

# BCK

## PROVISIONAL ANSWER KEY (CBRT)

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Advertisement No.	134/2020-21
Preliminary Test held on	07-12-2021
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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](http://www.safevaults.in/login)**

001. In acute asthma, anticholinergic drugs have following effects:  
 (A) Additive action with beta- agonists (B) Act mainly on central airways  
 (C) Both A and B (D) High Incidence of adverse cardiac events
002. Which of the following sentences about physical examination of patients with acute myocardial ischemia is false?  
 (A) Patient may have a third or fourth heart sound  
 (B) There may be new murmur from aortic root dissection  
 (C) Patients may have crackles on lung auscultation from congestive heart failure  
 (D) Chest wall tenderness is absent in almost all AMI cases.
003. In case of tracheomalacia, the pressure –volume curve will have following Characteristics:  
 (A) Expiratory limb only will be flattened (B) Inspiratory limb only will be flattened  
 (C) Variable extrathoracic flow obstruction (D) Fixed extrathoracic flow obstruction
004. What is the recommended door-to-ECG time in patients presenting with chest pain?  
 (A) 5 minutes  (B) 10 minutes  
 (C) 15 minutes (D) 30 minutes
005. A normocapnic chronic obstructive pulmonary diseases patients will have following clinical features which will differentiate it from hypercapnic patients  
 (A) Chronic bronchitis Component is more than emphysema  
 (B) They are obese  
 (C) Lungs are hyperinflated  
 (D) Right heart failure occurs early
006. What is the significance of a third heart sound (S3) in the diagnosis of CHF?  
 (A) Absence suggests increased 90-day mortality  
 (B) Absence suggests worse outcome  
 (C) Presence suggests an elevated pulmonary capillary wedge pressure  
 (D) Presence suggests improved outcome
007. Which of the following group has best outcome in terms of mortality from ARDS  
 (A) Multiple Trauma (B) Chronic Liver Disease  
 (C) Pancreatitis (D) Age greater than 70
008. Which of the following is the most frequent radiographic finding of left-sided heart failure?  
 (A) Cardiomegaly  (B) Dilated upper lobe vessels  
 (C) Enlarged pulmonary artery (D) Interstitial edema
009. Inspiratory hold Maneuver is used to calculate  
 (A) Plateau pressure (B) Peak Pressure  
 (C) Auto Peep (D) Fio2 requirment
010. Which one of the following is used for staging the severity of acute limb ischemia?  
 (A) Rutherford Criteria (B) Johnson and Louise criteria  
 (C) Prince and Gary criteria (D) Synovitz criteria
011. 60 year old man presents to emergency department with sudden onset right hemiplegia and aphasia 16hours back . he is obtunded ,with a left gaze deviation and unilaterally dilated pupil. On CT scan of brain , he is found to have a large ischemic stroke more than 2/3<sup>rd</sup> area of left middle cerebral artery territory with mass effect and uncal herniation. Amongst all the following steps , which is most beneficial for a good outcome  
 (A) Osmotherapy with 23% saline (B) Adminstration of intra- arterial thrombolysis  
 (C) Hemicraniectomy (D) Intravenous Mannitol

012. Which of the following symptom complexes may be seen patient with progressing aortic dissection?
- (A) Paraplegia (B) cardiac tamponade  
(C) Horner's syndrome (D) All of the above
013. The laboratory result that you must do in all patients with acute ischemic stroke being considered for fibrinolytic therapy is
- (A) Blood Glucose (B) Platelets Counts  
(C) INR (D) Aptt
014. Which one of the following sentences is not correct regarding aortic dissection?
- (A) Classically presents with acute chest pain that is most severe at onset and radiates to the back.  
(B) Elderly males with hypertension are more commonly affected than female patients with hypertension.  
(C) Neurological sequelae are seen in around 40% cases.  
(D) chest x-ray is normal in 85% to 90% of patients with aortic dissection.
015. Regarding Pseudoseizures following is are true Except
- (A) Confirm diagnosis of pseudo-seizures can made only by EEG monitoring  
(B) Patients resist eye opening  
(C) Response to treatment by anti-epileptic drugs is very good  
(D) Despite of long duration of seizures there are no metabolic derangements
016. A 44-year-old woman presents with dyspnea at rest and with exertion for the past 3 months. Vital signs are BP-90/70, pulse rate- 98, RR-22, Temperature - 98.6, room air saturation of 97%. The patient is alert. Physical exam findings include jugular vein distention, soft heart sounds, clear lungs, and a pulsus paradoxus of 28 mm Hg. An ECG shows low-voltage QRS complexes and electrical alternans. While arrangements are made for admission and an echocardiography-guided pericardiocentesis with pigtail catheter insertion, what would be most appropriate temporizing ED treatment?
- (A) Furosemide intravenously (B) Broad spectrum antibiotic  
(C) Infusion of noradrenalin (D) Fluid bolus of 500–1000 mL of NS
017. 56-year-old woman presents to the ED with a 2-day history of sudden onset severe headache. Which ONE of the following findings is MOST likely to suggest SAH?
- (A) Homogenously bloody CSF in all tubes  
(B) Normal opening pressure at lumbar puncture  
(C) Maximal headache at 6 hours after the onset  
(D) Absence of white cells in the CSF
018. The Pulmonary Embolism Rule-Out Criteria (PERC) states that if all the criteria are met, then the risk of PE falls to less than what percent?
- (A) 2% (B) 5%  
(C) 10% (D) 15%
019. Which ONE of the following is the MOST LIKELY cause in a 72-year-old woman who presents with severe vertigo and positive examination findings for otitis media?
- (A) Ménière's disease (B) Bacterial labyrinthitis  
(C) Ramsay Hunt syndrome (D) Cerebellopontine angle tumour

020. Wells' Score for Pulmonary Embolism include all of following except?  
 (A) Heart rate >100 beats/min (B) Immobilization within prior 6-8 weeks  
 (C) Active malignancy (D) Hemoptysis
021. Regarding lower limb examination findings of a patient with diabetes, which ONE of the following statements is TRUE?  
 (A) Pretibial myxoedema is a purplish-pink plaque on the front of the shins associated with type 2 Diabetes  
 (B) Diabetic peripheral neuropathy causes loss of fine touch, pain and temperature sensation with preserved vibratory and position sense  
 (C) Neuropathic arthropathy presents as an acutely painful swollen joint  
 (D) Diabetic foot ulcers are most commonly seen under the metatarsal heads
022. A 27-year-old female patient with a history of cystic fibrosis presents to the ED complaining of 2 days of gradual onset throbbing headache. She has had no fevers, chills, upper respiratory infection symptoms, and has never gotten headaches before. She is very healthy and has been going to the gym a lot in the last 2 weeks. Her mother states that she has been "grumpy" the last day or two and he has noticed she occasionally has resting "muscle twitches." She does not any addiction. Her last hospitalization was more than 2 years ago. Her vital signs are within normal range and she is afebrile. The patient proceeds to have a grand mal seizure in the ED and while the nurse is giving IV benzodiazepines. Her serum sodium level is of 109. Which of the following is the most appropriate rate for a 3% sodium chloride infusion for this patient?  
 (A) 50 mL/hour (B) 150 mL/hour  
 (C) 200 mL/hour (D) 250 mL/hour
023. In the assessment of a foot ulcer in a patient with diabetes presenting to the emergency department (ED), which ONE of the following features is MOST LIKELY to be associated with underlying osteomyelitis?  
 (A) Ulcer <2cm<sup>2</sup> in area  
 (B) Presence of Charcot's arthropathy  
 (C) Bacterial growth on a wound swab  
 (D) An ulcer extending to the underlying bone on sterile surgical probing
024. A 24- year-old female vegetarian (no dairy/animal by-products) training for a national running competition for 2-3 month presents with persistent cracked lips, a reddened tongue, and eczema of the face and genitalia. What vitamin deficiency is causing her symptoms?  
 (A) Vitamin B1 (B) Vitamin B2  
 (C) Vitamin B6 (D) Vitamin B12
025. In a patient who presents to the ED with a high suspicion for having a thyroid storm, which ONE of the following conditions is LEAST likely to be considered in the differential diagnosis?  
 (A) Intravenous amphetamine use (B) Alcohol withdrawal  
 (C) Salicylate overdose (D) Neuroleptic malignant syndrome
026. A 40-year-old homeless alcoholic man presents to the ED complaining of foot numbness. He has been sleeping in a drainage culvert to stay out of the wind. Night time temperatures have been well above freezing, but it has rained steadily for the past 5 days. His feet are pale and numb. They develop severe burning pain on rewarming. What is the most likely diagnosis?  
 (A) Chilblains (B) Cold urticaria  
 (C) Frostbite (D) Trench foot

