

# Practice Exam Questions

AMERICAN  
ASSOCIATION  
*of* CRITICAL-CARE  
NURSES

ACNPC-AG(Adult-Gero.)



Acute Care NP



**EXAMKILLER**

Help Pass Your Exam At First Try

## Total Question: 100 QAs

### Question No: 1

A 40-year-old female hospitalized for severe exacerbation of asthma has been treated for 6 days with albuterol by small volume nebulizer, oral theophylline, and IV methylprednisolone. The patient's blood gases have stabilized. When discontinuing the IV steroid in preparation for discharge, the acute care nurse practitioner should order:

- A. Inhaled steroid, such as Azmacort, only
- B. Oral prednisone 20 mg daily for one week and then Azmacort
- C. Oral prednisone in decreasing doses
- D. Oral prednisone in decreasing doses and inhaled steroid, such as Azmacort

Answer: D

Explanation: Patients receiving oral or intravenous steroids should be prescribed oral prednisone in decreasing doses while initiating inhaled steroids. Severe episodes of asthma may occur with withdrawal of oral or IV steroids when switching to inhaled aerosol, so combining inhaled treatment with decreasing doses can help prevent adrenal suppression, which results in acute exacerbation of symptoms. Patients should use a metered-dose inhaler (MDI) with a reservoir device or a formulation with a spacing tube (such as Azmacort) and rinse the mouth thoroughly after inhaling to prevent thrush.

### Question No: 2

A patient states, "This treatment is too much trouble." Which of the following is the best example of therapeutic communication?

- A. "I agree with you."
- B. "You think the treatment isn't helping you?"
- C. "You should trust the doctor."
- D. "Don't worry. Everything will be fine."

Answer: B

Explanation: "You think the treatment isn't helping you?" is a verbal expression of an implied message. The topic should be explored while allowing the patient to terminate the discussion without probing:

"I'd like to hear how you feel about that." Agreeing with rather than accepting and responding to the patient's statements can make it difficult for the patient to change his/her statement or opinion later. The nurse should avoid giving advice with "should" statements. Meaningless cliches, such as "Don't worry," can block effective communication.

### Question No: 3

A patient who receives multiple transfusions with citrated blood products must be monitored closely for:

- A. Hyponatremia
- B. Hypomagnesemia
- C. Hypokalemia
- D. Hypocalcemia

Answer: D

Explanation: Patients who receive multiple transfusions with citrated blood products must be carefully monitored for hypocalcemia. Calcium is important for transmitting nerve impulses and regulating muscle

contraction and relaxation, including the myocardium. Calcium activates enzymes that stimulate chemical reactions and has a role in coagulation of blood. Values include:

- Normal values: 8.2 to 10.2 mg/dL.
- Hypocalcemia: <8.2 mg/dL. Critical value: <7 mg/dL.
- Hypercalcemia: >10.2 mg/dL. Critical value: >12 mg/dL.

Symptoms include tetany, tingling, seizures, altered mental status, and ventricular tachycardia.

Treatment is calcium replacement and vitamin D.

Question No: 4

Which of the following arterial blood gas (ABG) findings is consistent with metabolic acidosis in an adult?

- A.  $\text{HCO}_3^- < 22$  mEq/L and  $\text{pH} < 7.35$
- B.  $\text{HCO}_3^- > 26$  mEq/L and  $\text{pH} > 7.45$
- C.  $\text{PaCO}_2$  35-45 mm Hg and  $\text{PaO}_2 \geq 80$  mm Hg
- D.  $\text{PaCO}_2 > 55$  mm Hg and  $\text{PaO}_2 < 60$

Answer: A

Explanation:  $\text{HCO}_3^- < 22$  mEq/L and  $\text{pH} < 7.35$  are consistent with metabolic acidosis, which may result from severe diarrhea, starvation, DKA, kidney failure, and aspirin toxicity. Symptoms may include headache, altered consciousness, agitation, lethargy, and coma. Cardiac dysrhythmias and Kussmaul respiration are common. Other readings:

- $\text{HCO}_3^- > 26$  mEq/L and  $\text{pH} > 7.45$  are consistent with metabolic alkalosis.
- $\text{PaCO}_2$  35-45 mm Hg and  $\text{PaO}_2 \geq 80$  mm Hg are normal adult readings.
- $\text{PaCO}_2 > 55$  mm Hg and  $\text{PaO}_2 < 60$  are consistent with acute respiratory failure in a previously healthy adult.

Question No: 5

When irrigating a wound, what wound irrigation pressure is needed to effectively cleanse the wound while avoiding trauma?

