Insulating

Level Two

Module 19210
Chilled and Hot Water Heating Systems

EXAMINATION PACKET

This packet contains the reproducible Module Examination, Answer Key, and Performance Profile Sheet(s).

STORE IN A SECURE AREA!

NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH

Pearson Education, Inc.

Upper Saddle River, New Jersey Columbus, Ohio

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Module Examination **TASK MODULE 19210** **Chilled and Hot Water Heating Systems**

Name: _____ **Date:** _____

Social Security Number: _____

_____ 1. At what temperature does a typical chilled water system operate?

a. 10 degrees
b. 24 degrees
c. 36 degrees
d. 46 degrees

_____ 2. What apparatus might *not* be in a chilled water system?

a. Blow-off valve
b. Air separator
c. Pump
d. Flexible connector

_____ 3. Where would an air separator be located?

a. At the cooling coil
b. Near the pumps
c. At the end of the main
d. In each branch pipe

_____ 4. A chilled water system should be insulated _____.

a. for heat conservation
b. with a vapor barrier
c. for personal protection
d. only at the chillers

_____ 5. Ambient temperature is ____.

a. the chilled water system temperature
b. the hot water system temperature
c. 212 degrees
d. the temperature of the air surrounding a body

_____ 6. Chilled water cannot connect to _____.

a. air handling equipment
b. room fan coil
c. induction units
d. a hot water heater

_____ 7. Condenser water piping ____.

a. reduces the volume of water
b. transfers heat
c. cools the environment
d. is usually copper tubing

_____ 8. Hot water heaters are fueled by _____.

a. the chilled water system
b. nuclear power
c. solar power
d. electricity or gas

_____ 9. Hot water systems operate around _____.

a. 160-180 degrees
b. 200-225 degrees
c. 110-150 degrees
d. ambient temperature

_____ 10. Dual-temperature systems _____.

a. are insulated for personal protection
b. are insulated only for hot service
c. are completely insulated including a vapor barrier
d. do not require insulation

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NOTE ON PERFORMANCE PROFILE TESTING

Performance Profiles are included in this Instructor's Guide in a format that can be easily photocopied for each trainee. The Profiles measure trainee competency in the tasks taught in this module.

Please note the number of tasks to be tested while teaching this module. Each trainee should be tested on the tasks listed in the Performance Profile. Before the performance testing, the instructor should brief the trainees on:

- test objectives and criteria,
- safety precautions, and
- procedures for each task to be tested.

The instructor administering the performance testing should also do the following:

- ensure that all of the needed equipment is available and operating properly;
- set up the testing stations;
- organize and administer the test in a way that allows for optimal performance;
- complete the Performance Profile Sheet for each trainee by assigning a score for each listed task;
- monitor adherence to all safety regulations and precautions;
- provide adequate supervision to prevent injuries; and
- take immediate and effective action to remedy any emergency.

ACCREDITATION TESTING

If this Performance Profile Testing is done in the National Center for Construction Education and Research Standardized Craft Training Program, the following conditions must be met:

1. The Craft Instructor must hold valid NCCER instructor certification.
2. The training must be delivered through a Training Program Sponsor recognized by the NCCER.
3. For every module, the specific performance testing must be completed to the satisfaction of the instructor.
4. The results of the testing must be recorded on the Craft Training Report Form. This form must be provided to the local Training Program Sponsor to be forwarded to the NCCER National Craft Training Registry.

Craft: Insulating

Task Module Number: 19210

Task Module Title: Chilled and Hot Water Heating Systems

TRAINEE NAME: _____

TRAINEE SOCIAL SECURITY NUMBER: _____

CLASS: _____

TRAINING PROGRAM SPONSOR: _____

_____

INSTRUCTOR: _____

Rating Levels: 1. Passed: performed task.

2. Failed: did not perform task.

Recognition: When testing for the NCCER Standardized Craft Training Program, be sure to record Performance Profile testing results on Craft Training Report Form 200 and submit the results to the Training Program Sponsor.

TASK	RATING
1. Identify the systems that have been covered in this module in an actual equipment room	

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Answer Key to Module Examination

Answer	Section
1. d	2.0.0
2. a	2.0.0
3. b	2.0.0
4. b	2.0.0
5. d	2.0.0
6. d	2.0.0
7. b	3.0.0
8. d	4.0.0
9. a	4.0.0
10. c	5.0.0