



PENNSYLVANIA CERTIFIED HORTICULTURIST PROGRAM EXAM SAMPLE QUESTIONS

The Pennsylvania Certified Horticulturist Program strives to improve the professional standards of the nursery - landscape - garden center industry by recognizing those individuals who have demonstrated an essential level of knowledge through successful completion of the exam process. Applicants are permitted to use a calculator during the exam.

The following objectives state in general terms the knowledge expectations for an individual aspiring to become a Pennsylvania Certified Horticulturist. It is the responsibility of the applicant to locate appropriate resources and study materials covering these objectives as needed. The PCH Committee strongly encourages purchase of the PCH study manual available through the PLNA office. The PCH Study Manual and other resource books will contain specific information in addition to the objectives listed here. While this additional information will be useful to the horticultural professional, it may not be covered in the PCH exam.

SECTION I: PLANTS AND THEIR GROWTH (100 Questions) (refer to PCH Study Manual chapters 1, 2 & 7)

Examinee will be asked to demonstrate a working knowledge of:

1. Landscape plants common to Pennsylvania, including Latin and common names, culture, habit, bloom, fruit, fall color, use and other outstanding features.
2. Plant parts and their functions related to plant growth and development (such as photosynthesis, transpiration, etc.).
3. Factors relative to plant growth and development which includes environmental factors, plant nutrition and soils.

SAMPLE QUESTIONS:

MULTIPLE CHOICE: Choose the letter of the correct response.

1. Shoot growth of the genus *Pinus*, *Abies* and *Picea* lasts for only a short period in spring and early summer. This type of growth is referred to as:
 - A. flush or surge
 - B. caliper
 - C. cambial
 - D. reaction

MATCH THE PROCESS WITH THE FUNCTION: Choose the letter of the correct function name.

1. The process by which a plant loses water primarily from leaf stomata?
2. The reverse of photosynthesis?
3. The process necessary for mineral transport from the soil to the plant parts?
 - A. Transpiration
 - B. Respiration

SECTION II: PLANT MAINTENANCE (100 Questions)
(refer to PCH Study Manual chapters 2, 3, & 7)

Examinee will be asked to demonstrate a working knowledge of:

1. What a pesticide is and how it is used
2. IPM techniques
3. Calibration for pesticide application including conversion of measurements
4. Fertilizer formulations and calculation rates and methods
5. Pruning techniques, tools and timing
6. Turf grass care and maintenance including pest control and fertilization methods
7. How insects, diseases and environmental factors affect plant growth
8. Mulching materials and the reasons for their use
9. The importance of safety techniques and how they impact lives and the environment
10. The function of water in plant growth

SAMPLE QUESTIONS:

TRUE/FALSE:

1. Reasons for mulching include weed control and moisture conservation

MULTIPLE CHOICE: Choose the letter of the correct response.

1. The herbicide label lists the contents as an 80w wettable powder. How many pounds of this formulation are required to treat an area 500' x 1200' at a rate of 2 lbs. AIA?

A. 34.4
B. 17.2
C. 189.7
D. 75.3

MATCH: The following insect to the stage of its life cycle which causes the greatest damage to landscape plants.

- | | |
|---------------------|-----------|
| A. Birch Leaf Miner | 1. Larvae |
| B. Oak Gall | 2. Pupa |
| C. Chinch Bug | 3. Adult |

SECTION III: LANDSCAPE DESIGN AND INSTALLATION (50 Questions)
(refer to PCH Study Manual chapters 2, 4, & 7)

Examinee will be asked to demonstrate a working knowledge of:

1. The principles of design, such as balance, unity and rhythm
2. The factors influencing design such as cost, climate, family size
3. The design process beginning with the client interview to determine needs through property (landscape) functions.
4. Development of a landscape plan from base map through final drawing, including graphic symbols, scale drawing, appropriate plant selection, etc.
5. Selection, installation and care of plant materials

SAMPLE QUESTIONS:

TRUE/FALSE:

1. Existing trees and shrubs are not part of the base plan

MULTIPLE CHOICE: Choose the letter(s) of the correct response

1. Choose the four basic landscape principles:
- | | |
|-------------|-----------|
| A. unity | E. scale |
| B. size | F. rhythm |
| C. balance | G. form |
| D. function | |

MATCH: The following plants with its corresponding form

- | | | |
|------------------------|------------------|--------------|
| 1. Berberis thunbergii | A. pyramidal | E. prostrate |
| 2. Betula nigra | B. round/rounded | F. mound |
| 3. Zelkova serrata | C. clump | G. tuft |
| | D. V-shaped | H. columnar |

SECTION IV: GARDEN CENTER BASIC AND ADDITIONAL MATERIALS (50 Questions)

(refer to PCH Study Manual chapters 2, 5, 6, 7 & 8)

Examinee will be asked to demonstrate a working knowledge of:

1. Garden center layout and operations
2. Employee fundamentals and customer services
3. Marketing, merchandising and sales
4. Safety and garden center maintenance
5. Plant knowledge and maintenance
6. Water gardening
7. Aquatics and invasive plants
8. Pennsylvania laws and regulations

SAMPLE QUESTIONS:

TRUE/FALSE:

1. Advertising is not a good use of time and money.

MULTIPLE CHOICE: Choose the letter(s) of the correct response

1. An annual is a plant that completes its life cycle:
- A. After 2 years
 - B. After 5 years
 - C. In 1 year
 - D. None of the above