BHEL
ET

Previous Year Paper
(Electrical)
11 Apr, 2025 Shift 1

BHEL 11th 12th April 2025

Participant ID	
Participant Name	
Test Center Name	
Test Date	11/04/2025
Test Time	9:00 AM - 11:30 AM
Subject	Engineer Trainee Electrical

Section : **Section I Question on Subject Discipline**

Q.1 What is the primary condition that must be satisfied for an oscillator circuit to sustain oscillations, in terms of voltage gain?

Ans ✅ A. The voltage gain of the amplifier must be greater than or equal to 1, and the phase shift around the loop must be 360°.

❌ B. The voltage gain of the amplifier must be greater than 1.

❌ C. The voltage gain of the amplifier must be less than 1.

❌ D. The voltage gain of the amplifier must be equal to 1.

Question ID : **44100951108**
Option 1 ID : **441009203589**
Option 2 ID : **441009203586**
Option 3 ID : **441009203587**
Option 4 ID : **441009203588**
Status : **Not Answered**
Chosen Option : **--**

Q.2 Which of the following expressions describes the displacement current density?

Ans ❌ A. $J_d = \dfrac{\mu dH}{dt}$

❌ B. $J_d = \nabla \times H$

❌ C. $J_d = \sigma E$

✅ D. $J_d = \dfrac{\varepsilon dE}{dt}$

Question ID : **441009122309**
Option 1 ID : **441009486169**
Option 2 ID : **441009486168**
Option 3 ID : **441009486167**
Option 4 ID : **441009486166**
Status : **Answered**
Chosen Option : **C**

Q.3 Identify the correct statement related to peak overshoot parameter for a second order control system.

Ans ✗ A. The peak overshoot is directly proportional to the damped factor.

✓ B. The peak overshoot is inversely proportional to the damped factor.

✗ C. The peak overshoot is independent of the damped factor.

✗ D. The peak overshoot is always a constant and does not dependent on any system parameter

Question ID : **44100949311**
Option 1 ID : **441009196533**
Option 2 ID : **441009196532**
Option 3 ID : **441009196534**
Option 4 ID : **441009196535**
Status : **Answered**
Chosen Option : **B**

Q.4 Determine the maximum voltage the capacitor can charge if the Series RC circuit is exited by a step function of amplitude 'V' volts.

Ans ✗ A. V/2

✓ B. V

✗ C. 2V

✗ D. 3V

Question ID : **44100949172**
Option 1 ID : **441009195986**
Option 2 ID : **441009195985**
Option 3 ID : **441009195984**
Option 4 ID : **441009195987**
Status : **Answered**
Chosen Option : **B**

Q.5 If a transformer operates under no-load conditions, what will the primary current mainly consist of?

Ans ✗ A. Secondary current

✗ B. Load current

✓ C. Magnetizing current

✗ D. Copper loss current

Question ID : **44100984508**
Option 1 ID : **441009335817**
Option 2 ID : **441009335814**
Option 3 ID : **441009335815**
Option 4 ID : **441009335816**
Status : **Answered**
Chosen Option : **C**

Q.6 For a right-sided sequence x[n], what is the Region of Convergence (ROC) of its Z-transform?

Ans ✗ A. Entire z-plane

✗ B. $|z| < r$

✗ C. ROC does not exist.

✓ D. $|z| > r$

Question ID : **44100977361**
Option 1 ID : **441009307426**
Option 2 ID : **441009307425**
Option 3 ID : **441009307427**
Option 4 ID : **441009307424**
Status : **Answered**
Chosen Option : **D**

Q.7 Which of the following is an application of an adder circuit?

Ans ✗ A. Digital Comparator

✗ B. Flip-Flop

✗ C. Frequency Modulator

✓ D. Arithmetic Logic Unit (ALU)

Question ID : **44100968516**
Option 1 ID : **441009272691**
Option 2 ID : **441009272694**
Option 3 ID : **441009272693**
Option 4 ID : **441009272692**
Status : **Answered**
Chosen Option : **D**

Q.8 Voltage regulation in short transmission lines is usually very low because _____.

Ans ✓ A. the line length is short and the impedance is low

✗ B. the series resistance is negligible

✗ C. the series reactance is negligible

✗ D. the power factor is usually high

Question ID : **44100943663**
Option 1 ID : **441009174106**
Option 2 ID : **441009174104**
Option 3 ID : **441009174103**
Option 4 ID : **441009174105**
Status : **Answered**
Chosen Option : **A**

Q.9 What is latching current in an SCR?

Ans ✗ A. The current at which the SCR turns off

✓ B. The minimum anode current required to maintain conduction once triggered

✗ C. The leakage current when SCR is off

✗ D. The maximum gate current to trigger SCR

Question ID : **441009138531**
Option 1 ID : **441009550342**
Option 2 ID : **441009550341**
Option 3 ID : **441009550343**
Option 4 ID : **441009550340**
Status : **Answered**
Chosen Option : **B**

Q.10 The frequency of induced rotor current in a squirrel cage induction motor at full load is typically:

Ans ✗ A. equal to the supply frequency

✗ B. nearly zero

✓ C. equal to the slip times supply frequency

✗ D. equal to the stator frequency

Question ID : **44100984492**
Option 1 ID : **441009335754**
Option 2 ID : **441009335755**
Option 3 ID : **441009335756**
Option 4 ID : **441009335757**
Status : **Answered**
Chosen Option : **C**

Q.11 What is the transformation ratio of the teaser transformer in a Scott connection?

Ans ✗ A. 0.5

✓ B. 0.866

✗ C. 0.707

✗ D. 1.0

Question ID : **44100984530**
Option 1 ID : **441009335894**
Option 2 ID : **441009335896**
Option 3 ID : **441009335895**
Option 4 ID : **441009335897**
Status : **Answered**
Chosen Option : **B**

Q.12 What effect does the positive temperature coefficient of channel resistance in MOSFETs have?

Ans ✗ A. Reduces switching speed

✓ B. Helps in automatic current sharing between parallel devices

✗ C. Increases the conduction loss

✗ D. Reduces gate-drive requirements

Question ID : **441009138523**
Option 1 ID : **441009550308**
Option 2 ID : **441009550310**
Option 3 ID : **441009550309**
Option 4 ID : **441009550311**
Status : **Answered**
Chosen Option : **C**

Q.13 Voltage cancellation in current source inverters involves:

Ans ✗ A. using zero-crossing detectors

✗ B. connecting diodes in reverse bias

✗ C. increasing input DC voltage

✓ D. shifting the turn-on and turn-off times of switches

Question ID : **441009138608**
Option 1 ID : **441009550669**
Option 2 ID : **441009550668**
Option 3 ID : **441009550671**
Option 4 ID : **441009550670**
Status : **Not Answered**
Chosen Option : **--**

Q.14 In the equivalent circuit of a transformer, what is the primary reason for considering leakage reactance?

Ans ✗ A. It represents the resistance losses in the winding.

✗ B. It accounts for the flux linking both windings.

✗ C. It shows the no-load current.

✓ D. It represents the voltage drop due to the leakage flux.

Question ID : **44100984505**
Option 1 ID : **441009335803**
Option 2 ID : **441009335802**
Option 3 ID : **441009335805**
Option 4 ID : **441009335804**
Status : **Answered**
Chosen Option : **D**

Q.15 The purpose of grading in underground cables is to _____.

Ans   ✗ A. reduce the cost of the cable

     ✗ B. improve the voltage regulation

     ✔ C. reduce the electric stress across the insulation

     ✗ D. increase the current carrying capacity

> Question ID : **44100941356**
> Option 1 ID : **441009164974**
> Option 2 ID : **441009164975**
> Option 3 ID : **441009164973**
> Option 4 ID : **441009164972**
> Status : **Answered**
> Chosen Option : **C**

Q.16 The coordination of overcurrent relays in a protection system is designed to _____.

Ans   ✗ A. ensure that the relays operate at the same time during a fault

     ✔ B. ensure that the relay closest to the fault operates first, isolating the fault without affecting the entire system

     ✗ C. allow the most distant relay from the fault to operate first

     ✗ D. guarantee that no relays operate during a fault

> Question ID : **44100945572**
> Option 1 ID : **441009181473**
> Option 2 ID : **441009181475**
> Option 3 ID : **441009181474**
> Option 4 ID : **441009181476**
> Status : **Answered**
> Chosen Option : **B**

Q.17 Which of the following correctly represents the Discrete-Time Fourier Transform (DTFT) of a discrete-time signal x[n]?

Ans   ✗ A. $X(\omega) = \sum_{n=0}^{\infty} x[n]e^{-j\omega n}$

     ✗ B. $X(\omega) = \int_{-\infty}^{\infty} x[t]e^{-j\omega t}dt$

     ✗ C. $X(\omega) = \sum_{n=-\infty}^{\infty} x[n]e^{j\omega n}$

     ✔ D. $X(\omega) = \sum_{n=-\infty}^{\infty} x[n]e^{-j\omega n}$

> Question ID : **44100970612**
> Option 1 ID : **441009281062**
> Option 2 ID : **441009281061**
> Option 3 ID : **441009281060**
> Option 4 ID : **441009281059**
> Status : **Answered**
> Chosen Option : **D**

Q.18 The transfer function H(s) of an LTI system is defined as:

Ans ✗ A. Sum of input and output in Laplace domain

✗ B. Ratio of output to input in time domain

✔ C. Ratio of output to input in frequency domain

✗ D. Ratio of input to output in time domain

Question ID : **44100973195**
Option 1 ID : **441009291085**
Option 2 ID : **441009291086**
Option 3 ID : **441009291084**
Option 4 ID : **441009291083**
Status : **Answered**
Chosen Option : **C**

Q.19 Select the correct option based on the given statements.

Statement 1: An independent voltage source maintains a constant voltage across its terminals regardless of the current drawn from it.
Statement 2: An independent current source maintains a constant current regardless of the voltage across its terminals.

Ans ✗ A. Both Statement 1 and Statement 2 are incorrect.

✗ B. Statement 1 is incorrect and Statement 2 is correct.

✗ C. Statement 1 is correct and Statement 2 is incorrect.

✔ D. Both Statement 1 and Statement 2 are correct.

Question ID : **441009141395**
Option 1 ID : **441009561779**
Option 2 ID : **441009561778**
Option 3 ID : **441009561777**
Option 4 ID : **441009561776**
Status : **Answered**
Chosen Option : **D**

Q.20 What is the typical voltage gain (magnitude) of a MOSFET common-source amplifier?

Ans ✔ A. Greater than 1

✗ B. Equal to 0

✗ C. Less than 1

✗ D. Equal to 1

Question ID : **44100949495**
Option 1 ID : **441009197254**
Option 2 ID : **441009197255**
Option 3 ID : **441009197252**
Option 4 ID : **441009197253**
Status : **Not Answered**
Chosen Option : **--**

Q.21 Consider the following statements and select the correct option.

Statement 1: When an RL circuit is connected in parallel with an RC circuit, the total current in the circuit will be the sum of the individual currents in both the branches.
Statement 2: The total impedance of the parallel combination of RL and RC circuits is always less than the impedance of the individual RL or RC circuits.

Ans ✔ A. Both Statement 1 and Statement 2 are correct.

✘ B. Both Statement 1 and Statement 2 are incorrect.

✘ C. Statement 1 is incorrect, but Statement 2 is correct.

✘ D. Statement 1 is correct, but Statement 2 is incorrect.

Question ID : **441009138648**
Option 1 ID : **441009550856**
Option 2 ID : **441009550859**
Option 3 ID : **441009550858**
Option 4 ID : **441009550857**
Status : **Answered**
Chosen Option : **A**

Q.22 Which of the following statements about slip in an induction motor is correct?

Ans ✔ A. Slip increases as the load on the motor increases.

✘ B. Slip is always constant regardless of load.

✘ C. Slip is always zero during no-load operation.

✘ D. Slip is negative for motoring operation.

Question ID : **44100984446**
Option 1 ID : **441009335579**
Option 2 ID : **441009335581**
Option 3 ID : **441009335578**
Option 4 ID : **441009335580**
Status : **Answered**
Chosen Option : **A**

Q.23 Select the correct option based on the given statements.

Statement 1: The resonance frequency of a series R-L-C circuit is dependent on the resistance (R), inductance (L) and capacitance (C).
Statement 2: At resonance, the impedance of a series R-L-C circuit is at its minimum value.

Ans ✔ A. Statement 1 is incorrect and Statement 2 is correct.

✘ B. Statement 1 is correct and Statement 2 is incorrect.

✘ C. Both Statement 1 and Statement 2 are incorrect.

✘ D. Both Statement 1 and Statement 2 are correct.

Question ID : **441009141206**
Option 1 ID : **441009561036**
Option 2 ID : **441009561037**
Option 3 ID : **441009561039**
Option 4 ID : **441009561038**
Status : **Answered**
Chosen Option : **D**

Q.24 Select the correct option based on the given statements.

Statement 1: The reciprocity theorem states that in a linear network, the current in one branch due to a voltage source in another branch is the same as the current that would flow if the voltage source were in the second branch and the load were in the first branch.

Statement 2: The reciprocity theorem is only applicable for circuits with resistive elements.

Ans ✗ A. Both Statement 1 and Statement 2 are false.

✓ B. Statement 1 is true and Statement 2 is false.

✗ C. Both Statement 1 and Statement 2 are true.

✗ D. Statement 1 is false and Statement 2 is true.

Question ID : **441009138767**
Option 1 ID : **441009551401**
Option 2 ID : **441009551399**
Option 3 ID : **441009551398**
Option 4 ID : **441009551400**
Status : **Not Answered**
Chosen Option : **--**

Q.25 A discrete-time LTI system is stable if the Region of Convergence (ROC) of its Z-transform:

Ans ✗ A. exists anywhere in the z-plane

✗ B. lies inside the unit circle

✗ C. lies outside the unit circle

✓ D. includes the unit circle

Question ID : **44100970663**
Option 1 ID : **441009281266**
Option 2 ID : **441009281264**
Option 3 ID : **441009281265**
Option 4 ID : **441009281263**
Status : **Answered**
Chosen Option : **D**

Q.26 In a voltage divider biasing circuit of a MOSFET, the voltage at the gate is determined by:

Ans ✗ A. the threshold voltage of the MOSFET

✗ B. the value of the source resistor

✓ C. the ratio of the two resistors in the voltage divider network

✗ D. the value of the drain resistor

Question ID : **44100949510**
Option 1 ID : **441009197315**
Option 2 ID : **441009197314**
Option 3 ID : **441009197312**
Option 4 ID : **441009197313**
Status : **Answered**
Chosen Option : **B**

Q.27 What is the difference between a D flip-flop and a D latch?

Ans ✗ A. There is no difference, both are same.

✔ B. Flip-flop is edge-triggered, latch is level-triggered.

✗ C. Flip-flop has no clock, latch has a clock.

✗ D. Flip-flop is asynchronous, latch is synchronous.

Question ID : **44100975366**
Option 1 ID : **441009299741**
Option 2 ID : **441009299738**
Option 3 ID : **441009299740**
Option 4 ID : **441009299739**
Status : **Answered**
Chosen Option : **C**

Q.28 In an RL circuit, the impulse response represents the inductor's reaction to a sudden voltage pulse. The current response of the RL circuit is _____.

Ans ✗ A. a step function

✔ B. exponentially decreasing

✗ C. a sine wave

✗ D. exponentially increasing

Question ID : **441009138666**
Option 1 ID : **441009550954**
Option 2 ID : **441009550953**
Option 3 ID : **441009550955**
Option 4 ID : **441009550952**
Status : **Answered**
Chosen Option : **A**

Q.29 Identify the correct statement related to the 'peak time' parameter of a second order control system.

Ans ✗ A. The peak time is the time taken for the system's output to reach the first maximum value after a sinusoidal input is applied.

✗ B. The peak time is the time taken for the system's output to reach the fifth maximum (or peak) value after a sinusoidal input is applied.

✗ C. The peak time is the time taken for the system's output to reach the fifth maximum value after a step input is applied.

✔ D. The peak time is the time taken for the system's output to reach the first maximum value after a step input is applied.

Question ID : **44100949320**
Option 1 ID : **441009196570**
Option 2 ID : **441009196571**
Option 3 ID : **441009196568**
Option 4 ID : **441009196569**
Status : **Answered**
Chosen Option : **D**

Q.30 Identify the correct statement related to the 'settling time' parameter of a second order control system.

Ans   ✗ A. A lower natural frequency results in slower response, reducing the settling time.

     ✗ B. A natural frequency cannot impact the settling time parameter.

     ✗ C. A higher natural frequency results in a faster response, increasing the settling time.

     ✔ D. A higher natural frequency results in a faster response, reducing the settling time.

Question ID : **44100949323**
Option 1 ID : **441009196582**
Option 2 ID : **441009196580**
Option 3 ID : **441009196581**
Option 4 ID : **441009196583**
Status : **Answered**
Chosen Option : **D**

Q.31 A basic series inverter uses which of the following components to shape the output waveform?

Ans   ✗ A. Only inductors

     ✔ B. RLC circuit

     ✗ C. Only capacitors

     ✗ D. Only resistors

Question ID : **441009138660**
Option 1 ID : **441009550923**
Option 2 ID : **441009550921**
Option 3 ID : **441009550922**
Option 4 ID : **441009550920**
Status : **Not Answered**
Chosen Option : **--**

Q.32 How many inputs does a 2-bit comparator have?

Ans   ✗ A. 8

     ✗ B. 2

     ✗ C. 6

     ✔ D. 4

Question ID : **44100968521**
Option 1 ID : **441009272714**
Option 2 ID : **441009272711**
Option 3 ID : **441009272713**
Option 4 ID : **441009272712**
Status : **Answered**
Chosen Option : **D**

Q.33 In a 3-phase transmission line, the self-inductance per unit length is given by the formula _____.

Ans ✗ A. $L = (\mu_o / 2\pi) * \ln(r/D)$

✗ B. $L = (\mu_o / 2\pi) * \ln(r / GMD)$

✗ C. $L = (\mu_o / 2\pi) * \ln(D/r)$

✓ D. $L = (\mu_o / 2\pi) * \ln(GMD/r)$

Question ID : **44100945972**
Option 1 ID : **441009183075**
Option 2 ID : **441009183074**
Option 3 ID : **441009183073**
Option 4 ID : **441009183072**
Status : **Answered**
Chosen Option : **D**

Q.34 Which of the following is a characteristic of an ideal voltage source?

Ans ✗ A. It maintains a constant current regardless of the voltage.

✗ B. It has infinite internal resistance and can supply only a limited amount of current.

✓ C. It has zero internal resistance and can supply any amount of current.

✗ D. It has a finite internal resistance and can supply infinite current.

Question ID : **441009141374**
Option 1 ID : **441009561694**
Option 2 ID : **441009561693**
Option 3 ID : **441009561692**
Option 4 ID : **441009561695**
Status : **Answered**
Chosen Option : **C**

Q.35 Which theorem states that any linear electrical network with voltage and current sources can be replaced by an equivalent circuit consisting of a single voltage source and a series resistance?

Ans ✓ A. Thevenin's Theorem

✗ B. Norton's Theorem

✗ C. Superposition Theorem

✗ D. Maximum Power Transfer Theorem

Question ID : **44100958986**
Option 1 ID : **441009234860**
Option 2 ID : **441009234858**
Option 3 ID : **441009234859**
Option 4 ID : **441009234861**
Status : **Answered**
Chosen Option : **A**

Q.36 The standard for vector group classification in transformers is defined in:

Ans ✗ A. IEC 60760

✓ B. IS:2026 (Part IV)-1977

✗ C. IS:2066 (Part III)-1980

✗ D. IEEE Std 519

Question ID : **44100984532**
Option 1 ID : **441009335905**
Option 2 ID : **441009335902**
Option 3 ID : **441009335903**
Option 4 ID : **441009335904**
Status : **Not Answered**
Chosen Option : **--**

Q.37 A circuit breaker is used in electrical systems primarily for _____.

Ans ✗ A. regulating the power flow in the circuit

✓ B. protecting the system and disconnecting the load under abnormal conditions

✗ C. reducing the voltage fluctuations

✗ D. sensing the overcurrent

Question ID : **44100945604**
Option 1 ID : **441009181605**
Option 2 ID : **441009181603**
Option 3 ID : **441009181606**
Option 4 ID : **441009181604**
Status : **Answered**
Chosen Option : **B**

Q.38 If the secondary voltage of a transformer remains constant, what happens when the load impedance decreases?

