

American Heart Association

Basic Life Support for Healthcare Providers

Written Examinations

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March 2011

2011 Basic Life Support for Healthcare Providers

Written Test

Introduction The 2011 Basic Life Support for Healthcare Provider Course includes both skills tests and written tests. The written test measures the mastery of cognitive skills. The 2011 written test must be used with the 2011 course materials, ie, student manuals, course videos, and instructor manuals.

Administering the written tests This closed-book test must be completed individually by each student. To receive a course completion card, students must score at least 84% on the written test.

Remediation All students deserve remediation on topics in which they are not confident or have not mastered.

For guidance on remediation, refer to the instructor manual.

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March 2011



ANSWER SHEET
BLS for Healthcare Providers
Written Exam

Name _____ Date _____ Version _____

<u>Question</u>	<u>Answer</u>			
1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D
7.	A	B	C	D
8.	A	B	C	D
9.	A	B	C	D
10.	A	B	C	D
11.	A	B	C	D
12.	A	B	C	D
13.	A	B	C	D
14.	A	B	C	D
15.	A	B	C	D
16.	A	B	C	D
17.	A	B	C	D
18.	A	B	C	D
19.	A	B	C	D
20.	A	B	C	D



- | | | | | |
|-----|---|---|---|---|
| 21. | A | B | C | D |
| 22. | A | B | C | D |
| 23. | A | B | C | D |
| 24. | A | B | C | D |
| 25. | A | B | C | D |

American Heart Association

Basic Life Support for Healthcare Providers

Written Examination

Version A

March 2011

**BLS for Healthcare Providers Course
Version A**

Please do not mark on this examination. Record the best answer on the separate answer sheet.

1. The rescuer knows the rescue breath for an infant victim is effective when

- A. the stomach rises visibly.
- B. the chest rises visibly.
- C. the child ventilation bag is completely compressed.
- D. the rescuer can hear an air leak around the mask.

2. When a child has a heart rate greater than 60 per minute and a pulse but is not breathing effectively, the rescuer should

- A. give breaths and chest compressions.
- B. give breaths without chest compressions.
- C. give chest compressions without breaths.
- D. connect the AED to the child and analyze.

3. Which of the following ventilation devices/techniques is not recommended for a single rescuer to provide breaths during CPR?

- A. Bag-mask device
- B. Mouth-to-barrier device technique
- C. Mouth-to-mouth technique
- D. Mouth-to-mask technique

4. Which of the following options lists the correct compression and ventilation rates for 2-rescuer CPR in the presence of an advanced airway?

- A. Compress at a rate of at least 100 per minute, 1 breath every 6 to 8 seconds.
- B. Compress at a rate of at least 60 per minute, 1 breath every 6 to 8 seconds.
- C. Compress at a rate of at least 100 per minute, 2 breaths every 5 to 10 seconds.
- D. Compress at a rate of at least 60 per minute, 1 breath every 5 to 10 seconds.

5. After the AED delivers a shock, the rescuer should

- A. wait for the AED to reanalyze the rhythm.
- B. immediately restart CPR, beginning with chest compressions.
- C. provide 2 ventilations to the victim.
- D. immediately check the carotid pulse for no more than 10 seconds.

6. If an unresponsive infant is not breathing and has a heart rate of 53 beats per minute and signs of poor perfusion despite oxygenation and ventilation with a bag and mask, which of the following should you perform?

- A. One rescue breath every 10 seconds
- B. Cycles of back blows and chest thrusts
- C. Chest compressions without breaths
- D. Both chest compressions and breaths

7. Where should the hands be placed to perform chest compressions on an adult?

- A. On the lower half of the breastbone
- B. In the center of the breastbone
- C. On the upper portion of the abdomen
- D. In the upper half of the breastbone

8. The 2 thumb–encircling hands technique for the infant

- A. produces less blood flow than the 2-finger technique.
- B. is the preferred chest compression technique for 2-rescuer CPR.
- C. is the preferred chest compression technique for 1-rescuer CPR.
- D. generates less blood pressure than the 2-finger technique.

9. The recommended rate for performing chest compressions for victims of all ages is

- A. at least 40 compressions per minute.
- B. at least 60 compressions per minute.
- C. at least 80 compressions per minute.
- D. at least 100 compressions per minute.

10. The depth of chest compressions for an adult victim should be at least

- A. 1 inch (2.5 cm).
- B. 2 inches (5 cm).
- C. 3 inches (7.5 cm).
- D. 4 inches (10 cm).

