



## Job Ready Assessment Blueprint

# Floriculture-Greenhouse



Test Code: 4949 / Version: 01

**“Measuring What Matters”**

## Specific Competencies and Skills Tested in this Assessment:

### Basic Floral Design

- Display basic safe work practices
- Identify and correctly use floral supplies and tools
- Use ribbons and accessories in floral design
- Design and create basic arrangements
- Process, condition, and store plants and cut flowers
- Exhibit knowledge of shop sanitation, including coolers, containers, and buckets
- Identify cut materials and plants
- Display basic knowledge of floral design history



### Intermediate Floral Design

- Create and design permanent floral arrangements
- Safely use steel pick machine, hot glue gun, and other floral adhesives
- Apply the principles and elements of floral design
- Exhibit knowledge of various floral wire services (FTD®, Teleflora®, and electronic services)

### Advanced Floral Design

- Design and create various holiday and special occasion arrangements
- Apply knowledge and competence with wedding designs and accessories
- Apply knowledge and competence with funerals and sympathy work



### ***Specific Competencies and Skills continued:***

#### **Small Floriculture or Floriculture-Greenhouse Business**

- Identify and describe business categories (sole proprietor, partnership, etc.)
- Exhibit knowledge of proper floriculture salesmanship techniques, customer relations, including telephone etiquette
- Set up effective merchandise displays and window displays
- Exhibit knowledge of effective floriculture advertising techniques
- Correctly price and determine costs of floral arrangements
- Apply knowledge of correct inventory procedures, shipping/receiving, and completing invoices
- Apply business math (invoice, payroll, labor, etc.)
- Identify and describe careers/jobs within the floral and/or greenhouse industry



#### **Plant Science**

- Classify plants using binomial nomenclature
- Identify and describe plant life cycles
- Identify and describe plant anatomy and physiology
- Exhibit understanding of sexual and asexual plant reproduction

#### **Soil Sciences**

- Identify and describe soil microbiology, components, and classification
- Describe drainage dynamics and types
- Identify and describe essential and trace elements, interactions, and availability
- Analyze soil test results
- Identify and describe types of growing media

***Specific Competencies and Skills continued:***

**Greenhouse Operations**

- Correctly select appropriate structures, sites, and layouts for greenhouses
- Describe various watering techniques
- Describe environmental factors that affect crop production
- Apply methods of propagation (i.e., sexual, asexual)
- Identify types and uses of fertilizers
- Describe concepts and practices of integrated pest management (IPM)
- Identify and describe greenhouse-related worker protection standards
- Describe various effective methods of greenhouse climate control
- Identify greenhouse crops
- Identify and use greenhouse-related containers
- Identify and describe insect types, anatomy, and life cycles

