NEET SS 2024 Critical Care Medicine Group

Question Paper

Conducted by NBEMS

General Instructions

(i) This question paper consists of **150 questions**. All questions are **compulsory**.

(ii) Total duration of exam is **2 hours 30 minutes** (150 minutes).

(iii) Total marks is **600**.

(iv) Each correct response carries **4 marks**, while **1 mark** is deducted for every incorrect answer.

1. According to Light's criteria, which of the following findings indicates that a pleural effusion is exudative?

(A) Pleural fluid protein/serum protein ratio < 0.5

(B) Pleural fluid LDH/serum LDH ratio < 0.6

(C) Pleural fluid protein/serum protein ratio > 0.5

(D) Pleural fluid LDH less than two-thirds of the upper limit of normal serum LDH

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2. Battle's sign is a clinical indicator seen in which of the following conditions?

(A) Fracture of the nasal bone

(B) Fracture of the mandible

(C) Fracture of the base of the skull (basilar fracture)

(D) Fracture of the zygomatic arch

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3. Steeple's sign is a radiological feature seen in which of the following conditions?

(A) Epiglottitis

(B) Acute Laryngotracheobronchitis or Croup

(C) Retropharyngeal abscess

(D) Foreign body aspiration

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4. What is the MACOCHA score used for?

(A) Assessing the severity of community-acquired pneumonia

(B) Predicting the difficulty of endotracheal intubation in ICU patients

(C) Determining the prognosis in chronic obstructive pulmonary disease (COPD)

(D) Evaluating the severity of asthma exacerbations

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5. The Cotton–Myer classification is used to grade:

(A) Severity of laryngeal trauma

(B) Subglottic stenosis based on airway obstruction

(C) Vocal cord paralysis severity

(D) Tracheomalacia in infants

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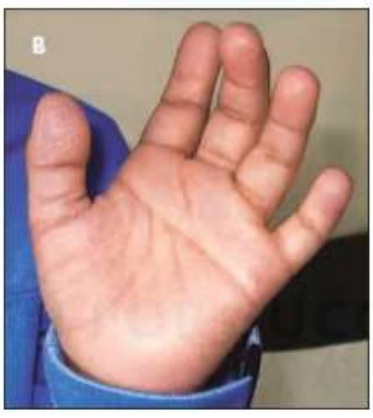
6. The feature shown in the image is most commonly associated with which cardiac abnormality?



(A) ASD

(B) VSD

(C) PDA

(D) TGA

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7. What is the most common cause of large bowel obstruction in adults?

(A) Volvulus

(B) Adhesions

(C) Colorectal carcinoma

(D) Diverticulitis

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8. What is the most common cause of esophageal rupture?

(A) Mallory–Weiss tear

(B) Iatrogenic injury during endoscopy

(C) Boerhaave's syndrome

(D) Ingestion of caustic substances

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9. A 25-year-old woman presents with a 2-day history of persistent vomiting due to acute gastroenteritis. Her arterial blood gas (ABG) analysis shows the following:

- **pH: 7.52**
- **$PaCO_2$: 48 mmHg**
- **HCO_3^-: 36 mEq/L**

Which of the following acid–base abnormalities is most consistent with this presentation?

(A) Metabolic acidosis

(B) Respiratory acidosis

(C) Metabolic alkalosis

(D) Respiratory alkalosis

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10. In the Glasgow Coma Scale (GCS), what does a score of M3 indicate?

(A) Obeys commands
(B) Localizes to pain
(C) Flexion response to pain (abnormal flexion/decorticate posture)
(D) Extension response to pain (decerebrate posture)

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11. Which of the following is the most common cause of Type 3 (perioperative) respiratory failure?

(A) Pulmonary embolism
(B) Lung atelectasis
(C) Acute asthma exacerbation
(D) Pneumonia

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12. Which type of respiratory failure is seen in septic shock?

(A) Type 1 respiratory failure
(B) Type 2 respiratory failure
(C) Type 3 respiratory failure
(D) Type 4 respiratory failure

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13. Lithium exerts its mood-stabilizing effects primarily by inhibiting which of the following enzymes?

