

VSSC Exam 16th and 17th Sept 2026

Participant ID	
Participant Name	
Test Center Name	
Test Date	16/09/2026
Test Time	12:30 PM - 2:00 PM
Subject	1535 Technician B Electrician

Section : Technical Domain

Q.1 A power transformer of input 1000 kVA operates at unity power factor. If transformer efficiency is 95%, what will be the output power delivered?

- Ans ☒ A. 1000 kW
☒ B. 950 kW
☒ C. 1050 kW
☒ D. 900 kW

Question ID : 4410092257346

Option 1 ID : 4410098880013

Option 2 ID : 4410098880015

Option 3 ID : 4410098880014

Option 4 ID : 4410098880012

Status : Answered

Chosen Option : B

Q.2 When connecting an MCB (Miniature Circuit Breaker) in a circuit, what is the correct practice of connecting supply wires?

- Ans ☒ A. To the bottom terminals of the MCB
☒ B. To the earth terminal of the MCB
☒ C. To the neutral terminal of the MCB
☒ D. To the top terminals of the MCB

Question ID : 4410092257347

Option 1 ID : 4410098880016

Option 2 ID : 4410098880018

Option 3 ID : 4410098880019

Option 4 ID : 4410098880017

Status : Answered

Chosen Option : A

Q.3 Which thyristor turn-off method relies on natural zero crossing of alternating supply voltage?

- Ans** ☒ A. Resonant Pulse Commutation method
☒ B. Forced commutation method
☒ C. Line commutation method
☒ D. Class C Commutation method

Question ID : **4410092257334**

Option 1 ID : **4410098879967**

Option 2 ID : **4410098879965**

Option 3 ID : **4410098879966**

Option 4 ID : **4410098879964**

Status : **Not Answered**

Chosen Option : --

Q.4 Luminous intensity of a light source is measured in the unit:

- Ans** ☒ A. Lux
☒ B. Watt
☒ C. Candela (cd)
☒ D. Lumen

Question ID : **4410092257484**

Option 1 ID : **4410098880518**

Option 2 ID : **4410098880519**

Option 3 ID : **4410098880517**

Option 4 ID : **4410098880516**

Status : **Answered**

Chosen Option : **C**

Q.5 A Power MOSFET is primarily controlled by the:

- Ans** ☒ A. Frequency of the source terminal
☒ B. Voltage applied at the gate terminal
☒ C. Temperature of the drain terminal
☒ D. Current injected into the gate terminal

Question ID : **4410092257492**

Option 1 ID : **4410098880551**

Option 2 ID : **4410098880550**

Option 3 ID : **4410098880549**

Option 4 ID : **4410098880548**

Status : **Not Answered**

Chosen Option : --

Q.6 Which type of circuit breaker uses either natural air or blast air as its arc quenching medium?

- Ans
- ☐ A. Oil circuit breaker
 - ☐ B. SF6 circuit breaker
 - ☐ C. Vacuum circuit breaker
 - ☒ D. Air-circuit breaker

Question ID : 4410092257573

Option 1 ID : 4410098880854

Option 2 ID : 4410098880855

Option 3 ID : 4410098880852

Option 4 ID : 4410098880853

Status : Answered

Chosen Option : C

Q.7 A moving-coil ammeter has a full-scale deflection current of 1 A and an internal resistance of 0.1Ω . It is required to measure a maximum current of 10 A. What resistance should be connected as a shunt across the meter coil?

- Ans
- ☒ A. 0.0111Ω
 - ☐ B. 1.0Ω
 - ☐ C. 0.150Ω
 - ☐ D. 0.900Ω

Question ID : 4410092257428

Option 1 ID : 4410098880312

Option 2 ID : 4410098880315

Option 3 ID : 4410098880313

Option 4 ID : 4410098880314

Status : Answered

Chosen Option : B

Q.8 If an alternator operates at 500 rpm and is required to generate a frequency of 50 Hz, what will be the number of poles required for this condition?

- Ans
- ☐ A. 8
 - ☐ B. 24
 - ☐ C. 4
 - ☒ D. 12

Question ID : 4410092257309

Option 1 ID : 4410098879865

Option 2 ID : 4410098879866

Option 3 ID : 4410098879864

Option 4 ID : 4410098879867

Status : Answered

Chosen Option : D

Q.9 What is the maximum voltage rating for which belted cables are suitable in underground electrical installations?

- Ans
- ☐ A. Up to 33kV
 - ☐ B. Up to 66kV
 - ☐ C. Below 1kV
 - ☒ D. Up to 11kV

Question ID : 4410092257575

Option 1 ID : 4410098880860

Option 2 ID : 4410098880862

Option 3 ID : 4410098880861

Option 4 ID : 4410098880863

Status : Not Answered

Chosen Option : --

Q.10 Which type of transmission line requires the use of the nominal pi or T method for modeling taking lumped parameters of line for modeling?

- Ans
- ☒ A. Medium transmission line
 - ☐ B. Long transmission line
 - ☐ C. Short transmission line
 - ☐ D. Secondary distribution line

Question ID : 4410092257436

Option 1 ID : 4410098880346

Option 2 ID : 4410098880345

Option 3 ID : 4410098880344

Option 4 ID : 4410098880347

Status : Answered

Chosen Option : D

Q.11 In a practical scenario, why is the auxiliary winding in a split-phase induction motor made of thinner wire and has more turns than the main winding?

