypercoagulable disorder?
- (A) Antithrombin deficiency
 - (B) Factor V Leiden mutation
 - (C) Protein C deficiency
 - (D) Prothrombin gene mutation
043. Regarding pericarditis in patients with end-stage renal disease (ESRD) requiring chronic dialysis, which ONE of the following statements is TRUE?
- (A) Dialysis-related pericarditis is responsible for about 75% of cases
 - (B) The absence of a pericardial friction rub is a feature of uraemic pericarditis
 - (C) Typical electrocardiogram (ECG) changes of acute pericarditis are usually absent in uraemic Pericarditis
 - (D) Anterior pericardectomy is the treatment of choice in haemodynamically stable patients with a large pericardial effusion
044. Which one of the following sentences regarding blood transfusion is correct?
- (A) Each unit of PRBCS should raise the hematocrit by 5%
 - (B) Transfusion-related acute lung injury occurs commonly following infusion of PRBC.
 - (C) *Yersinia enterocolitica* is the most likely bacterium to be transmitted during a blood transfusion.
 - (D) The transfusion of 15 units of PRBCs with a 24-hour period constitutes a massive transfusion
045. Regarding haemolytic uremic syndrome (HUS) in children, which ONE of the following statements is TRUE?
- (A) The majority of cases are associated with *Shigella* infectious diarrhoea
 - (B) HUS classically occurs in children over 4 years of age
 - (C) HUS is an uncommon cause of ARF in children
 - (D) Antibiotic use in diarrhoeal illness may increase the risk of HUS
046. A 23-year-old female presents with lower abdominal cramping and vaginally bleeding for 2 days. Her last menstrual period was 5 weeks ago. Her hCG is 2000 mIU/mL and she is Rh positive. A transvaginal ultrasound shows no intrauterine pregnancy. Which of the following is the next best step in management ?
- (A) Administer Rhogam 50 MIU IM
 - (B) Discharge home with ectopic precautions and obstetric follow-up in 2 days for a repeat HCG
 - (C) Call her return to OPD the next day for a repeat ultrasound and HCG
 - (D) Obtain an obstetric consult in the ED for expert opinion.

047. Regarding the epidemiology of UTI in children, which ONE of the following is TRUE?
- (A) Most cases of UTI in girls occur before the age of 2 years
 - (B) Children with UTI are more likely to have a family history of UTI in first-degree relatives than children without UTI
 - (C) Vesicoureteric reflux (VUR) is present in at least 5% of children having their first UTI
 - (D) Having a first UTI at a young age is not associated with recurrence
048. 30-year-old woman G1P0 at 36 weeks of pregnancy presents to the ED following a motor vehicle collision. Which of the following statements correctly describes a physiologic change in pregnancy that would impact the resuscitation of this patient?
- (A) A baseline tachycardia is expected in the last trimester pregnancy.
 - (B) Blood pressure decreases to a nadir in the third trimester
 - (C) Hematocrit is decreased in pregnancy.
 - (D) Pregnant women will not efficiently compensate for blood loss because of a decrease in cardiac output
049. A 60-year-old male is referred by his general practitioner (GP) with an INR of >10. He has no active bleeding. He is on warfarin for atrial fibrillation. Which ONE of the following is the MOST appropriate action?
- (A) He should receive FFP, prothrombinex and 5–10 mg vitamin K intravenously
 - (B) He should be given 5 mg of the intravenous preparation of vitamin K orally
 - (C) He should be admitted and observed with daily INR testing
 - (D) Vitamin K 5–10 mg should be given intravenously
050. Which one of the statements is not correct?
- (A) Patients with placenta previa presents with painless bright red vaginal bleeding
 - (B) Transabdominal ultrasound should be obtained prior to performing speculum or digital pelvic examination to differentiate abruption placenta from placenta previa.
 - (C) Ultrasound is very sensitive in detecting placental abruption than it is for diagnosis of placenta previa.
 - (D) Tocolytics are best avoided in patients with suspected abruption.
051. Regarding idiopathic thrombocytopenic purpura (ITP), which ONE of the following is TRUE?
- (A) It is caused by an autoimmune destruction of platelets
 - (B) The presence of a large spleen supports the diagnoses of ITP
 - (C) Usually associated with palpable petechiae or purpura
 - (D) The laboratory hallmark of ITP is isolated thrombocytopenia with platelet fragments on the peripheral smear
052. Which of the following statements about activated charcoal is not true?
- (A) Activated charcoal should not be routinely administered to all poisoned or overdosed patients.
 - (B) Patients' airway should be assessed before administering activated charcoal.
 - (C) Patients' bowel motility and bowel sounds should be routinely assessed before administering activated charcoal.
 - (D) Multiple doses of cathartics like magnesium citrate can be safely given along with activate charcoal.

053. Regarding hypercalcaemia associated with malignancy, which ONE of the following is TRUE?
- (A) The most common cause of hypercalcaemia in malignancy is bone metastases
 - (B) Symptoms usually correlate with acuity of the rise as opposed to actual calcium level
 - (C) Biphosphonates should be simultaneously administered with fluid hydration for maximal effect
 - (D) Pamidronate, when indicated, should ideally be given as a bolus injection
054. Which of the following statement about NEXUS (National Emergency X-Radiography Utilization Study) criteria is correct?
- (A) It is a set of validated criteria used to decide which trauma patients do not require cardiothoracic imaging.
 - (B) The NEXUS criteria have a sensitivity of 99.6% for ruling out cervical spine injury with imaging.
 - (C) The NEXUS criteria is most reliable when used for patient >65 years of age.
 - (D) All of the above
055. A 26-year-old female who is 39 weeks pregnant presents to a rural ED with an itchy vesicular rash of 24 hours' duration. She has no past history and this is her first pregnancy, which has, so far, been uncomplicated. You diagnose chickenpox and find that this patient has not been immunised or exposed to varicella in the past. What should you do prior to discharging her?
- (A) Give her a dose of varicella zoster immunoglobulin
 - (B) Counsel her regarding the risk of congenital varicella syndrome
 - (C) Commence a course of oral acyclovir
 - (D) Arrange in utero transfer to a larger centre for caesarean section to reduce transmission at delivery
056. Which of the following cervical spine fractures are usually unstable except?
- (A) Flexion teardrop fracture
 - (B) Avulsion fracture of anterior arch of atlas
 - (C) Fracture of posterior arch of atlas
 - (D) Uncinate process fracture
057. One of the following is not a criterion of severe malaria
- (A) Glasgow Coma Score <11
 - (B) Spontaneous bleeding
 - (C) Parasitemia of 5%
 - (D) Hemoglobinuria
058. What is the MOST common source of pain referred to the shoulder?
- (A) Brachial plexus injury
 - (B) Cervical spine
 - (C) Diaphragmatic irritation from intra-abdominal bleeding or hollow viscous perforation
 - (D) Myocardial infarction
059. A 24-year-old woman presents with a 5-day history of mild lower abdominal pain. As part of her ED examination she is found to have cervicitis but no discharge or signs of pelvic inflammatory disease. Which ONE of the following is INCORRECT regarding this patient?
- (A) She should be treated with azithromycin and ceftriaxone
 - (B) Ectopic pregnancy is a recognised complication of this condition
 - (C) The likely cause is Candida albicans
 - (D) Diagnosis involves PCR of an endocervical swab