- A. <4 psi
- B. 20-30 psi
- C. 10- 15 psi
- D. >15psi

Answer: C

Explanation: Wounds should be irrigated with pressures of 10 to 15 psi. An irrigation pressure of <4 psi does not adequately cleanse a wound, and pressures > 15 psi can result in trauma to the wound, interfering with healing. A mechanical irrigation device is more effective for irrigation than a bulb syringe, which delivers about =<2 psi. A 250 mL squeeze bottle supplies about 4.5 psi, adequate for low-pressure cleaning. A 35-mL syringe with a 19-gauge needle provides about 8 psi.

Question No: 6

A patient has chest pain, dyspnea, and hypotension. A 12-lead ECG shows atrial rates of 250 with regular ventricular rates of 100. P waves are saw-toothed (referred to as F waves), QRS shape and duration (0.04 to 0.11 seconds) is normal, PR interval is hard to calculate because of F waves, and the P:QRS ratio is 2- 4:1.

Which of the following diagnoses fits this profile?

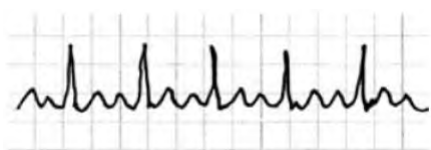
- A. Premature atrial contraction

- B. Premature junctional contraction
- C. Atrial fibrillation
- D. Atrial flutter

Answer: D

Explanation: Atrial flutter (AF) occurs when the atrial rate is faster (usually 250–400 beats per minute) than the atrioventricular (AV) node conduction rate so not all of the beats are conducted into the ventricles (ventricular rate 75–150). The beats are effectively blocked at the AV node, preventing ventricular fibrillation although some extra ventricular impulses may go through. AF is caused by the same conditions that cause atrial fibrillation: coronary artery disease, valvular disease, pulmonary disease, heavy alcohol ingestion, and cardiac surgery. Treatment includes:

- Cardioversion if condition is unstable.
- Medications to slow ventricular rate and conduction through AV node: Cardizem®, Catapran®.
- Medications to convert to sinus rhythm: Corvert®, Cardioquin®, Norpace®, Cordarone®.



Question No: 7

A 44-year-old obese woman recovering from a femoropopliteal bypass develops sudden onset of dyspnea with chest pain on inspiration, cough, and fever of 39°C. An S4 gallop rhythm is present.

The ECG shows tachycardia and nonspecific changes in ST and T waves. The most likely diagnosis is:

- A. Myocardial infarction
- B. Pulmonary embolism
- C. Pneumonia
- D. Sepsis

Answer: B

Explanation: Although symptoms of pulmonary embolism may vary widely depending on the size and location of the embolus, dyspnea, inspirational chest pain, cough, fever, S4 sound, tachycardia, and non-specific ECG changes in ST and T waves are common. Risk factors include obesity, recent surgery, history of deep vein thrombosis, and inactivity. Treatment includes oxygen, IV fluids, dobutamine for hypotension, analgesia for anxiety, and medications as indicated (digitalis, diuretic, antiarrhythmic). Intubation and mechanical ventilation may be required. Percutaneous filter may be placed in the inferior vena cava to prevent more emboli from reaching lungs.

Question No: 8

Which of the following is the correct procedure to evaluate the function of cranial nerve X (vagus)?

- A. Ask the patient to protrude the tongue and move it from side to side against a tongue depressor
- B. Observe patient swallowing, and place sugar or salt at back third of tongue to determine if patient can differentiate
- C. Ask patient to swallow and speak, and place tongue blade on posterior tongue or pharynx to elicit gag reflex
- D. Place hands on patient's shoulders and ask the patient to shrug against resistance

Answer: C

Explanation: To evaluate cranial nerve X (vagus), ask the patient to swallow and speak, observing for difficulty swallowing or hoarseness, and stimulate the back of the tongue or pharynx to elicit the gag reflex. Other examinations include:

- Cranial nerve IX (glossopharyngeal): Observe patient swallowing, and place sugar or salt at back third of tongue to determine if patient can differentiate between them
- Cranial nerve XI (spinal accessory): Place hands on patient's shoulders and ask the patient to shrug against resistance
- Cranial nerve XII (hypoglossal): Ask the patient to protrude the tongue and move it from side to side against a tongue depressor

Question No: 9

In Erikson's psychosocial model of development, which stage is typical of those entering young adulthood?