- Ans
- ☐ A. To handle higher current during starting
 - ☐ B. To increase the running torque of the motor
 - ☐ C. To reduce iron losses in the core
 - ☒ D. To achieve higher resistance and greater phase shift

Question ID : 4410092257427

Option 1 ID : 4410098880309

Option 2 ID : 4410098880310

Option 3 ID : 4410098880308

Option 4 ID : 4410098880311

Status : Answered

Chosen Option : B

Q.12 Which property is shared by electrolytes, insulators, and semiconductors regarding their resistance and temperature?

- Ans** ☒ A. They have a positive temperature coefficient of resistance
☒ B. They have a negative temperature coefficient of resistance
☒ C. Their resistance increases with temperature
☒ D. They maintain constant resistance

Question ID : **4410092257574**

Option 1 ID : **4410098880858**

Option 2 ID : **4410098880856**

Option 3 ID : **4410098880857**

Option 4 ID : **4410098880859**

Status : **Answered**

Chosen Option : **B**

Q.13 In a scenario where the transformer's yoke is cracked, which potential issue might arise during operation?

- Ans** ☒ A. Uneven distribution of magnetic flux
☒ B. Oil leakage from the tank
☒ C. Displacement of windings
☒ D. Loss of insulation between windings

Question ID : **4410092257441**

Option 1 ID : **4410098880366**

Option 2 ID : **4410098880365**

Option 3 ID : **4410098880364**

Option 4 ID : **4410098880367**

Status : **Answered**

Chosen Option : **C**

Q.14 At the instant of starting, the slip (S) of a three-phase induction motor is:

- Ans** ☒ A. A negative value below zero
☒ B. 1, or 100 percent
☒ C. Equal to the synchronous speed value
☒ D. 0, or zero percent

Question ID : **4410092257487**

Option 1 ID : **4410098880529**

Option 2 ID : **4410098880530**

Option 3 ID : **4410098880531**

Option 4 ID : **4410098880528**

Status : **Answered**

Chosen Option : **B**

Q.15 Which practice helps extend the service life of a maintenance-free battery during regular use?

- Ans** ☒ A. Avoiding deep discharge during operation
☒ B. Refilling the battery with only distilled water every week
☒ C. Adding acid to the battery on regular basis
☒ D. Storing the battery at high temperatures

Question ID : **4410092257312**

Option 1 ID : **4410098879877**

Option 2 ID : **4410098879879**

Option 3 ID : **4410098879876**

Option 4 ID : **4410098879878**

Status : **Answered**

Chosen Option : **B**

Q.16 Which physical phenomenon causes the generation of emf in an alternator according to its principle?

- Ans** ☒ A. Static placement of conductors in magnetic field
☒ B. Relative motion between conductor and magnetic field
☒ C. Direct contact between conductors
☒ D. Temperature difference in conductors

Question ID : **4410092257568**

Option 1 ID : **4410098880832**

Option 2 ID : **4410098880835**

Option 3 ID : **4410098880834**

Option 4 ID : **4410098880833**

Status : **Answered**

Chosen Option : **B**

Q.17 Which instrument from the drawing instrument box is best suited for drawing straight lines at right angles to the edge of the drawing sheet?

- Ans** ☒ A. Divider
☒ B. T-square
☒ C. Protractor
☒ D. Compass

Question ID : **4410092257448**

Option 1 ID : **4410098880392**

Option 2 ID : **4410098880394**

Option 3 ID : **4410098880395**

Option 4 ID : **4410098880393**

Status : **Answered**

Chosen Option : **B**

Q.18 In a common dry cell (zinc-carbon cell), the outer container itself typically serves as the:

- Ans**
- ☐ A. Electrolyte reservoir only
 - ☐ B. Separator material only
 - ☐ C. Positive electrode of the cell
 - ☒ D. Negative electrode (zinc)

Question ID : **4410092257499**

Option 1 ID : **4410098880576**

Option 2 ID : **4410098880578**

Option 3 ID : **4410098880577**

Option 4 ID : **4410098880579**

Status : **Answered**

Chosen Option : **A**

Q.19 A single-phase line has two conductors, each with a GMR of 0.008 meters, separated by 1.2 meters. What is the value of $\log(\text{GMD}/\text{GMR})$ needed for inductance calculation?

- Ans**
- ☒ A. $\log(1.2/0.008)$
 - ☐ B. $\log(1.2 \times 0.008)$
 - ☐ C. $\log(0.008/1.2)$
 - ☐ D. $\log(1.2 + 0.008)$

Question ID : **4410092257435**

Option 1 ID : **4410098880340**

Option 2 ID : **4410098880341**

Option 3 ID : **4410098880343**

Option 4 ID : **4410098880342**

Status : **Answered**

Chosen Option : **A**

Q.20 During periodic earthing tests, the resistance value gradually increases over the years. What is the cause of this trend?

- Ans**
- ☐ A. Sudden changes in soil moisture after rainfall
 - ☐ B. Improper spike placement in recent tests
 - ☒ C. Corrosion and aging of the earth electrode
 - ☐ D. Temporary rise in soil pH during rainy seasons

Question ID : **4410092257418**

Option 1 ID : **4410098880275**

Option 2 ID : **4410098880273**

Option 3 ID : **4410098880274**

Option 4 ID : **4410098880272**

Status : **Answered**

Chosen Option : **C**

Q.21 An electric vehicle controller uses an IGBT module. If the vehicle experiences reduced acceleration, which parameter should be investigated first?

