

Sample Items

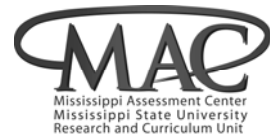
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Postsecondary

Small Engine & Turf Repair Technology

Test Code: 307

Mississippi Department of Education
Office of Student Assessment



MS-CPAS2 Sample Test Items

The MS-CPAS2 sample test items for the Mississippi Vocational–Technical Curriculum Frameworks are now available to the public.

Sample test items are provided to help familiarize students with the MS-CPAS2. The sample test items in this publication are representative only and should not be interpreted as exact duplicates of the items on the MS-CPAS2. Although the results of the MS-CPAS2 sample test items can be used to determine students' strengths and weaknesses, they should not replace other forms of classroom assessment.

The answer keys are located at the back of each sample item document and can be used to identify the unit/course to which the sample item is aligned as well as the cognitive level (C1 or C2) of each item.

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307 Small Engine and Turf Equipment Repair Sample

1

What color designates caution in the small engine repair shop?

- A. Red
- B. Green
- C. Yellow
- D. Blue

2

Which color is used to identify areas and items of danger or emergency?

- A. Blue
- B. Green
- C. Orange
- D. Red

3

Oily rags should always be stored in:

- A. regular open waste containers.
- B. water filled containers.
- C. closets that do not open into the main part of the shop.
- D. airtight closed metal containers.

4

If you are required to drain the fuel tank on a small engine in order to service it, the fuel should be:

- A. poured out on a concrete drive outside the building and allowed to evaporate.
- B. stored in an open container and returned to the tank later.
- C. stored in an approved container.
- D. poured down the drain.

5

You are working on a small engine fuel system, and a small amount of gasoline splashes on your shirt sleeve. What should you do?

- A. Soak as much of the gas up as you can with a shop towel, and continue working.
- B. Remove your shirt, and let it dry out in a well ventilated area.
- C. Dispose of the shirt in an air tight metal container.
- D. Keep your shirt on, and let the gas evaporate over time.

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The following information is taken from a materials safety data sheet for sodium hydroxide, a highly caustic alkaline material found in drain cleaners. Based on the information shown below, what would be the FIRST step to take if someone accidentally drank some of this chemical?

FIRST AID MEASURES

Specific Measures:

Eyes: IMMEDIATELY FLUSH EYES with a stream of running water for a minimum of fifteen (15) minutes. (Using any available clean container, pour water over the eye(s) in a gentle steady stream. Position casualty lying on back, face tilted to one side.) HOLD eyelids open while flushing. REPEAT flushing, if irritation persists. Get MEDICAL ATTENTION immediately. Flushing may be continued while casualty is transported to medical facility.

Skin: IMMEDIATELY FLUSH the exposed area with large amounts of water WHILE REMOVING contaminated clothing (including shoes, watches, and rings). CONTINUE WASHING the area for (15) minutes. REPEAT flushing if irritation persists. Obtain MEDICAL ATTENTION immediately.

Inhalation: IMMEDIATELY remove casualty from contaminated area to fresh air. (CAUTION must be used by rescuers to avoid exposure to the contaminating fumes.) If BREATHING HAS STOPPED give artificial respiration. If BREATHING and PULSE ARE ABSENT, give CPR. IMMEDIATELY CONTACT A PHYSICIAN. Stay with casualty until medical help arrives.

Ingestion: DO NOT INDUCE VOMITING. If casualty is ALERT and NOT CONVULSING; RINSE mouth with water and GIVE 2 cups of water or milk to dilute material. IMMEDIATELY OBTAIN MEDICAL ATTENTION. If SPONTANEOUS VOMITING occurs; have casualty lean forward with head down to avoid breathing in of vomitus. RINSE mouth and ADMINISTER 2 cups of water or milk.

- A. Try to get the person to throw up.
- B. Have the person drink 2 cups of water.
- C. Call 911 for an ambulance and paramedics.
- D. Rinse the person's mouth out with water.

