



- a) for enteral feeding  
 c) To measure intracranial pressure
- b) To remove respiratory secretions  
 d) To drain bile from the gallbladder
- (viii) write the correct answer- A "PR interval" on an ECG represents:
- a) The time it takes for the atria to depolarize  
 c) The time between the P wave and the QRS complex
- b) The time it takes for the ventricles to depolarize  
 d) The duration of the T wave
- (ix) Select the type of ABG machine is most commonly used in clinical laboratories and hospitals for routine testing?
- a) Benchtop ABG machine(Y)  
 c) Laboratory-based ABG machine(N)
- b) Handheld ABG machine(N)  
 d) Point-of-care ABG machine(N)
- (x) Select the following parameters can typically be measured by an ABG machine?
- a) Hemoglobin concentration  
 c) Blood volume
- b) Lung compliance  
 d) Creatinine levels
- (xi) select the write answer - A 45-year-old male with chronic obstructive pulmonary disease (COPD) presents with increased dyspnea and fatigue. His ABG shows pH 7.30, PaCO<sub>2</sub> 60 mm Hg, and HCO<sub>3</sub><sup>-</sup> 30 mEq/L. Write likely diagnosis?
- a) Respiratory acidosis  
 c) Metabolic acidosis
- b) Metabolic alkalosis  
 d) Respiratory alkalosis
- (xii) identify is the primary purpose of a ventilator
- a) To provide oxygen to patients  
 c) To administer nebulized medications
- b) To maintain a patient's airway  
 d) to assist with mechanical ventilation
- (xiii) select In which type of ventilation mode does the ventilator deliver a set tidal volume at a fixed rate?
- a) Assist-control ventilation  
 c) SIMV
- b) Pressure support ventilation  
 d) CPAP
- (xiv) Choose Which of the following conditions is characterized by abnormally high levels of carbon dioxide (hypercapnia) in the blood?
- a) Respiratory acidosis  
 c) Hyperventilation
- b) Respiratory alkalosis  
 d) Hypoxia
- (xv) Select Which of the following is not a lung volume measured by spirometry?
- a) Inspiratory reserve volume  
 c) Residual volume
- b) Cardiac output  
 d) Tidal volume

### Group-B

(Short Answer Type Questions)

3 x 5=15

2. Describe in detail the recommended procedures for disinfecting and sterilizing different components of a ventilator, including breathing circuits and humidifiers? (3)
3. Tell why routine maintenance of ventilator is crucial for patient safety? (3)
4. discuss the primary goals of care for unconscious adult patients, (3)
5. write the contraindications and potential complications associated with Ryle's tube insertion (3)
6. evaluate the role of continuous monitoring, including vital signs and neurological assessments, in caring for unconscious adult patients? (3)

OR

summerize the potential complications that can arise from prolonged unconsciousness in adult patients, (3)

### Group-C

(Long Answer Type Questions)

5 x 6=30

7. focus on the common indications for using an Ambu bag (5)
8. summarize on the effective strategies for improving communication between healthcare providers and patients to reduce anxiety and increase trust? (5)
9. distinguish between invasive and non-invasive ventilation. (5)
10. write the various methods of monitoring oxygen therapy (5)
11. tell about the concept of capnography and its significance in airway management. (5)
12. write short note on hemodialysis (5)

**OR**

Explain the components and function of a hemofiltration circuit, including the filter, blood access, and dialysate solution. (5)

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