पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

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| Test Center Name | Pawan Ganga Educational Center 3 |
| Test Date | 05/12/2023 |
| Test Time | 4:30 PM - 6:30 PM |
| Subject | Diploma Trainee Electrical |

Section : **Electrical Engineering**

**Q.1** **The principle on which a DC generator operates is _____.**

**Ans**
✓ 1. Faraday's law of electromagnetic induction
✗ 2. Kirchhoff's voltage law
✗ 3. Ohm's law
✗ 4. Ampere's law

Question ID : **630680485713**
Option 1 ID : **6306801897067**
Option 2 ID : **6306801897070**
Option 3 ID : **6306801897068**
Option 4 ID : **6306801897069**
Status : **Answered**
Chosen Option : **1**

**Q.2** **Which type of error is caused by the aging of an instrument?**

**Ans**
✗ 1. Gross error
✗ 2. Absolute error
✗ 3. Random error
✓ 4. Systematic error

Question ID : **630680485703**
Option 1 ID : **6306801897027**
Option 2 ID : **6306801897030**
Option 3 ID : **6306801897029**
Option 4 ID : **6306801897028**
Status : **Answered**
Chosen Option : **4**

Q.3 **For maximum power transfer in AC circuits, the load impedance should be _____.**

Ans
- ✗ 1. Half of source impedance
- ✗ 2. Double of source impedance
- ✓ 3. Conjugate of source impedance
- ✗ 4. Equal to source impedance

Question ID : **630680485693**
Option 1 ID : **6306801896989**
Option 2 ID : **6306801896990**
Option 3 ID : **6306801896988**
Option 4 ID : **6306801896987**
Status : **Answered**
Chosen Option : **3**

Q.4 **Francis turbines are best suited for _____.**

Ans
- ✗ 1. Very high head and very low flow rates
- ✓ 2. Medium head and medium flow rates
- ✗ 3. Low head and high flow rates
- ✗ 4. High head and low flow rates

Question ID : **630680485746**
Option 1 ID : **6306801897202**
Option 2 ID : **6306801897201**
Option 3 ID : **6306801897199**
Option 4 ID : **6306801897200**
Status : **Answered**
Chosen Option : **2**

Q.5 **Which component in a CSP plant focuses sunlight onto a target?**

Ans
- ✗ 1. Photovoltaic cell
- ✗ 2. Inverter
- ✗ 3. Battery storage
- ✓ 4. Mirror or lens

Question ID : **630680485748**
Option 1 ID : **6306801897207**
Option 2 ID : **6306801897208**
Option 3 ID : **6306801897210**
Option 4 ID : **6306801897209**
Status : **Answered**
Chosen Option : **4**

Q.6 **Differential protection of a bus bar is based on the principle of _____.**

Ans
- ✓ 1. Comparison of incoming and outgoing currents
- ✗ 2. Current grading
- ✗ 3. Voltage grading
- ✗ 4. Time grading

Question ID : **630680485805**
Option 1 ID : **6306801897437**
Option 2 ID : **6306801897436**
Option 3 ID : **6306801897438**
Option 4 ID : **6306801897435**
Status : **Answered**
Chosen Option : **1**

Q.7 **The order of a system is determined by:**

Ans
- ✗ 1. Number of input signals
- ✗ 2. Number of output signals
- ✗ 3. Number of feedback loops
- ✓ 4. Highest power of 's' in its transfer function

Question ID : **630680485786**
Option 1 ID : **6306801897361**
Option 2 ID : **6306801897362**
Option 3 ID : **6306801897359**
Option 4 ID : **6306801897360**
Status : **Answered**
Chosen Option : **4**

Q.8 **A purely resistive AC circuit has a power factor of _____.**

Ans
- ✗ 1. 0.5
- ✗ 2. Infinite
- ✗ 3. 0
- ✓ 4. 1

Question ID : **630680485695**
Option 1 ID : **6306801896996**
Option 2 ID : **6306801896998**
Option 3 ID : **6306801896995**
Option 4 ID : **6306801896997**
Status : **Answered**
Chosen Option : **4**

Q.9 **The dynamometer type wattmeter operates on the principle of _____.**

Ans
- ✗ 1. Electrostatic induction
- ✗ 2. Mutual induction
- ✓ 3. Electromagnetic induction
- ✗ 4. Self induction

Question ID : **630680485704**
Option 1 ID : **6306801897034**
Option 2 ID : **6306801897031**
Option 3 ID : **6306801897033**
Option 4 ID : **6306801897032**
Status : **Answered**
Chosen Option : **3**

Q.10 **According to Faraday's first law of electromagnetic induction, the induced electromotive force in any closed circuit is equal to:**

Ans
- ✗ 1. The total magnetic flux through the circuit
- ✗ 2. The current flowing through the circuit
- ✓ 3. The rate of change of the magnetic flux through the circuit
- ✗ 4. The resistance of the circuit

Question ID : **630680485799**
Option 1 ID : **6306801897412**
Option 2 ID : **6306801897414**
Option 3 ID : **6306801897411**
Option 4 ID : **6306801897413**
Status : **Answered**
Chosen Option : **3**

Q.11 What is the primary factor affecting the inductance of a transmission line?

Ans
- ✔ 1. Conductor material
- ✘ 2. Temperature of the surrounding environment
- ✘ 3. Frequency of the signal
- ✘ 4. Length of the transmission line

Question ID : **630680485755**
Option 1 ID : **6306801897236**
Option 2 ID : **6306801897238**
Option 3 ID : **6306801897235**
Option 4 ID : **6306801897237**
Status : **Answered**
Chosen Option : **3**

Q.12 What does Norton's theorem help determine the equivalent of?

Ans
- ✔ 1. Current Source
- ✘ 2. Resistance
- ✘ 3. Capacitance
- ✘ 4. Voltage Source

Question ID : **630680485692**
Option 1 ID : **6306801896984**
Option 2 ID : **6306801896985**
Option 3 ID : **6306801896986**
Option 4 ID : **6306801896983**
Status : **Answered**
Chosen Option : **1**

Q.13 In node analysis, which element is taken as a reference?

Ans
- ✘ 1. Highest voltage node
- ✘ 2. Node with maximum branches
- ✘ 3. Node with minimum branches
- ✔ 4. Ground or zero voltage node

Question ID : **630680485691**
Option 1 ID : **6306801896979**
Option 2 ID : **6306801896981**
Option 3 ID : **6306801896982**
Option 4 ID : **6306801896980**
Status : **Answered**
Chosen Option : **4**

Q.14 The VVVF method of speed control stands for:

Ans
- ✘ 1. Very Voltage Very Frequency
- ✘ 2. Voltage Vector and Frequency Factor
- ✘ 3. Voltage Variation and Frequency Fixation
- ✔ 4. Variable Voltage Variable Frequency

Question ID : **630680485734**
Option 1 ID : **6306801897152**
Option 2 ID : **6306801897154**
Option 3 ID : **6306801897153**
Option 4 ID : **6306801897151**
Status : **Answered**
Chosen Option : **4**

Q.15 In a two-port network, the open-circuit impedance parameter Z11 represents _____.

Ans
✗ 1. Transfer impedance from input to output
✗ 2. Transfer impedance from output to input
✓ 3. Input impedance with output open-circuited
✗ 4. Output impedance with input open-circuited

Question ID : **630680485697**
Option 1 ID : **6306801897005**
Option 2 ID : **6306801897006**
Option 3 ID : **6306801897003**
Option 4 ID : **6306801897004**
Status : **Answered**
Chosen Option : **3**

Q.16 What is the formula for calculating the transmission efficiency of short transmission lines?

Ans
✓ 1. Efficiency = (Received power / Transmitted power) × 100
✗ 2. Efficiency = 1 - (Received power / Transmitted power)
✗ 3. Efficiency = Transmitted power / Received power
✗ 4. Efficiency = (Transmitted power - Received power) / Transmitted power

Question ID : **630680485760**
Option 1 ID : **6306801897255**
Option 2 ID : **6306801897258**
Option 3 ID : **6306801897256**
Option 4 ID : **6306801897257**
Status : **Answered**
Chosen Option : **1**

Q.17 For an application requiring high starting torque and low starting current, which type of motor is most suitable?

Ans
✗ 1. Squirrel cage induction motor
✗ 2. Capacitor start motor
✓ 3. Slip ring induction motor
✗ 4. Synchronous motor

Question ID : **630680485733**
Option 1 ID : **6306801897150**
Option 2 ID : **6306801897149**
Option 3 ID : **6306801897148**
Option 4 ID : **6306801897147**
Status : **Answered**
Chosen Option : **3**

Q.18 For a sinusoidal waveform, the RMS value is approximately what fraction of the peak value?

Ans
✗ 1. 0.5
✓ 2. 0.707
✗ 3. 1
✗ 4. 0.9

Question ID : **630680485774**
Option 1 ID : **6306801897311**
Option 2 ID : **6306801897312**
Option 3 ID : **6306801897314**
Option 4 ID : **6306801897313**
Status : **Answered**
Chosen Option : **2**

Q.19 The load angle in a synchronous motor indicates the angle between _____.

Ans
✗ 1. Rotor magnetic field and supply voltage
✗ 2. Supply voltage and rotor current
✓ 3. Rotor and stator magnetic fields
✗ 4. Stator magnetic field and rotor current

Question ID : **630680485736**
Option 1 ID : **6306801897161**
Option 2 ID : **6306801897160**
Option 3 ID : **6306801897159**
Option 4 ID : **6306801897162**
Status : **Answered**
Chosen Option : **3**

Q.20 In a power system, reactive power is primarily due to _____.

Ans
✓ 1. Inductive loads
✗ 2. Resistive loads
✗ 3. Purely active loads
✗ 4. Capacitive loads

Question ID : **630680485705**
Option 1 ID : **6306801897037**
Option 2 ID : **6306801897035**
Option 3 ID : **6306801897038**
Option 4 ID : **6306801897036**
Status : **Answered**
Chosen Option : **1**

Q.21 Which test signal is used to determine the steady-state error of a system?

Ans
✗ 1. Sinusoidal Signal
✗ 2. Impulse Signal
✗ 3. Ramp Signal
✓ 4. Step Signal

Question ID : **630680485785**
Option 1 ID : **6306801897358**
Option 2 ID : **6306801897355**
Option 3 ID : **6306801897356**
Option 4 ID : **6306801897357**
Status : **Answered**
Chosen Option : **4**

Q.22 In a water-tube boiler, water flows inside the _____.

