Circle the best answer to each question.

1 What is a foodborne-illness outbreak?

- A When two or more food handlers contaminate multiple food items
- B When an operation serves contaminated food to two or more people
- C When two or more people report the same illness from eating the same food
- D When the CDC receives information on two or more people with the same illness

2 Which is a ready-to-eat food?

- A Uncooked rice
- B Raw deboned chicken
- C Sea salt
- D Unwashed green beans

3 Why are preschool-age children at a higher risk for foodborne illnesses?

- A They have not built up strong immune systems.
- B They are more likely to spend time in a hospital.
- C They are more likely to suffer allergic reactions.
- D Their appetites have increased since birth.

4 Which is a TCS food?

- A Bread
- B Flour
- C Sprouts
- D Strawberries
- 5 The 5 common risk factors that can lead to foodborne illness are failing to cook food adequately, holding food at incorrect temperatures, using contaminated equipment, practicing poor personal hygiene, and
- A reheating leftover food.
- B serving ready-to-eat food.
- C using single-use, disposable gloves.
- D purchasing food from unsafe sources.

- 6 Raw chicken breasts are left out at room temperature on a prep table. What is the risk that could cause a foodborne illness?
 - A Cross-contamination
 - B Poor personal hygiene
 - C Time-temperature abuse
 - D Poor cleaning and sanitizing
- 7 What is TCS food?
 - A Food requiring thermometer checks for security
 - B Food requiring trustworthy conditions for service
 - C Food requiring training commitments for standards
 - D Food requiring time and temperature control for safety
- 8 A food handler left a pan of roasted turkey breasts to cool at room temperature overnight. In addition to throwing away the turkey, what is an appropriate corrective action?
 - A Complete an incident report.
 - B Order additional turkey breasts.
 - C Deduct the cost from the food handler's pay.
 - D Make sure the food handler understands safe cooling practices.
- 9 What is an important measure for preventing foodborne illness?
 - A Using new equipment
 - B Measuring pathogens
 - C Preventing cross-contamination
 - D Serving locally grown, organic food
- 10 What is one possible function of a government agency that is responsible for food safety?
 - A Ensuring a product's appeal
 - B Approving a construction project
 - C Monitoring an operation's revenue
 - D Protecting a product's brand name

For answers, please turn to page 1.19.

- 1 What are the most common symptoms of a foodborne illness?
 - A Diarrhea, vomiting, fever, nausea, abdominal cramps, and dizziness
 - B Diarrhea, vomiting, fever, nausea, abdominal cramps, and headache
 - Diarrhea, vomiting, fever, nausea, abdominal cramps, and jaundice
- D Diarrhea, vomiting, fever, nausea, abdominal cramps, and tiredness
- 2 How does most contamination of food happen?
 - A Through contaminated water
 - B When contaminants are airborne
 - C When people cause the contamination
 - D Through the use of contaminated animal products
- 3 What is the most important way to prevent a foodborne illness from bacteria?
 - A Control time and temperature.
 - B Prevent cross-contamination.
 - C Practice good personal hygiene.
 - D Practice good cleaning and sanitizing.
- 4 What is the most important way to prevent a foodborne illness from viruses?
 - A Control time and temperature.
 - B Prevent cross-contamination.
 - C Practice good personal hygiene.
 - D Practice good cleaning and sanitizing.
- 5 Parasites are commonly linked with what type of food?
 - A Rice
 - B Poultry
 - C Seafood
 - D Canned food

