

# SkillsUSA 2011-12 District 10 Competition

Bradford, Pennsylvania

January 16, 2012



*Automotive Service Specialization*

*Automotive Room 103*

## **Clothing / Safety Requirements**

School Uniform or Blue Dickies no ripped or torn clothing

## **Eligibility**

Registered Skills USA members in an Automotive Program

## **Tools / Materials Supplied by Contestant**

Safety Glasses

Resume

## **Equipment Supplied**

All tools and Equipment will be supplied

Seat Covers, Floor Mat and steering wheel cover

Coates Rim Clamp Tire Machine 5030A

Hunter GSP9700 Balancer

Rotor Micrometer

Digital Drum Micrometer

Tread Depth Gauge

Alldata

Snap-on Modis Scanner

## **Scope of the Contest**

- Student will provide a resume
- Complete a 50 question Written Test (30 minutes)
- Complete a Written Repair Order/Interview Customer & Prepare a car for service (25 minutes)
- Dismount, Remount, Inflate and Balance Tire (20 minutes)
- Measure and Record Brake Lining nearest 32nd, Rotor and Drum Measurements +/- .001" (15 minutes)
- Create a Service Special using Microsoft Word (20 minutes)
- Create Repair Estimate using Alldata (15 minutes)
- Scan vehicle for DTC's and Record findings (15 minutes)
- Contestant will work safely

## **Scoring Rubric**

### **Automotive Service Specialization Evaluation Rubric/Point System**

<b>Items Evaluated</b>	<b>Possible Points</b>
Resume	50
Written Test	50
Written Repair Order/Interview	50
Dismount, Remount and Balance Tire	50
Brake Measurements	50
Service Special	25
Estimate	25
Diagnostic trouble Codes	25
Safety	25
<b>Total Possible Points</b>	<b>350</b>
	<b>Deductions</b>
Incorrect DTC or no information	-10
Incorrect answer on Test	-1 Each
Incomplete/not readable boxes on R.O.	-2 Each
Safety Penalty/ Incident	-10
Measurements over/under actual	-5 each
Incomplete Jobs in Time allotted	-10/job
Tire Service Procedure deduction for each mistake	-5
Repair Estimate deduction for each mistake	-5
No Resume	-50

### **Contact information:**

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## Skills USA Practice

### Multiple Choice

*Identify the choice that best completes the statement or answers the question.*

1. Technician A says a fluorescent tube drop light should be used in automotive workplaces. Technician B says a bulb cage light can be used with a shatterproof bulb in automotive workplaces. Who is correct?
  - a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
2. Technician A says oxygen and acetylene cylinders should be stored together away from ignition sources. Technician B says oxygen and acetylene cylinders should be stored at least 10 feet from each other. Who is correct?
  - a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.**
3. Technician A says in order to prevent back injuries, you should use your arm strength to lift objects. Technician B says in order to prevent back injuries, you should use your leg strength to lift objects.  
Who is correct?
  - a. Technician A.
  - b. Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
4. Technician A says hardened tools are designed for use on hardened materials. Technician B says hardened tools should not be used on hardened materials. Who is correct?
  - a. Technician A.
  - b. Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
5. Technician A says machine guards are used when you don't have time to locate and wear appropriate PPE. Technician B says machine guards must be used in addition to wearing appropriate PPE. Who is correct?
  - a. Technician A.
  - b. Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.

