

QUIZ 54

TOPIC: ELECTRICAL ENGINEERING

1. The direction of rotation of a single-phase capacitor run induction motor is reversed

by

- [A] interchanging the terminals of the AC supply
- [B] interchanging the terminals of the capacitor
- [C] interchanging the terminals of the auxiliary winding
- [D] interchanging the terminals of both the windings

Answer: C

- A stand alone engine driven synchronous generator is feeding a partly inductive load.
 A capacitor is now connected across the load to completely nullify the inductive current. For this operating condition is
 - [A] the field current and fuel input have to be reduced
 - [B] the field current and fuel input have to be increased
 - [C] the field current has to be increased and fuel input left unaltered
 - [D] the field current has to be reduced and fuel input left unaltered

Answer: D





3. Starting torque can be obtained in the case of a single phase induction motor with identical main and auxiliary windings by connecting

- [A] a capacitor across the mains
- [B] a capacitor in series with the machine
- [C] a capacitor in series with the auxiliary winding
- [D] the main and the auxiliary windings in series

Answer: C

- 4. The type of single-phase induction motor having the highest power factor at full-load is
 - [A] shaded pole type
 - [B] split-phase type
 - [C] capacitor-start type
 - [D] capacitor-run type

Answer: D

- 5. If an induction machine is run at above synchronous speed, it acts as
 - [A] a synchronous motor
 - [B] an induction generator
 - [C] an induction motor
 - [D] none of the above

Answer: B





- 6. In amplitude modulation
 - [A] The amplitude of the carrier kept constant
 - [B] Change occurs in the carrier frequency
 - [C] Amplitude is varied according to the instantaneous value of modulating wave
 - [D] None of these

Answer: C

- 7. A moving iron type ammeter has few turns of thick wire so that
 - [A] Resistance is less
 - [B] Sensitivity is high
 - [C] Damping is effective
 - [D] Scale is large

Answer: A

- 8. Synchronous motor can be used for power factor improvement when it operates with
 - [A] Over excitation
 - [B] No excitation
 - [C] Normal excitation
 - [D] Under excitation

Answer: A





9. When compared with BJTs, MOSFETs have lesser turn-off time, enabling them to operate at high operating frequencies. What is the reason that can be attributed to that property?

- [A] The absence of minority storage charge in the MOSFETs
- [B] High input impedance of the MOSFETs
- [C] Positive temperature coefficient of the MOSFETs
- [D] smaller leakage current of MOSFETs

Answer: A

10. In the formation of Routh-Hurwitz array for a polynomial, all the elements of a row have zero values. This premature termination of the array indicates the presence of

- [A] Only one root at the origin
- [B] Imaginary roots
- [C] Only positive real roots
- [D] Only negative real roots

Answer: B