11. The compression-to-breaths ratio for 2-rescuer child CPR is

- A. 30:2.
- B. 5:1.
- C. 20:2.
- D. 15:2.

12. The compression-to-ventilation ratio for 1-rescuer adult CPR is
- A. 30:2.
 - B. 5:1.
 - C. 20:2.
 - D. 15:2.
13. The compression-to-ventilation ratio for 2-rescuer infant CPR is
- A. 30:2.
 - B. 5:1.
 - C. 20:2.
 - D. 15:2.
14. The recommended depth of chest compressions for an infant is
- A. at least one fourth the depth of the chest, approximately 1 inch (2.5 cm).
 - B. at least one third the depth of the chest, approximately 1.5 inches (4 cm).
 - C. at least one half the depth of the chest, approximately 2 inches (5 cm).
 - D. at least two thirds the depth of the chest, approximately 3 inches (8 cm).
15. Which of the following victims needs CPR?
- A. A victim with a pulse who is having trouble breathing
 - B. A victim with chest pain and indigestion
 - C. A victim who is unresponsive with no normal breathing and no pulse
 - D. A victim who is unresponsive but is breathing adequately
16. Why is it important to compress to the appropriate depth during CPR?
- A. Adequate depth of compression is needed to create blood flow during compressions.
 - B. Adequate depth of compression is needed to create air flow into the lungs and adequate oxygenation.
 - C. Adequate depth of compression is needed to prolong asystole.
 - D. Adequate depth of compression is needed to stimulate spontaneous respirations.
17. As soon as an AED becomes available, which of the following is the first step the rescuer should perform to operate the AED?
- A. Place the AED pads on the chest.
 - B. Deliver 2 rescue breaths before using the AED.
 - C. Turn on the AED.
 - D. Complete 5 cycles of chest compressions.

18. If a victim of foreign body airway obstruction becomes unresponsive, the rescuer should send someone to activate the emergency response system and immediately

- A. performs abdominal thrusts
- B. performs blind finger sweeps
- C. start CPR beginning with compressions
- D. calls the victim's doctor

19. When should the rescuer initially ensure that the scene is safe?

- A. When the rescuer first sees a potential victim
- B. After the rescuer activates the emergency response system
- C. As emergency medical services arrive on the scene
- D. After an AED attached to the victim delivers a shock

20. The 2010 AHA Guidelines for CPR and ECC recommend that to identify cardiac arrest in an unresponsive victim with no breathing (or no normal breathing), a healthcare provider should check a pulse for no more than

- A. 25 seconds.
- B. 10 seconds.
- C. 15 seconds.
- D. 20 seconds.

21. During bag-mask ventilation, which of the following is recommended to minimize the risk of gastric inflation?

- A. Give breaths as quickly as you can.
- B. Give each breath over as long a time as you can (several seconds).
- C. Give the largest breaths that you can.
- D. Give a breath just until you see the chest rise.

22. After you identify an unresponsive victim with no breathing (or no normal breathing) and no pulse, chest compressions should be initiated within

- A. 25 seconds.
- B. 10 seconds.
- C. 30 seconds.
- D. 60 seconds.

23. In 2-rescuer CPR, while the first rescuer begins chest compressions, the second rescuer should

- A. count compressions aloud.
- B. check for a pulse during compressions.
- C. do nothing until the first rescuer needs relief.
- D. maintain an open airway and give ventilations.

24. After the airway is opened, which of the following correctly states the proper technique for delivering mouth-to-mouth ventilation?

- A. The rescuer opens the airway, seals his or her mouth over the victim's mouth, pinches the victim's nose closed, and gives 2 breaths while watching for the chest to rise.
- B. The rescuer opens the airway, puts his or her mouth on the victim's mouth, and gives several small puffs while trying to avoid making the chest rise.
- C. The rescuer opens the airway, seals his or her mouth on the victim's mouth, and gives 1 slow breath for a duration of 5 seconds.
- D. The rescuer opens the airway, puts his or her mouth on the victim's mouth, and gives 5 slow breaths, each with a duration of 2 seconds, while watching for the chest to rise.

25. When administering breaths by using a bag-mask device for a child who is not breathing but does have a pulse, the rescuer should

- A. squeeze the bag as often as possible.
- B. Give breaths at the rate of 1 breath every 3 to 5 seconds.
- C. position the child on his or her stomach.
- D. avoid performing a head tilt.

