

Exam

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) A locked wheel _____ to the road surface than a rolling wheel. 1) _____
A) Has greater traction B) Has less traction

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 2) Brake fluid must not boil or damage vehicle painted surfaces. 2) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 3) Design requirements for vehicle brakes include _____. 3) _____
A) Fluid that does not freeze
B) Hydraulic system that prevents undesirable wheel lockup
C) Either A or B
D) Both A and B

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 4) The FMVSS 135 test is designed to reveal weaknesses in brake systems. 4) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 5) the main driver-operated brakes of the vehicle are also called _____ brakes. 5) _____
A) Foundation B) Base C) Both A and B D) Neither A nor B

- 6) What three factors determine the friction coefficient of a material? 6) _____
A) Heat, friction material, surface finish
B) Friction material, surface area, surface finish
C) Heat, surface area, surface finish
D) Heat, surface area, friction material

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 7) Leverage is a mechanical principle used to increase force. 7) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 8) The front brakes on a vehicle do more work than do the rear brakes. Technician A says that this is because the front wheel cylinders are closer to the master cylinder than are the rear wheel cylinders. Technician B says that this is because the weight of a vehicle shifts to the front during a stop. Which technician is correct? 8) _____
A) Technician A only B) Technician B only
C) Both technicians D) Neither technician

9) All of the following are correct statements about braking EXCEPT _____.

9) _____

- A) The heavier the vehicle, the greater the kinetic energy when moving
- B) Kinetic energy must be absorbed by the braking system
- C) If the vehicle weight is doubled, the kinetic energy of a moving vehicle is doubled
- D) Kinetic energy of a vehicle doubles when the speed doubles

10) Maximum deceleration rates for a typical passenger car or light truck is _____.

10) _____

- A) 5 to 10 ft/sec
- B) 200 to 250 ft/sec²
- C) 16 to 32 ft/sec²
- D) 1 to 3 ft/sec