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The following is taken from a hazardous materials data sheet for sulfuric acid, commonly found in lead acid storage batteries.

First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Extensive irrigation is required (at least 30 minutes).

Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. **SPEEDY ACTION IS CRITICAL!**

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2–4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Move to fresh air immediately. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

From the information above, which should you do **FIRST** if some of the acid splashed into your eyes?

- A. Try to blot it out with a towel or handkerchief.
- B. Call for assistance.
- C. Flush the eye with soap and water.
- D. Neutralize the acid with baking soda.

8

The type of oil suitable for winter service is a/an:

- A. “W” oil.
- B. SAE.
- C. API.
- D. viscosity.

9

When operating an engine inside a confined area, it is **MOST IMPORTANT** to:

- A. wear a respirator.
- B. vent the exhaust to the outside.
- C. have a fire extinguisher nearby.
- D. wear gloves to protect your hands.

10

When working with dangerous liquids such as battery acid, which of the following devices would offer the most protection to your face and eyes?

- A. Safety glasses
- B. Safety goggles
- C. Respirator
- D. Face shield

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The correct sequence of events in a four-stroke cycle engine is:

- A. power – compression – exhaust – intake.
- B. compression – exhaust – intake – power.
- C. intake – compression – power – exhaust.
- D. intake – power – compression – exhaust.

12

Instead of conventional intake and exhaust valves, two-stroke cycle engines use:

- A. gate valves and seals.
- B. reed valves and ports.
- C. injectors and emitters.
- D. rings and seals.

13

In a four-stroke cycle engine, the intake and exhaust valves are opened by the:

- A. connecting rod.
- B. crankshaft.
- C. camshaft.
- D. valve spring.

14

Most single cylinder small engines generate electricity for the spark plug using a/an:

- A. generator.
- B. flywheel magneto.
- C. AC alternator.
- D. battery.

15

As the distance between the center electrode and the ground electrode of a spark plug increases, the:

- A. voltage required to fire the plug decreases.
- B. voltage required to fire the plug increases.
- C. heat range of the plug decreases.
- D. reach of the plug decreases.

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The most commonly used antifreeze coolant in most liquid cooled engines today is:

- A. polyvinyl chloride.
- B. ethylene glycol.
- C. acetone.
- D. sodium chloride.

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In a four-stroke cycle engine, what is the position of the exhaust valve during the intake stroke?

- A. It closes at the beginning of the stroke and remains closed.
- B. It opens at the beginning of the stroke and remains open.
- C. It closes at the beginning of the stroke and opens at the end of the stroke.
- D. It opens at the beginning of the stroke and closes at the end of the stroke.

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In a four-stroke cycle engine, what are the positions of the intake and exhaust valves during the intake stroke?

- A. Intake open, exhaust open
- B. Intake open, exhaust closed
- C. Intake closed, exhaust opened
- D. Intake closed, exhaust closed

19

A belt on a mower deck with a frayed edge indicates that the:

- A. belt is installed too tightly.
- B. belt is not installed tight enough.
- C. belt is slipping on the pulley.
- D. pulley is not correctly aligned.

20

Most rotary mower blades are sharpened to a:

- A. 10° angle.
- B. 20° angle.
- C. 30° angle.
- D. 40° angle.

21

When a reel mower assembly is correctly adjusted, the reel blades should:

- A. lightly touch the entire length of the cutter bar.
- B. lightly touch one end of the cutter bar.
- C. be recessed about 1/8 in. from the cutter bar.
- C. be recessed 1/4 in. from the cutter bar.

22

To properly sharpen the blades on a reel mower, you should use a/an:

- A. round file.
- B. angle grinder.
- C. backlapping kit.
- D. bench grinder.

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Selection of the proper diameter of string for a string trimmer is dependent mainly on the:

- A. model of the trimmer.
- B. height of the grass being cut.
- C. power of the trimmer.
- D. density of the grass being cut.

24

When setting the tension on a chain saw chain, you MUST:

- A. hold the bar nose down.
- B. hold the bar nose up.
- C. tighten the front bar nut first.
- D. hold the bar nose level.

