

Question Bank

Subject: - ACM.

Subject Code: -17511.

The shaft of an induction motor is made of

- a. Stainless steel
- b. Carbon steel
- c. Cast iron
- d. Aluminium

The starting torque of a squirrel-cage induction motor is

- a. Full-load torque
- b. Slightly more than full-load torque
- c. Low
- d. Negligible

The term 'cogging' is associated with

- a. Three-phase transformer
- b. Compound Generator
- c. Induction motor
- d. D.C series motor

A 50 Hz, 3-phase induction motor has a full load speed of 1440 R.P.M. The number of poles in the motor is

- a. 2 pole
- b. 4 pole
- c. 6 pole
- d. 8 pole

Which of the following motor has high starting torque?

- a. Slip ring Induction motor
- b. Squirrel cage induction motor
- c. Both 1 & 2
- d. None of the above

At standstill condition the value of slip is

- a. Zero
- b. Infinity
- c. One
- d. None of the above

Measurement of slip of three phase induction motor by

- a. Tachometer method.
- b. Compare stator frequency with rotor frequency.
- c. Stroboscopic meter method.
- d. All of the above.

No load test of 3-phase induction motor used to determine

- a. Variable loss
- b. Constant loss
- c. Eddy current loss only
- d. Hysteresis loss only

<p>The efficiency of an induction motor is about</p> <ol style="list-style-type: none"> 100% 80-90% 50-60% Less than 50%
<p>The crawling in the induction motor is caused by</p> <ol style="list-style-type: none"> High Loads Low Voltage supply Harmonic developed in the motor Improper design of machine
<p>Rotor resistance speed control method is not applicable in</p> <ol style="list-style-type: none"> Slip Ring induction motor Squirrel cage induction motor Synchronous motor None of the above
<p>The speed of a squirrel cage induction motor is changed by</p> <ol style="list-style-type: none"> Cascade Connection Rheostat control Pole changing method Any of the above
<p>_____ Starter is used up to 05 HP three phase induction motors.</p> <ol style="list-style-type: none"> Star Delta Starters Auto transformer. Direct On Line Starter. All of the above.
<p>Cranes, Lifts, Crusher are the applications of</p> <ol style="list-style-type: none"> Three phase Induction Motors. D.C. Compound Motors D.C. Shunt Motor. All of the above.
<p>In an alternator zero power factor method is used to find the</p> <ol style="list-style-type: none"> Synchronous impedance Efficiency Armature resistance Voltage regulation
<p>High speed alternators usually have</p> <ol style="list-style-type: none"> Salient pole rotors Cylindrical rotors Both salient pole and cylindrical rotors None of these
<p>The main advantage of using fractional pitch winding in an alternator is to reduce</p> <ol style="list-style-type: none"> Amount of copper in the winding Size of the machine Harmonics in the generated EMF Cost of the machine
<p>The power factor of an alternator depends on</p> <ol style="list-style-type: none"> Load

<ul style="list-style-type: none"> b. Variable losses c. Core losses d. Armature losses.
<p>EMF Equation of Alternator is</p> <ul style="list-style-type: none"> a. $4.44 K_c K_d \phi f.T.$ volts. b. $4.44 K_b \phi T.$ volts. c. $1.11 K_p K_b \phi f.T.$ volts. d. All of the Above.
<p>High capacity generators are usually _____ cooled.</p> <ul style="list-style-type: none"> a. Hydrogen cooled. b. Fan cooled. c. Air cooled. d. All of the above.
<p>When a turbine drives an alternator, it is termed as _____.</p> <ul style="list-style-type: none"> a. Turbo Alternator. b. Synchronous motor. c. D.C. Motor. d. All of the above.
<p>The rating of an alternator is expressed in terms of _____.</p> <ul style="list-style-type: none"> a. KVA or MVA. b. Volts. c. Ampere. d. All of the above.
<p>Salient-pole synchronous generators normally operate at</p> <ul style="list-style-type: none"> a. Lower Speed. b. Normal Speed. c. Medium Speed. d. All of the above.
<p>For finding of voltage regulation of alternators by</p> <ul style="list-style-type: none"> a. Direct loading method b. Synchronous impedance method c. Ampere turns method d. All of the above.
<p>Practically, most of the alternators prefer which type of construction?</p> <ul style="list-style-type: none"> a. Rotating field type b. Rotating armature type c. Both are equally important d. None of these
<p>Condition for parallel operation of two alternators</p> <ul style="list-style-type: none"> a. Frequency Should be same. b. Voltage Level Should be same. c. Impedance should be same d. All of the above.
<p>Need of parallel operation is</p> <ul style="list-style-type: none"> a. To get more output power. b. To reduce power. c. To get reduce voltage d. None of the above.
<p>Following methods are used for synchronising of two alternators.</p> <ul style="list-style-type: none"> a. Dark Lamp method b. Bright Lamp method c. Synchronoscope meter method. d. All of the above.