(A) Monoamine oxidase
(B) Inositol monophosphatase

(C) Catechol-O-methyltransferase

(D) Adenylate cyclase

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14. A 35-year-old man develops refractory anaphylaxis following a bee sting. He has already received two doses of intramuscular adrenaline (0.5 mg each) with minimal improvement. Intravenous adrenaline infusion is now planned. What is the recommended IV adrenaline dose for refractory anaphylaxis?

(A) 0.1 mg IV bolus slowly over 5–10 minutes

(B) 1 mg IV bolus rapidly

(C) 0.5 mg IV bolus

(D) 5 mg IV bolus

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15. During cardiopulmonary resuscitation (CPR), magnesium sulfate ($MgSO_4$) is specifically indicated in the management of which of the following conditions?

(A) Ventricular fibrillation

(B) Torsades de pointes

(C) Asystole

(D) Pulseless electrical activity (PEA)

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16. Griesinger's sign is seen in which condition?

(A) Mastoiditis

(B) Lateral sinus thrombosis

(C) Otitis externa

(D) Labyrinthitis

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17. A 30-year-old man is brought to the emergency department after a blunt chest trauma from a road traffic accident. On examination, air entry is equal bilaterally, the abdomen is soft, and there are no long bone fractures. Despite adequate fluid resuscitation, his blood pressure remains low. Which of the following is the most likely diagnosis?

(A) Cardiac tamponade
(B) Tension pneumothorax
(C) Massive hemothorax
(D) Neurogenic shock

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18. Which of the following tests is commonly used to detect salicylates in urine?

(A) Benedict's test
(B) Ferric chloride test
(C) Fehling's test
(D) Jaffe's test

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19. Anticholinergic effects are commonly seen in which of the following drugs?

(A) Tricyclic antidepressants (TCA)
(B) Antihistamines
(C) Beta-blockers
(D) ACE inhibitors

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20. In which of the following toxicities is intra-arterial calcium gluconate indicated?

(A) Digoxin toxicity
(B) Hyperkalemia
(C) Hydrofluoric acid burn
(D) Organophosphate poisoning

21. Which of the following is the antidote for organophosphate poisoning?

(A) Naloxone

(B) Pralidoxime

(C) N-acetylcysteine

(D) Flumazenil

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22. Which of the following muscle relaxants is contraindicated in organophosphate poisoning?

(A) Succinylcholine

(B) Atracurium

(C) Vecuronium

(D) Rocuronium

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23. What is the hook effect in the context of beta-hCG testing?

(A) Falsely elevated beta-hCG due to heterophile antibodies

(B) Falsely low beta-hCG result when levels are extremely high

(C) Normal beta-hCG despite pregnancy

(D) Beta-hCG detected only in urine, not serum

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24. Which of the following is considered the predictor of a better outcome in ARDS?

(A) Low driving pressure

(B) High driving pressure

(C) High peak airway pressure

(D) High PEEP

25. Which of the following does NOT satisfy the criteria for severe ARDS according to the Berlin definition?

(A) PaO_2/FiO_2 ratio $\leq$ 100 mmHg

(B) PaO_2/FiO_2 ratio 100–200 mmHg

(C) Bilateral opacities on chest imaging

(D) Respiratory failure not fully explained by cardiac failure or fluid overload

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26. The OSCAR trial is related to which of the following?

(A) Use of corticosteroids in COVID-19

(B) High-frequency oscillatory ventilation (HFOV) in ARDS

(C) Prone positioning in ARDS

(D) ECMO in severe respiratory failure

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27. Which oxygen delivery device can provide the highest fraction of inspired oxygen (FiO_2) to a patient?

(A) Nasal cannula

(B) Simple face mask

(C) Non-rebreather mask (NRBM)

(D) Venturi mask

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28. Which of the following is considered an early marker of coagulopathy in trauma patients?

(A) Platelet count

(B) Prothrombin time (PT) / INR

(C) Fibrinogen level

(D) D-dimer

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29. In the MACOCHA score, which of the following is NOT included as a scoring parameter?