- A. Identify vs role confusion
- B. Initiative vs guilt
- C. Ego integrity vs despair
- D. Intimacy vs isolation

Answer: D

Explanation: Erikson's psychosocial development model focuses on conflicts at each stage of the lifespan and the virtue that results from finding balance in the conflict. The first 5 stages refer to infancy and childhood and the last 3 stages to adulthood:

- Intimacy vs isolation (young adulthood): Love/ intimacy or lack of close relationships
- Generativity vs stagnation (middle age): Caring and achievements or stagnation
- Ego integrity vs despair (older adulthood): Acceptance and wisdom or failure to accept changes of aging/ despair

Question No: 10

Which of the following is a violation of professional boundaries on the part of the acute care nurse practitioner?

- A. A nurse practitioner accepts a box of chocolates to be shared by all unit staff from a patient's daughter
- B. The nurse practitioner confides to the patient that he, like the patient, is getting a divorce, so he understands the patient's stress
- C. The nurse practitioner assists a patient in placing a call to his landlord so the patient can explain that he cannot pay the rent on time
- D. The nurse practitioner finds a patient crying and places his hand on the patient's shoulder

Answer: B

Explanation: The nurse should not disclose personal information, such as an impending divorce, because this establishes a social relationship that interferes with the professional role of the nurse. Small tokens of appreciation that can be shared with other staff, such as a box of chocolates, are usually acceptable (depending upon the policy of the institution), but almost any other gifts (jewelry, money, clothes) should be declined. Assisting a patient to place a phone call is not a boundary issue.

Touching should be used with care, such as touching a hand or shoulder. Hugging may be misconstrued.

Question No: 11

Using the average cost of a problem and the cost of intervention to demonstrate savings is:



- A. A cost-benefit analysis
- B. An efficacy study
- C. A product evaluation
- D. A cost-effectiveness analysis

Answer: A

Explanation: A cost-benefit analysis uses average cost of a problem (such as wound infections) and the cost of intervention to demonstrate savings. For example, if a surgical unit averaged 10 surgical site infections annually at an additional average cost of \$27,000 each, the total annual cost would be \$270,000. If the total cost for interventions (new staff person, benefits, education, and software) totals \$92,000, and the goal is to reduce infections by 50% (5 X \$27,000 for a total projected savings of \$135,000), cost benefit is demonstrated by subtracting the intervention costs from the proposed savings (\$135,000 - \$92,000) for a savings of \$43,000 annually.

Question No: 12

A legal document that specifically designates someone to make decisions regarding medical and end-of-life care if a patient is mentally incompetent is a(n):

- A. Advance directive
- B. Do not resuscitate order
- C. Durable power of attorney
- D. General power of attorney

Answer: C

Explanation: The legal document that designates someone to make decisions regarding medical and end-of-life care if a patient is mentally incompetent is a durable power of attorney. This is a type of advance directive, which can include living wills or specific requests of the patient regarding treatment. A do not resuscitate order indicates the patient does not want resuscitative treatment for terminal illness or condition. A general power of attorney allows a designated person to make decisions for a person over broader areas, including finances.

Question No: 13

In evaluating outcomes of nutritional intervention for a patient with type 1 diabetes mellitus and fasting blood sugar of 130 mg/ dL three months previously, which lab result most indicates dietary compliance?

- A. Fasting blood sugar of 106 mg/ dL
- B. Hemoglobin A1C of 6.6%
- C. Hemoglobin A1C of 5.5%
- D. Fasting blood sugar of 150 mg/ dL

Answer: C

Explanation: Hemoglobin A1C of 5.5% most indicates dietary compliance. Hemoglobin A1C comprises hemoglobin A with a glucose molecule because hemoglobin holds onto excess blood glucose, so it shows the average blood glucose levels over a 3-month period and is used primarily to monitor long-term diabetic therapy. Normal value: <6% and elevation > 7%. Fasting blood sugar (FBS) results can vary widely but show current serum level, so a person who stays on a diet for a few days and fasts may show a near-normal FBS for a short period even though the patient is frequently noncompliant.

Normal FBS: 70-99 mg/ dL.

Question No: 14

Which is the most critical skill for a nurse collaborating in an interdisciplinary team?

- A. Patience
- B. Assertiveness
- C. Empathy with others
- D. Willingness to compromise

Answer: D

Explanation: While all of these characteristics are important for team members, central to collaboration is the willingness to compromise. In addition, members must be able to communicate clearly, which encompasses assertiveness, patience, and empathy. Teams should identify specific challenges and problems and then focus on the task of reaching a solution. Collaboration is needed in order to move nursing forward. Nurses must take an active role in gathering data for evidence-based practice to support nursing's role in health care and must share this information with other nurses and health professionals.