060. Which of the following fractures after bony foot injury is not likely to require surgery after initial ED management?
- (A) Metatarsal fracture (B) Talus fracture
(C) Calcaneal fracture (D) Lisfranc fracture
061. Which ONE of the following is a cause for pseudo hyponatraemia?
- (A) Hyperglycaemia
(B) Syndrome of inappropriate antidiuretic hormone (SIADH)
(C) Hyperlipidaemia
(D) Liver cirrhosis
062. A child presenting with an acute crisis of their congenital adrenal hyperplasia (CAH) will likely have the following abnormality?
- (A) Hypoglycemia with absence of urinary ketones
(B) Metabolic acidosis with hyperammonemia
(C) Metabolic acidosis with hypernatremia and hypokalemia
(D) Metabolic acidosis with hyponatremia and hyperkalemia
063. A 28-year-old man is brought into the ED with a Glasgow Coma Scale (GCS) of 12/15 and having ingested an unknown substance. His blood results are as follows:
- pH 7.15 mmol/L (7.35–7.45)
 - HCO₃ 8 mmol/L (20–24)
 - PCO₂ 28 mmol/L (35–45)
 - Na⁺ 141 mmol/L (135–145)
 - K⁺ 4.5 mmol/L (3.5–5.0)
 - Cl⁻ 92 mmol/L (95–105)
 - Ur 10 mmol/L (2–7)
 - Cr 100 mmol/L (60–110)
 - BSL 7.5 mmol/L (3.6–5.8)
 - lactate 16 mmol/L (< 2.2)
 - Osm measured = 375 mOsm/L (275–295)
 - ethanol 30 mmol/L.
- Which ONE of the following drugs/poisons would NOT typically explain the above results?
- (A) Paracetamol (B) Ethanol
(C) Cyanide (D) Acetone
064. Rapid multidirectional eye movements along with involuntary extremity movements can be associated with which of the following oncologic condition?
- (A) Hodgkin lymphoma (B) Medulloblastoma
(C) Nephroblastoma (D) Neuroblastoma

065. An 8-week-old boy is brought to the ED with a 3-day history of vomiting. His venous blood gas shows:
- pH 7.55 (7.35–7.45)
 - HCO₃ 40 mmol/L (22–24)
 - PCO₂ 48 mmol/L (35–45)
 - K 2.8 mmol/L (3.5–5.0)
 - Na 135 mmol/L (135–145)
 - Cl 85 mmol/L (95–105).
- His gas improves with normal saline therapy. Which ONE of the following conditions is the MOST likely cause of his blood gas result?
- (A) Sepsis (B) Adrenogenital syndrome
(C) Adrenal insufficiency (D) Pyloric stenosis
066. What is the most common cause of congenital stridor in children?
- (A) Hemangioma (B) Laryngomalacia
(C) Subglottic stenosis (D) Vascular ring
067. Which ONE of the following techniques provides the best visualisation of the vocal cords during rapid sequence intubation (RSI)?
- (A) Backwards-upwards-rightwards pressure on thyroid cartilage (BURP manoeuvre)
(B) Bimanual laryngoscopy
(C) Retraction of the right side of the mouth laterally by an assistant
(D) Sellick's manoeuvre
068. A 2-year-old girl is brought to casualty with history of seizure. Mother states the child was shaking with her eyes rolled back for 2– 3 minutes. Past few days, the child has been coughing with runny nose. In the emergency department, you evaluate an interactive child who is clinging to her mother's side. Her right tympanic membrane is red and bulging with yellow effusion. Vital signs reveal fever otherwise normal. What is most appropriate next step in management of this patient?
- (A) Consult a paediatric neurologist
(B) Obtain a CBC, urinalysis, and cultures and start injectable broad-spectrum antibiotics after hospitalization
(C) Start antiepileptic medication and order a head CT and electroencephalogram (EEG).
(D) Prescribe course of amoxicillin and discharge home with counselling
069. Regarding the use of lignocaine as a local anaesthetic agent, which ONE of the following is TRUE?
- (A) Alkalinisation of the anaesthetic solution reduces the pain of injection but does not hasten the onset of action
(B) Lignocaine remains effective for up to 4 hours when administered as a regional nerve block
(C) The safe dose of lignocaine without adrenaline is 5–7mg/kg
(D) The dose should not exceed 300mg at a single injection