(A) Presence of beard

(B) Mallampati score

(C) Glasgow coma scale

(D) Pathology limiting cervical spine mobility

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30. Which of the following is considered an essential minimum criterion before initiating a spontaneous breathing trial (SBT) during ventilator weaning?

(A) $PaO_2/FiO_2 < 150$ with PEEP 10 cm H_2O

(B) Patient receiving vasopressors at moderate doses

(C) Hemodynamic stability without significant vasopressor support

(D) Sedation with RASS -4 to –5

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31. Which of the following does NOT influence a capnogram?

(A) Cardiac output

(B) Alveolar ventilation

(C) Pulmonary perfusion

(D) Arterial oxygen saturation (SpO_2)

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32. Which of the following is an inherited cause of hypercoagulability?

(A) Paroxysmal nocturnal hemoglobinuria (PNH)

(B) Polycythemia rubra vera (PRV)

(C) Antiphospholipid antibody syndrome (APLA)

(D) Factor V Leiden mutation

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33. During treatment of diabetic ketoacidosis (DKA), what is the recommended rate of decrease in plasma glucose?

(A) >100 mg/dL per hour

(B) 10-20 mg/dL per hour

(C) 50-75 mg/dL per hour

(D) 5 mg/dL per hour

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34. What is the most accurate description of insulin shock?

(A) Diabetic ketoacidosis caused by lack of insulin

(B) Severe hypoglycemia due to insulin excess

(C) Hyperosmolar hyperglycemic state caused by dehydration

(D) Hypoglycemia caused only by skipping meals

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35. The most important adverse effect of sotalol is primarily due to which mechanism?

(A) Potassium channel blockade leading to QT prolongation

(B) Inhibition of calcium channels causing AV block

(C) Alpha-1 receptor blockade causing hypotension

(D) Sodium channel blockade causing QRS widening

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36. What is rise time in mechanical ventilation?

(A) Duration of the entire inspiratory phase

(B) Time taken to cycle from inspiration to expiration

(C) Time taken to reach the set inspiratory pressure

(D) Time to deliver a set tidal volume in volume-controlled mode

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37. Flow-time and pressure-time ventilator waveforms can be used to identify which of the following?

(A) Patient–ventilator asynchrony

(B) Inadequate inspiratory flow

(C) Breath stacking

(D) Auto-PEEP

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38. Which of the following statements regarding nebulization in an intubated patient with an endotracheal (ET) tube is incorrect?

(A) As the size of the ET tube increases from 7.0 to 8.0 mm, nebulization effectiveness reduces

(B) Particle size should be between 2-5 micrometer

(C) Placement of the nebulizer 15 cm away from the Y-connector improves aerosol deposition

(D) Humidification should be removed during nebulization to improve aerosol delivery

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39. Which of the following drugs is most commonly associated with producing anterograde amnesia?

(A) Midazolam

(B) Morphine

(C) Ketamine

(D) Propofol

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40. Which of the following antiepileptic drugs is contraindicated in the treatment of theophylline-induced seizures?

(A) Lorazepam

(B) Phenytoin

(C) Levetiracetam

(D) Phenobarbital

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41. Which fluoroquinolone does not require dose modification in renal failure?

(A) Ciprofloxacin

(B) Levofloxacin

(C) Moxifloxacin

(D) Norfloxacin

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42. Which of the following is a feature of acute lithium intoxication?

(A) Ataxia

(B) Nephrogenic DI

(C) SILENT

(D) Vomiting

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43. Which of the following is considered a minimally invasive method of cardiac output monitoring?