2011 EXAM A
ANSWER KEY
BLS for Healthcare Providers

<u>Question</u>	<u>Answer</u>			
1.	A	•	C	D
2.	A	•	C	D
3.	•	B	C	D
4.	•	B	C	D
5.	A	•	C	D
6.	A	B	C	•
7.	•	B	C	D
8.	A	•	C	D
9.	A	B	C	•
10.	A	•	C	D
11.	A	B	C	•
12.	•	B	C	D
13.	A	B	C	•
14.	A	•	C	D
15.	A	B	•	D
16.	•	B	C	D
17.	A	B	•	D
18.	A	B	•	D
19.	•	B	C	D
20.	A	•	C	D

- | | | | | |
|-----|---|---|---|---|
| 21. | A | B | C | • |
| 22. | A | • | C | D |
| 23. | A | B | C | • |
| 24. | • | B | C | D |
| 25. | A | • | C | D |



**2011 EXAM A
Reference Sheet
BLS for Healthcare Providers**

Question	Reference	Answer			
1.	(See page 37, BLS for Healthcare Providers Manual)	A	•	C	D
2.	(See page 49, BLS for Healthcare Providers Manual)	A	•	C	D
3.	(See page 14, BLS for Healthcare Providers Manual)	•	B	C	D
4.	(See page 43, BLS for Healthcare Providers Manual)	•	B	C	D
5.	(See page 20, BLS for Healthcare Providers Manual)	A	•	C	D
6.	(See page 49, BLS for Healthcare Providers Manual)	A	B	C	•
7.	(See page 10, BLS for Healthcare Providers Manual)	•	B	C	D
8.	(See page 37, BLS for Healthcare Providers Manual)	A	•	C	D
9.	(See page 2, BLS for Healthcare Providers Manual)	A	B	C	•
10.	(See page 2, BLS for Healthcare Providers Manual)	A	•	C	D
11.	(See page 31, BLS for Healthcare Providers Manual)	A	B	C	•
12.	(See page 8, BLS for Healthcare Providers Manual)	•	B	C	D
13.	(See page 37, BLS for Healthcare Providers Manual)	A	B	C	•
14.	(See page 36, BLS for Healthcare Providers Manual)	A	•	C	D
15.	(See page 8, BLS for Healthcare Providers Manual)	A	B	•	D
16.	(See page 11, BLS for Healthcare Providers Manual)	•	B	C	D
17.	(See page 20, BLS for Healthcare Providers Manual)	A	B	•	D
18.	(See page 53, BLS for Healthcare Providers Manual)	A	B	•	D
19.	(See page 8, BLS for Healthcare Providers Manual)	•	B	C	D
20.	(See page 5, BLS for Healthcare Providers Manual)	A	•	C	D

- | | | | | | |
|-----|--|---|---|---|---|
| 21. | (See page 15, BLS for Healthcare Providers Manual) | A | B | C | • |
| 22. | (See page 9, BLS for Healthcare Providers Manual) | A | • | C | D |
| 23. | (See page 15, BLS for Healthcare Providers Manual) | A | B | C | • |
| 24. | (See page 45, BLS for Healthcare Providers Manual) | • | B | C | D |
| 25. | (See page 14, BLS for Healthcare Providers Manual) | A | • | C | D |

American Heart Association

Basic Life Support for Healthcare Providers

Written Examination

Version B

March 2011

**BLS for Healthcare Providers Course
Version B**

Please do not mark on this examination. Record the best answer on the separate answer sheet.

1. After the airway is opened, which of the following correctly states the proper technique for delivering mouth-to-mouth ventilation?

- A. The rescuer opens the airway, seals his or her mouth over the victim's mouth, pinches the victim's nose closed, and gives 2 breaths while watching for the chest to rise.
- B. The rescuer opens the airway, puts his or her mouth on the victim's mouth, and gives several small puffs while trying to avoid making the chest rise.
- C. The rescuer opens the airway, seals his or her mouth on the victim's mouth, and gives 1 slow breath for a duration of 5 seconds.
- D. The rescuer opens the airway, puts his or her mouth on the victim's mouth, and gives 5 slow breaths, each with a duration of 2 seconds, while watching for the chest to rise.

2. High-quality CPR includes starting compressions within how many seconds after recognition of cardiac arrest in adults?

- A. 10
- B. 15
- C. 20
- D. 30

3. When administering breaths by using a bag-mask device for a child who is not breathing but does have a pulse, the rescuer should

- A. squeeze the bag as often as possible.
- B. Give breaths at the rate of 1 breath every 3 to 5 seconds.
- C. position the child on his or her stomach.
- D. avoid performing a head tilt.

