

Transmission Corporation of Andhra Pradesh Limited

Notations :

- Options shown in **green** color and with  icon are correct.
- Options shown in **red** color and with  icon are incorrect.

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Electrical Engineering

Group Number :	1
Group Id :	4410093211644
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Show Attended Group? :	No
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General Intelligence and Reasoning

Section Id :	4410093242012
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093253296
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 1 Question Id : 441009814183 Question Type : MCQ Option Shuffling : Yes

Seven people, A, B, C, D, E, F and G are sitting in a row, facing north. Only five people sit between F and G. E sits to the immediate left of G. Only one person sits between E and A. C sits at some place to the left of D but at some place to the right of B. Who sits second to the right of C?

Options :

4410093210855.  D
4410093210856.  A
4410093210857.  B
4410093210858.  E

Question Number : 2 Question Id : 441009797062 Question Type : MCQ Option Shuffling : Yes

Refer to the given letter series and answer the question that follows.

(Left) X Z O W B Y M F H G U K R E S I A Q T C D (Right)

How many letters are there in the English alphabetical series between the letter which is sixth from the right end and seventh from the left end of the series?

Options :

4410093142247.  Four
4410093142248.  Three
4410093142249.  Two
4410093142250.  Five

Question Number : 3 Question Id : 441009765196 Question Type : MCQ Option Shuffling : Yes

Based on the English alphabetical order, three of the following four are alike in a certain way and thus form a group. Which is the one that 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)

Options :

4410093014777. ✖ CHF

4410093014778. ✔ KPM

4410093014779. ✖ RWU

4410093014780. ✖ NSQ

Question Number : 4 Question Id : 441009781802 Question Type : MCQ Option Shuffling : Yes

Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster 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.)

Options :

4410093081211. ✔ FCD

4410093081212. ✖ OKM

4410093081213. ✖ HDF

4410093081214. ✖ LHJ

Question Number : 5 Question Id : 441009585207 Question Type : MCQ Option Shuffling : Yes

24 is related to 9 following a certain logic. Following the same logic, 120 is related to 33. To which of the following is 84 related to, following the same logic?

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

Options :

4410092295954. ✔ 24

4410092295955. ✖ 32

4410092295956. ✖ 36

4410092295957. ✖ 134

General awareness

Section Id :	4410093242013
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093253297
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 6 Question Id : 4410091453928 Question Type : MCQ Option Shuffling : Yes

Who was appointed as the Chairperson of the National Statistical Commission (NSC) in June 2026?

Options :

4410095744013. ✖ T. C. A. Anant

4410095744014. ✔ Saibal Chattopadhyay

4410095744015. ✖ Pronab Sen

4410095744016. ✖ Bimal Kumar Roy

Question Number : 7 Question Id : 4410092115976 Question Type : MCQ Option Shuffling : Yes

Who was the President of the Indian National Congress during its Eleventh Session in 1895?

Options :

4410098330405. ✖ Bal Gangadhar Tilak

4410098330406. ✖ Gopal Krishna Gokhale

4410098330407. ✔ Surendranath Banerjee

4410098330408. ✖ Dadabhai Naoroji

Question Number : 8 Question Id : 441009244778 Question Type : MCQ Option Shuffling : Yes

Which major administrative change did the British implement in India following the Revolt of 1857?

Options :

441009954812. ✖ The East India Company's rule continued

441009954813. ✖ Indian rulers were completely removed

441009954814. ✓ The British Crown took direct control of India
441009954815. ✗ India was divided into new independent kingdoms

Question Number : 9 Question Id : 441009284032 Question Type : MCQ Option Shuffling : Yes

Mallika Sarabhai is best known for her expertise in which two classical dance forms?

Options :

4410091103243. ✓ Bharatanatyam and Kuchipudi
4410091103244. ✗ Kathakali and Mohiniyattam
4410091103245. ✗ Bharatanatyam and Kathakali
4410091103246. ✗ Odissi and Kathak

Question Number : 10 Question Id : 4410092115981 Question Type : MCQ Option Shuffling : Yes

The Automated Weather Station (AWS) installed at a glacial lake in Sikkim in 2023 is primarily intended to provide early warning against which hazard?

Options :

4410098330425. ✗ Prolonged drought caused by a weak monsoon
4410098330426. ✗ Widespread frost associated with a western disturbance
4410098330427. ✗ Coastal storm surge during the retreating monsoon
4410098330428. ✓ Glacial Lake Outburst Flood triggered by intense rainfall

Question Number : 11 Question Id : 4410092258049 Question Type : MCQ Option Shuffling : Yes

Which of the following mountain ranges is primarily composed of ancient metamorphic rocks, considered one of the oldest geological formations in India?

Options :

4410098882744. ✗ The Himalayas
4410098882745. ✗ The Western Ghats
4410098882746. ✗ The Vindhya Range
4410098882747. ✓ The Aravalli Range

Question Number : 12 Question Id : 4410092200869 Question Type : MCQ Option Shuffling : Yes

According to the Consolidated FDI Policy circular of 2020, what is the threshold for classifying an investment in a listed Indian company as Foreign Direct Investment (FDI) rather than Foreign Portfolio Investment (FPI)?

Options :

4410098660628. ✗ 1% or more of the post-issue paid-up equity capital
4410098660629. ✗ 5% or more of the post-issue paid-up equity capital
4410098660630. ✓ 10% or more of the post-issue paid-up equity capital
4410098660631. ✗ 25% or more of the post-issue paid-up equity capital

English

Section Id :	4410093242014
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093253299
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Id : 4410092413407 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No

Question Pattern Type : NonMatrix

Question Numbers : (13 to 14)

Read the passage carefully and answer the questions that follow.