- Ans**
- ☐ A. The ambient humidity affecting device insulation
 - ☐ B. The gate threshold voltage of the IGBT module
 - ☒ C. The pulse width modulation (PWM) duty cycle applied to the IGBT
 - ☐ D. The physical packaging of the IGBT module

Question ID : **4410092257431**

Option 1 ID : **4410098880324**

Option 2 ID : **4410098880326**

Option 3 ID : **4410098880327**

Option 4 ID : **4410098880325**

Status : **Answered**

Chosen Option : **C**

Q.22 An AC supply provides voltage $v(t) = 230 \sin(\omega t)$. If the current in the circuit is $i(t) = 230 \sin(\omega t - 45^\circ)$, what is the phase difference between voltage and current?

- Ans**
- ☐ A. No phase difference exists between voltage and current
 - ☐ B. The voltage lags the current by 45 degrees
 - ☐ C. The current leads the voltage by 22.5 degrees
 - ☒ D. The current lags the voltage by 45 degrees

Question ID : **4410092257405**

Option 1 ID : **4410098880221**

Option 2 ID : **4410098880222**

Option 3 ID : **4410098880223**

Option 4 ID : **4410098880220**

Status : **Answered**

Chosen Option : **D**

Q.23 How many controlled switches are used in a single-phase full-wave mid-point converter?

- Ans**
- ☐ A. 1
 - ☐ B. 6
 - ☒ C. 2
 - ☐ D. 4

Question ID : **4410092257335**

Option 1 ID : **4410098879970**

Option 2 ID : **4410098879969**

Option 3 ID : **4410098879971**

Option 4 ID : **4410098879968**

Status : **Answered**

Chosen Option : **D**

Q.24 A workshop owner invests Rs. 1000 at 5% compound interest per annum for 3 years. What will be the total amount after 3 years?

- Ans ☒ A. Rs. 1200.48
☒ B. Rs. 1157.63
☒ C. Rs. 1170.72
☒ D. Rs. 1150.00

Question ID : 4410092257451
Option 1 ID : 4410098880406
Option 2 ID : 4410098880404
Option 3 ID : 4410098880405
Option 4 ID : 4410098880407
Status : Answered
Chosen Option : B

Q.25 A manufacturer claims their new cell has a longer shelf life. This means the cell will:

- Ans ☒ A. Retain usable charge longer when not in use
☒ B. Deliver more current under heavy load
☒ C. Provide higher voltage when loaded
☒ D. Allow more recharge cycles before failure

Question ID : 4410092257438
Option 1 ID : 4410098880354
Option 2 ID : 4410098880352
Option 3 ID : 4410098880353
Option 4 ID : 4410098880355
Status : Answered
Chosen Option : A

Q.26 If a straight line touches a circle but does not cross it, what is this line called?

- Ans ☒ A. Chord
☒ B. Tangent
☒ C. Diameter
☒ D. Secant

Question ID : 4410092257610
Option 1 ID : 4410098881001
Option 2 ID : 4410098881002
Option 3 ID : 4410098881000
Option 4 ID : 4410098881003
Status : Answered
Chosen Option : B

Q.27 In an AC circuit, which term describes the vector sum of resistance and reactance?

- Ans
- ☐ A. Conductance
 - ☐ B. Susceptance
 - ☒ C. Impedance
 - ☐ D. Reactance

Question ID : 4410092257306

Option 1 ID : 4410098879852

Option 2 ID : 4410098879853

Option 3 ID : 4410098879854

Option 4 ID : 4410098879855

Status : Answered

Chosen Option : B

Q.28 A technician needs to select a capacitor for a single-phase induction motor starter circuit. What is the primary purpose of using the capacitor?

- Ans
- ☐ A. Capacitor increases current flow in motor windings
 - ☐ B. Capacitor stores charge for insulation purposes
 - ☐ C. Capacitor provides a direct path for DC
 - ☒ D. Capacitor creates phase shift

Question ID : 4410092257419

Option 1 ID : 4410098880278

Option 2 ID : 4410098880276

Option 3 ID : 4410098880277

Option 4 ID : 4410098880279

Status : Answered

Chosen Option : D

Q.29 In a three-phase star connection, what is the relationship between line voltage (V_L) and phase voltage (V_{ph})?

- Ans
- ☐ A. $V_L = V_{ph}$
 - ☒ B. $V_L = \sqrt{3} V_{ph}$
 - ☐ C. $V_L = 3 V_{ph}$
 - ☐ D. $V_L = \frac{1}{\sqrt{3}} V_{ph}$

Question ID : 4410092257308

Option 1 ID : 4410098879861

Option 2 ID : 4410098879860

Option 3 ID : 4410098879863

Option 4 ID : 4410098879862

Status : Answered

Chosen Option : B

Q.30 What is the decimal value for 50 percent?

- Ans ☐ A. 50.0
☐ B. 5.0
☐ C. 0.05
☒ D. 0.50

Question ID : 4410092257353

Option 1 ID : 4410098880040

Option 2 ID : 4410098880043

Option 3 ID : 4410098880042

Option 4 ID : 4410098880041

Status : Answered

Chosen Option : D

Q.31 When a magnet is freely suspended, which direction do its poles tend to align with?

