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1. The direction of rotation of a synchronous motor can be reversed by reversing

A.Current to the field winding
B.Supply phase sequence
C.Polarity of rotor poles
D.None of the above

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B.Supply phase sequence
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2. In a synchronous motor, the magnitude of stator back e.m.f. E_b depends on

A.Speed of the motor
B.Load of the motor
C.Both the speed and rotor flux
D.D.C. excitation only

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D.D.C. excitation only
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3. The maximum value of torque angle a in a synchronous motor is ..... degrees electrical

A.45
B.90
C.Between 45 and 90
D.Below 60

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B.90
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4. If the field of a synchronous motor is under excited, the power factor will be

A.Lagging
B.Leading
C.Unity
D.More than unity

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A.Lagging
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5. The V-curves of a synchronous motor show relationship between

A.Excitation current and back e.m.f
B.Field current and p.f.
C.D.C. field current and A.C. armature current
D.Armature current and supply voltage

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C.D.C. field current and A.C. armature current

6. The effect of increasing load on a synchronous motor running with normal excitation is to

A.Increase both its I_a and p.f.
B.Decrease I_a but increase p.f.
C.Increase I_a but decrease p.f.
D.Decrease both its I_a and p.f.

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C.Increase I_a but decrease p.f.
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7. When load on a synchronous motor is increased, its armature currents in increased provided it is

A.Normally-excited
B.Over-excited
C.Under-excited
D.All of the above

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D.All of the above
✍ Your Comments

8. When load on a synchronous motor running with normal excitation is increased, armature current drawn by it increases because

A.Back e.m.f. E_b becomes less than applied voltage V
B.Power factor is decreased
C.Net resultant voltage E_R in armature is increased
D.Motor speed is reduced

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C.Net resultant voltage E_R in armature is increased
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9. When running under no-load condition and with normal excitation, armature current I_a drawn by a synchronous motor

A.Leads the back e.m.f.E_b by a small angle
B.Is large
C.Lags the applied voltage V by a small angle
D.Lags the resultant voltage E_R by 90^0

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C.Lags the applied voltage V by a small angle
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10. When load on a normally-excited synchronous motor is increased, its power factor tends to

A.Approach unity
B.Becomes increasingly lagging
C.Becomes increasingly leading
D.Remain unchanged

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B.Becomes increasingly lagging