

Name \_\_\_\_\_

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

- 1) Early vehicles were constructed mostly of what material? 1) \_\_\_\_\_  
A) Wood                      B) Tin                      C) Cast iron                      D) Steel
  
- 2) Which component is NOT part of the chassis system? 2) \_\_\_\_\_  
A) Electrical system                      B) Frame  
C) Suspension                      D) Brakes
  
- 3) A V-type engine could have how many cylinders? 3) \_\_\_\_\_  
A) 8                      B) 4                      C) 6                      D) All of these
  
- 4) A malfunction indicator light on the dash may be labeled \_\_\_\_\_. 4) \_\_\_\_\_  
A) MAL                      B) MIL  
C) Check engine                      D) Service vehicle soon
  
- 5) A 4WD vehicle often uses a \_\_\_\_\_ to transmit torque to all four wheels. 5) \_\_\_\_\_  
A) U-joints                      B) Drive shaft                      C) Transaxle                      D) Transfer case
  
- 6) Which pillar is nearest the front of the vehicle? 6) \_\_\_\_\_  
A) A                      B) B                      C) C                      D) D
  
- 7) Which type vehicle is most likely to have a D pillar? 7) \_\_\_\_\_  
A) Pickup truck                      B) Station wagon                      C) Sports coupe                      D) None of these
  
- 8) Which device controls coolant flow to the radiator? 8) \_\_\_\_\_  
A) Vacuum solenoid                      B) Thermostat  
C) Heater valve                      D) Water pump
  
- 9) Which item is usually NOT included in a first aid kit? 9) \_\_\_\_\_  
A) Eye wash solution                      B) Fire blanket  
C) Antibiotic cream                      D) Bandages
  
- 10) Which type of glove is damaged by contact with petroleum products or solvents? 10) \_\_\_\_\_  
A) Nitrile                      B) Latex                      C) Both A and B                      D) Neither A nor B
  
- 11) How might a ring be a safety hazard? 11) \_\_\_\_\_  
A) It could become a path for an electrical circuit  
B) It could get caught on a moving part  
C) Both A and B  
D) Neither A nor B
  
- 12) A proper working height is \_\_\_\_\_. 12) \_\_\_\_\_  
A) At waist height                      B) Above your head  
C) At knee height                      D) None of these

- 13) Technician A uses a face shield when using any type of pressure or chemical procedure. Technician B uses protective gloves when working with solvents. Which technician is correct? 13) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 14) Technician A says that eye contamination should be treated by flushing with water. Technician B says that professional help should be involved in the event of eye contamination. Which technician is correct? 14) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 15) To determine if a product or substance being used is hazardous, consult \_\_\_\_\_. 15) \_\_\_\_\_  
 A) An MSDS B) EPA guidelines C) A dictionary D) SAE standards
- 16) Used engine oil should be disposed of by all these methods EXCEPT \_\_\_\_\_. 16) \_\_\_\_\_  
 A) Burned onsite in a waste oil-approved heater  
 B) Disposed of in regular trash  
 C) Shipped offsite for recycling  
 D) Burned offsite in a waste oil-approved heater
- 17) All of the following are the proper ways to dispose of a drained oil filter EXCEPT \_\_\_\_\_. 17) \_\_\_\_\_  
 A) Sent for recycling  
 B) Picked up by a service contract company  
 C) Considered to be hazardous waste and disposed of accordingly  
 D) Disposed of in regular trash
- 18) All of the following information is listed on the MSDS EXCEPT \_\_\_\_\_. 18) \_\_\_\_\_  
 A) Physical properties of the chemical B) Expiration date  
 C) Health hazards D) First aid information
- 19) Technician A says that used oil should be collected for recycling. Technician B says that used oil filters may be disposed of as regular solid waste only after an approved draining process. Which technician is correct? 19) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 20) The following statements are all correct EXCEPT \_\_\_\_\_. 20) \_\_\_\_\_  
 A) Airbags contain material that may irritate the skin.  
 B) Airbags may be accidentally deployed by electrostatic discharge.  
 C) Airbags should be stored facing downward.  
 D) Airbag circuits should be properly disabled and discharged before working near the area in a vehicle.
- 21) Technician A says that automotive air-conditioning refrigerants can be vented into the air if a recovery machine is not available. Technician B says that used automotive air-conditioning oils are considered hazardous. Which technician is correct? 21) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B