070. Which of the following protective methods is appropriate for most infectious agents of concern for bioterrorism?
- (A) Contact precautions (B) Droplet precautions
(C) Patient isolation (D) Standard precautions
071. Regarding major trauma in children, which ONE of the following statements is TRUE?
- (A) Abdominal injury is the most common single organ injury associated with death in children
(B) Injuries to internal abdominal organs are more likely to occur in children than in adults
(C) The absence of rib fractures on X-ray essentially excludes underlying lung injury
(D) Bladder injuries are less common in children than in adults
072. A 63-year-old man received a cadaveric kidney transplant for end-stage renal disease due to diabetic nephropathy approximately 8 weeks ago. The patient presents to the ED with 3 days of decreased urine output, tenderness over the graft site, and a potassium level of 5.6 mEq/L (baseline, 4.8 mEq/L posttransplant). Vital signs include a blood pressure of 186/98 mm Hg, heart rate of 92 beats/min, and a temperature of 100°F (37.8°C). Given this patient's presentation, which of the following would be the most likely diagnosis?
- (A) Acute renal artery occlusion (B) Infection from cytomegalovirus (CMV)
(C) *S. aureus* bacteremia (D) Urinoma
073. Prediction of an intracranial injury visible on CT is one of the main objectives in the assessment of an adult patient with head injury. Which ONE of the following statements is TRUE regarding this assessment?
- (A) A history of loss of consciousness is the only proven predictor
(B) Isolated vomiting without a history of loss of consciousness is not a valuable predictor
(C) 2% of patients without a history of loss of consciousness have CT positive intracranial injury
(D) Isolated amnesia without a history of loss of consciousness is not a valuable predictor
074. Which of the following statements about patient who underwent heart transplantation is not correct?
- (A) Heart transplantation results in a denervated heart and does not respond with centrally mediated tachycardia in response to stress or exercise
(B) Most episodes of acute cardiac transplant rejection are asymptomatic and patients present with dysrhythmias and generalized fatigue.
(C) Atropine has no effect on a denervated heart and is not recommended for bradyarrhythmia in heart transplant patients. Instead, administer isoproterenol 2 to 10µg/min IV infusion.
(D) Patients experiencing myocardial ischemia will present with typical angina pectoris.
075. Regarding ED management of a young adult with an acute spinal cord injury, which ONE of the following statements is TRUE?
- (A) Hypotension should be managed with vasopressors as it is usually secondary to neurogenic shock
(B) Suxamethonium should not be used as a paralytic agent during rapid sequence intubation
(C) There is high-quality evidence to support the early use of corticosteroids
(D) A nasogastric tube should be inserted early during ED management

076. Graft-versus host disease is most commonly seen after which organ transplantation?
(A) Lung (B) Heart
(C) Pancreas (D) Hematopoietic stem cell transplant
077. Regarding the diagnosis and management of haemothorax in patients with thoracic trauma, which ONE of the following statements is TRUE?
(A) A massive haemothorax in the adult is defined as at least 1000mL blood in the hemithorax or blood occupying approximately one-third of the available space in the hemithorax
(B) More than 1000 mL of blood in the hemithorax may be missed on a supine chest X-ray (CXR)
(C) There is no indication to evacuate blood from the pleural cavity with tube thoracostomy, when the estimated amount in a stable patient is 200–500ml
(D) More than half of patients with chest trauma require intercostal tube drainage
078. Which of the following drugs is illicitly used for drug-facilitated sexual assault due to its amnestic and rapid sedative effect?
(A) γ -Hydroxybutyrate (B) Carisoprodol
(C) Chloral Hydrate (D) Meprobamate
079. Regarding stab wounds to the heart, which ONE of the following statements is TRUE?
(A) The left side of the heart is at greatest risk of injury from a stab wound
(B) Exsanguinating haemorrhage is more likely to occur if cardiac wound communicates with pleural cavity
(C) Cardiac tamponade is less likely to occur from a myocardial stab wound than from a gunshot wound
(D) Atrial stab wounds spontaneously seal better than ventricular wounds and therefore blood loss is limited from atrial wounds
080. As a rule of thumb, the appropriate depth of ET tube placement in a 3-kg infant as measured from the lips is?
(A) 5cm (B) 7cm
(C) 9cm (D) 13cm
081. Regarding small bowel injury due to blunt abdominal trauma, which ONE of the following statements is TRUE?
(A) Mortality is usually not due to the resultant peritonitis
(B) Abdominal tenderness is an early sign
(C) It is not associated with intraabdominal bleeding
(D) Extravasation of oral contrast on CT scan is present in the majority of the patients
082. A 23-year-old woman suffers a cardiac arrest in your emergency department (ED) from a suspected pulmonary embolism. She is 34 weeks pregnant. Resuscitative efforts are not going well. Which of the following is TRUE regarding perimortem caesarean section?
(A) Maternal CPR should be stopped as soon as the procedure is considered to avoid trauma to the infant.
(B) Perimortem caesarean section should not be considered after 4 minutes of maternal cardiac arrest.
(C) Prognosis for intact survival of the infant is best if delivery occurs within 5 minutes of cardiac arrest.
(D) The procedure is best performed using a horizontal, bikini-type incision.

083. In a patient who has been injured in a bomb explosion once the immediate life threats have been excluded or attended to, assessment should be done to identify the injuries due to primary blast injury. Regarding primary blast injury, which ONE of the following statements is TRUE?
- (A) The lung is the most commonly injured structure due to primary blast injury
 - (B) The detection of tympanic membrane rupture with otoscopy is a sensitive marker for the presence of other significant injuries due to primary blast injury
 - (C) Abdominal solid organ injuries are usually due to primary blast injury
 - (D) An explosion in a confined space (e.g. a bus) is less likely to cause primary blast injury than an explosion in an open space
084. In a poisoned patient with an increased anion gap metabolic acidosis, what aetiology is likely with the additional finding of calcium oxalate crystals in the urine?
- (A) Ethylene glycol
 - (B) Isopropyl alcohol
 - (C) Methanol
 - (D) Propylene glycol
085. Regarding physal (growth plate) injuries in children, which ONE of the following statements is INCORRECT?
- (A) The most common site for the Salter-Harris type III fracture is the distal end of the tibia
 - (B) Fractures of the lateral condyle of the humerus can be treated conservatively
 - (C) Injuries to the growth plate occur in one-third of all bony injuries in children
 - (D) Avascular necrosis of the epiphysis is a complication
086. A 42-year-old man with schizophrenia with some drug dependence and alcohol abuse with last alcohol intake before 8 days presents with a 4-day history of worsening mental status and fevers. Upon presentation, he is altered and agitated, hyperthermic, tachycardic, hypotensive, and has muscular rigidity. What is the most likely diagnosis in this patient?
- (A) Amphetamine withdrawal
 - (B) Alcohol withdrawal
 - (C) Neuroleptic malignant syndrome
 - (D) Serotonin syndrome
087. When differentiating transient synovitis of the hip from septic arthritis in a child who presents with a history of inability to weight-bear, which ONE of the following features is MOST likely to be helpful towards diagnosing transient synovitis?
- (A) Pain-free passive movement of the hip on examination
 - (B) Lateral displacement of the femoral epiphysis on X-ray (Waldenstrom's sign) due to a hip effusion
 - (C) Pain in the hip, groin, medial thigh or knee
 - (D) White cell count (WCC) $< 12 \times 10^6/L$ in serum
088. Which of the following best describes chronic bronchitis?
- (A) Change in the characteristic of a productive cough that has lasted for more than 3 months for 2 consecutive years.
 - (B) Nonproductive cough for 3 months each year for 2 consecutive years, often with dyspnea and partially reversible airway obstruction.
 - (C) Productive cough for 2 months each year for 3 consecutive years, often with dyspnea.
 - (D) Productive cough for 3 months each year for 2 consecutive years, often with dyspnea and partially reversible airway obstruction.

