

# LUCAS<sup>®</sup> 3, v3.1 chest compression system

## Training test

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Circle the correct responses and return to the instructor once you've completed the test.

**1. Which one of the following is NOT a contraindication for LUCAS device use?**

- a. A patient that is too small for the LUCAS device
- b. A patient with a closed head injury
- c. If it's not possible to position the LUCAS device safely or correctly on the patient's chest
- d. A patient that is too large for the LUCAS device

**2. When the battery indicator shows an intermittent yellow LED, the approximate operating time left is:**

- a. 15 minutes
- b. 10 minutes
- c. 30 minutes
- d. 5 minutes

**3. When applying the LUCAS device, what is your FIRST action upon opening the carrying case?**

- a. Remove the back plate
- b. Check for a spare battery
- c. Push ON/OFF
- d. Pull out the Instructions for Use

**4. All of the following are risks of incorrect pressure pad position EXCEPT:**

- a. Damage to the rib cage
- b. Impairment of blood circulation
- c. Tibial fracture
- d. Damage to internal organs

**5. What should you do if the patient is too small for the LUCAS device?**

- a. Put something, such as a blanket, between the patient and the back plate
- b. Remove the LUCAS device and provide manual chest compressions instead
- c. Continue to use the LUCAS device despite the suction cup not being in contact with the chest
- d. Put something, such as a blanket, between the patient and the pressure pad of the suction cup

**6. All of the following are examples of when to use the PAUSE button EXCEPT:**

- a. During a short break in compressions; for example, during ECG analysis
- b. To change the battery during use
- c. To mute the alarm
- d. When moving a patient down stairs if the LUCAS device doesn't stay in the correct position and angle on the patient's chest

**7. How should the LUCAS device be positioned on the chest?**

- a. The lower edge of the pressure pad inside the suction cup should be positioned immediately above the end of the sternum
- b. The lower edge of the suction cup should be positioned immediately above the end of the sternum
- c. The lower edge of the suction cup should be positioned at a distance of two fingers from the lower end of the sternum
- d. The lower edge of the suction cup should be positioned at the nipple line of the patient

**8. How should the suction cup be lowered to the patient's chest during adjustment?**

- a. Use both hands and push as hard as you can until the pressure pad compresses the chest
- b. Use one hand (two fingers) and push down until the pressure pad touches the chest without compressing the chest
- c. Use both hands to lower as far as the pressure pad will go
- d. Use one hand (two fingers) and push down making sure to leave a 2-inch/5 cm space above the chest

**9. All of the statements are true regarding the battery in the LUCAS device, EXCEPT:**

- a. Press the PAUSE button before removing the battery while compressions are ongoing
- b. The LUCAS device will remember the current settings and start position for 60 seconds after the battery is removed
- c. You must power off the LUCAS device before removing the battery
- d. The battery will last for approximately 45 minutes with a full charge

**10. All of the following steps are done when moving a patient on the LUCAS device, EXCEPT:**

- a. Reassess placement of the suction cup frequently
- b. Lift the patient using the wrist straps (patient straps)
- c. Attach the stabilization strap
- d. Secure the patient's wrists in the patient straps

**True or false**

11. Bruising and soreness of the chest are common during the use of the LUCAS chest compression system.  True  False

12. A battery does not have to be inserted into the LUCAS device when it's running on AC power.  True  False

13. Always check to make sure the position of the suction cup is correct after defibrillation.  True  False

14. If the battery change takes more than 60 seconds, the LUCAS device does a self-test and you must adjust the start position again.  True  False

15. A fully charged spare LUCAS device battery should always be in the carrying case.  True  False

16. It's ok for the defibrillator electrodes and wires to be under the suction cup.  True  False

17. The LUCAS device is intended for performing external cardiac compressions on adult patients in cardiac arrest.  True  False

18. The use of the LUCAS device is restricted by patient weight.  True  False

19. An intermittent LED and alert signal alerts the rescuer before each ventilation pause.  True  False

20. The LUCAS device should be used on every patient in cardiac arrest regardless of whether manual chest compressions would be performed.  True  False