- Ans ☐ A. Up and Down
☒ B. North and South
☐ C. East and West
☐ D. Diagonal

Question ID : 4410092257580

Option 1 ID : 4410098880881

Option 2 ID : 4410098880883

Option 3 ID : 4410098880882

Option 4 ID : 4410098880880

Status : Answered

Chosen Option : B

Q.32 On a V-curve, operating a synchronous motor with excitation to the right of the minimum point (over-excited) makes the motor draw a current that:

- Ans ☐ A. Is exactly in phase, giving unity power factor always
☐ B. Lags the supply voltage, giving a lagging power factor
☐ C. Becomes zero regardless of the excitation level
☒ D. Leads the supply voltage, giving a leading power factor

Question ID : 4410092257501

Option 1 ID : 4410098880586

Option 2 ID : 4410098880584

Option 3 ID : 4410098880587

Option 4 ID : 4410098880585

Status : Answered

Chosen Option : A

Q.33 A relay in a control circuit repeatedly fails due to frequent coil burnout. The coil is rated at 230V AC but is connected to a fluctuating supply between 190 V and 260 V. Which engineering solution best addresses this reliability issue?

- Ans**
- ☒ A. Incorporating a voltage stabilizer before the relay coil
 - ☐ B. Relocating the relay to a cooler environment
 - ☐ C. Increasing the relay core size
 - ☐ D. Using a relay with a higher contact rating

Question ID : **4410092257445**

Option 1 ID : **4410098880380**

Option 2 ID : **4410098880383**

Option 3 ID : **4410098880381**

Option 4 ID : **4410098880382**

Status : **Answered**

Chosen Option : **A**

Q.34 Which of the following factors can cause a decrease in an alkaline cell's efficiency?

- Ans**
- ☐ A. More number of plates
 - ☐ B. Thinner plates
 - ☐ C. Low output rating
 - ☒ D. High internal resistance

Question ID : **4410092257340**

Option 1 ID : **4410098879988**

Option 2 ID : **4410098879991**

Option 3 ID : **4410098879990**

Option 4 ID : **4410098879989**

Status : **Answered**

Chosen Option : **D**

Q.35 An Earth leakage circuit breaker (ELCB) should be tested periodically using its built-in test button because doing so:

- Ans**
- ☒ A. Verifies the tripping mechanism is functioning correctly
 - ☐ B. Changes the device from single-phase to three-phase
 - ☐ C. Permanently resets the device's leakage sensitivity setting
 - ☐ D. Increases the rated current of the breaker

Question ID : **4410092257478**

Option 1 ID : **4410098880493**

Option 2 ID : **4410098880495**

Option 3 ID : **4410098880494**

Option 4 ID : **4410098880492**

Status : **Answered**

Chosen Option : **C**

Q.36 A P-type semiconductor is formed by doping a pure (intrinsic) silicon crystal with a:

- Ans** ☒ A. Pentavalent impurity such as Arsenic
☒ B. Trivalent impurity such as Boron
☒ C. Pentavalent impurity such as Phosphorus
☒ D. Tetravalent impurity such as Germanium

Question ID : **4410092257469**

Option 1 ID : **4410098880459**

Option 2 ID : **4410098880457**

Option 3 ID : **4410098880456**

Option 4 ID : **4410098880458**

Status : **Answered**

Chosen Option : **B**

Q.37 When inspecting a DC motor for unusual noises, what is the safest approach?

- Ans** ☒ A. Adjust the brushes while the motor is running
☒ B. Switch off the motor and allow it to stop before inspection
☒ C. Inspect while the motor is running at low speed
☒ D. Tap the casing to locate the noise source during operation

Question ID : **4410092257415**

Option 1 ID : **4410098880262**

Option 2 ID : **4410098880261**

Option 3 ID : **4410098880263**

Option 4 ID : **4410098880260**

Status : **Answered**

Chosen Option : **C**

Q.38 Excessive sparking at the brushes of a DC motor is caused by which of the following conditions?

- Ans** ☒ A. Worn brushes, improper spring pressure, or a dirty commutator surface
☒ B. Properly lubricated bearings fitted during routine maintenance work
☒ C. Brushes correctly positioned on the magnetic neutral axis of the machine
☒ D. New brushes properly seated and correctly bedded on the commutator

Question ID : **4410092257476**

Option 1 ID : **4410098880484**

Option 2 ID : **4410098880485**

Option 3 ID : **4410098880486**

Option 4 ID : **4410098880487**

Status : **Answered**

Chosen Option : **A**

Q.39 During normal thermal power plant operation, the steam drum level suddenly decreases while the feedwater flow remains constant and the steam flow increases rapidly. Which of the following phenomena explains the observed decrement in the drum level?

- Ans** ☒ A. Boiler-water shrinkage due to increased steam demand
☐ B. Increased furnace draft due to combustion changes
☐ C. Reduced heat transfer due to economizer fouling
☐ D. Decreased heat absorption due to lower flue-gas flow

Question ID : **4410092257434**

Option 1 ID : **4410098880336**

Option 2 ID : **4410098880338**

Option 3 ID : **4410098880337**

Option 4 ID : **4410098880339**

Status : **Not Answered**

Chosen Option : --

Q.40 Which of the following materials is suitable for manufacturing high voltage overhead line insulators?

- Ans** ☐ A. Polyvinyl Chloride
☒ B. Porcelain
☐ C. Paper
☐ D. Bakelite

Question ID : **4410092257349**

Option 1 ID : **4410098880026**

Option 2 ID : **4410098880025**

Option 3 ID : **4410098880027**

Option 4 ID : **4410098880024**

Status : **Answered**

Chosen Option : **B**

Q.41 Two batteries of 3 volts are connected in series. What is the total voltage supplied by this combination?

