

# Electrician

---

- The equivalent binary number to the decimal number '6' is  

<input type="radio"/> (A) 0110	<input type="radio"/> (B) 0101
<input type="radio"/> (C) 0010	<input type="radio"/> (D) 0011
- What does the term 'normally open contacts' mean?  

<input type="radio"/> (A) It means that the contacts are open a circuit.	<input type="radio"/> (B) It means that the contacts are open at all times.
<input type="radio"/> (C) It means that the contacts are open when the relay is energized.	<input type="radio"/> (D) It means that the contacts are open when the relay is de-energized.
- What type of drill does not require a cord with a ground connection?  

<input type="radio"/> (A) Die cast.	<input type="radio"/> (B) Resistance coated.
<input type="radio"/> (C) Low voltage.	<input type="radio"/> (D) Double insulated.
- What is the minimum size of single-conductor aluminum-sheathed cable that can be used for a consumer's service? (Refer Rule 6-304)  

<input type="radio"/> (A) #6 awg	<input type="radio"/> (B) #3 awg
<input type="radio"/> (C) #5 awg	<input type="radio"/> (D) #4 awg
- A synchronous motor has an excitation voltage of 125 volts with a maximum rotor current of 10 amperes. What is the resistance of the motor?  

<input type="radio"/> (A) 13.4 ohms	<input type="radio"/> (B) 11.5 ohms
<input type="radio"/> (C) 10.1 ohms	<input type="radio"/> (D) 12.5 ohms
- What is the current on the neutral conductor of a three-wire, 120/240 V circuit that carries 1200 W on phase A and 6000 W on phase B?  

<input type="radio"/> (A) 25A	<input type="radio"/> (B) 30A
<input type="radio"/> (C) 10A	<input type="radio"/> (D) 40A
- The correct way of soldering the resistor's leads etc. is :  

<input type="radio"/> (A) heat up the solder and apply the molten solder to the joint	<input type="radio"/> (B) apply solder before heating
<input type="radio"/> (C) heat up the joint and apply the solder	<input type="radio"/> (D) apply heat and solder simultaneously

## Electrician

---

8. Which cable to be used from Joint to Patch in Plenum for Cat5e wire?  
(Refer Table 19)
- (A) None of these (B) FCC  
(C) CMX (D) SOP
9. On a 12ohm resistor in series with three parallel resistors of 3ohms, 6ohms and 9ohms each, has the total resistance of which of the following?
- (A) 43.64 (B) 13.64  
(C) 8.46 (D) 28.9
10. What is required to start a rotary phase converter?
- (A) A WRIM is required to start a rotary phase converter. (B) A heavy inductive load is required to start a rotary phase converter.  
(C) Capacitors are required to start a rotary phase converter. (D) A resistive by-pass required to start a rotary phase converter.
11. What circuit class does a high temperature cutout in an auxiliary boiler need to be?
- (A) Class 1 (B) Class 3  
(C) Class 2 (D) Class 4
12. What effect on the current flow takes place on reversing the direction of movement of a conductor in the magnetic field of a generator ?
- (A) current flow is stopped (B) no effect takes place  
(C) the magnitude of current flow is decreased (D) The direction of current flow is reversed
13. A Wheat-stone Bridge is a series-parallel electrical bridge used to accurately measure resistances in the 1 to 100,000 ohm range.
- (A) false (B) 1 to 25,000 range  
(C) true (D) 1 to 50,000 ohm range
14. What is the approximate wattage of a 240-volt motor with a resistance of 28 ohms?
- (A) 2057 watts (B) 1780 watts  
(C) 1045 watts (D) 3640 watts

## Electrician

---

1093. Which of the following circuit breakers has high reliability and negligible maintenance ?

- (A) Vacuum circuit breaker                      (B) Air blast circuit breaker  
(C) Oil circuit breaker                              (D) Sulphur hexafluoride circuit breaker

1094. Electrolyte of a lead-acid battery is formed by adding :

- (A) water to sulphuric acid                      (B) sulphuric acid to water  
(C) water to hydrochloric acid                (D) hydrochloric acid to water

1095. A 100 Ah capacity battery should deliver a current of 8 A for approximately :

- (A) 100 h    (B) 20 h  
(C) 8 h     (D) 12 h

1096. An AC drive system with a tacho-generator is used to supply a feedback signal and to control a conveyor belt. This represents a Closed-loop control.

- (A) True  
(B) False

1097. Which of the following conductor types are permitted to be used in a non-ventilated cable tray in a Wet location? (Refer Table 19)

- (A) TECK90    (B) RA90  
(C) TW    (D) A-7A

1098. A characteristic of an auto-transformer is that it:

- (A) isolates the secondary load resistance from the primary supply                      (B) only steps up supply voltage  
(C) has primary and secondary current-flows sharing the same coil                      (D) only steps down supply voltage

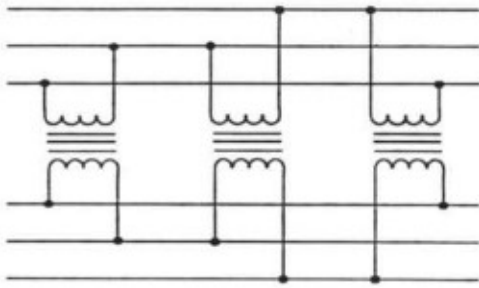
1099. A tachometer's output is calibrated in:

- (A) fps    (B) rpm  
(C) foot pounds                                    (D) cfm

## Electrician

---

1100.



The transformer connection illustrated in this figure is a:

- (A) star-delta                      (B) delta-delta  
(C) star-star                        (D) delta-star
1101. What do colour bands on a resistor indicate?  
(A) The current rating.                      (B) The voltage rating.  
(C) The resonance value.                      (D) The ohmic value.
1102. What is the maximum voltage rating of type MI Mineral-Insulated Cable? (Refer Table D1)  
(A) 1000 V                              (B) 300 V  
(C) 600 V                                (D) 750 V
1103. Which of the following is the voltage rating, temp rating and use of TEW equipment wire? (Refer Table 11)  
(A) 640V, 75degrees, wet location                      (B) 600V, 60degrees, wet location  
(C) 340V, 105degrees, hard usage                      (D) 600V, 105degrees, not for hard usage
1104. The D.C. motor works on the principle that the :  
(A) combined magnetic field set up by two current carrying conductors produces a force between them                      (B) magnetic field set up by varying current which produces force in the conductor  
(C) conductor moves when kept in a uniform magnetic field                      (D) current carrying conductor placed in a uniform magnetic field experiences a force on it