(A) Arterial pressure waveform analysis

(B) Pulmonary artery catheter thermodilution

(C) Direct Fick method

(D) Left ventricular angiography

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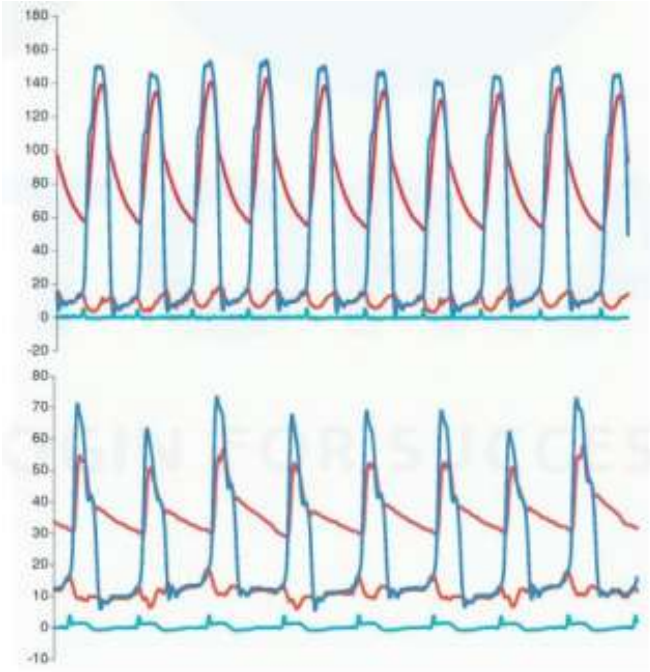
44. The following pressure tracing obtained during cardiac catheterization is most likely due to?



(A) Restrictive cardiomyopathy

(B) Pericardial effusion

(C) Cardiac tamponade

(D) Constrictive pericarditis

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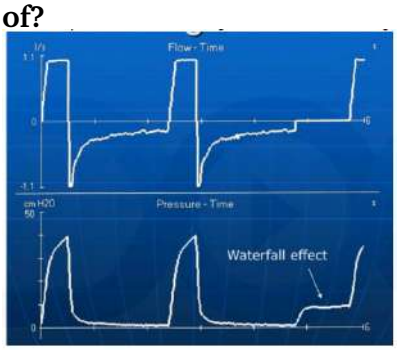
45. A ventilator pressure–time waveform is given below. What is this finding most suggestive of?



(A) Circuit leak

(B) Auto-PEEP

(C) Patient–ventilator asynchrony

(D) High airway resistance

46. In a mechanically ventilated patient, auto-PEEP is most likely to develop due to which of the following mechanisms?

(A) Incomplete exhalation
(B) Low airway resistance
(C) Prolonged expiratory time
(D) Low respiratory rate

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47. Which of the following is NOT a component of antibiotic stewardship according to the diagram?

(A) Enhancing infection prevention and control
(B) Prescribing antibiotics when they are truly needed
(C) Using the shortest effective duration of antibiotics
(D) Increasing empirical broad-spectrum antibiotic use

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48. Which of the following parameters is NOT included in the APACHE II scoring system?

(A) Serum potassium
(B) Hematocrit
(C) Arterial pH
(D) Blood glucose level

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49. Which of the following is considered an prognostic marker for identifying patients with suspected infection who are at risk for poor outcomes?

(A) qSOFA
(B) SOFA

(C) APACHE II

(D) Serum lactate alone

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50. Which of the following is considered a newer emerging biomarker for prognostication in heart failure?

(A) BNP

(B) Angiopoietin-2

(C) Troponin

(D) NT-proBNP

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51. Which antibiotic is the drug of choice for treating MRSA infection in a patient with thrombocytopenia?

(A) Vancomycin

(B) Linezolid

(C) Daptomycin

(D) Clindamycin

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52. Re-exploration is NOT advised in which of the following situations in a patient with post-laparotomy peritonitis?

(A) Hemodynamic instability

(B) Persistent intra-abdominal infection

(C) Clinical improvement with effective source control

(D) Anastomotic leak

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53. A 58-year-old man presents with right-upper-quadrant abdominal pain, fever (39°C), tachycardia (118/min), and leukocytosis. Ultrasound shows a distended gallbladder with wall

thickening and pericholecystic fluid, consistent with acute cholecystitis with sepsis. His BP is 118/70 mmHg, lactate is mildly elevated, and he demonstrates improved blood pressure and perfusion after a fluid bolus. Which of the following is the most appropriate next step in management?