027. In considering Graves' disease, which ONE of the following statements is TRUE?
- (A) IgA antibodies stimulate thyroid-stimulating hormone (TSH) receptors on thyroid follicular cells
  - (B) Hyperthyroidism may present with acute generalised weakness
  - (C) The mainstay of management of thyroid ophthalmopathy is treatment of the hyperactive Thyroid
  - (D) Pretibial myxoedema appears as a long-term sequela of therapy for Graves' disease, caused by induced hypothyroidism
028. Which of the following is not an indication for administering polyvalent Crotalidae Immune Fab (CroFab™) after a rattlesnake bite?
- (A) Progressive symptoms
  - (B) Altered mental status
  - (C) ARDS
  - (D) DIC with elevated PT or falling platelet count.
029. A 19-year-old man presents with violent vomiting, abdominal cramps and mild diarrhoea 2 hours after the consumption of leftover fried rice and meat. Which ONE of the following is the MOST likely responsible organism?
- (A) Staphylococcus
  - (B) Vibrio
  - (C) Bacillus cereus
  - (D) Clostridium perfringens
030. Which of the following diving injuries is correctly paired with its appropriate treatment?
- (A) Arterial gas embolism—heparin and thrombolytics
  - (B) Decompression sickness—recompression with hyperbaric oxygen
  - (C) Nitrogen narcosis—recompression with hyperbaric oxygen
  - (D) Pulmonary barotrauma—recompression with hyperbaric oxygen
031. Regarding investigations for chest pain, which ONE of the following statements is TRUE?
- (A) A new ST segment elevation  $\geq 1$ mm in two contiguous leads on electrocardiogram (ECG) has a 50% positive predictive value for diagnosis of acute myocardial infarction (AMI)
  - (B) Troponin is specific to myocardial damage and is infrequently elevated in other pathology
  - (C) Any troponin elevation above threshold has prognostic significance in patients presenting with ACS
  - (D) Exercise stress testing has a high sensitivity and specificity for coronary heart disease and is a useful investigation to diagnose coronary artery disease
032. Which one of the following may be a part of management of poisoning with Oleander (Nerium oleander)?
- (A) GI decontamination with activated charcoal
  - (B) Monitoring of potassium level
  - (C) Digoxin-specific Fab antibody
  - (D) All of the above
033. Regarding cardiogenic shock in AMI, which ONE of the following is FALSE?
- (A) Cardiogenic shock complicating myocardial infarction carries a mortality of approximately 80%
  - (B) The early use of inotropes is associated with reduced mortality
  - (C) Arranging urgent reperfusion is critical when left anterior descending artery occlusion causing myocardial infarction is responsible
  - (D) Intra-aortic balloon counterpulsation is only useful when combined with revascularization

034. Bright-green streaming appearance to fluorescein instilled into the tear layer (Seidel test) is pathognomonic for?
- (A) Suspected Chemical Ocular Injury       (B) Suspected penetrating eye injury  
(C) Suspected Ultraviolet Keratitis      (D) Suspected Hyphema
035. Regarding atrioventricular block, which ONE of the following statements is TRUE?
- (A) Mobitz type I (Wenckebach) is characterised by increased refractoriness of the His-Purkinje system, resulting in progressive lengthening of the PR interval until a QRS complex is dropped  
(B) The most common conduction defect found in AMI patients is Mobitz type II  
 (C) The most frequent unstable rhythm found in AMI patients is complete heart block  
(D) Complete heart block is always associated with a wide QRS complex
036. Which of the following is TRUE regarding pain management?
- (A) Anxiolytics should not be combined with narcotics due to the increased risk of respiratory depression.  
(B) Opioid agonist-antagonists have no benefit over pure opioid agonists.  
(C) Patients of all ages tend to report pain in similar ways.  
 (D) The proper use of opioids requires consideration of side effects, initial dose, route and timing of onset, and frequency of administration.
037. Regarding Brugada syndrome, which ONE of the following statements is FALSE?
- (A) Brugada syndrome is associated with syncope and sudden cardiac death in young patients with a structurally normal heart  
(B) It is characterised by incomplete or complete RBBB and ST segment elevation in V1-V3 that may be downsloping or concave  
(C) When untreated, it has a mortality of 20% at 2 years  
 (D) It is best treated with a sodium channel blocking agent
038. Which of the following statements is true regarding wound infections?
- (A) Delayed primary closure 2 weeks after injury is advised for wounds that have a high chance for infection.  
 (B) Soil, or clay, contamination poses a high risk of wound infection.  
(C) Ultrasound should cannot be used to detect a small retained foreign body.  
(D) Wounds with a high risk of infection should never be closed.
039. Regarding paroxysmal SVT in an infant, which ONE of the following statements is TRUE?
- (A) Infants usually present late (after 48 hours from the onset) as they tolerate SVT well  
(B) Vagal manoeuvres are ineffective in infants  
 (C) Use of verapamil may cause cardiovascular collapse and death  
(D) AV nodal reentry is a more common mechanism in this age group
040. Which of the following statements regarding wound ballistics is TRUE?
- (A) A bullet's caliber is an indicator of wound potential.  
(B) Lead bullets in soft tissue should be removed because of the risk of lead poisoning.  
 (C) Radiographic localization of a bullet requires two views at 90 degrees.  
(D) The emergency physician should describe wounds details separately as entrance and exit wounds in the medical record.

041. Regarding a patient presenting to the ED with a fever who has a history of a liver transplant and who is on immunosuppressant therapy, which ONE of the following is TRUE?
- (A) Simultaneous treatment with antibiotics and large-dose corticosteroid is appropriate
  - (B) Infection occurring in the first month after transplant is usually due to opportunistic infections
  - (C) The presence or absence of fever is useful in distinguishing between infection and rejection
  - (D) NSAIDs, but not paracetamol, can safely be prescribed for pain and fever
042. The New Orleans Criteria for obtaining a head CT after minor head injury does not include which of the following factor?
- (A) Age >60
  - (B) Intoxication
  - (C) Evidence of trauma above the clavicles
  - (D) Unwitnessed fall
043. Regarding investigations performed in renal failure, which ONE of the following is TRUE?
- (A) Serum markers of myocardial damage (CK and troponin) are reliable in the diagnosis of myocardial damage in dialysis patients
  - (B) Serum urea can be used as an accurate marker of the clinical syndrome of uraemia
  - (C) Fractional excretion of sodium (FeNa) >1% is suggestive of prerenal causes of ARF
  - (D) The presence of hyaline casts in the urine suggests acute tubular necrosis
044. Which of the following sentences about Disseminated Intravascular Coagulation is not true?
- (A) The clinical features of DIC are a result of simultaneous haemorrhage and thrombosis
  - (B) Intravenous vitamin K is not helpful in bleeding patient enough with elevated PT
  - (C) Tranexamic acid should be given only in the setting of DIC due to trauma.
  - (D) Transfuse fresh frozen plasma (15 mL/kg) for bleeding patient with PT or PTT that are >1.5 times the upper limit of normal.
045. Regarding the aetiology of rhabdomyolysis, which ONE of the following is TRUE?
- (A) Crush injuries are the most common cause in adults
  - (B) Rhabdomyolysis as a complication of statins occurs in about 10% of patients
  - (C) Influenza virus is the most common infectious cause
  - (D) Endurance-based exercise is more prone to cause rhabdomyolysis than strength training or heavy lifting
046. In considering emergency complications of malignancies, which of the following is TRUE?
- (A) Demeclocycline is the treatment of choice for cancer patients with hyponatremia from inappropriate antidiuretic hormone secretion.
  - (B) Electrical alternans is a common electrocardiographic finding in patients with malignant pericardial effusion.
  - (C) Hypercalcemia is frequent laboratory abnormality associated with tumor lysis syndrome
  - (D) Thromboembolism is among leading cause of death in cancer patients
047. Which ONE of the following statements is TRUE regarding asymptomatic bacteriuria?
- (A) Asymptomatic bacteriuria is the presence of >10<sup>3</sup> CFU/mL of a single bacterial species on two successive urine cultures in patients without symptoms
  - (B) Screening is recommended in pregnancy, nursing home residents and patients with indwelling urinary catheters due to the high incidence
  - (C) Treatment is recommended in patients with indwelling urinary catheters
  - (D) Treatment in pregnancy reduces the incidence of pyelonephritis