Semiconductor manufacturing has emerged as a strategic priority as geopolitical tensions and supply-chain disruptions have exposed the vulnerabilities of excessive dependence on a handful of chip-producing economies. Consequently, governments are no longer treating semiconductor fabrication merely as an industrial activity but as an instrument of economic resilience and technological sovereignty. India's recent Semicon 2.0 initiative extends this logic by coupling financial incentives with investments in design capabilities, fabrication facilities, advanced packaging, and critical materials rather than pursuing fabrication in isolation. Such an integrated approach acknowledges that competitiveness in the semiconductor ecosystem depends less on constructing individual fabrication plants than on cultivating an interconnected network of research, skilled talent, suppliers, and downstream industries. Accordingly, long-term strategic success will be determined not by manufacturing capacity alone but by the sustained integration of innovation, industrial collaboration, and resilient supply-chain governance.

Sub questions

Question Number : 13 Question Id : 4410092413408 Question Type : MCQ Option Shuffling : Yes

Which of the following best summarizes the passage?

Options :

4410099491273. ✖ Semiconductor policies primarily seek to increase the number of fabrication plants because manufacturing capacity alone determines technological leadership and long-term industrial competitiveness.

4410099491274. ✔ Modern semiconductor initiatives emphasise building an integrated ecosystem combining manufacturing, innovation, skills, and supply chains to strengthen economic resilience and technological capability.

4410099491275. ✖ Geopolitical tensions have permanently disrupted semiconductor trade, compelling countries to replace international cooperation entirely with complete domestic production and market insulation.

4410099491276. ✖ India's semiconductor strategy concentrates mainly on financial subsidies for fabrication projects because research, packaging, and supplier ecosystems contribute comparatively little to competitiveness.

Question Number : 14 Question Id : 4410092413409 Question Type : MCQ Option Shuffling : Yes

Which option most accurately describes the organisational structure of the passage?

Options :

4410099491277. ✔ It identifies a contemporary challenge, explains its broader implications, illustrates an emerging policy response, and concludes with a general principle about industrial competitiveness.

4410099491278. ✖ It introduces a policy initiative, compares it with international semiconductor programmes, evaluates their relative effectiveness, and recommends the superior framework.

4410099491279. ✖ It outlines the historical evolution of semiconductor manufacturing, examines successive technological advances, and predicts future industrial transformation.

4410099491280. ✖ It presents an economic problem, critiques existing fiscal incentives, evaluates statistical evidence, and argues against government intervention in semiconductor production.

Sub-Section Number :

2

Sub-Section Id :

4410093253300

Question Shuffling Allowed :

Yes

Is Section Default? :

No

Question Number : 15 Question Id : 4410091711179 Question Type : MCQ Option Shuffling : Yes

Complete the following sentence by choosing the correct option.

During the debate, the speaker _____ addressed each criticism, demonstrating both logic and composure.

Options :

4410096749020. ✔ systematically

4410096749021. ✖ confusedly

4410096749022. ✖ emotionally

4410096749023. ✖ silently

Question Number : 16 Question Id : 441009484088 Question Type : MCQ Option Shuffling : Yes

Change the given sentence into passive voice.

Nancy has written this letter.

Options :

4410091891701. ✖ This letter had been written by Nancy.

4410091891702. ✔ This letter has been written by Nancy.

4410091891703. ✖ This letter was written by Nancy.

4410091891704. ✖ This letter will have been written by Nancy.

Question Number : 17 Question Id : 4410091713147 Question Type : MCQ Option Shuffling : Yes

Substitute one word for the given underlined segment by choosing from the following options.

The court's decision was intended to formally declare a previous judicial ruling or law as null and void due to its inconsistency with the new constitution.

Options :

4410096756790. ✖ codify

4410096756791. ✖ litigate

4410096756792. ✔ abrogate

4410096756793. ✖ adjudicate

Quantitative aptitude

Section Id :

4410093242015

Section Number :

4

Section type :

Online

Mandatory or Optional :

Mandatory

Maximum Instruction Time :

0

Sub-Section Number :

1

Sub-Section Id :

4410093253301

Question Shuffling Allowed :

Yes

Is Section Default? :

No

Question Number : 18 Question Id : 441009582459 Question Type : MCQ Option Shuffling : Yes

There are 48 members in group A, 60 members in group B and 42 members in group C. All the members of these groups went to a restaurant. The average amount spent on each member of group A, B and C is ₹350, ₹383 and ₹460, respectively. The total average amount (in ₹) spent per member is:

Options :

- 4410092284962. ✓ 394
- 4410092284963. ✗ 399
- 4410092284964. ✗ 390
- 4410092284965. ✗ 398

Question Number : 19 Question Id : 441009852060 Question Type : MCQ Option Shuffling : Yes

Find the simple interest (in ₹) if a sum of ₹500 is borrowed for 7.5 years at 12% per annum rate of interest.

Options :

- 4410093361212. ✓ 450
- 4410093361213. ✗ 500
- 4410093361214. ✗ 430
- 4410093361215. ✗ 550

Question Number : 20 Question Id : 44100913483 Question Type : MCQ Option Shuffling : Yes

Ten squares of different sizes are pasted on a chart paper adjacent to each. If the first ten multiples of three represent the sides in cm of the ten squares, find the area (in cm^2) of the chart paper covered.

Options :

- 44100953745. ✗ 385
- 44100953746. ✗ 1155
- 44100953747. ✓ 3465
- 44100953748. ✗ 10395

Question Number : 21 Question Id : 441009855141 Question Type : MCQ Option Shuffling : Yes

20% of a number is more than 20% of 700 by 160. The number is:

Options :

- 4410093373536. ✓ 1500
- 4410093373537. ✗ 1350
- 4410093373538. ✗ 1550
- 4410093373539. ✗ 1600

Question Number : 22 Question Id : 441009548027 Question Type : MCQ Option Shuffling : Yes

Three friends P, Q and R started a business by investing a sum of money in the ratio of 8 : 4 : 7. After 6 months Q withdraws half of his capital. If the sum invested by P is ₹31000, out of a total annual profit of ₹24000 find the share of Q in profit.

Options :

- 4410092147504. ✓ ₹4000
- 4410092147505. ✗ ₹3225
- 4410092147506. ✗ ₹4835
- 4410092147507. ✗ ₹2230

Question Number : 23 Question Id : 441009518586 Question Type : MCQ Option Shuffling : Yes

Two taps can fill a cistern in 2 hours and 44 hours, respectively. A third tap can empty it in 44 hours. How long (in hours) will it take to fill half of the empty cistern, if all of them are opened together?