- 6 A guest had a reversal of hot and cold sensations after eating seafood. What most likely caused the illness?
 - A Parasites
 - B Allergic reaction
 - C Biological toxins
 - D Chemical contamination
- 7 A prep cook stores a bottle of sanitizer on a shelf above a prep table. To prevent chemical contamination, what should be done differently?
 - A Store the sanitizer bottle away from the prep area.
 - B Store the sanitizer bottle on the floor between uses.
 - C Store the sanitizer bottle on the work surface of the prep table.
 - D Store the sanitizer bottle with food supplies below the prep table.
- 8 To prevent the deliberate contamination of food, a manager should know who is in the facility, monitor the security of products, keep information related to food security on file, and know
 - A when to register with the EPA.
 - B how to fill out an incident report.
 - C where to find Safety Data Sheets in the operation.
 - D whom to contact about suspicious activity.
- 9 What should food handlers do to prevent food allergens from being transferred to food?
 - A Use clean and sanitized utensils when prepping the order.
 - B Cook food to the appropriate minimum internal temperature.
 - C Store cold food at 41°F (5°C) or lower.
 - D Label chemical containers correctly.
- 10 What step should be taken if a manager suspects a foodborneillness outbreak?
 - A Reheat the suspected product to safe temperatures.
 - B Provide as little information as possible to the regulatory authority.
 - C Deny that the operation has anything to do with the foodborne-illness outbreak.
 - D Set aside the suspected product and label it with "do not use" and "do not discard."

For answers, please turn to page 2.35.

Circle the best answer to each question. 1 After which activity must food handlers wash their hands?

- A Clearing tables
- B Putting on gloves
- Serving customers
- D Applying hand antiseptic
- 2 When washing hands, what is the minimum time you should scrub with soap?
 - 5 seconds
 - 10 seconds B
 - 20 seconds
 - D 40 seconds
- 3 What should food handlers do after prepping food and before using the restroom?
 - A Wash their hands
 - Take off their hats
 - Change their gloves C
 - Take off their aprons
- 4 A food handler will be wearing single-use gloves to assemble boxed lunches. When must the food handler's hands be washed?
 - A After 4 hours
 - After the first hour
 - C After putting on the gloves
 - Before putting on the gloves
- 5 A cook wore single-use gloves while forming raw ground beef into patties. The cook continued to wear them while slicing hamburger buns. What mistake was made?
 - A The cook did not wear reusable gloves while handling the raw ground beef and hamburger buns.
 - The cook did not clean and sanitize the gloves before handling the hamburger buns.
 - The cook did not wash hands before putting on the same gloves to slice the hamburger buns.
 - The cook did not wash hands and put on new gloves before slicing the hamburger buns.

- 6 Who is most at risk of contaminating food?
 - A food handler whose spouse works primarily with high-
 - A food handler whose young daughter has diarrhea C
 - A food handler who gets a lot of aches and pains
 - A food handler who eats a lot of rare meat
- 7 A food handler has diarrhea and has been diagnosed with an illness from Shigella spp. What should the manager tell
 - Wear gloves while handling food
 - Work in a non-food handling position
 - Stay home until approved to return to work D
 - Wash hands frequently while handling food
- 8 A food handler prepares meals for a child day-care center. What symptoms require this food handler to stay home
 - Thirst with itching
 - Soreness with fatigue
 - Sore throat with fever
 - D Headache with soreness
- 9 When is it acceptable to eat in an operation?
 - When prepping food
 - When washing dishes
 - C When sitting in a break area
 - D When handling utensils
- 10 What should a manager of a hospital cafeteria do if a cook calls in with a headache, nausea, and diarrhea?
 - Tell the cook to stay away from work and see a doctor
 - Tell the cook to come in for a couple of hours and then B
 - Tell the cook to rest for a couple of hours and then come
 - Tell the cook to go to the doctor and then immediately come

For answers, please turn to page 3.25.

- 1 A food handler has finished trimming raw chicken on a A 1000 nander that have been board to prep vegetables. What must be done to the cutting board?
 - A It must be dried with a paper towel.
 - B It must be turned over to the other side.
 - It must be washed, rinsed, and sanitized.
 - It must be rinsed in hot water and air-dried.
- 2 How far must a bimetallic stemmed thermometer be inserted into food to give an accurate reading?
 - A Just past the tip of the thermometer stem
 - B Halfway between the tip of the thermometer stem and the dimple
 - To the dimple in the thermometer stem
 - D Past the dimple of the thermometer stem
- 3 Which probe should be used to check the temperature of a chicken breast?
 - A Air probe
 - B Immersion probe
 - C Penetration probe
 - D Surface probe
- 4 At what temperatures do most foodborne pathogens grow most quickly?
 - A Between 0°F and 41°F (-17°C and 5°C)
 - Between 45°F and 65°F (7°C and 18°C)
 - Between 70°F and 125°F (21°C and 52°C)
 - Between 130°F and 165°F (54°C and 74°C)
- 5 Which practice can help prevent time-temperature abuse?
 - A Keeping records of employee schedules
 - B Cleaning and sanitizing equipment and work surfaces
 - Making sure food handlers spend at least 30 seconds washing their hands
 - D Limiting the amount of food that can be removed from a cooler for prepping

