

01	A	B	C	D	E
02	A	B	C	D	E
03	A	B	C	D	E
04	A	B	C	D	E
05	A	B	C	D	E
06	A	B	C	D	E
07	A	B	C	D	E
08	A	B	C	D	E
09	A	B	C	D	E
10	A	B	C	D	E
11	A	B	C	D	E
12	A	B	C	D	E
13	A	B	C	D	E

14	A	B	C	D	E
15	A	B	C	D	E
16	A	B	C	D	E
17	A	B	C	D	E
18	A	B	C	D	E
19	A	B	C	D	E
20	A	B	C	D	E
21	A	B	C	D	E
22	A	B	C	D	E
23	A	B	C	D	E
24	A	B	C	D	E
25	A	B	C	D	E
26	A	B	C	D	E

27	A	B	C	D	E
28	A	B	C	D	E
29	A	B	C	D	E
30	A	B	C	D	E
31	A	B	C	D	E
32	A	B	C	D	E
33	A	B	C	D	E
34	A	B	C	D	E
35	A	B	C	D	E
36	A	B	C	D	E
37	A	B	C	D	E
38	A	B	C	D	E
39	A	B	C	D	E

PRACTICE QUESTIONS

Board of Certification for Emergency Nursing(BCEN)

X65XZ287

Certified Flight Registered Nurse (CFRN)

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

Before you begin

What this is

9 practice questions for Board of Certification for Emergency Nursing(BCEN) X65XZ287 , each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, X65XZ287
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

QUESTION 1

MULTIPLE CHOICE

Which physiologic changes are characteristic of acute exposure to altitude during air medical transport? (Choose two.)

- ☒ **A** Decreased alveolar partial pressure of oxygen
- ☐ **B** Decreased minute ventilation at rest
- ☒ **C** Expansion of trapped gas in body cavities
- ☐ **D** Increased viscosity of blood at capillary level

ANSWER A - C

WHY As altitude increases, barometric pressure falls and the partial pressure of oxygen decreases, reducing alveolar PO₂ (A). According to Boyle's law, gas expands at lower pressure, so any trapped gas (e.g., pneumothorax, bowel gas, middle ear air) expands (C). Minute ventilation typically increases due to hypoxic drive (not decreases), and blood viscosity does not acutely rise in a clinically meaningful way at transport altitudes.

QUESTION 2

MULTIPLE CHOICE

Which items are considered essential components of a pre-flight scene safety assessment by a flight nurse? (Choose two.)

- ☒ **A** Wind direction and approximate wind speed
- ☐ **B** Identification of the patient's primary insurance carrier
- ☒ **C** Presence of overhead obstructions such as power lines and towers
- ☐ **D** Patient's religious preference for end-of-life decisions

ANSWER A - C

WHY Wind direction/speed (A) and overhead obstructions (C) directly affect aircraft approach/departure paths and landing zone safety. Insurance information and religious preferences are administrative or clinical items not relevant to the immediate safety of the aircraft and crew.

QUESTION 3 SINGLE CHOICE

A patient is intubated during interfacility transport. At a cabin altitude of 8,000 feet, the flight nurse should anticipate which change in the behavior of a tracheostomy tube cuff?

- ☐ A Cuff pressure will decrease as the trapped gas expands at altitude
- ☒ B Cuff pressure will increase as the trapped gas expands at altitude
- ☐ C Cuff volume will remain constant but leak around the stoma
- ☐ D Cuff pressure is unaffected because cuff pressure is set on the ground

ANSWER B

WHY By Boyle's law, as ambient pressure decreases with altitude, gas within the cuff expands and cuff pressure rises. Overinflated cuffs can compromise tracheal mucosal perfusion, so pressure should be monitored and adjusted during ascent and descent.

QUESTION 4 SINGLE CHOICE

An adult trauma patient with suspected tension pneumothorax is being transported by helicopter. Which intervention is most appropriate for the flight nurse to perform?