048. Regarding ovarian torsion, which of the following statements is correct?
- (A) Drugs that stimulate ovulation are a risk factor for ovarian torsion.
  - (B) If a patient has vague, bilateral lower abdominal pain, ovarian torsion is extremely unlikely.
  - (C) Ovarian torsion most commonly occurs on the left side.
  - (D) Pelvic ultrasound is highly reliable (100% sensitive) for the evaluation of ovarian torsion.
049. Regarding anticoagulation therapy with warfarin, which ONE of the following statements is TRUE?
- (A) Age is not a risk factor for over-coagulation
  - (B) The two available brands of warfarin, Coumadin and Marevan, are bioequivalent and interchangeable
  - (C) About 50% of bleeding episodes occur while the international normalised ratio (INR) is <4.0
  - (D) Unfractionated or low molecular weight heparin should always be given concurrently until the INR is therapeutic
050. Which of the following statements is true regarding the risks of radiation and diagnostic tests with pregnant patients?
- (A) Chest CT scanning results in more radiation exposure than ventilation–perfusion scanning for pulmonary embolism.
  - (B) Fetal exposure to less than 10 rad does not increase the risk of fetal death, mental defect, or growth retardation.
  - (C) Significant radiation exposure during 8–15 weeks can result in small head size.
  - (D) The first 2 weeks of pregnancy are the period of organogenesis and therefore the highest risk period
051. Regarding bleeding disorders, which ONE of the following statements is TRUE?
- (A) Haemarthrosis and epistaxis are typical of von Willebrand’s disease
  - (B) In patients with haemophilia, the prothrombin time will usually be abnormal
  - (C) Recurrent bleeding into muscles are associated with both haemophilia A and B
  - (D) Spontaneous bleeding from the oropharyngeal tract is common in patients with haemophilia A
052. Which of the following statements regarding preeclampsia and eclampsia is correct?
- (A) A 34-year-old female G2P1 at 16 weeks, seen in the obstetric office on two consecutive visits with a blood pressure of 150/80, should be classified as mild preeclampsia.
  - (B) Magnesium should be started in the ED on all patient in the third trimester with a blood pressure greater than 140/90.
  - (C) Multiparity is a risk factor for preeclampsia.
  - (D) Subcapsular liver hematoma is a potential complication of Hemolysis, Elevated Liver Enzymes, Low Platelet Count (HELLP) syndrome.
053. Regarding the assessment of haematological malignancies in children, which ONE of the following is TRUE?
- (A) Bone pain caused by marrow displacement in acute leukaemia is typically tender to palpation
  - (B) Gingival hyperplasia occurs more commonly in acute lymphoblastic leukemia (ALL) than acute myeloid leukaemia (AML)
  - (C) The absence of a raised white cell count (WCC) excludes leukaemia
  - (D) Disseminated intravascular coagulopathy may occur in newly diagnosed AML



054. Which of the following statements about activated charcoal is true?
- (A) Using cathartic along with activated charcoal is more effective than activated charcoal alone.
  - (B) Repeated doses of cathartics like magnesium citrate can be given safely along with activate charcoal.
  - (C) Whole bowel irrigation with polyethylene glycol electrolyte lavage solution does not affect adsorptive capacity of activated charcoal.
  - (D) Multiple doses activated charcoal is useful to prevent systemic absorption of xenobiotic which has prolonged absorptive phase such as extended-release formulations.
055. A 28-year-old man is brought to the ED with a 10-day history of fevers, myalgia, headache and malaise. Today he is feeling much worse, is confused and lethargic. He has recently returned from a holiday in South-East Asia; prior to the trip he had all necessary vaccinations and took Malarone (atavaquoneproguanil) as chemoprophylaxis against malaria. Which ONE of the following is correct regarding malaria?
- (A) The full blood count (FBC) in patients with malaria typically shows a microcytic anaemia with an elevated white cell count and thrombocytopenia
  - (B) The cerebrospinal fluid (CSF) usually shows markedly raised white cells and a reduced protein and glucose level
  - (C) A negative blood smear (thick and thin film) indicates that the diagnosis is unlikely to be malaria
  - (D) Artesunate or quinine would be a suitable treatment for this patient if he had Plasmodium falciparum malaria
056. A 27-year-old male without significant past medical history arrives in the emergency department complaining of neck pain. He reports being a seat belted passenger in a parked car that was struck from behind at a low rate of speed about 12 hours prior to arrival. The patient was fine at the time of the accident, but has now developed neck pain and stiffness. He denies any focal numbness or weakness, and denies any other injuries. A physical exam reveals tender paracervical muscles, but does not reveal any midline tenderness to palpation, and his neurologic examination is normal. The patient does report pain on the contralateral side of the neck when turning her head from side to side and a decreased range of motion secondary to pain. What is the MOST appropriate next diagnostic or therapeutic intervention?
- (A) Place the patient in cervical collar and obtain plain radiographs of the cervical spine.
  - (B) Place the patient in a semirigid collar and advise follow-up with his primary care physician in 2 weeks.
  - (C) Place the patient in a cervical collar and obtain an MRI scan to assess for ligamentous injury.
  - (D) Prescribe analgesics and muscle relaxants, and advise the patient to maintain motion as usual and avoid activities that produce pain.
057. A 17-year-old male presents to the ED with a 6-hour history of vomiting and profuse diarrhea and blurred vision. He has no past medical history, medications or allergies and lives with two other college students, neither of whom have symptoms. On examination he is mildly dehydrated; he is unable to tolerate oral fluids due to difficulty in swallowing, and his power is 3/5 in the upper limbs and 4/5 in the lower limbs. What is the most likely causative organism?
- (A) Botulinum toxin
  - (B) Salmonella
  - (C) Shigella
  - (D) Enterohaemorrhagic E. coli
058. Which of the following cervical spine fractures are usually unstable except?
- (A) Flexion teardrop fracture
  - (B) Hyperextension dislocation
  - (C) Extension teardrop fracture
  - (D) Fracture of posterior arch of atlas

059. Target or target-like lesions are seen in all of the following conditions EXCEPT:  
 (A) Erythema multiforme (B) Toxic epidermal necrolysis (TEN)  
 (C) Stevens-Johnson syndrome (SJS) (D) Pyoderma gangrenosum
060. Which of the following statements about plantar fasciitis is not true?  
 (A) Plantar fasciitis is the most common cause of heel pain and is a result of overuse.  
 (B) The symptom of plantar fasciitis is pain on the plantar surface of the foot, and is worse after waking up.  
 (C) Plantar fasciitis has prolonged course and only 40-50% of cases resolve with adequate treatment after 2-3 years.  
 (D) Corticosteroid injections are useful and provide short-term benefit.
061. A 68-year-old man is brought in seizing from a nursing home. His initial  $[Na^+]$  on a venous blood gas is found to be 176 mmol/L. Which ONE of the following drugs may be responsible for this finding?  
 (A) Morphine  
 (B) Lithium  
 (C) Nonsteroidal anti-inflammatory drugs (NSAIDs)  
 (D) Carbamazepine
062. A 18 month old boy is brought in by EMS for seizure. The child is healthy with no chronic problems. Mother states that child was playing & was sitting on the floor, cried, and then became cyanotic. This was followed by loss of body tone with brief shaking of extremities. The boy was back to baseline condition upon EMS arrival to house the physical examination of the child was normal, the next most appropriate action would be?  
 (A) EEG (B) MRI of the brain  
 (C) Neurology consultation (D) Reassurance
063. Which ONE of the following is a cause of saline unresponsive metabolic alkalosis?  
 (A) Thiazide diuretic use (B) Protracted vomiting  
 (C) Primary hyperaldosteronism (D) Cystic fibrosis
064. Which of the following conditions are associated with hypoglycemia in new-borns neonates except?  
 (A) Neonate of a diabetic mother (B) congenital heart disease  
 (C) maternal eclampsia (D) Inborn errors of metabolism
065. A 35-year-old female presents with a prolonged seizure. Her initial ABG is shown.  
 • pH 7.25 (7.35–7.45)  
 • PCO<sub>2</sub> 55 mmol/L (35–45)  
 • PO<sub>2</sub> 100 mmol/L (80–100)  
 • HCO<sub>3</sub> 15 mmol/L (22–24)  
 • Na<sup>+</sup> 135 mmol/L (135–145)  
 • K<sup>+</sup> 4.5 mmol/L (3.5–5)  
 • Cl 98 mmol/L (95–105).  
 Which ONE of the following explains the above blood gas?  
 (A) Mixed normal AG metabolic acidosis and respiratory acidosis  
 (B) High AG metabolic acidosis  
 (C) Mixed high AG metabolic acidosis and metabolic alkalosis  
 (D) Mixed high AG metabolic acidosis and respiratory acidosis