4. Gastric inflation is more likely to occur if the rescuer

- A. does not make a good seal between the face and the mask.
- B. gives breaths too quickly or with too much force.
- C. gives each breath over 1 second.
- D. gives volume just sufficient to see the chest rise.

5. Complete chest recoil contributes to CPR success by

- A. reducing the fatigue of the rescuer.
- B. allowing the heart to refill with blood between compressions.
- C. reducing the risk of rib fractures.
- D. increasing the rate of chest compressions.

6. Which of the following is the preferred chest compression technique for 2-rescuer CPR in an infant?

- A. 2 fingers
- B. 2 thumb—encircling hands
- C. 1 hand
- D. Either 1 or 2 hands

7. Which of the following is a characteristic of high-quality CPR in adults?

- A. Minimizing recoil
- B. Compressing at a depth of about 1 inch
- C. Compressing at a depth of at least 2 inches
- D. Checking for a pulse every minute

8. The correct depth of chest compressions for a child is

- A. at least one fourth the depth of the chest, approximately 1.5 inches (4 cm).
- B. at least one third the depth of the chest, approximately 2 inches (5 cm).
- C. at least two thirds the depth of the chest, approximately 4 inches (10 cm).
- D. at least three fourths the depth of the chest, approximately 4.5 inches (12 cm).

9. The compression-to-ventilation ratio for 1-rescuer child CPR is

- A. 30:2.
- B. 5:1.
- C. 20:2.
- D. 15:2.

10. The compression-to-ventilation ratio for 2-rescuer adult CPR is

- A. 30:2.
- B. 5:1.
- C. 20:2.
- D. 15:2.

11. The compression-to-ventilation ratio for 1-rescuer infant CPR is

- A. 30:2.
- B. 5:1.
- C. 20:2.
- D. 15:2.

12. The proper compression rate for victims of all ages is at least

- A. 30 compressions per minute.
- B. 50 compressions per minute.
- C. 100 compressions per minute.
- D. 200 compressions per minute.

13. Which of the following victims needs CPR?

- A. A victim with a pulse who is having trouble breathing
- B. A victim with chest pain and indigestion
- C. A victim who is unresponsive with no normal breathing and no pulse
- D. A victim who is unresponsive but is breathing adequately

14. Ideally, interruptions in chest compressions should be

- A. limited to less than 10 seconds.
- B. performed as often as needed to assess the victim.
- C. longer than 10 seconds.
- D. performed every 5 minutes.

15. The rescuer should deliver a shock with an AED after

- A. the AED advises a shock, charges, and prompts the rescuer to push the shock button.
- B. completion of 2 cycles of compressions and breaths.
- C. placement of an advanced airway.
- D. a check for a carotid pulse.

16. If an AED is used for a child less than 8 years of age,

- A. infant pads may be used if pediatric pads are unavailable.
- B. only adult pads or a dose attenuator may be used.
- C. adult pads/dose may be used if pediatric pads/dose attenuator are not available.
- D. adult pads may be used, but they should be cut in half before application.

17. Why is it important to compress to the appropriate depth during CPR?

- A. Adequate depth of compression is needed to create blood flow during compressions.
- B. Adequate depth of compression is needed to create air flow into the lungs and adequate oxygenation.
- C. Adequate depth of compression is needed to prolong asystole.
- D. Adequate depth of compression is needed to stimulate spontaneous respirations.

18. If a victim of foreign body airway obstruction becomes unresponsive, the rescuer should send someone to activate the emergency response system and immediately

- A. performs abdominal thrusts
- B. performs blind finger sweeps
- C. start CPR beginning with compressions
- D. calls the victim's doctor

19. For which of the following would it be appropriate to move an adult victim who needs CPR?

- A. When help is more than 15 minutes away from the scene
- B. To locate the AED when one is not available
- C. When the adult victim is in a dangerous environment
- D. As soon as the adult is found to be in arrest

20. Where should a rescuer attempt to palpate the brachial pulse in an infant?

- A. On the outside of the lower arm, near the wrist
- B. Inside the upper arm, between the elbow and shoulder
- C. On the medial side of the upper leg, near the groin
- D. On the side of the neck, near the trachea

21. Which of the following is a characteristic of high-quality CPR?

- A. Compressing at a rate of 80 per minute
- B. Minimizing chest recoil
- C. Compressing at a depth of 1 inch
- D. Minimizing interruptions in chest compressions

22. To reduce rescuer fatigue during team CPR, compressor roles should be switched about every

- A. 1 cycle.
- B. 3 cycles.
- C. 5 cycles.
- D. 8 cycles.