(A) Vasopressors
(B) Intravenous fluids
(C) Inotropes
(D) Corticosteroids

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54. A 65-year-old man in septic shock is undergoing hemodynamic monitoring with a pulmonary artery (Swan–Ganz) catheter. The monitor shows a low-amplitude waveform with a clear dicrotic notch, and the measured pressure is 10 mmHg. Which pressure is being recorded?

(A) Right atrial pressure (RAP)
(B) Right ventricular pressure (RVP)
(C) Pulmonary artery pressure (PAP)
(D) Pulmonary capillary wedge pressure (PCWP)

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55. A 60-year-old male in the ICU develops oliguria (urine output <0.5 mL/kg/hr) after a hypotensive episode. Bedside echocardiography is performed to assess intravascular volume status. Which ECHO finding most strongly suggests a prerenal, hypovolemic cause of oliguria?

(A) Hyperdynamic left ventricle with near-complete cavity obliteration in systole
(B) Dilated left ventricle with poor systolic function
(C) Normal-sized left ventricle with preserved ejection fraction
(D) Dilated right ventricle with septal flattening

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56. Which echocardiographic finding is most suggestive of acute pulmonary embolism?

(A) Hyperdynamic small LV

(B) Concentric LV hypertrophy

(C) RA/RV dilatation

(D) Pericardial effusion with RV collapse

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57. In echocardiography, the E-point septal separation (EPSS) is measured in which view?

(A) Apical four-chamber (A4C)

(B) Parasternal short-axis (PSAX)

(C) Subcostal four-chamber

(D) Parasternal long-axis (PLAX)

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58. Which Doppler mode is used to measure the Velocity Time Integral (VTI) on echocardiography?

(A) Continuous wave Doppler

(B) Pulse wave Doppler

(C) Color Doppler

(D) M-mode

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59. In a critically ill patient, guided fluid therapy aims to assess fluid responsiveness before giving intravenous fluids. Which of the following bedside maneuvers or tests is most reliable to predict fluid responsiveness?

(A) Passive leg raise (PLR) test

(B) Central venous pressure (CVP) measurement

(C) Heart rate trend monitoring

(D) Mean arterial pressure (MAP) at baseline

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60. In a patient with severe ARDS who continues to have refractory hypoxemia despite optimal lung-protective ventilation and adequate prone positioning, what should be the next step in management?

(A) Increase tidal volume to improve oxygenation
(B) High-frequency oscillatory ventilation (HFOV)
(C) Trial of inhaled nitric oxide
(D) VV ECMO

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61. In a patient with moderate to severe ARDS, at what PaO_2/FiO_2 (P/F) ratio is prone positioning recommended as part of evidence-based lung-protective management?

(A) < 200
(B) < 100
(C) < 150
(D) < 250

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62. On ultrasound, the "sinusoid sign" is characteristic of which condition?

(A) Pleural effusion
(B) Pneumothorax
(C) Lung consolidation
(D) Pulmonary edema

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63. A 68-year-old man with a history of COPD and long-term diuretic therapy for heart failure presents with increased lethargy, reduced appetite, and worsening pedal edema. He also reports several days of vomiting due to gastritis. On examination, he is drowsy, hypoventilating, and has poor air entry bilaterally. Arterial blood gas (ABG) shows pH $= 7.50$, $PaCO_2 = 50$ mmHg, HCO_3^- = elevated. What is the most likely acid–base disorder?

(A) Respiratory alkalosis with metabolic compensation

(B) Respiratory acidosis with renal compensation

(C) Metabolic acidosis with respiratory compensation

(D) Metabolic alkalosis with respiratory acidosis

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64. A 28-year-old pregnant woman (28 weeks gestation) presents with sudden onset dyspnea, pleuritic chest pain, tachycardia (HR 138/min), hypotension (BP 78/40 mmHg), and severe hypoxemia. She is drowsy, diaphoretic, and in respiratory distress. Bedside echocardiography shows acute right ventricular dilation and strain, strongly suggesting massive pulmonary embolism. What is the most appropriate immediate management?