Ans
✗ 1. Outer shell only
✗ 2. Combustion chamber
✓ 3. Tubes and hot gases surround them
✗ 4. Tubes and cold gases surround them

Question ID : **630680485740**
Option 1 ID : **6306801897178**
Option 2 ID : **6306801897175**
Option 3 ID : **6306801897176**
Option 4 ID : **6306801897177**
Status : **Answered**
Chosen Option : **3**

Q.23 **Which diode is specifically designed to operate in the reverse breakdown region?**

Ans
- ✔ 1. Zener Diode
- ✘ 2. Tunnel Diode
- ✘ 3. Schottky Diode
- ✘ 4. Light Emitting Diode

Question ID : **630680485773**
Option 1 ID : **6306801897307**
Option 2 ID : **6306801897310**
Option 3 ID : **6306801897309**
Option 4 ID : **6306801897308**
Status : **Answered**
Chosen Option : **1**

Q.24 **What is a primary consideration in the design of street lighting?**

Ans
- ✔ 1. Distance between poles
- ✘ 2. Height of nearby buildings
- ✘ 3. Colour of the light
- ✘ 4. Aesthetic appeal

Question ID : **630680485769**
Option 1 ID : **6306801897292**
Option 2 ID : **6306801897294**
Option 3 ID : **6306801897293**
Option 4 ID : **6306801897291**
Status : **Answered**
Chosen Option : **1**

Q.25 **Which type of motor is specifically designed for precise control of angular position?**

Ans
- ✔ 1. Servomotor
- ✘ 2. Induction Motor
- ✘ 3. Synchronous Motor
- ✘ 4. DC Motor

Question ID : **630680485783**
Option 1 ID : **6306801897348**
Option 2 ID : **6306801897347**
Option 3 ID : **6306801897349**
Option 4 ID : **6306801897350**
Status : **Answered**
Chosen Option : **1**

Q.26 **Wind power density is directly proportional to _____.**

Ans
- ✔ 1. Wind speed cubed
- ✘ 2. Square root of wind speed
- ✘ 3. Wind speed
- ✘ 4. Wind speed squared

Question ID : **630680485750**
Option 1 ID : **6306801897217**
Option 2 ID : **6306801897218**
Option 3 ID : **6306801897215**
Option 4 ID : **6306801897216**
Status : **Answered**
Chosen Option : **2**

Q.27 Given a single-phase transformer with a turns ratio of 10:1, a primary voltage of 220V, and a frequency of 50Hz, if the flux in the core is sinusoidal and has a maximum value of 0.02 Wb, what is the peak value of the induced EMF in the secondary winding?

Ans
- ✗ 1. 314V
- ✗ 2. 2200V
- ✗ 3. 628V
- ✓ 4. 440V

Question ID : **630680485722**
Option 1 ID : **6306801897105**
Option 2 ID : **6306801897104**
Option 3 ID : **6306801897106**
Option 4 ID : **6306801897103**
Status : **Answered**
Chosen Option : **2**

Q.28 What is the purpose of calculating string efficiency in transmission lines?

Ans
- ✓ 1. To determine the capacitance
- ✗ 2. To calculate inductance
- ✗ 3. To optimize conductor material
- ✗ 4. To minimize line losses

Question ID : **630680485763**
Option 1 ID : **6306801897270**
Option 2 ID : **6306801897269**
Option 3 ID : **6306801897267**
Option 4 ID : **6306801897268**
Status : **Answered**
Chosen Option : **4**

Q.29 Which technique involves combining blocks in series or parallel to simplify a block diagram?

Ans
- ✗ 1. Routh-Hurwitz Criterion
- ✗ 2. Mason's Gain Formula
- ✓ 3. Block Diagram Reduction
- ✗ 4. Nyquist Stability Criterion

Question ID : **630680485782**
Option 1 ID : **6306801897344**
Option 2 ID : **6306801897343**
Option 3 ID : **6306801897345**
Option 4 ID : **6306801897346**
Status : **Answered**
Chosen Option : **2**

Q.30 Which factor is essential in the design of HT LT overhead lines?

Ans
- ✗ 1. Proximity to birds' nests
- ✓ 2. Distance from the ground
- ✗ 3. Colour of insulators
- ✗ 4. Nearby vegetation type

Question ID : **630680485770**
Option 1 ID : **6306801897295**
Option 2 ID : **6306801897296**
Option 3 ID : **6306801897297**
Option 4 ID : **6306801897298**
Status : **Answered**
Chosen Option : **2**

Q.31 **Which method is commonly used for the measurement of low resistances?**

Ans
- ✗ 1. Wheatstone bridge method
- ✗ 2. Ohm's law method
- ✗ 3. Megger method
- ✓ 4. Kelvin's double bridge method

Question ID : **630680485707**
Option 1 ID : **6306801897045**
Option 2 ID : **6306801897043**
Option 3 ID : **6306801897046**
Option 4 ID : **6306801897044**
Status : **Answered**
Chosen Option : **4**

Q.32 **The primary purpose of a current transformer (CT) is to _____.**

Ans
- ✓ 1. Convert high current to a lower value
- ✗ 2. Convert low current to a higher value
- ✗ 3. Step up voltage
- ✗ 4. Step down voltage

Question ID : **630680485712**
Option 1 ID : **6306801897065**
Option 2 ID : **6306801897066**
Option 3 ID : **6306801897063**
Option 4 ID : **6306801897064**
Status : **Answered**
Chosen Option : **1**

Q.33 **For parallel operation of transformers, which of the following conditions is NOT essential?**

Ans
- ✗ 1. Same frequency
- ✗ 2. Same polarity
- ✓ 3. Same kVA rating
- ✗ 4. Same voltage ratio

Question ID : **630680485728**
Option 1 ID : **6306801897129**
Option 2 ID : **6306801897130**
Option 3 ID : **6306801897128**
Option 4 ID : **6306801897127**
Status : **Answered**
Chosen Option : **1**

Q.34 **Plant capacity factor is the ratio of _____.**

Ans
- ✓ 1. Actual energy produced to the maximum possible energy
- ✗ 2. Maximum possible energy to the actual energy produced
- ✗ 3. Average energy to the actual energy
- ✗ 4. Actual energy to the average energy

Question ID : **630680485754**
Option 1 ID : **6306801897231**
Option 2 ID : **6306801897232**
Option 3 ID : **6306801897234**
Option 4 ID : **6306801897233**
Status : **Answered**
Chosen Option : **1**

Q.35 **Armature reaction in a DC generator primarily affects:**

Ans
- ✗ 1. Efficiency
- ✗ 2. Power factor
- ✓ 3. Generated voltage
- ✗ 4. Speed of the generator

Question ID : **630680485715**
Option 1 ID : **6306801897078**
Option 2 ID : **6306801897077**
Option 3 ID : **6306801897075**
Option 4 ID : **6306801897076**
Status : **Answered**
Chosen Option : **3**

Q.36 **The primary purpose of a surge tank in a hydroelectric power plant is to _____.**

Ans
- ✓ 1. Reduce water hammer effect in the penstock
- ✗ 2. Store water for future use
- ✗ 3. Increase the efficiency of the turbine
- ✗ 4. Generate additional power

Question ID : **630680485747**
Option 1 ID : **6306801897204**
Option 2 ID : **6306801897203**
Option 3 ID : **6306801897205**
Option 4 ID : **6306801897206**
Status : **Answered**
Chosen Option : **1**

Q.37 **The back e.m.f. in a DC motor opposes the:**

Ans
- ✓ 1. Supply voltage
- ✗ 2. Armature current
- ✗ 3. Field current
- ✗ 4. Load current

Question ID : **630680485716**
Option 1 ID : **6306801897079**
Option 2 ID : **6306801897080**
Option 3 ID : **6306801897081**
Option 4 ID : **6306801897082**
Status : **Answered**
Chosen Option : **1**

Q.38 **The e.m.f. generated in a DC generator can be increased by:**

Ans
- ✓ 1. Increasing the speed of the generator
- ✗ 2. Decreasing the flux per pole
- ✗ 3. Decreasing the number of turns in the coil
- ✗ 4. Using a smaller coil

Question ID : **630680485714**
Option 1 ID : **6306801897073**
Option 2 ID : **6306801897072**
Option 3 ID : **6306801897071**
Option 4 ID : **6306801897074**
Status : **Answered**
Chosen Option : **1**

Q.39 **In mesh analysis, which of the following is true?**

Ans
- ✗ 1. Only outer loops are considered.
- ✗ 2. Both inner and outer loops are considered.
- ✓ 3. Only one loop is considered at a time.
- ✗ 4. All loops are considered simultaneously.

Question ID : **630680485690**
Option 1 ID : **6306801896977**
Option 2 ID : **6306801896978**
Option 3 ID : **6306801896975**
Option 4 ID : **6306801896976**
Status : **Answered**
Chosen Option : **3**

Q.40 **When reducing a block diagram, which of the following is NOT a basic configuration?**

Ans
- ✗ 1. Feedback Configuration
- ✓ 2. Diagonal Configuration
- ✗ 3. Parallel Configuration
- ✗ 4. Series Configuration

Question ID : **630680485787**
Option 1 ID : **6306801897365**
Option 2 ID : **6306801897366**
Option 3 ID : **6306801897364**
Option 4 ID : **6306801897363**
Status : **Answered**
Chosen Option : **2**

Q.41 **Which component in an elevator control system primarily determines the elevator's direction and speed?**

Ans
- ✓ 1. Microcontroller
- ✗ 2. Door sensor
- ✗ 3. Floor button
- ✗ 4. Relay

Question ID : **630680485780**
Option 1 ID : **6306801897337**
Option 2 ID : **6306801897335**
Option 3 ID : **6306801897336**
Option 4 ID : **6306801897338**
Status : **Not Answered**
Chosen Option : **--**

Q.42 **The overall efficiency of a steam power plant is defined as the ratio of _____.**

Ans
- ✗ 1. Electrical energy output to the mechanical energy input
- ✗ 2. Mechanical energy output to the heat energy input
- ✗ 3. Heat energy output to the electrical energy input
- ✓ 4. Electrical energy output to the heat energy input

Question ID : **630680485739**
Option 1 ID : **6306801897172**
Option 2 ID : **6306801897171**
Option 3 ID : **6306801897174**
Option 4 ID : **6306801897173**
Status : **Answered**
Chosen Option : **1**

Q.43 The rectifier type AC voltmeter is used to measure _____.

Ans
✗ 1. Peak value
✓ 2. Average value
✗ 3. Peak-to-peak value
✗ 4. RMS value

Question ID : **630680485711**
Option 1 ID : **6306801897059**
Option 2 ID : **6306801897061**
Option 3 ID : **6306801897062**
Option 4 ID : **6306801897060**
Status : **Answered**
Chosen Option : **2**

Q.44 Which bridge is used for the measurement of inductance?

Ans
✗ 1. Wheatstone bridge
✗ 2. Kelvin's bridge
✓ 3. Maxwell's bridge
✗ 4. Anderson's bridge

Question ID : **630680485708**
Option 1 ID : **6306801897049**
Option 2 ID : **6306801897048**
Option 3 ID : **6306801897047**
Option 4 ID : **6306801897050**
Status : **Answered**
Chosen Option : **3**

Q.45 A real-world voltage source that has some internal resistance is termed as:

Ans
✗ 1. Independent voltage source
✗ 2. Dependent voltage source
✗ 3. Ideal voltage source
✓ 4. Non-ideal voltage source

Question ID : **630680485775**
Option 1 ID : **6306801897318**
Option 2 ID : **6306801897317**
Option 3 ID : **6306801897315**
Option 4 ID : **6306801897316**
Status : **Answered**
Chosen Option : **4**

Q.46 Which type of FET is normally ON when the gate-source voltage is zero?

Ans
✓ 1. Depletion-mode MOSFET
✗ 2. Enhancement-mode MOSFET
✗ 3. MOSFET
✗ 4. JFET

Question ID : **630680485772**
Option 1 ID : **6306801897306**
Option 2 ID : **6306801897305**
Option 3 ID : **6306801897304**
Option 4 ID : **6306801897303**
Status : **Answered**
Chosen Option : **1**

Q.47 What is the result of the inverse Laplace transform of F(s) = 1/s?

Ans
✗ 1. e^(-at)
✓ 2. u(t)
✗ 3. cos(at)
✗ 4. sin(at)

Question ID : **630680485700**
Option 1 ID : **6306801897016**
Option 2 ID : **6306801897015**
Option 3 ID : **6306801897018**
Option 4 ID : **6306801897017**
Status : **Answered**
Chosen Option : **2**

Q.48 In electric traction, the purpose of sectioning is to _____.