089. An 82-year-old woman presents 3 days after a mechanical fall at home. She has mild dementia. Since the fall she is able to walk but with considerable right hip pain. Her leg is not shortened or externally rotated. On examination, she has some tenderness in the right inguinal region and has restricted active range of movement due to pain. She has almost full passive range of movement with pain in that hip. Her pelvis X-ray and AP and lateral right hip X-rays appear normal. Regarding an occult neck of femur fracture, which ONE of the following is TRUE?
- (A) 30% of patients with normal X-ray have an occult fracture diagnosed on MRI
 - (B) Early bone scan is indicated because it can detect fracture as well as tumours and septic hip
 - (C) When an occult fracture is suspected, the acceptable approach is to advise bed rest and non-weight bearing, with a repeat X-ray in 7 days
 - (D) CT should be done and, if the CT is negative, the patient can be safely discharged without further investigations
090. Which of the following represent increased dead space ventilation?
- (A) Acute respiratory distress syndrome (ARDS)
 - (B) Cyanide toxicity
 - (C) Pulmonary embolus
 - (D) Pulmonary haemorrhage
091. Regarding a patient presenting with acute lumbosacral pain without sciatica, which ONE of the following statements is TRUE?
- (A) 60–70% take over 6 months to recover
 - (B) Radiological imaging is nearly always likely to find the cause
 - (C) Staying active as opposed to bed rest results in improved functional status and early pain reduction
 - (D) This is often due to herniated nucleus pulposus
092. Which of the following statements is TRUE regarding the use of sterile technique for wound closure in ED?
- (A) Basic cleanliness, including the use of nonsterile gloves, is appropriate for wound closure.
 - (B) Full sterile technique should be used for dirty wounds.
 - (C) Probing of the wound with a sterile, gloved, finger is recommended for palpation of foreign bodies prior to wound closure.
 - (D) Skin disinfectants should be used to cleanse the wound and wound margins prior to closure.
093. Which ONE of the following is the MOST common reason for large bowel/colonic obstruction?
- (A) Adhesions
 - (B) Neoplasms
 - (C) Hernias
 - (D) Diverticulitis
094. A 44-year-old man presents to the ED after a deep upper thigh laceration after dropping his chain saw. What is the appropriate way to close this wound?
- (A) Deep absorbable sutures
 - (B) Horizontal mattress suture
 - (C) Multi-layered closure
 - (D) Running sutures

095. Which ONE of the statements regarding hernias is most CORRECT?
- (A) Incisional hernias have a narrow origin and complications are uncommon
 - (B) Umbilical hernias resolve spontaneously in children
 - (C) Direct inguinal hernias occur more frequently in the older age group, extend into the scrotum and can become strangulated requiring surgery
 - (D) Indirect inguinal hernias occur due to a defect in the transversalis fascia and anterior abdominal wall; they may become strangulated and require surgery
096. Which of the following statements is TRUE regarding wounds closed with topical skin adhesives?
- (A) Supplementary dressing should be placed over the wound adhesive.
 - (B) Topical antibiotic cream should always be applied over the wound adhesive.
 - (C) Wound adhesives are appropriate for use on gaping lacerations.
 - (D) Wound adhesives can be removed from the skin with antibiotic ointment or petrolatum jelly.
097. Regarding infection of the breast, which ONE of the following statements is the most CORRECT?
- (A) Breast infections occur in one of every 10 lactating women
 - (B) In non-lactating women *Staphylococcus epidermidis* is the most common causative organism
 - (C) Risk factors include smoking, diabetes and gestational age <41weeks
 - (D) The majority of cases in lactating women can be treated with oral co-amoxiclav and regular expression of milk from the breast
098. An obese elderly female presents with a head injury and a hip fracture. Her blood pressure is low and she is moaning in pain. which of the following is correct about femoral nerve block procedure on this patient?
- (A) Inject after resistance is felt.
 - (B) Injection should be done 3 cm below the inguinal crease.
 - (C) Pillow should be placed under the contralateral hip.
 - (D) Ultrasound guidance or a peripheral nerve stimulator should be used in all cases if available.
099. A 2-year-old boy presents with rectal bleeding, mild crampy abdominal pain and mild anaemia. Abdominal X-rays are unremarkable and a barium enema looks normal. What is the MOST likely diagnosis?
- (A) Meckel's diverticulum
 - (B) Intussusception
 - (C) Haemophilia
 - (D) Anal fissure
100. Which of the following pairs correctly identifies a drug with its associated side effect?
- (A) Etomidate— myoclonic jerking
 - (B) Fentanyl—paradoxical agitation
 - (C) Ketamine—rigid chest syndrome
 - (D) Midazolam—emergence reactions
101. Which ONE of the following conditions is NOT a cause of acute painless unocular visual loss?
- (A) Central retinal artery occlusion
 - (B) Optic neuritis
 - (C) Posterior vitreous detachment
 - (D) Vitreous haemorrhage