- Ans** ☐ A. 3 V
☒ B. 6 V
☐ C. 1.5 V
☐ D. 2 V

Question ID : **4410092257341**

Option 1 ID : **4410098879993**

Option 2 ID : **4410098879995**

Option 3 ID : **4410098879992**

Option 4 ID : **4410098879994**

Status : **Answered**

Chosen Option : **B**

Q.42 An armature of a DC machine has 32 coils and is wound with wave winding. If the machine has 4 poles, what will be the number of parallel paths?

- Ans ☒ A. 32
☒ B. 2
☒ C. 4
☒ D. 8

Question ID : 4410092257416

Option 1 ID : 4410098880266

Option 2 ID : 4410098880267

Option 3 ID : 4410098880264

Option 4 ID : 4410098880265

Status : Answered

Chosen Option : B

Q.43 In a single-phase transformer, when is the efficiency considered to be at its maximum?

- Ans ☒ A. When copper losses are less than iron losses
☒ B. When copper losses equal iron losses
☒ C. When copper losses are double the iron losses
☒ D. When copper losses are more than iron losses

Question ID : 4410092257604

Option 1 ID : 4410098880978

Option 2 ID : 4410098880976

Option 3 ID : 4410098880979

Option 4 ID : 4410098880977

Status : Answered

Chosen Option : B

Q.44 If a half-adder is replaced by a full-adder in a binary addition circuit, what new feature does the circuit gain?

- Ans ☒ A. Error detection in outputs
☒ B. Handling of negative numbers
☒ C. The ability to add a carry-in from a previous computation
☒ D. Automatic output correction

Question ID : 4410092257578

Option 1 ID : 4410098880875

Option 2 ID : 4410098880874

Option 3 ID : 4410098880872

Option 4 ID : 4410098880873

Status : Not Answered

Chosen Option : --

Q.45 What is the benefit of transposing wires in electric power transmission?

- Ans**
- ☐ A. Reduces height of towers
 - ☐ B. Reduces number of towers
 - ☐ C. Decreases wire thickness
 - ☒ D. Reduces electromagnetic interference

Question ID : **4410092257338**

Option 1 ID : **4410098879981**

Option 2 ID : **4410098879982**

Option 3 ID : **4410098879980**

Option 4 ID : **4410098879983**

Status : **Answered**

Chosen Option : **C**

Q.46 In a three-phase transformer vector-group notation, the label 'Dyn11' indicates:

- Ans**
- ☐ A. Delta primary connected to a Delta secondary only
 - ☒ B. Delta primary, Star secondary with neutral, 330-degree phase displacement
 - ☐ C. Only the transformer's rated power capacity in kVA
 - ☐ D. Star primary, Delta secondary, with no neutral brought out

Question ID : **4410092257504**

Option 1 ID : **4410098880598**

Option 2 ID : **4410098880596**

Option 3 ID : **4410098880599**

Option 4 ID : **4410098880597**

Status : **Answered**

Chosen Option : **B**

Q.47 A limitation of the casing-capping wiring system compared to conduit wiring is that it:

- Ans**
- ☐ A. Always costs more than conduit wiring in every case
 - ☐ B. Cannot be installed inside residential buildings at all
 - ☐ C. Provides complete protection against fire under all conditions
 - ☒ D. Offers less mechanical protection and a higher fire risk with wooden casing

Question ID : **4410092257505**

Option 1 ID : **4410098880602**

Option 2 ID : **4410098880601**

Option 3 ID : **4410098880600**

Option 4 ID : **4410098880603**

Status : **Not Answered**

Chosen Option : **--**

Q.48 In a machine panel, two inductors of 8 H and 12 H are connected in parallel. What is the equivalent inductance?

- Ans ☒ A. 20 H
☒ B. 4.8 H
☒ C. 8.5 H
☒ D. 10.5 H

Question ID : **4410092257420**

Option 1 ID : **4410098880282**

Option 2 ID : **4410098880283**

Option 3 ID : **4410098880280**

Option 4 ID : **4410098880281**

Status : **Answered**

Chosen Option : **B**

Q.49 Which procedure is correct for checking the continuity of a transformer winding using a multimeter?

- Ans ☒ A. Connect the multimeter across the winding terminals and check for a continuous electrical path
☒ B. Apply the rated supply voltage to the winding and observe the current
☒ C. Connect the multimeter across the primary and secondary terminals and check for zero resistance
☒ D. Connect the multimeter between a winding terminal and the transformer core

Question ID : **4410092257442**

Option 1 ID : **4410098880368**

Option 2 ID : **4410098880371**

Option 3 ID : **4410098880369**

Option 4 ID : **4410098880370**

Status : **Answered**

Chosen Option : **C**

Q.50 Which tool is suitable for fastening wires to terminals in a control panel?

- Ans ☒ A. Screwdriver
☒ B. Stripper
☒ C. Wire twister
☒ D. Pliers

Question ID : **4410092257348**

Option 1 ID : **4410098880023**

Option 2 ID : **4410098880021**

Option 3 ID : **4410098880022**

Option 4 ID : **4410098880020**

Status : **Not Answered**

Chosen Option : **--**

Q.51 If the supply frequency applied to a pure inductor is increased, its inductive reactance will:

- Ans ☒ A. Remain completely unchanged
☒ B. Increase proportionally with frequency
☒ C. Decrease proportionally with frequency
☒ D. Reduce to exactly zero

Question ID : **4410092257481**

Option 1 ID : **4410098880507**

Option 2 ID : **4410098880506**

Option 3 ID : **4410098880504**

Option 4 ID : **4410098880505**

Status : **Answered**

Chosen Option : **B**

Q.52 Which of the following is the most suitable application of a DC shunt generator because of its nearly constant terminal voltage characteristic?