- 22) Technician A says that the diameter of a bolt is the same as the wrench size used to remove or install the fastener. Technician B says that the length is measured from the top of the head of the bolt to the end of the bolt. Which technician is correct? 22) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 23) The grade of a fastener, such as a bolt, is a measure of its \_\_\_\_\_. 23) \_\_\_\_\_  
 A) Hardness B) Tensile strength  
 C) Color D) Finish
- 24) Which of the following is a metric bolt? 24) \_\_\_\_\_  
 A) 5/16-18 B) 8 mm C) M12×1.5 D) 1/2-20
- 25) All of the following are types of clips EXCEPT \_\_\_\_\_. 25) \_\_\_\_\_  
 A) E clip B) C clip  
 C) Internal snap ring D) Cotter
- 26) Metric thread pitch is measured in \_\_\_\_\_. 26) \_\_\_\_\_  
 A) Inches B) Millimeters C) Centimeters D) None of these
- 27) Which of these is used to cut threads in a drilled hole? 27) \_\_\_\_\_  
 A) Tap B) Die C) Both A and B D) Neither A nor B
- 28) Which of these may be used to restore damaged threads on a bolt? 28) \_\_\_\_\_  
 A) Tap B) Die C) Both A and B D) Neither A nor B
- 29) Which of these is used to clean threads of a bolt to be reused? 29) \_\_\_\_\_  
 A) Die B) Thread chaser C) Tap D) None of these
- 30) Which type nut is used with a cotter pin? 30) \_\_\_\_\_  
 A) Castle nut B) Nylon ring nut C) Both A and B D) Neither A nor B
- 31) What type of hammer is plastic coated, has a metal casing inside, and is filled with small lead balls? 31) \_\_\_\_\_  
 A) Sledge hammer B) Plastic hammer  
 C) Soft blow hammer D) Dead blow hammer
- 32) Which of these tools is used most often by automotive service technicians? 32) \_\_\_\_\_  
 A) Hammer B) Wrench C) Pliers D) None of these
- 33) Which type socket is more likely to round the edges of a fastener? 33) \_\_\_\_\_  
 A) 12 point B) 6 point C) Both A and B D) Neither A nor B
- 34) Crowfoot wrenches are available in which design? 34) \_\_\_\_\_  
 A) Flare nut B) Open end C) Both A and B D) Neither A nor B
- 35) Which type of screwdriver can be used as a chisel? 35) \_\_\_\_\_  
 A) Flat blade B) Phillips C) Both A and B D) Neither A nor B

- 36) What type of socket should be used with an air impact wrench? 36) \_\_\_\_\_  
 A) Black                      B) Chrome                      C) 12 point                      D) Either A or B
- 37) Two technicians are discussing the use of a typical bench/pedestal mounted grinder. Technician A says that a wire brush wheel can be used to clean threads. Technician B says that the grinding stone can be used to clean threads. Which technician is correct? 37) \_\_\_\_\_  
 A) Technician A only                      B) Technician B only  
 C) Both technicians A and B                      D) Neither technician A nor B
- 38) Which type of trouble light is recommended for use in the shop? 38) \_\_\_\_\_  
 A) Incandescent                      B) Florescent                      C) LED                      D) Either B or C
- 39) Technician A changes air compressor oil as part of routine maintenance. Technician B purges water out of air compressor tanks as part of routine maintenance. Which technician is correct? 39) \_\_\_\_\_  
 A) Neither technician A nor B                      B) Both technicians A and B  
 C) Technician B only                      D) Technician A only
- 40) Which air tool is used to remove rust or gaskets? 40) \_\_\_\_\_  
 A) Die grinder                      B) Air sander                      C) Air drill                      D) None of these
- 41) Technician A says that face shields should always be worn when using a bench grinder. Technician B says that face shields are not required if the bench grinder has built-in shields. Which technician is correct? 41) \_\_\_\_\_  
 A) Technician A only                      B) Technician B only  
 C) Both technicians A and B                      D) Neither technician A nor B
- 42) The stone wheel mounted to a bench grinder can be used for \_\_\_\_\_. 42) \_\_\_\_\_  
 A) Sharpening chisels and blades                      B) Cleaning gaskets from surfaces  
 C) Both A and B                      D) Neither A nor B
- 43) A safety stand is also called a \_\_\_\_\_. 43) \_\_\_\_\_  
 A) Jack stand                      B) Safety stool                      C) Bottle jack                      D) Jack
- 44) Tall safety stands would be used to \_\_\_\_\_. 44) \_\_\_\_\_  
 A) Help support the vehicle when a major component is removed from the vehicle  
 B) Lift a vehicle  
 C) Lift a component such as an engine high off the ground  
 D) Both B and C
- 45) Commonly damaged areas of a vehicle during hoisting include \_\_\_\_\_. 45) \_\_\_\_\_  
 A) Tires or body panels                      B) Rocker panels  
 C) Exhaust systems                      D) All of these
- 46) Technician A says that a hoist can be stopped at any level as long as the safety latch engages. Technician B says that the vehicle should be hoisted to the top of the hoist travel for safety. Which technician is correct? 46) \_\_\_\_\_  
 A) Technician A only                      B) Technician B only  
 C) Both technicians A and B                      D) Neither technician A nor B