102. Which of the following is not a cause of Impingement syndrome?
 (A) Pancoast tumour (B) Subacromial tendonitis
(C) Subacromial bursitis (D) Supraspinatus tendonitis
103. Regarding an orbital blowout fracture, which ONE of the following statements is CORRECT?
(A) An isolated blowout fracture with features of entrapment require urgent surgery within 24–48 hours
(B) Significant injury to the eye is not usually associated with this fracture
 (C) It should be treated with oral antibiotics
(D) Retrobulbar haematoma is not a recognized complication
104. A 60-year-old male presents to your ED complaining of nausea and vomiting. Two hours ago, he had the onset of epigastric abdominal pain. About 1 hour ago he started having intense nausea and multiple episodes of bilious emesis. He denies any history of coronary artery disease or NSAID use. His ECG done at the time of presentation is normal. What is the most likely cause of his emesis?
(A) Gastric outlet obstruction (B) Large bowel obstruction
(C) Myocardial infarction (D) Small bowel obstruction
105. Regarding removal of nasal foreign bodies in children, all of the following statements are true EXCEPT:
(A) Positive pressure techniques are recommended as first-line methods of removal for most foreign bodies that are not firmly impacted
 (B) The ‘big kiss’ and ‘modified big kiss’ techniques often cause barotrauma to the lungs
(C) The success rates with the use of a balloon catheters is high
(D) During procedural sedation, the preservation of gag and cough reflexes is important to prevent aspiration
106. A 23-year-old male presents to the ED complaining of black stools. He states he has been having an upset stomach and diarrhoea for the past 2 days. He started taking an over-the-counter, bismuth-containing medication, with relief of his symptoms. However, today he noticed the onset of black stools and became alarmed. He has a normal exam except for black stool in his rectal vault that is guaiac negative. Lab results show hemoglobin of 15 gm/dL and BUN:creatinine ratio of < 20. Which of the following is MOST appropriate?
 (A) Discharge without any further testing and with reassurance
(B) Initiation of oral proton pump inhibitor and close follow-up
(C) Insertion of a nasogastric tube to evaluate for an UGI bleed
(D) Intravenous proton pump inhibitor and admission
107. Regarding tongue lacerations, which ONE of the following statements is FALSE?
(A) A lingual block or local anaesthetic infiltration are the preferred anaesthetic choices
(B) A large gaping laceration if not repaired results in a grooved or a bifid tongue
 (C) Lignocaine with adrenaline should not be used for local anaesthesia and to achieve haemostasis
(D) A deep laceration involving the muscle can be sutured with deep stitches that penetrate both the mucosa and the muscle

108. Which of the following is TRUE regarding esophageal perforation?
- (A) Boerhaave syndrome is responsible for more than 30% of esophageal perforations.
 - (B) Iatrogenic perforation is the most frequent etiology.
 - (C) Most iatrogenic perforations occur through the left posterolateral wall of the distal esophagus.
 - (D) Proximal perforations tend to be more severe than distal perforations.
109. A young female patient presents to the ED with right flank pain, fever, rigors and vomiting. Her heart rate is 110 and systolic blood pressure (BP) is 95mmHg. She has a penicillin allergy. Her body weight is 72kg. Which ONE of the following is the most appropriate empiric antibiotic regime?
- (A) Amoxicillin 500mg orally 8-hourly for 7 days
 - (B) Cephalexin 500mg orally 6-hourly for 10 days
 - (C) Gentamicin 220mg IV first dose
 - (D) Cefotaxime 1g IV 8-hourly
110. What of the following imaging modality has highest sensitivity for diagnosis of acute cholecystitis?
- (A) CT of the abdomen
 - (B) Endoscopic retrograde cholangiography (ERCP)
 - (C) Magnetic resonance imaging of abdomen.
 - (D) Ultrasound
111. Regarding testicular torsion, which ONE of the following statements is TRUE?
- (A) It is mostly due to lateral rotation of the spermatic cord
 - (B) The cremasteric reflex is always absent
 - (C) It can be reliably excluded with scrotal ultrasound scan (USS)
 - (D) It can be associated with a fever
112. Which of the following statements is TRUE regarding chemical burns?
- (A) Acids generally require longer irrigation times than alkalis.
 - (B) Acetic acid burns may be associated with serious systemic toxicity.
 - (C) Earlier irrigation with water is associated with improved prognosis.
 - (D) There is no benefit to use of calcium gluconate over irrigation with water in hydrofluoric acid burns.
113. Regarding the clinical features of ectopic pregnancies, which ONE of the following is TRUE?
- (A) Risk factors for ectopic pregnancy are present in almost all cases
 - (B) The passage of tissue can differentiate between an ectopic and an IUP
 - (C) Uterine size for estimated gestational age is most often normal
 - (D) Abnormal vaginal bleeding is the most common presenting symptom in patients with ectopic pregnancy

114. Which of the following statements about tetanus is correct?
- (A) Identification and debridement of any wound or devitalized tissue where injury might have occurred is of no value in management of tetanus.
 - (B) Patients who recover from clinical tetanus develop immunity and there is need of active immunization.
 - (C) Tetanus immune globulin is to be given after wound debridement.
 - (D) Many cases of tetanus occur in patients where no specific injury is recognized, and injuries are often minor and occur indoors.
115. A 24-year-old female presents to the ED with blurred vision and slight headache. She is 26 weeks pregnant. Her BP is 150/100 mmHg and a urine dipstix shows 1+ protein. Which ONE of the following is the MOST appropriate?
- (A) She requires conservative management with admission for BP monitoring
 - (B) She is at low risk of developing eclampsia as her BP is not high enough
 - (C) She requires immediate lowering of her BP with intravenous hydralazine
 - (D) Administration of magnesium sulphate will reduce the rate of development of eclampsia by at least 50%
116. Which of the following hallucinogenic drug has shortest duration of action?
- (A) Marijuana (cannabis)
 - (B) Phencyclidine (“angel dust”)
 - (C) Methylenedioxymethamphetamine (“Ecstasy”)
 - (D) Lysergic acid diethylamide
117. Which ONE of the following is TRUE regarding acute vulvovaginitis?
- (A) Chlamydiae is the most common infectious cause in symptomatic women
 - (B) A fishy odour on the whiff test usually means bacterial vaginosis is present
 - (C) The presence of clue cells on microscopy is suggestive of trichomonas
 - (D) A positive culture for Gardnerella on vaginal discharge confirms vaginitis
118. As per the Indian Medical Council (Professional conduct, Etiquette and Ethics) Regulations, 2002, every physician shall maintain the medical records pertaining to his / her indoor patients for a period of?
- (A) Period of 3 years from the date of commencement of the treatment.
 - (B) Period of 5 years from the date of commencement of the treatment.
 - (C) Period of 7 years from the date of commencement of the treatment.
 - (D) Period of 10 years from the date of commencement of the treatment.
119. Regarding dysfunctional uterine bleeding, which ONE of the following is MOST appropriate?
- (A) Regular periods are always associated with ovulatory-type bleeding
 - (B) Thyroid function should be performed routinely
 - (C) Nonsteroidal anti-inflammatory drugs (NSAIDs) are helpful in the treatment of ovulatory but not anovulatory bleeding
 - (D) Tranexamic acid at a dose of 1g three times daily for 3 days is useful in ovulatory-type bleeding