- 6 Which thermometer is used to measure surface temperatures?
 - A Thermistor
 - B Thermocouple
 - C Infrared thermometer
 - D Bimetallic stemmed thermometer
- 7 A thermometer used to measure the temperature of food must be accurate to what temperature?
 - A ±2°F or ±1°C
 - B ±4°F or ±3°C
 - C ±6°F or ±5°C
 - D ±8°F or ±7°C
- 8 Which practice can help prevent cross-contamination?
 - A Using color-coded cutting boards
 - B Rinsing cutting boards between use
 - C Purchasing food requiring preparation
 - D Prepping raw and ready-to-eat food at the same time
- 9 What device can be used to monitor both time and temperature abuse during the shipment or storage of food?
 - A Infrared thermometer
 - B Time-temperature indicator
 - C Thermistor with an air probe
 - D Bimetallic stemmed thermometer
- 10 How long can food stay in the temperature danger zone before it must be thrown out?
 - A 1 hour
 - B 2 hours
 - C 3 hours
 - D 4 hours

For answers, please turn to page 4.17.

- What is the most important factor in choosing a food supplier?
 - A It is recommended by others in the industry.
 - B It has a HACCP program or other food safety system.
 - C It has documented manufacturing and packing practices.
 - D It has been inspected and complies with local, state, and federal laws.
- 2 What is the best method of checking the temperature of vacuum-packed meat?
 - A Lay the thermometer stem or probe on the surface of the top package.
 - B Place the thermometer stem or probe between two packages of product.
 - C Open a package and insert the thermometer stem or probe into the product.
 - D Insert the thermometer stem or probe through the package into the product.
- 3 What is the correct temperature for receiving cold TCS food?
 - A 32°F (0°C) or lower
 - B 41°F (5°C) or lower
 - C 45°F (7°C) or lower
 - D 50°F (10°C) or lower
- 4 Milk can be received at 45°F (7°C) under what condition?
 - A It is thrown out after 2 days.
 - B It is cooled to 41°F (5°C) or lower in 4 hours.
 - C It is immediately cooled to 41°F (5°C) or lower.
 - D It is served or used in the operation within 2 hours.
- 5 What causes large ice crystals to form on frozen food and its packaging?
 - A Cross-contact
 - B Cross-contamination
 - C Time-temperature abuse
 - D Incorrect cleaning and sanitizing

- 6 Whole potatoes were coated with olive oil and salt, baked in-house, and stored in a cooler for several days. What must be included on the label for the baked potatoes?
 - A List of all ingredients
 - B List of common allergens
 - C Date that the food was received
 - D Date that the food should be discarded
- 7 When must you discard tuna salad that was prepped on July 19?
 - A July 21
 - B July 23
 - C July 25
 - D July 27
- 8 What is the problem with storing raw ground turkey above raw ground pork?
 - A Cross-contamination
 - B Poor personal hygiene
 - C Time-temperature abuse
 - D Cross-contact with allergens
- 9 Due to an operation's space limits, ready-to-eat and uncooked foods must be stored in the same cooler. How should foods be stored, in top-to-bottom order?
 - A According to the FIFO method, with oldest items on the top shelf and the newest items on the bottom
 - B According to preparation dates, with the earliest dates on the top shelf and the latest dates on the bottom
 - C According to minimum internal cooking temperatures, with ready-to-eat foods on the top shelf and poultry on the bottom
 - According to minimum acceptable storage temperatures, with foods that can tolerate the warmest temperature on the top shelf and foods needing the coldest temperature on the bottom
- 10 How many inches (centimeters) from the floor should food be stored?
 - A At least 1 inch (3 cm)
 - B At least 2 inches (5 cm)
 - C At least 4 inches (10 cm)
 - D At least 6 inches (15 cm)

For answers, please turn to page 5.23.