066. Which of the following malignancy of children demonstrates a mixed sclerotic/lytic “sunburst” appearance of periosteal reaction?  
 (A) Ewing’s sarcoma (B) Osteosarcoma  
 (C) Fibrosarcoma of bone (D) Giant cell tumour of bone
067. Regarding laryngospasm as a cause of upper airway obstruction, which ONE of the following is TRUE?  
 (A) It is most common in children aged 1–3 years  
 (B) Bradycardia is an unlikely complication in children  
 (C) It can cause pulmonary oedema  
 (D) It resolves as soon as the causative stimulus has ceased
068. Which of the following statements about Bronchilitis is not true?  
 (A) Bronchiolitis is the most frequent lower respiratory infection in the first 2 years of life  
 (B) Most patients have wheezing and rhinorrhea  
 (C) Most infants with bronchiolitis respond well to both  $\beta$ -agonists and corticosteroids and are first line treatment.  
 (D) Diagnosis is clinical and does not require laboratory or radiologic studies.
069. Regarding intravenous regional anaesthesia (Bier’s block), which ONE of the following statements is TRUE?  
 (A) Prilocaine can safely be infused at a dose of 5mg/kg  
 (B) Lignocaine injected as a 0.5% solution is an acceptable alternative to prilocaine  
 (C) The anaesthetic agent should always be injected distal to the site of injury to be effective  
 (D) Minimum tourniquet inflation time should be at least 10 minutes
070. What is considered as the “universal” decontamination agent?  
 (A) Bleach (B) Decontamination foam  
 (C) Neutralizing alkali (D) Water
071. Which ONE of the following is the MOST common manifestation of abusive head trauma in children?  
 (A) Retinal haemorrhage (B) Brainstem infarction  
 (C) Subdural haematoma (D) Extradural haematoma
072. A 62-year-old female who underwent liver transplantation a year earlier due to hepatitis C cirrhosis presents to the ED with fever, confusion, and new onset ascites. Her current transplant medications include prednisone and tacrolimus. The patient was stable until 2 weeks ago when she was exposed to an upper respiratory infection. She presented to her primary care physician and was given pseudoephedrine, azithromycin, and an antitussive. What is the most likely etiology to this patient’s hepatic encephalopathy?  
 (A) Tacrolimus toxicity (B) Acute hepatitis C  
 (C) Disappearing duct syndrome (D) Primary graft failure
073. Regarding intracranial haemorrhage associated with traumatic brain injury, all of the following are correct EXCEPT:  
 (A) Traumatic subarachnoid haemorrhage (SAH) may be missed on CT scans obtained within 6–8 hours from the time of injury  
 (B) Mortality from an acute subdural haematoma is higher than from an extradural haematoma  
 (C) Subdural haematomas but not extradural haematomas cross suture lines on a CT scan  
 (D) A history of loss of consciousness is nearly always present in patients with an extradural haematoma

074. Which of the following statements about a patient who underwent heart transplantation is correct?
- (A) Consider the possibility of transplant rejection for patients who present with atrial or ventricular dysrhythmia.
- (B) Symptomatic bradyarrhythmia is treated with isoproterenol infusion.
- (C) Hemodynamically unstable patient with suspected acute rejection should receive methylprednisolone 1 g IV in emergency department.
- (D) All of the above.
075. A 25-year-old male presents to the ED with a stab wound to the neck. During the primary survey, the emergency medicine registrar searches for the presence of any hard signs. Which ONE of the following is LEAST likely to be a hard sign in this patient?
- (A) Evolving stroke (B) Air bubbling through the wound
- (C) Subcutaneous emphysema (D) Large haematoma
076. Which of the following is not useful treatment modality in a patient with lithium toxicity?
- (A) Haemodialysis  (B) Activated charcoal
- (C) Sodium polystyrene sulfonate (D) Whole-bowel irrigation
077. Regarding a patient with a flail chest secondary to blunt trauma, which ONE of the following statements is TRUE?
- (A) Hypoxaemia is usually the result of increased work of breathing due to paradoxical chest wall movements of the flail segment during inspiration and expiration
- (B) The movement of the flail segment is most visible just after injury and less visible 24 hours later
- (C) In an awake patient conservative treatment with meticulous analgesia provides good recovery even with significant flail segment and underlying lung contusion
- (D) A patient with flail segment involving more than eight ribs has a high mortality
078. Which of the following hallucinogenic drug has longest duration of action?
- (A) Marijuana (cannabis)
- (B) Phencyclidine (“angel dust”)
- (C) Methylenedioxymethamphetamine (“Ecstasy”)
- (D) Lysergic acid diethylamide
079. Which ONE of the following is NOT an aim of ED resuscitative thoracotomy?
- (A) Control of bleeding from pulmonary vessels with clamping
- (B) Cross-clamping of the ascending aorta to stop massive intraabdominal bleeding
- (C) Internal cardiac massage
- (D) Removal of a blood clot from the pericardial sac
080. M A near-term but low-birth-weight newborn has received tactile stimulation and blow by oxygen for a heart rate of 80. After 30 seconds of blow by oxygen, there has been no improvement. No meconium was noted. What is the next step?
- (A) Chest compressions
- (B) ET intubation and positive pressure ventilation
- (C) ET intubation and aspiration for meconium
- (D) Positive pressure ventilation with a bag-mask, at a rate of 40–60 breaths/min

081. In the management of a haemodynamically unstable patient with a pelvic fracture, which ONE of the following measures is MOST appropriate?
- (A) If the FAST is negative, all measures should be taken to control pelvic bleeding, which may include prompt angiography and selective embolization
  - (B) If the FAST is negative, patient should proceed for laparotomy because a false negative FAST is common in patients with pelvic fractures
  - (C) If the FAST is positive, the patient should proceed to operating theatre for surgical control of bleeding from common and external iliac and common femoral arteries
  - (D) All patients, irrespective of the FAST results, should proceed first to laparotomy and then to surgical or radiological control of pelvic bleeding
082. Which of the following statements about cardiopulmonary resuscitation in a 10-year-old child is most correct?
- (A) Children of this age are treated as adults with respect to basic life support.
  - (B) Compress the lower half of the sternum with one hand, using the heel only.
  - (C) Current recommendations for ET drug use suggest a dose that is half of the IV dose.
  - (D) Monitor the brachial pulse for adequacy of compression.
083. Which ONE of the following is applicable for estimating the total body surface area (TBSA) of a burn?
- (A) The 'rule of 9' should not be used for children under the age of 10
  - (B) The head of a 2-year-old child is equivalent to about 9% of TBSA
  - (C) The palm of a patient's hand, including the fingers, is approximately 5% of the TBSA
  - (D) The back of the trunk accounts for 9% TBSA in an adult
084. Which of the following clinical features best distinguishes serotonin syndrome from neuroleptic malignant syndrome (NMS)?
- (A) Altered mentation
  - (B) Clonus
  - (C) Hyperthermia
  - (D) Onset >24 hours
085. Regarding a diagnosis of nerve injuries when assessing a child with a supracondylar fracture of the humerus, all of the following statements are correct EXCEPT:
- (A) Inability to flex the distal interphalangeal joint of the index finger and the interphalangeal joint of the thumb indicates injury to the anterior interosseous branch of the median nerve
  - (B) If the child is able to fully extend the thumb it excludes a radial nerve injury
  - (C) If the child is able to fully abduct all fingers it excludes an ulnar nerve injury
  - (D) Inability to make a fist is usually secondary to pain and should not be considered as a median nerve injury
086. Which of the following statements about vasopressor use in critically ill patients with renal failure is FALSE?
- (A) Dopamine at low doses improves renal recovery and decreases mortality in critically ill patients with renal failure.
  - (B) Fenoldopam is considered by some experts as the agent of choice for hypertensive emergencies in patients with renal dysfunction.
  - (C) Fenoldopam is a dopamine and alpha-receptor agonist that increases blood flow to the renal cortex and outer medulla.
  - (D) Fenoldopam reduces mortality and provides renal protection in critically ill patients at risk for renal failure.