120. A medical practitioner is permitted to make a formal announcement in press regarding the following except?
- (A) On temporary absence from duty.
 - (B) On resumption of another practice.
 - (C) On achievement of new skills, affiliations or qualification.
 - (D) On succeeding to another practice.
121. Regarding drug- or toxin-induced methaemoglobinaemia, which ONE of the following statements is TRUE?
- (A) The oxygen saturation obtained by a blood gas analyser will produce a falsely elevated result
 - (B) Blood appears initially chocolate-brown in colour and redden on exposure to air or oxygen
 - (C) Pulse oximetry readings are deceptively low
 - (D) NAC is the currently recommended antidote
122. TIMI risk score for patients with UA/NSTEMI does not have following risk factor?
- (A) Aspirin use in last 7 days
 - (B) Recent episode of angina prior to this event
 - (C) Raised troponin levels (or another cardiac marker)
 - (D) Echocardiography study showing regional wall motion abnormality
123. Regarding submersion events, which ONE of the following statements is TRUE?
- (A) Significant electrolyte abnormalities are common with saltwater events
 - (B) Drowning is defined as death due to suffocation after submersion in a liquid medium
 - (C) The Conn and Modell classification is a useful neurological classification system and can guide Management
 - (D) Current evidence recommends discontinuation of resuscitation efforts if the submersion time was >5 minutes and resuscitation efforts >10 minutes
124. Which of the following statements about patient with paraparesis is not true?
- (A) In patient with cauda equina syndrome hip flexion and sensation over the anterolateral thighs is often spared.
 - (B) Subacute to chronic paraparesis is always caused by pathology of the spinal cord, myopathy or neuropathy.
 - (C) In patients with acute paraparesis due to anterior cerebral artery ischemia shoulder shrug also is affected.
 - (D) In patients with acute paraparesis due to ischemia of spinal cord, proprioception is not affected.
125. Regarding acute radiation syndrome, which ONE of the following is TRUE?
- (A) A rapid decline in lymphocytes is one of the best early indicators of the extent of the radiation injury
 - (B) Nausea, vomiting and anorexia seen initially after exposure of e^2 Gy is due to a direct toxic effect on the intestinal mucosal barrier and carries a poor prognosis
 - (C) Bone marrow suppression with pancytopenia typically occurs within hours of exposure
 - (D) The acuity of onset and duration of the prodromal phase bears no relation to the dose received

126. Which of the following drugs induces inappropriate secretion of ADH and causes increased gut water absorption, leading to profound hyponatremia?
- (A) Lysergic acid diethylamide
 - (B) Methylenedioxymethamphetamine (“Ecstasy”)
 - (C) Synthetic cathinone derivatives (“bath salts”)
 - (D) Marijuana (cannabis)
127. Which ONE of the following statements is TRUE regarding neuroleptic malignant syndrome?
- (A) It is caused by antipsychotic medication only
 - (B) It has a low mortality rate
 - (C) It is caused by antipsychotics when given in high doses only
 - (D) Severely ill catatonic patients have an increased risk of developing this condition
128. A 20-year-old student living in a hostel was brought to casualty with fever, headache, altered sensorium and multiple purpuric rashes all over body and later diagnosed to have meningococemia serotype B. His close contacts in casualty are concerned about prevention of infection. What would be the most appropriate advice to them?
- (A) Oral rifampicin
 - (B) Vaccination with tetravalent vaccine.
 - (C) Observation and sending blood samples for culture for meningococci.
 - (D) Only counselling regarding no any specific intervention needed.
129. A 3-week-old boy is brought in by his father with a 2-day history of recurrent focal seizures associated with periods of unresponsiveness. On examination he is noted to be drowsy with a distended anterior fontanel and a heart rate of 75bpm. Which ONE of the following is the MOST appropriate answer.
- (A) A benzodiazepine for termination of seizures is a good choice in this setting
 - (B) This seizure type is classified as complex partial seizure and the child will most likely benefit from Carbamazepine
 - (C) A trial of pyridoxine is indicated as B6 deficiency is a common cause of seizures in this age group
 - (D) The head of the bed should be raised to 30 degrees and mannitol should be available for urgent administration
130. Which of the following is not a criterion for scoring in a scoring system for making priority in kidney transplantation after deceased kidney donation in India?
- (A) Near relative of Previous deceased donor now requiring kidney transplant.
 - (B) Previous Living donor now requiring Kidney Transplant.
 - (C) Previous immunological graft failure within 6 months of transplantation
 - (D) Age of recipient
131. Regarding health and safety issues at a disaster site, which ONE of the following statements is TRUE?
- (A) The first priority of healthcare staff is their own safety
 - (B) Chemical decontamination is best achieved by rinsing off under warm shower water
 - (C) Ambulance staff transferring patients to hospital from a contaminated site should wear full personal protective equipment (PPE)
 - (D) Access to the hot zone of an incident is controlled by the ambulance service

132. Following are the factors associated with poor prognosis in a case of survivor of hanging and strangulation arriving at emergency department except:
- (A) Contact with ground (B) Circumferential ligature mark
 (C) Injury severity score <15 (D) Axonic brain injury on CT scan
133. Very much elevated ESR is seen in all of the following except
- (A) Multiple myeloma (B) Subacute Bacterial Endocarditis
 (C) Osteomyelitis (D) Chronic liver disease
134. A Which one of the following is not considered as positive diagnostic peritoneal lavage performed in a patient with abdominal trauma?
- (A) If more than 10 ml of gross blood is aspirated.
 (B) If red blood cell count is higher than 1000 cells/mm³.
 (C) If white blood cell count is higher than 500 cells/mm³.
 (D) If bile is present.
135. Middle East Respiratory syndrome (MERS) is caused by
- (A) Influenza virus (H5N1) (B) Avian flu virus (H7N9)
 (C) Corona virus (D) Swine flu virus (H1N1)
136. Fern pattern burns (Lichtenberg figures) are seen with which of the following type of injuries?
- (A) Lightning injuries. (B) Chemical burns
 (C) High voltage burns (D) Radiation injury
137. Hypovolemic shock results if volume of blood lost is
- (A) > 25% (B) > 30%
 (C) > 35% (D) > 40%
138. A 40-year-old female presents with 5 days of low-grade fever, cough, and worsening sore throat. On physical exam, she has a petechial pattern on her soft palate, grade II tonsils with erythema, and no exudates and nontender cervical adenopathy. What is the most appropriate plan of action?
- (A) Ask her about a history of exposures to HIV, mononucleosis, and influenza and treat with salt gargling, oral hydration, and analgesics.
 (B) Ask her about recent antibiotics and immune status and treat with fluconazole, oral hydration, and analgesics.
 (C) Give her single-dose oral dexamethasone and discharge with salt gargling, oral hydration, and analgesics.
 (D) Test her for Group A Beta-Hemolytic Streptococci (GABHS) using the rapid antigen test and, if negative, treat with salt gargling, oral hydration, and analgesics.
139. Normal level of methemoglobin in blood is
- (A) < 1% of total Hb (B) < 2% of total Hb
 (C) < 3% of total Hb (D) < 4% of total Hb
140. Which one of the following statements about a patient who has Speech Devices (Passy-Muir valve) after tracheostomy is no true?
- (A) It is a two-way valve that fits directly over the opening tracheostomy tube allowing for hands free speech.
 (B) A Passy Muir valve should not be used in a patient with a cuffed tracheostomy tube.
 (C) If a patient with a Passy-Muir valve develops respiratory distress or an inability to speak, first intervention should be to remove the speech valve and then to check the tracheostomy tube for obstruction.
 (D) Both a and b