Ans ✗ A. Core flux increases

✓ B. Secondary current increases

✗ C. Primary current decreases

✗ D. Secondary current decreases

Question ID : **44100984511**
Option 1 ID : **441009335829**
Option 2 ID : **441009335826**
Option 3 ID : **441009335828**
Option 4 ID : **441009335827**
Status : **Answered**
Chosen Option : **B**

Q.39 What is the primary limitation of using a log amplifier circuit with a diode in the feedback loop?

Ans ✗ A. High offset voltage

✗ B. Limited bandwidth

✗ C. Non-linearity at high frequencies

✓ D. Temperature dependence

Question ID : **44100950356**
Option 1 ID : **441009200656**
Option 2 ID : **441009200655**
Option 3 ID : **441009200658**
Option 4 ID : **441009200657**
Status : **Not Answered**
Chosen Option : **--**

Q.40 What device is connected in antiparallel to each thyristor in DC-AC inverter applications?

Ans ✗ A. Resistor

✗ B. Fuse

✗ C. Capacitor

✓ D. Diode

Question ID : **441009138625**
Option 1 ID : **441009550744**
Option 2 ID : **441009550745**
Option 3 ID : **441009550747**
Option 4 ID : **441009550746**
Status : **Answered**
Chosen Option : **D**

Q.41 What is the output impedance of a Darlington pair?

Ans ✗ A. Very high

✗ B. Infinite

✗ C. Zero

✓ D. Very low

Question ID : **44100949537**
Option 1 ID : **441009197420**
Option 2 ID : **441009197422**
Option 3 ID : **441009197423**
Option 4 ID : **441009197421**
Status : **Not Answered**
Chosen Option : **--**

Q.42 In a crystal oscillator circuit, what is the primary mechanism by which energy is transferred back to the crystal, causing it to oscillate?

Ans ✗ A. Electromagnetic induction

✗ B. Magnetic resonance

✗ C. Electrostatic coupling

✓ D. Piezoelectric effect

Question ID : **44100951081**
Option 1 ID : **441009203478**
Option 2 ID : **441009203480**
Option 3 ID : **441009203479**
Option 4 ID : **441009203481**
Status : **Answered**
Chosen Option : **D**

Q.43 In a crystal oscillator circuit, what is the primary mechanism by which energy is transferred back to the crystal, causing it to oscillate?

Ans ✓ A. Piezoelectric effect

✗ B. Magnetic resonance

✗ C. Electromagnetic induction

✗ D. Electrostatic coupling

Question ID : **44100951148**
Option 1 ID : **441009203743**
Option 2 ID : **441009203745**
Option 3 ID : **441009203742**
Option 4 ID : **441009203744**
Status : **Answered**
Chosen Option : **A**

Q.44 In multilevel converters, the output voltage waveform is composed of:

Ans ✓ A. discrete voltage levels

✗ B. constant DC voltage

✗ C. high-frequency triangular waves

✗ D. pure sine waves

Question ID : **441009138638**
Option 1 ID : **441009550810**
Option 2 ID : **441009550811**
Option 3 ID : **441009550809**
Option 4 ID : **441009550808**
Status : **Answered**
Chosen Option : **A**

Q.45 The Geometric Mean Distance (GMD) for calculating the self-inductance of a single-phase overhead transmission line refers to _____.

Ans ✅ A. the average distance between the conductors

❌ B. the square root of the product of distances between conductors

❌ C. the mean of the distances between all pairs of conductors

❌ D. the sum of the distances between conductors

Question ID : **44100945967**
Option 1 ID : **441009183052**
Option 2 ID : **441009183054**
Option 3 ID : **441009183053**
Option 4 ID : **441009183055**
Status : **Answered**
Chosen Option : **B**

Q.46 Which method is used for controlling the AC output voltage in a single-phase inverter?

Ans ✅ A. Varying the gate pulse width

❌ B. Varying the load impedance

❌ C. Varying switching frequency

❌ D. Using a step-down transformer

Question ID : **441009138688**
Option 1 ID : **441009551056**
Option 2 ID : **441009551057**
Option 3 ID : **441009551055**
Option 4 ID : **441009551058**
Status : **Answered**
Chosen Option : **C**

Q.47 In sinusoidal PWM, what is the relationship between switching and output frequencies?

Ans ❌ A. Output frequency is higher.

❌ B. Both are equal.

✅ C. Switching frequency is higher than output frequency.

❌ D. Switching frequency is zero.

Question ID : **441009138647**
Option 1 ID : **441009550853**
Option 2 ID : **441009550852**
Option 3 ID : **441009550854**
Option 4 ID : **441009550855**
Status : **Answered**
Chosen Option : **B**

Q.48 The linearity property of the Z-Transform states that:

Ans ✗ A. $Z\{ax[n] + by[n]\} = aX(z) - bY(z)$

✗ B. $Z\{ax[n] + by[n]\} = aX(z).bY(z)$

✔ C. $Z\{ax[n] + by[n]\} = aX(z) + bY(z)$

✗ D. $Z\{ax[n] + by[n]\} = a\dfrac{X(z)}{Y(z)}$

Question ID : **44100977252**
Option 1 ID : **441009307011**
Option 2 ID : **441009307010**
Option 3 ID : **441009307009**
Option 4 ID : **441009307012**
Status : **Answered**
Chosen Option : **C**

Q.49 How does the inner cage of a double cage rotor contribute to the motor performance?

Ans ✗ A. By increasing rotor reactance

✔ B. By providing low resistance at running conditions

✗ C. By reducing synchronous speed

✗ D. By improving power factor at start

Question ID : **44100984484**
Option 1 ID : **441009335722**
Option 2 ID : **441009335723**
Option 3 ID : **441009335725**
Option 4 ID : **441009335724**
Status : **Answered**
Chosen Option : **B**

Q.50 What happens to the torque (T) if the supply voltage (V) is reduced to 50% in a squirrel cage induction motor?

Ans ✗ A. Torque increases

✗ B. Torque remains unchanged

✔ C. Torque reduces to 25%

✗ D. Torque reduces to 50%

Question ID : **44100984486**
Option 1 ID : **441009335733**
Option 2 ID : **441009335732**
Option 3 ID : **441009335731**
Option 4 ID : **441009335730**
Status : **Answered**
Chosen Option : **C**

Q.51 Which of the following statements correctly describes a property of the Discrete Fourier Transform (DFT) related to frequency-domain sampling and complex addition?

Ans ✗ A. The DFT only works for signals with an even number of samples.

✔ B. The DFT assumes that the time-domain signal is periodic and samples the frequency domain accordingly.

✗ C. The DFT only provides real-valued outputs for any real-valued input signal.

✗ D. The DFT can only be applied to continuous signals, not discrete signals.

Question ID : **44100977455**
Option 1 ID : **441009307750**
Option 2 ID : **441009307749**
Option 3 ID : **441009307751**
Option 4 ID : **441009307752**
Status : **Answered**
Chosen Option : **B**

Q.52 Which of the following equations represents the magnetic field intensity according to Biot-Savart's Law?

Ans ✗ A. $dH \propto \dfrac{I\,dl\,\cos(\alpha)}{R^3}$

✗ B. $dH \propto \dfrac{I\,dl\,\cos(\alpha)}{R^2}$

✔ C. $dH \propto \dfrac{I\,dl\,\sin(\alpha)}{R^2}$

✗ D. $dH \propto \dfrac{I\,dl\,\sin(\alpha)}{R^3}$

Question ID : **441009120603**
Option 1 ID : **441009479444**
Option 2 ID : **441009479442**
Option 3 ID : **441009479443**
Option 4 ID : **441009479445**
Status : **Answered**
Chosen Option : **C**

Q.53 In a single-phase full-bridge voltage source inverter, what is the peak output voltage (fundamental component) for sinusoidal PWM with a modulation index ma = 1?

Ans ✗ A. Vdc/2

✔ B. Vdc

✗ C. (4/π)·(Vdc/2)

✗ D. (2/π)·Vdc

Question ID : **441009138674**
Option 1 ID : **441009550984**
Option 2 ID : **441009550983**
Option 3 ID : **441009550985**
Option 4 ID : **441009550986**
Status : **Answered**
Chosen Option : **A**

Q.54 In the unbalanced current test, what is typically used to apply reduced voltage to the winding?
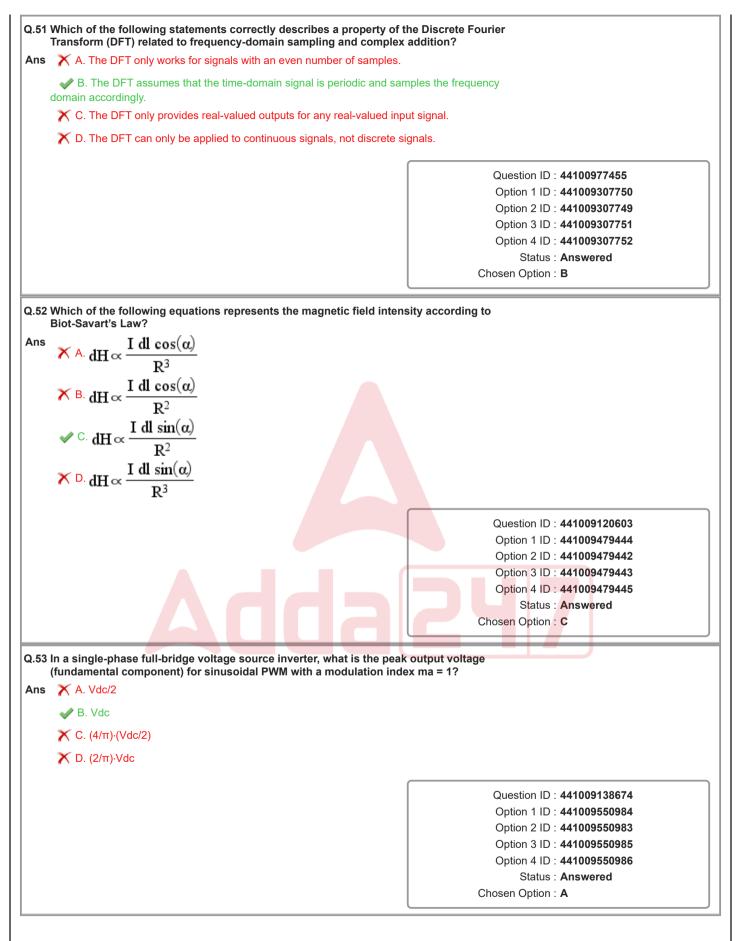
Ans ✅ A. A three-phase autotransformer

❌ B. A rectifier circuit

❌ C. A step-up transformer

❌ D. A DC generator

Question ID : **44100984475**
Option 1 ID : **441009335691**
Option 2 ID : **441009335692**
Option 3 ID : **441009335690**
Option 4 ID : **441009335693**
Status : **Not Answered**
Chosen Option : **--**

Q.55 In the context of relays, selectivity refers to _____.

Ans ❌ A. the accuracy of relay current settings

✅ B. the ability of a relay to operate only for the intended fault condition

❌ C. the speed at which the relay operates

❌ D. the ability of a relay to trip without any delay

Question ID : **44100945950**
Option 1 ID : **441009182986**
Option 2 ID : **441009182985**
Option 3 ID : **441009182987**
Option 4 ID : **441009182984**
Status : **Answered**
Chosen Option : **B**

Q.56 Which of the following is a non-conventional source of power generation that uses the heat from the Earth's internal sources?

Ans ❌ A. Hydroelectric power

✅ B. Geothermal power

❌ C. Tidal power

❌ D. Biomass power

Question ID : **44100941272**
Option 1 ID : **441009164532**
Option 2 ID : **441009164533**
Option 3 ID : **441009164534**
Option 4 ID : **441009164535**
Status : **Answered**
Chosen Option : **B**

Q.57 What is the borrow output of a half subtractor, when the inputs A = 0 and B = 1?
Assume subtraction as A − B.

Ans   ✗ A. A

   ✔ B. 1

   ✗ C. B

   ✗ D. 0

Question ID : **44100968530**
Option 1 ID : **441009272749**
Option 2 ID : **441009272748**
Option 3 ID : **441009272750**
Option 4 ID : **441009272747**
Status : **Answered**
Chosen Option : **B**

Q.58 Why do slip ring induction motors have better starting torque than squirrel cage motors?

Ans   ✗ A. They operate at a higher power factor.

   ✗ B. They do not require external excitation.

   ✗ C. They use laminated steel rotors.

   ✔ D. They have external resistance in the rotor circuit.

Question ID : **44100984493**
Option 1 ID : **441009335758**
Option 2 ID : **441009335761**
Option 3 ID : **441009335760**
Option 4 ID : **441009335759**
Status : **Answered**
Chosen Option : **D**

Q.59 The power loss in a short transmission line is primarily due to _____.

Ans   ✔ A. the series resistance

   ✗ B. the series reactance

   ✗ C. the shunt capacitance

   ✗ D. the series inductance

Question ID : **44100943636**
Option 1 ID : **441009173996**
Option 2 ID : **441009173998**
Option 3 ID : **441009173997**
Option 4 ID : **441009173995**
Status : **Answered**
Chosen Option : **A**

Q.60 What is Electric Field Density for a point charge Q located at origin, as per Gauss's Law?

Ans

✗ A. $D = \dfrac{Q}{(4\pi r)}\, a_r$

✓ B. $D = \dfrac{Q}{(4\pi r^2)}\, a_r$

✗ C. $D = \dfrac{Q}{(4\pi r^3)}\, a_r$

✗ D. $D = \dfrac{Q \cdot r}{(4\pi)}\, a_r$

Question ID : **441009120574**
Option 1 ID : **441009479327**
Option 2 ID : **441009479328**
Option 3 ID : **441009479329**
Option 4 ID : **441009479326**
Status : **Answered**
Chosen Option : **B**

Q.61 What is the Region of Convergence (ROC) for a finite-duration discrete-time signal x[n]?

Ans ✗ A. No ROC exists for finite duration signals.

✗ B. Only for $|z| > 1$

✗ C. Only for $|z| < 1$

✓ D. Entire z − plane except at $z = 0$ and $z = \infty$

Question ID : **44100977339**
Option 1 ID : **441009307351**
Option 2 ID : **441009307349**
Option 3 ID : **441009307350**
Option 4 ID : **441009307348**
Status : **Answered**
Chosen Option : **D**

Q.62 If there is no surface current (Js = 0) at the interface between two media, what happens to the tangential component of the magnetic field intensity (H) across the boundary?

Ans ✓ A. The tangential component of H remains continuous.

✗ B. The tangential component of H becomes zero.

✗ C. The tangential component of H is always discontinuous.

✗ D. The normal component of H is always equal to Js.

Question ID : **441009122202**
Option 1 ID : **441009485742**
Option 2 ID : **441009485743**
Option 3 ID : **441009485744**
Option 4 ID : **441009485745**
Status : **Answered**
Chosen Option : **A**

Q.63 In a buck converter operating in continuous-conduction mode, what happens when the switch is ON?

Ans   ✗ A. Diode conducts

   ✓ B. Inductor charges and current increases linearly

   ✗ C. Output voltage drops to zero

   ✗ D. Inductor current stops

Question ID : **441009138453**
Option 1 ID : **441009550048**
Option 2 ID : **441009550049**
Option 3 ID : **441009550050**
Option 4 ID : **441009550047**
Status : **Answered**
Chosen Option : **B**

Q.64 The convolution property of the Z-Transform states that:

Ans

✗ A. $Z\{x[n] * h[n]\} = \dfrac{X(z)}{H(z)}$

✗ B. $Z\{x[n] * h[n]\} = X(z) + H(z)$

✓ C. $Z\{x[n] * h[n]\} = X(z)H(z)$

✗ D. $Z\{x[n] * h[n]\} = X(z) - H(z)$

Question ID : **44100977268**
Option 1 ID : **441009307073**
Option 2 ID : **441009307071**
Option 3 ID : **441009307070**
Option 4 ID : **441009307072**
Status : **Answered**
Chosen Option : **C**

Q.65 Identify whether the following statements are true or false.

Statement 1: The Superposition Theorem is used in AC circuits to simplify the analysis when there are multiple independent sources (voltage or current). The theorem states that the response in a linear circuit with multiple sources is the sum of the responses from each individual source acting alone.
Statement 2: The Superposition Theorem is only applicable to DC circuits.

Ans   ✗ A. Statement 1 is false, and Statement 2 is true.

   ✗ B. Both Statement 1 and Statement 2 are true.

   ✓ C. Statement 1 is true, but Statement 2 is false

   ✗ D. Both Statement 1 and Statement 2 are false.

Question ID : **441009138798**
Option 1 ID : **441009551526**
Option 2 ID : **441009551524**
Option 3 ID : **441009551525**
Option 4 ID : **441009551527**
Status : **Answered**
Chosen Option : **C**

Q.66 If the time constant of the RC series circuit is 1 sec and the value of capacitor C = 1μ F, determine the value of resistor R.

Ans ✗ A. 10 K Ω

✗ B. 10 M Ω

✗ C. 100 K Ω

✓ D. 1 M Ω

Question ID : **44100949169**
Option 1 ID : **441009195972**
Option 2 ID : **441009195974**
Option 3 ID : **441009195973**
Option 4 ID : **441009195975**
Status : **Answered**
Chosen Option : **D**

Q.67 Determine the Neper frequency (in rad/s) of a series RLC circuit if R = 1 MΩ ,C = 1 μ F , and L = 1 m H.

Ans ✓ A. 0.5

✗ B. 1

✗ C. 1.5

✗ D. 2

Question ID : **44100949293**
Option 1 ID : **441009196466**
Option 2 ID : **441009196465**
Option 3 ID : **441009196467**
Option 4 ID : **441009196464**
Status : **Not Answered**
Chosen Option : **--**

Q.68 Which of the following applications is NOT suitable for a squirrel cage induction motor?

Ans ✗ A. Conveyors in factories

✗ B. Air compressors

✓ C. CNC machines requiring precise speed control

✗ D. Centrifugal pumps

Question ID : **44100984474**
Option 1 ID : **441009335681**
Option 2 ID : **441009335679**
Option 3 ID : **441009335680**
Option 4 ID : **441009335678**
Status : **Answered**
Chosen Option : **C**

Q.69 What is the key difference between a JK and a T flip-flop in terms of conversion?

Ans   ✗ A. JK has an undefined state.

     ✗ B. T cannot be implemented using JK.

     ✔ C. JK has 2 inputs, while T has 1.

     ✗ D. T is asynchronous, while JK is synchronous.

> Question ID : **44100975364**
> Option 1 ID : **441009299733**
> Option 2 ID : **441009299731**
> Option 3 ID : **441009299730**
> Option 4 ID : **441009299732**
> Status : **Answered**
> Chosen Option : **C**

Q.70 Which of the following options represents a Poisson's equation in electrostatics for a charge-free region?

Ans   ✔ A. $\nabla^2 V = 0$

     ✗ B. $\nabla^2 V = \mu_O$

     ✗ C. $\nabla^2 V = \varepsilon_O E$

     ✗ D. $\nabla^2 V = \varepsilon_O$

> Question ID : **441009122260**
> Option 1 ID : **441009485962**
> Option 2 ID : **441009485964**
> Option 3 ID : **441009485965**
> Option 4 ID : **441009485963**
> Status : **Answered**
> Chosen Option : **A**

Q.71 Identify the correct statement with respect to unit step response of a second order system .

Ans   ✗ A. The settling time is always zero

     ✔ B. The settling time is greater than the rise time

     ✗ C. The settling time is equal to the rise time

     ✗ D. The settling time is less than the rise time

> Question ID : **44100949300**
> Option 1 ID : **441009196495**
> Option 2 ID : **441009196494**
> Option 3 ID : **441009196492**
> Option 4 ID : **441009196493**
> Status : **Answered**
> Chosen Option : **B**

Q.72 Which mode of dual converter operation involves only one bridge conducting at a time?

Ans ✅ A. Circulating current-free operation

❌ B. Simultaneous conduction mode

❌ C. Freewheeling operation

❌ D. Circulating current mode

Question ID : **441009138356**
Option 1 ID : **441009549659**
Option 2 ID : **441009549657**
Option 3 ID : **441009549658**
Option 4 ID : **441009549660**
Status : **Answered**
Chosen Option : **A**

Q.73 The impulse response of a second order system can be obtained by:

Ans ✅ A. differentiating the step response of the second order system

❌ B. first integrating and then differentiating the step response of the second order system

❌ C. giving a ramp function at the input and then differentiating the step response of the second order system

❌ D. integrating the step response of the second order system

Question ID : **44100949292**
Option 1 ID : **441009196461**
Option 2 ID : **441009196462**
Option 3 ID : **441009196463**
Option 4 ID : **441009196460**
Status : **Answered**
Chosen Option : **A**

Q.74 Which of the following statements is correct regarding the inductance of a toroidal coil with a high-permeability core?

