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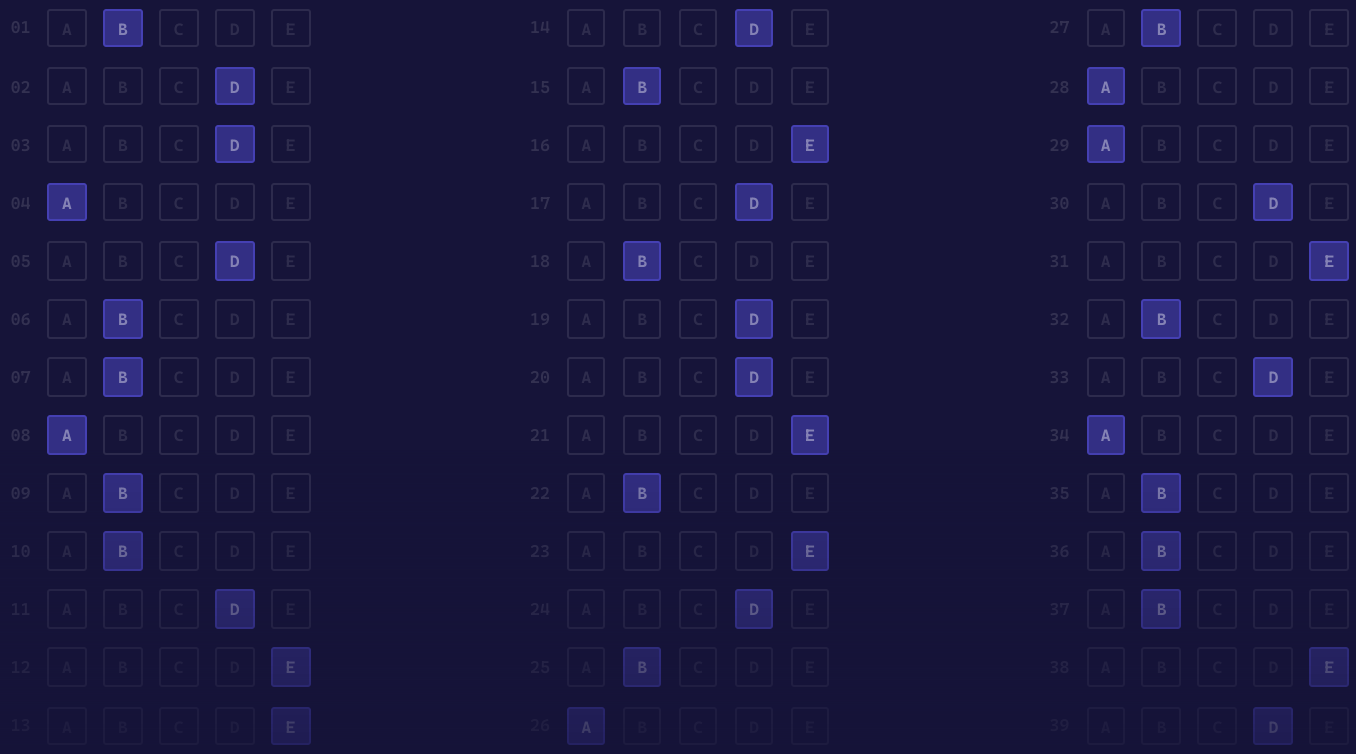

PRACTICE QUESTIONS

CA Division of Labour Standards Enforcement

RZH7TLXP

CA Voice Data Video Technician (Renewal)

EDITION	QUESTIONS	FORMAT
Demo	9	Limited Edition PDF

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Before you begin

What this is

9 practice questions for CA Division of Labour Standards Enforcement `RZH7TLXP`, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, `RZH7TLXP`
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

QUESTION 1 SINGLE CHOICE

Under the National Electrical Code, which article covers the installation of communications circuits, including telephone, telegraph, and data circuits?

A Article 300

B Article 725

C **Article 800**

D Article 820

ANSWER C

WHY Article 800 of the NEC covers Communications Circuits, which includes telephone, telegraph, data, and similar low-voltage communication systems. Article 300 covers general wiring methods, Article 725 covers Class 2 and Class 3 remote-control, signaling, and power-limited circuits, and Article 820 covers Community Antenna Television (CATV) and radio distribution systems.

QUESTION 2 SINGLE CHOICE

Which listing marking indicates a communications cable that is suitable for use in plenums, meeting the requirements for fire and smoke characteristics under the NEC?

A CM

B CMR

C **CMP**

D CMX

ANSWER C

WHY CMP (Communications Plenum) cables are listed for use in plenums and other spaces used for environmental air, and they meet stringent fire and smoke performance requirements. CM (Communications) is the general-use listing, CMR (Communications Riser) is listed for riser applications between floors, and CMX (Communications Limited Use) is for residential or restricted-use applications.