Options :

- 4410092029763. ✓ 1
- 4410092029764. ✗ 2
- 4410092029765. ✗ 3
- 4410092029766. ✗ 4

Question Number : 24 Question Id : 441009538575 Question Type : MCQ Option Shuffling : Yes

In a 2700 m circular race, Raman finishes one round in 30 seconds and Mohan finishes one round in 75 seconds. How many different meeting points are there on circumference if they are running in a same direction?

Options :

- 4410092109696. ✓ 3
- 4410092109697. ✗ 1
- 4410092109698. ✗ 8
- 4410092109699. ✗ 5

Question Number : 25 Question Id : 4410091556698 Question Type : MCQ Option Shuffling : Yes

The volume of a cuboidal block of silver is $1,536 \text{ cm}^3$. If its dimensions are in the ratio of 4:3:2, find the cost of gold polishing its entire surface at the rate of ₹2.50 per cm^2 .

Options :

- 4410096149366. ✓ ₹2,080
- 4410096149367. ✗ ₹2,140
- 4410096149368. ✗ ₹2,260
- 4410096149369. ✗ ₹2,380

Computer knowledge

Section Id :	4410093242016
Section Number :	5
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093253302
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 26 Question Id : 4410092276829 Question Type : MCQ Option Shuffling : Yes

A company switches from a traditional hard disk drive system to a hybrid storage architecture that combines volatile and non-volatile memory modules for its database operations. Which outcome most accurately reflects the effect of this change on the system's data handling and performance?

Options :

- 4410098956631. ✗ Data retrieval becomes slower because the system checks multiple memory types for every operation.
- 4410098956632. ✓ Frequently accessed information is retrieved more quickly due to volatile memory, while long-term data remains secure in non-volatile modules.
- 4410098956633. ✗ All data is permanently erased when power is lost, regardless of memory type used.
- 4410098956634. ✗ System stability is unaffected, as memory configuration has no impact on data security or access speed.

Question Number : 27 Question Id : 4410092307500 Question Type : MCQ Option Shuffling : Yes

Which option in MS Word 2021 allows you to change the alignment of text within a table cell?

Options :

- 4410099075288. ✗ Home tab
- 4410099075289. ✗ Review tab
- 4410099075290. ✗ Table Design tab
- 4410099075291. ✓ Table Layout tab

Question Number : 28 Question Id : 4410092276341 Question Type : MCQ Option Shuffling : Yes

A logistics company uses an Excel function to automatically assign delivery routes based on a dynamic list of driver locations that updates every hour. Which function would most reliably ensure the route assignments always correspond to the most recently updated driver data when the spreadsheet recalculates, even if drivers are added or removed from the list during the day?

Options :

- 4410098954683. ✓ INDEX with dynamic named ranges referencing the updated list
- 4410098954684. ✗ INDIRECT with hard-coded cell references for driver data
- 4410098954685. ✗ OFFSET with static range references fixed at setup
- 4410098954686. ✗ VLOOKUP with a fixed table array defined at initial configuration

Question Number : 29 Question Id : 4410092272417 Question Type : MCQ Option Shuffling : Yes

While editing a presentation in MS PowerPoint, a user needs to adjust the dimensions of an inserted image without removing it from the slide. Which feature is most appropriate for this task?

Options :

- 4410098939023. ✗ Crop tool
- 4410098939024. ✓ Resize handles
- 4410098939025. ✗ Animation Pane
- 4410098939026. ✗ Format Painter

Question Number : 30 Question Id : 4410092276899 Question Type : MCQ Option Shuffling : Yes

A research lab wants to interconnect its climate sensors, control systems, and local data servers within a single building to allow rapid data exchange and device management. Which network configuration, if chosen, would present the most significant risk of signal collision and performance bottlenecks as the number of connected devices increases, assuming all devices share equal bandwidth allocation and operate simultaneously?

Options :

4410098956911. ✓ Implementing a single shared communication channel for all device connections within the building
4410098956912. ✗ Setting up multiple isolated channels for different building segments
4410098956913. ✗ Assigning bandwidth dynamically to devices based on real-time usage needs
4410098956914. ✗ Creating device subgroups with independent bandwidth allocation per group

Electrical Engineering

Section Id :	4410093242017
Section Number :	6
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093253303
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 31 Question Id : 4410091544744 Question Type : MCQ Option Shuffling : Yes

What is the primary function of the Maxwell's Inductance-Capacitance type bridge?

Options :

4410096102035. ✗ To measure the unknown frequency of the AC source.
4410096102036. ✓ To measure the unknown self-inductance (L_x) in terms of a standard capacitor (C_1).
4410096102037. ✗ To measure the unknown capacitance in terms of known inductance.
4410096102038. ✗ To measure very high-quality factor (Q) coils ($Q > 10$).

Question Number : 32 Question Id : 4410091547293 Question Type : MCQ Option Shuffling : Yes

A digital voltmeter operates by converting the analog voltage into:

Options :

4410096112039. ✓ Digital form using an ADC
4410096112040. ✗ Electrostatic force
4410096112041. ✗ Magnetic deflection
4410096112042. ✗ Frequency modulation

Question Number : 33 Question Id : 4410091533313 Question Type : MCQ Option Shuffling : Yes

