

# Air Brake Theory Assessment

---

1. The low air pressure warning signal will come on before the pressure in the air tanks falls below:
  - a. 75-80 psi
  - b. 55-75 psi
  - c. 70-75 psi
  - d. 90-100 psi
2. With air brake vehicles, the parking brake should be used:
  - a. As little as possible
  - b. Only during pre-trip inspections
  - c. Whenever you leave the vehicle unattended
3. The proper use of the brakes when going down a long steep grade after selecting a proper gear is to brake until your speed is about \_\_\_ below the posted speed limit and release your brake.
  - a. 15 mph
  - b. 10 mph
  - c. 5 mph
4. To check the free play of manual slack adjusters of S-cam brakes, you should park on:
  - a. Level ground and apply the parking brakes, then apply service brakes
  - b. Level ground and drain off air pressure before checking adjustment
  - c. Level ground, chock the wheels and release the parking brakes
5. The most important thing to do when a low air pressure warning comes on is:
  - a. Stop and safely park as soon as possible
  - b. Downshift
  - c. Up-shift
6. Excessive use of the service brakes results in overheating which can lead to:
  - a. Proper adjustment of s-cam
  - b. Increase contact between the brake drums and linings
  - c. Expansion of the brake drums
7. Modern air brakes combine three different systems. They are the service, the parking, and the \_\_\_ brakes.
  - a. Drum
  - b. Emergency
  - c. Foot
8. How should you check that your service brakes are working properly?
  - a. Park on level ground, wait until normal air pressure is reached, release the parking brake and move forward slowly at about 5 mph. Then apply the brakes firmly
  - b. Park on slight grade, drain off air pressure, set parking brake and check to the movement.
  - c. Park on level ground, chock the wheels, engage the parking brakes when you have the correct amount of air pressure to do so and shut the engine off.

## Air Brake Theory Assessment

---

9. Some air brake systems have an alcohol evaporator. What may happen if you don't keep the proper level of alcohol?
  - a. Ice may form in the air brake valves and cause brake failure
  - b. The s-cam may not take back when you release the brake pedal
  - c. Ice may form on the brake drums and wear them out.
10. Your truck or bus has a dual air brake system. If a low air pressure warning comes on for only one system, what should you do?
  - a. Reduce your speed and drive to the nearest garage for repairs
  - b. Reduce your speed and test the remaining system while under way
  - c. Stop right away and safely park. Continue only after the system is fixed.
11. Emergency stab braking is:
  - a. When you press hard on a brake pedal and apply hand valve while you stop
  - b. Press on the brake pedal as hard as you can, release the brakes when the wheels lock, put on the brakes again when the wheels start rolling
  - c. Use light steady pressure on the brake pedal
12. What is a "wig wag"
  - a. A mechanical arm that signals low air pressure
  - b. Part of the stop light system
  - c. A spring mount for hair pieces
13. The brake system that applies and releases the brakes when the driver uses the brake pedal is the \_\_\_ brake system.
  - a. Service
  - b. Emergency
  - c. Parking
14. Your truck has a dual air system and one of the system loses its pressure. What will happen?
  - a. Brake drums will not be fully pressurized
  - b. The manual slack adjusters of the s-cam brakes will not be set properly
  - c. Either the front or back brake will not be fully operational
15. Your brakes are fading when:
  - a. The brake pedal feels spongy when you apply pressure
  - b. You have to push harder on a brake pedal to control your speed on a downgrade
  - c. Less pressure is needed on the brake pedal for each stop
16. Which of the following will be true about your brake function in your ABS fails?
  - a. It may cause problems with other mechanical systems and possibly pose a huge fire risk
  - b. You will still have normal brake function and will just need to get the ABS repaired soon
  - c. It will slow your truck or bus and force you to pull over
17. Which of these is NOT a proper time to apply the parking brakes?
  - a. If you are going to test the parking brake to make sure that it holds the vehicle
  - b. If the brakes are very hot (e.g. just after coming down a steep grade)
  - c. If you will be stopping for only one hour

## Air Brake Theory Assessment

---

18. The air compressor governor controls:
  - a. The speed of the air compressor
  - b. When air is pumped into the air tanks
  - c. Air pressure applied to the brakes
19. The safety valve discharges automatically at the pressure of:
  - a. 100 psi
  - b. 150 psi
  - c. 50 psi
20. All air brake equipped vehicles have:
  - a. An air usage gauge
  - b. A supply pressure gauge
  - c. A backup hydraulic system

# Air Brake Theory Assessment

---

## Answer Key:

1. B
2. C
3. C
4. C
5. A
6. C
7. B
8. A
9. C
10. C
11. B
12. A
13. A
14. C
15. B
16. B
17. B
18. B
19. B
20. B