Ans ❌ A. The inductance is inversely proportional to the square of the number of turns.

✅ B. The inductance increases as the number of turns increases.

❌ C. The inductance is independent of the core material.

❌ D. The inductance decreases as the permeability of the core increases.

Question ID : **441009120594**
Option 1 ID : **441009479409**
Option 2 ID : **441009479406**
Option 3 ID : **441009479407**
Option 4 ID : **441009479408**
Status : **Not Answered**
Chosen Option : **--**

Q.75 The Rate of Rise of Recovery Voltage (RRRV) is an important parameter in switchgear protection because it _____.

Ans ✗ A. determines the fault current in the system

✓ B. indicates the speed at which the voltage returns to normal after a fault is cleared

✗ C. defines the speed at which a circuit breaker opens

✗ D. measures the efficiency of the protection system

Question ID : **44100945956**
Option 1 ID : **441009183011**
Option 2 ID : **441009183009**
Option 3 ID : **441009183008**
Option 4 ID : **441009183010**
Status : **Answered**
Chosen Option : **C**

Q.76 What happens to the output voltage when the pulse width increases in PWM control?

Ans ✗ A. Output becomes distorted.

✗ B. Output voltage decreases.

✗ C. Output frequency increases.

✓ D. Output voltage increases.

Question ID : **441009138697**
Option 1 ID : **441009551098**
Option 2 ID : **441009551096**
Option 3 ID : **441009551097**
Option 4 ID : **441009551095**
Status : **Answered**
Chosen Option : **D**

Q.77 What is the primary limitation of using a differentiator circuit with an OPAMP in a practical application?

Ans ✗ A. Limited bandwidth

✗ B. Inability to handle high-input impedance sources

✗ C. Difficulty in achieving stable operation

✓ D. High noise sensitivity

Question ID : **44100950338**
Option 1 ID : **441009200588**
Option 2 ID : **441009200590**
Option 3 ID : **441009200589**
Option 4 ID : **441009200587**
Status : **Not Answered**
Chosen Option : **--**

Q.78 Identify the correct statement related to transient response characteristics of a second order control system.

Ans ✗ A. The delay time is directly proportional to the damped natural frequency.

✗ B. The delay time is independent of the damped natural frequency.

✔ C. The delay time is inversely proportional to the damped natural frequency.

✗ D. The delay time is always a constant and does not dependent on any system parameter

Question ID : **44100949308**
Option 1 ID : **441009196521**
Option 2 ID : **441009196522**
Option 3 ID : **441009196520**
Option 4 ID : **441009196523**
Status : **Answered**
Chosen Option : **C**

Q.79 If the damping ratio for a second order system in a control system is represented by 'd' (its Zeta generally), then we get Underdamped Response if _____ and overdamped Response if _____.

Ans ✔ A. $0 < d < 1$; $d > 1$

✗ B. $d = 1$; $d = 0$

✗ C. $d = 0$; $d = 1$

✗ D. $d > 1$; $d < 1$

Question ID : **44100949298**
Option 1 ID : **441009196486**
Option 2 ID : **441009196487**
Option 3 ID : **441009196485**
Option 4 ID : **441009196484**
Status : **Answered**
Chosen Option : **A**

Q.80 What is the magnetic field intensity due to straight current carrying filamentary conductor of infinite length? (where conductor is along the z-axis)

Ans ✔ A. $H = \dfrac{I}{2\pi\rho}\, a_{\varphi}$

✗ B. $H = \dfrac{I}{4\pi\rho}\, a_{\varphi}$

✗ C. $H = \dfrac{2I}{\pi\rho}\, a_{\varphi}$

✗ D. $H = \dfrac{I}{\pi\rho}\, a_{\varphi}$

Question ID : **441009120602**
Option 1 ID : **441009479439**
Option 2 ID : **441009479440**
Option 3 ID : **441009479441**
Option 4 ID : **441009479438**
Status : **Answered**
Chosen Option : **A**

Q.81 Why are single squirrel cage induction motors preferred in irrigation pump sets?

Ans ✗ A. They operate with DC supply.

✗ B. They have high starting torque.

✗ C. They offer variable speed control.

✓ D. They provide fairly constant speed and high efficiency.

Question ID : **44100984471**
Option 1 ID : **441009335669**
Option 2 ID : **441009335666**
Option 3 ID : **441009335667**
Option 4 ID : **441009335668**
Status : **Answered**
Chosen Option : **D**

Q.82 What does the control parameter α represent in the overlapping control of the chopper?

Ans ✗ A. Firing angle

✗ B. Power factor

✓ C. Duty cycle

✗ D. Resistance setting of RB

Question ID : **441009138436**
Option 1 ID : **441009549980**
Option 2 ID : **441009549979**
Option 3 ID : **441009549981**
Option 4 ID : **441009549982**
Status : **Answered**
Chosen Option : **C**

Q.83 What is the Z-transform of x[n + k] in terms of X(z)?

Ans ✗ A. $X(z) + z^k$

✗ B. $X(z^k)$

✗ C. $X(z) - z^k$

✓ D. $z^k X(z)$

Question ID : **44100977316**
Option 1 ID : **441009307266**
Option 2 ID : **441009307265**
Option 3 ID : **441009307267**
Option 4 ID : **441009307264**
Status : **Answered**
Chosen Option : **D**

Q.84 What type of shift register allows data to be shifted in both left and right directions?

Ans ✗ A. Serial-in parallel-out (SIPO)

✗ B. Serial-in serial-out (SISO)

✗ C. Parallel-in serial-out (PISO)

✓ D. Universal shift register

Question ID : **44100975305**
Option 1 ID : **441009299495**
Option 2 ID : **441009299494**
Option 3 ID : **441009299497**
Option 4 ID : **441009299496**
Status : **Answered**
Chosen Option : **D**

Q.85 In differential protection, the basic principle is based on the comparison of _____.

Ans ✗ A. voltage at the two ends of the line

✗ B. resistance at the two ends of the line

✗ C. power factor of supply and load

✓ D. current entering and leaving a protected zone

Question ID : **44100943733**
Option 1 ID : **441009174379**
Option 2 ID : **441009174382**
Option 3 ID : **441009174381**
Option 4 ID : **441009174380**
Status : **Answered**
Chosen Option : **D**

Q.86 Which of the following options is correct regarding the magnetic vector potential (A) and the magnetic field intensity (B)?

Ans ✓ A. B is the curl of A.

✗ B. B is the gradient of A.

✗ C. B is the Laplacian of A.

✗ D. B is the divergence of A.

Question ID : **441009122269**
Option 1 ID : **441009486000**
Option 2 ID : **441009485998**
Option 3 ID : **441009486001**
Option 4 ID : **441009485999**
Status : **Answered**
Chosen Option : **B**

Q.87 If the transfer function of the control system has 4 poles and 2 zeros, then the order of the system is:

Ans ✔ A. 4

✘ B. 6

✘ C. 2

✘ D. 8

Question ID : **44100949331**
Option 1 ID : **441009196613**
Option 2 ID : **441009196614**
Option 3 ID : **441009196612**
Option 4 ID : **441009196615**
Status : **Answered**
Chosen Option : **A**

Q.88 In a basic current mirror circuit using two identical bipolar junction transistors (BJTs), the collector current of the output transistor (Q2) is:

Ans ✔ A. equal to the collector current of the input transistor (Q1)

✘ B. twice the collector current of the input transistor (Q1)

✘ C. equal to the base current of the input transistor (Q1)

✘ D. half the collector current of the input transistor (Q1)

Question ID : **44100949517**
Option 1 ID : **441009197341**
Option 2 ID : **441009197342**
Option 3 ID : **441009197340**
Option 4 ID : **441009197343**
Status : **Answered**
Chosen Option : **A**

Q.89 Select the correct option based on the given statements.

Statement 1: In a parallel circuit, the voltage across each component is the same as the source voltage.
Statement 2: The total current in a parallel circuit is equal to the sum of the currents through all the branches.

Ans ✘ A. Statement 1 is incorrect and Statement 2 is correct.

✔ B. Both Statement 1 and Statement 2 are correct.

✘ C. Both Statement 1 and Statement 2 are incorrect.

✘ D. Statement 1 is correct and Statement 2 is incorrect.

Question ID : **441009141248**
Option 1 ID : **441009561206**
Option 2 ID : **441009561204**
Option 3 ID : **441009561207**
Option 4 ID : **441009561205**
Status : **Answered**
Chosen Option : **B**

Q.90 What is the major difference between a T flip-flop and a JK flip-flop?

Ans ✅ A. T flip-flop toggles on every clock pulse when T = 1, while JK flip-flop follows J and K inputs.

❌ B. T flip-flop has two inputs, whereas JK flip-flop has one input.

❌ C. JK flip-flop does not require a clock.

❌ D. T flip-flop cannot be used in counters.

Question ID : **44100975369**
Option 1 ID : **441009299751**
Option 2 ID : **441009299750**
Option 3 ID : **441009299753**
Option 4 ID : **441009299752**
Status : **Answered**
Chosen Option : **A**

Q.91 The Region of Convergence (ROC) of a left-sided sequence in the Z-domain is:

Ans ❌ A. at $|z| = 1$

✅ B. inside the circle $|z| < r$

❌ C. at no specific region

❌ D. outside the circle $|z| > r$

Question ID : **44100968260**
Option 1 ID : **441009271817**
Option 2 ID : **441009271815**
Option 3 ID : **441009271818**
Option 4 ID : **441009271816**
Status : **Answered**
Chosen Option : **B**

Q.92 In an AC circuit, improving the power factor can be achieved by:

Ans ❌ A. reducing the supply voltage

❌ B. adding inductors in parallel

❌ C. increasing the circuit resistance

✅ D. adding capacitors in parallel

Question ID : **44100958960**
Option 1 ID : **441009234757**
Option 2 ID : **441009234754**
Option 3 ID : **441009234756**
Option 4 ID : **441009234755**
Status : **Answered**
Chosen Option : **A**

Q.93 Which of the following modifications can be made to a 4-bit parallel adder to perform subtraction?

Ans ✔️ A. Complement one of the inputs and add 1.

❌ B. Use XOR gates to invert the carry.

❌ C. Increase the number of adders.

❌ D. Connect the output carry to input carry.

Question ID : **44100968524**
Option 1 ID : **441009272723**
Option 2 ID : **441009272724**
Option 3 ID : **441009272725**
Option 4 ID : **441009272726**
Status : **Answered**
Chosen Option : **A**

Q.94 What happens when J = 0 and K = 1 in a JK flip-flop?

Ans ✔️ A. The output resets to 0.

❌ B. The output remains the same.

❌ C. The output sets to 1.

❌ D. The output toggles.

Question ID : **44100975368**
Option 1 ID : **441009299748**
Option 2 ID : **441009299747**
Option 3 ID : **441009299749**
Option 4 ID : **441009299746**
Status : **Answered**
Chosen Option : **B**

Q.95 In a control system, if the input is a unit step function, then the steady state error for type-1 system is _____ and for type-2 system is _____.

Ans ❌ A. zero; infinity

❌ B. unity; infinity

❌ C. zero; unity

✔️ D. zero; zero

Question ID : **44100949343**
Option 1 ID : **441009196657**
Option 2 ID : **441009196659**
Option 3 ID : **441009196656**
Option 4 ID : **441009196658**
Status : **Not Answered**
Chosen Option : **--**

Q.96 Which of the following statements correctly describes the force experienced by a charged particle moving in a magnetic field?

Ans ✗ A. The force is in the opposite direction of the magnetic field.

✔ B. The force is perpendicular to both the velocity of the particle and the magnetic field.

✗ C. The force is zero regardless of the particle's motion.

✗ D. The force is in the direction of the particle's velocity.

Question ID : **441009120598**
Option 1 ID : **441009479423**
Option 2 ID : **441009479424**
Option 3 ID : **441009479425**
Option 4 ID : **441009479422**
Status : **Answered**
Chosen Option : **B**

Q.97 In distance protection, the relay operates when _____.

Ans ✗ A. the current exceeds a set value

✗ B. the load current exceeds the rated value

✗ C. the voltage exceeds a set value

✔ D. the impedance between the relay and the faulted section falls below a set value

Question ID : **44100943747**
Option 1 ID : **441009174435**
Option 2 ID : **441009174438**
Option 3 ID : **441009174436**
Option 4 ID : **441009174437**
Status : **Answered**
Chosen Option : **D**

Q.98 The time-delay characteristic of overvoltage protection is used to _____.

Ans ✗ A. ensure that the protection operates only after a full fault occurs

✔ B. allow for brief voltage surges to pass without causing a trip

✗ C. delay relay operation during transient faults

✗ D. prevent tripping during minor overloads

Question ID : **44100945585**
Option 1 ID : **441009181529**
Option 2 ID : **441009181527**
Option 3 ID : **441009181530**
Option 4 ID : **441009181528**
Status : **Answered**
Chosen Option : **B**

Q.99 In the steady-state response of an RL circuit, the voltage across the inductor is _____.

Ans ✗ A. half of the supply voltage

✓ B. zero

✗ C. equal to the supply voltage

✗ D. proportional to the current

Question ID : **441009138710**

Option 1 ID : **441009551145**

Option 2 ID : **441009551142**

Option 3 ID : **441009551143**

Option 4 ID : **441009551144**

Status : **Answered**

Chosen Option : **B**

Q.10 What is the main advantage of an auto transformer over a two-winding transformer?
0

Ans ✗ A. Can work with DC supply

✓ B. Has higher efficiency and smaller size

✗ C. Completely eliminates core losses

✗ D. Has separate primary and secondary windings

Question ID : **44100984496**

Option 1 ID : **441009335764**

Option 2 ID : **441009335762**

Option 3 ID : **441009335763**

Option 4 ID : **441009335765**

Status : **Answered**

Chosen Option : **B**

Q.10 What is the primary mechanism by which a voltage-controlled oscillator (VCO) achieves
1 frequency modulation in response to a control voltage?

Ans ✓ A. Varactor diode capacitance variation

✗ B. Bipolar junction transistor (BJT) base-emitter voltage variation

✗ C. Junction field-effect transistor (JFET) transconductance variation

✗ D. Resistor-capacitor (RC) time constant variation

Question ID : **44100951136**

Option 1 ID : **441009203694**

Option 2 ID : **441009203696**

Option 3 ID : **441009203695**

Option 4 ID : **441009203697**

Status : **Not Answered**

Chosen Option : **--**

Q.10 2 A capacitor of $2\ \mu F$ is connected across a 5 V DC voltage source at time $t = 0$ seconds through a switch. The current at $t = \infty$ seconds will be _____.

Ans ✗ A. 1 A

✗ B. 0.5 A

✓ C. 0 A

✗ D. 2.5 A

Question ID : **441009138549**
Option 1 ID : **441009550421**
Option 2 ID : **441009550423**
Option 3 ID : **441009550420**
Option 4 ID : **441009550422**
Status : **Answered**
Chosen Option : **C**

Q.10 3 What happens to the rotor resistance of a deep bar rotor as the motor speed increases?

Ans ✗ A. It increases

✓ B. It decreases

✗ C. It fluctuates randomly

✗ D. It remains constant

Question ID : **44100984482**
Option 1 ID : **441009335714**
Option 2 ID : **441009335716**
Option 3 ID : **441009335717**
Option 4 ID : **441009335715**
Status : **Not Answered**
Chosen Option : **--**

Q.10 4 While calculating the final value theorem for a function F(s) and f(t), the limit is applied as:

Ans ✗ A. t tends to 0 for f(t) and s tends to ∞ for F(s)

✗ B. t tends to ∞ for f(t) and s tends to ∞ for F(s)

✓ C. t tends to ∞ for f(t) and s tends to 0 for F(s)

✗ D. t tends to 0 for f(t) and s tends to 0 for F(s)

Question ID : **44100949310**
Option 1 ID : **441009196530**
Option 2 ID : **441009196529**
Option 3 ID : **441009196531**
Option 4 ID : **441009196528**
Status : **Answered**
Chosen Option : **C**

Q.10 **For long transmission lines, the voltage regulation becomes worse when _____.**
5

Ans ✗ A. the length of the transmission line decreases

✗ B. the current is reduced

✗ C. the line is lightly loaded

✔ D. the line is heavily loaded

Question ID : **44100943642**
Option 1 ID : **441009174021**
Option 2 ID : **441009174022**
Option 3 ID : **441009174020**
Option 4 ID : **441009174019**
Status : **Answered**
Chosen Option : **C**

Q.10 **In forced commutation, which parameter is forced to zero to turn off the SCR?**
6

Ans ✗ A. Anode-to-cathode voltage

✔ B. Anode current

✗ C. Gate voltage

✗ D. Holding voltage

Question ID : **441009138616**
Option 1 ID : **441009550709**
Option 2 ID : **441009550710**
Option 3 ID : **441009550708**
Option 4 ID : **441009550711**
Status : **Answered**
Chosen Option : **B**

Q.10 **In a MOD-10 counter, what is the count sequence after 9?**
7

Ans ✔ A. 0

✗ B. 15

✗ C. 10

✗ D. 1

Question ID : **44100975323**
Option 1 ID : **441009299566**
Option 2 ID : **441009299568**
Option 3 ID : **441009299567**
Option 4 ID : **441009299569**
Status : **Answered**
Chosen Option : **A**

Q.10 What is the impact of a line-to-line fault on the voltage in the faulted phases?
8

Ans   ✗ A. Voltage in all phases becomes equal.

   ✓ B. Voltage in the faulted phases becomes zero.

   ✗ C. Voltage in the faulted phases increases.

   ✗ D. Only the unaffected phase experiences a voltage drop.

Question ID : **44100941337**
Option 1 ID : **441009164882**
Option 2 ID : **441009164880**
Option 3 ID : **441009164881**
Option 4 ID : **441009164883**
Status : **Answered**
Chosen Option : **B**

Q.10 The standard form of characteristics equation of the second order system transfer
9   function is an equation which includes:

Ans   ✗ A. damping factor and open loop zeros only

   ✓ B. both natural frequency and damping factor

   ✗ C. natural frequency only

   ✗ D. neither natural frequency nor damping factor

Question ID : **44100949295**
Option 1 ID : **441009196472**
Option 2 ID : **441009196474**
Option 3 ID : **441009196473**
Option 4 ID : **441009196475**
Status : **Answered**
Chosen Option : **B**

Q.11 Which of the following is the unit of the Poynting vector?
0

Ans   ✗ A. Watts per metre (W/m)

   ✓ B. Watts per square metre (W/m^2)

   ✗ C. Volt per square metre (V/m^2)

   ✗ D. Ampere per square metre (A/m^2)

Question ID : **441009122277**
Option 1 ID : **441009486031**
Option 2 ID : **441009486030**
Option 3 ID : **441009486033**
Option 4 ID : **441009486032**
Status : **Not Answered**
Chosen Option : **--**

Q.11 1 Select the correct option based on the given statements.

Statement 1: In a balanced three-phase system, the phase voltage is the voltage measured between any one phase and the neutral.
Statement 2: The line voltage is the voltage measured between any two phases.

Ans ✔️ A. Both Statement 1 and Statement 2 are true.

❌ B. Statement 1 is false, Statement 2 is true.

❌ C. Statement 1 is true, Statement 2 is false.

❌ D. Both Statement 1 and Statement 2 are false.

