

Chapter 05 - Practice Questions

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- 1) An air bag
 - a. is an active restraint.
 - b. automatically inflates to protect an occupant.
 - c. must be fastened and adjusted by the occupant.
 - d. is not a reliable protective device.

- 2) The distance your vehicle travels while you respond to a road hazard is called
 - a. braking distance.
 - b. perception distance.
 - c. reaction distance.
 - d. stopping distance.

- 3) A vehicle going uphill works
 - a. with the force of gravity.
 - b. against the force of gravity.
 - c. against centrifugal force.
 - d. with centrifugal force.

- 4) Good shock absorbers
 - a. last for the life of the vehicle.
 - b. decrease available traction.
 - c. are needed only on foreign vehicles.
 - d. help create traction.

- 5) Modern seat belts
 - a. are installed only when requested.
 - b. are passive restraint devices.

- c. should fit somewhat loosely across the chest.
- d. are three-point lap and shoulder safety belts.

6) When a vehicle's speed triples, how much more distance does it need to stop?

- a. about double the distance
- b. about nine times the distance
- c. about six times the distance
- d. about three times the distance

7) An important factor in maintaining traction is

- a. overinflated tires.
- b. having a brand new vehicle.
- c. a clean vehicle.
- d. good shock absorbers.

8) Energy of motion is another way of expressing

- a. kinetic energy.
- b. effect of wind on vehicle control.
- c. mileage rating of a vehicle.
- d. the way vehicle bodies are designed.

9) All states require that young children up to a certain age be protected by a

- a. shoulder belt and a safety belt.
- b. child safety seat.
- c. parent's arms.
- d. regular safety belt.

10) In wet weather, with temperatures near the freezing point,

- a. a highway roadway freezes before a bridge roadway.
- b. a bridge roadway freezes before a highway roadway.
- c. bridge and highway roadways will freeze at the same time.

d. bridge and highway roadways will not freeze.

11) The second collision occurs when

- a. a vehicle strikes a parked vehicle.
- b. the occupants hit the inside of the vehicle after a collision.
- c. a vehicle loses control and spins out.
- d. a vehicle is struck by a vehicle following it.

12) The higher the speed of your vehicle, the more

- a. you will lose traction.
- b. it will tend to go straight.
- c. it will tend to drift sideways.
- d. you will feel the bumps in the pavement.

13) What rule is used to estimate your total stopping distance under ideal conditions?

- a. 4-second rule
- b. 2-second following-distance rule
- c. 12-second visual lead rule
- d. 3-second travel rule

14) When braking and turning, you use

- a. all four wheels of traction.
- b. only the outside edge of your tires.
- c. split traction.
- d. additional traction.

15) The 4-second rule is an estimate of

- a. the vehicle's braking distance.
- b. the time it takes you to react to a traffic event.
- c. your stopping distance.
- d. the following distance at 20 mph.

16) The force that pulls objects toward the center of the earth is

- a. gravity.
- b. energy of motion.
- c. kinetic energy.
- d. inertia.

17) Total stopping distance is the distance

- a. it takes for you to perceive a hazard.
- b. it takes for you to brake.
- c. it takes for you to react to a hazard.
- d. your vehicle travels while you make a stop.

18) The distance a vehicle travels from the time the driver applies the brakes until the vehicle stops is

- a. perception distance.
- b. total stopping distance.
- c. reaction distance.
- d. braking distance.

19) Which energy-absorbing feature protects the driver in a front-end collision?

- a. head restraints
- b. the steering wheel and column
- c. side door beams
- d. shock absorbers

20) A vehicle driven into a curve tends to

- a. go in a straight line.
- b. store energy of motion.
- c. increase speed.
- d. increase traction.

21) Child restraint seats must be used

- a. in conjunction with an air bag.

- b. only when driving more than two miles away.
- c. in the front passenger seat.
- d. in the back seat.

22) A banked curve

- a. is cost prohibitive.
- b. is higher on the inside than on the outside.
- c. is higher on the outside than on the inside.
- d. causes your vehicle to move to the middle of the curve.

23) Air bags are designed to

- a. be used with safety belts.
- b. protect in all types of collisions.
- c. take up most of the room on your dashboard for safety purposes.
- d. protect all occupants of the vehicle, front and back.

24) The gripping action that keeps a tire from slipping on the roadway is called

- a. kinetic energy.
- b. friction.
- c. gravity.
- d. inertia.

25) How many collisions occur when a vehicle hits a solid object?

- a. two
- b. zero
- c. three
- d. one

26) High energy of motion may cause a vehicle to

- a. go around a tight curve successfully.
- b. miss a tight curve.