Answers

6.8 What's the Problem?

- 1 No. The lettuce, meat, and cheese are being time-temperature abused. She should take out of the cooler only what she can use within a short amount of time.
- 2 Yes. She used separate equipment for the shrimp and the produce.
- 3 No. One batch of spinach could cross-contaminate the other. Between batches, he should have emptied the sink, cleaned and sanitized it, and changed the ice water.
- 4 No. He should have either gotten a variance from his local regulatory authority before selling the juice without a warning label or included warning labels on the juice.
- 5 Yes. He used pasteurized eggs because raw shell eggs and undercooked, unpasteurized shell eggs cannot be served in a nursing home.

5 D

6.9 Pick the Correct Way to Prep Food

- 1 B
- 2 B
- 3 B
- 4 A

6.14 How Do You Check It?

- 1 A
- 2 A

6.15 What's the Temperature?

- 1 B
- 2 C 6 A
- 3 B 7 C
- 4 C 8 D

Answers

6.19 Cooling Food

1 and 2 should be marked.

6.19 Is It Hot Enough?

- 1 No. The chili did not reach an internal temperature of 165°F (74°C) within two hours.
- 2 Yes. Assuming the roast beef was cooked and cooled correctly, it can be reheated to any temperature because it is being served immediately.

6.21 Chapter Review Case Study

- 1 Here is what Amanda did wrong:
 - She thawed the chicken breasts the wrong way. She should not have thawed them under hot water.
 - She cooled the leftover chicken breasts the wrong way. She should not have left them out to cool at room temperature.
 - She did not make sure that the clam chowder reached at least 165°F (75°C) for 15 seconds.
- 2 Here is what Amanda should have done differently:
 - If Amanda needed to thaw the chicken breasts quickly, she should have either used a microwave or placed them under running water at 70°F (21°C) or lower.
 - Amanda should have ensured the clam chowder was heated to at least 165°F (75°C) for 15 seconds before moving it to the steam table.
 - To cool the chicken breasts, she could have used a blast chiller or placed the container of chicken breasts in an icewater bath. Then she could move them to the cooler.

6.22 Study Questions

1 B	6 D
2 C	7 C
3 A	8 D
4 C	9 D
5 C	10 A

		the best answer to each question.
Cir	cle	the best answer to each quantities answer to each quantities and the plate should a food handler avoid touching nich part of the plate should a food handler avoid touching its mountainers?
1	wi	nich part of the plate should be
	wh	en serving customers?
	A	Bottom
	В	Edge
	C	Side
	D	Top
	ita	operation has a self-service salad bar with 8 different ms on it. How many serving utensils are needed to serve e items on the salad bar?
	A	2
	B	6
	D	8
	4 4 70	
		what maximum internal temperature should cold TCS od be held?
	A	0°F (-17°C)
	В	32°F (0°C)
	C	41°F (5°C)
	D	60°F (16°C)
		nat item must customers take each time they return to a f-service area for more food?
	A	Clean plate
	В	Extra napkins
	C	Hand sanitizer
	D	New serving spoon
5	At	what minimum internal temperature should hot TCS food
	be !	held?
	A	115°F (46°C)
	В	125°F (52°C)