QUESTION 3 SINGLE CHOICE

Per NEC Article 800, the grounding conductor for a communications system must be connected to which of the following?

A Any convenient metallic water pipe

B The building grounding electrode system or an acceptable grounding electrode

C The neutral conductor of the nearest 120V branch circuit

D A separate ground rod driven only for the communications system

ANSWER B

WHY NEC Article 800.100 requires the grounding conductor of a communications system to be connected to the building's grounding electrode system, an accessible location on the building grounding electrode system, or to an accessible grounding electrode. Connection only to a water pipe is not permitted as the sole means, and the neutral conductor cannot serve as the equipment grounding conductor for these systems.

QUESTION 4 SINGLE CHOICE

When communications cables are run in the same raceway or enclosure with electric light, power, or Class 1 circuits, the NEC requires which condition to be met?

A The communications cables must be shielded with a continuous metallic armor bonded at both ends.

B All conductors must be separated by a permanent barrier or a listed divider.

C The voltage on the power conductors must not exceed 150 volts to ground.

D Communications cables must always be run in a separate conduit regardless of barrier use.

ANSWER B

WHY NEC 800.133(A)(1)(b) allows communications cables to be in the same raceway or enclosure with electric light, power, or Class 1 circuits only when the conductors are separated by a permanent barrier or listed divider. Without this barrier, the cables must be in separate raceways or enclosures.

QUESTION 5 SINGLE CHOICE

Which NEC article specifically covers coaxial cable distribution systems such as community antenna television (CATV) and radio distribution systems?

A Article 645

B Article 725

C Article 800

D Article 820

ANSWER D

WHY Article 820 covers Community Antenna Television (CATV) and Radio Distribution Systems, including coaxial cable installations. Article 800 covers general communications circuits, Article 645 covers Information Technology Equipment, and Article 725 covers Class 2 and Class 3 power-limited circuits.

QUESTION 6 SINGLE CHOICE

Under NEC Article 725, what is the maximum voltage and current permitted for a Class 2 power-limited circuit when supplied by a listed Class 2 transformer or power supply?

A 30 volts and 1500 volt-amperes

B 150 volts and 100 volt-amperes

C 300 volts and 5 amperes

D 50 volts and 5 amperes

ANSWER A

WHY NEC Table 11(A) and related provisions establish that a Class 2 circuit is limited to a maximum of 30 volts (rms) and 1500 volt-amperes, or alternatively to lower current and VA limits depending on the application. Class 2 circuits are considered inherently safe due to their limited power capacity.

QUESTION 7 SINGLE CHOICE

For a typical residential voice/data/video structured wiring installation, which type of cable is most commonly required by current standards for a Category 6 (or higher) horizontal run?

A **Unshielded twisted pair (UTP) listed as CMX or higher**

B Coaxial cable with a Type F connector

C Multi-conductor thermostat wire

D Standard lamp cord (Type SPT)

ANSWER A

WHY Modern residential and commercial structured wiring uses unshielded twisted pair (UTP) cables such as Category 6 or Category 6A, listed for the appropriate environment (CMX for residential/limited use, or CM/CMR/CMP for commercial applications). Lamp cord and thermostat wire do not meet data-grade signaling requirements, and coaxial cable serves different applications such as video distribution.

QUESTION 8 SINGLE CHOICE

Per NEC 800.100(A)(4), the primary protector grounding conductor for a communications system shall be as short as practicable and, in one- and two-family dwellings, shall not exceed what length?

A 10 feet

B **20 feet**

C 30 feet

D 50 feet

ANSWER B

WHY NEC 800.100(A)(4) specifies that in one- and two-family dwellings, the grounding conductor from the primary protector to the grounding electrode shall not exceed 20 feet. The intent is to keep the grounding conductor short so that surges can be effectively dissipated.

QUESTION 9 SINGLE CHOICE

When a communications system enters a building, what is the NEC requirement regarding bonding of the communications grounding electrode system to the building's power grounding electrode system?

A No bonding is required if the two systems are isolated.

B **The communications grounding electrode must be bonded to the building power grounding electrode system with a minimum 6 AWG copper bonding jumper.**

C Bonding is required only when the building has a metal water pipe.

D A bonding jumper of 14 AWG copper is sufficient for all installations.

ANSWER B

WHY NEC 800.100(D) requires that the grounding electrode conductor of a communications system be bonded to the building's power grounding electrode system, the building grounding electrode system, or to a grounded conductor of the power system using a bonding conductor not smaller than 6 AWG copper (or equivalent). This bonding is critical to minimize potential differences between the two systems and provide a common reference point for surge protection.