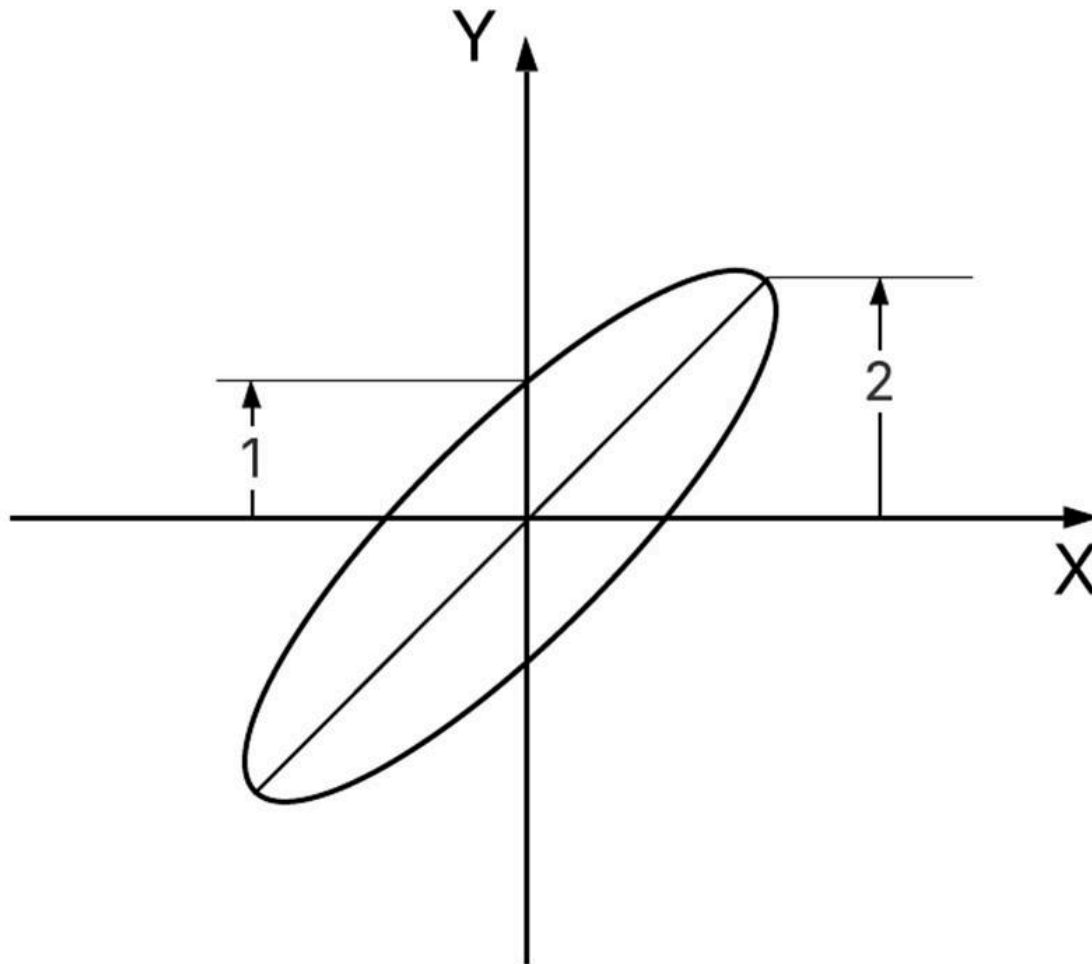
Two same frequency signals, with equal amplitudes and with some phase difference between them, are applied across the X and Y plates of a CRO. It was found that the pattern displayed on screen was an ellipse with its major axis lying in the 2nd and 4th quadrant. Which of the following can be a possible phase difference between these two signals?

Options :

4410096056270. ✗ 30°
4410096056271. ✗ 60°
4410096056272. ✓ 120°
4410096056273. ✗ 180°

Question Number : 34 Question Id : 4410091537551 Question Type : MCQ Option Shuffling : Yes

A CRO displays a Lissajous pattern, as shown below, for voltages of the same frequency but out of phase, which are connected to the Y and X plates of the oscilloscope. If the spot generating the pattern moves in an anticlockwise direction, what is the phase difference between the two signals?



Options :

4410096073879. ✓ -30°

4410096073880. ✗ $+30^\circ$

4410096073881. ✗ -60°

4410096073882. ✗ $+60^\circ$

Question Number : 35 Question Id : 4410091544767 Question Type : MCQ Option Shuffling : Yes

The 'loading effect', in which a measuring instrument changes the quantity being measured, is explicitly referred to as a type of which error subcategory?

Options :

4410096102127. ✗ Observational Error

4410096102128. ✗ Gross Error

4410096102129. ✓ Instrumental Error

4410096102130. ✗ Environmental Error

Question Number : 36 Question Id : 4410091547683 Question Type : MCQ Option Shuffling : Yes

In electrostatic instruments, controlling torque is provided by:

Options :

4410096113575. ✓ Spring mechanism

4410096113576. ✗ Magnetic shunt

4410096113577. ✗ Permanent magnet

4410096113578. ✗ Air vane

Question Number : 37 Question Id : 4410091544749 Question Type : MCQ Option Shuffling : Yes

Which of the following describes the role of the braking magnet when a single-phase energy meter is undergoing calibration?

Options :

4410096102055. ✗ It minimizes the effect of friction on the disc

4410096102056. ✓ Adjust and control braking torque

4410096102057. ✗ Produce rotating magnetic field

4410096102058. ✖ Regulate supply voltage

Question Number : 38 Question Id : 4410091547204 Question Type : MCQ Option Shuffling : Yes

In a cathode ray oscilloscope, the voltage of an unknown signal is obtained by observing:

Options :

4410096111687. ✖ Horizontal sweep frequency

4410096111688. ✖ Time base setting

4410096111689. ✔ Vertical deflection per division

4410096111690. ✖ Input impedance of CRO

Question Number : 39 Question Id : 4410091545945 Question Type : MCQ Option Shuffling : Yes

The mechanical force on a current-carrying conductor in a magnetic field depends on which of the following?

Options :

4410096120581. ✔ Magnetic flux density

4410096120582. ✖ Resistance of the conductor

4410096120583. ✖ Frequency of electrical supply of the conductor

4410096120584. ✖ Permittivity of the medium

Question Number : 40 Question Id : 4410091563526 Question Type : MCQ Option Shuffling : Yes

A coil of 500 turns carries 2 A current. If the magnetic path length is 0.5 m and relative permeability of the core is 1000, what will be the value of magnetic field strength H?