Question ID : **441009140077**
Option 1 ID : **441009556505**
Option 2 ID : **441009556508**
Option 3 ID : **441009556507**
Option 4 ID : **441009556506**
Status : **Answered**
Chosen Option : **A**

Q.11 2 The power factor (pf) of an AC circuit is defined as the ratio of:

Ans ❌ A. real power to reactive power

❌ B. apparent power to real power

❌ C. reactive power to apparent power

✔️ D. real power to apparent power

Question ID : **44100958951**
Option 1 ID : **441009234721**
Option 2 ID : **441009234720**
Option 3 ID : **441009234718**
Option 4 ID : **441009234719**
Status : **Answered**
Chosen Option : **D**

Q.11 3 If Kp denotes the position error constant, then the steady state error of a second order control system for step input is defined as:

Ans ❌ A. $\dfrac{1}{[1 - K_p]}$

✔️ B. $\dfrac{1}{[1 + K_p]}$

❌ C. $\dfrac{[1 + K_p]}{K_p}$

❌ D. $[1 + K_p]$

Question ID : **44100949329**
Option 1 ID : **441009196605**
Option 2 ID : **441009196607**
Option 3 ID : **441009196606**
Option 4 ID : **441009196604**
Status : **Answered**
Chosen Option : **B**

Q.11 Which of the following is NOT a typical application of flip-flops?
4

Ans   ✗ A. Phase shifting

     ✗ B. Digital storage

     ✔ C. Analog signal amplification

     ✗ D. Frequency division

Question ID : **44100975362**
Option 1 ID : **441009299724**
Option 2 ID : **441009299723**
Option 3 ID : **441009299725**
Option 4 ID : **441009299722**
Status : **Answered**
Chosen Option : **A**

Q.11 In a circuit with three resistors in series, if the current through the circuit is 2 A and the
5   resistors have values of 3 Ω, 5 Ω and 7 Ω, respectively, what is the total voltage across
the loop according to KVL?

Ans   ✗ A. 10 V

     ✔ B. 30 V

     ✗ C. 15 V

     ✗ D. 20 V

Question ID : **441009140935**
Option 1 ID : **441009559957**
Option 2 ID : **441009559958**
Option 3 ID : **441009559956**
Option 4 ID : **441009559959**
Status : **Answered**
Chosen Option : **B**

Q.11 A capacitive filter is used to filter out the AC component of a rectified voltage. The filter
6   consists of a capacitor C connected in parallel with a load resistor R_L. If the rectified
voltage has a peak value of V_P and a frequency of f, what is the effect of increasing the
value of the capacitor C on the ripple voltage V_R?

Ans   ✔ A. The ripple voltage V_R decreases

     ✗ B. The ripple voltage V_R becomes zero

     ✗ C. The ripple voltage V_R increases

     ✗ D. The ripple voltage V_R remains the same

Question ID : **44100948412**
Option 1 ID : **441009192849**
Option 2 ID : **441009192851**
Option 3 ID : **441009192848**
Option 4 ID : **441009192850**
Status : **Answered**
Chosen Option : **A**

Q.11 In an IGBT, the control terminal is called the:
7

Ans   ✗ A. collector

     ✗ B. emitter

     ✗ C. base

     ✓ D. gate

Question ID : **441009138483**
Option 1 ID : **441009550163**
Option 2 ID : **441009550164**
Option 3 ID : **441009550165**
Option 4 ID : **441009550166**
Status : **Answered**
Chosen Option : **D**

Q.11 For a two-sided sequence x[n], which of the following statements about the ROC of its
8   Z-transform is correct?

Ans   ✓ A. The ROC lies between two poles.

     ✗ B. The ROC is always |z| < r.

     ✗ C. The ROC does not exist for two-sided sequences.

     ✗ D. The ROC is always |z| > r.

Question ID : **44100977380**
Option 1 ID : **441009307492**
Option 2 ID : **441009307494**
Option 3 ID : **441009307495**
Option 4 ID : **441009307493**
Status : **Answered**
Chosen Option : **A**

Q.11 What is the effect of time-scaling x[an] on the Z-Transform?
9

Ans   ✓ A. $X(z^{\frac{1}{a}})$

     ✗ B. $\dfrac{X(z)}{a}$

     ✗ C. $X(az)$

     ✗ D. $X(z^a)$

Question ID : **44100977291**
Option 1 ID : **441009307162**
Option 2 ID : **441009307165**
Option 3 ID : **441009307164**
Option 4 ID : **441009307163**
Status : **Answered**
Chosen Option : **A**

Q.12 Which of the following equations shows that the time varying E field is not
0 conservative?

Ans

A. $\nabla \times E = -\dfrac{\partial B}{\partial t}$ ✓

B. $\nabla \bullet D = \rho_v$ ✗

C. $\nabla \times E = 0$ ✗

D. $\nabla \times H = J$ ✗

Question ID : **441009122286**
Option 1 ID : **441009486068**
Option 2 ID : **441009486066**
Option 3 ID : **441009486067**
Option 4 ID : **441009486069**
Status : **Answered**
Chosen Option : **C**

Section : **Section II Test on Reasoning**

Q.1 Seven boxes J, K, L, M, W, X and Y are kept one over the other but not necessarily in the same order. No box is kept above Y. Only three boxes are kept between Y and M. Only one box is kept between L and K. K is kept immediately above M. Only four boxes are kept between L and J. X is kept at some place above W. Which box is kept second below X?

Ans
A. Y ✗

B. W ✗

C. K ✗

D. M ✓

Question ID : **44100914620**
Option 1 ID : **44100958332**
Option 2 ID : **44100958331**
Option 3 ID : **44100958329**
Option 4 ID : **44100958330**
Status : **Not Answered**
Chosen Option : **--**

Q.2 Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?

DER124 , JKX117 , PQD110 , VWJ103 , ?

Ans
A. HCP96 ✗

B. BCQ96 ✗

C. BCP96 ✓

D. BDP96 ✗

Question ID : **44100914717**
Option 1 ID : **44100958720**
Option 2 ID : **44100958719**
Option 3 ID : **44100958717**
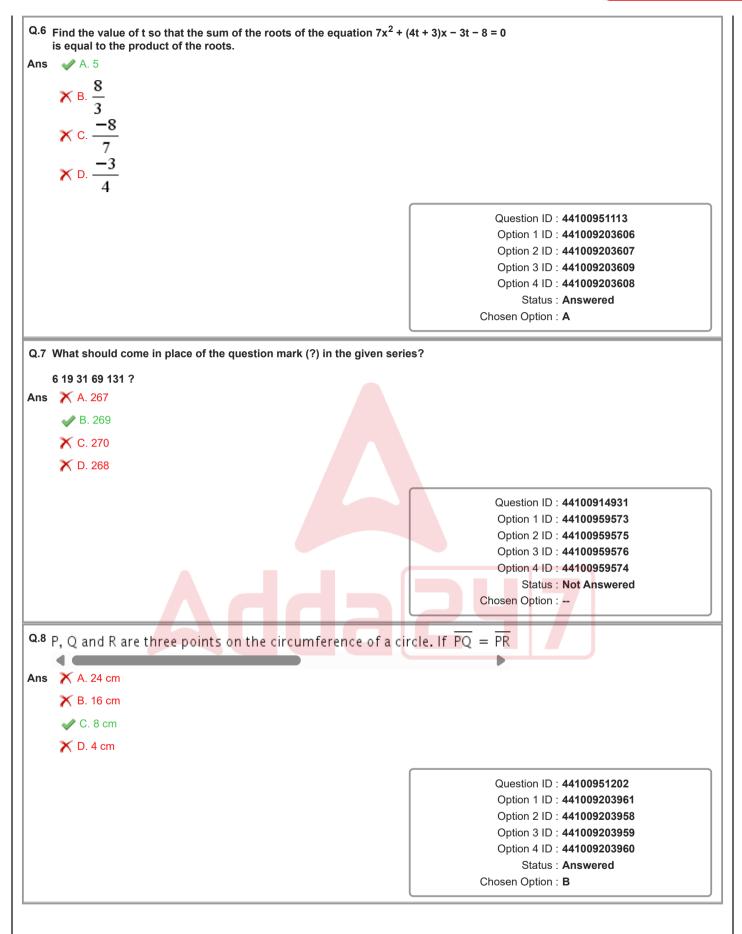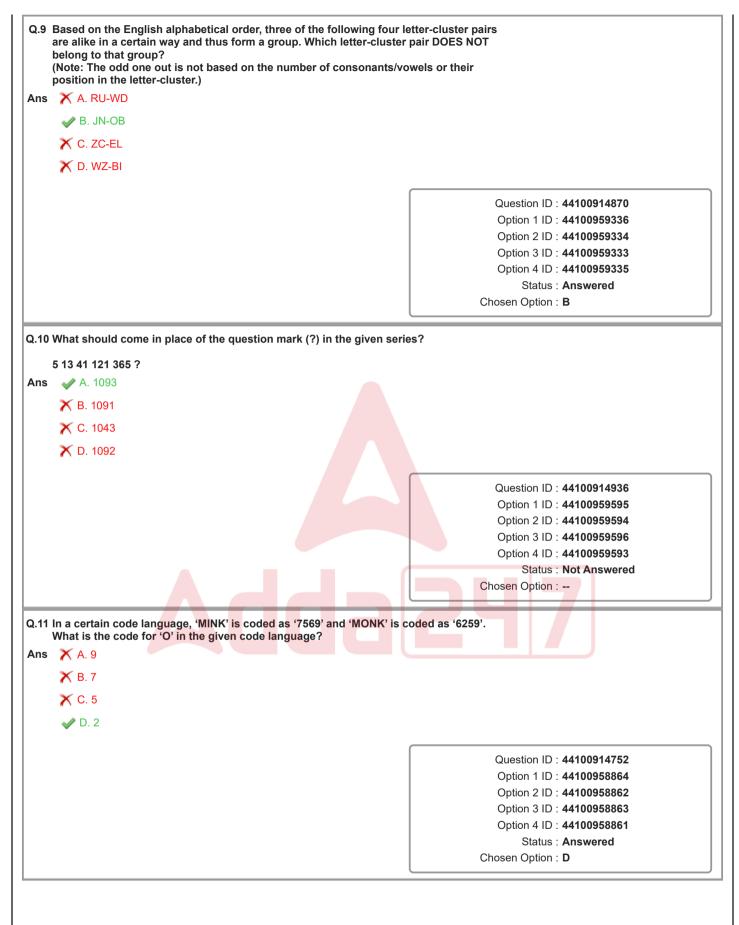Option 4 ID : **44100958718**
Status : **Answered**
Chosen Option : **C**

Q.3 The value of 32 − 3[3 + 4(3 − 3(7 − 5) + 8) − 12] ÷ 3 is:

Ans ✓ A. 21

✗ B. 22

✗ C. 33

✗ D. 31

Question ID : **44100950795**
Option 1 ID : **441009202382**
Option 2 ID : **441009202385**
Option 3 ID : **441009202384**
Option 4 ID : **441009202383**
Status : **Answered**
Chosen Option : **A**

Q.4 Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of ::?

 # : AEK :: BFL : %

Ans ✗ A. # = TXD, % = INS

✗ B. # = TYD, % = IMS

✓ C. # = TXD, % = IMS

✗ D. # = TXD, % = IMT

Question ID : **44100914663**
Option 1 ID : **44100958504**
Option 2 ID : **44100958503**
Option 3 ID : **44100958501**
Option 4 ID : **44100958502**
Status : **Answered**
Chosen Option : **C**

Q.5 Find the average of cubes of natural numbers from 1 to 15.

Ans ✗ A. 945

✗ B. 992

✗ C. 816

✓ D. 960

Question ID : **44100950076**
Option 1 ID : **441009199551**
Option 2 ID : **441009199549**
Option 3 ID : **441009199550**
Option 4 ID : **441009199548**
Status : **Not Answered**
Chosen Option : **--**

Q.6 Find the value of t so that the sum of the roots of the equation $7x^2 + (4t + 3)x − 3t − 8 = 0$ is equal to the product of the roots.

Ans ✔️ A. 5

❌ B. $\dfrac{8}{3}$

❌ C. $\dfrac{-8}{7}$

❌ D. $\dfrac{-3}{4}$

Question ID : **44100951113**
Option 1 ID : **441009203606**
Option 2 ID : **441009203607**
Option 3 ID : **441009203609**
Option 4 ID : **441009203608**
Status : **Answered**
Chosen Option : **A**

Q.7 What should come in place of the question mark (?) in the given series?

6 19 31 69 131 ?

Ans ❌ A. 267

✔️ B. 269

❌ C. 270

❌ D. 268

Question ID : **44100914931**
Option 1 ID : **44100959573**
Option 2 ID : **44100959575**
Option 3 ID : **44100959576**
Option 4 ID : **44100959574**
Status : **Not Answered**
Chosen Option : **--**

Q.8 P, Q and R are three points on the circumference of a circle. If $\overline{PQ} = \overline{PR}$

Ans ❌ A. 24 cm

❌ B. 16 cm

✔️ C. 8 cm

❌ D. 4 cm

Question ID : **44100951202**
Option 1 ID : **441009203961**
Option 2 ID : **441009203958**
Option 3 ID : **441009203959**
Option 4 ID : **441009203960**
Status : **Answered**
Chosen Option : **B**

Q.9 Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group?
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

Ans ✗ A. RU-WD

✓ B. JN-OB

✗ C. ZC-EL

✗ D. WZ-BI

Question ID : **44100914870**
Option 1 ID : **44100959336**
Option 2 ID : **44100959334**
Option 3 ID : **44100959333**
Option 4 ID : **44100959335**
Status : **Answered**
Chosen Option : **B**

Q.10 What should come in place of the question mark (?) in the given series?

5 13 41 121 365 ?

Ans ✓ A. 1093

✗ B. 1091

✗ C. 1043

✗ D. 1092

Question ID : **44100914936**
Option 1 ID : **44100959595**
Option 2 ID : **44100959594**
Option 3 ID : **44100959596**
Option 4 ID : **44100959593**
Status : **Not Answered**
Chosen Option : **--**

Q.11 In a certain code language, 'MINK' is coded as '7569' and 'MONK' is coded as '6259'. What is the code for 'O' in the given code language?

Ans ✗ A. 9

✗ B. 7

✗ C. 5

✓ D. 2

Question ID : **44100914752**
Option 1 ID : **44100958864**
Option 2 ID : **44100958862**
Option 3 ID : **44100958863**
Option 4 ID : **44100958861**
Status : **Answered**
Chosen Option : **D**

Q.12 Read the given statement(s) and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statement(s).

Statements:
Some pigs are cameras.
All statues are cameras.

Conclusions:
(I) Some pigs are statues.
(II) All cameras are statues.

Ans ✗ A. Both conclusions (I) and (II) follow.

✗ B. Only conclusion (II) follows.

✗ C. Only conclusion (I) follows.

✓ D. Neither conclusion (I) nor (II) follows.

Question ID : **44100914727**
Option 1 ID : **44100958758**
Option 2 ID : **44100958759**
Option 3 ID : **44100958760**
Option 4 ID : **44100958757**
Status : **Answered**
Chosen Option : **D**

Q.13 A sum of ₹2,128 is to be distributed among X, Y and Z in the ratio of 5 : 2 : 7. What will be the difference between X's and Z's shares?

Ans ✓ A. ₹304

✗ B. ₹760

✗ C. ₹152

✗ D. ₹608

Question ID : **44100944351**
Option 1 ID : **441009176744**
Option 2 ID : **441009176745**
Option 3 ID : **441009176743**
Option 4 ID : **441009176746**
Status : **Answered**
Chosen Option : **A**

Q.14 The areas of two similar triangles, ΔXYZ and ΔABC, are 36 cm^2 and 49 cm^2, respectively. If BC = 21 cm, find YZ.

Ans ✓ A. 18 cm

✗ B. 7 cm

✗ C. 21 cm

✗ D. 6 cm

Question ID : **44100953169**
Option 1 ID : **441009211751**
Option 2 ID : **441009211750**
Option 3 ID : **441009211749**
Option 4 ID : **441009211748**
Status : **Not Answered**
Chosen Option : **--**

Q.15 If X, Y and Z can do a work in 9 days, 12 days and 18 days, respectively, then how long will they take to complete the work when all three work together?

Ans   ✗ A. 36 days

    ✓ B. 4 days

    ✗ C. 6 days

    ✗ D. 18 days

Question ID : **44100944502**
Option 1 ID : **441009177251**
Option 2 ID : **441009177254**
Option 3 ID : **441009177253**
Option 4 ID : **441009177252**
Status : **Answered**
Chosen Option : **B**

Q.16 Read the given statement(s) and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statement(s).

Statements:
Some trees are sims.
No sim is a bell.

Conclusions:
(I) Some trees are bells.
(II) Some sims are trees.

Ans   ✗ A. Both conclusions (I) and (II) follow.

    ✗ B. Only conclusion (I) follows.

    ✗ C. Neither conclusion (I) nor (II) follows.

    ✓ D. Only conclusion (II) follows.

Question ID : **44100914739**
Option 1 ID : **44100958816**
Option 2 ID : **44100958813**
Option 3 ID : **44100958815**
Option 4 ID : **44100958814**
Status : **Answered**
Chosen Option : **D**

Q.17 A right circular cone of height 45 cm and base radius 24 cm is melted and cast into smaller cones of equal sizes of height 15 cm and base radius 2.4 cm. The number of cones cast is:

Ans   ✗ A. 225

    ✗ B. 450

    ✗ C. 150

    ✓ D. 300

Question ID : **44100953112**
Option 1 ID : **441009211527**
Option 2 ID : **441009211524**
Option 3 ID : **441009211526**
Option 4 ID : **441009211525**
Status : **Answered**
Chosen Option : **D**

Q.18 A sofa set when sold for ₹22,080 incurred a loss of 8%. At what price should it have been sold to make a profit of 18% on the cost?

Ans ✗ A. ₹27,820

✓ B. ₹28,320

✗ C. ₹24,288

✗ D. ₹24,950

Question ID : **44100944143**
Option 1 ID : **441009176029**
Option 2 ID : **441009176027**
Option 3 ID : **441009176028**
Option 4 ID : **441009176030**
Status : **Answered**
Chosen Option : **A**

Q.19 The present ages of Ramesh and Mohan are in the ratio 12 : 5. After six years, their ages will be in the ratio 2 : 1. Find their respective present ages.

Ans ✗ A. 18 years; 36 years

✓ B. 36 years; 15 years

✗ C. 15 years; 36 years

✗ D. 36 years; 18 years

Question ID : **44100951007**
Option 1 ID : **441009203192**
Option 2 ID : **441009203190**
Option 3 ID : **441009203191**
Option 4 ID : **441009203193**
Status : **Answered**
Chosen Option : **C**

Q.20 In how much time will the simple interest be $\frac{3}{5}$ of the principal at 12%

Ans ✓ A. 5 years

✗ B. 6 years

✗ C. 11 years

✗ D. 12 years

Question ID : **44100950135**
Option 1 ID : **441009199786**
Option 2 ID : **441009199785**
Option 3 ID : **441009199787**
Option 4 ID : **441009199784**
Status : **Answered**
Chosen Option : **A**

Q.21 H, I, J, K, W, X, and Y are sitting around a circular table facing the centre of the table. H sits fourth to the right of Y. Only two people sit between X and K when counted from the left of X. J sits third to the left of I. W is an immediate neighbour of I and K.
How many people sit between H and W when counted from the left of W?

Ans ✅ A. Four

❌ B. Three

❌ C. Two

❌ D. One

Question ID : **44100914605**
Option 1 ID : **44100958272**
Option 2 ID : **44100958271**
Option 3 ID : **44100958270**
Option 4 ID : **44100958269**
Status : **Not Answered**
Chosen Option : **--**

Q.22 Seven boxes J, K, L, M, W, X and Y are kept one over the other but not necessarily in the same order. Only four boxes are kept between M and W. Only K is kept above M. Only two boxes are kept between X and L. J is kept immediately above Y. L is not kept immediately above J. Which box is kept fourth from the top?

Ans ❌ A. Y

❌ B. L

❌ C. M

✅ D. J

Question ID : **44100914617**
Option 1 ID : **44100958320**
Option 2 ID : **44100958318**
Option 3 ID : **44100958319**
Option 4 ID : **44100958317**
Status : **Not Answered**
Chosen Option : **--**

Q.23 The marked price of a wallet is ₹500. After allowing a discount of 24% on the marked price, the shopkeeper makes a profit of ₹130. Find the gain percentage.