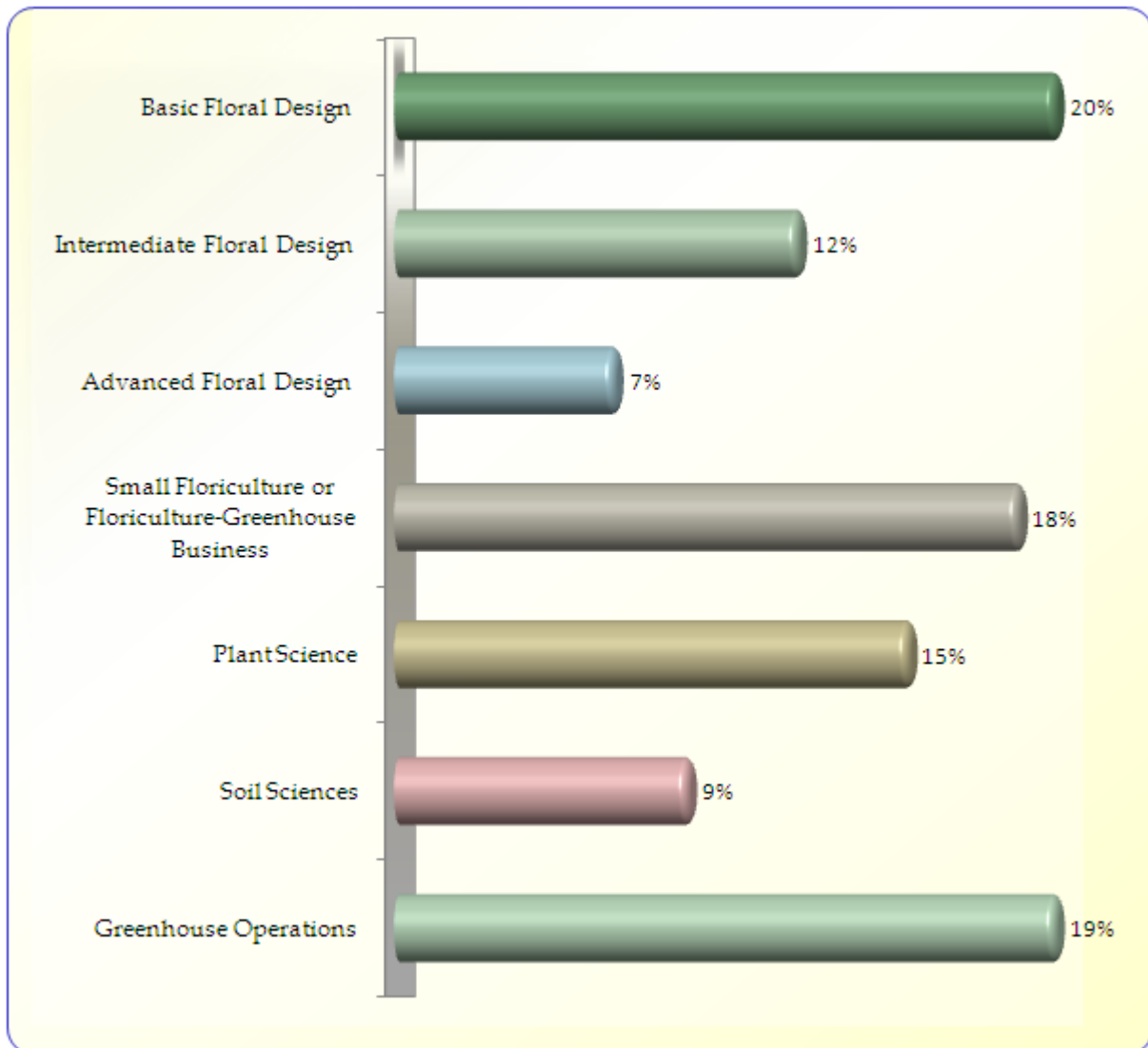


## Written Assessment:

Administration Time: 3 hours

Number of Questions: 196

### Areas Covered:



## Sample Questions:

Artistry and design principles are most important to an individual seeking a career in

- A. greenhouse production
- B. plant science
- C. retail floristry
- D. soil science

Steel pick machines use steel picks that may

- A. come with or without wire attached
- B. be useful for cutting heavy stems
- C. cut fingers because they are sharp
- D. be purchased in various colors

The two most common tools used for fresh flowers designs are a

- A. styrofoam cutter and ribbon shears
- B. staple gun and wire cutters
- C. sharp knife and floral shears
- D. stem stripper and pruners

What is the scientific name (binomial nomenclature) for the carnation?

- A. *lilium longiflorum*
- B. *erica carnea*
- C. *hyacinthus orientalis*
- D. *dianthus caryophyllus*

The term, scarification, describes a method of

- A. reducing scars on a stem of a plant
- B. subjecting seeds to cold weather to aid germination
- C. detecting plant disease
- D. mechanically helping a seed to take in water



## Performance Assessment:

**Administration Time:** 2 hours and 55 minutes

**Number of Jobs:** 5

### Areas Covered:

#### 19% **Isosceles Triangle Arrangement**

Wholesale and selling prices, profit margin, container preparation, quality of design, material handling, and time to complete job

#### 25% **Design a Multi-Flower Corsage**

Selection of flowers and foliage, assembly procedures/mechanics, selection of ribbon, appearance of bow, overall appearance and quality, packaging, clean up, and time to complete job.

#### 10% **Cash Register/Sales**

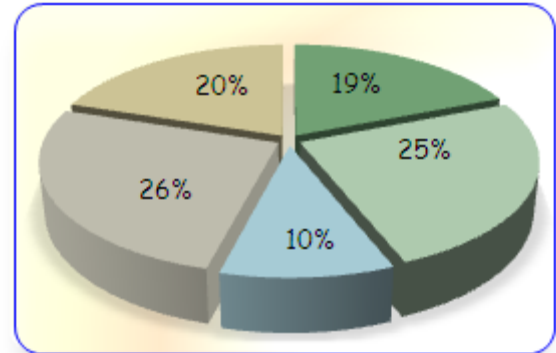
Greeting, completion of receipt, calculation of bill and change, close the sale, and time to complete job.

#### 26% **Plant Classification and Identification**

Correctly identify annuals, perennials, cut flowers, house plants, and cut foliage, and time to complete job

#### 20% **Start/Propagate Herbaceous Plant from a Stem Tip Cutting**

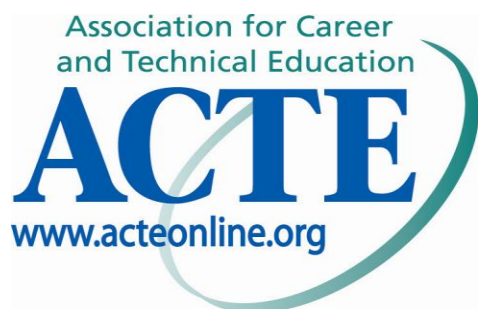
Prepare for taking cuttings-organization, preparation of containers, harvesting cuttings, preparation of cuttings, sticking cuttings, preparation of labels, placement of containers on bench, clean up work area, media in containers, size of cutting, appearance of cuttings in containers and time to complete job.



**Sample Job:** Start/Propagate Herbaceous plant from a Stem Tip Cutting

**Maximum Time:** 25 minutes

**Participant Activity:** The test participant will prepare 12 containers for starting, by direct sticking, 12 herbaceous plant cuttings. Harvest cuttings from a stock plant and demonstrate sterile techniques using a florist's knife. Prepare cuttings and treat with rooting compound. Properly stick the cuttings into the containers. Label the containers and place potted plants in the greenhouse. Clean up work area and return supplies to original location.



The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!