Options :

4410096175701. ✔ 2000 A/m

4410096175702. ✖ 1000 A/m

4410096175703. ✖ 2000 Tesla

4410096175704. ✖ 1000 Tesla

Question Number : 41 Question Id : 4410091545636 Question Type : MCQ Option Shuffling : Yes

An alternator's voltage regulation is often highest (positive and largest) while supplying _____.

Options :

4410096105551. ✖ Unity power factor load

4410096105552. ✔ Lagging power factor load

4410096105553. ✖ Leading power factor load

4410096105554. ✖ No load

Question Number : 42 Question Id : 4410091549531 Question Type : MCQ Option Shuffling : Yes

As the load on a synchronous motor increases, the inverted V-curve corresponding to that load shifts _____:

Options :

4410096126907. ✖ Upward because the motor draws more reactive power.

4410096126908. ✖ Downward due to increased copper losses.

4410096126909. ✖ To the left, indicating that lesser field current is now required for feeding the load at unity power factor.

4410096126910. ✔ To the right, requiring higher field current to feed the load at unity power factor.

Question Number : 43 Question Id : 4410091557248 Question Type : MCQ Option Shuffling : Yes

Autotransformers are preferred in:

Options :

4410096151521. ✖ Power Amplifiers

4410096151522. ✖ Large transformation ratio

4410096151523. ✔ Starting of induction motors

4410096151524. ✖ Protection circuits

Question Number : 44 Question Id : 4410091545698 Question Type : MCQ Option Shuffling : Yes

When the quantity of conducting material in an auto-transformer is reduced, the required window area is also reduced, which ultimately leads to _____.

Options :

4410096105795. ✖ A larger core length and higher core weight

4410096105796. ✔ A smaller core length and lower core weight

4410096105797. ✖ No change in the core dimensions

4410096105798. ✖ An increase in the core area

Question Number : 45 Question Id : 4410091555063 Question Type : MCQ Option Shuffling : Yes

Two-reaction theory is applied to:

Options :

- 4410096142914. ✖ Cylindrical rotor alternators
- 4410096142915. ✖ DC generators
- 4410096142916. ✔ Salient pole synchronous machines
- 4410096142917. ✖ Induction motors

Question Number : 46 Question Id : 4410091563574 Question Type : MCQ Option Shuffling : Yes

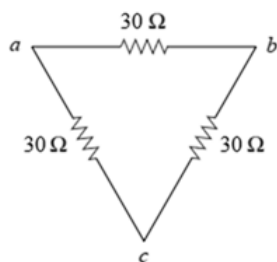
In the phasor diagram of a synchronous motor operating at lagging power factor, the excitation emf E leads the terminal voltage V by the load angle δ . If excitation is increased while load remains constant, what will the phasor diagram show?

Options :

- 4410096175957. ✖ δ increases and motor power factor improves
- 4410096175958. ✔ δ decreases and motor power factor improves
- 4410096175959. ✖ δ increases and motor power factor worsens
- 4410096175960. ✖ δ decreases and motor power factor worsens

Question Number : 47 Question Id : 4410091554862 Question Type : MCQ Option Shuffling : Yes

For the figure given below showing delta connection, find the equivalent resistance per phase for the equivalent star connection.



Options :

- 4410096142127. ✔ 10 Ω
- 4410096142128. ✖ 20 Ω
- 4410096142129. ✖ 30 Ω
- 4410096142130. ✖ 90 Ω

Question Number : 48 Question Id : 4410091557938 Question Type : MCQ Option Shuffling : Yes

A circuit containing both RC and RL components exhibits:

Options :

- 4410096154064. ✖ Only capacitive behavior
- 4410096154065. ✖ Only inductive behavior
- 4410096154066. ✔ First-order or second-order response depending on topology
- 4410096154067. ✖ Purely resistive response

Question Number : 49 Question Id : 4410091565492 Question Type : MCQ Option Shuffling : Yes

An ideal inductor has zero current passing through it before $t = 0$. At $t = 0$, it is suddenly connected to a DC current source. How will the inductor behave right after this moment ($t = 0^+$)?

Options :

- 4410096207229. ✖ It will behave like a short circuit.
- 4410096207230. ✖ It will behave like a non-ideal current source (with some internal resistance).
- 4410096207231. ✖ It will behave like an ideal current source.
- 4410096207232. ✔ It will behave like an open circuit.

Question Number : 50 Question Id : 4410091557582 Question Type : MCQ Option Shuffling : Yes

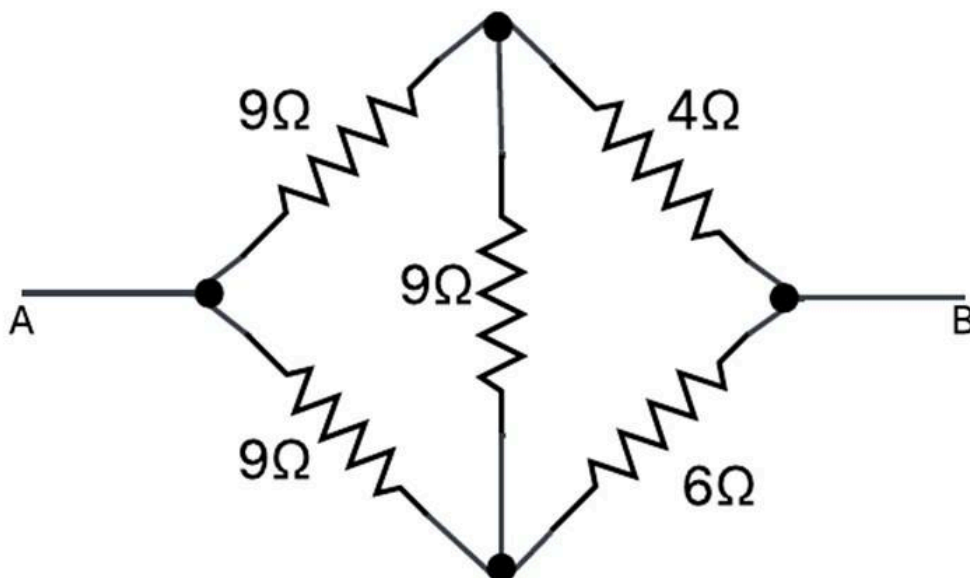
Source transformation is mainly used to:

Options :

- 4410096152625. ✖ Increase circuit voltage
- 4410096152626. ✖ Reduce total current
- 4410096152627. ✔ Simplify complex circuit networks
- 4410096152628. ✖ Convert nonlinear elements into linear ones

Question Number : 51 Question Id : 4410091565478 Question Type : MCQ Option Shuffling : Yes

Determine the equivalent resistance across terminals A and B in the given circuit.