Question No: 15

A 25-year-old patient with multiple fractures from an auto accident develops hypoxia, dyspnea, precordial chest pain, tachycardia, and thick milky sputum. Auscultation of the lungs shows crackles and wheezes. The patient complains of headache and has a fever of 40°C. Which of the following interventions should be done first?

- A. High-flow oxygen
- B. Corticosteroids (IV)
- C. Vasopressors
- D. Morphine

Answer: A

Explanation: These symptoms are consistent with fat embolism syndrome (FES), which may cause rapid acute pulmonary edema and ARDS, so the patient should be immediately provided with high-flow oxygen. Controlled-volume ventilation with positive end-expiratory pressure (PEEP) may be indicated to prevent/treat pulmonary edema. Corticosteroids may reduce inflammation of the lungs and reduce cerebral edema. Vasopressors prevent hypotension and interstitial pulmonary edema. Morphine with a benzodiazepine may be indicated for patients who require artificial ventilation.

Question No: 16

Because there is only one bed available but two patients in need of care, the acute care nurse practitioner recommends that one patient be transferred to another facility. The decision regarding which patient to transfer should be based on which ethical principle?

- A. Nonmaleficence
- B. Beneficence
- C. Justice
- D. Autonomy

Answer: C

Explanation: Justice is the ethical principle that relates to the distribution of the limited resources of healthcare benefits to the members of society. These resources must be distributed fairly. This issue may arise if there is only one bed left and two sick patients. Justice comes into play in deciding which patient should stay and which should be transported or otherwise cared for. The decision should be made

according to what is best or most just for the patients and not colored by personal bias.

Question No: 17

An elderly patient states that all 15 family members may be provided information about her condition and treatment. The best method to ensure confidentiality is to:

- A. Keep a list of the patient's family members on the patient's chart
- B. Establish a password for family members to use when requesting information
- C. Ask callers and visitors if they are family members
- D. Ask the patient to limit the number of people who have access to her information

Answer: B

Explanation: Care should be taken to safeguard information and provide the privacy that the patient deserves. This is accomplished through the use of required passwords when family members call or ask for information. Confidentiality is the obligation that is present in a professional-patient relationship. Nurses must protect the information they possess concerning the patient and family.

The nurse must make all efforts to safeguard patient records and identification. Computerized record keeping should be done in such a way that the screen is not visible to others, and paper records must be secured.

Question No: 18

A patient is hospitalized for a myocardial infarction and exhibits increased preload, increased afterload, and decreased contractility with decreased cardiac output and increased systemic vascular resistance. BP is 84/40 and pulse 124 bpm, thready, and irregular. The patient has tachypnea, chest pain, basilar rales, and pallor. The most likely diagnosis is:

- A. Cardiogenic shock
- B. Pulmonary embolism
- C. Heart failure
- D. Atrial fibrillation

Answer: A

Explanation: These symptoms are consistent with cardiogenic shock. Cardiogenic shock has 3 characteristics: Increased preload, increased afterload, and decreased contractility. Together these result in a decreased cardiac output and an increase in systemic vascular resistance (SVR) to compensate and protect vital organs. This results in an increase of afterload in the left ventricle with increased need for oxygen. As the cardiac output continues to decrease, tissue perfusion decreases, coronary artery perfusion decreases, fluid backs up, and the left ventricle fails to adequately pump the blood, resulting in pulmonary edema and right ventricular failure.

Question No: 19

An HIV-positive patient has experienced a recent drop in CD4 count to 190. She has developed a fever with general malaise and abdominal pain, and examination shows hepatosplenomegaly.

Differential diagnoses should include:

- A. Pneumocystis jirovecipneumonia, bacterial pneumonia, and TB
- B. Toxoplasmosis, herpes encephalitis, and CNS lymphoma
- C. Histoplasmosis, Mycobacterium avium complex, and bacillary peliosis
- D. TB, non-Hodgkin's lymphoma, and bacillary angiomatosis



Answer: C

Explanation: Fever, malaise, abdominal pain, and hepatosplenomegaly in an HIV-positive patient with CD4 count  $<200$  may result from histoplasmosis, Mycobacterium avium complex, and bacillary peliosis.

Fever, cough, and dyspnea may indicate Pneumocystis jirovecipneumonia, bacterial pneumonia, and TB.

