

# Fire Service Electrical Fitter Trade Test Written Test Mock Paper

( Version : EFE-WM-EN-01 )



此文件關於消防電氣裝配工技能測試（大工）技術知識測試（筆試）模擬試題。  
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1. Fire service installations belong to which category in the Code of Practice for the Electricity (Wiring) Regulations?
  - a. Category 3 circuit
  - b. Category 1 circuit
  - c. Category 2 circuit
  - d. Category 4 circuit
2. Smoke detectors should be positioned at a level of not more than how many millimeters from the ceiling?
  - a. 1,200
  - b. 1,000
  - c. 800
  - d. 600
3. When drilling cast iron (pig iron) work pieces, which of the followings should be added at the drilling position:
  - a. Dry cutting is most suitable
  - b. Cutting fluid mixed with water
  - c. Vegetable oil
  - d. Kerosene
4. After sawing, the sharp bur on the steel conduit should be removed with:
  - a. A thin steel sheet
  - b. A saw blade
  - c. A flat file
  - d. A conical reamer
5. A set of multiple manual (break glass) fire alarm systems is connected by red and black conductors. An end point detector is installed to check it before connecting to control panel. Why does the measurement by multimeter show infinite resistance (ohm) value when it is connected to the conductors?
  - a. Short circuit, or some of the devices are incorrectly connected causing a short circuit
  - b. The red and black line conductors of one of the devices are swapped
  - c. The resistance at the wire-end resistor is too small
  - d. Open circuit, or some devices improperly connected causing an open circuit, or wrongly used wire-end resistor with high resistance
6. When the power of the motors in a sprinkler pump, a fire installation powered by non-overhead line sprinkler pump from electricity suppliers, ranges from 11 kilowatts to 55 kilowatts, which of the following electricity-controlled starting methods should be used?
  - a. Current voltage increase start
  - b. Transformer voltage reduction start
  - c. A direct start
  - d. A star-delta start

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7. When the heat or the heat detector is taken away from the wiring in a traditional fire alarm, what will the alarm display?
  - a. Display only the faults in the zone in which the detector is installed
  - b. No display whatsoever
  - c. Display malfunctioning of the alarm
  - d. Display the number and detailed location of the detector
8. Which of the followings is not a linking function that should exist after activating a manual fire alarm system (break glass)?
  - a. Show the current zone
  - b. Activate the alarm or blinking lights
  - c. Activate the water pump
  - d. Turn on the "EXIT" sign
9. The commonly used resistor for fire protection system is  $510\Omega$ . The colour code of this resistance should be in the following colours:
  - a. Green-brown-brown
  - b. Brown-brown-green
  - c. Brown-green-brown
  - d. Green-brown-black
10. The end point resistor circuit in a fire protection circuit is abbreviated as:
  - a. LEO
  - b. OEL
  - c. ELO
  - d. EOL
11. Which of the followings is the formula for the correct calculation of power in single-phase AC?
  - a.  $P = VI \cos\Phi$
  - b.  $P = VI \sin\Phi$
  - c.  $P = VI \cos\Phi$
  - d.  $P = VI \tan\Phi$
12. In a three-phase four-wire circuit that supplies electricity to a fire pump, how much voltage should the phase wire (live wire) have on the neutral wire (the 'zero' wire)?
  - a. 380V
  - b. 346V
  - c. 110V
  - d. 220V
13. The pump control board of a common fire installation must not be installed with which of the following devices?
  - a. Overcurrent relay
  - b. Manual starter
  - c. Fuse switch device
  - d. Phase selector
14. It is best to select which of the followings for the wiring connecting heat detectors in a town gas meter room?
  - a. A low-smoke and non-toxic cable
  - b. A PVC armoured copper cable
  - c. A PVC armoured aluminium cable
  - d. A metallic sheathed cable (MICC Cable)

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15. Which of the followings helps in the rapid identification of the number of zones in the automatic fire alarm system?
- Automatic fire alarm system diagram
  - A detailed drawing of the fire control centre
  - Fire service installation system map
  - Automatic fire alarm system plan
16. When installing extra-low voltage circuits for fire alarm systems, one of the followings is correct:
- It cannot be installed with the power cable in the same conduit
  - Use a plastic electric conduit in external walls
  - No attention to safety is required as the voltage is super low
  - Fire retardant plastic wires must be used
17. What is the minimum amount of "advantage" as stated in Prevention of Bribery Ordinance?
- \$100
  - \$200
  - \$500
  - No limited amount
18. A person should be serious at work and should uphold work ethics, including:
- Appropriation of other's property
  - Craving for personal interest and neglecting the damages dealt to others
  - Accepting money and other advantages
  - Integrity, be honest and responsible, keep moral principles. Never corrupt and accept illegal advantage.
19. When lifting heavy objects, which of the following methods is correct?
- Correct posture should be used. Workers should remain upright in their back.
  - Ask for a heavier load each time to hasten the process
  - Throw the object to higher places to strengthen the body
  - Hasten the speed of work suddenly
20. What may happen if working under hot and humid environments for a long period?
- Heat stroke
  - Temporary blindness
  - Hunger
  - Anaemia

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