- ☐ A Delay intervention until landing to confirm diagnosis with imaging
- ☒ B Perform needle decompression at the 2nd intercostal space, midclavicular line
- ☐ C Administer 100% oxygen and observe, withholding invasive procedures in flight
- ☐ D Begin positive pressure ventilation at 20 breaths per minute to re-expand the lung

ANSWER B

WHY Tension pneumothorax is a clinical diagnosis requiring immediate decompression. In flight, needle decompression at the 2nd intercostal space, midclavicular line is the standard prehospital/interfacility treatment. Delaying treatment, observation alone, or PPV without decompression will worsen the patient's cardiovascular collapse.

QUESTION 5

SINGLE CHOICE

A patient on a vasopressor infusion develops a marked drop in blood pressure as the helicopter climbs to cruise altitude. What is the most likely contributing factor?

- ☐ A Increased viscosity of vasopressor solution at lower temperatures
- ☐ B Decreased barometric pressure causing vasopressor molecules to degrade
- ☒ C **Altitude-induced vasodilation and decreased systemic vascular resistance**
- ☐ D Automatic altitude compensation by modern infusion pumps

ANSWER C

WHY Altitude exposure causes a compensatory vasodilation in some vascular beds and, when combined with hypoxemia and decreased SVR, can blunt the effect of vasopressors. Infusion pumps do not automatically compensate for altitude, and drug degradation at cabin altitudes is not clinically significant over a typical transport.

QUESTION 6

SINGLE CHOICE

Which gas law best explains the recommendation to use a saline lock rather than an air-filled syringe during ascent in an unpressurized aircraft?

- ☐ A Dalton's law
- ☐ B Henry's law
- ☒ C **Boyle's law**
- ☐ D Graham's law

ANSWER C

WHY Boyle's law states that at constant temperature, gas volume is inversely proportional to pressure. As ambient pressure decreases with altitude, trapped air expands, which can cause air emboli or line/airspace complications. Using fluid-filled (saline-locked) lines reduces this risk.

QUESTION 7

SINGLE CHOICE

During transport of a neonate in an infant incubator, what is the primary reason supplemental heat must be actively managed throughout the flight?

- ☒ **A Convective heat loss increases due to cabin air movement at altitude**
- ☐ B The incubator heating element is disabled by FAA regulation in flight
- ☐ C Neonatal oxygen saturation cannot be measured without active warming
- ☐ D Cabin pressurization eliminates the need for active thermal management

ANSWER A

WHY Increased airflow within the cabin and decreased ambient temperature at altitude increase convective heat loss for neonates, who have limited thermoregulatory reserves. Active thermal management (radiant warmers, incubator temperature control) must be maintained and monitored throughout flight.

QUESTION 8

SINGLE CHOICE

A flight nurse notices that the pilot appears fatigued and is having difficulty maintaining radio communications during a long transport. Which CRM-based action is most appropriate?

- ☐ A Continue the mission and document concerns after landing
- ☐ B Privately ask the pilot about rest and caffeine intake
- ☒ **C Notify the communications center and request a crew pause or replacement when safety permits**
- ☐ D Reduce radio traffic by switching to text messaging only

ANSWER C

WHY Crew Resource Management emphasizes that any crew member has both the responsibility and authority to address safety concerns through established communication channels. Notifying the communications center so that a safety decision (crew rest, replacement, or operational pause) can be made protects the patient, crew, and aircraft.

QUESTION 9

SINGLE CHOICE

When establishing a helicopter landing zone (LZ) at a scene, which minimum dimension is recommended for a day-time LZ on flat, hard ground?

- ☐ A 50 feet by 50 feet
- ☐ B 75 feet by 75 feet
- ☒ C 100 feet by 100 feet
- ☐ D 150 feet by 150 feet

ANSWER C

WHY Standard scene LZ recommendations for helicopter operations call for a minimum of 100 ft x 100 ft for day operations on flat, hard, level ground, free of overhead and surrounding obstructions. Smaller dimensions (50 or 75 ft) are insufficient for safe approach and touchdown for most medical helicopters, and 150 ft is more typical of a recommended/ideal dimension rather than the minimum standard.