The starting capacitor of a single phase motor is

- a. Electrolytic capacitor
- b. Ceramic capacitor
- c. Paper capacitor
- d. None of the above.

The motor used in household refrigerators is

- a. dc series motor
- b. dc shunt motor
- c. universal motor
- d. single phase induction motor.

For ceiling fans generally, the single-phase motor used is

- a. split phase type
- b. capacitor start type
- c. capacitor start and run type
- d. permanent capacitor type.

In a split phase motor

- a. Both starting and running windings are connected through a centrifugal switch
- b. Centrifugal switch is used to control supply voltage
- c. The running winding is connected through a centrifugal switch
- d. The starting winding is connected through a centrifugal switch

A capacitor start, capacitor run single phase induction motor is basically a

- a. ac series motor
- b. dc series motor
- c. 2 phase induction motor
- d. 3 phase induction motor.

A universal motor is one

- a. which can run on any value of supply voltage
- b. which has infinitely varying speed
- c. which can operate on ac as well as dc voltage
- d. which can work as single phase or three phase motor.

Induction Generator is used in

- a. Wind Power Plant.
- b. Thermal Power Plant.
- c. Geo thermal Power Plant.
- d. All of the above.

Negative Slip is present in _____ Machine.

- a. Induction Generator.
- b. D.C. Motor.
- c. Induction Motor.
- d. All of the above.

In A.C. series motor compensating winding is employed to

- a. Increase the torque
- b. Reduce the effect of armature reaction
- c. Reduce sparking in brushes
- d. Both b and c

Linear Induction Motor is operated in

- a. Horizontal direction.
- b. Rotating direction.
- c. No direction.
- d. None of the above.

Following is the motor whose direction of rotation is in steps.

- a. Stepper Motor.
- b. Synchronous Motor.
- c. Induction Motor.
- d. None of the above.

Which of the following motor is used in the mixer?

- a. Repulsion Motor
- b. Reluctance Motor
- c. Hysteresis Motor
- d. Universal Motor

In A.C. series motor compensating winding is employed to

- e. Increase the torque
- f. Reduce the effect of armature reaction
- g. Reduce sparking in brushes
- h. Both b and c

Linear Induction Motor is operated in

- e. Horizontal direction.
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- g. No direction.
- h. None of the above.

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- h. None of the above.

Which of the following motor is used in the mixer?

- e. Repulsion Motor
- f. Reluctance Motor
- g. Hysteresis Motor

h. Universal Motor
For ceiling fans generally, the single-phase motor used is <ul style="list-style-type: none"> e. split phase type f. capacitor start type g. capacitor start and run type h. permanent capacitor type.
In a split phase motor <ul style="list-style-type: none"> e. Both starting and running windings are connected through a centrifugal switch f. Centrifugal switch is used to control supply voltage g. The running winding is connected through a centrifugal switch h. The starting winding is connected through a centrifugal switch
A capacitor start, capacitor run single phase induction motor is basically a <ul style="list-style-type: none"> a. ac series motor b. dc series motor c. 2 phase induction motor d. 3 phase induction motor.
A universal motor is one <ul style="list-style-type: none"> a. which can run on any value of supply voltage b. which has infinitely varying speed c. which can operate on ac as well as dc voltage d. which can work as single phase or three phase motor.
Induction Generator is used in <ul style="list-style-type: none"> e. Wind Power Plant. f. Thermal Power Plant. g. Geo thermal Power Plant. h. All of the above.
At standstill condition the value of slip is <ul style="list-style-type: none"> e. Zero f. Infinity g. One h. None of the above
A 3-phase 440 V, 50 Hz induction motor has 4% slip. The frequency of rotor current will be <ul style="list-style-type: none"> a. 50 Hz b. 25 Hz c. 5 Hz d. 2 Hz
The starting torque of a squirrel-cage induction motor is <ul style="list-style-type: none"> a. Full-load torque b. Slightly more than full-load torque