Ans
✗ 1. Reduce the current flow
✗ 2. Improve the efficiency
✓ 3. Divide the overhead equipment into sections
✗ 4. Increase the voltage

Question ID : **630680485793**
Option 1 ID : **6306801897389**
Option 2 ID : **6306801897390**
Option 3 ID : **6306801897388**
Option 4 ID : **6306801897387**
Status : **Answered**
Chosen Option : **3**

Q.49 Which principle ensures safety against electric shock during electrical installations?

Ans
✗ 1. Wearing a helmet during installations
✓ 2. Insulation of live parts
✗ 3. Keeping a first aid kit nearby
✗ 4. Using a flashlight in dark areas

Question ID : **630680485766**
Option 1 ID : **6306801897280**
Option 2 ID : **6306801897279**
Option 3 ID : **6306801897282**
Option 4 ID : **6306801897281**
Status : **Answered**
Chosen Option : **2**

Q.50 **Which of the following statements best describes the Corona effect in Extra High Voltage (EHV) transmission lines?**

Ans ✓ 1. It is the phenomenon where a bluish glow appears along with a hissing noise around the conductors.

✗ 2. It is the effect where the transmission line starts to resonate at its natural frequency due to external disturbances.

✗ 3. It is the effect where the transmission line heats up excessively due to high current flow.

✗ 4. It is the phenomenon where the insulation of the transmission line gets permanently damaged due to high voltage.

Question ID : **630680485788**
Option 1 ID : **6306801897368**
Option 2 ID : **6306801897369**
Option 3 ID : **6306801897370**
Option 4 ID : **6306801897367**
Status : **Answered**
Chosen Option : **1**

Q.51 **The demand factor is the ratio of _____.**

Ans ✗ 1. Connected load to maximum demand

✗ 2. Average load to connected load

✓ 3. Maximum demand to connected load

✗ 4. Connected load to average load

Question ID : **630680485752**
Option 1 ID : **6306801897224**
Option 2 ID : **6306801897225**
Option 3 ID : **6306801897223**
Option 4 ID : **6306801897226**
Status : **Answered**
Chosen Option : **3**

Q.52 **Instrument systems can be classified based on _____.**

Ans ✗ 1. Weight

✗ 2. Colour

✓ 3. Function and response

✗ 4. Size

Question ID : **630680485701**
Option 1 ID : **6306801897022**
Option 2 ID : **6306801897019**
Option 3 ID : **6306801897021**
Option 4 ID : **6306801897020**
Status : **Answered**
Chosen Option : **3**

Q.53 When a synchronous motor is on load with constant excitation, an increase in load will _____.

Ans
✓ 1. Decrease the power factor
✗ 2. Increase the power factor
✗ 3. Not affect the power factor
✗ 4. Make the motor run asynchronously

Question ID : **630680485737**
Option 1 ID : **6306801897163**
Option 2 ID : **6306801897164**
Option 3 ID : **6306801897165**
Option 4 ID : **6306801897166**
Status : **Answered**
Chosen Option : **1**

Q.54 In a transmission line, the proximity effect is more pronounced when:

Ans
✓ 1. The conductors are closely spaced and the frequency is high.
✗ 2. The conductors are closely spaced and the frequency is low.
✗ 3. The conductors are spaced far apart and the frequency is high.
✗ 4. The conductors are spaced far apart and the frequency is low.

Question ID : **630680485756**
Option 1 ID : **6306801897242**
Option 2 ID : **6306801897240**
Option 3 ID : **6306801897241**
Option 4 ID : **6306801897239**
Status : **Answered**
Chosen Option : **1**

Q.55 In an AC locomotive, the primary source of power is derived from _____.

Ans
✗ 1. Diesel engine
✗ 2. Ground rails
✓ 3. Overhead lines
✗ 4. Batteries

Question ID : **630680485795**
Option 1 ID : **6306801897396**
Option 2 ID : **6306801897398**
Option 3 ID : **6306801897397**
Option 4 ID : **6306801897395**
Status : **Answered**
Chosen Option : **3**

Q.56 In industrial installations, what design consideration is vital for machinery?

Ans
✓ 1. Adequate power supply
✗ 2. Colour coordination
✗ 3. Proximity to windows
✗ 4. Distance from the main gate

Question ID : **630680485768**
Option 1 ID : **6306801897289**
Option 2 ID : **6306801897290**
Option 3 ID : **6306801897287**
Option 4 ID : **6306801897288**
Status : **Answered**
Chosen Option : **1**

Q.57 **A differential relay operates when the difference between the currents in its two coils exceeds?**

Ans
- ✗ 1. Zero
- ✓ 2. A preset value
- ✗ 3. 100% of rated current
- ✗ 4. 50% of rated current

Question ID : **630680485806**
Option 1 ID : **6306801897442**
Option 2 ID : **6306801897439**
Option 3 ID : **6306801897441**
Option 4 ID : **6306801897440**
Status : **Answered**
Chosen Option : **2**

Q.58 **What is the formula to calculate the receiving end voltage of a distributor?**

Ans
- ✗ 1. Receiving End Voltage = Voltage Drop / Sending End Voltage
- ✗ 2. Receiving End Voltage = Sending End Voltage × Voltage Drop
- ✓ 3. Receiving End Voltage = Sending End Voltage - Voltage Drop
- ✗ 4. Receiving End Voltage = Sending End Voltage + Voltage Drop

Question ID : **630680485765**
Option 1 ID : **6306801897278**
Option 2 ID : **6306801897277**
Option 3 ID : **6306801897276**
Option 4 ID : **6306801897275**
Status : **Answered**
Chosen Option : **3**

Q.59 **How is the voltage regulation of a short transmission line typically determined?**

Ans
- ✗ 1. By analyzing transient conditions
- ✗ 2. By measuring the line length
- ✓ 3. By considering the line's impedance
- ✗ 4. By measuring the conductor diameter

Question ID : **630680485759**
Option 1 ID : **6306801897252**
Option 2 ID : **6306801897251**
Option 3 ID : **6306801897253**
Option 4 ID : **6306801897254**
Status : **Answered**
Chosen Option : **1**

Q.60 **The synchronous motor runs at a speed that is synchronized with _____.**

Ans
- ✗ 1. Rotor speed
- ✗ 2. Stator speed
- ✓ 3. Supply frequency
- ✗ 4. Load torque

Question ID : **630680485735**
Option 1 ID : **6306801897157**
Option 2 ID : **6306801897158**
Option 3 ID : **6306801897155**
Option 4 ID : **6306801897156**
Status : **Answered**
Chosen Option : **1**

Q.61 PMMC (Permanent magnet moving coil) instruments are suitable for _____.

Ans
✗ 1. Neither AC nor DC
✗ 2. Both AC and DC
✗ 3. AC measurements
✓ 4. DC measurements

Question ID : **630680485706**
Option 1 ID : **6306801897042**
Option 2 ID : **6306801897041**
Option 3 ID : **6306801897039**
Option 4 ID : **6306801897040**
Status : **Answered**
Chosen Option : **4**

Q.62 The equivalent resistance of a transformer is used to calculate:

Ans
✓ 1. Copper losses
✗ 2. Power factor
✗ 3. Core losses
✗ 4. Efficiency

Question ID : **630680485725**
Option 1 ID : **6306801897116**
Option 2 ID : **6306801897118**
Option 3 ID : **6306801897115**
Option 4 ID : **6306801897117**
Status : **Answered**
Chosen Option : **1**

Q.63 When calculating the sag in a transmission line, which factor is considered?

Ans
✗ 1. Atmospheric pressure
✗ 2. Temperature of the conductor
✗ 3. Conductor material
✓ 4. Line length

Question ID : **630680485762**
Option 1 ID : **6306801897265**
Option 2 ID : **6306801897266**
Option 3 ID : **6306801897263**
Option 4 ID : **6306801897264**
Status : **Answered**
Chosen Option : **4**

Q.64 In a parallel RLC circuit operating at a frequency other than its resonant frequency, which of the following statements is true?

Ans
✗ 1. The total current is always in phase with the voltage.
✓ 2. The total current is either leading or lagging the voltage, depending on the values of R, L, and C.
✗ 3. The total current is always lagging the voltage by 90 degrees.
✗ 4. The total current is always equal to the sum of the individual currents through R, L, and C.

Question ID : **630680485694**
Option 1 ID : **6306801896991**
Option 2 ID : **6306801896992**
Option 3 ID : **6306801896993**
Option 4 ID : **6306801896994**
Status : **Answered**
Chosen Option : **2**

Q.65 **Which of the following is NOT a category of FACTS controllers used in EHV transmission lines?**

Ans
✗ 1. Combined series-shunt controllers
✓ 2. Diagonal controllers
✗ 3. Shunt controllers
✗ 4. Series controllers

Question ID : **630680485790**
Option 1 ID : **6306801897378**
Option 2 ID : **6306801897377**
Option 3 ID : **6306801897376**
Option 4 ID : **6306801897375**
Status : **Answered**
Chosen Option : **2**

Q.66 **Which logic gate gives a high output only when both its inputs are low?**

Ans
✓ 1. NOR gate
✗ 2. AND gate
✗ 3. NAND gate
✗ 4. OR gate

Question ID : **630680485778**
Option 1 ID : **6306801897329**
Option 2 ID : **6306801897327**
Option 3 ID : **6306801897330**
Option 4 ID : **6306801897328**
Status : **Answered**
Chosen Option : **1**

Q.67 **Which organization sets the standards for illumination levels in various spaces?**

Ans
✓ 1. IESNA
✗ 2. IEEE
✗ 3. ISO
✗ 4. IEC

Question ID : **630680485797**
Option 1 ID : **6306801897404**
Option 2 ID : **6306801897403**
Option 3 ID : **6306801897405**
Option 4 ID : **6306801897406**
Status : **Answered**
Chosen Option : **3**

Q.68 **Diversity factor is always _____.**

Ans
✗ 1. Less than one
✗ 2. Equal to one
✓ 3. Greater than one
✗ 4. Zero

Question ID : **630680485753**
Option 1 ID : **6306801897227**
Option 2 ID : **6306801897228**
Option 3 ID : **6306801897229**
Option 4 ID : **6306801897230**
Status : **Answered**
Chosen Option : **3**

Q.69 What are the ABCD constants used for in the context of a short transmission line?

Ans
✓ 1. To analyze steady-state conditions
✗ 2. To calculate capacitance
✗ 3. To calculate inductance
✗ 4. To determine the temperature of the line

Question ID : **630680485758**
Option 1 ID : **6306801897249**
Option 2 ID : **6306801897247**
Option 3 ID : **6306801897248**
Option 4 ID : **6306801897250**
Status : **Answered**
Chosen Option : **1**

Q.70 The Schering bridge is used to measure _____.