(A) LMWH

(B) Thrombolysis

(C) Unfractionated Heparin (UFH)

(D) IVC filter placement

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65. What is the blood lead level that indicates toxic exposure to lead in children?

(A) 3.5 μg/dL

(B) 5 μg/dL

(C) 10 μg/dL

(D) 20 μg/dL

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66. Which of the following is considered the best and most widely validated sedation scale for assessing the depth of sedation in ICU patients?

(A) Riker Sedation-Agitation Scale (SAS)

(B) Richmond Agitation-Sedation Scale (RASS)

(C) Glasgow Coma Scale (GCS)

(D) Ramsay Sedation Scale

67. Which of the following best describes the technique of Rapid Sequence Intubation (RSI)?

(A) Sedation first, then wait 2 minutes before giving NM

(B) Neuromuscular blocker only, without sedation

(C) Neuromuscular blocker (NMB) and sedation administered simultaneously

(D) Sedation only, with no paralytic used

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68. During cardiopulmonary resuscitation (CPR), after a patient has been successfully intubated, what is the recommended ventilation rate?

(A) 1 breath every 2 seconds

(B) 1 breath every 5-6 seconds

(C) 2 breaths every 30 compressions

(D) 5 breaths per minute

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69. In the management of moderate to severe hypothermia, several rewarming methods can be used. Which of the following is not a preferred or effective route for rewarming?

(A) Rectal rewarming

(B) Warmed IV fluids

(C) Heated humidified oxygen

(D) Extracorporeal blood rewarming

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70. Which ECG finding is classically associated with hypothermia?

(A) Peaked T waves

(B) Osborn (J) wave

(C) Delta wave

(D) S1Q3T3 pattern

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71. In mechanically ventilated patients, which device helps prevent dryness of the airway by conserving heat and moisture?

(A) Heat and Moisture Exchanger (HME)

(B) Bacterial viral filter

(C) In-line suction catheter

(D) End-tidal CO_2 sensor

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72. Tolvaptan is primarily indicated in the management of which type of hyponatremia?

(A) Euvolemic hyponatremia

(B) Hypervolemic hyponatremia due to heart failure

(C) Hypovolemic hyponatremia

(D) Hyponatremia due to gastrointestinal losses

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73. Which of the following cannot be used to assess or estimate intracranial pressure (ICP)?

(A) Central Venous Pressure (CVP)

(B) Optic Nerve Sheath Diameter (ONSD)

(C) Transcranial Doppler (TCD)

(D) Invasive ventriculostomy

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74. According to standard AKI definitions, what minimum rise in serum creatinine within 48 hours is required to diagnose Acute Kidney Injury (AKI)?

(A) 0.3 mg/dL

(B) 0.5 mg/dL

(C) 1.0 mg/dL

(D) 1.5 mg/dL

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75. Which dialysis modality is considered the most efficient at solute clearance per unit time?

(A) Continuous Renal Replacement Therapy (CRRT)

(B) Sustained Low-Efficiency Dialysis (SLED)

(C) Peritoneal Dialysis

(D) Intermittent Hemodialysis (IHD)

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76. A 35-year-old patient undergoing a regional nerve block suddenly develops generalized seizures, followed by bradycardia and cardiac arrest shortly after administration of bupivacaine. Which of the following is the drug of choice (DOC) for this life-threatening complication?

(A) Epinephrine

(B) Sodium bicarbonate

(C) Lipid emulsion

(D) Amiodarone

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77. Which of the following is the best marker of severity in a patient with chronic liver disease (CLD)?

(A) SGOT

(B) SGPT

(C) PT INR / aPTT

(D) Serum bilirubin

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78. A 28-year-old male is brought to the emergency department after a high-speed road traffic accident. He is drowsy, responds only to painful stimuli (GCS 7), has labored breathing with accessory muscle use, and is hypotensive with a BP of 80/40 mmHg. His oxygen saturation is 82% on a non-rebreather mask. What is the next best step in his management?

(A) Intubation
(B) Give 1 L crystalloid bolus
(C) Perform FAST examination
(D) Start vasopressors

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79. Which of the following is not a mechanism of action of Milrinone?