087. Regarding interpretation of children's cervical spine radiographs, all of the following are correct EXCEPT:
- (A) Fractures of the upper cervical spine above C3–4 level is more common than that of the lower spine in children < 8 years of age
  - (B) Anterior atlantodental space (preodontoid space) is < 5mm in those < 8 years of age
  - (C) C2–3 pseudosubluxation is common and can be identified by assessing posterior vertebral and spinolaminar lines
  - (D) A fracture-like appearance at the base of the odontoid should be interpreted as incomplete ossification (synchronosis)
088. Which of the following statements about urinary tract infections in patients with an indwelling Foley catheter is TRUE?
- (A) Infections in patients with short-term indwelling catheters are usually caused by a single organism.
  - (B) Intermittent self-catheterization is associated with a higher risk of urinary tract infection compared with indwelling catheter.
  - (C) Pyuria is universal for patients with indwelling catheters for more than 30 days and diagnosis of urinary tract infection should not be made without the presence of other clinical symptoms or signs, such as fever, flank pain, or hematuria.
  - (D) The presence of Candida in the urine of a patient with an indwelling catheter is common and does not require treatment.
089. Regarding radiographic assessment of an ankle in a patient who has a clinical diagnosis of an acute ankle sprain, which ONE of the following statements is INCORRECT?
- (A) The lateral view is helpful in identifying a joint effusion
  - (B) Ankle joint margins should be parallel and the medial part of the joint space should not exceed 4mm in the mortise view
  - (C) Avulsion fractures are often present but they do not correlate to the location of ligamentous injuries
  - (D) Syndesmotic disruption can be identified by examining the distal tibial and fibular overlap on an AP view
090. All of the following conditions have an elevated A–a gradient. Which one will NOT be corrected by supplemental oxygen administration?
- (A) Age-related decrease A–a gradient due to decreased PaO<sub>2</sub>
  - (B) Arteriovenous (AV) shunt
  - (C) Congestive heart failure
  - (D) Pleural effusion
091. Which ONE of the following is the MOST LIKELY diagnosis for a 68-year-old male who presents to the emergency department (ED) with a history of left lower quadrant abdominal pain and tenderness, low-grade fever and altered bowel habit?
- (A) Pyelonephritis
  - (B) Irritable bowel syndrome
  - (C) Sigmoid volvulus
  - (D) Diverticulitis
092. Which of the following statements is true with regard to the formation of scars?
- (A) Hypertrophic scars extend beyond the original wound margins and decrease in size over time.
  - (B) Keloids extend beyond original wound margins and fail to change size over time.
  - (C) Keloids usually decrease in size over 1–2 years.
  - (D) Whites are more prone to developing keloids

093. Use of bedside ultrasound for detecting abdominal aortic aneurysm in the ED is becoming increasingly common. Which ONE of the following statements pertaining to this is TRUE?
- (A) Emergency clinicians with relatively limited training can reliably detect an abdominal aortic aneurysm
  - (B) The lumen of the aorta should be measured from inner wall to inner wall
  - (C) The probe selected should have a frequency of 7–12MHz
  - (D) Bedside ultrasound can reliably exclude a ruptured abdominal aortic aneurysm
094. Which of the following statements best applies to the use of tissue adhesives?
- (A) Cyanoacrylate tissue adhesives have a lower rate of wound dehiscence as compared with other forms of primary closure.
  - (B) Octyl-cyanoacrylate and butyl-cyanoacrylate are similar in their water resistance and burst strength.
  - (C) The patient should be placed in Trendelenburg to avoid leakage of the adhesive into the eyes.
  - (D) Tissue adhesives should cover the entire wound and extend to 5–10 mm on either side of the wound edges
095. Which ONE of the following patients is the MOST suitable for discharge from the ED?
- (A) 77-year-old female, low-grade fever 37.7°C, cognitively normal, with one episode of vomiting, mild lower abdominal pain, no rebound or guarding with a urine dipstick that is positive for nitrites and large leucocytes
  - (B) 82-year-old female who has constipation, is confused, afebrile, has central abdominal pain and a distended abdomen
  - (C) 73-year-old male, history of hypertension with sudden onset of flank pain and a BP of 95/62
  - (D) 86-year-old male with diarrhoea and vomiting with mild generalised abdominal pain
096. While evaluating the lacerations to the knee or ankle for joint capsule penetration, which of the following management plans is the most appropriate for identifying an injury?
- (A) Injection of 5–10 cc of saline into the joint
  - (B) Methylene blue joint injection
  - (C) Injection of fluorescein solution followed by a Wood's lamp examination
  - (D) Physical examination alone
097. Which ONE of the wounds described below is MOST suitable for delayed primary closure?
- (A) An 8 cm wound to the medial thigh through the subcutaneous tissue from a surfboard that occurred 6 hours ago
  - (B) A dog bite, with laceration to the finger that occurred 4 hours ago
  - (C) Laceration to the hand from broken glass that occurred 12 hours ago
  - (D) A pretibial skin flap in an elderly patient who fell on a curb
098. Which of the following statements is true regarding the management of puncture wounds?
- (A) Debridement of a puncture wound should always be performed to better visualize the base.
  - (B) High-pressure irrigation will enable better visualization of the entrance site.
  - (C) Prophylactic antibiotics should always be prescribed in cases where the puncture wound involves the foot.
  - (D) Pseudomonas should be considered in puncture wounds involving sneakers or rubber-soled shoes.

099. Which ONE of the following statements relating to upper gastrointestinal tract foreign bodies is CORRECT?
- (A) A button battery located in the stomach 8 hours post ingestion needs urgent endoscopic removal
  - (B) On anterior–posterior (AP) X-ray coins lying in the sagittal plane are more likely to be in the Oesophagus
  - (C) Mediastinitis is a recognised complication of an oesophageal foreign body
  - (D) In adults an oesophageal foreign body is most likely to get stuck at the cricopharyngeal region
100. Which vital sign is recommended to be continuously monitored for all levels of sedation, from minimal to deep?
- (A) Blood pressure
  - (B) Oxygen saturation
  - (C) Pulse
  - (D) Respiratory rate
101. Regarding assessment and management of central retinal artery occlusion (CRAO) and central retinal vein occlusion (CRVO), which ONE of the following statements is INCORRECT?
- (A) In both conditions the visual loss can be abrupt
  - (B) A ‘blood and thunder’ appearance of the retina can be seen in CRVO
  - (C) Emergent referral to ophthalmology is indicated in both CRAO and CRVO
  - (D) There is no evidence to suggest that emergent therapies such as pulse massage of the eyeball and intravenous acetazolamide are effective
102. Which of the following is NOT considered a core feature of conversion disorder?
- (A) At least three prior similar events have occurred.
  - (B) Symptom expressed is a change or loss of physical function suggesting a physical disorder.
  - (C) Recent psychological stressor or conflict.
  - (D) Symptom produced unconsciously.
103. Regarding a patient presenting to the ED with epistaxis, which ONE of the following statements is TRUE?
- (A) Posterior epistaxis is more common in young patients
  - (B) There is a clear association between hypertension and epistaxis
  - (C) When posterior packing is done with a Foley catheter, the balloon should be fully inflated to 30cc to achieve an effective tamponade
  - (D) Chemical cautery should be done on one side only
104. Which of the following statements about heparin induced thrombocytopenia is not correct?
- (A) It occurs earlier if heparin was given within last 3 months
  - (B) It is more common in patients undergoing any surgery.
  - (C) It is more frequent in females than males
  - (D) Platelet count rarely falls below 20000/microlitre
105. Regarding repair of a through-and-through laceration involving the pinna of the ear, which ONE of the following statements is TRUE?
- (A) If a haematoma develops a few days after suturing a laceration, it should be treated conservatively
  - (B) As cartilage heals slowly, the skin sutures should be removed in 10–14 days
  - (C) If the cartilage is exposed due to avulsed skin, the wound should be managed with non-adherent dressings until skin cover develops
  - (D) A repaired large laceration should always be covered with a properly placed pressure dressing



