

Sample Items

Revised September 2008

Postsecondary Horticulture Cluster

Test Code: 255

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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1

In the Latin name *Pyrus calleryana* 'Bradford,' the word 'Bradford' is the:

- A. cultivar.
- B. ecotype.
- C. genus.
- D. species.

2

What is the proper way to write the botanical name for the red maple variety October Glory?

- A. *Acer Rubrum* 'October Glory'
- B. *acer rubrum* October Glory
- C. *Acer rubrum* 'October Glory'
- D. *acer rubrum* "October Glory"

3

The veins of monocot leaves are:

- A. netted.
- B. palmate.
- C. parallel.
- D. pinnate.

4

The USDA Plant Hardiness Zones are based on tolerance to:

- A. cold.
- B. heat.
- C. rain.
- D. wind.

5

Which of the following is a deciduous ground cover?

- A. Asiatic jasmine
- B. English ivy
- C. Liriope
- D. Trailing lantana

6

Which of the following trees is classified as an evergreen?

- A. Bald cypress
- B. Bigleaf magnolia
- C. Black gum
- D. Southern magnolia

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Which summer blooming shrub should be used with caution because of its poisonous nature?

- A. Elaeagnus
- B. Japanese cleyera
- C. Oleander
- D. Chinese loropetalum

8

In which of the following plants does flowering occur before foliage appears?

- A. Camellia
- B. Japanese magnolia
- C. Mimosa tree
- D. Southern catalpa

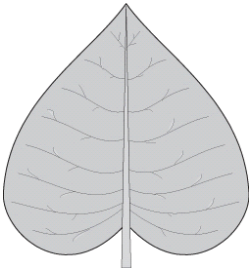
9

The biological term used to describe a plant that completes its life cycle in 1 year is:

- A. annual.
- B. biennial.
- C. perennial.
- D. centennial.

10

The leaf shape shown below is:



- A. cordate.
- B. obovate.
- C. peltate.
- D. spatulate.

11

A plant that has features or characteristics that make it more noticeable than the average plant is a/an:

- A. accent plant.
- B. border plant.
- C. ground cover plant.
- D. low maintenance plant.

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Which of the following indoor plants can survive in very low light with almost no water?

- A. Ming aralia
- B. Mother-in-law's tongue
- C. Peace lily
- D. Weeping fig

13

Which of the following plants bears black to purple fruit?

- A. Chinese tallow tree
- B. Waxleaf ligustrum
- C. Nandina
- D. Pyracantha

14

Which plant is available in a variegated form?

- A. Boxwood
- B. Japanese camellia
- C. Liriope
- D. Vitex

15

A winter-hardy bedding plant is the genus:

- A. *Viola*.
- B. *Catharanthus*.
- C. *Pelargonium*.
- D. *Caladium*.

16

In a landscaping plan, a specimen plant is:

- A. used as a single plant to create a focal point or other special feature of the landscape.
- B. used to separate some part of the landscape from another.
- C. a number of trees or shrubs planted together as a point of interest.
- D. a collection of plants that is placed in the landscape as needed.

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If it is not labeled, which direction should one assume the directional arrow on a landscape plan is pointing?

- A. North
- B. East
- C. South
- D. West

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- 18** When developing a landscape plan for a home, the front of a home is called what area of the landscape?
- A. Public
 - B. Private
 - C. Service
 - D. Outdoor living
- 19** Which of the following is part of the analysis of the client's needs rather than a part of the site analysis?
- A. Preferred color
 - B. Location of existing plants
 - C. Location of utilities
 - D. pH of soil
- 20** Which scale is used to make a drawing where 1 in. = 60 ft?
- A. Architect
 - B. Engineer
 - C. Mechanical drafter
 - D. Metric
- 21** Which insect causes honeydew and sooty mold on plants?
- A. Aphids
 - B. Chinch bugs
 - C. Lace bugs
 - D. Spider mites
- 22** Insects are distinguished from each other primarily by their:
- A. scales and body coverings.
 - B. mouthparts and wings.
 - C. legs and feet.
 - D. eyes and ovipositors.
- 23** All of the following are symptoms of powdery mildew except:
- A. curled and distorted leaves.
 - B. deformed flower buds.
 - C. stem gall.
 - D. white, moldy deposit.
-

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The first step in pesticide safety is to:

- A. put on a pair of rubber gloves.
- B. purchase a pair of goggles.
- C. buy an agricultural chemical manual.
- D. read and understand the pesticide label.

25

Which of these pesticide formulations does NOT leave a visible residue?

- A. Dust
- B. Emulsifiable concentrate
- C. Flowable
- D. Wettable powder

26

Which of the following statements about pesticide regulations is false?

- A. It is illegal to apply a pesticide at a rate lower than stated on the label.
- B. Licensed Class III applicators can legally advertise their services.
- C. No certification is required to purchase "General Use" pesticides.
- D. When applying a pesticide, the applicator should wear the protective equipment specified by the pesticide label.