(A) Inhibition of phosphodiesterase-3
(B) Increase in intracellular cAMP levels
(C) Increased myocardial contractility
(D) Decrease in intracellular cAMP levels

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80. A 60-year-old male on chronic beta-blocker therapy for ischemic heart disease presents with profound bradycardia, hypotension, and shock. Fluid resuscitation and catecholamines provide minimal response. What is the drug of choice (DOC) in this condition?

(A) Adrenaline
(B) Noradrenaline
(C) Glucagon
(D) Levosimendan

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81. What is the drug of choice (DOC) for the management of severe digoxin toxicity?

(A) Atropine
(B) Lidocaine

(C) Magnesium sulfate

(D) Digoxin Immune Fab

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82. Which corticosteroid is recommended for use in refractory septic shock despite adequate fluid resuscitation and vasopressor therapy?

(A) Prednisolone

(B) Hydrocortisone

(C) Dexamethasone

(D) Methylprednisolone

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83. Which of the following is the first-line vasopressor recommended for the management of septic shock?

(A) Norepinephrine

(B) Vasopressin

(C) Dopamine

(D) Phenylephrine

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84. Which of the following structures is NOT assessed in a standard FAST scan?

(A) Heart

(B) Liver-kidney interface

(C) Brain

(D) Spleen-kidney interface

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85. A 56-year-old diabetic man presents with fever, facial pain, nasal congestion, and rapidly progressive swelling around the eye. On nasal examination, a black necrotic eschar is seen on

the nasal septum. What is the most likely diagnosis?

(A) Aspergillosis

(B) Bacterial sinusitis

(C) Mucormycosis

(D) Rhinosporidiosis

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86. On chest CT, the presence of an air-crescent sign most suggestive of which condition?

(A) Pulmonary embolism

(B) Aspergilloma

(C) Lung abscess

(D) Bronchiectasis

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87. In the emergency management of anaphylaxis, what is the preferred intramuscular (IM) injection site for administering adrenaline ?

(A) Anterolateral thigh

(B) Deltoid muscle

(C) Gluteal muscle

(D) Upper arm

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88. Among liver transplant recipients, which of the following is the most common opportunistic infection?

(A) Cytomegalovirus (CMV)

(B) Pneumocystis jirovecii

(C) Aspergillus fumigatus

(D) Toxoplasma gondii

89. A 40-year-old man with end-stage lung disease is being evaluated for lung transplantation. He has a history of IV drug abuse, HIV infection, and severe thoracic scoliosis leading to restrictive lung mechanics. Based on standard lung transplant criteria, which of the following is an absolute contraindication to lung transplantation?

(A) HIV infection
(B) History of substance abuse with risk of recidivism
(C) Severe scoliosis
(D) Mechanical ventilation requirement

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90. A 50 year-old female develops sudden severe dyspnea, hypertension, pink frothy sputum, and acute pulmonary edema shortly after CABG surgery. He is extremely anxious, tachycardic, and hypertensive (BP 210/120 mmHg). What is the drug of choice (DOC) for immediate management of SCAPE?

(A) Nicardipine
(B) Nimodipine
(C) Nitroglycerin
(D) Beta-blockers

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91. What is the antidote of choice for the management of opioid toxicity?

(A) Atropine
(B) Flumazenil
(C) N-acetylcysteine
(D) Naloxone

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92. What is the antidote of choice for the management of toxic alcohol (ethylene glycol/methanol) poisoning?

(A) Flumazenil

(B) Naloxone

(C) Fomepizole

(D) Hydroxocobalamin

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93. What is the normal diameter of the inferior vena cava (IVC) in a healthy adult at rest?

(A) 1 cm to 1.5 cm

(B) 2 cm to 3.5 cm

(C) 0.5 cm to 0.8 cm

(D) 3.5 cm to 4 cm

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94. What is the full form of AMBU in emergency and critical care practice?

(A) Airway Management Bag Unit

(B) Automated Mechanical Backup Unit

(C) Artificial Manual Breathing Unit

(D) Assisted Manual Bag Utility

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95. Which of the following is an absolute contraindication to performing Transesophageal Echocardiography (TEE)?