141. In hemolytic anemias level of unconjugated bilirubin never exceeds
(A) 1 – 2 mg/dl (B) 2 – 3 mg/dl
(C) 3 – 4 mg/dl (D) 4 – 5 mg/dl
142. Which of the following would be the most common presentation for a urologic emergency in a one-year-old boy?
(A) High-flow priapism (B) Testicular torsion
(C) Tourniquet syndrome (D) Varicocele
143. All are true about Rasburicase except
(A) Recombinant Xanthine oxidase
(B) Can cause hypersensitivity reaction
(C) Contraindicated in G6PD deficiency
(D) Can lead to underestimation of blood uric acid levels
144. Which of the following is most appropriate key defining characteristic of a disaster?
(A) Mismatch between available and required resources.
(B) Number of patients.
(C) Types of injuries involved.
(D) Use of chemical, biological, or radiological agents.
145. Hyperbaric oxygen therapy can be used in which of the following etiologies of hemorrhagic cystitis
(A) BK virus induced (B) Drug induced
(C) Radiation induced (D) All of the above
146. All of the following are true about Toxic Shock Syndrome except?
(A) Erythroderma seen (B) Renal failure before shock
(C) Multiorgan failure (D) Very low mortality in obstetric related TSS
147. Monoclonal antibody, 'Eculizumab' used in the treatment of PNH inactivates which component of compliments system
(A) C1 (B) C3
(C) C3b (D) C5
148. False regarding Pyomyositis is?
(A) Common in tropical areas
(B) Etiological agent is usually *S. aureus*
(C) Toxic shock syndrome can develop in case of toxin producing organism
(D) CT scan is the most specific and sensitive diagnostic tool
149. All are true about HIT except
(A) Heparin should be stopped
(B) Warfarin can be started after platelet count normalizes
(C) Platelet transfusion can be given for temporary relief
(D) None of the above
150. The Most Appropriate First Line of Therapy in Medical Management of aortic dissection is
(A) Sodium nitroprusside (B) Nifedipine
(C) Metoprolol (D) Enalaprilat

151. Which of the following is contraindicated in G6PD deficiency
 (A) Allopurinol (B) Rasburicase
 (C) Febuxostat (D) All of the above
152. Acute megaloblastic anemia can be seen after?
 (A) Halothane anesthesia (B) Nitrous oxide anesthesia
 (C) Barbiturate anesthesia (D) Ether anesthesia
153. All of the following conditions present with prolonged aPTT except
 (A) F VII Deficiency (B) F IX Deficiency
 (C) F XI Deficiency (D) F XIII Deficiency
154. All are characteristics of tumor lysis syndrome except?
 (A) Urinary uric acid to creatinine ratio > 1
 (B) Rare with solid tumors
 (C) Spontaneous tumor lysis syndrome can occur
 (D) Usually develops 5 to 6 days post chemotherapy
155. Frequent sighing respiration and irregular breathing pattern suggest which cause of dyspnoea
 (A) Cardiac (B) Pulmonary
 (C) Psychogenic (D) Diaphragmatic palsy
156. All are modalities used for treatment of hemorrhagic cystitis except?
 (A) Mesna (B) High urinary flow maintenance
 (C) Diluted formalin solution (D) N-acetylcysteine
157. Which of the following is false in Eisenmenger's syndrome: -
 (A) Cyanosis (B) Elevated pulmonary vascular resistance
 (C) Intracardiac communication (D) Pulmonic stenosis
158. The most characteristic clinical manifestation of sickle cell trait amongst the following is?
 (A) Painful crises (B) Anemia
 (C) Jaundice (D) Painless hematuria
159. Kussmaul's sign is found in
 (A) Constrictive pericarditis (B) Restrictive cardiomyopathy
 (C) Massive pulmonary embolism (D) All of the above
160. Signs of iron overload affecting endocrine, cardiac and hepatic function are common after?
 (A) 50 transfusions (B) 70 transfusions
 (C) 80 transfusions (D) 100 transfusions
161. S4 is frequently present in all except
 (A) Systemic hypertension (B) Aortic stenosis
 (C) Hypertrophic cardiomyopathy (D) Left ventricular infarction
162. Erythromelalgia is associated with?
 (A) Erythrocytosis (B) Leucocytosis
 (C) Thrombocytosis (D) Mastocytosis
163. The murmur that may be heard in stenosis of left anterior descending coronary artery is
 (A) Graham-Steell murmur (B) Carey- Coombs murmur
 (C) Dock's murmur (D) Carvallo's murmur