Ans
✗ 1. Frequency
✓ 2. Capacitance
✗ 3. Resistance
✗ 4. Inductance

Question ID : **630680485709**
Option 1 ID : **6306801897054**
Option 2 ID : **6306801897053**
Option 3 ID : **6306801897051**
Option 4 ID : **6306801897052**
Status : **Answered**
Chosen Option : **2**

Q.71 परमाणु रिएक्टर में एक श्रृंखला प्रतिक्रिया _____ द्वारा कायम रहती है।

Ans
✗ 1. इलेक्ट्रॉन
✓ 2. धीमा न्यूट्रॉन
✗ 3. तेज़ न्यूट्रॉन
✗ 4. प्रोटोन

Question ID : **630680485744**
Option 1 ID : **6306801897194**
Option 2 ID : **6306801897192**
Option 3 ID : **6306801897191**
Option 4 ID : **6306801897193**
Status : **Answered**
Chosen Option : **3**

Q.72 The primary purpose of a DC motor starter is to:

Ans
✓ 1. Limit the starting current
✗ 2. Enhance power factor
✗ 3. Increase the motor speed
✗ 4. Improve efficiency

Question ID : **630680485718**
Option 1 ID : **6306801897088**
Option 2 ID : **6306801897090**
Option 3 ID : **6306801897087**
Option 4 ID : **6306801897089**
Status : **Answered**
Chosen Option : **1**

Q.73 The pentagonal OHE centenary construction is primarily used for _____.

Ans
✓ 1. Improving the mechanical strength
✗ 2. Increasing the conductivity
✗ 3. Enhancing the aesthetic appeal
✗ 4. Reducing the weight of the structure

Question ID : **630680485794**
Option 1 ID : **6306801897393**
Option 2 ID : **6306801897394**
Option 3 ID : **6306801897392**
Option 4 ID : **6306801897391**
Status : **Answered**
Chosen Option : **2**

Q.74 Leakage reactance in a transformer is due to:

Ans
✓ 1. Leakage flux
✗ 2. Mutual flux
✗ 3. Core losses
✗ 4. Copper losses

Question ID : **630680485723**
Option 1 ID : **6306801897109**
Option 2 ID : **6306801897107**
Option 3 ID : **6306801897108**
Option 4 ID : **6306801897110**
Status : **Answered**
Chosen Option : **1**

Q.75 Which equation correctly represents the relationship between self-inductance (L), mutual inductance (M), and the number of turns (N1 and N2) for two closely coupled coils?

Ans
✗ 1. $M = L / (N1 \times N2)$
✗ 2. $L = M \times N1 \times N2$
✗ 3. $L = M / (N1 + N2)$
✓ 4. $M = L \times \sqrt{(N1 \times N2)}$

Question ID : **630680485798**
Option 1 ID : **6306801897408**
Option 2 ID : **6306801897407**
Option 3 ID : **6306801897409**
Option 4 ID : **6306801897410**
Status : **Answered**
Chosen Option : **4**

Q.76 The form factor of an AC waveform is defined as the ratio of _____.

Ans
✗ 1. RMS value to the peak value
✗ 2. Average value to the RMS value
✓ 3. RMS value to the average value
✗ 4. Peak value to the RMS value

Question ID : **630680485801**
Option 1 ID : **6306801897422**
Option 2 ID : **6306801897420**
Option 3 ID : **6306801897419**
Option 4 ID : **6306801897421**
Status : **Answered**
Chosen Option : **3**

Q.77 **Which transformation is used to simplify a three-resistor network?**

**A) Star to Delta**
**B) Delta to Star**

Ans
✔ 1. Only B
✘ 2. Neither A nor B
✘ 3. Both A and B
✘ 4. Only A

Question ID : **630680485689**
Option 1 ID : **6306801896972**
Option 2 ID : **6306801896974**
Option 3 ID : **6306801896973**
Option 4 ID : **6306801896971**
Status : **Answered**
Chosen Option : **3**

Q.78 **In the four quadrant operation of a 3-phase induction motor, the fourth quadrant represents:**

Ans
✔ 1. Generating with reverse torque
✘ 2. Motoring with forward torque
✘ 3. Generating with forward torque
✘ 4. Motoring with reverse torque

Question ID : **630680485732**
Option 1 ID : **6306801897146**
Option 2 ID : **6306801897145**
Option 3 ID : **6306801897144**
Option 4 ID : **6306801897143**
Status : **Answered**
Chosen Option : **1**

Q.79 **In a DC motor, torque is directly proportional to:**

Ans
✔ 1. Armature current
✘ 2. Motor speed
✘ 3. Supply voltage
✘ 4. Back e.m.f.

Question ID : **630680485721**
Option 1 ID : **6306801897100**
Option 2 ID : **6306801897102**
Option 3 ID : **6306801897101**
Option 4 ID : **6306801897099**
Status : **Answered**
Chosen Option : **1**

Q.80 **When selecting an MCCB (Molded Case Circuit Breaker) for motors, which factor is crucial?**

Ans
✘ 1. Brand reputation
✘ 2. Colour of MCCB
✘ 3. Motor weight
✔ 4. Motor starting current

Question ID : **630680485803**
Option 1 ID : **6306801897428**
Option 2 ID : **6306801897427**
Option 3 ID : **6306801897430**
Option 4 ID : **6306801897429**
Status : **Answered**
Chosen Option : **4**

Q.81 The primary advantage of using SF6 gas in circuit breakers is its _____.

Ans
✓ 1. High dielectric strength
✗ 2. Non-toxicity
✗ 3. Low cost
✗ 4. Non-flammability

Question ID : **630680485802**
Option 1 ID : **6306801897424**
Option 2 ID : **6306801897426**
Option 3 ID : **6306801897423**
Option 4 ID : **6306801897425**
Status : **Answered**
Chosen Option : **1**

Q.82 All day efficiency of a transformer is the ratio of:

Ans
✗ 1. Average output to average input for 24 hours
✗ 2. Maximum output to maximum input for 24 hours
✗ 3. Minimum output to minimum input for 24 hours
✓ 4. Total output to total input for 24 hours

Question ID : **630680485726**
Option 1 ID : **6306801897120**
Option 2 ID : **6306801897121**
Option 3 ID : **6306801897122**
Option 4 ID : **6306801897119**
Status : **Answered**
Chosen Option : **4**

Q.83 The voltage transformation ratio of a transformer is the ratio of:

Ans
✓ 1. Primary to secondary voltage
✗ 2. Secondary to primary resistance
✗ 3. Primary to secondary resistance
✗ 4. Secondary to primary voltage

Question ID : **630680485724**
Option 1 ID : **6306801897113**
Option 2 ID : **6306801897114**
Option 3 ID : **6306801897111**
Option 4 ID : **6306801897112**
Status : **Answered**
Chosen Option : **4**

Q.84 A brushless DC motor operates primarily on the principle of:

Ans
✓ 1. Electronic commutation
✗ 2. Commutation by brushes
✗ 3. Synchronous operation
✗ 4. Variable reluctance

Question ID : **630680485720**
Option 1 ID : **6306801897096**
Option 2 ID : **6306801897095**
Option 3 ID : **6306801897098**
Option 4 ID : **6306801897097**
Status : **Answered**
Chosen Option : **1**

Q.85 In a two-port network, the short-circuit admittance parameter Y21 represents _____.

Ans
✗ 1. Output admittance with input short-circuited
✗ 2. Transfer admittance from input to output
✗ 3. Input admittance with output short-circuited
✓ 4. Transfer admittance from output to input

Question ID : **630680485698**
Option 1 ID : **6306801897010**
Option 2 ID : **6306801897008**
Option 3 ID : **6306801897009**
Option 4 ID : **6306801897007**
Status : **Answered**
Chosen Option : **4**

Q.86 In a homo-polar transmission line, which of the following is a significant challenge that needs to be addressed?

Ans
✗ 1. Balancing the three phases
✓ 2. Mitigating the direct current magnetic fields
✗ 3. Reduction of skin effect
✗ 4. Increasing the line capacitance

Question ID : **630680485789**
Option 1 ID : **6306801897372**
Option 2 ID : **6306801897373**
Option 3 ID : **6306801897371**
Option 4 ID : **6306801897374**
Status : **Answered**
Chosen Option : **2**

Q.87 Wound rotor induction generators are primarily used in wind turbines because they _____.

Ans
✓ 1. Allow variable speed operation
✗ 2. Increase the wind turbine size
✗ 3. Make the turbine noiseless
✗ 4. Reduce the overall cost

Question ID : **630680485751**
Option 1 ID : **6306801897220**
Option 2 ID : **6306801897221**
Option 3 ID : **6306801897222**
Option 4 ID : **6306801897219**
Status : **Answered**
Chosen Option : **1**

Q.88 Which characteristic of an instrument defines its behaviour during rapid changes in the measurand?

Ans
✗ 1. Precision
✓ 2. Dynamic
✗ 3. Accuracy
✗ 4. Static

Question ID : **630680485702**
Option 1 ID : **6306801897026**
Option 2 ID : **6306801897024**
Option 3 ID : **6306801897025**
Option 4 ID : **6306801897023**
Status : **Answered**
Chosen Option : **2**

Q.89 **In a control system, if all poles lie on the left side of the s-plane, the system is:**

Ans
- ✗ 1. Unstable
- ✗ 2. Oscillatory
- ✓ 3. Stable
- ✗ 4. Marginally stable

Question ID : **630680485781**
Option 1 ID : **6306801897339**
Option 2 ID : **6306801897342**
Option 3 ID : **6306801897341**
Option 4 ID : **6306801897340**
Status : **Answered**
Chosen Option : **3**

Q.90 **In transmission lines, sag is least affected by:**

Ans
- ✓ 1. Colour of the conductor
- ✗ 2. Weight of the conductor
- ✗ 3. Ice loading
- ✗ 4. Span length

Question ID : **630680485792**
Option 1 ID : **6306801897386**
Option 2 ID : **6306801897383**
Option 3 ID : **6306801897385**
Option 4 ID : **6306801897384**
Status : **Answered**
Chosen Option : **1**

Q.91 **In circuit analysis, converting a voltage source in series with a resistance to a current source in parallel with the same resistance is known as _____.**

Ans
- ✗ 1. Parallel to series resistance transformation
- ✓ 2. Voltage to current source transformation
- ✗ 3. Current to voltage source transformation
- ✗ 4. Resistor to inductor transformation

Question ID : **630680485688**
Option 1 ID : **6306801896969**
Option 2 ID : **6306801896967**
Option 3 ID : **6306801896968**
Option 4 ID : **6306801896970**
Status : **Answered**
Chosen Option : **2**

Q.92 **The primary function of an ELCB (Earth leakage circuit breaker) is to detect _____.**

Ans
- ✗ 1. Phase imbalance
- ✗ 2. Overcurrent
- ✓ 3. Earth leakage current
- ✗ 4. Overvoltage

Question ID : **630680485804**
Option 1 ID : **6306801897434**
Option 2 ID : **6306801897431**
Option 3 ID : **6306801897433**
Option 4 ID : **6306801897432**
Status : **Answered**
Chosen Option : **3**

Q.93 In a three-phase system, RYB sequence is also known as _____.

Ans
1. Both positive and negative sequence.
2. Negative sequence
3. Positive sequence
4. Zero sequence

Question ID : **630680485696**
Option 1 ID : **6306801897002**
Option 2 ID : **6306801897000**
Option 3 ID : **6306801896999**
Option 4 ID : **6306801897001**
Status : **Answered**
Chosen Option : **3**

Q.94 In the four quadrant operation of a three-phase induction motor, consider the following scenarios:

I. Motor operates in the forward direction with motoring torque.
II. Motor operates in the reverse direction with regenerative braking.
III. Motor operates in the forward direction with regenerative braking.
IV. Motor operates in the reverse direction with motoring torque.

Which of the following correctly represents the third quadrant of operation?