Ans ❌ A. 24%

✅ B. 52%

❌ C. 37%

❌ D. 31%

Question ID : **44100944166**
Option 1 ID : **441009176124**
Option 2 ID : **441009176125**
Option 3 ID : **441009176126**
Option 4 ID : **441009176123**
Status : **Answered**
Chosen Option : **B**

Q.24 If the angle of elevation of the sun changes from 45° to 60°, then the length of the shadow of a pillar decreases by 24 m. The height of the pillar is:

Ans ✗ A. $36(\sqrt{3} + 1)\,\text{m}$

✔ B. $12(3 + \sqrt{3})\,\text{m}$

✗ C. $12(3 - \sqrt{3})\,\text{m}$

✗ D. $12(\sqrt{3} + 1)\,\text{m}$

Question ID : **44100953202**
Option 1 ID : **441009211874**
Option 2 ID : **441009211875**
Option 3 ID : **441009211872**
Option 4 ID : **441009211873**
Status : **Answered**
Chosen Option : **B**

Q.25 Refer to the following letter, number and symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) # H P W H & $ C A 7 T V & ? 7 G Y 7 W Z M E (Right)

How many such numbers are there each of which is immediately preceded by a symbol and also immediately followed by a letter?

Ans ✔ A. One

✗ B. Four

✗ C. Two

✗ D. Three

Question ID : **44100914632**
Option 1 ID : **44100958377**
Option 2 ID : **44100958380**
Option 3 ID : **44100958378**
Option 4 ID : **44100958379**
Status : **Answered**
Chosen Option : **A**

Q.26 From a point on a circular track 18 km long, P, Q and R started running in the same direction at the same time at the speeds of 3 km/hr, 9 km/hr and 6 km/hr, respectively. Then, on the starting point, all three will meet again after:

Ans ✗ A. 4 hours

✔ B. 6 hours

✗ C. 3 hours

✗ D. 9 hours

Question ID : **44100953058**
Option 1 ID : **441009211311**
Option 2 ID : **441009211309**
Option 3 ID : **441009211308**
Option 4 ID : **441009211310**
Status : **Answered**
Chosen Option : **B**

Q.27 Find the median from the following data.

Marks	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Freq.	15	13	8	6	15	7	6

Ans ✗ A. 55

✓ B. 58.75

✗ C. 53.83

✗ D. 65

Question ID : **44100950953**
Option 1 ID : **441009202982**
Option 2 ID : **441009202983**
Option 3 ID : **441009202985**
Option 4 ID : **441009202984**
Status : **Not Answered**
Chosen Option : **--**

Q.28 Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group?
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

Ans ✗ A. OR-TA

✗ B. MP-RY

✗ C. WZ-BI

✓ D. SB-EX

Question ID : **44100914866**
Option 1 ID : **44100959320**
Option 2 ID : **44100959317**
Option 3 ID : **44100959319**
Option 4 ID : **44100959318**
Status : **Answered**
Chosen Option : **D**

Q.29 Five coins whose faces are marked 4 and 5 are thrown. What is the probability of obtaining a total of 22?

Ans ✗ A. $\dfrac{7}{16}$

✓ B. $\dfrac{5}{16}$

✗ C. $\dfrac{3}{16}$

✗ D. $\dfrac{1}{16}$

Question ID : **44100951046**
Option 1 ID : **441009203345**
Option 2 ID : **441009203344**
Option 3 ID : **441009203343**
Option 4 ID : **441009203342**
Status : **Answered**
Chosen Option : **D**

Q.30 The number of employees working in a company is increased by 12% and the wages per head are decreased by 12%. If it results in k% decrease in total wages, then the value of k is:

Ans ✗ A. 12

✗ B. 6

✗ C. 0

✓ D. 1.44

Question ID : **44100950890**

Option 1 ID : **441009202747**

Option 2 ID : **441009202748**

Option 3 ID : **441009202746**

Option 4 ID : **441009202749**

Status : **Not Answered**

Chosen Option : **--**

Q.31 Refer to the following letter, number and symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) $ + M ? + ^ F T $ + 8 H ^ W = 6 2 # P H 4 8 (Right)

How many such symbols are there each of which is immediately preceded by a letter and also immediately followed by a number?

Ans ✗ A. Three

✓ B. One

✗ C. Two

✗ D. Four

Question ID : **44100914635**

Option 1 ID : **44100958391**

Option 2 ID : **44100958389**

Option 3 ID : **44100958390**

Option 4 ID : **44100958392**

Status : **Answered**

Chosen Option : **B**

Q.32 PQRS is a cyclic trapezium whose sides PS and QR are parallel to each other. If $\angle$PQR = 85°, then the measure of $\angle$QRS is:

Ans ✗ A. 65°

✗ B. 75°

✗ C. 95°

✓ D. 85°

Question ID : **44100951204**

Option 1 ID : **441009203967**

Option 2 ID : **441009203969**

Option 3 ID : **441009203968**

Option 4 ID : **441009203966**

Status : **Answered**

Chosen Option : **C**

Q.33 Three pipes, P, Q and R, can fill a tank in 9 hours. After working together for 3 hours, the pipe R is closed and pipes P and Q can fill the remaining part in 24 hours. The time taken by pipe R alone to fill the tank is:

Ans ✗ A. 21 hours

     ✗ B. 18 hours

     ✗ C. 6 hours

     ✓ D. 12 hours

Question ID : **44100944479**
Option 1 ID : **441009177159**
Option 2 ID : **441009177161**
Option 3 ID : **441009177162**
Option 4 ID : **441009177160**
Status : **Answered**
Chosen Option : **D**

Q.34 K, L, M, N, W, X and Y are sitting around a circular table facing the centre of the table. Y sits third to the left of N. W sits second to the left of X. Only N sits between L and W. K is not an immediate neighbor of Y. How many people sit between M and W when counted from the right of M?

Ans ✗ A. One

     ✓ B. Two

     ✗ C. Three

     ✗ D. Four

Question ID : **44100914611**
Option 1 ID : **44100958293**
Option 2 ID : **44100958294**
Option 3 ID : **44100958295**
Option 4 ID : **44100958296**
Status : **Answered**
Chosen Option : **B**

Q.35 In a certain code language,

'A # B' means 'A is the daughter of B',
'A + B' means 'A is the father of B',
'A ÷ B' means 'A is the son of B' and
'A & B' means 'A is the sister of B'.

How is A related to P if 'A & G ÷ R + O # P'?

Ans ✓ A. Daughter

     ✗ B. Mother

     ✗ C. Sister

     ✗ D. Wife

Question ID : **44100914772**
Option 1 ID : **44100958944**
Option 2 ID : **44100958941**
Option 3 ID : **44100958943**
Option 4 ID : **44100958942**
Status : **Answered**
Chosen Option : **A**

Q.36 If Joseph's salary is 25% more than that of Jayswal, then by how much percentage is Jayswal's salary less than that of Joseph?

Ans　✗ A. 75%

　　　✗ B. 25%

　　　✔ C. 20%

　　　✗ D. 80%

Question ID : **44100950853**	
Option 1 ID : **441009202610**	
Option 2 ID : **441009202611**	
Option 3 ID : **441009202613**	
Option 4 ID : **441009202612**	
Status : **Answered**	
Chosen Option : **C**	

Q.37 Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group?
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

Ans　✗ A. EH-JQ

　　　✗ B. QT-VC

　　　✔ C. JM-LP

　　　✗ D. PS-UB

Question ID : **44100914873**	
Option 1 ID : **44100959348**	
Option 2 ID : **44100959347**	
Option 3 ID : **44100959346**	
Option 4 ID : **44100959345**	
Status : **Answered**	
Chosen Option : **C**	

Q.38 Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of ::?

 # : INU :: SXE : %

Ans　✗ A. # = ANM, % = AFM

　　　✗ B. # = AFM, % = BFM

　　　✔ C. # = AFM, % = AFM

　　　✗ D. # = AFM, % = AFN

Question ID : **44100914672**	
Option 1 ID : **44100958539**	
Option 2 ID : **44100958540**	
Option 3 ID : **44100958537**	
Option 4 ID : **44100958538**	
Status : **Answered**	
Chosen Option : **C**	

Q.39 Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of ::?

: KOU :: HLR : %

Ans ✗ A. # = EIO, % = NRY

✗ B. # = EFO, % = NRX

✓ C. # = EIO, % = NRX

✗ D. # = EIO, % = ORX

Question ID : **44100914666**
Option 1 ID : **44100958514**
Option 2 ID : **44100958516**
Option 3 ID : **44100958513**
Option 4 ID : **44100958515**
Status : **Answered**
Chosen Option : **C**

Q.40 Refer to the following letter, number and symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) R = 7 ? = 5 * B 8 S 8 % & 9 G F \ \ X U % K (Right)

How many such numbers are there each of which is immediately preceded by a symbol and also immediately followed by a letter?

Ans ✗ A. Two

✗ B. Three

✗ C. Four

✓ D. One

Question ID : **44100914644**
Option 1 ID : **44100958426**
Option 2 ID : **44100958427**
Option 3 ID : **44100958428**
Option 4 ID : **44100958425**
Status : **Answered**
Chosen Option : **D**

Q.41 In how much time will ₹625 amount to ₹729 at 16% per annum, when compounded half yearly?

Ans ✗ A. 1.5 years

✗ B. 2.5 years

✗ C. 2 years

✓ D. 1 year

Question ID : **44100950672**
Option 1 ID : **441009201896**
Option 2 ID : **441009201898**
Option 3 ID : **441009201897**
Option 4 ID : **441009201895**
Status : **Answered**
Chosen Option : **A**

Q.42 A car moving at 66 km/hr covers a distance in 5 hours 20 minutes. If it travels the same distance at 88 km/hr, then how long will it take to cover the distance?

Ans ✗ A. 3 hours

✓ B. 4 hours

✗ C. 5 hours

✗ D. 6 hours

Question ID : **44100953068**
Option 1 ID : **441009211351**
Option 2 ID : **441009211349**
Option 3 ID : **441009211348**
Option 4 ID : **441009211350**
Status : **Answered**
Chosen Option : **B**

Q.43 The students in three classes are in the ratio 5 : 8 : 5. If 14 students are increased in each class, the ratio changes to 4 : 5 : 4. Then the total number of students in the three classes before the increase is:

Ans ✗ A. 32

✗ B. 186

✓ C. 36

✗ D. 200

Question ID : **44100944241**
Option 1 ID : **441009176412**
Option 2 ID : **441009176413**
Option 3 ID : **441009176414**
Option 4 ID : **441009176411**
Status : **Not Answered**
Chosen Option : **--**

Q.44 Refer to the following letter, number and symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) S ? @ 5 ? 3 \ M A T 6 \ P 6 C 7 A S 2 * 9 M (Right)

How many such numbers are there each of which is immediately preceded by a letter and also immediately followed by a symbol?

Ans ✓ A. Two

✗ B. One

✗ C. Four

✗ D. Three

Question ID : **44100914643**
Option 1 ID : **44100958422**
Option 2 ID : **44100958421**
Option 3 ID : **44100958424**
Option 4 ID : **44100958423**
Status : **Answered**
Chosen Option : **A**

Q.45 In a certain code language, 'HOPE' is coded as '8341' and 'HYPE' is coded as '8319'.
What is the code for 'Y' in the given code language?

Ans ✗ A. 8

✓ B. 9

✗ C. 4

✗ D. 1

Question ID : **44100914750**
Option 1 ID : **44100958856**
Option 2 ID : **44100958853**
Option 3 ID : **44100958854**
Option 4 ID : **44100958855**
Status : **Answered**
Chosen Option : **B**

Q.46 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what
will come in place of the question mark (?) in the following equation?

68 D 66 A 11 C 8 B 4 = ?

Ans ✗ A. 93

✗ B. 91

✗ C. 92

✓ D. 94

Question ID : **44100914916**
Option 1 ID : **44100959515**
Option 2 ID : **44100959513**
Option 3 ID : **44100959514**
Option 4 ID : **44100959516**
Status : **Answered**
Chosen Option : **D**

Q.47 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what
will come in place of the question mark (?) in the following equation?

9 B 6 C 3 D 55 A 5 = ?

Ans ✗ A. 47

✓ B. 46

✗ C. 44

✗ D. 45

Question ID : **44100914901**
Option 1 ID : **44100959456**
Option 2 ID : **44100959455**
Option 3 ID : **44100959453**
Option 4 ID : **44100959454**
Status : **Answered**
Chosen Option : **B**

Q.48 The greatest number that divides 343, 249, 98 and leaves 7, 9 and 2 as remainders, respectively, is:

Ans ✗ A. 24

✗ B. 47

✔ C. 48

✗ D. 96

Question ID : **44100950778**
Option 1 ID : **441009202316**
Option 2 ID : **441009202317**
Option 3 ID : **441009202315**
Option 4 ID : **441009202314**
Status : **Answered**
Chosen Option : **C**

Q.49 The average of 11 numbers is 3. If the average of the first 6 numbers be 3 and the average of last 6 numbers be 4, then the middle number is:

Ans ✗ A. 5

✗ B. 6

✔ C. 9

✗ D. 8

Question ID : **44100950081**
Option 1 ID : **441009199571**
Option 2 ID : **441009199568**
Option 3 ID : **441009199569**
Option 4 ID : **441009199570**
Status : **Not Answered**
Chosen Option : **--**

Q.50 Prashant starts from Point A and drives 36 km towards east. He then takes a right turn, drives 44 km, turns right and drives 59 km. He then takes a right turn and drives 57 km. He takes a final right turn, drives 23 km and stops at Point P. How far (shortest distance) and towards which direction should he drive in order to reach Point A again? (All turns are 90 degrees turns only unless specified)

Ans ✔ A. 13 km to the south

✗ B. 12 km to the north

✗ C. 13 km to the north

✗ D. 12 km to the south

Question ID : **44100914704**
Option 1 ID : **44100958662**
Option 2 ID : **44100958664**
Option 3 ID : **44100958663**
Option 4 ID : **44100958661**
Status : **Answered**
Chosen Option : **A**

Section : **Section III General Knowledge**

Q.1 Which of the following Articles of the Indian Constitution provides a directive principle of the state policy to protect the monuments and places of national importance?

Ans ✅ A. Article 49

❌ B. Article 48A

❌ C. Article 48

❌ D. Article 38

Question ID : **44100921089**
Option 1 ID : **44100984097**
Option 2 ID : **44100984096**
Option 3 ID : **44100984095**
Option 4 ID : **44100984098**
Status : **Not Answered**
Chosen Option : **--**

Q.2 Who was the Chief Minister of Manipur before the implementation of the President's Rule in February 2025?

Ans ❌ A. Pema Khandu

❌ B. Conrad Sangma

❌ C. Himanta Biswa Sarma

✅ D. N Biren Singh

Question ID : **44100913753**
Option 1 ID : **44100954830**
Option 2 ID : **44100954829**
Option 3 ID : **44100954832**
Option 4 ID : **44100954831**
Status : **Not Answered**
Chosen Option : **--**

Q.3 In which of the following years was the National Food Security Mission (NFSM) introduced?

Ans ❌ A. 2004

❌ B. 2009

✅ C. 2007

❌ D. 2006

Question ID : **44100917412**
Option 1 ID : **44100969503**
Option 2 ID : **44100969506**
Option 3 ID : **44100969505**
Option 4 ID : **44100969504**
Status : **Not Answered**
Chosen Option : **--**

Q.4 Who among the following was the Governor-General of India during the conquest of Sindh in 1843?

Ans ✗ A. Lord Hardinge

✓ B. Lord Ellenborough

✗ C. Lord Dalhousie

✗ D. Lord Elgin

Question ID : **44100933608**
Option 1 ID : **441009133617**
Option 2 ID : **441009133618**
Option 3 ID : **441009133615**
Option 4 ID : **441009133616**
Status : **Not Answered**
Chosen Option : **--**

Q.5 Which of the following are the three key dimensions of India's National Multidimensional Poverty Index (MPI)?

Ans ✗ A. Governance, Infrastructure, and Migration

✗ B. Income, Employment, and Social Welfare

✗ C. Agriculture, Industrial Development, and Trade

✓ D. Health, Education, and Standards of Living

Question ID : **44100917344**
Option 1 ID : **44100969246**
Option 2 ID : **44100969244**
Option 3 ID : **44100969243**
Option 4 ID : **44100969245**
Status : **Not Answered**
Chosen Option : **--**

Q.6 Which of the following colonial administrators established the Fort William College at Calcutta?

Ans ✓ A. Richard Wellesley

✗ B. Alured Clarke

✗ C. Charles Cornwallis

✗ D. Warren Hastings

Question ID : **44100933592**
Option 1 ID : **441009133553**
Option 2 ID : **441009133554**
Option 3 ID : **441009133552**
Option 4 ID : **441009133551**
Status : **Not Answered**
Chosen Option : **--**

Q.7 Who notifies the territorial area of a municipality?

Ans ✗ A. President of India

✗ B. Mayor

✓ C. Governor of the State

✗ D. Chief Minister of the State

Question ID : **44100921127**
Option 1 ID : **44100984256**
Option 2 ID : **44100984257**
Option 3 ID : **44100984255**
Option 4 ID : **44100984258**
Status : **Not Answered**
Chosen Option : **--**

Q.8 How many seats did the Aam Aadmi Party (AAP) secure in the 2025 Delhi Assembly elections?

Ans ✓ A. 22

✗ B. 21

✗ C. 20

✗ D. 23

Question ID : **44100913745**
Option 1 ID : **44100954799**
Option 2 ID : **44100954798**
Option 3 ID : **44100954797**
Option 4 ID : **44100954800**
Status : **Not Answered**
Chosen Option : **--**

Q.9 Which of the following Articles provides a constitutional status to the Panchayati Raj Institutions?

Ans ✓ A. Article 243

✗ B. Article 249

✗ C. Article 247

✗ D. Article 245

Question ID : **44100921139**
Option 1 ID : **44100984303**
Option 2 ID : **44100984306**
Option 3 ID : **44100984305**
Option 4 ID : **44100984304**
Status : **Not Answered**
Chosen Option : **--**

Q.10 In the Union Budget, 2025-26, Finance Minister Nirmala Sitharaman announced the establishment of a Makhana Board in which Indian state to improve the production and processing of foxnuts?

Ans ✗ A. Uttar Pradesh

✗ B. West Bengal

✓ C. Bihar

✗ D. Odisha

Question ID : **44100913785**
Option 1 ID : **44100954953**
Option 2 ID : **44100954954**
Option 3 ID : **44100954955**
Option 4 ID : **44100954956**
Status : **Not Answered**
Chosen Option : **--**

Q.11 As per the Economic Survey, 2024-25, what was the YoY growth of M3 (excluding the impact of a non-bank merger) as of 27 December 2024?

Ans ✗ A. 11.0%

✗ B. 10.2%

✓ C. 9.3%

✗ D. 8.5%

Question ID : **44100913598**
Option 1 ID : **44100954224**
Option 2 ID : **44100954223**
Option 3 ID : **44100954222**
Option 4 ID : **44100954221**
Status : **Not Answered**
Chosen Option : **--**

Q.12 Which of the following debit cards is provided to account holders under the Pradhan Mantri Jan Dhan Yojana (PMJDY), launched on 15 August 2014?

Ans ✗ A. Virtual Debit Card

✗ B. Visa Debit Card

✗ C. Contactless Debit Card

✓ D. RuPay Debit Card

Question ID : **44100917354**
Option 1 ID : **44100969280**
Option 2 ID : **44100969279**
Option 3 ID : **44100969282**
Option 4 ID : **44100969281**
Status : **Not Answered**
Chosen Option : **--**

Q.13 How many scientists received the Rashtriya Vigyan Puraskar in its inaugural ceremony held in August 2024?

Ans ✗ A. 35

✗ B. 41

✔ C. 33

✗ D. 38

Question ID : **44100913604**
Option 1 ID : **44100954246**
Option 2 ID : **44100954248**
Option 3 ID : **44100954245**
Option 4 ID : **44100954247**
Status : **Not Answered**
Chosen Option : **--**

Q.14 Which of the following Articles of the Indian Constitution provides a directive principle of the state policy for free and compulsory education for children till the age of 14 years?

Ans ✗ A. Article 46

✗ B. Article 47

✗ C. Article 43

✔ D. Article 45

Question ID : **44100921084**
Option 1 ID : **44100984077**
Option 2 ID : **44100984078**
Option 3 ID : **44100984075**
Option 4 ID : **44100984076**
Status : **Not Answered**
Chosen Option : **--**

Q.15 The real name of which of the following leaders of the Revolt of 1857 was Ramachandra Pandurang?

Ans ✗ A. Jwala Prasad

✗ B. Nana Saheb

✔ C. Tatya Tope

✗ D. Kunwar Singh

Question ID : **44100933616**
Option 1 ID : **441009133649**
Option 2 ID : **441009133647**
Option 3 ID : **441009133648**
Option 4 ID : **441009133650**
Status : **Not Answered**
Chosen Option : **--**

Q.16 Which initiative was launched in October 2024 for the digitization of vaccination services and maintaining immunization records for pregnant women and children under the Universal Immunization Programme?