Options :

- 4410096190865. ✖ 5.725 Ω
- 4410096190866. ✔ 6.937 Ω
- 4410096190867. ✖ 4.187 Ω
- 4410096190868. ✖ 7.562 Ω

Question Number : 52 Question Id : 4410091565535 Question Type : MCQ Option Shuffling : Yes

Consider a connected graph with 'n' nodes and 'b' branches. The incidence matrix 'A' is defined such that each row corresponds to a node and each column to a branch. Which of the following statements is always true for the incidence matrix of a connected graph?

Options :

- 4410096183563. ✖ The rank of the incidence matrix is always equal to the number of branches b
- 4410096183564. ✖ The product $A \cdot A^T$ yields a diagonal matrix with branch degrees on the diagonal
- 4410096183565. ✔ The sum of all rows of the incidence matrix is a zero vector
- 4410096183566. ✖ The incidence matrix is symmetric for all undirected graphs

Question Number : 53 Question Id : 4410091546047 Question Type : MCQ Option Shuffling : Yes

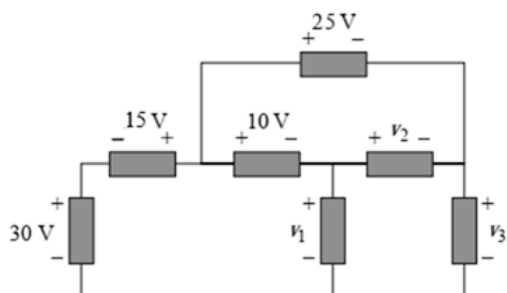
At the resonant frequency, the response curve of a parallel circuit shows _____ and the sharpness of the resonance curve in a parallel resonance circuit is determined by its _____.

Options :

- 4410096107027. ✖ Maximum current, Power rating
- 4410096107028. ✔ Minimum current, Q-factor
- 4410096107029. ✖ Zero impedance, Frequency tolerance
- 4410096107030. ✖ Sudden voltage drops, Q-factor

Question Number : 54 Question Id : 4410091554790 Question Type : MCQ Option Shuffling : Yes

For the following circuit, find the values of v_1 , v_2 , and v_3 , respectively.



Options :

- 4410096141859. ✔ $v_1 = 35$ V, $v_2 = 15$ V, $v_3 = 20$ V
- 4410096141860. ✖ $v_1 = 35$ V, $v_2 = -15$ V, $v_3 = 20$ V
- 4410096141861. ✖ $v_1 = -35$ V, $v_2 = 15$ V, $v_3 = 20$ V

4410096141862. ✖ $v_1 = 35 \text{ V}$, $v_2 = 15 \text{ V}$, $v_3 = -20 \text{ V}$

Question Number : 55 Question Id : 4410091561457 Question Type : MCQ Option Shuffling : Yes

Line conductance represents:

Options :

4410096167954. ✔ Leakage current at the insulators

4410096167955. ✖ Magnetic flux

4410096167956. ✖ Charging current

4410096167957. ✖ Corona effect

Question Number : 56 Question Id : 4410091572701 Question Type : MCQ Option Shuffling : Yes

During the load flow analysis of an electrical power system, which quantities are unknown for a generator bus and must be found out by solving the power flow equations of the system?

(Note: P_i - net real power input at the bus,
 Q_i - net reactive power input at the bus,
 V_i - voltage magnitude at the bus,
 δ_i - voltage phase angle at the bus)

Options :

4410096224150. ✖ $|V_i|$ and P_i

4410096224151. ✔ δ_i and Q_i

4410096224152. ✖ P_i and Q_i

4410096224153. ✖ $|V_i|$ and δ_i

Question Number : 57 Question Id : 4410091549706 Question Type : MCQ Option Shuffling : Yes

In a medium-length transmission line, which characteristic of the line is mainly responsible for the real power loss that occurs due to current flow and results in reduced transmission efficiency?

Options :

4410096121523. ✖ Line inductance

4410096121524. ✖ Line capacitance

4410096121525. ✔ Conductive property of the line material

4410096121526. ✖ Power factor variation

Question Number : 58 Question Id : 4410091561223 Question Type : MCQ Option Shuffling : Yes

Per-unit impedance diagrams are used because they:

Options :

4410096167070. ✖ Vary with voltage level

4410096167071. ✖ Are difficult to compute

4410096167072. ✔ Eliminate transformer turns ratio complications

4410096167073. ✖ Increase complexity

Question Number : 59 Question Id : 4410091561259 Question Type : MCQ Option Shuffling : Yes

For a fully transposed transmission line, zero-sequence impedance is usually:

Options :

4410096167214. ✖ Equal to positive sequence impedance

4410096167215. ✖ Equal to negative sequence impedance

4410096167216. ✔ Higher than both positive and negative sequence impedance

4410096167217. ✖ Zero

Question Number : 60 Question Id : 4410091563848 Question Type : MCQ Option Shuffling : Yes

In fault analysis, the bus impedance matrix is significant because _____.

Options :

4410096177057. ✖ It directly provides fault current values without requiring further numerical calculation

4410096177058. ✔ It relates bus voltages to injected currents, enabling accurate fault current computation

4410096177059. ✖ It eliminates the requirement for symmetrical component analysis in fault current studies

4410096177060. ✖ It remains unaffected by the electrical network configuration or overall system topology

Question Number : 61 Question Id : 4410091565363 Question Type : MCQ Option Shuffling : Yes

A 3-phase, 5 MVA industry substation is feeding the load at 0.8 power factor lagging. However, due to electricity rules, this industry has to maintain its power factor at unity and for that the industry decided to install a capacitor bank. What will be the per phase rating of the capacitor bank?