- 47) When checking stability, how high should the vehicle be raised? 47) \_\_\_\_\_  
 A) About 3 feet (91 cm) B) About 6 inches (15 cm)  
 C) About 1 foot (30 cm) D) About 2 inches (5 cm)
- 48) Technician A says to never look away from a vehicle being hoisted. Technician B says that the vehicle must be raised off the mechanical locks before lowering. Which technician is correct? 48) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 49) Vehicle hoists are rated by \_\_\_\_\_. 49) \_\_\_\_\_  
 A) The maximum height a vehicle can be lifted  
 B) Maximum lifting capacity  
 C) Both A and B  
 D) Neither A nor B
- 50) A telescopic gauge can be used to measure a cylinder bore if what other measuring device is used to measure the telescopic gauge? 50) \_\_\_\_\_  
 A) Small hole gauge B) Dial indicator  
 C) Micrometer D) Feeler gauge
- 51) There are \_\_\_\_\_ millimeters in one centimeter. 51) \_\_\_\_\_  
 A) 1000 B) 100 C) 0.10 D) 10
- 52) The best tool to measure clearance between two components is \_\_\_\_\_. 52) \_\_\_\_\_  
 A) Micrometer B) Caliper C) Feeler gauge D) None of these
- 53) A micrometer can be used to measure to an accuracy of \_\_\_\_\_. 53) \_\_\_\_\_  
 A) 0.0001 in B) 0.001 in C) 0.01 in D) None of these
- 54) When should the engine oil be replaced? 54) \_\_\_\_\_  
 A) Every three months, regardless of miles  
 B) Every 3,000 miles regardless of time  
 C) According to the vehicle manufacturer's recommended interval based on time and mileage, whichever occurs first  
 D) All of the above
- 55) Most vehicle manufacturers specify brake fluid that meets what specification? 55) \_\_\_\_\_  
 A) DOT 2 B) DOT 3 C) DOT 4 D) DOT 5
- 56) Engine oil level should be checked \_\_\_\_\_. 56) \_\_\_\_\_  
 A) With the engine running B) With the vehicle parked on level ground  
 C) Both A and B D) Neither A nor B
- 57) Windshield wiper blades are constructed of \_\_\_\_\_ and tend to become brittle due to age. 57) \_\_\_\_\_  
 A) Brushes B) Nylon C) Cork D) Rubber
- 58) As the percentage of antifreeze in the coolant increases, \_\_\_\_\_. 58) \_\_\_\_\_  
 A) The boiling point decreases B) The freeze point decreases (up to a point)  
 C) The heat transfer increases D) All of the above occurs

- 59) Adding a chemical to make ethylene glycol bitter to the taste is called \_\_\_\_\_. 59) \_\_\_\_\_  
 A) Refractometer      B) Passivation      C) Electrolysis      D) Embittered
- 60) Which mixture of coolant/water solution below is recommended for general automotive use? 60) \_\_\_\_\_  
 A) 100/0      B) 30/70      C) 70/30      D) 50/50
- 61) All these are functions of coolant EXCEPT \_\_\_\_\_. 61) \_\_\_\_\_  
 A) Rust inhibitor      B) Corrosion inhibitor  
 C) Cooling system lubricant      D) All of these are functions of coolant
- 62) The upper radiator hose collapses when the engine cools. What is the most likely cause? 62) \_\_\_\_\_  
 A) A defective pressure cap  
 B) A defective upper radiator hose  
 C) A defective thermostat  
 D) The spring is missing from the upper radiator hose which is used to keep it from collapsing
- 63) Heat transfer is improved from the coolant to the air when the \_\_\_\_\_. 63) \_\_\_\_\_  
 A) Coolant is 95% antifreeze      B) Temperature difference is small  
 C) Temperature difference is great      D) Both A and C
- 64) What diagnostic trouble code (DTC) could be set if the thermostat is defective? 64) \_\_\_\_\_  
 A) P0171      B) P0440      C) P0128      D) P0300
- 65) Technician A says that the purpose and function of the cooling system is to maintain proper engine operating temperature. Technician B says that the water pump controls engine coolant temperature by opening at its rated opening temperature to allow coolant to flow through the radiator. Who is right? 65) \_\_\_\_\_  
 A) Technician A only      B) Technician B only  
 C) Both technicians A and B      D) Neither technician A nor B
- 66) Technician A says that the automotive water pump is a positive displacement-type pump. Technician B says that the coolant mix should be a 50/50 split between antifreeze and water. Who is right? 66) \_\_\_\_\_  
 A) Technician A only      B) Technician B only  
 C) Both technicians A and B      D) Neither technician A nor B
- 67) Pressurizing the automotive cooling system results in \_\_\_\_\_. 67) \_\_\_\_\_  
 A) Increased coolant boiling point      B) Reduced engine temperature  
 C) Increased coolant warm up rate      D) Reduced coolant boiling point
- 68) For every one PSI increase in cooling system pressure, the coolant's boiling point is raised how many degrees F? 68) \_\_\_\_\_  
 A) Three      B) Five      C) Two      D) One
- 69) Technician A says that the engine oil used should be meet the vehicle manufacturer's standards. Technician B says that the specified viscosity of oil should be used. Which technician is correct? 69) \_\_\_\_\_  
 A) Technician A only      B) Technician B only  
 C) Both technicians A and B      D) Neither technician A nor B