Ans   ✗ A. Co-WIN Portal

      ✗ B. ImmunoCare App

      ✓ C. U-WIN Portal

      ✗ D. e-Vaccine Tracker

Question ID : **44100913844**
Option 1 ID : **44100955189**
Option 2 ID : **44100955192**
Option 3 ID : **44100955190**
Option 4 ID : **44100955191**
Status : **Not Answered**
Chosen Option : **--**

Q.17 Who among the following founded the Asiatic Society of Bengal at Calcutta?

Ans   ✗ A. Charles Cornwallis

      ✓ B. William Jones

      ✗ C. Warren Hastings

      ✗ D. James Prinsep

Question ID : **44100933559**
Option 1 ID : **441009133420**
Option 2 ID : **441009133421**
Option 3 ID : **441009133422**
Option 4 ID : **441009133419**
Status : **Not Answered**
Chosen Option : **--**

Q.18 Constitution of Municipalities comes under which Article of the Indian Constitution?

Ans   ✗ A. Article 243 S

      ✗ B. Article 243 R

      ✗ C. Article 243 Q

      ✓ D. Article 243 P

Question ID : **44100921122**
Option 1 ID : **44100984230**
Option 2 ID : **44100984229**
Option 3 ID : **44100984228**
Option 4 ID : **44100984227**
Status : **Not Answered**
Chosen Option : **--**

Q.19 As per the Economic Survey of India, 2024-25, what percentage of rural households had tap water connections when the Jal Jeevan Mission was launched?

Ans ✅ A. 17%

❌ B. 30%

❌ C. 10%

❌ D. 25%

Question ID : **44100913551**
Option 1 ID : **44100954042**
Option 2 ID : **44100954044**
Option 3 ID : **44100954041**
Option 4 ID : **44100954043**
Status : **Not Answered**
Chosen Option : **--**

Q.20 According to the Economic Survey 2024-25, which organisation supported 1917 applications on its cloud under the GI Cloud initiative, commonly known as MeghRaj, as of 30 November 2024?

Ans ❌ A. Department of Telecommunications (DoT)

❌ B. NITI Aayog

❌ C. Bharat Sanchar Nigam Limited (BSNL)

✅ D. National Informatics Centre (NIC)

Question ID : **44100913542**
Option 1 ID : **44100954008**
Option 2 ID : **44100954007**
Option 3 ID : **44100954005**
Option 4 ID : **44100954006**
Status : **Not Answered**
Chosen Option : **--**

Section : **Section IV General English**

Q.1 Select the most appropriate option to fill in the blank.
The committee's decision was made _____ careful deliberation and extensive discussions.

Ans ❌ A. despite

✅ B. after

❌ C. on

❌ D. by

Question ID : **44100917304**
Option 1 ID : **44100969094**
Option 2 ID : **44100969091**
Option 3 ID : **44100969093**
Option 4 ID : **44100969092**
Status : **Answered**
Chosen Option : **B**

Q.2 Select the INCORRECTLY spelt word.

Ans ✗ A. Consensus

✗ B. Bureaucracy

✔ C. Occured

✗ D. Harass

Question ID : **44100918741**
Option 1 ID : **44100974730**
Option 2 ID : **44100974731**
Option 3 ID : **44100974729**
Option 4 ID : **44100974728**
Status : **Answered**
Chosen Option : **A**

Q.3 Select the INCORRECTLY spelt word.

Ans ✔ A. Mileninum

✗ B. Serendipity

✗ C. Exaggerate

✗ D. Threshold

Question ID : **44100918748**
Option 1 ID : **44100974756**
Option 2 ID : **44100974759**
Option 3 ID : **44100974757**
Option 4 ID : **44100974758**
Status : **Answered**
Chosen Option : **B**

Q.4 Select the INCORRECTLY spelt word.

Ans ✗ A. Flabbergasted

✗ B. Chiaroscuro

✔ C. Indispensible

✗ D. Camaraderie

Question ID : **44100918755**
Option 1 ID : **44100974784**
Option 2 ID : **44100974786**
Option 3 ID : **44100974785**
Option 4 ID : **44100974787**
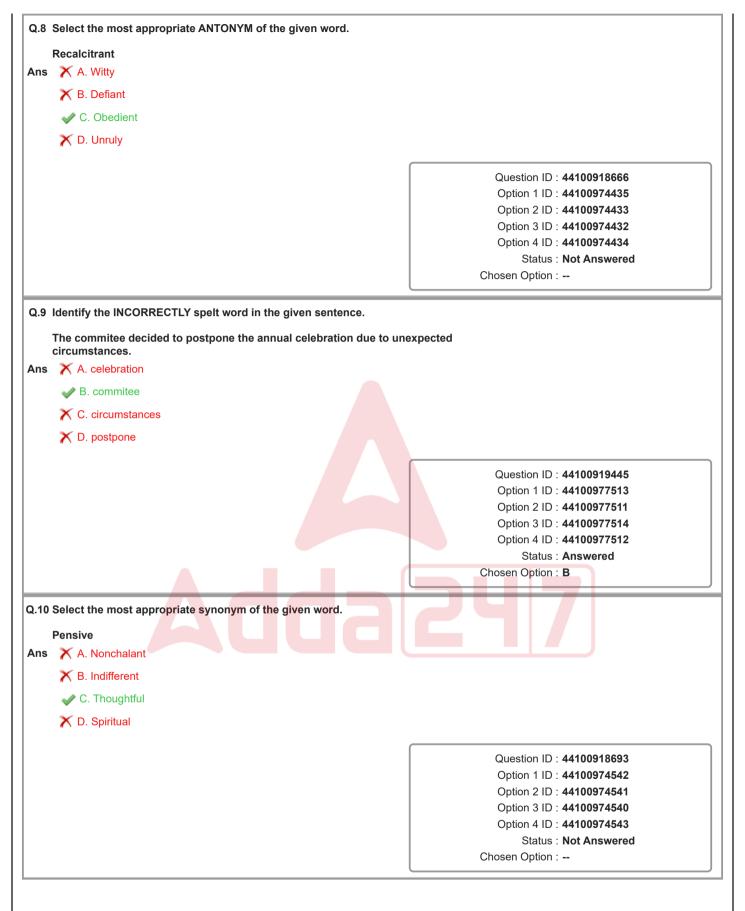Status : **Not Answered**
Chosen Option : **--**

Q.5 **Select the option that rectifies the incorrectly spelt word in the given sentence.**

I felt miserable at having made such a bad beginning, and plunjed recklessly into the subject of French plays.

Ans   ❌ A. Begining

   ❌ B. Recklesly

   ✅ C. Plunged

   ❌ D. Playes

Question ID : **44100918804**
Option 1 ID : **44100974980**
Option 2 ID : **44100974983**
Option 3 ID : **44100974982**
Option 4 ID : **44100974981**
Status : **Answered**
Chosen Option : **A**

Q.6 **Select the option that rectifies the incorrectly spelt word in the given sentence.**

Every cow-puncher on the range knew her by sight and was a loyal vassel.

Ans   ✅ A. Vassal

   ❌ B. Renge

   ❌ C. Cow-puncherr

   ❌ D. Sighht

Question ID : **44100918815**
Option 1 ID : **44100975035**
Option 2 ID : **44100975033**
Option 3 ID : **44100975032**
Option 4 ID : **44100975034**
Status : **Answered**
Chosen Option : **B**

Q.7 **Select the most appropriate option to fill in the blank.**
The experienced diplomat _____ navigated the delicate international negotiations to reach a deal that is mutually beneficial.

Ans   ✅ A. adroitly

   ❌ B. cantankerously

   ❌ C. clumsily

   ❌ D. boisterously

Question ID : **44100915141**
Option 1 ID : **44100960430**
Option 2 ID : **44100960429**
Option 3 ID : **44100960432**
Option 4 ID : **44100960431**
Status : **Not Answered**
Chosen Option : **--**

Q.8 **Select the most appropriate ANTONYM of the given word.**

Recalcitrant

Ans   ✗ A. Witty

   ✗ B. Defiant

   ✓ C. Obedient

   ✗ D. Unruly

Question ID : **44100918666**
Option 1 ID : **44100974435**
Option 2 ID : **44100974433**
Option 3 ID : **44100974432**
Option 4 ID : **44100974434**
Status : **Not Answered**
Chosen Option : **--**

Q.9 **Identify the INCORRECTLY spelt word in the given sentence.**

The commitee decided to postpone the annual celebration due to unexpected circumstances.

Ans   ✗ A. celebration

   ✓ B. commitee

   ✗ C. circumstances

   ✗ D. postpone

Question ID : **44100919445**
Option 1 ID : **44100977513**
Option 2 ID : **44100977511**
Option 3 ID : **44100977514**
Option 4 ID : **44100977512**
Status : **Answered**
Chosen Option : **B**

Q.10 **Select the most appropriate synonym of the given word.**

Pensive

Ans   ✗ A. Nonchalant

   ✗ B. Indifferent

   ✓ C. Thoughtful

   ✗ D. Spiritual

Question ID : **44100918693**
Option 1 ID : **44100974542**
Option 2 ID : **44100974541**
Option 3 ID : **44100974540**
Option 4 ID : **44100974543**
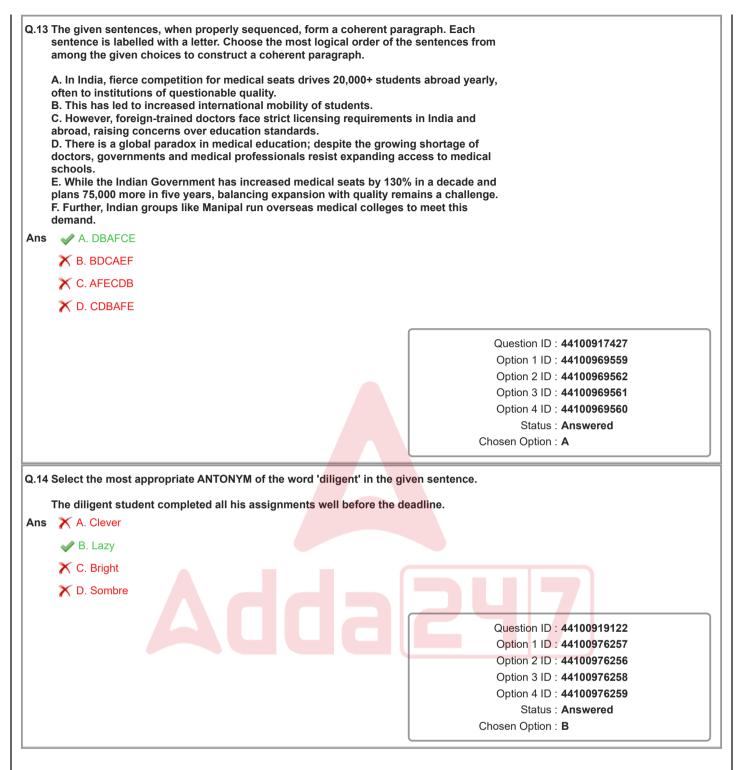Status : **Not Answered**
Chosen Option : **--**

Q.11 Select the most appropriate option to fill in the blank.

Despite his vast knowledge and experience, the professor remained _____ in his interactions with students, always encouraging them to express their ideas freely.

Ans ✗ A. apathetic

✗ B. indifferent

✗ C. arrogant

✔ D. humble

Question ID : **44100912260**
Option 1 ID : **44100948838**
Option 2 ID : **44100948837**
Option 3 ID : **44100948835**
Option 4 ID : **44100948836**
Status : **Answered**
Chosen Option : **D**

Q.12 Select the most appropriate option to fill in the blank.

Abira completed the project _____, ensuring every detail was perfect before submitting it.

Ans ✔ A. meticulously

✗ B. reluctantly

✗ C. carelessly

✗ D. lazily

Question ID : **44100917274**
Option 1 ID : **44100968967**
Option 2 ID : **44100968969**
Option 3 ID : **44100968970**
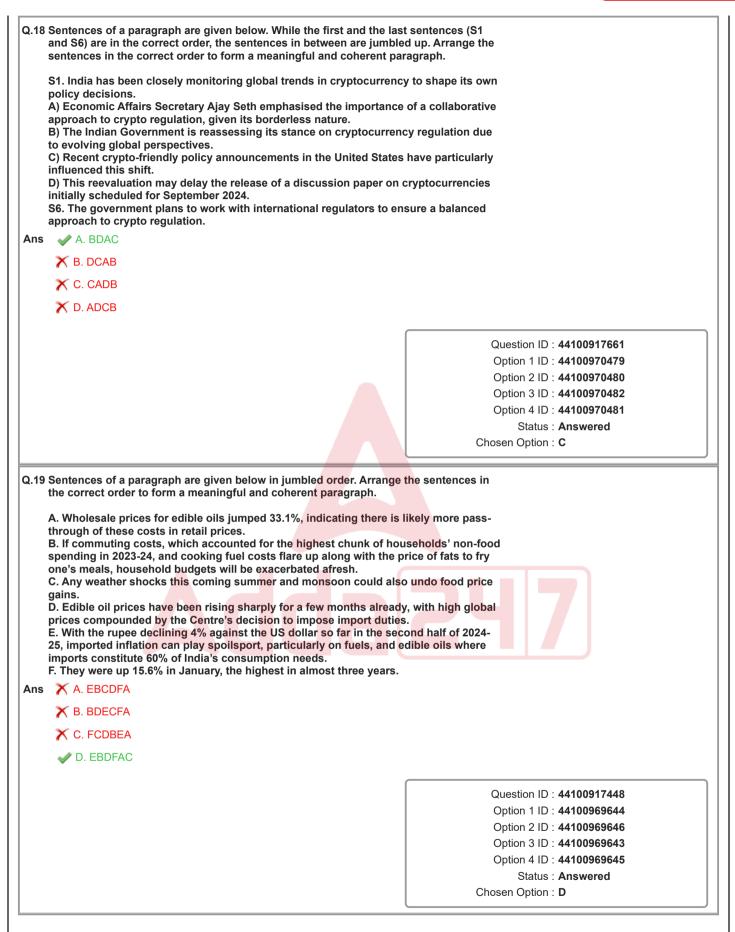Option 4 ID : **44100968968**
Status : **Answered**
Chosen Option : **A**

Q.13 The given sentences, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a letter. Choose the most logical order of the sentences from among the given choices to construct a coherent paragraph.

A. In India, fierce competition for medical seats drives 20,000+ students abroad yearly, often to institutions of questionable quality.
B. This has led to increased international mobility of students.
C. However, foreign-trained doctors face strict licensing requirements in India and abroad, raising concerns over education standards.
D. There is a global paradox in medical education; despite the growing shortage of doctors, governments and medical professionals resist expanding access to medical schools.
E. While the Indian Government has increased medical seats by 130% in a decade and plans 75,000 more in five years, balancing expansion with quality remains a challenge.
F. Further, Indian groups like Manipal run overseas medical colleges to meet this demand.

Ans ✅ A. DBAFCE

❌ B. BDCAEF

❌ C. AFECDB

❌ D. CDBAFE

Question ID : **44100917427**
Option 1 ID : **44100969559**
Option 2 ID : **44100969562**
Option 3 ID : **44100969561**
Option 4 ID : **44100969560**
Status : **Answered**
Chosen Option : **A**

Q.14 Select the most appropriate ANTONYM of the word 'diligent' in the given sentence.

The diligent student completed all his assignments well before the deadline.

Ans ❌ A. Clever

✅ B. Lazy

❌ C. Bright

❌ D. Sombre

Question ID : **44100919122**
Option 1 ID : **44100976257**
Option 2 ID : **44100976256**
Option 3 ID : **44100976258**
Option 4 ID : **44100976259**
Status : **Answered**
Chosen Option : **B**

Q.15 Select the most appropriate ANTONYM of the given word.

Obsequious

Ans ✗ A. Servile

✗ B. Nonchalant

✓ C. Assertive

✗ D. Fawning

Question ID : **44100918675**
Option 1 ID : **44100974469**
Option 2 ID : **44100974471**
Option 3 ID : **44100974470**
Option 4 ID : **44100974468**
Status : **Not Answered**
Chosen Option : **--**

Q.16 Select the most appropriate option to complete the statement and make it grammatically and contextually correct.

The psychological thriller had a _____ plot that kept viewers guessing until the final scene.

Ans ✗ A. consequential

✓ B. labyrinthine

✗ C. fiscal

✗ D. bereaved

Question ID : **44100915095**
Option 1 ID : **44100960239**
Option 2 ID : **44100960238**
Option 3 ID : **44100960240**
Option 4 ID : **44100960237**
Status : **Answered**
Chosen Option : **A**

Q.17 Select the INCORRECTLY spelt word.

Ans ✗ A. Onomatopoeia

✓ B. Abberation

✗ C. Paraphernalia

✗ D. Circumlocution

Question ID : **44100918761**
Option 1 ID : **44100974808**
Option 2 ID : **44100974810**
Option 3 ID : **44100974811**
Option 4 ID : **44100974809**
Status : **Answered**
Chosen Option : **D**

Q.18 Sentences of a paragraph are given below. While the first and the last sentences (S1 and S6) are in the correct order, the sentences in between are jumbled up. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

S1. India has been closely monitoring global trends in cryptocurrency to shape its own policy decisions.
A) Economic Affairs Secretary Ajay Seth emphasised the importance of a collaborative approach to crypto regulation, given its borderless nature.
B) The Indian Government is reassessing its stance on cryptocurrency regulation due to evolving global perspectives.
C) Recent crypto-friendly policy announcements in the United States have particularly influenced this shift.
D) This reevaluation may delay the release of a discussion paper on cryptocurrencies initially scheduled for September 2024.
S6. The government plans to work with international regulators to ensure a balanced approach to crypto regulation.

Ans ✅ A. BDAC

❌ B. DCAB

❌ C. CADB

❌ D. ADCB

Question ID :	**44100917661**
Option 1 ID :	**44100970479**
Option 2 ID :	**44100970480**
Option 3 ID :	**44100970482**
Option 4 ID :	**44100970481**
Status :	**Answered**
Chosen Option :	**C**

Q.19 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. Wholesale prices for edible oils jumped 33.1%, indicating there is likely more pass-through of these costs in retail prices.
B. If commuting costs, which accounted for the highest chunk of households' non-food spending in 2023-24, and cooking fuel costs flare up along with the price of fats to fry one's meals, household budgets will be exacerbated afresh.
C. Any weather shocks this coming summer and monsoon could also undo food price gains.
D. Edible oil prices have been rising sharply for a few months already, with high global prices compounded by the Centre's decision to impose import duties.
E. With the rupee declining 4% against the US dollar so far in the second half of 2024-25, imported inflation can play spoilsport, particularly on fuels, and edible oils where imports constitute 60% of India's consumption needs.
F. They were up 15.6% in January, the highest in almost three years.

Ans ❌ A. EBCDFA

❌ B. BDECFA

❌ C. FCDBEA

✅ D. EBDFAC

Question ID :	**44100917448**
Option 1 ID :	**44100969644**
Option 2 ID :	**44100969646**
Option 3 ID :	**44100969643**
Option 4 ID :	**44100969645**
Status :	**Answered**
Chosen Option :	**D**

Q.20 Select the most appropriate option to fill in the blank.

Rakesh _____ explained the complex mathematical theorem to his struggling students.

Ans ✔ A. patiently

✘ B. annually

✘ C. distantly

✘ D. importantly

Question ID : **44100915128**
Option 1 ID : **44100960383**
Option 2 ID : **44100960382**
Option 3 ID : **44100960384**
Option 4 ID : **44100960381**
Status : **Answered**
Chosen Option : **A**

Q.21 Select the most appropriate option to fill in the blanks.

The lawyer struggled _____ argue the case convincingly because he was not well-versed _____ the nuances of international law.

Ans ✔ A. to, in

✘ B. for, about

✘ C. with, on

✘ D. at, in

Question ID : **44100915176**
Option 1 ID : **44100960571**
Option 2 ID : **44100960569**
Option 3 ID : **44100960570**
Option 4 ID : **44100960572**
Status : **Answered**
Chosen Option : **A**

Q.22 Select the most appropriate ANTONYM of the given word.