106. Which of the following features, best predicts adverse outcomes in patients with upper GI hemorrhage except?
- (A) A history of cirrhosis or ascites on examination
  - (B) Coffee-ground emesis in the nasogastric lavage
  - (C) Initial hematocrit less than 30%
  - (D) Initial systolic blood pressure less than 100mmHg
107. Which ONE of the following regarding percutaneous suprapubic catheterisation (SPC) is FALSE?
- (A) History of previous lower abdominal surgery or irradiation is a contraindication to SPC insertion
  - (B) Recognised complications include extraperitoneal extravasation, haematuria and injury to the bowel
  - (C) Indications include trauma to the urethra, phimosis with urinary retention and pelvic trauma
  - (D) It is less likely to cause bacteriuria than urethral catheterization
108. Which of the following statements is TRUE regarding oesophageal foreign bodies?
- (A) Button batteries lodged in the oesophagus can be managed expectantly.
  - (B) Button batteries do not need further follow-up once they have passed the oesophagus.
  - (C) Endoscopic retrieval is the preferred method to remove small drug packets in body packers.
  - (D) Objects that are irregular, sharp, particularly wide, or long are at risk for becoming lodged distal to the pylorus.
109. Causes of priapism include all of the following EXCEPT:
- (A) Papaverine injection
  - (B) Spinal cord injury
  - (C) Systemic sclerosis
  - (D) Sickle cell disease
110. A 54-year-old male with cirrhosis presents with a distended abdomen and shortness of breath. An ultrasound reveals significant peritoneal fluid consistent with ascites. A paracentesis was performed. More than 4 L of fluid was removed from the patient. Once the paracentesis is complete, the patient complains that the paracentesis site is leaking. What is the most appropriate next step in management?
- (A) Increase the dose of diuretics.
  - (B) Perform another paracentesis to remove more peritoneal fluid
  - (C) Place a dry dressing and recheck in 1 hour
  - (D) Place a purse string suture, apply a dry dressing, and recheck in 30 minutes
111. Urine dipstick testing is frequently used in the ED. Which ONE of the following statements is INCORRECT?
- (A) The presence of nitrites on a urine dipstick is highly sensitive for diagnosis of a urinary tract infection (UTI)
  - (B) A negative urinalysis test on a bag urine sample in a paediatric patient is sufficient to exclude a UTI
  - (C) Urine dipstick tests in the ED frequently give false positive or false negative readings
  - (D) Urine dipstick is an adequate test to exclude UTI
112. What is the MOST common location of pain in a pregnant woman with appendicitis?
- (A) Right upper quadrant
  - (B) Right lower quadrant
  - (C) Left lower quadrant
  - (D) Umbilicus

113. Regarding serial  $\beta$ HCG testing in early pregnancy, which ONE of the following is MOST CORRECT?
- (A) A rise in  $\beta$ HCG >50% in 48 hours suggests a viable pregnancy
- (B) A normal doubling time of  $\beta$ HCG in 48 hours on serial testing excludes ectopic pregnancy
- (C) A very low  $\beta$ HCG <100 mIU/mL excludes an ectopic pregnancy
- (D)  $\beta$ HCG >1500 mIU/mL is the discriminatory zone above which an IUP can reliably be visualised on transabdominal ultrasound
114. Which of the following antiepileptic drugs is known to cause aplastic anemia, hepatic failure and can crystalize in the kidney, leading to acute renal failure in large overdose?
- (A) Felbamate (B) Lacosamide
- (C) Zonisamide (D) Tiagabine
115. A 21-year-old female has been placed on a MgSO<sub>4</sub> infusion after she had an eclamptic seizure. Which ONE of the following is TRUE regarding the use of MgSO<sub>4</sub> in pregnancy
- (A) Serum magnesium levels should be measured and infusion rate adjusted to maintain a therapeutic range for seizure prophylaxis
- (B) MgSO<sub>4</sub> can cause renal insufficiency and therefore hourly urine output should be routinely Monitored
- (C) Brisk reflexes may be an early indicator of toxicity
- (D) Toxicity follows a dose-response relationship and clinical monitoring is usually adequate to avoid adverse effects
116. Which of the following statements about misconduct as specified under chapter 7 of Indian Medical Council (Professional conduct, Etiquette and Ethics) Regulations, 2002 is not true?
- (A) In the case of running of a nursing home by a physician and employing assistants to help him / her, the ultimate responsibility rests on the physician.
- (B) The registered medical practitioner shall not disclose the secrets of a patient that have been learnt in the exercise of his / her profession under any circumstances without any exceptions.
- (C) Consent is not needed to publish photographs or case reports of his / her patients without their permission, in any medical or other journal if his/her identity is not disclosed.
- (D) Physician posted in a medical college/institution both as teaching faculty or otherwise who is found absent on more than two occasions during duty hours and it is certified by the Principal/Medical Superintendent and forwarded through the State Government to Medical Council of India/State Medical Council.
117. Regarding pelvic inflammatory disease (PID), which ONE of the following is FALSE?
- (A) The risk of infection is higher during and shortly after menses
- (B) Cervical motion tenderness on examination is more sensitive than adnexal tenderness
- (C) PID is usually polymicrobial and due to sexually acquired pathogens
- (D) The presence of white blood cells in the vaginal discharge is a sensitive marker for PID
118. Persons diagnosed with COVID-19 disease in a hospital were asked for COVID-19 vaccination status. An equal number of patients without COVID-19 disease were asked for COVID-19 vaccination status, and the responses in the two groups were compared. The appropriate measure of association in this study would be?
- (A) Risk ratio (B) Incidence density
- (C) Odds ratio (D) Prevalence ratio
119. All of the following are complications of urinary alkalisation EXCEPT:
- (A) Alkalaemia (B) Hypokalaemia
- (C) Dehydration (D) Hypocalcaemia

120. All are sources of research question EXCEPT:
- (A) Published literature (B) Being alert to new ideas  
(C) Careful observation and teaching (D) Personal experiences
121. Regarding the management of heatstroke, which ONE of the following is TRUE?
- (A) The end point of cooling techniques is a rectal temperature of 36–38°C  
(B) Benzodiazepine is an appropriate choice of drug to suppress shivering associated with some cooling Techniques  
(C) Temperature should gradually be reduced over a few hours to reduce shivering  
(D) Evaporative cooling with ice-cold water is the preferred external cooling technique
122. Which of the following is FALSE about disease prevalence?
- (A) It is the ratio of existing cases to the total population at risk during a specified time point  
(B) Total mid-year population is used as an approximation for population at risk wherever at risk population is not available  
(C) The multiplier is chosen depending upon how rare or common the disease being studied is.  
(D) Prevalence is the appropriate for measuring burden of diseases with high fatality.
123. Regarding electrical injuries sustained by household current, which ONE of the following is TRUE?
- (A) The household current in Australia is low and not capable of causing ventricular fibrillation  
(B) All patients require 4–6 hours of cardiac monitoring due to the potential for delayed Arrhythmia  
(C) Children who sustain hand wounds from electric outlet injuries should be admitted for 12–24 hours due to potential transthoracic current pathway  
(D) Severe bleeding from the labial artery, from chewing or biting on electrical cords, is usually delayed for 1–2 weeks
124. Prophylactic antibiotics are often recommended for?
- (A) human bites on the extremities (B) Dog or cat bites on the extremities  
(C) Wounds with exposed joints or tendons (D) All of the above.
125. Regarding mental state examination (MSE), which ONE of the following statements is INCORRECT
- (A) Diagnosis is an important outcome of MSE  
(B) MSE starts on commencement of the interview with the patient  
(C) Command hallucinations in a patient indicate serious illness  
(D) Restricted affect is commonly found in schizophrenia
126. Which of the following is a drug of choice for induction in rapid sequence intubation of a child with asthma?
- (A) Etomidate (B) Ketamine  
(C) Propofol (D) Lorazepam
127. A 3-month-old previously well child has fever for 2 days without a source. The child appears well and has no evidence of sepsis or toxicity. Urine screening is negative, WCC is 8/mm<sup>3</sup>, neutrophil count 4/mm<sup>3</sup>, CSF is normal, chest X-ray (CXR) is normal and blood culture (BC) is pending. Which ONE of the following is CORRECT?
- (A) Current evidence suggests that this patient cannot be managed as an outpatient  
(B) Empiric acyclovir is indicated  
(C) GBS disease does not affect this age demographic  
(D) Reviewing the band-to-total neutrophil ratio may be of use