- Ans ☒ A. Constant-voltage DC lighting supply
☒ B. Electric welding
☒ C. Electroplating process
☒ D. Railway traction

Question ID : **4410092257414**

Option 1 ID : **4410098880259**

Option 2 ID : **4410098880257**

Option 3 ID : **4410098880258**

Option 4 ID : **4410098880256**

Status : **Answered**

Chosen Option : **C**

Q.53 In the context of AC circuit analysis, why are coiled conductors preferred over straight conductors when inductance is a crucial factor?

- Ans ☒ A. Straight conductors are better because they have low inductance
☒ B. Inductance is not important in AC circuit analysis
☒ C. Both coiled and straight conductors are equally suitable for AC circuits
☒ D. Coiled conductors provide high inductance, affecting AC circuit behavior

Question ID : **4410092257582**

Option 1 ID : **4410098880888**

Option 2 ID : **4410098880890**

Option 3 ID : **4410098880891**

Option 4 ID : **4410098880889**

Status : **Answered**

Chosen Option : **D**

Q.54 For which type of surfaces are Simpson's rule and trapezoidal rule specifically applied?

- Ans
- ☐ A. Circular surfaces
 - ☐ B. Straight surfaces
 - ☒ C. Irregular surfaces
 - ☐ D. Regular surfaces

Question ID : **4410092257611**

Option 1 ID : **4410098881005**

Option 2 ID : **4410098881007**

Option 3 ID : **4410098881004**

Option 4 ID : **4410098881006**

Status : **Not Answered**

Chosen Option : --

Q.55 If the supply voltage is 230V AC and the firing angle is set to 0 degrees in a single-phase semi converter, what is the nature of the output voltage?

- Ans
- ☐ A. Zero average output voltage
 - ☐ B. Negative average output voltage
 - ☒ C. Maximum average output voltage
 - ☐ D. Minimum average output voltage

Question ID : **4410092257433**

Option 1 ID : **4410098880335**

Option 2 ID : **4410098880332**

Option 3 ID : **4410098880333**

Option 4 ID : **4410098880334**

Status : **Not Answered**

Chosen Option : --

Q.56 The fire triangle consists of which three elements needed for a fire to occur?

- Ans
- ☐ A. Fuel, Water, and Smoke
 - ☐ B. Heat, Smoke, and Water
 - ☐ C. Oxygen, Smoke, and Ash
 - ☒ D. Fuel, Oxygen, and Heat

Question ID : **4410092257491**

Option 1 ID : **4410098880545**

Option 2 ID : **4410098880547**

Option 3 ID : **4410098880546**

Option 4 ID : **4410098880544**

Status : **Answered**

Chosen Option : **D**

Q.57 A short circuit occurring in one branch of a parallel network typically causes:

- Ans** ☒ A. A very high current draw, risking damage to wiring and supply
- ☐ B. A significant increase in the overall circuit resistance
- ☐ C. No current flow anywhere in the rest of the circuit
- ☐ D. A permanent drop in supply voltage down to zero

Question ID : **4410092257473**

Option 1 ID : **4410098880475**

Option 2 ID : **4410098880474**

Option 3 ID : **4410098880472**

Option 4 ID : **4410098880473**

Status : **Answered**

Chosen Option : **A**

Q.58 Which parameter must be checked when selecting a diode for a circuit with 0.8A continuous forward current?

- Ans** ☐ A. Forward voltage drop
- ☐ B. Reverse recovery time
- ☐ C. Reverse voltage rating
- ☒ D. Maximum forward current rating

Question ID : **4410092396122**

Option 1 ID : **4410099423621**

Option 2 ID : **4410099423622**

Option 3 ID : **4410099423623**

Option 4 ID : **4410099423620**

Status : **Answered**

Chosen Option : **D**

Q.59 Which wattmeter can measure power in both AC and DC circuits?

- Ans** ☐ A. Thermocouple type wattmeter
- ☐ B. Electrostatic type wattmeter
- ☐ C. Induction type wattmeter
- ☒ D. Dynamometer type wattmeter

Question ID : **4410092257589**

Option 1 ID : **4410098880918**

Option 2 ID : **4410098880919**

Option 3 ID : **4410098880917**

Option 4 ID : **4410098880916**

Status : **Answered**

Chosen Option : **D**

Q.60 A lighting system gives 2000 lumens using 80 W. If efficiency improves to 40 lumens per watt, what will be the new luminous output with the same 80 W power?