Ans
1. III
2. II
3. I
4. IV

Question ID : **630680485731**
Option 1 ID : **6306801897141**
Option 2 ID : **6306801897140**
Option 3 ID : **6306801897139**
Option 4 ID : **6306801897142**
Status : **Answered**
Chosen Option : **2**

Q.95 The slip of an induction motor is 0 when the motor is:

Ans
1. Overloaded
2. At standstill
3. Running at synchronous speed
4. Running at maximum torque

Question ID : **630680485729**
Option 1 ID : **6306801897134**
Option 2 ID : **6306801897131**
Option 3 ID : **6306801897132**
Option 4 ID : **6306801897133**
Status : **Answered**
Chosen Option : **3**

Q.96 **Which Boolean operation is represented by the multiplication of two binary variables?**

Ans
✔ 1. AND operation
✘ 2. XOR operation
✘ 3. OR operation
✘ 4. NOT operation

Question ID : **630680485779**
Option 1 ID : **6306801897332**
Option 2 ID : **6306801897334**
Option 3 ID : **6306801897331**
Option 4 ID : **6306801897333**
Status : **Answered**
Chosen Option : **1**

Q.97 **Which of the following describes the primary difference between a JFET (Junction Field-Effect Transistor) and a MOSFET (Metal-Oxide-Semiconductor Field-Effect Transistor)?**

Ans
✘ 1. MOSFETs are unipolar devices while JFETs are bipolar
✘ 2. Gate is voltage-controlled and current flows through it in a MOSFET
✔ 3. Gate is voltage-controlled and no current flows through it in a MOSFET
✘ 4. JFETs use a PN-junction for gating, while MOSFETs use a metal-semiconductor junction

Question ID : **630680485771**
Option 1 ID : **6306801897301**
Option 2 ID : **6306801897300**
Option 3 ID : **6306801897299**
Option 4 ID : **6306801897302**
Status : **Answered**
Chosen Option : **4**

Q.98 **The time required for half of the radioactive atoms in a sample to decay is called _____.**

Ans
✔ 1. Half-life
✘ 2. Radioactive decay
✘ 3. Full-life
✘ 4. Decay constant

Question ID : **630680485742**
Option 1 ID : **6306801897185**
Option 2 ID : **6306801897184**
Option 3 ID : **6306801897186**
Option 4 ID : **6306801897183**
Status : **Answered**
Chosen Option : **1**

Q.99 **In a Boiling Water Reactor (BWR), the coolant used is _____.**

Ans
✔ 1. Light water
✘ 2. Liquid sodium
✘ 3. Heavy water
✘ 4. Carbon dioxide

Question ID : **630680485743**
Option 1 ID : **6306801897190**
Option 2 ID : **6306801897188**
Option 3 ID : **6306801897187**
Option 4 ID : **6306801897189**
Status : **Answered**
Chosen Option : **3**

Q.100 Why is transposition of conductors necessary in transmission lines?

Ans
✗ 1. To improve the efficiency of the line
✗ 2. To increase line losses
✓ 3. To reduce the inductance of the line
✗ 4. To increase the capacitance of the line

Question ID : **630680485757**
Option 1 ID : **6306801897244**
Option 2 ID : **6306801897243**
Option 3 ID : **6306801897245**
Option 4 ID : **6306801897246**
Status : **Answered**
Chosen Option : **3**

Q.101 जैव-रासायनिक बिजली संयंत्र ऊर्जा उत्पादन के लिए मुख्य रूप से किस प्रक्रिया का उपयोग करते हैं?

Ans
✗ 1. दहन
✗ 2. निस्पंदन
✗ 3. आसवन
✓ 4. किण्वन

Question ID : **630680485749**
Option 1 ID : **6306801897211**
Option 2 ID : **6306801897214**
Option 3 ID : **6306801897213**
Option 4 ID : **6306801897212**
Status : **Answered**
Chosen Option : **4**

Q.102 What is a distinct advantage of the Ring distribution system over radial distribution?

Ans
✓ 1. Increased reliability due to multiple paths for power flow
✗ 2. Reduced material usage
✗ 3. Simpler design and construction
✗ 4. Lower maintenance costs

Question ID : **630680485764**
Option 1 ID : **6306801897271**
Option 2 ID : **6306801897273**
Option 3 ID : **6306801897272**
Option 4 ID : **6306801897274**
Status : **Answered**
Chosen Option : **1**

Q.103 In a Star (Y) connected system, if phase voltage is Vp and line voltage is Vl, which of the following relationships is correct?

Ans
✓ 1. $V_p = V_l / \sqrt{3}$
✗ 2. $V_p = V_l \times \sqrt{3}$
✗ 3. $V_p = 3 \times V_l$
✗ 4. $V_p = V_l$

Question ID : **630680485800**
Option 1 ID : **6306801897415**
Option 2 ID : **6306801897416**
Option 3 ID : **6306801897418**
Option 4 ID : **6306801897417**
Status : **Answered**
Chosen Option : **1**

Q.104 Which of the following is NOT a typical loss in a synchronous motor?

Ans
✔ 1. Capacitive loss
✘ 2. Iron loss
✘ 3. Friction loss
✘ 4. Copper loss

Question ID : **630680485738**
Option 1 ID : **6306801897170**
Option 2 ID : **6306801897168**
Option 3 ID : **6306801897169**
Option 4 ID : **6306801897167**
Status : **Answered**
Chosen Option : **1**

Q.105 In an overcurrent relay, the time of operation is inversely proportional to _____.

Ans
✘ 1. The frequency
✘ 2. The cube of the current
✔ 3. The square of the current
✘ 4. The voltage

Question ID : **630680485807**
Option 1 ID : **6306801897446**
Option 2 ID : **6306801897444**
Option 3 ID : **6306801897443**
Option 4 ID : **6306801897445**
Status : **Answered**
Chosen Option : **3**

Q.106 The primary purpose of an electrostatic precipitator in a power plant is to _____.

Ans
✔ 1. Remove ash particles from the exhaust
✘ 2. Increase combustion efficiency
✘ 3. Generate electricity
✘ 4. Reduce fuel consumption

Question ID : **630680485741**
Option 1 ID : **6306801897181**
Option 2 ID : **6306801897182**
Option 3 ID : **6306801897179**
Option 4 ID : **6306801897180**
Status : **Answered**
Chosen Option : **1**

Q.107 Which of the following is the correct formula of string efficiency?

Ans
✘ 1. String Efficiency = voltage across the whole string/(number of discs in string × the voltage across the disc farthest to the conductor)
✔ 2. String Efficiency = voltage across the whole string/(number of discs in string × the voltage across the disc nearest to the conductor)
✘ 3. String Efficiency = (voltage across the whole string × number of discs in string) /the voltage across the disc farthest to the conductor
✘ 4. String Efficiency = (voltage across the whole string × number of discs in string) /the voltage across the disc nearest to the conductor

Question ID : **630680485791**
Option 1 ID : **6306801897380**
Option 2 ID : **6306801897379**
Option 3 ID : **6306801897382**
Option 4 ID : **6306801897381**
Status : **Answered**
Chosen Option : **2**

Q.108 Electronic energy meters provide an advantage of _____.

Ans
✗ 1. High power consumption
✗ 2. Having moving parts
✗ 3. Being bulky
✓ 4. High accuracy and reliability

Question ID : **630680485710**
Option 1 ID : **6306801897057**
Option 2 ID : **6306801897056**
Option 3 ID : **6306801897055**
Option 4 ID : **6306801897058**
Status : **Answered**
Chosen Option : **4**

Q.109 The torque in a three-phase induction motor is maximum at a slip of:

Ans
✓ 1. Between 0 and 1
✗ 2. Greater than 1
✗ 3. 0
✗ 4. 1

Question ID : **630680485730**
Option 1 ID : **6306801897137**
Option 2 ID : **6306801897138**
Option 3 ID : **6306801897135**
Option 4 ID : **6306801897136**
Status : **Answered**
Chosen Option : **4**

Q.110 In the armature control method, the speed of the DC motor:

Ans
✗ 1. Remains constant with increased resistance
✗ 2. Increases with increased resistance
✓ 3. Decreases with increased resistance
✗ 4. Becomes zero with increased resistance

Question ID : **630680485719**
Option 1 ID : **6306801897093**
Option 2 ID : **6306801897091**
Option 3 ID : **6306801897092**
Option 4 ID : **6306801897094**
Status : **Answered**
Chosen Option : **3**

Q.111 In which closed-loop configuration does an operational amplifier provide phase inversion?

Ans
✗ 1. Differential amplifier
✓ 2. Inverting amplifier
✗ 3. Non-inverting amplifier
✗ 4. Voltage follower

Question ID : **630680485777**
Option 1 ID : **6306801897326**
Option 2 ID : **6306801897323**
Option 3 ID : **6306801897324**
Option 4 ID : **6306801897325**
Status : **Answered**
Chosen Option : **2**

Q.112 What is a crucial factor to consider when preparing a detailed electrical estimate?

Ans
- ✗ 1. Office location
- ✗ 2. Colour of wires
- ✗ 3. Brand of equipment
- ✓ 4. Load requirements

Question ID : **630680485767**
Option 1 ID : **6306801897286**
Option 2 ID : **6306801897283**
Option 3 ID : **6306801897284**
Option 4 ID : **6306801897285**
Status : **Answered**
Chosen Option : **4**

Q.113 Which of the following is NOT a characteristic of an ideal operational amplifier?

Ans
- ✓ 1. Finite open-loop gain
- ✗ 2. Zero output impedance
- ✗ 3. Infinite input impedance
- ✗ 4. Infinite bandwidth

Question ID : **630680485776**
Option 1 ID : **6306801897322**
Option 2 ID : **6306801897320**
Option 3 ID : **6306801897319**
Option 4 ID : **6306801897321**
Status : **Answered**
Chosen Option : **1**

Q.114 The process by which water vapor in the air is changed into liquid water is called _____.

Ans
- ✗ 1. Infiltration
- ✓ 2. Condensation
- ✗ 3. Evaporation
- ✗ 4. Precipitation

Question ID : **630680485745**
Option 1 ID : **6306801897198**
Option 2 ID : **6306801897196**
Option 3 ID : **6306801897195**
Option 4 ID : **6306801897197**
Status : **Answered**
Chosen Option : **2**

Q.115 In a DC motor, the supply voltage is equal to:

Ans
- ✓ 1. Back e.m.f. plus armature drop
- ✗ 2. Armature drop divided by back e.m.f.
- ✗ 3. Armature drop minus back e.m.f.
- ✗ 4. Back e.m.f. minus armature drop

Question ID : **630680485717**
Option 1 ID : **6306801897084**
Option 2 ID : **6306801897086**
Option 3 ID : **6306801897085**
Option 4 ID : **6306801897083**
Status : **Answered**
Chosen Option : **1**

Q.116 The illumination level in a room is determined by the ratio of _____.

Ans
✗ 1. Luminous intensity to the distance
✓ 2. Luminous flux to the area
✗ 3. Luminous intensity to the area
✗ 4. Luminous flux to the volume

Question ID : **630680485796**
Option 1 ID : **6306801897400**
Option 2 ID : **6306801897399**
Option 3 ID : **6306801897402**
Option 4 ID : **6306801897401**
Status : **Answered**
Chosen Option : **1**

Q.117 Scott connection in transformers is primarily used for:

Ans
✗ 1. Voltage regulation
✗ 2. Harmonic reduction
✗ 3. Power factor correction
✓ 4. Three-phase to two-phase conversion

Question ID : **630680485727**
Option 1 ID : **6306801897125**
Option 2 ID : **6306801897126**
Option 3 ID : **6306801897123**
Option 4 ID : **6306801897124**
Status : **Answered**
Chosen Option : **4**

Q.118 In a medium transmission line, if the received power is 800 kW and the transmitted power is 850 kW, what is the transmission efficiency?