- 70) Oil viscosity refers to which of these? 70) \_\_\_\_\_  
 A) Tendency of oil to resist flowing  
 B) Divided into body and fluidity  
 C) Most important property of lubricating oil  
 D) Tendency of oil to increase flow
- 71) Technician A always inspects or replaces the drain plug gasket when performing an oil change. Technician B says that warm oil holds contaminants and flows faster than cold oil. Who is correct? 71) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 72) Engine oil passages in an engine block are called \_\_\_\_\_. 72) \_\_\_\_\_  
 A) Galleries B) Holes C) Pathways D) Runners
- 73) What is the color of the warning light that indicates hydraulic system failure? 73) \_\_\_\_\_  
 A) Red B) Yellow C) Amber D) None of these
- 74) Disc brakes use replaceable friction material called \_\_\_\_\_. 74) \_\_\_\_\_  
 A) Pads B) Web C) Core D) Linings
- 75) Drum brakes use replaceable friction material called \_\_\_\_\_. 75) \_\_\_\_\_  
 A) Pads B) Core C) Web D) Shoes
- 76) The aspect ratio of a tire means \_\_\_\_\_. 76) \_\_\_\_\_  
 A) The ratio of width to height B) Its width to diameter of a wheel ratio  
 C) The ratio of rolling resistance D) The ratio of height to width
- 77) A tire is labeled 215/60R×15 92T; the T indicates \_\_\_\_\_. 77) \_\_\_\_\_  
 A) Its tread wear rating B) Its temperature resistance rating  
 C) Its load rating D) Its speed rating
- 78) Tire inflation is very important to the safe and economical operation of any vehicle. Technician A says that the tire pressure should never exceed the maximum pressure imprinted on the sidewall of the tire. Technician B says to inflate tires to the pressures recommended on the tire information decal or placard on the drivers door. Which technician is correct? 78) \_\_\_\_\_  
 A) Technician A only B) Technician B only  
 C) Both technicians A and B D) Neither technician A nor B
- 79) A tire with lower than specified inflation pressure could lead to what condition? 79) \_\_\_\_\_  
 A) Reduced tire life  
 B) Reduced fuel economy  
 C) Increased chances of roadside faults or accidents  
 D) All of the above
- 80) Peter Piper picked a peck of pickled peppers. If Peter Piper picked a peck of pickled peppers, then how many pickled peppers did Peter Piper pick? 80) \_\_\_\_\_  
 A) 1/4 Bushel B) Many C) Really?? D) ?????

## Answer Key

Testname:

- 1) A
- 2) A
- 3) D
- 4) C
- 5) D
- 6) A
- 7) B
- 8) B
- 9) B
- 10) B
- 11) C
- 12) A
- 13) C
- 14) C
- 15) A
- 16) B
- 17) C
- 18) B
- 19) C
- 20) C
- 21) B
- 22) D
- 23) B
- 24) C
- 25) D
- 26) B
- 27) A
- 28) B
- 29) B
- 30) A
- 31) D
- 32) B
- 33) A
- 34) C
- 35) D
- 36) A
- 37) A
- 38) D
- 39) B
- 40) A
- 41) A
- 42) A
- 43) A
- 44) A
- 45) D
- 46) A
- 47) C
- 48) C
- 49) B
- 50) C



## Answer Key

Testname:

- 51) D
- 52) C
- 53) A
- 54) C
- 55) B
- 56) B
- 57) D
- 58) B
- 59) D
- 60) D
- 61) D
- 62) A
- 63) C
- 64) C
- 65) A
- 66) B
- 67) A
- 68) A
- 69) C
- 70) A
- 71) C
- 72) A
- 73) A
- 74) A
- 75) D
- 76) D
- 77) D
- 78) C
- 79) D
- 80) A, B, C, D