6. Technician A says pneumatic tools require that specific air pressure be used to maintain safe operation. Technician B says all air compressors supply safe amounts of air pressure for use with pneumatic tools. Who is correct?
- Technician A.**
  - Technician B.
  - Both Technician A and Technician B.
  - Neither Technician A nor Technician B.
7. Technician A says air hoses that are damaged or leak can be dangerous. Technician B says air hoses that are damaged or leak simply reduce the operating pressure of pneumatic tools. Who is correct?
- Technician A.**
  - Technician B.
  - Both Technician A and Technician B.
  - Neither Technician A nor Technician B.
8. Technician A says vehicle lift points are in the same standard locations on all vehicle frames. Technician B says you should refer to the lift operating instructions to determine correct vehicle lift points. Who is correct?
- Technician A.
  - Technician B.
  - Both Technician A and Technician B.
  - Neither Technician A nor Technician B.**
9. Technician A says hoists are designed and weighted appropriately for stability when pulling engines and lifting heavy loads. Technician B says it is important to know the load ratings of a hoist and keep the load close to the hoist body to keep the hoist stable. Who is correct?
- Technician B.
  - Technician A.**
  - Both Technician A and Technician B.
  - Neither Technician A nor Technician B.
10. Technician A says a Class A-B fire extinguisher can be used on electrical fires. Technician B says a Class B-C extinguisher can be used on clothing fires. Who is correct?
- Technician A.
  - Technician B.
  - Both Technician A and Technician B.
  - Neither Technician A nor Technician B.**
11. Technician A says a fire emergency plan includes the location of fire exits and what is expected of each person. Technician B says a fire emergency plan identifies a location where employees should meet outside. Who is correct?
- Technician A.
  - Technician B.
  - Both Technician A and Technician B.**
  - Neither Technician A nor Technician B.
12. Technician A says flammables and combustibles should be stored on overhead shelves. Technician B says flammables and combustibles should be stored in a fire-resistant cabinet. Who is correct?
- Technician A.
  - Technician B.**
  - Both Technician A and Technician B.
  - Neither Technician A nor Technician B.
13. When discussing safety signs, Technician A says yellow means danger. Technician B says orange means danger. Who is correct?
- Technician A.

- b. Technician B.
  - c. Both Technician A and Technician B.
  - d. **Neither Technician A nor Technician B.**
14. Technician A says earphones are a type of personal protective equipment. Technician B says earmuffs are a type of personal protective equipment. Who is correct?
- a. Technician A.
  - b. **Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
15. Technician A says an air hose should never be used to blow dust from a brake assembly. Technician B says a HEPA vacuum cleaner can be used to clean dust from brake components. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. **Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
16. Technician A says ergonomics is the study of workplace design. Technician B says endonomics is the study of workplace design. Who is correct?
- a. **Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
17. Technician A says 3 pints of oil is equivalent to 1.42 liters of oil. Technician B says 3 pints of oil is equivalent to 1,420 milliliters of oil. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. **Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
18. Technician A says a bolt with a UNEF pitch has more threads per inch than a bolt with a UNC pitch. Technician B says a bolt with a UNC pitch has more threads per inch than a bolt with a UNEF pitch. Who is correct?
- a. **Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
19. Technician A says setscrews are usually loosened and tightened using an impact driver. Technician B says setscrews are usually loosened and tightened using an allen wrench. Who is correct?
- a. Technician A.
  - b. **Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
20. Technician A says antiseize compound is often used when inserting steel bolts into an aluminum part. Technician B says antiseize compound is often used when inserting steel bolts into a steel part. Who is correct?
- a. **Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.

- d. Neither Technician A nor Technician B.
21. Technician A says anaerobic sealant should not be used on parts that flex. Technician B says aerobic sealant should not be used on parts that flex. Who is correct?
- a. **Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
22. Technician A says OSHA was created in 1991. Technician B says OSHA was created in 1971. Who is correct?
- a. Technician A.
  - b. **Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
23. Technician A says hazardous materials and wastes pose a danger to human health. Technician B says hazardous materials and wastes pose a danger to the environment. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. **Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
24. Technician A says a carbon spoon is used to remove carbon and other debris from metal parts. Technician B says a carbon blade is used to remove carbon and other debris from metal parts. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. **Neither Technician A nor Technician B.**
25. Technician A says a claw-type pickup tool is used to pick up small objects in tight spaces. Technician B says a magnetic pickup tool is used to pick up metal parts in tight spaces. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. **Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
26. Technician A says a soldering gun is used to melt solder for electrical connections. Technician B says a soldering iron is used to melt solder for electrical connections. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. **Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
27. Technician A says axle stands are used to safely support a vehicle so you can work under it. Technician B says safety stands are used to safely support a vehicle so you can work under it. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. **Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
  - e.
28. Technician A says a master extractor set includes an assortment of tools used to remove hubs, bearings, pulleys, and so forth. Technician B says a master puller set includes an assortment of tools used to remove hubs, bearings, pulleys, and so forth. Who is correct?
- a. Technician A.