164. Which of the drug treatment for multiple myeloma needs Herpes zoster prophylaxis?
 (A) Bortezomib (B) Lenalidomide
 (C) Melphalan (D) None of the above
165. Which of the following is not seen in Wolf-Parkinson-White syndrome
 (A) Wide QRS complex (B) Relatively Short PR interval
 (C) Delta wave (D) T wave changes in precordial leads
166. All are true about amoebic infections except?
 (A) Best test for diagnosis of amoebiasis is demonstration of trophozoite in stool sample
 (B) Asymptomatic carriage of amoebic cysts just needs conservative management
 (C) Amoebic liver abscesses are more common in males
 (D) Jaundice is common in amoebic liver abscess
167. In ECG, total electrical alternans (P-QRS-T) with sinus tachycardia is a relatively specific sign of
 (A) Myocardial ischemia (B) Myocarditis
 (C) Pericardial effusion (D) Pneumothorax
168. In which of the following hypoxias venous blood tends to have high PaO₂?
 (A) Severe exercise (B) Circulatory hypoxia
 (C) Cyanide poisoning (D) Carbon monoxide poisoning
169. AV conduction block is associated with all of the following except
 (A) Kearns – Sayre syndrome (B) Myotonic dystrophy
 (C) Facio-scapular muscular dystrophy (D) Parkinson's disease
170. Which of the following is a typical feature of JVP seen in tricuspid stenosis?
 (A) Prominent v wave (B) Slow y descent
 (C) Obliteration of x descent (D) Deep y trough
171. What is the heart rate in accelerated junctional rhythm
 (A) 40 to 60 beats / min (B) 50 to 100 beats / min
 (C) 100 to 120 beats / min (D) 120 to 160 beats / min
172. Reversed (paradoxical) splitting of S₂ is seen in?
 (A) Left Bundle branch block (B) Right ventricular ectopic beat
 (C) Severe aortic outflow obstruction (D) All of the above
173. I.V. heparin treatment is started when duration of Atrial fibrillation is of
 (A) > 3 hours (B) > 12 hours
 (C) > 24 hours (D) > 48 hours
174. In mitral stenosis which of the following more reliable as an index of severity of valve obstruction?
 (A) Loudness of S₁ (B) Character of murmur
 (C) Duration of murmur (D) Intensity of Opening snap
175. Characteristic ECG findings that suggest VT are all except
 (A) Superior and rightward QRS frontal plane axis
 (B) Bizarre QRS complex mimicking LBBB or RBBB QRS
 (C) Slurring of the initial portion of QRS
 (D) AV dissociation

176. An abnormal increase in U-wave amplitude is due to which of the following drugs?
 (A) Quinidine (B) Dofetilide
 (C) Aminodarone (D) All of the above
177. All of the following are side effects of amiodarone except
 (A) Hypothyroidism (B) Hepatitis
 (C) Pulmonary fibrosis (D) Peripheral neuropathy
178. Tokyo scoring system is used for?
 (A) Pancreatitis (B) Acute cholecystitis
 (C) Esophagitis (D) Diverticulitis
179. '3' sign over chest X-ray is found in
 (A) Patent Ductus Arteriosus (B) Supravalvular Aortic Stenosis
 (C) Coarctation of aorta (D) Tetralogy of Fallot
180. Normal values of intrinsic heart rate are calculated by the formula?
 (A) $116.2 - (0.53 \times \text{age})$ beats per minute (B) $117.2 - (0.53 \times \text{age})$ beats per minute
 (C) $118.2 - (0.53 \times \text{age})$ beats per minute (D) $119.2 - (0.53 \times \text{age})$ beats per minute
181. Which of the following is false about Tako-tsubo (stress) cardiomyopathy
 (A) ST – elevation and T wave inversion in chest leads
 (B) Normal coronary angiography
 (C) Occurs mostly in women
 (D) ECG and Echocardiography changes revert back in 3 to 4 weeks
182. Postural orthostatic tachycardia syndrome (POTS) is diagnosed when on standing heart rate increases by?
 (A) 10 beats/ min (B) 20 beats/ min
 (C) 30 beats/ min (D) 40 beats/ min
183. Which of the following is intravenous antiplatelet agent
 (A) Ticagrelor (B) Prasugrel
 (C) Cangrelor (D) None of the above
184. Electrical cardioversion has no effect in which of the following?
 (A) Atrial flutter (B) Atrial fibrillation
 (C) Multifocal atrial tachycardia (D) Paroxysmal supraventricular tachycardia
185. Which of the following drugs is not usually implicated in crystal-induced nephropathy?
 (A) Acyclovir (B) Indinavir
 (C) Phenytoin (D) Sulfonamides
186. Adenosine should not be given in?
 (A) Regular wide complex tachycardia
 (B) Irregular wide complex tachycardia
 (C) Atrioventricular nodal reentrant tachycardia
 (D) Atrioventricular reciprocating tachycardia
187. The drug that leads to cholestatic pattern of liver injury is
 (A) Phenytoin (B) Methyl testosterone
 (C) Methotrexate (D) Sulfonamides

188. The false statement about Ivabradine is?
(A) Inhibits I_f current (B) Causes bradycardia
(C) Mild inotropic action (D) Irregular pulse can occur
189. All of the following drugs used for long term treatment of Cluster headache except
(A) Prednisolone (B) Verapamil
(C) Lithium (D) Topiramate
190. Alvarado score is used in the evaluation of?
(A) Cholecystitis (B) Autoimmune hepatitis
(C) Appendicitis (D) Pancreatitis
191. All of the following can be toxic manifestations of niacin except
(A) Flushing over face and body
(B) Acute hepatic injury
(C) Pre-medication with steroids can alleviate symptoms
(D) Tachyphylaxis can develop to flushing symptoms
192. Mitral valve prolapse is associated with which of the following?
(A) Ostium primum ASD (B) Ostium secundum ASD
(C) Ventricular septal defect (D) Patent ductus arteriosus
193. All of the following are intrinsic causes of renal failure except
(A) HUS-TTP (B) Hepatic failure
(C) Sepsis (D) Vasculitis
194. All are present in constrictive pericarditis except?
(A) Prominent y descent (B) Prominent x descent
(C) Pericardial knock (D) Third heart sound
195. The risk of refeeding syndrome is increased in all of the following except
(A) Use of antacid for long period (B) Anorexia nervosa
(C) Elderly patients (D) Long term use of antibiotics
196. Crack lung is commonly seen in?
(A) Heroine (B) Cocaine
(C) SLE (D) Busulphan
197. What percentage of rib fractures may not be apparent on antero-posterior Chest Xrays
(A) 20 % (B) 30%
(C) 40% (D) 50%

198. Which of following gives least information about adequate resuscitation?
- (A) Arterial lactate level (B) Systolic blood pressure of 100mmHg
- (C) Central venous oxygen saturation (D) Mixed venous oxygen saturation
199. Which of the following statements is TRUE for initial assessment of a patients with acute abdominal pain
- (A) Early administration of opioid analgesia should be avoided as it will obscure physical findings, delay diagnosis, or lead to increased morbidity/mortality.
- (B) Elevated serum lipase is highly sensitive and specific for the diagnosis of acute pancreatitis.
- (C) Normal serum lactate rules out mesenteric ischemia.
- (D) Normal WBC reliably excludes surgical disease.
200. Strategies to prevent hypotension in hemodialysis in ICU patients include all except?
- (A) High sodium concentration dialysate (B) Bicarbonate buffered dialysate
- (C) Low efficiency dialysis (D) High calcium dialysate