Test Type: The Retail Commercial Baking assessment is included in NOCTI’s Teacher assessment battery. Teacher assessments measure an individual’s technical knowledge and skills in a proctored proficiency examination format. These assessments are used in a large number of states as part of the teacher licensing and/or certification process, assessing competency in all aspects of a particular industry. NOCTI Teacher tests typically offer both a written and performance component that must be administered at a NOCTI-approved Area Test Center. Teacher assessments can be delivered in an online or paper/pencil format.

Revision Team: The assessment content is based on input from subject matter experts representing the following states: Idaho, Michigan, New Jersey, and Pennsylvania.
NOCTI written assessments consist of questions to measure an individual’s factual theoretical knowledge.

**Administration Time:** 3 hours  
**Number of Questions:** 191  
**Number of Sessions:** This assessment may be administered in one, two, or three sessions.

### Areas Covered

- **Safety and Sanitation:** 13%  
- **Business and Math Skills:** 12%  
- **Identification, Classification, and Properties of Ingredients:** 8%  
- **Baking Preparation (Mise en Place):** 12%  
- **Basic Baking:** 29%  
- **Product Merchandising:** 8%  
- **Purchasing, Receiving, Inventory, and Storage:** 7%  
- **Nutrition:** 4%  
- **Human Relations and Career Skills:** 7%
Specific Standards and Competencies Included in this Assessment

Safety and Sanitation
- Identify causes and prevention of kitchen accidents, including burns, fires, and slips
- Demonstrate safe and sanitary procedures for operating and maintaining large equipment, hand tools, and small wares
- Exhibit familiarity with laws and rules pertaining to the food service industry, of regulatory agencies such as OSHA
- Identify the Critical Control Points during all food handling processes, including demonstrating proper personal hygiene, as a method for minimizing the risk of food-borne illnesses (HACCP system)
- Identify causes and signs of biological, physical, and chemical contamination
- Describe use, storage, and disposal of types of cleaners and sanitizers and their proper use (MSDS)
- Identify proper methods of waste disposal and recycling
- Identify and describe microorganisms related to food spoilage and food-borne illness, including growth environments

Business and Math Skills
- Perform basic mathematical operations pertaining to the food service industry (addition, subtraction, multiplication, division)
- Weigh and measure accurately
- Calculate preparation temperatures based on known variables (friction factor, altitude, etc.)

Identification, Classification, and Properties of Ingredients
- Identify, compare, and contrast ingredients and their sources
- Explain the strengthening or weakening effect of ingredients in the production of doughs and batters
- Select specific ingredients and/or substitutions appropriate to method and desired product outcome
- Identify and describe physical, chemical, and biological leaveners

(Continued on the following page)
Specific Standards and Competencies (continued)

Baking Preparation (Mise en Place)
- Demonstrate mise en place by planning assignment inventory of ingredients, equipment, and tools
- Break down assignments into tasks
- Utilize convenience products if and when necessary, preparing a sequenced and prioritized timeline
- Demonstrate a variety of cooking methods: baking, frying, boiling, blanching, poaching, and steaming
- Identify and use herbs, spices, and flavor extracts
- Display understanding of basic bakery production and planning principles, including the importance of planning to the overall operation of a baking facility

Basic Baking
- Read and prepare standardized recipes/formulas and menus
- Define terms related to baking methods, processes, and techniques
- Describe, compare, and contrast yeast and laminate dough types and related methods and processes
- Describe, compare, and contrast quick breads, including muffin and biscuit dough types and related methods and processes
- Describe, compare, and contrast pie dough types and related methods and processes
- Describe, compare, and contrast fruit pie filling methods
- Describe, compare, and contrast creaming and two-stage methods as they relate to cakes, cookies, quick breads, brownies, and short dough
- Describe, compare, and contrast egg foam method as it relates to sponge, génoise, angel food, chiffon, meringues, mousse, and soufflés
- Describe, compare, and contrast frosting, icing, and glaze types and methods
- Describe Pâte à Choux and products derived from it
- Describe, compare, and contrast custard types and related methods
- Describe proper gluten development in relationship to product outcomes
- Relate cooking times and temperatures to methods, products, and ingredients
- Indicate order for adding ingredients given various methods
Specific Standards and Competencies (continued)

Product Merchandising
- Determine methods of promoting baked goods, including seasonal merchandising strategies
- Create menu item descriptions for bakery goods
- Demonstrate food presentation techniques

Purchasing, Receiving, Inventory, and Storage
- Describe proper techniques of receiving and storing fresh, frozen, refrigerated, and staple goods
- Examine various inventory systems (FIFO, etc.)
- Discuss ethical issues as they relate to purchasing
- Order food requisitions from appropriate/reliable sources

Nutrition
- Discuss various diets (e.g., food allergies, alternative dieting), and dietary guidelines
- Interpret food labels in terms of the portion size, ingredients, and nutritional value

Human Relations and Career Skills
- Demonstrate effective communication skills, employment skills, personal traits, and interpersonal skills
- Identify career opportunities in the baking industry
- Identify professional organizations and explain their purposes and benefits to the industry
Sample Questions

After touching hands, face, or body, bakery workers must
A. wash hands properly
B. put new gloves on
C. use hand sanitizer
D. change the apron

Whole-wheat flour contains which of these three parts of the wheat kernel?
A. endosperm, pectin, and starch
B. bran, endosperm, and germ
C. germ, seed, and gluten
D. starch, protein, and chalazae

The mixing of shortening with sugar is called
A. kneading
B. whipping
C. blending
D. creaming

The straight dough method consists of
A. combining the liquid, yeast, and part of the flour
B. combining all the ingredients and mixing
C. creaming fat and sugars
D. blending flour, fat, and sugar

Sugars are classified as
A. carbohydrates
B. proteins
C. fats
D. minerals
NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

**Administration Time:** 4 hours and 45 minutes  
**Number of Jobs:** 4

**Areas Covered:**

**18% Soft Dinner Roll Dough**  
Scaling, shaping and panning, proofing, baking and finishing, and time to complete Job 1.

**28% Cake Decorating**  
Slicing cake in half horizontally, cake assembly, iced cake, writing (inscription), borders and flowers, display, work area cleaned, and time to complete Job 2.

**26% Fruit Pie**  
Scaling, mixing, refrigerating, rolling and trimming, baking, taste, and time to complete Job 3.

**28% Pâte à Choux**  
Scaling, cooking, mixing, piping, baking, taste, and time to complete Job 4.
Sample Job

Soft Dinner Roll Dough

**Maximum Time:** 1 hour

**Participant Activity:** The participant will follow the instructions provided and prepare the soft dinner roll dough.