

## HONG KONG CONSTRUCTION INDUSTRY TRADE TESTING CENTRE 香港建造業工藝測試中心

# Control Panel Assembler Trade Test Written Test Mock Paper

( Version: EEP-WM-EN-01)



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- Which of the following fits the definition of 2. extra-low voltage in the Factories and Industrial Undertakings (Electricity) Regulations?
  - The voltage between individual conductors does not exceed 120V direct current
  - b. The voltage between individual conductors does not exceed 1,200V direct current
  - c. The voltage between individual conductors exceeds 120V direct current
  - d. Power comes from batteries
- 3. The size of a screwdriver is based on:
  - a. The length of the shank
  - b. The length of the handle
  - c. The diameter of the handle
  - d. The total length of the entire screwdriver
- 5. According to Electricity Supply Rules, single 6. phase motor which is connected to earthing system can be activated with direct-on-line starter in case of less than \_\_\_\_\_ kW.
  - a. 11
  - b. 3.8
  - c. 1.5
  - d. 2.2

- 2. Why can't a fuse be installed on the secondary side of the current transformer?
  - a. When the fuse has been blown, the secondary winding will produce dangerous voltage
  - It is often used in a separate partition in the switch cubicle and hence there is not enough space
  - When the current is too high, fuse can restrict current which cause secondary current inaccurate
  - d. Since the internal resistance in the fuse is quite high, installing it will reduce the burden
- 4. The range for an electro probe is:
  - a. 500 1,000V
  - b. 24 50V
  - c. 3 24V
  - d. 100 500V
- 6. To measure voltage by Volt Meter, the connection relationship of Loading and Volt Meter should be:

Version: EEP-WM-EN-01

- a. Any connection
- b. In series and parallel
- c. In series
- d. In parallel

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## **Control Panel Assembler Trade Test** Written Test Mock Paper (Con't)

- Normal Open (N.O.) contact for electric 8. 7. relay is:
  - Open when electric relay cut-off of a. power
  - Open at all time b.
  - Open when electric relay with power c.
  - Close at all time d.
- three-phase motor is L1 L2 L3, in order to change the running direction, the sequence of wiring should be:
  - L2 L1 L3a.
  - L1 L2 L3b.
  - L2 L3 L1c.
  - L3 L1 L2
- 11. In addition to overload relay, why is fuse 12. Concerning the internal winding, the also necessary in the controlled circuit of motor?
  - The time/ current characteristics of a. the overload relay are very poor, and a fuse is required to coordinate and differentiate operation
  - b. Overload relay is to provide overcurrent protection and fuse is to provide low-voltage protection
  - c. The stability of overload relay is low, therefore a fuse is required as a backup
  - Overload relay prevents device from overloading and fuse provides shortcircuit protection

- Which of the following has the lowest resistance at the connection point of a motor?
  - a. All electrical resistance are the same
  - b. Running (R) and Common (C)
  - Starting (S) and Running (R) c.
  - d. Starting (S) and Common (C)
- Provided that the power sequence of a 10. In a star delta starter with high power, what protective equipment should be installed between the star and delta magnetic contactors?
  - a. Electric and mechanical interlocks
  - b. **Synchro**
  - c. Sequencing selector
  - Automatic sequencing selector d.
  - function of the star delta starter of threephase induction motor is:
    - Increase the starting voltage, so as to increase the starting current and reduce voltage dip
    - b. Reduce the starting voltage, so as to increase the starting current and starting torque
    - Increase the starting voltage, so as to c. reduce the starting current and amplify the starting torque
    - Lower the starting voltage, so as to reduce the starting current and voltage dip

Version: EEP-WM-EN-01

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- 13. If the full load current of a three-phase 14. If a three-phase four-pole induction motor induction motor is 10 amperes (A), how much ampere(s) (A) should be set for the overload relay of the phase current?
  - a.
  - b. 6
  - c. 10
  - d. 17
- 15. Which of the following motor starters is 16. For most star delta starter of three-phase activated with full voltage?
  - Direct online starter a.
  - b. Star starter
  - Autotransformer starter C.
  - d. Static state starter

- is connected to a 50Hz power supply, the synchronous speed should be:
  - 3,600 rpm a.
  - 3,000 rpm b.
  - 1,800 rpm c.
  - d. 1,500 rpm
  - induction motor, what would happen if the time setting of starting is too long?
    - The motor will be overloaded
    - The torque after activating the motor is insufficient
    - The starting current of motor is very c.
    - d. The starting torque of motor will be insufficient
- "advantage" as stated in Prevention of Bribery Ordinance?
  - \$100 a.
  - \$200 b.
  - \$500 c.
  - No limited amount d.
- 17. What is the minimum amount of 18. A person should be serious at work and should uphold work ethics, including:
  - Appropriation of other's property a.
  - Craving for personal interest and neglecting the damages dealt to others
  - Accepting money and other C. advantages
  - d. Integrity, be honest and responsible, keep moral principles. Never corrupt and accept illegal advantage.

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- 19. When lifting heavy objects, which of the 20. What may happen if working under hot and following methods is correct?
  - Correct posture should be used. Workers should remain upright in their back.
  - Ask for a heavier load each time to b. hasten the process
  - Throw the object to higher places to c. strengthen the body
  - d. Hasten the speed of work suddenly

- humid environments for a long period?
  - Heat stroke a.
  - b. Temporary blindness
  - Hunger
  - d. Anaemia

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