Recondite

Ans ✘ A. Obscure

✔ B. Obvious

✘ C. Esoteric

✘ D. Arcane

Question ID : **44100918682**
Option 1 ID : **44100974498**
Option 2 ID : **44100974499**
Option 3 ID : **44100974496**
Option 4 ID : **44100974497**
Status : **Not Answered**
Chosen Option : **--**

Q.23 Select the option that rectifies the underlined incorrectly spelt word in the given sentence.

The scientist's discovery was truly <u>phenomenol</u>.

Ans ✅ A. phenomenal

❌ B. phenominal

❌ C. phenominol

❌ D. phenomenol

Question ID : **44100918779**
Option 1 ID : **44100974883**
Option 2 ID : **44100974882**
Option 3 ID : **44100974881**
Option 4 ID : **44100974880**
Status : **Answered**
Chosen Option : **B**

Q.24 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A) Missions such as Chandrayaan and Mangalyaan exemplify India's technological prowess.
B) Furthermore, they have inspired a new generation of scientists and space enthusiasts.
C) India's space programme has earned international acclaim for its ambitious projects.
D) These achievements highlight the nation's rapid advancements in science and technology.

Ans ✅ A. CADB

❌ B. ADBC

❌ C. BADC

❌ D. DACB

Question ID : **44100917755**
Option 1 ID : **44100970856**
Option 2 ID : **44100970858**
Option 3 ID : **44100970855**
Option 4 ID : **44100970857**
Status : **Answered**
Chosen Option : **A**

Q.25 Select the most appropriate option to fill in the blank.

Aisha excels _____ playing classical music _____ the sitar.

Ans ❌ A. beside, of

❌ B. from, at

✅ C. at, on

❌ D. with, by

Question ID : **44100915167**
Option 1 ID : **44100960533**
Option 2 ID : **44100960534**
Option 3 ID : **44100960535**
Option 4 ID : **44100960536**
Status : **Answered**
Chosen Option : **D**

Q.26 Select the most appropriate ANTONYM of the given word.
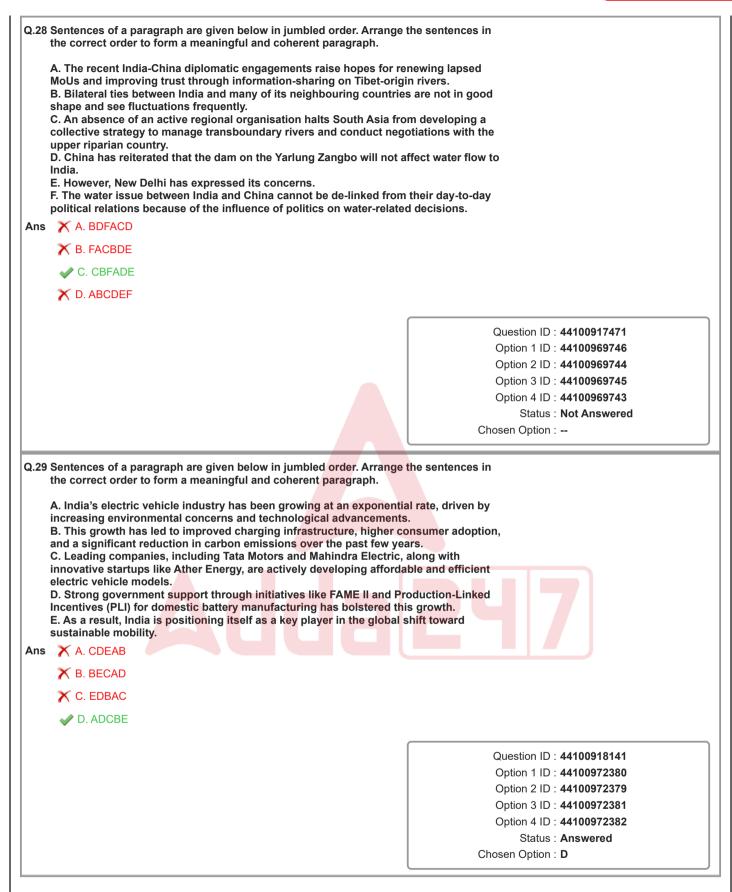
Obvious

Ans ✗ A. Apparent

✔ B. Ambiguous

✗ C. Clear

✗ D. Evident

Question ID : **44100918651**
Option 1 ID : **44100974377**
Option 2 ID : **44100974378**
Option 3 ID : **44100974376**
Option 4 ID : **44100974379**
Status : **Answered**
Chosen Option : **B**

Q.27 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. This expansion has contributed to increased financial inclusion, greater transparency, and the formalisation of the economy through cashless transactions.
B. UPI has revolutionised financial transactions by enabling instant, seamless, and secure money transfers across different banks and platforms.
C. Indian fintech firms are also collaborating with other nations to implement similar payment models, extending their reach into international markets.
D. India has emerged as a global leader in digital payments, primarily through the success of the Unified Payments Interface (UPI).
E. The growing adoption of digital payments has also encouraged innovation in financial services, leading to the development of new fintech solutions.

Ans ✔ A. DBAEC

✗ B. BDECA

✗ C. CEBAD

✗ D. EADBC

Question ID : **44100918338**
Option 1 ID : **44100973155**
Option 2 ID : **44100973156**
Option 3 ID : **44100973157**
Option 4 ID : **44100973158**
Status : **Answered**
Chosen Option : **D**

Q.28 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. The recent India-China diplomatic engagements raise hopes for renewing lapsed MoUs and improving trust through information-sharing on Tibet-origin rivers.
B. Bilateral ties between India and many of its neighbouring countries are not in good shape and see fluctuations frequently.
C. An absence of an active regional organisation halts South Asia from developing a collective strategy to manage transboundary rivers and conduct negotiations with the upper riparian country.
D. China has reiterated that the dam on the Yarlung Zangbo will not affect water flow to India.
E. However, New Delhi has expressed its concerns.
F. The water issue between India and China cannot be de-linked from their day-to-day political relations because of the influence of politics on water-related decisions.

Ans ✗ A. BDFACD

✗ B. FACBDE

✓ C. CBFADE

✗ D. ABCDEF

Question ID : **44100917471**
Option 1 ID : **44100969746**
Option 2 ID : **44100969744**
Option 3 ID : **44100969745**
Option 4 ID : **44100969743**
Status : **Not Answered**
Chosen Option : **--**

Q.29 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. India's electric vehicle industry has been growing at an exponential rate, driven by increasing environmental concerns and technological advancements.
B. This growth has led to improved charging infrastructure, higher consumer adoption, and a significant reduction in carbon emissions over the past few years.
C. Leading companies, including Tata Motors and Mahindra Electric, along with innovative startups like Ather Energy, are actively developing affordable and efficient electric vehicle models.
D. Strong government support through initiatives like FAME II and Production-Linked Incentives (PLI) for domestic battery manufacturing has bolstered this growth.
E. As a result, India is positioning itself as a key player in the global shift toward sustainable mobility.

Ans ✗ A. CDEAB

✗ B. BECAD

✗ C. EDBAC

✓ D. ADCBE

Question ID : **44100918141**
Option 1 ID : **44100972380**
Option 2 ID : **44100972379**
Option 3 ID : **44100972381**
Option 4 ID : **44100972382**
Status : **Answered**
Chosen Option : **D**

Q.30 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. Sectors like healthcare, agriculture, and governance are witnessing improved efficiency and decision-making through AI-driven solutions.
B. These efforts are strengthening India's position in the global AI landscape.
C. This has led to increased investments, talent development, and international partnerships.
D. Government initiatives such as the National AI Strategy and AI for All are driving large-scale adoption across industries.
E. India is rapidly emerging as a global hub for artificial intelligence, with top institutions and startups collaborating on advanced research.

Ans ✗ A. CBAED

✓ B. EDACB

✗ C. ADCBE

✗ D. BEADC

Question ID : **44100918107**
Option 1 ID : **44100972252**
Option 2 ID : **44100972251**
Option 3 ID : **44100972254**
Option 4 ID : **44100972253**
Status : **Answered**
Chosen Option : **B**

Q.31 Select the most appropriate option to complete the statement and make it grammatically and contextually correct.

The scientist made a _____ discovery that revolutionised quantum physics.

Ans ✗ A. culinary

✗ B. blatant

✗ C. theatrical

✓ D. groundbreaking

Question ID : **44100915077**
Option 1 ID : **44100960162**
Option 2 ID : **44100960163**
Option 3 ID : **44100960164**
Option 4 ID : **44100960161**
Status : **Answered**
Chosen Option : **D**

Q.32 Select the most appropriate synonym of the given word.

Trepidation

Ans ✗ A. Serenity

✓ B. Anxiety

✗ C. Stupendous

✗ D. Magnificent

Question ID : **44100918699**
Option 1 ID : **44100974565**
Option 2 ID : **44100974566**
Option 3 ID : **44100974567**
Option 4 ID : **44100974564**
Status : **Not Answered**
Chosen Option : **--**

Q.33 Select the option that rectifies the incorrectly spelt word in the given sentence.
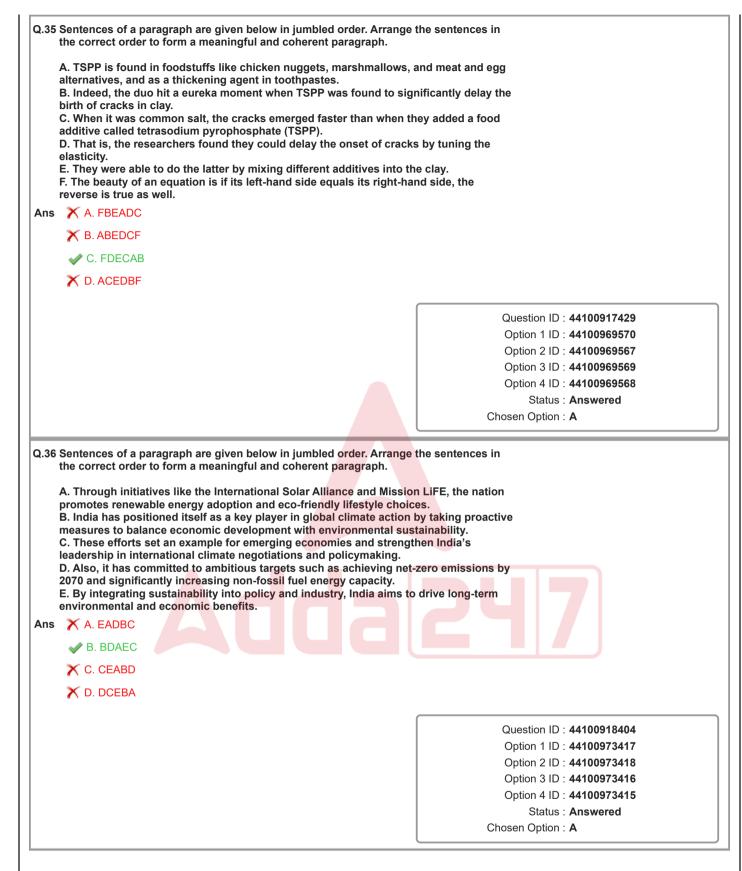
It is well to be reasonably watchful when a Mexican lion sings soprano along the aroyos at sundown.

Ans ✗ A. seprano

✓ B. arroyos

✗ C. watchfull

✗ D. reasonablly

Question ID : **44100918829**
Option 1 ID : **44100975091**
Option 2 ID : **44100975090**
Option 3 ID : **44100975089**
Option 4 ID : **44100975088**
Status : **Not Answered**
Chosen Option : **--**

Q.34 Select the most appropriate option to complete the statement and make a grammatically and contextually correct sentence.

The famous violinist played _____ at the concert, moving many members of the audience to tears.

Ans ✗ A. vociferously

✗ B. briefly

✓ C. soulfully

✗ D. doggedly

Question ID : **44100915107**
Option 1 ID : **44100960291**
Option 2 ID : **44100960292**
Option 3 ID : **44100960290**
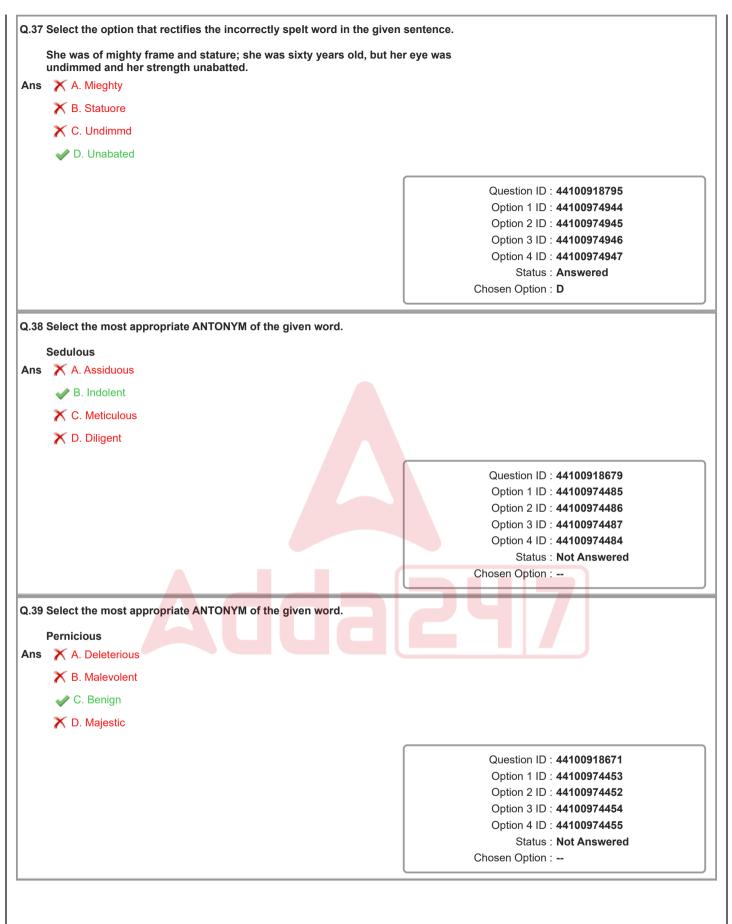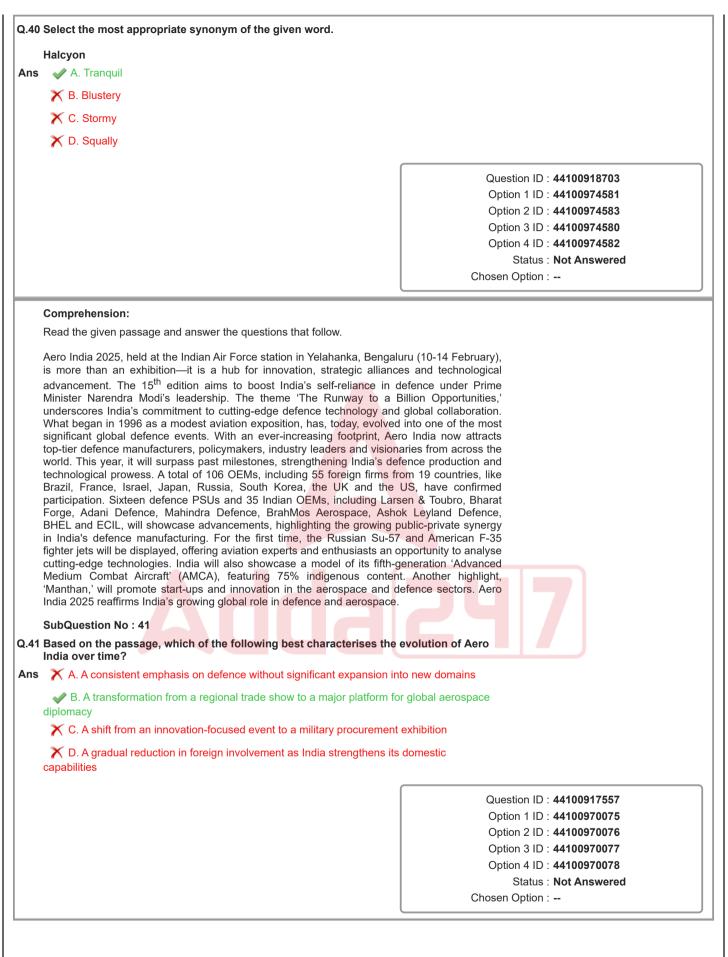Option 4 ID : **44100960289**
Status : **Answered**
Chosen Option : **C**

Q.35 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. TSPP is found in foodstuffs like chicken nuggets, marshmallows, and meat and egg alternatives, and as a thickening agent in toothpastes.
B. Indeed, the duo hit a eureka moment when TSPP was found to significantly delay the birth of cracks in clay.
C. When it was common salt, the cracks emerged faster than when they added a food additive called tetrasodium pyrophosphate (TSPP).
D. That is, the researchers found they could delay the onset of cracks by tuning the elasticity.
E. They were able to do the latter by mixing different additives into the clay.
F. The beauty of an equation is if its left-hand side equals its right-hand side, the reverse is true as well.

Ans ✗ A. FBEADC

✗ B. ABEDCF

✔ C. FDECAB

✗ D. ACEDBF

Question ID : **44100917429**
Option 1 ID : **44100969570**
Option 2 ID : **44100969567**
Option 3 ID : **44100969569**
Option 4 ID : **44100969568**
Status : **Answered**
Chosen Option : **A**

Q.36 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. Through initiatives like the International Solar Alliance and Mission LiFE, the nation promotes renewable energy adoption and eco-friendly lifestyle choices.
B. India has positioned itself as a key player in global climate action by taking proactive measures to balance economic development with environmental sustainability.
C. These efforts set an example for emerging economies and strengthen India's leadership in international climate negotiations and policymaking.
D. Also, it has committed to ambitious targets such as achieving net-zero emissions by 2070 and significantly increasing non-fossil fuel energy capacity.
E. By integrating sustainability into policy and industry, India aims to drive long-term environmental and economic benefits.

Ans ✗ A. EADBC

✔ B. BDAEC

✗ C. CEABD

✗ D. DCEBA

Question ID : **44100918404**
Option 1 ID : **44100973417**
Option 2 ID : **44100973418**
Option 3 ID : **44100973416**
Option 4 ID : **44100973415**
Status : **Answered**
Chosen Option : **A**

Q.37 Select the option that rectifies the incorrectly spelt word in the given sentence.

She was of mighty frame and stature; she was sixty years old, but her eye was undimmed and her strength unabatted.

Ans ✗ A. Mieghty

✗ B. Statuore

✗ C. Undimmd

✔ D. Unabated

Question ID : **44100918795**
Option 1 ID : **44100974944**
Option 2 ID : **44100974945**
Option 3 ID : **44100974946**
Option 4 ID : **44100974947**
Status : **Answered**
Chosen Option : **D**

Q.38 Select the most appropriate ANTONYM of the given word.

Sedulous

Ans ✗ A. Assiduous

✔ B. Indolent

✗ C. Meticulous

✗ D. Diligent

Question ID : **44100918679**
Option 1 ID : **44100974485**
Option 2 ID : **44100974486**
Option 3 ID : **44100974487**
Option 4 ID : **44100974484**
Status : **Not Answered**
Chosen Option : **--**

Q.39 Select the most appropriate ANTONYM of the given word.

Pernicious

Ans ✗ A. Deleterious

✗ B. Malevolent

✔ C. Benign

✗ D. Majestic

Question ID : **44100918671**
Option 1 ID : **44100974453**
Option 2 ID : **44100974452**
Option 3 ID : **44100974454**
Option 4 ID : **44100974455**
Status : **Not Answered**
Chosen Option : **--**

Q.40 Select the most appropriate synonym of the given word.

Halcyon

Ans ✅ A. Tranquil

❌ B. Blustery

❌ C. Stormy

❌ D. Squally

Question ID : **44100918703**
Option 1 ID : **44100974581**
Option 2 ID : **44100974583**
Option 3 ID : **44100974580**
Option 4 ID : **44100974582**
Status : **Not Answered**
Chosen Option : **--**

Comprehension:

Read the given passage and answer the questions that follow.