128. Which of the following is drug of choice for cyclosporine induced hypertension?  
(A) Verapamil (B) Amlodipine  
(C) Prazocin (D) Metoprolol
129. Which ONE of the following is TRUE regarding normal developmental milestones in children?  
(A) A neonate at 1 month of age is able to fix its gaze on an object and follow to the midline  
(B) A baby may smile when talked to by 2 weeks of age  
(C) A baby at 1 month of age is able to roll onto its back  
(D) Babies usually walk at 9 months of age
130. Which of the following statements about kidney allocation system for deceased kidney transplantation in India is true?  
(A) Kidney from Paediatric donor (less than 18 years) first will be allocated to paediatric patients only.  
(B) Blood group O kidney will be allocated to any of the recipient with most points in scoring system in pooled city-based waiting list of group O, group A, group B and group AB.  
(C) Recipient requiring multi-organ transplant have no priority in allocation process and allocation is based upon kidney scoring system only.  
(D) For the kidneys retrieved at a transplant hospital, allocation of both the kidneys will be done first based on city waiting list.
131. Regarding biological emergencies, which ONE of the following statements is TRUE?  
(A) In suspected pulmonary anthrax, patients should be isolated to prevent droplet transmission  
(B) Pneumonic plague due to *Yersinia pestis* responds rapidly to oral penicillin  
(C) Smallpox classically presents with a centripetal dense vesicular rash  
(D) Botulism toxicity induces a lethal spastic paralysis of the respiratory muscles
132. All of the following characteristics of injury will help in determining “age of injury” except?  
(A) Granulation tissue formation (B) Shape of injury  
(C) Scab formation (D) Colour of injury
133. All the below statements are true regarding meningococemia except  
(A) Can lead to gangrenes in extremities  
(B) Can cause DIC  
(C) Rash is seen in about  $\frac{3}{4}$  of cases  
(D) Most commonly affected age group is 10 to 20 years
134. Sparrow foot marks like findings are associated with which type of following injury?  
(A) Motor cyclist's fracture (B) Under-running or tail gating  
(C) Steering wheel impact (D) Wind screen impact
135. The least common laboratory finding in Infective endocarditis is  
(A) Anemia (B) High CRP  
(C) Elevated ESR (D) Leukocytosis
136. All the organisms can cause Toxic shock syndrome (TSS) except?  
(A) *Clostridium sordellii* (B) *P. aeruginosa*  
(C) *S. pneumoniae* (D) *S. aureus*
137. Menorrhagia is a common symptom in women with  
(A) Von Willebrand disease (B) Factor XI deficiency  
(C) Symptomatic Carriers of hemophilia (D) All of the above

138. All of the following are complications of infective endocarditis except?  
 (A) Cerebrovascular accident (B) Myocardial abscess  
 (C) Intracardiac fistulas (D) Left atrial appendage clot
139. All of the following drugs can cause methemoglobinemia except  
 (A) Septran (B) Sodium Nitroprusside  
 (C) Primaquine (D) Aspirin
140. Muddy appearance of freshly drawn blood is characteristic of which of the following?  
 (A) Sickle cell anemia (B) Methemoglobinemia  
 (C) Thalassemia (D) Carbon monoxide poisoning
141. Which of the following is/are the mechanism/s for lactic acidosis in malignancies  
 (A) Hypoxemia (B) Extensive hepatic involvement by tumor  
 (C) Increased production by tumor mass (D) All of the above
142. Geographic distribution of which of the following diseases resembles that of falciparum malaria?  
 (A) Sickle cell disease (B) Thalassemia  
 (C) G6PD deficiency (D) All of the above
143. All are true about chemotherapy induced TTP/HUS except  
 (A) Onset is usually in 1 to 2 weeks  
 (B) Elevated creatinine, hemolysis and thrombocytopenia are present  
 (C) Mortality is high  
 (D) Rituximab can be used for treatment
144. All are features of tumor lysis syndrome except?  
 (A) Hyperkalemia (B) Hypercalcemia  
 (C) Hyperphosphatemia (D) Hyperuricemia
145. All of the following malignancies typically cause Eosinophilia except  
 (A) Lymphomas (B) Leukemias  
 (C) Lung cancers (D) Hepatocellular carcinoma
146. All are true about hemorrhagic cystitis except?  
 (A) Commonly caused by cyclophosphamide  
 (B) Can occur after bone marrow transplant  
 (C) Usually needs surgical treatment  
 (D) Mesna is used for prevention
147. All the statements regarding TRALI are true except  
 (A) Non cardiogenic pulmonary edema (B) Donors are usually multiparous women  
 (C) HLA II antibodies are involved (D) None of the above
148. The most common clinical manifestation of sickle cell anemia is?  
 (A) Painful crises (B) Jaundice  
 (C) Anemia (D) Infections
149. Which of the following is not a cause of normocytic anemia  
 (A) Chronic kidney disease  
 (B) Rheumatological disorders  
 (C) Human Immunodeficiency Virus infection  
 (D) Lead toxicity

150. All of the following are found in blood tests in chronic DIC except?  
 (A) D-dimer values are reduced                      (B) Mostly cutaneous bleeding episodes  
 (C) Mildly low or normal platelet count              (D) Normal to high aPTT, PT, fibrinogen values
151. Most common infection in multiple myeloma is  
 (A) Osteomyelitis    (B) Otitis media  
 (C) Pyelonephritis    (D) Cholecystitis
152. Most common cause of respiratory hypoxia is?  
 (A) Hypoventilation     (B) Ventilation – perfusion mismatch  
 (C) Intrapulmonary right to left shunting              (D) None of the above
153. All of these following non-transfusion treatment modalities can be used for hemophilia except  
 (A) DDAVP    (B) Tranexamic acid  
 (C) EACA     (D) Intravenous steroids
154. Which of the following is observed in JVP in constrictive pericarditis?  
 (A) Sharp y descent    (B) Deep y trough  
 (C) Rapid ascent to baseline                                       (D) All of the above
155. Overdose of which of the following preparation is associated with pulmonary edema: -  
 (A) Morphine    (B) Valproic acid  
 (C) Barbiturates    (D) Phenytoin
156. Pulsus paradoxus is found in?  
 (A) Pericardial tamponade    (B) Severe airway obstruction  
 (C) Massive pulmonary embolism                                       (D) All of the above
157. Which of the following wave is produced due to right ventricular isovolumetric systole  
 (A) a Wave     (B) c Wave  
 (C) v Wave    (D) x Wave
158. Graham-Steell murmur is best heard at?  
 (A) Left upper sternal border    (B) Left lower sternal border  
 (C) Apex    (D) Left interscapular region
159. Which of the following is not true about white coat hypertension  
 (A) Clinic based BP measurements are needed  
 (B) Non-clinic based BP measurements are needed  
 (C) Target organ damage is not seen  
 (D) 7 days clinic based BP monitoring is necessary before diagnosis
160. Right axis deviation (RAD) occurs in?  
 (A) Dextrocardia    (B) Left pneumothorax  
 (C) Left posterior hemiblock     (D) All of the above
161. Murmur of HOCM becomes louder with  
 (A) Standing    (B) Squatting  
 (C) Passive leg raising    (D) All of the above
162. QRS & QT prolongation along with sinus tachycardia can be seen in?  
 (A) Tricyclic antidepressant overdose    (B) Quinidine excess  
 (C) Subarachnoid hemorrhage    (D) Hyperkalemia