- Ans ☒ A. 4000 lumens
☒ B. 3200 lumens
☒ C. 2400 lumens
☒ D. 1600 lumens

Question ID : 4410092257422

Option 1 ID : 4410098880289

Option 2 ID : 4410098880290

Option 3 ID : 4410098880288

Option 4 ID : 4410098880291

Status : Answered

Chosen Option : B

Q.61 If a three-phase induction motor hums loudly but fails to start, the first likely cause to check is:

- Ans ☒ A. Single-phasing caused by a blown fuse or open phase
☒ B. Recently overhauled and freely rotating bearing assemblies
☒ C. A correct three-phase supply with fully balanced voltage
☒ D. A new coupling that is properly aligned and fitted

Question ID : 4410092257486

Option 1 ID : 4410098880524

Option 2 ID : 4410098880525

Option 3 ID : 4410098880526

Option 4 ID : 4410098880527

Status : Answered

Chosen Option : A

Q.62 A rectangular tray is required to fit inside a cabinet space measuring 100 cm in length and 40 cm in width. The tray must have a 2 cm gap on all sides. What should be the tray's external dimensions?

- Ans ☒ A. 98 cm by 38 cm
☒ B. 96 cm by 36 cm
☒ C. 96 cm by 40 cm
☒ D. 100 cm by 36 cm

Question ID : 4410092257449

Option 1 ID : 4410098880399

Option 2 ID : 4410098880398

Option 3 ID : 4410098880397

Option 4 ID : 4410098880396

Status : Not Answered

Chosen Option : --

Q.63 Why must the output of the DC current source be variable during calibration of a DC meter?

- Ans**
- ☒ A. To ensure the current flows in one direction only
 - ☒ B. To increase the resistance in the circuit
 - ☒ C. To stabilize the voltage across the meter
 - ☒ D. To test the meter at different current levels

Question ID : **4410092257590**

Option 1 ID : **4410098880921**

Option 2 ID : **4410098880923**

Option 3 ID : **4410098880922**

Option 4 ID : **4410098880920**

Status : **Not Answered**

Chosen Option : --

Q.64 While laying a low-voltage underground power cable (up to 1 kV) in normal ground condition, what minimum depth should be maintained below ground level to protect the cable from accidental damage?

- Ans**
- ☒ A. 600 mm
 - ☒ B. 300 mm
 - ☒ C. 900 mm
 - ☒ D. 750 mm

Question ID : **4410092257413**

Option 1 ID : **4410098880254**

Option 2 ID : **4410098880253**

Option 3 ID : **4410098880252**

Option 4 ID : **4410098880255**

Status : **Answered**

Chosen Option : **C**

Q.65 In an indirect lighting system, light mainly reaches the work area by being:

- Ans**
- ☒ A. Reflected off the ceiling and walls before reaching the work area
 - ☒ B. Blocked completely from ever reaching the work area below
 - ☒ C. Sent directly onto the work area with no reflection at all
 - ☒ D. Concentrated tightly into a single narrow directional beam

Question ID : **4410092257485**

Option 1 ID : **4410098880521**

Option 2 ID : **4410098880522**

Option 3 ID : **4410098880520**

Option 4 ID : **4410098880523**

Status : **Answered**

Chosen Option : **A**

Q.66 Which of the following symbols is used for showing the end of a measurement line in technical drawings?

- Ans
- ☒ A. 
 - ☒ B. 
 - ☒ C. 
 - ☒ D. 

Question ID : 4410092257350

Option 1 ID : 4410098880030

Option 2 ID : 4410098880028

Option 3 ID : 4410098880029

Option 4 ID : 4410098880031

Status : Answered

Chosen Option : B

Q.67 A 60-watt light bulb has an efficiency of 14.3 lumens per watt. What is the total luminous output in lumens for this bulb?

- Ans
- ☒ A. 720 lumens
 - ☒ B. 1050 lumens
 - ☒ C. 858 lumens
 - ☒ D. 600 lumens

Question ID : 4410092257584

Option 1 ID : 4410098880899

Option 2 ID : 4410098880898

Option 3 ID : 4410098880897

Option 4 ID : 4410098880896

Status : Answered

Chosen Option : C

Q.68 Automatic Meter Reading (AMR) infrastructure primarily allows a utility to:

- Ans
- ☒ A. Only measure voltage but not energy
 - ☒ B. Replace the need for any energy meter
 - ☒ C. Manually record readings by visiting each site
 - ☒ D. Collect energy consumption data remotely without manual visits

Question ID : 4410092257482

Option 1 ID : 4410098880509

Option 2 ID : 4410098880510

Option 3 ID : 4410098880508

Option 4 ID : 4410098880511

Status : Not Answered

Chosen Option : --

Q.69 According to the principle of shielding, what happens if the shielding angle increases?

- Ans** ☒ A. The degree of protection decreases
☐ B. Protection doubles
☐ C. The degree of protection increases
☐ D. Protection remains unchanged

Question ID : **4410092257572**

Option 1 ID : **4410098880848**

Option 2 ID : **4410098880850**

Option 3 ID : **4410098880851**

Option 4 ID : **4410098880849**

Status : **Answered**

Chosen Option : **A**

Q.70 The velocity ratio (V.R.) of a simple machine is defined as the ratio of:

- Ans** ☒ A. Distance moved by the effort to the distance moved by the load
☐ B. Load lifted by the machine to the effort applied on it
☐ C. Mechanical advantage of the machine to the input power supplied
☐ D. Weight of the machine to its overall operating efficiency

Question ID : **4410092257511**

Option 1 ID : **4410098880627**

Option 2 ID : **4410098880624**

Option 3 ID : **4410098880626**

Option 4 ID : **4410098880625**

Status : **Answered**

Chosen Option : **A**

Q.71 In a common-emitter configuration, a transistor's collector current is 5 mA when the base current is 50 μ A. If the base current increases to 100 μ A, which outcome is expected if the transistor is still operating in active region?