Aero India 2025, held at the Indian Air Force station in Yelahanka, Bengaluru (10-14 February), is more than an exhibition—it is a hub for innovation, strategic alliances and technological advancement. The 15th edition aims to boost India's self-reliance in defence under Prime Minister Narendra Modi's leadership. The theme 'The Runway to a Billion Opportunities,' underscores India's commitment to cutting-edge defence technology and global collaboration. What began in 1996 as a modest aviation exposition, has, today, evolved into one of the most significant global defence events. With an ever-increasing footprint, Aero India now attracts top-tier defence manufacturers, policymakers, industry leaders and visionaries from across the world. This year, it will surpass past milestones, strengthening India's defence production and technological prowess. A total of 106 OEMs, including 55 foreign firms from 19 countries, like Brazil, France, Israel, Japan, Russia, South Korea, the UK and the US, have confirmed participation. Sixteen defence PSUs and 35 Indian OEMs, including Larsen & Toubro, Bharat Forge, Adani Defence, Mahindra Defence, BrahMos Aerospace, Ashok Leyland Defence, BHEL and ECIL, will showcase advancements, highlighting the growing public-private synergy in India's defence manufacturing. For the first time, the Russian Su-57 and American F-35 fighter jets will be displayed, offering aviation experts and enthusiasts an opportunity to analyse cutting-edge technologies. India will also showcase a model of its fifth-generation 'Advanced Medium Combat Aircraft' (AMCA), featuring 75% indigenous content. Another highlight, 'Manthan,' will promote start-ups and innovation in the aerospace and defence sectors. Aero India 2025 reaffirms India's growing global role in defence and aerospace.

SubQuestion No : 41

Q.41 Based on the passage, which of the following best characterises the evolution of Aero India over time?

Ans ❌ A. A consistent emphasis on defence without significant expansion into new domains

✅ B. A transformation from a regional trade show to a major platform for global aerospace diplomacy

❌ C. A shift from an innovation-focused event to a military procurement exhibition

❌ D. A gradual reduction in foreign involvement as India strengthens its domestic capabilities

Question ID : **44100917557**
Option 1 ID : **44100970075**
Option 2 ID : **44100970076**
Option 3 ID : **44100970077**
Option 4 ID : **44100970078**
Status : **Not Answered**
Chosen Option : **--**

Comprehension:

Read the given passage and answer the questions that follow.

Aero India 2025, held at the Indian Air Force station in Yelahanka, Bengaluru (10-14 February), is more than an exhibition—it is a hub for innovation, strategic alliances and technological advancement. The 15th edition aims to boost India's self-reliance in defence under Prime Minister Narendra Modi's leadership. The theme 'The Runway to a Billion Opportunities,' underscores India's commitment to cutting-edge defence technology and global collaboration. What began in 1996 as a modest aviation exposition, has, today, evolved into one of the most significant global defence events. With an ever-increasing footprint, Aero India now attracts top-tier defence manufacturers, policymakers, industry leaders and visionaries from across the world. This year, it will surpass past milestones, strengthening India's defence production and technological prowess. A total of 106 OEMs, including 55 foreign firms from 19 countries, like Brazil, France, Israel, Japan, Russia, South Korea, the UK and the US, have confirmed participation. Sixteen defence PSUs and 35 Indian OEMs, including Larsen & Toubro, Bharat Forge, Adani Defence, Mahindra Defence, BrahMos Aerospace, Ashok Leyland Defence, BHEL and ECIL, will showcase advancements, highlighting the growing public-private synergy in India's defence manufacturing. For the first time, the Russian Su-57 and American F-35 fighter jets will be displayed, offering aviation experts and enthusiasts an opportunity to analyse cutting-edge technologies. India will also showcase a model of its fifth-generation 'Advanced Medium Combat Aircraft' (AMCA), featuring 75% indigenous content. Another highlight, 'Manthan,' will promote start-ups and innovation in the aerospace and defence sectors. Aero India 2025 reaffirms India's growing global role in defence and aerospace.

SubQuestion No : 42

Q.42 What is the central theme of the passage?

Ans ✗ A. The increasing global competition in the defence and aerospace sector

✗ B. The history and origin of Aero India since 1996

✔ C. India's growing self-reliance and global collaboration in defence technology

✗ D. The commercial benefits for foreign defence manufacturers participating in Aero India

Question ID : **44100917558**
Option 1 ID : **44100970080**
Option 2 ID : **44100970079**
Option 3 ID : **44100970081**
Option 4 ID : **44100970082**
Status : **Not Answered**
Chosen Option : **--**

Comprehension:

Read the given passage and answer the questions that follow.

Aero India 2025, held at the Indian Air Force station in Yelahanka, Bengaluru (10-14 February), is more than an exhibition—it is a hub for innovation, strategic alliances and technological advancement. The 15th edition aims to boost India's self-reliance in defence under Prime Minister Narendra Modi's leadership. The theme 'The Runway to a Billion Opportunities,' underscores India's commitment to cutting-edge defence technology and global collaboration. What began in 1996 as a modest aviation exposition, has, today, evolved into one of the most significant global defence events. With an ever-increasing footprint, Aero India now attracts top-tier defence manufacturers, policymakers, industry leaders and visionaries from across the world. This year, it will surpass past milestones, strengthening India's defence production and technological prowess. A total of 106 OEMs, including 55 foreign firms from 19 countries, like Brazil, France, Israel, Japan, Russia, South Korea, the UK and the US, have confirmed participation. Sixteen defence PSUs and 35 Indian OEMs, including Larsen & Toubro, Bharat Forge, Adani Defence, Mahindra Defence, BrahMos Aerospace, Ashok Leyland Defence, BHEL and ECIL, will showcase advancements, highlighting the growing public-private synergy in India's defence manufacturing. For the first time, the Russian Su-57 and American F-35 fighter jets will be displayed, offering aviation experts and enthusiasts an opportunity to analyse cutting-edge technologies. India will also showcase a model of its fifth-generation 'Advanced Medium Combat Aircraft' (AMCA), featuring 75% indigenous content. Another highlight, 'Manthan,' will promote start-ups and innovation in the aerospace and defence sectors. Aero India 2025 reaffirms India's growing global role in defence and aerospace.

SubQuestion No : 43

Q.43 What is the tone of the passage?

Ans ✗ A. Neutral and informative

✗ B. Critical and analytical

✗ C. Nostalgic and reflective

✓ D. Optimistic and assertive

Question ID : **44100917560**
Option 1 ID : **44100970088**
Option 2 ID : **44100970087**
Option 3 ID : **44100970089**
Option 4 ID : **44100970090**
Status : **Answered**
Chosen Option : **A**

Comprehension:

Read the given passage and answer the questions that follow.

Aero India 2025, held at the Indian Air Force station in Yelahanka, Bengaluru (10-14 February), is more than an exhibition—it is a hub for innovation, strategic alliances and technological advancement. The 15th edition aims to boost India's self-reliance in defence under Prime Minister Narendra Modi's leadership. The theme 'The Runway to a Billion Opportunities,' underscores India's commitment to cutting-edge defence technology and global collaboration. What began in 1996 as a modest aviation exposition, has, today, evolved into one of the most significant global defence events. With an ever-increasing footprint, Aero India now attracts top-tier defence manufacturers, policymakers, industry leaders and visionaries from across the world. This year, it will surpass past milestones, strengthening India's defence production and technological prowess. A total of 106 OEMs, including 55 foreign firms from 19 countries, like Brazil, France, Israel, Japan, Russia, South Korea, the UK and the US, have confirmed participation. Sixteen defence PSUs and 35 Indian OEMs, including Larsen & Toubro, Bharat Forge, Adani Defence, Mahindra Defence, BrahMos Aerospace, Ashok Leyland Defence, BHEL and ECIL, will showcase advancements, highlighting the growing public-private synergy in India's defence manufacturing. For the first time, the Russian Su-57 and American F-35 fighter jets will be displayed, offering aviation experts and enthusiasts an opportunity to analyse cutting-edge technologies. India will also showcase a model of its fifth-generation 'Advanced Medium Combat Aircraft' (AMCA), featuring 75% indigenous content. Another highlight, 'Manthan,' will promote start-ups and innovation in the aerospace and defence sectors. Aero India 2025 reaffirms India's growing global role in defence and aerospace.

SubQuestion No : 44

Q.44 The significance of Aero India 2025 in India's broader geopolitical strategy can best be inferred as:

Ans ✗ A. shifting India's defence policy from military readiness to commercial aerospace ventures

✓ B. strengthening India's diplomatic ties through defence collaborations and technological exchanges

✗ C. focusing primarily on domestic defence production and limiting foreign participation

✗ D. demonstrating India's self-reliance in defence to reduce the need for international partnerships

Question ID :	**44100917556**
Option 1 ID :	**44100970071**
Option 2 ID :	**44100970073**
Option 3 ID :	**44100970072**
Option 4 ID :	**44100970074**
Status :	**Not Answered**
Chosen Option :	**--**

Comprehension:

Read the given passage and answer the questions that follow.

Aero India 2025, held at the Indian Air Force station in Yelahanka, Bengaluru (10-14 February), is more than an exhibition—it is a hub for innovation, strategic alliances and technological advancement. The 15th edition aims to boost India's self-reliance in defence under Prime Minister Narendra Modi's leadership. The theme 'The Runway to a Billion Opportunities,' underscores India's commitment to cutting-edge defence technology and global collaboration. What began in 1996 as a modest aviation exposition, has, today, evolved into one of the most significant global defence events. With an ever-increasing footprint, Aero India now attracts top-tier defence manufacturers, policymakers, industry leaders and visionaries from across the world. This year, it will surpass past milestones, strengthening India's defence production and technological prowess. A total of 106 OEMs, including 55 foreign firms from 19 countries, like Brazil, France, Israel, Japan, Russia, South Korea, the UK and the US, have confirmed participation. Sixteen defence PSUs and 35 Indian OEMs, including Larsen & Toubro, Bharat Forge, Adani Defence, Mahindra Defence, BrahMos Aerospace, Ashok Leyland Defence, BHEL and ECIL, will showcase advancements, highlighting the growing public-private synergy in India's defence manufacturing. For the first time, the Russian Su-57 and American F-35 fighter jets will be displayed, offering aviation experts and enthusiasts an opportunity to analyse cutting-edge technologies. India will also showcase a model of its fifth-generation 'Advanced Medium Combat Aircraft' (AMCA), featuring 75% indigenous content. Another highlight, 'Manthan,' will promote start-ups and innovation in the aerospace and defence sectors. Aero India 2025 reaffirms India's growing global role in defence and aerospace.

SubQuestion No : 45

Q.45 **Select the most appropriate title for the passage.**

Ans ✗ A. The Evolution of Aero India: From Modesty to Global Significance

✓ B. Aero India 2025: Advancing India's Defence Self-Reliance and Global Partnerships

✗ C. Global Defence Giants at Aero India 2025

✗ D. India's Defence Market: A Hub for Foreign Investments

Question ID : **44100917559**
Option 1 ID : **44100970083**
Option 2 ID : **44100970084**
Option 3 ID : **44100970085**
Option 4 ID : **44100970086**
Status : **Answered**
Chosen Option : **B**

Comprehension:

Read the given passage and answer the questions that follow.

Some of history's greatest masterpieces remain unfinished yet continue to captivate. Leonardo da Vinci's Pilgrimage of the Magi was never completed but remains one of his most important works. Its imperfection invites us to explore not just the end result but the creative process— the artist's journey, struggles and decisions. The lack of polish enhances, rather than diminishes, its power. Life, too, is full of imperfect moments that inspire. True celebration lies not in perfection but in authenticity. The most inspiring people embrace their flaws, struggles and weaknesses, forging connections through honesty rather than an illusion of perfection. They make mistakes, learn and grow, proving that imperfection symbolises progress, growth and potential. When something is lacking, it is not bound by rules and expectations of success. It is free to grow and moves in new directions. Nature reflects this truth—trees grow irregularly, mountains are rugged and flowers bloom asymmetrically. Its beauty lies in rawness and authenticity, transforming imperfections into something extraordinary. Just as nature does not strive for perfection, neither do we. Challenges, mistakes and setbacks shape us. Personal growth is a winding journey, and imperfections propel us forward. Creativity thrives in imperfection. When we seek perfection, art, writing and expression become restricted. But when we embrace mistakes and experimentation, we create something special. Imperfect work holds limitless potential. We connect with those who are real, not perfect—people who endure hardships and evolve. The beauty of human experience lies in shared growth and change. Our flaws unite us, revealing potential in the unfinished, the raw and the ever-evolving.

SubQuestion No : 46

Q.46 Identify the tone of the passage.

Ans ✘ A. Pessimistic and doubtful

    ✔ B. Reflective and contemplative

    ✘ C. Critical and analytical

    ✘ D. Objective and factual

Question ID : **44100917596**
Option 1 ID : **44100970229**
Option 2 ID : **44100970228**
Option 3 ID : **44100970227**
Option 4 ID : **44100970230**
Status : **Answered**
Chosen Option : **A**

Comprehension:

Read the given passage and answer the questions that follow.

Some of history's greatest masterpieces remain unfinished yet continue to captivate. Leonardo da Vinci's Pilgrimage of the Magi was never completed but remains one of his most important works. Its imperfection invites us to explore not just the end result but the creative process— the artist's journey, struggles and decisions. The lack of polish enhances, rather than diminishes, its power. Life, too, is full of imperfect moments that inspire. True celebration lies not in perfection but in authenticity. The most inspiring people embrace their flaws, struggles and weaknesses, forging connections through honesty rather than an illusion of perfection. They make mistakes, learn and grow, proving that imperfection symbolises progress, growth and potential. When something is lacking, it is not bound by rules and expectations of success. It is free to grow and moves in new directions. Nature reflects this truth—trees grow irregularly, mountains are rugged and flowers bloom asymmetrically. Its beauty lies in rawness and authenticity, transforming imperfections into something extraordinary. Just as nature does not strive for perfection, neither do we. Challenges, mistakes and setbacks shape us. Personal growth is a winding journey, and imperfections propel us forward. Creativity thrives in imperfection. When we seek perfection, art, writing and expression become restricted. But when we embrace mistakes and experimentation, we create something special. Imperfect work holds limitless potential. We connect with those who are real, not perfect—people who endure hardships and evolve. The beauty of human experience lies in shared growth and change. Our flaws unite us, revealing potential in the unfinished, the raw and the ever-evolving.

SubQuestion No : 47

Q.47 Identify the correct facts according to the passage, from the options given below.

Ans ✘ A. Nature's irregularities are examples of failed attempts at perfection.

✘ B. Perfection is the ultimate goal of creativity and art.

✘ C. Imperfection limits growth and personal development.

✔ D. Unfinished masterpieces can provide insights into the creative process.

Question ID : **44100917597**
Option 1 ID : **44100970234**
Option 2 ID : **44100970231**
Option 3 ID : **44100970232**
Option 4 ID : **44100970233**
Status : **Not Answered**
Chosen Option : **--**

Comprehension:

Read the given passage and answer the questions that follow.

Some of history's greatest masterpieces remain unfinished yet continue to captivate. Leonardo da Vinci's Pilgrimage of the Magi was never completed but remains one of his most important works. Its imperfection invites us to explore not just the end result but the creative process—the artist's journey, struggles and decisions. The lack of polish enhances, rather than diminishes, its power. Life, too, is full of imperfect moments that inspire. True celebration lies not in perfection but in authenticity. The most inspiring people embrace their flaws, struggles and weaknesses, forging connections through honesty rather than an illusion of perfection. They make mistakes, learn and grow, proving that imperfection symbolises progress, growth and potential. When something is lacking, it is not bound by rules and expectations of success. It is free to grow and moves in new directions. Nature reflects this truth—trees grow irregularly, mountains are rugged and flowers bloom asymmetrically. Its beauty lies in rawness and authenticity, transforming imperfections into something extraordinary. Just as nature does not strive for perfection, neither do we. Challenges, mistakes and setbacks shape us. Personal growth is a winding journey, and imperfections propel us forward. Creativity thrives in imperfection. When we seek perfection, art, writing and expression become restricted. But when we embrace mistakes and experimentation, we create something special. Imperfect work holds limitless potential. We connect with those who are real, not perfect—people who endure hardships and evolve. The beauty of human experience lies in shared growth and change. Our flaws unite us, revealing potential in the unfinished, the raw and the ever-evolving.

SubQuestion No : 48

Q.48 Which of the following best encapsulates the central theme presented in the passage?

Ans ✗ A. Art and nature are fundamentally opposed in their treatment of imperfection.

✗ B. The pursuit of perfection often leads to incomplete work.

✗ C. Human flaws are obstacles to self-improvement.

✔ D. Incompleteness can create a greater sense of wholeness and meaning.

Question ID : **44100917593**
Option 1 ID : **44100970216**
Option 2 ID : **44100970215**
Option 3 ID : **44100970218**
Option 4 ID : **44100970217**
Status : **Not Answered**
Chosen Option : **--**

Comprehension:

Read the given passage and answer the questions that follow.

Some of history's greatest masterpieces remain unfinished yet continue to captivate. Leonardo da Vinci's Pilgrimage of the Magi was never completed but remains one of his most important works. Its imperfection invites us to explore not just the end result but the creative process—the artist's journey, struggles and decisions. The lack of polish enhances, rather than diminishes, its power. Life, too, is full of imperfect moments that inspire. True celebration lies not in perfection but in authenticity. The most inspiring people embrace their flaws, struggles and weaknesses, forging connections through honesty rather than an illusion of perfection. They make mistakes, learn and grow, proving that imperfection symbolises progress, growth and potential. When something is lacking, it is not bound by rules and expectations of success. It is free to grow and moves in new directions. Nature reflects this truth—trees grow irregularly, mountains are rugged and flowers bloom asymmetrically. Its beauty lies in rawness and authenticity, transforming imperfections into something extraordinary. Just as nature does not strive for perfection, neither do we. Challenges, mistakes and setbacks shape us. Personal growth is a winding journey, and imperfections propel us forward. Creativity thrives in imperfection. When we seek perfection, art, writing and expression become restricted. But when we embrace mistakes and experimentation, we create something special. Imperfect work holds limitless potential. We connect with those who are real, not perfect—people who endure hardships and evolve. The beauty of human experience lies in shared growth and change. Our flaws unite us, revealing potential in the unfinished, the raw and the ever-evolving.

SubQuestion No : 49

Q.49 How does the passage use the example of nature to reinforce its argument?

Ans ✗ A. It uses nature as a metaphor for chaos and unpredictability, warning against the pursuit of order.

✔ B. It suggests that nature's irregularity mirrors human flaws, both of which contribute to beauty and growth.

✗ C. It contrasts natural imperfections with human perfection to highlight human limitations.

✗ D. It argues that nature, unlike human endeavours, thrives on randomness rather than structured progress.

Question ID : **44100917595**
Option 1 ID : **44100970225**
Option 2 ID : **44100970226**
Option 3 ID : **44100970223**
Option 4 ID : **44100970224**
Status : **Not Answered**
Chosen Option : **--**

Comprehension:

Read the given passage and answer the questions that follow.

Some of history's greatest masterpieces remain unfinished yet continue to captivate. Leonardo da Vinci's Pilgrimage of the Magi was never completed but remains one of his most important works. Its imperfection invites us to explore not just the end result but the creative process—the artist's journey, struggles and decisions. The lack of polish enhances, rather than diminishes, its power. Life, too, is full of imperfect moments that inspire. True celebration lies not in perfection but in authenticity. The most inspiring people embrace their flaws, struggles and weaknesses, forging connections through honesty rather than an illusion of perfection. They make mistakes, learn and grow, proving that imperfection symbolises progress, growth and potential. When something is lacking, it is not bound by rules and expectations of success. It is free to grow and moves in new directions. Nature reflects this truth—trees grow irregularly, mountains are rugged and flowers bloom asymmetrically. Its beauty lies in rawness and authenticity, transforming imperfections into something extraordinary. Just as nature does not strive for perfection, neither do we. Challenges, mistakes and setbacks shape us. Personal growth is a winding journey, and imperfections propel us forward. Creativity thrives in imperfection. When we seek perfection, art, writing and expression become restricted. But when we embrace mistakes and experimentation, we create something special. Imperfect work holds limitless potential. We connect with those who are real, not perfect—people who endure hardships and evolve. The beauty of human experience lies in shared growth and change. Our flaws unite us, revealing potential in the unfinished, the raw and the ever-evolving.

SubQuestion No : 50

Q.50 What implicit critique does the passage offer about the traditional definition of success?

Ans ✅ A. Society's focus on perfection stifles creativity and authentic self-expression.

❌ B. Only unfinished or flawed efforts hold real value.

❌ C. Success is best achieved through strict adherence to perfectionist ideals.

❌ D. Success is an illusion, as true growth comes from failure.

Question ID : **44100917594**
Option 1 ID : **44100970220**
Option 2 ID : **44100970221**
Option 3 ID : **44100970222**
Option 4 ID : **44100970219**
Status : **Not Answered**
Chosen Option : **--**