

ASE Practice Test A6

Electrical-Electronics

General Electrical/Electronic System Diagnosis

- 1) When using a DMM (Digital Multimeter) voltmeter function to check for a voltage drop, meter leads should be connected in which of the following ways?
 - a. On the “positive” side of the circuit
 - b. Across the component or circuit
 - c. To any non-conductive material
 - d. In series with a circuit
- 2) Which of the following is correct regarding a series circuit?
 - a. Highest resistance has most current
 - b. Lowest resistance has most current
 - c. Lowest resistance has highest voltage drop
 - d. Highest resistance has highest voltage drop
- 3) When a Digital Multimeter (DMM) is used to measure DC voltage and is connected in parallel to the load device, which of the following defines the reading?
 - a. Amperage reading
 - b. Voltage drop
 - c. Voltage spike
 - d. Pulse width modulation
- 4) Which of the following tools can be used to check the continuity of wires that carry digital signals?
 - a. Megger Meter
 - b. Analog meter
 - c. Logic probe
 - d. Voltmeter

Battery and Starting System Diagnosis and Repair

- 5) Using a DMM (Digital Multimeter), a fully charged 12 volt battery should indicate how much voltage on the open circuit voltage (OCV) test?
 - a. 9.6 volts
 - b. 4 volts per cell
 - c. 1 volt per cell
 - d. 12.6 volts
- 6) Two technicians are discussing a battery's state of charge. Technician A says a specific gravity of 1.225 at 80F indicates that a battery's state of charge is approximately 75%. Technician B says you can use a hydrometer to check battery state of charge on a maintenance free battery. Who is right?
 - a. A only
 - b. B only
 - c. Both A and B

- d. Neither A nor B
- 7) When performing a load test on a battery, a technician finds that the battery voltage drops below specifications. Which of the following is the MOST likely action to perform?
- a. Recharge the battery and return it to service
 - b. Recharge the battery and retest it
 - c. Replace the battery
 - d. Replace the voltage regulator
- 8) Two technicians are discussing testing a battery using an electronic conductance or continuity tester. Technician A says some of these testers can load test a battery. Technician B says you need to make sure that the ignition switch and all accessories are off. Who is right?
- a. A only
 - b. B only
 - c. Both A and B
 - d. Neither A nor B

Charging System Diagnosis and Repair

- 9) Two technicians are discussing an alternator with zero output. Technician A says the field circuit may have an open circuit. Technician B says the fusible link may be open from the battery to the alternator. Who is right?
- a. A only
 - b. B only
 - c. Both A and B
 - d. Neither A nor B
- 10) This question has the word LEAST. For this question, look for the choice that would LEAST LIKELY cause the described situation. Read the entire question carefully before choosing your answer. An alternator has low output and is being full-fielded to determine the cause. Which of the following is the LEAST likely result of full-fielding the alternator?
- a. High battery voltage level
 - b. Battery gassing
 - c. Low battery voltage level
 - d. High alternator amperage output
- 11) Technician A says a loose serpentine alternator drive belt could cause overcharging. Technician B says undersized wiring between the alternator and the battery could cause undercharging. Who is right?
- a. A only
 - b. B only
 - c. Both A and B
 - d. Neither A nor B
- 12) The figure shows a belt tensioner with four lines to indicate belt wear and the need for replacement. Technician A says upon installation of a new belt, the three line marks close to each other should be very close to the ARROW on the base. Technician B says

the belt should be replaced if the single line mark lines up with the ARROW on the base.



Who is right?

- a. A only
- b. B only
- c. Both A and B
- d. Neither A nor B

Lighting Systems Diagnosis and Repair

- 13) Technician A says high-intensity discharge (HID) headlights are generally brighter and have a blue tint. Technician B says a defective turn signal bulb on one side can cause the turn signal on that side not to blink. Who is right?
- a. A only
 - b. B only
 - c. Both A and B
 - d. Neither A nor B
- 14) Which of the following is the LEAST likely cause of a dim headlight?
- a. Headlight connector corroded
 - b. Damaged or broken headlight assembly
 - c. Low alternator output
 - d. High resistance in the headlight wiring
- 15) Technician A says you aim HID (High Intensity Discharge) headlights on a level floor with and unloaded vehicle. Technician B says when aiming any headlights, you must follow the state inspection specifications. Who is right?
- a. A only
 - b. B only
 - c. Both A and B
 - d. Neither A nor B

- 16) Technician A says an aiming screen will work on any headlight design to aim the headlights. Technician B says mechanical aimers are used on HID (High Intensity Discharge) headlights. Who is right?
- a. A only
 - b. B only
 - c. Both A and B
 - d. Neither A nor B

Instrument Cluster & Driver Information Systems Diagnosis & Repair

- 17) Which of the following describes the MOST common type of electrical wiring used instrument lighting?
- a. Aluminum stranded wire
 - b. Copper stranded wire
 - c. Twisted pair type
 - d. Solid copper wire
- 18) What type of solder is required to repair the instrument panel wiring?
- a. Acid core
 - b. 60/40 with no flux
 - c. Rosin core
 - d. 50/50 with acid paste flux
- 19) A dash indicator warning lamp does not light when the key is in the ON or START positions. What should you check first?
- a. Sending unit
 - b. Wiring
 - c. Battery level
 - d. Bulb
- 20) If a fuel gauge reads full, which of the following is the MOST likely cause?
- a. A broken gauge
 - b. Float stuck in the up position
 - c. Wire to sending unit grounded
 - d. An open fuse