25

One advantage of a curved-shaft string trimmer is that:

- A. an angle transmission is not needed, which reduces weight.
- B. power can be more efficiently transmitted to the cutter head.
- C. larger diameter string can be used.
- D. a clutch assembly is not needed.

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The most common form of power mower is the:

- A. vertical shaft reel mower.
- B. horizontal shaft reel mower.
- C. flail mower.
- D. sickle mower.

27

A customer brings a chain saw in and complains that it cuts to the left. Which of the following is the MOST likely cause of this complaint?

- A. Improper chain selection (pitch and gauge)
- B. Clogged air filter
- C. Improper fuel mixture
- D. Dull or damaged chain

28

A customer brings a chain saw in and complains that the saw is not running right. The bar is discolored, and the flats are worn excessively. Which of the following is the most likely cause of this complaint?

- A. The chain is too loose.
- B. The chain is tensioned too tight.
- C. The sprocket is worn.
- D. The air filter is clogged.

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Which operation is performed on a chassis after sanding and before painting?

- A. Steam cleaning
- B. Washing with soap and water
- C. Blow-drying
- D. Wire brushing

30

Which of the following instruments is used to measure the diameter of an engine cylinder?

- A. Outside micrometer
- B. Inside micrometer
- C. Dial indicator
- D. Feeler gauge

31

Which of the following instruments is used to measure the play on a shaft?

- A. Micrometer
- B. Feeler gauge
- C. Caliper
- D. Dial indicator

32

A customer brings in a lawn mower and complains that it will not crank. After checking the condition and level of the fuel in the machine, which system should you check next?

- A. Fuel
- B. Lubrication
- C. Ignition
- D. Cylinder assembly

33

A customer brings in a mower and complains that it will not start. After trying to crank the engine, you check the spark plug and find that it is firing. Which system should you check next?

- A. Fuel
- B. Lubrication
- C. Cylinder assembly
- D. Valve assembly

34

A customer complains that a zero-turn mower will move in only one direction. If the pump is operating within its specified pressure and volume ranges, which of the following is the most likely cause of this problem?

- A. Low fluid levels in the reservoir
 - B. Overheating of the system
 - C. Worn or damaged wheel mower
 - D. Stoppage in the system filter
-

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A customer brings in a hydrostatic drive mower and complains that the machine will not move forward or backward. Which of the following conditions should you check first?

- A. Fluid level
- B. Belt tension
- C. Axle seals
- D. Bent linkages

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?	⊙	Answer/ Scale	Objective	?	⊙	Answer/ Scale	Objective
1	1	C	TEM 1123-C1	19	19	D	TEM 1134-C1
2	2	D	TEM 1123-C1	20	20	C	TEM 1134-C1
3	3	D	TEM 1123-C1	21	21	A	TEM 1134-C1
4	4	C	TEM 1123-C1	22	22	C	TEM 1134-C1
5	5	B	TEM 1123-C1	23	23	C	TEM 1134-C1
6	6	D	TEM 1123-C2	24	24	B	TEM 1134-C1
7	7	B	TEM 1123-C2	25	25	A	TEM 1134-C1
8	8	A	TEM 1224-C1	26	26	B	TEM 1134-C1
9	9	B	TEM 1224-C1	27	27	D	TEM 1134-C2
10	10	D	TEM 1224-C1	28	28	B	TEM 1134-C2
11	11	C	TEM 1224-C1	29	29	B	TEM 1243-C1
12	12	B	TEM 1224-C1	30	30	B	TEM 1234-C1
13	13	C	TEM 1224-C1	31	31	D	TEM 1234-C1
14	14	B	TEM 1224-C1	32	32	C	TEM 1234-C1
15	15	B	TEM 1224-C1	33	33	A	TEM 1234-C1
16	16	B	TEM 1224-C1	34	34	C	TEM 1234-C2
17	17	A	TEM 1224-C2	35	35	A	TEM 1234-C2
18	18	B	TEM 1224-C2				