163. Which of the following prolong phase 2 of the cardiac muscle action potential and increase the QT interval  
 (A) Hyperkalemia (B) Amiodarone  
 (C) Digitalis (D) Hypercalcemia
164. Chronotropic incompetence is a failure to reach what percentage of predicted maximal heart rate at peak exercise?  
 (A) 55% (B) 65%  
 (C) 75% (D) 85%
165. Diagnostic changes of acute or evolving ischemia are masked by all except  
 (A) Left bundle branch block (B) Electronic ventricular pacemaker patterns  
 (C) Wolf-Parkinson-White preexcitation (D) Right bundle branch block
166. Postural orthostatic tachycardia syndrome (POTS) is diagnosed when on standing heart rate increases to?  
 (A) > 100 beats/ min (B) > 110 beats/ min  
 (C) > 120 beats/ min (D) > 130 beats/ min
167. Which of the following neuromuscular disease produces SA node disease  
 (A) Myasthenia gravis (B) Botulism  
 (C) Lambert-Eaton syndrome (D) Kearns-Sayre syndrome
168. Which of the following statement about multifocal atrial tachycardia (MAT) is false?  
 (A) 3 or more consecutive P waves of different morphologies at rates > 100 beats/min  
 (B) Common following theophylline administration  
 (C) Irregular ventricular rate  
 (D) High incidence of VF
169. Escape pacemaker following AV nodal block is usually in  
 (A) His bundle (B) Bundle branches  
 (C) Purkinje fibers (D) Ventricular myocardium
170. Atrial flutter results from a reentrant circuit around?  
 (A) Mitral valve (B) Tricuspid valve  
 (C) Aortic valve (D) Pulmonary valve
171. Atrial flutter is a form of atrial reentry localized to the  
 (A) Right atrium (B) Left atrium  
 (C) Both atria (D) Both atria and AV node
172. Lusitropic effect best relates to?  
 (A) Enhanced velocity (B) Enhanced rate  
 (C) Enhanced contractility (D) Enhanced relaxation
173. Ventricular rate control for acute Atrial fibrillation is best established with  
 (A) Adenosine (B) Beta blockers  
 (C) Amiodarone (D) Digoxin
174. In adults with ad ASD and atrial fibrillation, the physical findings may be confused with?  
 (A) Mitral stenosis (B) Tricuspid stenosis  
 (C) Pulmonary stenosis (D) Mitral regurgitation

175. False statement about Brugada Syndrome is  
 (A) LBBB pattern  
 (B) ST elevation in leads  $V_1 - V_3$   
 (C) Terminal T wave inversion in leads  $V_1 - V_3$   
 (D) Due to mutation in cardiac sodium channels
176. All of the following findings favor a diagnosis of ASD over mitral stenosis except?  
 (A) Normal LA size (B) Absence of Kerley B lines  
 (C) Fixed splitting of S2  (D) All of the above
177. Which of the following is decreased in cardiogenic shock  
 (A) CVP and PCWP (B) Systemic Vascular Resistance  
 (C) Venous  $O_2$  Saturation (D) All of the above
178. All of the following are features of constrictive pericarditis except?  
 (A) Equalization of diastolic pressures (B) Normal RV size  
 (C) Electrical alternans (D) Kussmaul's sign
179. Gallavardin effect is seen in  
 (A) Aortic regurgitation  (B) Aortic stenosis  
 (C) Mitral stenosis (D) Mitral regurgitation
180. All of the following scoring systems are used for acute pancreatitis except?  
 (A) Ranson score (B) BISAP score  
 (C) Hinchey's score (D) SOFA score
181. Which of the following drug is protective against sudden cardiac death in Hypertrophic cardiomyopathy: -  
 (A) Amiodarone (B) Beta Blockers  
 (C) ACE inhibitors (D) Diltiazem
182. All are true about nutritional assessment except?  
 (A) BMI < 17 rules out Protein energy malnutrition  
 (B) Chronic starvation causes increase in extra cellular fluid volume  
 (C) BMI < 11 -13 in incompatible with life  
 (D) None of the above
183. Which of the following is the least common cause of intestinal obstruction in children except  
 (A) Meckel's diverticulum (B) Intussusception  
 (C) Malrotation  (D) Tumors
184. All of the following are the causes of hyperamylasemia except?  
 (A) Pregnancy (B) Diabetic ketoacidosis  
 (C) Burns  (D) All of the above
185. All of the following are true about Crohn's disease except  
 (A) Most common site of involvement is caecum and ascending colon  
 (B) Elevated ESR and CRP  
 (C) Toxic megacolon is rare  
 (D) ASCA antibodies are commonly associated with Crohn's disease



186. All are true about Valsalva maneuver except?  
 (A) Total 4 phases  
 (B) Tested in sitting position  
 (C) Phase I and III are mechanical  
 (D) Valsalva Ratio is predominantly a measure of Parasympathetic system function
187. All of the following statements are true except  
 (A) Levels of AST or ALT up to 300 IU/L are non-specific for liver disease  
 (B) Acute biliary obstruction can raise liver enzymes 1000-2000 IU/L  
 (C) AST: ALT of 3:1 is highly suggestive of Alcoholic liver cirrhosis  
 (D) Alcohol induced pyridoxal phosphate deficiency leads to low AST levels in serum
188. The false statement about Critical illness neuromuscular dysfunction is?  
 (A) Seen in the setting of Multiorgan dysfunction  
 (B) Use of Neuromuscular blockers in ICU can lead to prolonged weakness  
 (C) On chronic use of Neuromuscular blockade permanent damage to PNS is possible  
 (D) Females are more susceptible to prolonged weakness after Neuromuscular blockade use in ICU
189. All of the following drugs can exacerbate myasthenia gravis except  
 (A) Ciprofloxacin (B) Streptomycin  
 (C) Clindamycin  (D) Cefuroxime
190. Magnan's sign is found in?  
 (A) Alcohol (B) Calcium channel blocker  
 (C) Barbiturate  (D) Cocaine
191. Treatment goal after head injury regarding Intracranial pressure (ICP) and Cerebral perfusion pressure (CPP) is  
 (A) ICP < 20 mm Hg and CCP ≥ 60 mm Hg  
 (B) ICP < 40 mm Hg and CCP ≥ 80 mm Hg  
 (C) ICP < 60mm Hg and CCP ≥ 20mm Hg  
 (D) ICP < 80mm Hg and CCP ≥ 40mm Hg
192. The Following Medical measures can be done for managing abdominal compartment syndrome EXCEPT?  
 (A) Nasogastric Tube suction (B) 20% human Albumin and diuretics  
 (C) Use of neuromuscular blockage  (D) Maintain 30-degree head high position
193. The initial dose of anti-snake venom in case of common krait bite according to WHO protocol is  
 (A) 50 ml (B) 150 ml  
 (C) 100 ml (D) 200 ml
194. Regarding acute cardiorenal syndrome all are true except?  
 (A) Acute kidney injury secondary to heart failure  
 (B) Primary treatment is diuresis  
 (C) Normal NT-ProBNP level  
 (D) Dobutamine may be helpful

195. All of the following are true for HELLP Syndrome Except  
(A) Presents at early gestational age      **(B) Common in first pregnancy**  
(C) Preeclampsia is a predisposing Factor      (D) Complete recovery usually occurs
196. Cryoprecipitate is rich in all of the following except?  
**(A) Factor VII**      (B) Factor VIII  
(C) Von Willebrand Factor      (D) Fibrinogen
197. Which part of the heart is most often damaged in blunt cardiac trauma?  
**(A) Right ventricle**      (B) Left ventricle  
(C) Left atrium      (D) Aortic root
198. All are true about heparin therapy except?  
(A) Therapy can be monitored with anti-factor Xa level  
(B) Acts by activating antithrombin  
**(C) Clearance is mainly through renal route**  
(D) None of the above
199. Which one of the following statements about a patient with rhabdomyolysis is not true?  
**(A) Hypercalcemia and hypophosphatemia are early complication in rhabdomyolysis**  
(B) An elevated serum creatine kinase is the most sensitive and reliable indicator of muscle injury.  
(C) Diagnosis requires a fivefold or greater increase above the upper threshold of normal serum creatine kinase level in the absence of cardiac or brain injury.  
(D) Absence of an elevated serum myoglobin level or of myoglobinuria does not exclude the diagnosis of rhabdomyolysis.
200. Which of the following is associated with poor prognosis in CML?  
(A) Massive spleen      **(B) Lymphadenopathy**  
(C) Hepatomegaly      (D) Bony pains