

MASSACHUSETTS VOCATIONAL TECHNICAL TEACHER TESTING PROGRAM

SCOPE OF TEST CODE # 2 AUTOMOTIVE COLLISION REPAIR AND REFINISHING

WRITTEN EXAM - 100 QUESTIONS

TIME ALLOWED: 3 HOURS

PERCENT OF TEST:

20% Health and Safety

- Health and Safety Regulations and Practices
- High Pressure Systems
- Electrical Circuits
- Tools
- Refinishing Operations

5% Measuring Procedures & Power Tools

- Measuring Tools and Gauges
- Pneumatic and Electric Powered Tools

8% Structural Damage

- Set-up and Measure Structural Damage

20% Cutting and Welding

- Weldable and Non-Weldable Materials
- Cutting and Welding Processes and Equipment
- Set-up Welding Equipment
- Prep Metal and Work Area
- Test Welds
- Welding Problems

25% Repair Plan

- Wash Vehicle
- Develop Repair Plan
- Exterior Panel Cosmetic Repair

4% Mechanical and Electrical Components

- Suspension and Braking Components
- Electrical Systems Components

6% Plastics and Adhesives

- Types of Plastics used in Vehicles

10% Automotive Refinishing

- Mix and Apply Undercoats
- Dry or Wet Sand and Clean Area
- Blend a Panel
- Panel Refinishing
- Repair Paint Problems

2% Final Detail

THE INTENT OF THIS EXAM IS TO ASSESS YOUR ABILITY TO TEACH THE SKILLS FOUND IN THE MASSACHUSETTS VOCATIONAL TECHNICAL EDUCATION 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 PREPARE FOR THEIR EXAMS BY REVIEWING TEXTBOOKS AND REFERENCE MATERIAL WHICH HAS BEEN LISTED AS PART OF THIS EXAM OUTLINE. THESE RESOURCES CAN BE FOUND USING ONLINE SEARCH TOOLS, ONLINE VENDORS AND WEBSITES. CONTACT THE VOCATIONAL TECHNICAL TEACHER TESTING OFFICE IF YOU NEED FURTHER ASSISTANCE IN LOCATING RESOURCES LISTED IN THE EXAM OUTLINE. USE THE EXAM OUTLINE AND THE MA VOCATIONAL TECHNICAL EDUCATION FRAMEWORKS TO FOCUS YOUR PREPARATION FOR THE EXAM.**

You may refer to <http://www.doe.mass.edu/ccte/cvte/> for the Massachusetts Vocational Technical Educator Frameworks.

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

AUTO BODY REPAIR by Robert Scharff Delmar Publishing Inc. for MOTORS

MOTORS ESTIMATING CRASH GUIDES

CHIEF E-Z LINER Curriculum Guide

ESTIMATING FOR COLLISION REPAIR by Michael Crandell Delmar Publisher

YOU MAY WANT TO CHECK WITH YOUR LOCAL LIBRARY FOR OBTAINING THESE RESOURCES THROUGH THE INTERLIBRARY LOAN PROGRAM.

The written exam consists of 100 multiple choice questions. Each question consists of one incomplete sentence or a questions followed by four choices. Listed below are several sample items:

When installing a deck/trunk lid technician A aligns the sides first and technician B aligns the front edge first. Which technician is correct?

- * a. Technician A
- b. Technician B
- c. Both Technician A and B
- d. Neither Technician A or B

Technician A uses a supplied air respirator when spraying activated products. Technician B used an organic vapor respirator to spray non activated products. Which technician is correct?

- * a. Technician A
- b. Technician B
- c. Both Technician A and B
- d. Neither Technician A or B

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 # 2 AUTOMOTIVE COLLISION REPAIR AND REFINISHING

PERFORMANCE EXAM

TIME ALLOWED: 4 HOURS

PERCENT OF TEST:

17% DAMAGE APPRAISAL REPORT

- Analyze damage
- Use crash book or CCC Computerized Program
- Prepare a formal damage report
- Complete list of parts and materials needed
- Compile detailed list of labor operations

28 %REPAIRING DAMAGED PANEL

- Preparation of damaged panel
- Perform metal straightening and finishing on damaged panels
- Use body tools and equipment
- Use body filler/polyester putty
- Finish the damaged area to it's original contour(s) and primer ready

23 % REFINISHING

- Prepare surface
- Prepare panel for undercoat application
- Apply undercoat
- Prepare undercoats for topcoat application
- Apply topcoats

17 % STRUCTURAL DAMAGE

- Mark Out Cut Lines
- Tram Gauge – Cross Measure

10 % WELDING

- Set up and MIG Weld Steel

5 % SAFETY

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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.

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CANDIDATE IS RESPONSIBLE FOR THE FOLLOWING:

Safety Glasses
Appropriate Working Attire
Appropriate Work Shoes - No Sneakers
Spray Respirator
Spray Gun
Pen and/or pencil
Calculator

ADDITIONAL NOTES:

Due to unforeseen problems extra time, not to exceed ½ hour, will be allotted.

Candidate may leave if test is completed prior to 4 hours.

A break will be allowed.

Safety rules are expected to be industrial and OSHA safety standards.

IF SAFETY RULES ARE NOT OBSERVED,

EXAMINER WILL STOP THE TEST AT THAT AREA OF TESTING.

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

Safety Orientation NCCER, Person Prentice Hall www.crafttraining.com

www.osha.gov

Go to Regulations, select sections:

[1910.1200 - Hazard Communication](#)

[1910 Subpart I - Personal Protective Equipment](#)

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

UPDATED: 12/2018 lmb