(A) Esophageal varices

(B) Esophageal stricture

(C) Barrett's esophagus

(D) History of radiation to the mediastinum

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96. Massive transfusion is defined as administration of which of the following?

(A) 10 units of PRBCs within 24 hours

(B) 2 units of PRBCs within 1 hour

(C) 4 units of PRBCs within 6 hours

(D) 1 unit of PRBC every hour for 24 hours

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97. Central cyanosis may be masked in which of the following conditions?

(A) Heart failure

(B) Methemoglobinemia

(C) Polycythemia

(D) Carbon monoxide poisoning

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98. Which of the following is recommended as prophylaxis before administering Anti-Snake Venom (ASV) to reduce the risk of early anaphylactic reactions?

(A) Subcutaneous adrenaline

(B) Hydrocortisone

(C) Diphenhydramine

(D) IV magnesium

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99. Which of the following is the most sensitive and specific biochemical marker for diagnosing acute pancreatitis?

(A) Serum lipase

(B) Serum amylase

(C) LDH

(D) ALP

100. Which of the following clinical features is true regarding Bell's palsy?

(A) Inability to close the eye on the affected side

(B) Forehead wrinkles are preserved

(C) Symptoms progress over several weeks

(D) Bilateral facial paralysis is typical

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101. In a patient with ARDS, which of the following is the most common cause for NIV failure?

(A) Hypercapnia

(B) Severe hypoxemia

(C) Air leak around mask

(D) Patient-ventilator asynchrony

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102. Which of the following clinical patterns is characteristic of Brown-Sequard syndrome?

(A) Bilateral loss of all sensations below the lesion

(B) Ipsilateral loss of pain and temperature with contralateral motor weakness

(C) Ipsilateral motor loss with contralateral pain and temperature loss

(D) Only lower limb weakness without sensory loss

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103. Which antiseptic agent is recommended for skin preparation prior to performing invasive procedures?

(A) Chlorhexidine

(B) Povidone-iodine

(C) 70% Isopropyl alcohol

(D) Hydrogen peroxide

104. Which of the following is the most important risk factor for developing Clostridioides difficile infection (CDI) in ICU patients?

(A) Stress ulcer prophylaxis with H2 blockers
(B) High-protein diet
(C) Broad-spectrum antibiotic use
(D) Use of enteral nutrition

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105. REBOA (Resuscitative Endovascular Balloon Occlusion of the Aorta) is most beneficial in controlling bleeding from which of the following sites?

(A) Thoracic aorta rupture
(B) Subclavian artery
(C) Intracranial hemorrhage
(D) Internal iliac artery

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106. Which of the following is the hemodynamic effect of applying positive end-expiratory pressure (PEEP)?

(A) Preload decreases
(B) Preload increases
(C) Afterload of the right ventricle decreases
(D) Stroke volume increases

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107. A 58-year-old woman develops sudden severe chest pain, dyspnea, and diaphoresis immediately after hearing about the unexpected death of her son. ECG shows ST-segment elevation, but coronary angiography reveals no obstructive lesions. What is the most likely diagnosis?

(A) Inferior wall myocardial infarction

(B) Takotsubo cardiomyopathy

(C) Aortic dissection

(D) Pulmonary embolism

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108. Which of the following is a typical clinical feature of Anterior Cerebral Artery (ACA) syndrome?

(A) Contralateral face and arm weakness

(B) Contralateral leg weakness

(C) Homonymous hemianopia

(D) Complete aphasia

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109. A 64-year-old woman is admitted with altered sensorium, fever (39.5°C), tachycardia (132/min), and warm extremities. BP is 86/52 mmHg despite broad-spectrum antibiotics. Urine output over the last 3 hours is only 10 mL (oliguria). Lactate is 4.8 mmol/L. On bedside assessment, she shows improvement in blood pressure with a passive leg raise test (fluid responsive). What is the most appropriate immediate management?

(A) Intravenous fluids

(B) Vasopressors

(C) Inotropes

(D) Corticosteroids