Options :

- 4410096183003. ✖ 3 MVar
- 4410096183004. ✔ 1 MVar
- 4410096183005. ✖ 1.33 MVar
- 4410096183006. ✖ 4 MVar

Question Number : 62 Question Id : 4410091572716 Question Type : MCQ Option Shuffling : Yes

For a 20-bus power system with 30 transmission lines, what is the sparsity of the Y-bus matrix?

Options :

- 4410096268528. ✖ 0.65
- 4410096268529. ✖ 0.50
- 4410096268530. ✔ 0.80
- 4410096268531. ✖ 0.85

Question Number : 63 Question Id : 4410091557401 Question Type : MCQ Option Shuffling : Yes

Which of the following parameter/s most strongly influences the quality of a flash butt weld?

Options :

- 4410096151993. ✔ Welding current and flashing time
- 4410096151994. ✖ Electrode coating thickness
- 4410096151995. ✖ Frequency of the supply voltage
- 4410096151996. ✖ Type of shielding gas used

Question Number : 64 Question Id : 4410091557171 Question Type : MCQ Option Shuffling : Yes

In atomic hydrogen electric arc welding, the electric arc struck between two tungsten electrodes in an atmosphere of hydrogen. What is the function of hydrogen in the process?

Options :

- 4410096151285. ✖ Hydrogen causes the weld to form oxides and nitrides for high quality of weld
- 4410096151286. ✖ Hydrogen atmosphere acts as electrode itself for the welds
- 4410096151287. ✖ Hydrogen acts as a non-conducting atmosphere for controlling the arc.
- 4410096151288. ✔ Hydrogen acts as a cooling agent for the glowing tungsten electrode tips

Question Number : 65 Question Id : 4410091562239 Question Type : MCQ Option Shuffling : Yes

In AC arc welding machines, the welding transformer is designed to have:

Options :

- 4410096170542. ✖ High secondary voltage and low current
- 4410096170543. ✔ Low secondary voltage and high current
- 4410096170544. ✖ Equal primary and secondary voltages
- 4410096170545. ✖ Extremely high frequency output

Question Number : 66 Question Id : 4410091555356 Question Type : MCQ Option Shuffling : Yes

Which of the following statements are valid reasons for limiting the heat-production rate at very high frequencies in dielectric heating?

- i. At very high frequencies, tuning the inductance to resonate with the circuit capacitance becomes difficult.
- ii. At very high frequencies, achieving a uniform voltage distribution across the material becomes very difficult.
- iii. The penetration depth of electromagnetic waves decreases significantly at very high frequencies.
- iv. The dielectric constant of the material continues to increase without limit as the frequency increases.

Options :

- 4410096143971. ✔ i, ii, iii only
- 4410096143972. ✖ i, iii, iv only
- 4410096143973. ✖ ii, iii, iv only
- 4410096143974. ✖ i, ii, iv only

Question Number : 67 Question Id : 4410091559091 Question Type : MCQ Option Shuffling : Yes

Which of the following limits the high-frequency response of a BJT small-signal amplifier?

Options :

- 4410096158747. ✖ Coupling capacitors
- 4410096158748. ✖ Bypass capacitors
- 4410096158749. ✔ Internal transistor capacitances
- 4410096158750. ✖ DC power supply

Question Number : 68 Question Id : 4410091553474 Question Type : MCQ Option Shuffling : Yes

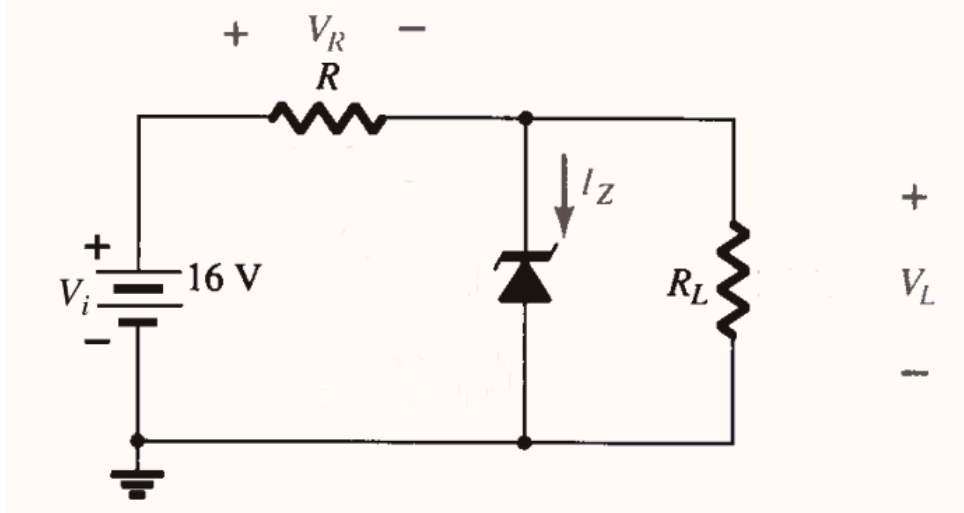
A basic voltage doubler circuit consists of _____.

Options :

- 4410096136567. ✖ Transistors only
- 4410096136568. ✖ Resistors and inductors
- 4410096136569. ✔ Diodes and capacitors
- 4410096136570. ✖ MOSFETs and resistors

Question Number : 69 Question Id : 4410091563107 Question Type : MCQ Option Shuffling : Yes

For the Zener diode network shown below, the input voltage is $V_i = 16$ V, series resistance $R = 1$ k Ω , load resistance $R_L = 1.2$ k Ω and Zener breakdown voltage $V_Z = 10$ V. Assume ideal Zener diode behavior. The voltage V_R across the series resistor R is _____.