- b. Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
29. Technician A says 10 mm equals 1 cm. Technician B says 100 mm equals 10 cm. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
30. Technician A says a coolant temperature reading of 32degrees C is equivalent to 89.6 degrees F. Technician B says a coolant temperature reading of 32 degrees C is equivalent to 102 degrees F. Who is correct?
- a. Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
31. Technician A says paying attention and interacting with the speaker is known as active listening. Technician B says paying attention and interacting with the speaker is known as attentive listening. Who is correct?
- a. Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
32. Technician A says hand tools should be cleaned after every use. Technician B says hand tools should be cleaned at the end of each shift. Who is correct?
- a. Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
33. Technician A says a ¼” to 2” USC set paired with a 6 mm to 20 mm metric set of wrenches will handle most jobs. Technician B says a ¼” to 1” USC set paired with a 7 mm to 19 mm metric set of wrenches will handle most jobs. Who is correct?
- a. Technician A.
  - b. Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
34. Technician A says a hex wrench is used to turn cap screws that have an internal hex turning configuration. Technician B says a crowfoot wrench is used to turn cap screws that have an internal hex turning configuration. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.**
35. Technician A says combination pliers are known as standard pliers. Technician B says slip-joint pliers are known as standard pliers. Who is correct?
- a. Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
36. Technician A says the 10 ounce ball peen hammer is the most commonly used hammer in an

automotive service center. Technician B says the 16 ounce ball peen hammer is the most commonly used hammer in an automotive service center. Who is correct?

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

37. Technician A says NATEF stands for National Automotive Teachers Education Foundation. Technician B NATEF stands for National Automotive Technicians Education Foundation. Who is correct?

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

38. To assist with diagnosis and repair, Technician A says most dealerships have personal computers directly connected to the manufacturers' computers via telephone lines. Technician B says most dealerships have personal computers directly connected to manufacturers' computers via satellite links. Who is correct?

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

39. Technician A says a fleet is a group of 5 or more vehicles owned and maintained by a single company. Technician B says a fleet is a group of 10 or more vehicles owned and maintained by a single company. Who is correct?

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

40. Technician A says a technician must pass a written exam and have at least two years of relevant work experience to become ASE certified in a particular area. Technician B says a technician can complete one year of an ASE-certified automotive technology training program, pass a written test, and complete one year of work to become ASE certified in a particular area. Who is correct?

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

41. Technician A says most automotive technicians are paid an hourly wage. Technician B says most automotive technicians are paid a flat rate based on predetermined times for completing certain tasks. Who is correct?

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

42. Technician A says personal appearance could affect a technician's success. Technician B says personal appearance has no effect on a technician's success in the industry. Who is correct?

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

43. Technician A says communication occurs when a message is sent from one person and received by

another. Technician B says communication occurs when a message is sent from one person and the meaning of that message is received by another. Who is correct?

- a. Technician A.
  - b. Technician B.**
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
44. Technician A says most automotive service-related organizations help ensure the quality of training offered to automotive service technicians. Technician B says automotive service-related organizations support automotive service technicians as they grow in their careers. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.**
  - d. Neither Technician A nor Technician B.
45. Technician A says a master technician is certified in 10 auto/light truck areas. Technician B says a master technician is certified in 12 auto/light truck areas. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.**
46. To remain certified in any of the auto/light truck areas, Technician A says a technician must pass a recertification test every 3 years. Technician B says a technician must pass a recertification test every 2 years to remain certified. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.**
47. Technician A says an ASE certified engine machinist is an automotive repair specialist. Technician B says an ASE certified automotive technician is an automotive assembly specialist. Who is correct?
- a. Technician A.
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.**
48. Technician A says a collision repair specialist not only restores a car's appearance after an accident but also repairs a car's mechanical and electrical systems. Technician B says a collision repair specialist restores a car's appearance after an accident, while an automobile technician repairs the car's mechanical and electrical system. Who is correct?
- a. Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
49. Technician A says NATEF was formed through the work of IPC, AVA, and ACTE. Technician B says NATEF was formed through the work of IPC, AVA, ASE, and ACTE. Who is correct?
- a. Technician A.**
  - b. Technician B.
  - c. Both Technician A and Technician B.
  - d. Neither Technician A nor Technician B.
  - e.
50. Technician A says nonverbal signals can help communication. Technician B says nonverbal signals can be interpreted through body language. Who is correct?

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