23. Which of the following correctly compares characteristics of chest compressions in adults with those in infants and children?

- A. Start compressions: for adults, within 10 seconds; for children/infants, within 30 seconds
- B. Chest compression rate: for adults, at least 80 compressions per minute; for children/infants, at least 100 compressions per minute
- C. Compression depth: for adults, at least 2 inches; for children/infants, at least one third the depth of the chest
- D. Compression-to-ventilation ratio for 2 rescuers: for adults, 30:2; for children/infants, 10:2

24. Which of the following ventilation devices/techniques is not recommended for a single rescuer to provide breaths during CPR?

- A. Bag-mask device
- B. Mouth-to-barrier device technique
- C. Mouth-to-mouth technique
- D. Mouth-to-mask technique

25. Which of the following options lists the correct compression and ventilation rates for 2-rescuer CPR in the presence of an advanced airway?

- A. Compress at a rate of at least 100 per minute, 1 breath every 6 to 8 seconds.
- B. Compress at a rate of at least 60 per minute, 1 breath every 6 to 8 seconds.
- C. Compress at a rate of at least 100 per minute, 2 breaths every 5 to 10 seconds.
- D. Compress at a rate of at least 60 per minute, 1 breath every 5 to 10 seconds.

2011 EXAM B
ANSWER KEY
BLS for Healthcare Providers

<u>Question</u>	<u>Answer</u>			
1.	•	B	C	D
2.	•	B	C	D
3.	A	•	C	D
4.	A	•	C	D
5.	A	•	C	D
6.	A	•	C	D
7.	A	B	•	D
8.	A	•	C	D
9.	•	B	C	D
10.	•	B	C	D
11.	•	B	C	D
12.	A	B	•	D
13.	A	B	•	D
14.	•	B	C	D
15.	•	B	C	D
16.	A	B	•	D
17.	•	B	C	D
18.	A	B	•	D
19.	A	B	•	D
20.	A	•	C	D

- | | | | | |
|-----|---|---|---|---|
| 21. | A | B | C | • |
| 22. | A | B | • | D |
| 23. | A | B | • | D |
| 24. | • | B | C | D |
| 25. | • | B | C | D |



**2011 EXAM B
Reference Sheet
BLS for Healthcare Providers**

Question	Reference	Answer			
1.	(See page 45, BLS for Healthcare Providers Manual)	•	B	C	D
2.	(See page 9, BLS for Healthcare Providers Manual)	•	B	C	D
3.	(See page 14, BLS for Healthcare Providers Manual)	A	•	C	D
4.	(See page 14, BLS for Healthcare Providers Manual)	A	•	C	D
5.	(See page 10, BLS for Healthcare Providers Manual)	A	•	C	D
6.	(See page 37, BLS for Healthcare Providers Manual)	A	•	C	D
7.	(See page 4, BLS for Healthcare Providers Manual)	A	B	•	D
8.	(See page 29, BLS for Healthcare Providers Manual)	A	•	C	D
9.	(See page 29, BLS for Healthcare Providers Manual)	•	B	C	D
10.	(See page 29, BLS for Healthcare Providers Manual)	•	B	C	D
11.	(See page 57, BLS for Healthcare Providers Manual)	•	B	C	D
12.	(See page 2, BLS for Healthcare Providers Manual)	A	B	•	D
13.	(See page 57, BLS for Healthcare Providers Manual)	A	B	•	D
14.	(See page 2, BLS for Healthcare Providers Manual)	•	B	C	D
15.	(See page 20, BLS for Healthcare Providers Manual)	•	B	C	D
16.	(See page 41, BLS for Healthcare Providers Manual)	A	B	•	D
17.	(See page 11, BLS for Healthcare Providers Manual)	•	B	C	D
18.	(See page 53, BLS for Healthcare Providers Manual)	A	B	•	D
19.	(See page 11, BLS for Healthcare Providers Manual)	A	B	•	D
20.	(See page 34, BLS for Healthcare Providers Manual)	A	•	C	D



- | | | | | | |
|-----|--|---|---|---|---|
| 21. | (See page 2, BLS for Healthcare Providers Manual) | A | B | C | • |
| 22. | (See page 15, BLS for Healthcare Providers Manual) | A | B | • | D |
| 23. | (See page 57, BLS for Healthcare Providers Manual) | A | B | • | D |
| 24. | (See page 14, BLS for Healthcare Providers Manual) | • | B | C | D |
| 25. | (See page 43, BLS for Healthcare Providers Manual) | • | B | C | D |