Ans
✗ 1. 94.59%
✓ 2. 94.12%
✗ 3. 5.88%
✗ 4. 55.29%

Question ID : **630680485761**
Option 1 ID : **6306801897260**
Option 2 ID : **6306801897259**
Option 3 ID : **6306801897261**
Option 4 ID : **6306801897262**
Status : **Answered**
Chosen Option : **2**

Q.119 Which property of Laplace Transform is used to solve differential equations?

Ans
✗ 1. Initial Value
✗ 2. Time Shifting
✓ 3. Linearity
✗ 4. Frequency Shifting

Question ID : **630680485699**
Option 1 ID : **6306801897014**
Option 2 ID : **6306801897012**
Option 3 ID : **6306801897011**
Option 4 ID : **6306801897013**
Status : **Answered**
Chosen Option : **4**

Q.120 Which type of position encoder uses light and sensors to determine position?

Ans
✔ 1. Optical Encoder
✘ 2. Capacitive Encoder
✘ 3. Magnetic Encoder
✘ 4. Resistive Encoder

Question ID : **630680485784**
Option 1 ID : **6306801897353**
Option 2 ID : **6306801897351**
Option 3 ID : **6306801897354**
Option 4 ID : **6306801897352**
Status : **Not Answered**
Chosen Option : **--**

Section : **General English**

Q.1 Choose the word that means the same as the given word.

Abdicate

Ans
✔ 1. Cede
✘ 2. Confiscate
✘ 3. Annulment
✘ 4. Rescindment

Question ID : **630680485809**
Option 1 ID : **6306801897451**
Option 2 ID : **6306801897452**
Option 3 ID : **6306801897453**
Option 4 ID : **6306801897454**
Status : **Not Answered**
Chosen Option : **--**

Q.2 Select the most appropriate option for the given blank.

A king was made to kneel at the feet of _____ brahmin.

Ans
✘ 1. an
✘ 2. No article
✔ 3. a
✘ 4. the

Question ID : **630680485813**
Option 1 ID : **6306801897469**
Option 2 ID : **6306801897470**
Option 3 ID : **6306801897468**
Option 4 ID : **6306801897467**
Status : **Not Answered**
Chosen Option : **--**

Q.3 **Choose the word that means the same as the given word.**

**Abbreviate**

Ans
- ✗ 1. Sycophant
- ✗ 2. Dilute
- ✗ 3. Dilate
- ✓ 4. Curtail

Question ID : **630680485808**
Option 1 ID : **6306801897448**
Option 2 ID : **6306801897450**
Option 3 ID : **6306801897447**
Option 4 ID : **6306801897449**
Status : **Not Answered**
Chosen Option : **--**

Q.4 **Select the most appropriate option for the given blank.**

**Once _____ boy came running in from play and asked, Mother, what is milk?**

Ans
- ✗ 1. an
- ✓ 2. a
- ✗ 3. No article
- ✗ 4. the

Question ID : **630680485812**
Option 1 ID : **6306801897465**
Option 2 ID : **6306801897464**
Option 3 ID : **6306801897466**
Option 4 ID : **6306801897463**
Status : **Answered**
Chosen Option : **2**

Q.5 **Select the most appropriate preposition for the given blank.**

**Being wrong opens us _____ the possibility of change.**

Ans
- ✗ 1. with
- ✗ 2. of to
- ✗ 3. into
- ✓ 4. up to

Question ID : **630680485810**
Option 1 ID : **6306801897455**
Option 2 ID : **6306801897457**
Option 3 ID : **6306801897456**
Option 4 ID : **6306801897458**
Status : **Not Answered**
Chosen Option : **--**

Q.6 The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

P. This results in higher income, consumption and associated levels of emissions.
Q. The World Bank estimates that 80% of global GDP is produced in urban areas.
R. It is certain that a considerable share of the global carbon budget will be used up for building new infrastructure, particularly in fast-growing cities.
S. Further emissions take place when cities expand and land use changes – turning vegetation into city grounds.

Ans
✓ 1. QPRS
✗ 2. RSQP
✗ 3. PQSR
✗ 4. QSRP

Question ID : **630680485814**
Option 1 ID : **6306801897472**
Option 2 ID : **6306801897473**
Option 3 ID : **6306801897471**
Option 4 ID : **6306801897474**
Status : **Answered**
Chosen Option : **4**

Q.7 Select the most appropriate preposition for the given blank.

If she doesn't rely _____ her driving skills as a source of her self-worth, it won't affect her self-esteem.

Ans
✗ 1. over
✗ 2. in
✓ 3. on
✗ 4. at

Question ID : **630680485811**
Option 1 ID : **6306801897462**
Option 2 ID : **6306801897460**
Option 3 ID : **6306801897461**
Option 4 ID : **6306801897459**
Status : **Not Answered**
Chosen Option : **--**

**Comprehension:**

Read the following passage and answer the questions given below.

Honey is a wonderful creation. It is deemed a top health food across the globe. Honey is among the most popular and widely used sweeteners, with enormous health benefits. It is used by several cultures around the world as a base for many traditional medicines, especially in Ayurveda. The health benefits and advantages of honey have been valued for ages.
Honey is known as an excellent source of natural energy as the natural, unprocessed sugar present in it enters the bloodstream directly, which in turn can give a quick boost of energy. According to a famous author and nutritionist, honey burns body fat even while you are sleeping. It is considered to be the best food for losing weight. Doctors recommend having a spoonful of honey before going to bed. You can also consume a little honey with warm water on an empty stomach early in the morning. Having it first thing in the morning helps increase the metabolism, which in turn helps reduce weight faster. Honey is also good for improving your overall health.

**SubQuestion No : 8**

**Q.8 Which word means the same as the word 'enormous' used in the passage?**

**Ans**

✗ 1. Diabolical

✗ 2. Whimsical

✗ 3. Frugal

✓ 4. Colossal

Question ID : **630680485818**
Option 1 ID : **6306801897485**
Option 2 ID : **6306801897486**
Option 3 ID : **6306801897483**
Option 4 ID : **6306801897484**
Status : **Not Answered**
Chosen Option : **--**

**Comprehension:**

Read the following passage and answer the questions given below.

Honey is a wonderful creation. It is deemed a top health food across the globe. Honey is among the most popular and widely used sweeteners, with enormous health benefits. It is used by several cultures around the world as a base for many traditional medicines, especially in Ayurveda. The health benefits and advantages of honey have been valued for ages.
Honey is known as an excellent source of natural energy as the natural, unprocessed sugar present in it enters the bloodstream directly, which in turn can give a quick boost of energy. According to a famous author and nutritionist, honey burns body fat even while you are sleeping. It is considered to be the best food for losing weight. Doctors recommend having a spoonful of honey before going to bed. You can also consume a little honey with warm water on an empty stomach early in the morning. Having it first thing in the morning helps increase the metabolism, which in turn helps reduce weight faster. Honey is also good for improving your overall health.

**SubQuestion No : 9**

**Q.9 Choose the most suitable title for the given passage.**

**Ans**

✓ 1. Honey: A wonderful creation

✗ 2. Natural or Synthetic

✗ 3. Sweets and benefits

✗ 4. Ayurvedic Honey

Question ID : **630680485816**
Option 1 ID : **6306801897478**
Option 2 ID : **6306801897475**
Option 3 ID : **6306801897477**
Option 4 ID : **6306801897476**
Status : **Answered**
Chosen Option : **1**

**Comprehension:**

Read the following passage and answer the questions given below.

Honey is a wonderful creation. It is deemed a top health food across the globe. Honey is among the most popular and widely used sweeteners, with enormous health benefits. It is used by several cultures around the world as a base for many traditional medicines, especially in Ayurveda. The health benefits and advantages of honey have been valued for ages.
Honey is known as an excellent source of natural energy as the natural, unprocessed sugar present in it enters the bloodstream directly, which in turn can give a quick boost of energy. According to a famous author and nutritionist, honey burns body fat even while you are sleeping. It is considered to be the best food for losing weight. Doctors recommend having a spoonful of honey before going to bed. You can also consume a little honey with warm water on an empty stomach early in the morning. Having it first thing in the morning helps increase the metabolism, which in turn helps reduce weight faster. Honey is also good for improving your overall health.

**SubQuestion No : 10**

**Q.10 According to the given passage, which of the following statements is NOT correct?**

**Ans**
✗ 1. Honey can help in losing weight.
✓ 2. Honey's advantages are not valued by people.
✗ 3. Honey can provide a quick boost of energy.
✗ 4. Honey is used by several cultures around the world.

Question ID : **630680485817**
Option 1 ID : **6306801897479**
Option 2 ID : **6306801897481**
Option 3 ID : **6306801897482**
Option 4 ID : **6306801897480**
Status : **Answered**
Chosen Option : **2**

Section : **Reasoning**

**Q.1** In the following question, select the related letters from the given alternatives.

QRLJ : PPIF :: FCDY : ?

**Ans**
✗ 1. VBYW
✗ 2. NUVX
✓ 3. EAAU
✗ 4. XPFF

Question ID : **630680485825**
Option 1 ID : **6306801897513**
Option 2 ID : **6306801897511**
Option 3 ID : **6306801897512**
Option 4 ID : **6306801897514**
Status : **Answered**
Chosen Option : **3**

Q.2 नीचे दिए गए प्रश्न में कुछ कथन और उनके बाद उन कथनों पर आधारित कुछ निष्कर्ष दिए गए हैं। दिए गए कथनों को सही माने, चाहे उनमें सामान्य ज्ञात तथ्यों से भिन्नता हो। सभी निष्कर्ष पढ़ें और फिर निर्धारित करें कि दिए गए कौन से निष्कर्ष, दिए गए कथनों के आधार पर युक्तिसंगत हैं।

कथन:

I. सभी दर्जी चिकित्सक हैं।

II. कोई भी चिकित्सक होशियार नहीं है।

निष्कर्ष:

I. सभी दर्जी होशियार हैं।

II. कुछ दर्जी चिकित्सक हैं।

Ans
✗ 1. केवल निष्कर्ष I अनुसरण करता है

✗ 2. दोनों निष्कर्ष I तथा II अनुसरण करते हैं

✓ 3. केवल निष्कर्ष II अनुसरण करता है

✗ 4. कोई भी निष्कर्ष अनुसरण नहीं करता है

Question ID : **630680485824**
Option 1 ID : **6306801897507**
Option 2 ID : **6306801897509**
Option 3 ID : **6306801897508**
Option 4 ID : **6306801897510**
Status : **Answered**
Chosen Option : **3**

Q.3 In the following question, select the missing number from the given series.

30, 61, 123, 247, 495, ?

Ans
✗ 1. 1017

✗ 2. 993

✓ 3. 991

✗ 4. 997

Question ID : **630680485828**
Option 1 ID : **6306801897526**
Option 2 ID : **6306801897524**
Option 3 ID : **6306801897523**
Option 4 ID : **6306801897525**
Status : **Answered**
Chosen Option : **3**

Q.4 अक्षरों से बनी नीचे दी गई स्ट्रिंग पर विचार करें। यदि बाएं छोर से पहले सात अक्षरों को उलट दिया जाए। फिर नवगठित स्ट्रिंग में दायें छोर से 22वाँ अक्षर कौन सा है?