- 6 An operation is located in a jurisdiction that allows it to hold TCS food without temperature control. How many hours can it display hot TCS food without temperature control before the food must be sold, served, or thrown out?
 - A 2
 - B 4
 - C 6
 - D 8
- 7 How often must you check the temperature of food that is being held with temperature control?
 - A At least every 2 hours
 - B At least every 4 hours
 - C At least every 6 hours
 - D At least every 8 hours
- 8 A pan of lasagna at 165°F (74°C) was packed in a heated cabinet for off-site delivery. What is the minimum information that should be on the pan label?
 - A Use-by date and time and reheating and service instructions
 - B Use-by date and reheating and service instructions
 - C Use-by time and reheating and service instructions
 - D Use-by date and time and reheating instructions
- 9 Which may be handled with bare hands?
 - A Cooked pasta for salad
 - B Chopped potatoes for soup
 - C Canned tuna for sandwiches
 - D Pickled watermelon for garnish
- 10 When a utensil is stored in water between uses, what are the requirements?
 - A Running water at any temperature, or a container of water at 70°F (21°C) or lower
 - B Running water at any temperature, or a container of water at 135°F (57°C) or higher
 - C Running water at 70°F (21°C) or lower, or a container of water at 70°F (21°C) or lower
 - D Running water at 135°F (57°C) or higher, or a container of water at 135°F (57°C) or higher

For answers, please turn to page 7.19.

- 1 A manager's responsibility to actively control risk factors for foodborne illnesses is called
 - hazard analysis critical control point (HACCP).
 - B quality control and assurance.
 - C food safety management.
 - D active managerial control.
- 2 A pest-control program is an example of a(n)
 - A HACCP program.
 - B workplace safety program.
 - C food safety program.
 - D active managerial control program.
- 3 A cook preps a beef tenderloin on a cutting board and then immediately cuts pies for dessert on the same cutting board. This is an example of which risk factor?
 - A Purchasing food from unsafe sources
 - B Holding food at incorrect temperatures
 - C Using contaminated equipment
 - D Practicing poor personal hygiene
- 4 The purpose of a food safety management system is to
 - A keep all areas of the facility clean and pest-free.
 - B identify, tag, and repair faulty equipment within the facility.
 - C prevent foodborne illness by controlling risks and hazards.
 - D use the correct methods for purchasing and receiving food.
- 5 Three components of active managerial control include
 - A identifying risks, creating specifications, and training.
 - B identifying risks, corrective action, and training.
 - C identifying risks, creating purchase orders, and training.
 - D identifying risks, record keeping, and training.

- 6 A manager asks a chef to continue cooking chicken breasts after seeing them cooked to an incorrect temperature. This is an example of which step in active managerial control?
 - A Identifying risks
 - B Monitoring
 - C Corrective action
 - D Re-evaluation
- 7 A manager walks around the kitchen every hour to answer questions and to see if staff members are following procedures. This is an example of which step in active managerial control?
 - A Identify risks
 - B Corrective action
 - C Management oversight
 - D Re-evaluation
- 8 One way for managers to show that they know how to keep food safe is to
 - A become certified in food safety.
 - B take cooking temperatures.
 - C monitor employee behaviors.
 - D conduct self-inspections.

For answers, please turn to page 8.11.

- 1 What are the most important food safety features to look for when selecting flooring, wall, and ceiling materials?
 - A Absorbent and durable
 - B Hard and durable
 - C Porous and durable
 - D Smooth and durable
- 2 What organization creates national standards for foodservice equipment?
 - A CDC
 - B EPA
 - C FDA
 - D NSF
- 3 When installing tabletop equipment on legs, the space between the base of the equipment and the tabletop must be at least
 - A 2 inches (5 centimeters).
 - B 4 inches (10 centimeters).
 - C 6 inches (15 centimeters).
 - D 8 inches (20 centimeters).
- 4 An operation has a buildup of grease and condensation on the walls and ceiling. What is the most likely problem?
 - A The ventilation system is not working correctly.
 - B The cleaning chemicals are not being used correctly.
 - C The staff are not cleaning the walls correctly.
 - D The grill is not being operated at a high-enough temperature.
- 5 A handwashing station should have a garbage container, hot and cold water, signage, a way to dry hands, and
 - A soap.
 - B a timer.
 - C a clock.
 - D gloves.