27

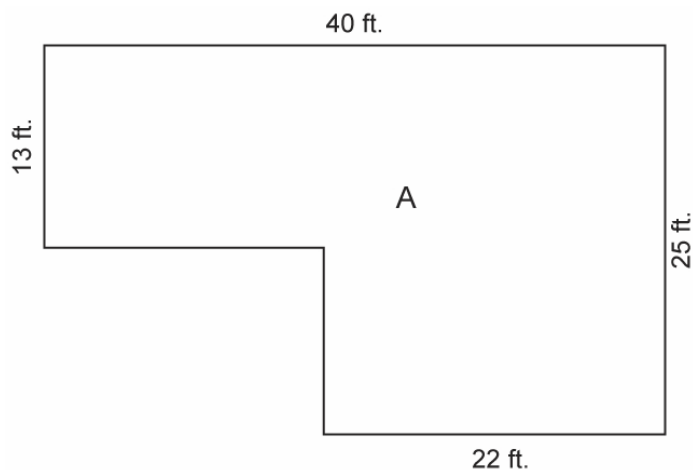
You are using Gnatrol, a biological control for fungus gnats. You plan to drench using a siphonex with a 1:16 ratio. The label rate states that you should use 2 oz per gallon. How much Gnatrol will you measure to make 1 gal. of concentrate for the siphonex?

- A. 8 oz
- B. 16 oz
- C. 32 oz
- D. 46 oz

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How many cubic yards of cypress mulch, 3 in. deep, are needed for the following shrub bed?



- A. 5.5
- B. 7.25
- C. 9.0
- D. 10.25

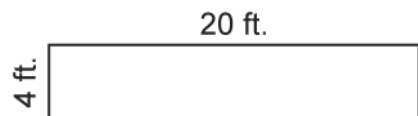
29

You are checking the calibration of a drop-type granular spreader. You place 10 lb of fertilizer in the hopper and push the spreader at your normal pace over a sheet of plastic that is 10 ft wide and 10 ft long. After spreading the fertilizer, you carefully collect the material on the sheet and weigh it. If there is a total of 12 oz of material on the sheet, how much fertilizer will the spreader distribute per 1,000 sq ft?

- A. 3.5 lb
- B. 5 lb
- C. 7.5 lb
- D. 15 lb

30

At 8-in. spacing, how many pansy plants should you install in the following bed for winter color?



- A. 36
- B. 80
- C. 180
- D. 1,440

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- 31** How many pounds of nitrogen are in a 100-lb bag of 12-18-24?
- A. 6
 - B. 12
 - C. 18
 - D. 24
- 32** You are checking the calibration of a drop-type granular spreader. You place 10 lb of fertilizer in the hopper and push the spreader at your normal pace over a sheet of plastic that is 10 ft wide and 10 ft long. After spreading the fertilizer, you carefully collect the material on the sheet and weigh it. If there is a total of 40 oz of material on the sheet, how much fertilizer will the spreader distribute per 1,000 sq ft?
- A. 22.5 lb
 - B. 25 lb
 - C. 28.5 lb
 - D. 31 lb
- 33** You want to overseed a 2,400-sq ft Bermuda lawn with ryegrass at a rate of 10 lb of seed per 1,000 sq ft. How many pounds of ryegrass seed will you need?
- A. 10
 - B. 24
 - C. 50
 - D. 240
- 34** You are checking the calibration of a drop-type granular spreader. You place 10 lb of fertilizer in the hopper and push the spreader at your normal pace over a sheet of plastic that is 10 ft wide and 10 ft long. After spreading the fertilizer, you carefully collect the material on the sheet and weigh it. If there is a total of 56 oz of material on the sheet, how much fertilizer will the spreader distribute per 1,000 sq ft?
- A. 25 lb
 - B. 30 lb
 - C. 35 lb
 - D. 40 lb
- 35** You are checking the calibration of a drop-type granular spreader. You place 10 lb of fertilizer in the hopper and push the spreader at your normal pace over a sheet of plastic that is 10 ft wide and 10 ft long. After spreading the fertilizer, you carefully collect the material on the sheet and weigh it. If there is a total of 24 oz of material on the sheet, how much fertilizer will the spreader distribute per 1,000 sq ft?
- A. 12.5 lb
 - B. 15 lb
 - C. 18.5 lb
 - D. 21 lb
-

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?	⊙	Answer/ Scale	Objective	?	⊙	Answer/ Scale	Objective
1	1	A	HLT 1114-C1	19	19	A	HLT 1513-C1
2	2	C	HLT 1114-C1	20	20	B	HLT 1513-C1
3	3	C	HLT 1114-C1	21	21	A	HLT 2813-C1
4	4	A	HLT 1114-C1	22	22	B	HLT 2813-C1
5	5	D	HLT 1114-C1	23	23	C	HLT 2813-C1
6	6	D	HLT 1114-C1	24	24	D	HLT 2813-C1
7	7	C	HLT 1114-C1	25	25	B	HLT 2813-C1
8	8	B	HLT 1114-C1	26	26	A	HLT 2813-C1
9	9	A	HLT 1124-C1	27	27	C	HLT 2813-C2
10	10	A	HLT 1124-C1	28	28	B	HLT 2124-C2
11	11	A	HLT 1124-C1	29	29	C	HLT 2124-C2
12	12	B	HLT 1124-C1	30	30	C	HLT 2124-C2
13	13	B	HLT 1124-C1	31	31	B	HLT 2124-C2
14	14	C	HLT 1124-C1	32	32	B	HLT 2124-C2
15	15	A	HLT 1124-C1	33	33	B	HLT 2124-C2
16	16	A	HLT 1513-C1	34	34	C	HLT 2124-C2
17	17	A	HLT 1513-C1	35	35	B	HLT 2124-C2
18	18	A	HLT 1513-C1				