R I R Y R W W I W Y
W W I I R Y I W I R
Y I I Y W

Ans
✗ 1. W
✓ 2. Y
✗ 3. R
✗ 4. I

Question ID : **630680485821**
Option 1 ID : **6306801897498**
Option 2 ID : **6306801897497**
Option 3 ID : **6306801897495**
Option 4 ID : **6306801897496**
Status : **Answered**
Chosen Option : **2**

Q.5 35 छात्रों की एक कक्षा में, ज़ोया नीचे से 7वें स्थान पर है जबकि सोनिया ऊपर से 9वें स्थान पर है। शाह को दोनों के बीच में रखा गया है। शाह से ज़ोया का स्थान क्या है?

Ans
✓ 1. 10वें
✗ 2. 12वें
✗ 3. 11वें
✗ 4. 13वें

Question ID : **630680485820**
Option 1 ID : **6306801897494**
Option 2 ID : **6306801897493**
Option 3 ID : **6306801897491**
Option 4 ID : **6306801897492**
Status : **Answered**
Chosen Option : **1**

Q.6 नीचे दी गई तालिका 5 वर्षों में एक कंपनी के कार्य के दिनो की संख्या को दर्शाती है।

| वर्ष | कार्य के दिन |
|---|---|
| A | 50 |
| B | 150 |
| C | 75 |
| D | 25 |
| E | 100 |

वर्ष D तथा E में कार्य के दिनो की संख्या का औसत क्या है?

Ans
✗ 1. 45.5
✗ 2. 53.5
✓ 3. 62.5
✗ 4. 72.5

Question ID : **630680485827**
Option 1 ID : **6306801897522**
Option 2 ID : **6306801897520**
Option 3 ID : **6306801897519**
Option 4 ID : **6306801897521**
Status : **Answered**
Chosen Option : **3**

Q.7 एक विशिष्ट कोड भाषा में, 'DRIVING' को 'IPKXKTF' लिखा जाता है। इस कोड भाषा में 'FACTORY' का कोड क्या है?

Ans
✓ 1. ATQVECH
✗ 2. ATQVEDI
✗ 3. HCEVQTA
✗ 4. ATQWECH

Question ID : **630680485823**
Option 1 ID : **6306801897504**
Option 2 ID : **6306801897505**
Option 3 ID : **6306801897506**
Option 4 ID : **6306801897503**
Status : **Answered**
Chosen Option : **1**

Q.8 एक अनुक्रम दिया गया है, जिसमें से एक पद लुप्त है। दिए गए विकल्पों में से वह सही विकल्प चुनिए, जो अनुक्रम को पूरा करे।

MNRM, OPUP, QRXS, STAV, ?

Ans
✗ 1. UYDO
✗ 2. VMNO
✗ 3. UMNO
✓ 4. UVDY

Question ID : **630680485822**
Option 1 ID : **6306801897501**
Option 2 ID : **6306801897499**
Option 3 ID : **6306801897502**
Option 4 ID : **6306801897500**
Status : **Answered**
Chosen Option : **4**

Q.9 निम्नलिखित प्रत्येक समस्या में एक प्रश्न और दो कथन (I) तथा (II) हैं।

X का मान क्या है?

I. x - 5 = 12

II. $x^2 = 16$

Ans ✗ 1.

यदि प्रश्न का उत्तर दोनों कथनों का एक साथ उपयोग करने पर भी नहीं दिया जा सकता है।

✓ 2.

यदि प्रश्न का उत्तर किसी एक कथन का उपयोग अकेले करके दिया जा सकता है लेकिन दूसरे कथन का उपयोग अकेले करके उत्तर नहीं दिया जा सकता है।

✗ 3.

यदि प्रश्न का उत्तर दोनों कथनों का एक साथ उपयोग करके दिया जा सकता है, लेकिन किसी एक कथन से अकेले नहीं।

✗ 4.

यदि प्रश्न का उत्तर कथन (I) या (II) में से किसी भी एक का अकेले उपयोग करके दिया जा सकता है।

Question ID : **630680485826**
Option 1 ID : **6306801897518**
Option 2 ID : **6306801897515**
Option 3 ID : **6306801897517**
Option 4 ID : **6306801897516**
Status : **Answered**
Chosen Option : **4**

Q.10 आठ शिक्षक A, B, C, D, E, F, G तथा H केंद्र की ओर मुख करके एक वृत्ताकार मेज के इर्द-गिर्द बैठे हुए हैं (जरूरी नहीं की इसी क्रम में हो)। F, C के दायीं ओर तीसरे स्थान पर है। H, C के बायीं ओर तीसरे स्थान पर है। D, C या H का निकटतम पड़ोसी नहीं है। E, A के तुरंत दायीं ओर है। G, A के बायीं ओर दूसरे स्थान पर है। E के दायीं ओर तीसरे स्थान पर कौन है?

Ans ✗ 1. A

✓ 2. D

✗ 3. G

✗ 4. C

Question ID : **630680485819**
Option 1 ID : **6306801897489**
Option 2 ID : **6306801897487**
Option 3 ID : **6306801897488**
Option 4 ID : **6306801897490**
Status : **Answered**
Chosen Option : **2**

Section : **Quantitative Aptitude**

Q.1 10000 रुपये की एक राशि पर 40 प्रतिशत की वार्षिक दर से अर्धवार्षिक संयोजन पर एक वर्ष का चक्रवृद्धि ब्याज क्या है?

Ans
✗ 1. 4700 रुपये
✗ 2. 4000 रुपये
✓ 3. 4400 रुपये
✗ 4. 4800 रुपये

Question ID : **630680485830**
Option 1 ID : **6306801897531**
Option 2 ID : **6306801897532**
Option 3 ID : **6306801897533**
Option 4 ID : **6306801897534**
Status : **Answered**
Chosen Option : **2**

Q.2 What is the value of $(x^2 - x + 1)(x + 1)$?

Ans
✗ 1. $x^3 - x$
✗ 2. $x^3 - x^2$
✓ 3. $x^3 + 1$
✗ 4. $x^3 - 1$

Question ID : **630680485837**
Option 1 ID : **6306801897560**
Option 2 ID : **6306801897562**
Option 3 ID : **6306801897561**
Option 4 ID : **6306801897559**
Status : **Answered**
Chosen Option : **3**

Q.3 यदि G, H से 30 प्रतिशत कम है तथा H, 1220 से 50 प्रतिशत अधिक है, तो G का मान क्या है?

Ans
✗ 1. 1181
✓ 2. 1281
✗ 3. 1081
✗ 4. 1381

Question ID : **630680485831**
Option 1 ID : **6306801897537**
Option 2 ID : **6306801897535**
Option 3 ID : **6306801897538**
Option 4 ID : **6306801897536**
Status : **Answered**
Chosen Option : **2**

Q.4 N1, N2 तथा N3 एक कार्य को क्रमशः 50, 25 तथा 37.5 दिनों में कर सकते हैं। उन तीनों ने साथ मिलकर काम करना आरंभ किया परंतु N2 कार्य समाप्त होने से 7.5 दिन पूर्व कार्य छोड़कर चला गया। कार्य कितने दिनों में पूरा हुआ होगा?

Ans
✔ 1. 15 दिन
✗ 2. 10 दिन
✗ 3. 18 दिन
✗ 4. 17 दिन

Question ID : **630680485834**
Option 1 ID : **6306801897547**
Option 2 ID : **6306801897549**
Option 3 ID : **6306801897548**
Option 4 ID : **6306801897550**
Status : **Answered**
Chosen Option : **4**

Q.5 यदि दिए गए शंकु की ऊँचाई 1/3 हो जाए तथा उसके आधार की त्रिज्या समान रहे, तो दिए गए शंकु तथा नये शंकु के आयतन का अनुपात क्या है?

Ans
✗ 1. 3 : 2
✗ 2. 4 : 2
✔ 3. 3 : 1
✗ 4. 4 : 1

Question ID : **630680485840**
Option 1 ID : **6306801897573**
Option 2 ID : **6306801897572**
Option 3 ID : **6306801897571**
Option 4 ID : **6306801897574**
Status : **Answered**
Chosen Option : **3**

Q.6 एक बस अपनी कुल यात्रा का 3/4 भाग सामान्य गति से तय करती है। बची हुई दूरी बस द्वारा उसकी सामान्य गति की 1/4 गति से तय की जाती है। धीमी गति के कारण वह अपने गंतव्य स्थान पर 120 मिनट की देरी से पहुँचती है। यदि कुल दूरी 200 कि.मी. है, तो बस की सामान्य गति क्या है?

Ans
✔ 1. 75 कि.मी./घंटा
✗ 2. 90 कि.मी./घंटा
✗ 3. 100 कि.मी./घंटा
✗ 4. 60 कि.मी./घंटा

Question ID : **630680485835**
Option 1 ID : **6306801897552**
Option 2 ID : **6306801897551**
Option 3 ID : **6306801897554**
Option 4 ID : **6306801897553**
Status : **Answered**
Chosen Option : **4**

Q.7 एक वृत्त में एक जीवा की लंबाई 30 से.मी. है जिसका व्यास 34 से.मी. है। इस जीवा की केंद्र से दूरी क्या होगी?

Ans
1. 15 से.मी.
2. 8 से.मी.
3. 12 से.मी.
4. 9 से.मी.

Question ID : **630680485841**
Option 1 ID : **6306801897578**
Option 2 ID : **6306801897575**
Option 3 ID : **6306801897577**
Option 4 ID : **6306801897576**
Status : **Answered**
Chosen Option : **2**

Q.8 यदि 5P = 7Q है, तो (P + Q)/P का मान क्या है?

Ans
1. 12/7
2. 7/12
3. 11/7
4. 9/7

Question ID : **630680485833**
Option 1 ID : **6306801897545**
Option 2 ID : **6306801897543**
Option 3 ID : **6306801897544**
Option 4 ID : **6306801897546**
Status : **Answered**
Chosen Option : **1**

Q.9 P, Q को एक पेन 30 प्रतिशत के लाभ पर बेचता है तथा Q उसे R को 30 प्रतिशत के लाभ पर बेचता है। P तथा R के क्रय मूल्यों का अनुपात क्या है?

Ans
1. 100 : 169
2. 100 : 133
3. 50 : 67
4. 81 : 50

Question ID : **630680485832**
Option 1 ID : **6306801897540**
Option 2 ID : **6306801897539**
Option 3 ID : **6306801897542**
Option 4 ID : **6306801897541**
Status : **Answered**
Chosen Option : **1**

Q.10 तीन लड़कियों में से, पहली लड़की का भार, दूसरी लड़की के भार का आधा है तथा तीसरी लड़की के भार का दोगुना है। यदि इन तीन लड़कियों का औसत भार 84 कि.ग्रा. है, तो दूसरी तथा तीसरी लड़की का कुल भार क्या होगा?

Ans
✔ 1. 180 कि.ग्रा.
✗ 2. 195 कि.ग्रा.
✗ 3. 170 कि.ग्रा.
✗ 4. 198 कि.ग्रा.

Question ID : **630680485829**
Option 1 ID : **6306801897528**
Option 2 ID : **6306801897527**
Option 3 ID : **6306801897529**
Option 4 ID : **6306801897530**
Status : **Answered**
Chosen Option : **1**

Q.11 What is the value of $(a + b)^2 + (a - b)^2$?

