

01	☐ A	☒ B	☐ C	☐ D	☐ E
02	☐ A	☐ B	☐ C	☒ D	☐ E
03	☐ A	☐ B	☒ C	☐ D	☐ E
04	☒ A	☐ B	☐ C	☐ D	☐ E
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14	☒ A	☐ B	☐ C	☐ D	☐ E
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25	☐ A	☐ B	☐ C	☐ D	☒ E
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27	☒ A	☐ B	☐ C	☐ D	☐ E
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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

American Board of Anesthesiology (ABA)

ADV

ADVANCED Exam

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

Before you begin

What this is

9 practice questions for American Board of Anesthesiology (ABA) ADV , 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, ADV
- the question number
- the email address on your order

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

QUESTION 1

SINGLE CHOICE

During cardiopulmonary bypass, which test is most commonly used at the bedside to monitor adequacy of heparin anticoagulation?

- ☒ **A** Activated clotting time (ACT)
- ☐ **B** Prothrombin time (PT)
- ☐ **C** Bleeding time
- ☐ **D** D-dimer level

ANSWER A

WHY Activated clotting time (ACT) is the standard point-of-care test used to monitor heparin effect and guide anticoagulation during cardiopulmonary bypass, with target values typically >400-480 seconds.

QUESTION 2

SINGLE CHOICE

A patient undergoing craniotomy develops acute intracranial hypertension. Which intervention provides the most rapid reduction in intracranial pressure?

- ☒ **A** Hyperventilation to a PaCO₂ of 25-30 mmHg
- ☐ **B** Administration of mannitol 0.5-1 g/kg IV
- ☐ **C** Elevating the head of bed 30 degrees
- ☐ **D** Increasing sevoflurane concentration

ANSWER A

WHY Hyperventilation causes rapid cerebral vasoconstriction and reduces ICP within minutes, making it the fastest acute intervention, though it is typically used only as a temporizing measure due to risk of cerebral ischemia with prolonged use.

QUESTION 3

MULTIPLE CHOICE

Which of the following are recognized first-line uterotonic agents used to treat postpartum hemorrhage due to uterine atony? (Choose two.)

- ☒ **A** Oxytocin
- ☒ **B** Carboprost (15-methyl PGF₂α)
- ☐ **C** Terbutaline
- ☐ **D** Nifedipine

ANSWER A • B

WHY Oxytocin is the first-line agent for uterine atony, and carboprost (a prostaglandin analog) is a commonly used second/third-line uterotonic. Terbutaline is a tocolytic that would worsen atony, and nifedipine is a tocolytic/antihypertensive not used for hemorrhage control.

QUESTION 4

SINGLE CHOICE

Which of the following is the most sensitive early sign of malignant hyperthermia under general anesthesia?

- ☐ **A** Masseter muscle rigidity
- ☒ **B** Rise in end-tidal CO₂ unresponsive to increased minute ventilation
- ☐ **C** Hyperkalemia
- ☐ **D** Core temperature above 40°C

ANSWER B

WHY An unexplained, sustained rise in end-tidal CO₂ despite increased minute ventilation is typically the earliest and most sensitive sign of malignant hyperthermia, often preceding significant temperature elevation.

QUESTION 5

SINGLE CHOICE

According to the ARDSNet protocol, which ventilator strategy has been shown to reduce mortality in patients with ARDS?

- ☒ **A** Low tidal volume ventilation (6 mL/kg predicted body weight) with plateau pressure <30 cmH₂O
- ☐ **B** High tidal volume ventilation (12 mL/kg) to minimize atelectasis
- ☐ **C** Permissive hypoxemia with SpO₂ target of 70-80%
- ☐ **D** Routine use of high-frequency oscillatory ventilation

ANSWER A

WHY The landmark ARDSNet trial demonstrated that a lung-protective strategy using low tidal volumes (6 mL/kg predicted body weight) and limiting plateau pressure to <30 cmH₂O reduces mortality in ARDS patients.

QUESTION 6

SINGLE CHOICE

Which adjuvant, when added to local anesthetic for peripheral nerve blockade, is most associated with prolonging block duration through alpha-2 adrenergic agonism?

- ☐ **A** Dexmedetomidine
- ☐ **B** Dexamethasone
- ☐ **C** Epinephrine
- ☒ **D** Clonidine

ANSWER D

WHY Clonidine is a classic alpha-2 adrenergic agonist adjuvant used to prolong peripheral nerve block duration. While dexmedetomidine is also an alpha-2 agonist, clonidine is the prototype agent historically studied for this indication and is distinguished from dexamethasone (a corticosteroid) and epinephrine (primarily a vasoconstrictor marker for intravascular injection).

QUESTION 7

SINGLE CHOICE

During one-lung ventilation, a patient develops hypoxemia. Which physiologic mechanism helps redirect blood flow away from the non-ventilated lung to improve oxygenation?

- ☒ **A** Hypoxic pulmonary vasoconstriction
- ☐ **B** Bohr effect
- ☐ **C** Haldane effect
- ☐ **D** Bronchial circulation shunting

ANSWER A

WHY Hypoxic pulmonary vasoconstriction is the physiologic mechanism by which blood flow is redirected away from poorly ventilated or collapsed lung regions toward better-ventilated areas, helping to minimize shunt and improve oxygenation during one-lung ventilation.

QUESTION 8

TRUE FALSE

Lipid emulsion (Intralipid) therapy is a recommended treatment for local anesthetic systemic toxicity (LAST) presenting with cardiovascular collapse.

- ☒ **A** True
- ☐ **B** False

ANSWER A

WHY Lipid emulsion therapy is a well-established treatment recommended by ASRA guidelines for severe local anesthetic systemic toxicity, particularly when cardiovascular collapse or refractory arrhythmias occur.

QUESTION 9

SINGLE CHOICE

Per Surviving Sepsis Campaign guidelines, which vasopressor is recommended as the first-line agent for septic shock refractory to fluid resuscitation?

- ☒ **A** Norepinephrine
- ☐ **B** Phenylephrine
- ☐ **C** Dopamine
- ☐ **D** Vasopressin

ANSWER A

WHY Norepinephrine is recommended as the first-line vasopressor for septic shock due to its potent alpha-agonist activity with modest beta-1 effects, providing effective vasoconstriction while maintaining cardiac output.