MASSACHUSETTS VOCATIONAL TECHNICAL TEACHER TESTING

PROGRAM SCOPE OF TEST CODE # 5 – BUILDING & PROPERTY

MAINTENANCE WRITTEN EXAM – 100 QUESTIONS

TIME ALLOWED: 3 HOURS

PERCENT OF TEST:

9% Building Alteration, Preparatory Painting and Repair of Wood Plaster, Concrete or Brick
12% Building Maintenance
11% Building Repair Materials
5% Energy Efficiency and Green Building Technology
10% Heating, Ventilation and Air Conditioning Troubleshooting
16% Landscaping and Grounds Maintenance
6% Building & Property Maintenance Related Mathematics
5% Painting and Finishing
3% Record Keeping
7% Safety
5% Technical Drawings and Blueprints
11% Tool and Equipment Use

THE INTENT OF THIS EXAM IS TO ASSESS YOUR ABILITY TO TEACH THE SKILLS FOUND IN THE MASSACHUSETTS VOCATIONAL TECHNICAL EDUCATION BUILDING & PROPERTY MAINTENANCE FRAMEWORK. ALL EXAMS ARE ALIGNED WITH THE MATCHING FRAMEWORK.

SOME QUESTIONS REQUIRE A SYNTHESIS OF KNOWLEDGE BASED ON EXPERIENCE IN THE FIELD AND MAY NOT BE FOUND IN ANY BOOK. HOWEVER, CANDIDATES ARE ENCOURAGED TO STUDY FOR THEIR EXAMS BY REVIEWING CURRENT TEXTBOOKS AND REFERENCE MATERIAL WHICH CAN USUALLY BE FOUND IN THE LIBRARIES OF MOST VOCATIONAL TECHNICAL SCHOOLS AND SCHOOLS WHICH OFFER CHAPTER 74 PROGRAMS. YOU MAY ALSO BE ABLE TO OBTAIN LISTED REFERENCE MATERIALS ONLINE.

You may refer to http://www.doe.mass.edu/cte/frameworks for the Massachusetts Vocational Technical Educator Frameworks.
THE FOLLOWING LIST OF REFERENCE MATERIALS WAS DEVELOPED AS A GUIDE FOR WRITTEN EXAM CANDIDATES:

HOME REPAIR AND MAINTENANCE by Jack M. Landers
Goodheart-Wilcox Co., Inc. (ISBN # 0-87006-569-6)

MODERN CARPENTRY by Willis H. Wagner
Goodheart-Wilcox Co., Inc. (ISBN # 0-87006-875-X)

MASONRY SKILLS by R. T. Kreh, Sr.

BASIC CONSTRUCTION BLUEPRINT READING by Mark W. Huth
Delmar Publishers, Inc. (ISBN # 0-8273-3233-5)

FUNDAMENTALS OF CARPENTRY TOOLS, MATERIALS AND PRACTICES by Durbahn and Putnam
LOW PRESSURE BOILERS by Frederick Steingross
NEW GARDEN BOOK by Better Homes and Gardens

HORTICULTURE GARDNER’S DESK REFERENCE by Anne Moyer Halpin
John Wiley & Sons Inc

GARDEN DOCTOR by Better Homes and Gardens
Better Homes and Gardens

SCOTTS LAWNS: YOUR GUIDE TO A BEAUTIFUL YARD by Nick Christmas and Ashton Ritchie
Meredith Books

AMERICAN HORTICULTURE SOCIETY GARDENING MANUAL by American Horticulture Society
Dorling Kindersley Publishing, Inc.

LANDSCAPE DESIGN, CONSTRUCTION AND MAINTENANCE by Biondo and Schroeder
Boston MA Pearson

CONSTRUCTION AND BUILDING TECHNOLOGY by Blankenbaker
Goodheart-Wilcox, Inc.
The written exam consists of 100 multiple choice questions. Each question consists of one incomplete sentence or a question followed by four choices. Listed below are several sample items:

The size of a portable drill is determined by:

a. horsepower of the motor.
b. highest rpm capability.
c. length of the drill body.
d. capacity of the chuck.

The three numbers on a bag of fertilizer always represent:

a. Nitrogen, phosphate and potash in that order.
b. Nitrogen, lime and potash in that order.
c. Nitrogen, potash and phosphate in that order.
d. Potash, lime and nitrogen in that order.

* indicates correct answer

THE TEACHER TESTING PROGRAM WILL PROVIDE NON-PROGRAMMABLE CALCULATORS FOR USE IN COMPLETING THE WRITTEN EXAM. DOCUMENTATION REGARDING THESE CALCULATORS WILL BE INCLUDED IN YOUR ADMISSION PACKAGE.
MASSACHUSETTS VOCATIONAL TECHNICAL TEACHER TESTING PROGRAM

SCOPE OF TEST CODE #5 – BUILDING & PROPERTY MAINTENANCE

PERFORMANCE EXAM

TIME ALLOWED: 5 HOURS

PERCENT OF TEST:

21% Outdoor Power Equipment Basic Repairs
   • Install Head, Gap Sparkplug, Sharpen Mower blade, Identify small engine components

23% Building Maintenance Skills
   • Maintain hand & power tools, maintain heating system, troubleshoot a HVAC common Problem

46% Building Repair and Alteration
   • Construct basic window frame, prepare door jamb, install hinge, repair drywall

10% Safety
   • Candidates will be assessed on the use of appropriate PPE, industry & OSHA recommended safety procedures, tool use and cleanliness.

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PERFORMANCE EXAM CANDIDATES WILL BE ASSESSED ON THEIR COMPLETION OF THE EXAM TASKS AND THEIR DEMONSTRATION OF INDUSTRY AND OSHA RECOMMENDED SAFETY PROCEDURES.

Most exam tasks require a synthesis of knowledge based on vocational technical work experience. As a result we highly recommend that Performance Exam Candidates possess the required years of related work experience as well as the appropriate industry recognized credentials as outlined as requirements for preliminary vocational technical educator licensure. Candidates are also encouraged to prepare for their exams by reviewing current textbooks and reference material which can usually be found in the libraries of most Vocational Technical Schools and Schools which offer Chapter 74 Programs. You may also be able to obtain listed reference materials online.
CANDIDATE IS RESPONSIBLE FOR THE FOLLOWING:

SAFETY GLASSES

APPROPRIATE WORK ATTIRE **MUST** BE WORN AT ALL TIMES DURING THE EXAM.

ALL NECESSARY TOOLS WILL BE AVAILABLE HOWEVER CANDIDATES ARE ALLOWED TO BRING ANY PERSONAL TOOLS, ETC. THAT HE/SHE FEELS WILL ASSIST HIM/HER IN COMPLETING THE EXAM.

THE FOLLOWING LIST OF REFERENCE MATERIALS WAS DEVELOPED AS A GUIDE FOR PERFORMANCE EXAM CANDIDATES:

- Safety Orientation NCCER, Person Prentice Hall
  - [www.crafttraining.com](http://www.crafttraining.com)
- [www.osha.gov](http://www.osha.gov) Go to Regulations, select sections:
  - 1910.1200 - Hazard Communication
  - 1910 Subpart I - Personal Protective Equipment

You may refer to [http://www.doe.mass.edu/cte/frameworks](http://www.doe.mass.edu/cte/frameworks) for the Massachusetts Vocational Technical Educator Frameworks.

CANDIDATES ARE REMINDED THAT THE USE OF A CALCULATOR IS ALLOWED FOR THE PERFORMANCE EXAM PROVIDING YOU BRING YOUR OWN.