Ans
✗ 1. $8ab$
✔ 2. $2(a^2 + b^2)$
✗ 3. $4ab$
✗ 4. $4(a^2 + b^2)$

Question ID : **630680485836**
Option 1 ID : **6306801897558**
Option 2 ID : **6306801897555**
Option 3 ID : **6306801897557**
Option 4 ID : **6306801897556**
Status : **Answered**
Chosen Option : **2**

Q.12 एक वर्ग के विकर्ण की लम्बाई 12 से.मी. है। वर्ग का क्षेत्रफल क्या है?

Ans
✗ 1. 48 से.मी.$^2$
✔ 2. 72 से.मी.$^2$
✗ 3. 60 से.मी.$^2$
✗ 4. 94 से.मी.$^2$

Question ID : **630680485839**
Option 1 ID : **6306801897569**
Option 2 ID : **6306801897567**
Option 3 ID : **6306801897568**
Option 4 ID : **6306801897570**
Status : **Answered**
Chosen Option : **2**

Q.13 दो निष्पक्ष पासे फेंके जाते हैं। 5 का योग प्राप्त होने की प्रायिकता क्या है?

Ans
1. 1/11
2. 1/8
3. 1/7
4. 1/9

Question ID : **630680485838**
Option 1 ID : **6306801897566**
Option 2 ID : **6306801897564**
Option 3 ID : **6306801897565**
Option 4 ID : **6306801897563**
Status : **Answered**
Chosen Option : **4**

Q.14 42 से.मी. त्रिज्या वाले दो वृत्त एक दूसरे को इस प्रकार प्रतिच्छेद करते हैं कि प्रत्येक एक दूसरे के केंद्र से होकर गुजरता है। उभयनिष्ठ जीवा की लंबाई क्या है?

Ans
1. 42 से.मी.
2. 27 से.मी.
3. $18\sqrt{3}$ से.मी.
4. $42\sqrt{3}$ से.मी.

Question ID : **630680485842**
Option 1 ID : **6306801897582**
Option 2 ID : **6306801897581**
Option 3 ID : **6306801897579**
Option 4 ID : **6306801897580**
Status : **Answered**
Chosen Option : **1**

Q.15 यदि $\sin A = \frac{3}{4}$ है, तो cos A का मान क्या है?

Ans
1. $\frac{\sqrt{7}}{4}$
2. $\frac{3}{\sqrt{7}}$
3. $\frac{4}{3}$
4. $\frac{\sqrt{7}}{3}$

Question ID : **630680485843**
Option 1 ID : **6306801897584**
Option 2 ID : **6306801897586**
Option 3 ID : **6306801897585**
Option 4 ID : **6306801897583**
Status : **Answered**
Chosen Option : **1**

Section : **General Knowledge**

Q.1 किस कंपनी ने भारत की पहली हाइड्रोजन आंतरिक दहन इंजन (H2ICE) तकनीक लॉन्च की?

Ans
✗ 1. हीरो मोटो कॉर्प
✗ 2. टाटा मोटर्स
✓ 3. रिलायंस इंडस्ट्रीज
✗ 4. महिंद्रा एंड महिंद्रा

Question ID : **630680485845**
Option 1 ID : **6306801897594**
Option 2 ID : **6306801897593**
Option 3 ID : **6306801897591**
Option 4 ID : **6306801897592**
Status : **Not Answered**
Chosen Option : **--**

Q.2 निम्नलिखित में से कौन सा अधिकार 'स्वतंत्रता का अधिकार' में शामिल नहीं है?

Ans
✗ 1. संगठन और संघ बनाने की स्वतंत्रता
✗ 2. शांतिपूर्ण ढंग से जमा होने की स्वतंत्रता
✗ 3. अभिव्यक्ति की स्वतंत्रता
✓ 4. विश्व में कहीं भी आने-जाने की स्वतंत्रता

Question ID : **630680485854**
Option 1 ID : **6306801897629**
Option 2 ID : **6306801897628**
Option 3 ID : **6306801897627**
Option 4 ID : **6306801897630**
Status : **Answered**
Chosen Option : **4**

Q.3 निम्नलिखित में से कौन सा भारत में ग्रीष्म ऋतु का अभिलक्षण है?

Ans
✓ 1. लू, इस ऋतु का एक प्रभावी लक्षण है।
✗ 2. दिन गर्म और रातें ठंडी होती हैं।
✗ 3. इस ऋतु में, देश में उत्तर-पूर्वी व्यापारिक पवनें प्रवाहित होती हैं।
✗ 4. तापमान दक्षिण से उत्तर की ओर घटता जाता है

Question ID : **630680485851**
Option 1 ID : **6306801897618**
Option 2 ID : **6306801897616**
Option 3 ID : **6306801897617**
Option 4 ID : **6306801897615**
Status : **Answered**
Chosen Option : **1**

Q.4 निम्नलिखित में से कौन सा युग्म सही सुमेलित है?

I. शर्करा – सरल कार्बोहाइड्रेट
II. चावल – जटिल कार्बोहाइड्रेट

Ans
1. केवल II
2. I तथा II दोनों
3. ना ही I ना ही II
4. केवल I

Question ID : **630680485858**
Option 1 ID : **6306801897645**
Option 2 ID : **6306801897644**
Option 3 ID : **6306801897646**
Option 4 ID : **6306801897643**
Status : **Answered**
Chosen Option : **2**

Q.5 भारत की संसद में शामिल हैं:

I. राष्ट्रपति
II. राज्य सभा
III. लोकसभा

Ans
1. केवल I तथा III
2. केवल II तथा III
3. केवल I तथा II
4. I, II तथा III

Question ID : **630680485856**
Option 1 ID : **6306801897637**
Option 2 ID : **6306801897636**
Option 3 ID : **6306801897635**
Option 4 ID : **6306801897638**
Status : **Answered**
Chosen Option : **4**

Q.6 "सब के लिए एक जाति, एक धर्म, एक ईश्वर" का नारा किसने दिया?

Ans
1. ज्योतिराव फुले
2. ई.वी. रामास्वामी नायकर
3. एम.एन. श्रीनिवास
4. श्री नारायण गुरु

Question ID : **630680485849**
Option 1 ID : **6306801897607**
Option 2 ID : **6306801897608**
Option 3 ID : **6306801897609**
Option 4 ID : **6306801897610**
Status : **Not Answered**
Chosen Option : **--**

Q.7 निम्नलिखित में से किस खेल में सरबजोत सिंह ने हांग्जो एशियाई खेल 2023 में भारत के लिए स्वर्ण पदक जीता?

Ans
✗ 1. मुक्केबाजी
✗ 2. टेबल टेनिस
✗ 3. फुटबॉल
✓ 4. निशानेबाजी

Question ID : **630680485844**
Option 1 ID : **6306801897589**
Option 2 ID : **6306801897587**
Option 3 ID : **6306801897590**
Option 4 ID : **6306801897588**
Status : **Not Answered**
Chosen Option : **--**

Q.8 पुणे में बालिकाओं के लिए बने देश के पहले विद्यालय की पहली प्रधान अध्यापिका कौन थीं?

Ans
✗ 1. सुचेता कृपलानी
✓ 2. सवित्री बाई फुले
✗ 3. अरुणा आसफ अली
✗ 4. आनंदीबाई गोपालराव जोशी

Question ID : **630680485848**
Option 1 ID : **6306801897605**
Option 2 ID : **6306801897606**
Option 3 ID : **6306801897604**
Option 4 ID : **6306801897603**
Status : **Answered**
Chosen Option : **2**

Q.9 सिंधु नदी की लंबाई कितनी है?

Ans
✗ 1. 2500 कि.मी.
✓ 2. 2900 कि.मी.
✗ 3. 3500 कि.मी.
✗ 4. 2000 कि.मी.

Question ID : **630680485852**
Option 1 ID : **6306801897620**
Option 2 ID : **6306801897621**
Option 3 ID : **6306801897622**
Option 4 ID : **6306801897619**
Status : **Answered**
Chosen Option : **2**

Q.10 राज्य सभा के सदस्यों का चुनाव _____ करते हैं।

Ans
✗ 1. विभिन्न राज्यों की विधानसभाओं के मनोनीत सदस्य
✗ 2. विभिन्न राज्यों की विधानसभाओं के निर्वाचित तथा मनोनीत सदस्य
✓ 3. विभिन्न राज्यों की विधानसभाओं के निर्वाचित सदस्य
✗ 4. लोकसभा के निर्वाचित सदस्य

Question ID : **630680485855**
Option 1 ID : **6306801897632**
Option 2 ID : **6306801897634**
Option 3 ID : **6306801897631**
Option 4 ID : **6306801897633**
Status : **Answered**
Chosen Option : **2**

Q.11 निम्नलिखित में से कौन सा ऊर्जा का मुख्य स्रोत है?

Ans
✗ 1. विटामिन
✗ 2. खनिज
✓ 3. कार्बोहाइड्रेट
✗ 4. प्रोटीन

Question ID : **630680485857**
Option 1 ID : **6306801897641**
Option 2 ID : **6306801897642**
Option 3 ID : **6306801897639**
Option 4 ID : **6306801897640**
Status : **Answered**
Chosen Option : **3**

Q.12 किस मंत्रालय ने PM-KISAN योजना के लिए AI चैटबॉट लॉन्च किया?

Ans
✗ 1. इलेक्ट्रॉनिक्स एवं सूचना प्रौद्योगिकी मंत्रालय
✓ 2. कृषि एवं किसान कल्याण मंत्रालय
✗ 3. सामाजिक न्याय और अधिकारिता मंत्रालय
✗ 4. ग्रामीण विकास मंत्रालय

Question ID : **630680485846**
Option 1 ID : **6306801897597**
Option 2 ID : **6306801897596**
Option 3 ID : **6306801897595**
Option 4 ID : **6306801897598**
Status : **Answered**
Chosen Option : **2**

Q.13 सितंबर 2023 में, केंद्रीय मंत्रिमंडल ने _____ रुपये के वित्तीय परिव्यय के साथ एक केंद्रीय क्षेत्र की योजना के रूप में ई-कोर्ट परियोजना चरण-3 को मंजूरी दी।

Ans
✗ 1. 6210 करोड़
✓ 2. 7210 करोड़
✗ 3. 8210 करोड़
✗ 4. 5210 करोड़

Question ID : **630680485847**
Option 1 ID : **6306801897599**
Option 2 ID : **6306801897601**
Option 3 ID : **6306801897600**
Option 4 ID : **6306801897602**
Status : **Not Answered**
Chosen Option : **--**

Q.14 2011 की जनगणना के अनुसार, 2001-2011 के दशक में भारत की जनसंख्या की वृद्धि दर _____ थी।

Ans
✓ 1. 17.7 प्रतिशत
✗ 2. 11.7 प्रतिशत
✗ 3. 19.7 प्रतिशत
✗ 4. 13.7 प्रतिशत

Question ID : **630680485853**
Option 1 ID : **6306801897625**
Option 2 ID : **6306801897623**
Option 3 ID : **6306801897626**
Option 4 ID : **6306801897624**
Status : **Not Answered**
Chosen Option : **--**

Q.15 निम्नलिखित में से 'सुधारवादी संगठन – संस्थापक' का कौन सा युग्म सही सुमेलित है?

I. आर्य समाज – स्वामी दयानंद सरस्वती
II. सत्यशोधक समाज – ज्योतिराव फुले

Ans
1. केवल I
2. केवल II
3. I तथा II दोनों
4. ना ही I ना ही II

Question ID : **630680485850**
Option 1 ID : **6306801897611**
Option 2 ID : **6306801897612**
Option 3 ID : **6306801897613**
Option 4 ID : **6306801897614**
Status : **Answered**
Chosen Option : **3**