<ul style="list-style-type: none"> c. Low d. Negligible
<p>The efficiency of an induction motor is about</p> <ul style="list-style-type: none"> a. 100% b. 80-90% c. 50-60% d. Less than 50%
<p>The speed of a squirrel cage induction motor is changed by</p> <ul style="list-style-type: none"> a. Cascade Connection b. Rheostat control c. Pole changing method d. Any of the above
<p>A three phase, 50 Hz induction motor has a full load speed of 1440 rpm. The full load slip will be</p> <ul style="list-style-type: none"> a. 3% b. 5% c. 4% d. 2%
<p>The auto-starters (using three autotransformers) can be used to start cage induction motor of the following type</p> <ul style="list-style-type: none"> a. Delta connected only b. Star connected only c. Both a and b d. None of the above
<p>If any two phases for an induction motor are interchanged</p> <ul style="list-style-type: none"> a. The motor will run in the reverse direction b. The motor will continue to run in the same direction c. The motor will stop d. The motor will Burn
<p>The shaft of an induction motor is made of</p> <ul style="list-style-type: none"> e. Stainless steel f. Carbon steel g. Cast iron h. Aluminium
<p>The term 'cogging' is associated with</p> <ul style="list-style-type: none"> e. Three-phase transformer f. Compound Generator g. Induction motor h. D.C series motor
<p>Which single phase ac motor will you select for record players and tape recorders?</p> <ul style="list-style-type: none"> a. Hysteresis motor b. Shaded pole motor c. Reluctance motor d. Two value capacitor motor.
<p>A universal motor is one</p> <ul style="list-style-type: none"> a. which can run on any value of supply voltage b. which has infinitely varying speed

<p>c. which can operate on ac as well as dc voltage</p> <p>d. which can work as single phase or three phase motor.</p>
<p>In repulsion motor direction of rotation of motor</p> <p>a. Same as that of brush shift</p> <p>b. Independent of brush shift</p> <p>c. Opposite to that of brush shift</p> <p>d. None of the above</p>
<p>Which of the following motor is used in the mixer?</p> <p>a. Repulsion Motor</p> <p>b. Reluctance Motor</p> <p>c. Hysteresis Motor</p> <p>d. Universal Motor</p>
<p>Direction of rotation of a split phase motor can be reversed by reversing the connection of</p> <p>a. Starting winding</p> <p>b. Running winding</p> <p>c. Either a or b</p> <p>d. None of the above</p>
<p>In A.C. series motor compensating winding is employed to</p> <p>a. Increase the torque</p> <p>b. Reduce the effect of armature reaction</p> <p>c. Reduce sparking in brushes</p> <p>d. Both b and c</p>
<p>For ceiling fans generally, the single-phase motor used is</p> <p>i. split phase type</p> <p>j. capacitor start type</p> <p>k. capacitor start and run type</p> <p>l. permanent capacitor type.</p>
<p>EMF Equation of Alternator is</p> <p>e. $4.44 K_c K_d \phi f.T.$ volts.</p> <p>f. $4.44 K_b \phi T.$ volts.</p> <p>g. $1.11 K_p K_b \phi f.T.$ volts.</p> <p>h. All of the Above.</p>
<p>High capacity generators are usually _____ cooled.</p> <p>e. Hydrogen cooled.</p> <p>f. Fan cooled.</p> <p>g. Air cooled.</p> <p>h. All of the above.</p>
<p>When a turbine drives an alternator, it is termed as _____.</p> <p>e. Turbo Alternator.</p> <p>f. Synchronous motor.</p> <p>g. D.C. Motor.</p> <p>h. All of the above.</p>
<p>The rating of an alternator is expressed in terms of _____.</p> <p>e. KVA or MVA.</p> <p>f. Volts.</p>

<p>g. Ampere. h. All of the above.</p>
<p>For finding of voltage regulation of alternators by</p> <ul style="list-style-type: none">a. Direct loading methodb. Synchronous impedance methodc. Ampere turns methodd. All of the above.
<p>Practically, most of the alternators prefer which type of construction?</p> <ul style="list-style-type: none">a. Rotating field typeb. Rotating armature typec. Both are equally importantd. None of these
<p>Condition for parallel operation of two alternators</p> <ul style="list-style-type: none">a. Frequency Should be same.b. Voltage Level Should be same.c. Impedance should be samed. All of the above.
<p>Synchronous motor can operate at</p> <ul style="list-style-type: none">a. Lagging power factor onlyb. Leading power factor onlyc. Unity power factor onlyd. Lagging, leading and unity power factor only.
<p>An unexcited single-phase synchronous motor is</p> <ul style="list-style-type: none">a. reluctance motorb. repulsion motorc. universal motord. AC series motor.