- What is the only completely reliable method for preventing backflow?
 - A Air gap
 - B Ball valve
 - C Cross-connection
 - D Vacuum breaker
- A food handler drops the end of a hose into a mop bucket and turns the water on to fill it. What has the food handler done wrong?
 - A Created a cross-connection
 - B Created an air-gap separation
 - C Prevented backflow
 - D Prevented atmospheric vacuuming
- 8 An operation received a violation in the outside area of the facility. The manager reviewed the area and saw that the dumpster was placed on a freshly graveled drive. The lids were closed, and the drain plug was in place to prevent the dumpster from draining. What was the problem?
 - A The dumpster lids should have been open to allow it to air out.
 - B The drain plug should have been removed to allow the dumpster to drain correctly.
 - C The surface underneath the dumpster should have been paved with concrete or asphalt.
 - D The dumpster should have been freshly painted so that food debris would not stick to surfaces.
- 9 A broken water main has caused the water in an operation to appear brown. What should the manager do?
 - A Boil the water for 1 minute before use.
 - B Contact the local regulatory authority before use.
 - C Use the water for everything except dishwashing.
 - D Use the water for everything except handwashing.
- What is the best way to eliminate pests that have entered the operation?
 - A Raise the heat in the operation after-hours.
 - B Lower the heat in the operation after-hours.
 - C Work with a licensed pest control operator (PCO).
 - D Apply over-the-counter pesticides around the operation.

For answers, please turn to page 9.19.

- 1 What is required for measuring the sanitizing rinse temperature in a high-temperature dishwashing machine?
 - A Infrared thermometer
 - B Time-temperature indicator
 - C Maximum registering thermometer
 - D Thermocouple with immersion probe
- 2 What is the acceptable contact time when sanitizing foodcontact surfaces?
 - A Soak the item in very hot water for 7 seconds.
 - B Soak the item in an iodine solution for 7 seconds.
 - C Soak the item in a chlorine solution for 7 seconds.
 - D Soak the item in an ammonia solution for 7 seconds.
- 3 If food-contact surfaces are in constant use, how often must they be cleaned and sanitized?
 - A Every 4 hours
 - B Every 5 hours
 - C Every 6 hours
 - D Every 7 hours
- 4 What must food handlers do to make sure sanitizing solution for use on food-contact surfaces has been made correctly?
 - A Test the solution with a sanitizer kit.
 - B Use very hot water when making the solution.
 - C Try out the solution on a food-contact surface.
 - D Mix the solution with equal parts of water.
- 5 George is getting ready to wash dishes in a threecompartment sink. What should be his first task?
 - A Remove leftover food from the dishes.
 - B Fill the first sink with detergent and water.
 - C Clean and sanitize the sinks and drain boards.
 - D Make sure there is a working clock with a second hand.

- 6 Which feature is most important for a chemical storage area?
 - A Good lighting
 - Single-use towels
 - Nonskid floor mats
 - Emergency shower system
- 7 How should flatware and utensils that have been cleaned and sanitized be stored?
 - With handles facing up
 - Below cleaning supplies
 - C Four inches (10 centimeters) from the floor
 - D In drawers that have been washed and rinsed
- 8 What is the correct way to clean and sanitize a prep table?
 - A Remove food from the surface, sanitize, rinse, wash, air-dry
 - B Remove food from the surface, wash, rinse, sanitize, air-dry
 - Remove food from the surface, wash, sanitize, air-dry, rinse
 - D Remove food from the surface, air-dry, wash, rinse, sanitize
- 9 Pete the buser poured some cleaner from its original container into a smaller, working container. What else does he need to do?
 - A Label the working container with its contents
 - B Read the safety data sheet (SDS) for the cleaner
 - C Use a new wiping cloth when first using the working container
 - D Note on the original container that some cleaner was put into a working container
- 10 What information should a master cleaning schedule contain?
 - A What should be cleaned, and when
 - B What should be cleaned, when, and by whom
 - C What should be cleaned, when, by whom, and how
 - D What should be cleaned, when, by whom, how, and why

For answers, please turn to page 10.25.