Fever, headache, neck pain, and altered mental status may indicate toxoplasmosis, herpes encephalitis, and CNS lymphoma. Fever with asymmetric or unilateral lymphadenopathy may indicate TB, non-Hodgkin's lymphoma, and bacillary angiomatosis.

Question No: 20

An 80-year-old male has had post-herpetic neuralgia for 11 months, but pain is increasingly intractable despite his taking 10 hydrocodone tablets daily. He has coronary stents in place and takes warfarin. The patient is weak, somnolent, and lethargic, and eats and sleeps poorly. Modifying his pain management should include:

- A. Weaning patient from hydrocodone and starting gabapentin in slowly increasing doses
- B. Discontinuing hydrocodone and starting morphine pump
- C. Weaning patient from hydrocodone and starting biofeedback
- D. Lowering the dose of hydrocodone and supplementing with NSAIDs

Answer: A

Explanation: Post-herpetic neuralgia is a chronic pain condition that responds poorly to opioids and is better treated with anticonvulsants, such as gabapentin. Tricyclic antidepressants are also used but may have severe side effects in the elderly. Because the patient has been on high doses of hydrocodone, he may experience withdrawal with abrupt discontinuation of the drug, so the dose should be decreased by one tablet every 2 to 3 days while gabapentin is started at a low dose and slowly increased to reduce incidence of side effects. Morphine pumps and NSAIDs are usually avoided with warfarin and are often ineffective.

Question No: 21

A 24-year-old female requires emergent treatment for benzodiazepine toxicity resulting from ingestion of large quantities of diazepam combined with alcohol and a combination of other unknown narcotic drugs. She exhibits pronounced lethargy, alterations in mental status, and hypotension. Treatment should include:

- A. Naloxone
- B. Flumazenil
- C. Forced diuresis
- D. Hemodialysis

Answer: A

Explanation: Benzodiazepine toxicity is treated with naloxone with co-ingestions. Flumazenil is usually contraindicated because of potential complications and is used only with pure benzodiazepine ingestion. Forced diuresis and hemodialysis have minimal effect on clearance of benzodiazepines.

IV fluids are used to treat hypotension. Gastric emptying is usually avoided as it is only useful if done within one hour of ingestion. Primary care is supportive with monitoring of CNS and respiratory depression and treatment as indicated.

Question No: 22

When forced expiratory volume in one second (FEV<sub>1</sub>) is markedly more reduced than the reduction in

forced vital capacity (FVC), the patient is probably experiencing:

- A. Restriction of maximal lung expansion
- B. Airway obstruction
- C. Depressed respiratory center
- D. Limitation in neurological impulses to the muscles of respiration

Answer: B

Explanation: Airway obstruction often results in FEV1 that is more reduced than FVC because the air is trapped and cannot be readily expelled in one second. Normally, FEV1 is about 80% of vital capacity with most of the remaining air expelled by 3 seconds (FEV3). Proportional reduction of both FEV1 and FVC indicate reduced lung expansion. Depression of respiratory centers results from anesthesia or sedation. Limitation in neurological impulses results from damage to the brain or spinal cord.

Question No: 23

Which of the following neurological disorders is characterized by ascending paralysis?

- A. Myasthenia gravis
- B. Limb-girdle muscular dystrophy
- C. Guillain-Barre syndrome
- D. Huntington's disease

Answer: C

Explanation: Guillain-Barre syndrome (GBS) is an autoimmune disorder of the myelinated motor peripheral nervous system, often triggered by a viral gastroenteritis or Campylobacter jejuni infection. It is characterized by numbness and tingling with increasing weakness of lower extremities that often ascends to involve the arms and may become generalized, sometimes resulting in complete paralysis and inability to breathe without ventilatory support. Deep tendon reflexes are typically absent and some people experience facial weakness and ophthalmoplegia (paralysis of muscles controlling movement of eyes).

Question No: 24

A patient with a score of 10 on the Glasgow coma scale is classified as:

- A. Comatose
- B. Severe head injury
- C. Moderate head injury
- D. Mild head injury

Answer: C

Explanation: A score of 10 on the Glasgow Coma Scale (GCS) indicates a moderate head injury. GCS measures the depth and duration of coma or impaired level of consciousness and is used for postoperative/brain injury assessment. The GCS measures three parameters—best eye response, best verbal response, and best motor response—with a total possible score that ranges from 3 to 15. Injuries/conditions are classified according to the total score:

- 3-8 coma
- $\geq 9$  = severe head injury
- 9-12 moderate head injury
- 13-15 mild head injury

Question No: 25