- c. bank a curve.
- d. maintain good traction in a tight curve.

27) A restraint that provides protection without having to be handled by the occupant is called

- a. a passive restraint.
- b. a semipassive restraint.
- c. an active restraint.
- d. a semiactive restraint.

28) Large vehicles, such as trucks and buses, have

- a. good turning ability for quick turns.
- b. slow stopping ability.
- c. fast accelerating ability.
- d. quick braking ability.

29) A properly adjusted safety belt

- a. fits loosely across the body and tightens during a collision.
- b. fits snugly across the hips and comfortably across the chest.
- c. restricts the upper body from moving.
- d. restricts breathing and circulation.

30) What are the most important parts of the control system?

- a. four tires
- b. brakes
- c. the steering wheel and column
- d. the clutch and accelerator

31) Braking distance

- a. increases as speed decreases.
- b. decreases as speed increases.
- c. doubles if speed doubles.

d. increases as speed increases.

32) One purpose of the tread pattern on a tire is to

- a. reduce tire wear.
- b. reduce traction.
- c. allow water to flow away from the tire.
- d. look impressive.

33) A rear-end collision involved a 20-year-old vehicle. The driver and front-seat passenger both sustained serious neck injuries. Which modern energy-absorbing device protects against such injuries?

- a. head restraints
- b. front and rear crush areas
- c. reinforced windshield
- d. padded dash and recessed knobs

34) Which statement best describes reaction time?

- a. It shortens if the traffic situation is complex.
- b. It lengthens if the traffic situation is complex.
- c. It is not affected by driver impairment.
- d. It averages $\frac{3}{4}$ of a second.

35) An example of an active restraint is

- a. an automatic safety belt.
- b. the padded interior of a vehicle.
- c. an air bag.
- d. a safety belt.

36) When you slow for a turn, some traction is used to slow, and some is

- a. manufactured.
- b. gained by the rear tires.
- c. used to turn.

d. lost forever.

37) Factors that affect traction include

- a. tires, shock absorbers, and steering system.
- b. length and width of the road.
- c. presence of other HTS users.
- d. oil, oil filter, and coolant level.

38) The center of gravity of a vehicle is that point

- a. around which all weight is evenly balanced.
- b. that is farthest from the ground.
- c. near the front bumper.
- d. about three feet under the roadway surface.

39) You drive through a curve at a speed higher than the posted speed. Your vehicle

- a. can add traction as needed to stay on the roadway.
- b. needs more traction to stay on the roadway.
- c. will adjust to the traction available.
- d. will stay on the road.

40) The best place to adjust speed to steer through a curve is

- a. before entering the curve.
- b. at the center of the curve.
- c. about halfway through the curve.
- d. just before you leave the curve.

41) A properly installed child safety seat is

- a. required in all states for children up to a certain age.
- b. a matter of the parents' personal choice to use or not to use.
- c. good protection for any age child.
- d. a passive restraint.

42) All-wheel drive means

- a. power is supplied to four wheels.
- b. all four tires are inflated properly.
- c. your traction is reduced.
- d. power is in the front tires only.

43) If a tire is underinflated, the only part that grips the road well is the

- a. center of the tire tread.
- b. outside edges of the tire tread.
- c. tire cords.
- d. wear bar.

44) When a moving object hits something, what is the most important factor in determining how hard it hits?

- a. gravity
- b. traction
- c. distance traveled
- d. speed

45) A vehicle's speed when going downhill tends to

- a. decrease.
- b. stabilize.
- c. increase.
- d. inhibit.

46) A small vehicle

- a. takes a long distance to stop.
- b. is the safest of all vehicles.
- c. uses more kinetic energy to stop than a large vehicle.
- d. can accelerate and stop more quickly than a large vehicle.

47) Side door beams provide protection

- a. in all collisions.

- b. for child-restraint seats.
- c. for your pets.
- d. in collisions when hit at an angle.

48) If your tires wear out their center treads, they are

- a. inflated just right.
- b. underinflated.
- c. overinflated.
- d. over-sized.

49) Because of its energy of motion, when a vehicle's speed doubles, the vehicle needs about

- a. twice the distance to stop.
- b. half the distance to stop.
- c. one-fourth the distance to stop.
- d. four times the distance to stop.

50) Three factors that determine force of impact are

- a. speed, weight, and distance between impact and stopping.
- b. traction, brakes, and steering.
- c. tire tread, visibility, and four-wheel drive.
- d. shock absorbers, tire pressure, and roadway surface.