- Ans** ☐ A. Transistor enters saturation
☐ B. Collector current decreases
☒ C. Collector current increases proportionally
☐ D. Transistor enters cut-off region

Question ID : **4410092257409**

Option 1 ID : **4410098880238**

Option 2 ID : **4410098880239**

Option 3 ID : **4410098880237**

Option 4 ID : **4410098880236**

Status : **Answered**

Chosen Option : **B**

Q.72 In a maintenance scenario, a synchronous motor's stator is found to have three sets of coil terminals. How should these be labeled for a three-phase operation?

- Ans** ☒ A. U1-U2, V1-V2, W1-W2
☐ B. P1-P2, S1-S2, T1-T2
☐ C. F1-F2, X1-X2, Z1-Z2
☐ D. L1-L2, M1-M2, N1-N2

Question ID : **4410092257440**
Option 1 ID : **4410098880360**
Option 2 ID : **4410098880363**
Option 3 ID : **4410098880361**
Option 4 ID : **4410098880362**
Status : **Answered**
Chosen Option : **A**

Q.73 The system that guides workers to select safer products and procedures is called the:

- Ans** ☐ A. Preventive Maintenance Plan
☐ B. Personal Protective Equipment (PPE) Guidelines
☐ C. Hazard Analysis Report
☒ D. Standard Operating Procedures (SOPs)

Question ID : **4410092257591**
Option 1 ID : **4410098880924**
Option 2 ID : **4410098880927**
Option 3 ID : **4410098880925**
Option 4 ID : **4410098880926**
Status : **Answered**
Chosen Option : **B**

Q.74 When a coil moves parallel to the magnetic field:

- Ans** ☒ A. No voltage is generated
☐ B. Minimum voltage is generated
☐ C. Voltage is generated
☐ D. Maximum voltage is generated

Question ID : **4410092257566**
Option 1 ID : **4410098880827**
Option 2 ID : **4410098880826**
Option 3 ID : **4410098880825**
Option 4 ID : **4410098880824**
Status : **Answered**
Chosen Option : **A**

Q.75 A large conference hall uses ceiling-mounted fluorescent lights to ensure even brightness across the entire space. Which type of illumination system does this describe?

- Ans**
- ☒ A. Local illumination system
 - ☒ B. Emergency illumination system
 - ☒ C. General illumination system
 - ☒ D. Accent illumination system

Question ID : **4410092257424**

Option 1 ID : **4410098880296**

Option 2 ID : **4410098880299**

Option 3 ID : **4410098880298**

Option 4 ID : **4410098880297**

Status : **Answered**

Chosen Option : **C**

Q.76 An SF₆ (Sulphur Hexafluoride) circuit breaker is preferred for high-voltage applications mainly because SF₆ gas has:

- Ans**
- ☒ A. Excellent arc-quenching and insulating properties
 - ☒ B. Poor insulating strength compared to air
 - ☒ C. High flammability and low chemical stability
 - ☒ D. No ability to extinguish an arc

Question ID : **4410092257498**

Option 1 ID : **4410098880573**

Option 2 ID : **4410098880572**

Option 3 ID : **4410098880575**

Option 4 ID : **4410098880574**

Status : **Answered**

Chosen Option : **A**

Q.77 What is the result of the interaction between the stator magnetic field and the rotor magnetic field in a three-phase induction motor?

- Ans**
- ☒ A. The rotor accelerates randomly
 - ☒ B. The rotor remains stationary
 - ☒ C. The rotor moves opposite to the stator's field
 - ☒ D. The rotor is forced to move in the same direction as the stator's rotating magnetic field

Question ID : **4410092257587**

Option 1 ID : **4410098880909**

Option 2 ID : **4410098880910**

Option 3 ID : **4410098880908**

Option 4 ID : **4410098880911**

Status : **Answered**

Chosen Option : **D**

Q.78 What is the hazard of using metal tools for repair on live circuits?

- Ans**
- ☒ A. Metal tools are harder to hold
 - ☒ B. Metal tools can melt
 - ☒ C. Metal tools can conduct electricity
 - ☒ D. Metal tools get magnetised permanently

Question ID : **4410092257332**

Option 1 ID : **4410098879956**

Option 2 ID : **4410098879958**

Option 3 ID : **4410098879957**

Option 4 ID : **4410098879959**

Status : **Answered**

Chosen Option : **C**

Q.79 Which electronic device amplifies a weak electrical signal into a stronger electrical signal?

- Ans**
- ☒ A. Diode
 - ☒ B. Thyristor
 - ☒ C. Transistor
 - ☒ D. Resistor

Question ID : **4410092257311**

Option 1 ID : **4410098879875**

Option 2 ID : **4410098879873**

Option 3 ID : **4410098879872**

Option 4 ID : **4410098879874**

Status : **Answered**

Chosen Option : **C**

Q.80 The four fundamental electrical constants (parameters) of a transmission line are:

- Ans**
- ☒ A. Resistance, Inductance, Capacitance, and Conductance
 - ☒ B. Weight, Tension, Temperature, and Wind
 - ☒ C. Length, Height, Sag, and Span
 - ☒ D. Voltage, Current, Power, and Frequency

Question ID : **4410092257496**

Option 1 ID : **4410098880567**

Option 2 ID : **4410098880566**

Option 3 ID : **4410098880565**

Option 4 ID : **4410098880564**

Status : **Answered**

Chosen Option : **D**