Options :

- 4410096173991. ✖ 6 V
- 4410096173992. ✔ 7.27 V
- 4410096173993. ✖ 16 V
- 4410096173994. ✖ 10 V

Question Number : 70 Question Id : 4410091553516 Question Type : MCQ Option Shuffling : Yes

A V-to-I converter is also called a/an _____.

Options :

- 4410096136735. ✖ Comparator
- 4410096136736. ✔ Transconductance amplifier
- 4410096136737. ✖ Differentiator
- 4410096136738. ✖ Integrator

Question Number : 71 Question Id : 4410091557705 Question Type : MCQ Option Shuffling : Yes

How does a monostable multivibrator react if retriggered during its high output state?

Options :

- 4410096153116. ✖ Retrigger immediately and extend the pulse
- 4410096153117. ✔ Ignore the trigger and continue existing pulse
- 4410096153118. ✖ Force a second pulse of reduced amplitude
- 4410096153119. ✖ Drive the op-amp into slew-rate limiting mode

Question Number : 72 Question Id : 4410091576293 Question Type : MCQ Option Shuffling : Yes

A synchronous MOD-12 counter is designed using T flip-flops. The minimum number of T flip-flops required is _____.

Options :

- 4410096225942. ✔ 4
- 4410096225943. ✖ 5
- 4410096225944. ✖ 6
- 4410096225945. ✖ 12

Question Number : 73 Question Id : 4410091538982 Question Type : MCQ Option Shuffling : Yes

In a digital communication system, a shift register is used to convert 8 bits of serial data into parallel format. Which property of the D flip-flop makes it the most suitable choice for constructing this shift register?

Options :

- 4410096079283. ✖ Its ability to toggle state when a control signal is high.

4410096079284. ✔ Its characteristic where the next state is exactly the present data input.

4410096079285. ✖ Its edge-triggered nature which prevents race conditions in the counter.

4410096079286. ✖ Its capability to hold data indefinitely as long as power is supplied.

Question Number : 74 Question Id : 4410091553661 Question Type : MCQ Option Shuffling : Yes

A multiplexer can be used to convert _____

Options :

4410096137315. ✖ Analog to digital data

4410096137316. ✖ Digital to analog data

4410096137317. ✖ Serial data to parallel data

4410096137318. ✔ Parallel data to serial data

Question Number : 75 Question Id : 4410091658350 Question Type : MCQ Option Shuffling : Yes

If A, B, and C denote the minuend, subtrahend, and previous borrow respectively of a full subtractor, the Boolean expression for the borrow output is _____.

Options :

4410096548120. ✖ $AB+BC+AC$

4410096548121. ✔ $A'B+BC+A'C$

4410096548122. ✖ $A'B'C + A'BC' + AB'C' + ABC$

4410096548123. ✖ $A'B+BC+AC$

Question Number : 76 Question Id : 4410091558288 Question Type : MCQ Option Shuffling : Yes

The resolution of a 9-bit Ladder network digital to analog converter which produces a maximum analog output value of 5.11 volts is:

Options :

4410096155553. ✔ 10 mV

4410096155554. ✖ 5 mV

4410096155555. ✖ 20 mV

4410096155556. ✖ 5.11 V

Question Number : 77 Question Id : 4410091554152 Question Type : MCQ Option Shuffling : Yes

If an open-loop system has one pole in the right-half of the s-plane, the system is _____.

Options :

4410096139249. ✖ Stable

4410096139250. ✔ Unstable

4410096139251. ✖ Conditionally stable

4410096139252. ✖ Marginally stable

Question Number : 78 Question Id : 4410091661829 Question Type : MCQ Option Shuffling : Yes

Given the $G(s)H(s) = \frac{k}{s(s+1)(s+3)}$, the point of intersection of the asymptotes of the root loci with the real axis is _____.

Options :

4410096568061. ✖ -4

4410096568062. ✔ -1.33

4410096568063. ✖ 4

4410096568064. ✖ -3

Question Number : 79 Question Id : 4410091553459 Question Type : MCQ Option Shuffling : Yes

For a third-order system with the characteristic equation $s^3+as^2+bs+c=0$, what is the necessary and sufficient condition for stability?

Options :

4410096136507. ✖ $a>0, b>0, c>0$

4410096136508. ✔ $a>0, b>0, c>0$, and $ab>c$

4410096136509. ✖ $a>0, b>0, c>0$, and $ab<c$

4410096136510. ✖ $a>0, b>0, c>0$, and $ac>b$

Question Number : 80 Question Id : 4410091554040 Question Type : MCQ Option Shuffling : Yes

Adding an Integral controller typically makes the system _____.

Options :

- 4410096138822. ✖ Noise-free
- 4410096138823. ✖ Faster
- 4410096138824. ✔ More sluggish
- 4410096138825. ✖ Overshoot-free

Question Number : 81 Question Id : 4410091565152 Question Type : MCQ Option Shuffling : Yes

Which of the following options is correct for the system with transfer function $T(s) = (s-4)/s(s+3)$?

Options :

- 4410096182163. ✖ It has 2 poles and one zero and the system is minimum phase system.
- 4410096182164. ✔ It has 2 poles and one zero and the system is non-minimum phase system.
- 4410096182165. ✖ It has 1 pole and two zeros and the system is minimum phase system.
- 4410096182166. ✖ It has 1 pole and two zeros and the system is non-minimum phase system.

Question Number : 82 Question Id : 4410091565164 Question Type : MCQ Option Shuffling : Yes

If the block diagram of a control system consists of forward gain G_1 then G_2 in series and the feedback path has $H(s)$ (negative) sampling output and subtracting at input, the equivalent closed-loop transfer function of the control system is _____.

Options :

- 4410096182211. ✖ $(G_1+G_2)/(1+G_1G_2H)$
- 4410096182212. ✔ $(G_1G_2)/(1+G_1G_2H)$
- 4410096182213. ✖ $(G_1.G_2)/(1+H)$
- 4410096182214. ✖ $(G_1+G_2)/(1+H)$

Question Number : 83 Question Id : 4410091550358 Question Type : MCQ Option Shuffling : Yes

Which of the following methods is used to control the magnitude of the fundamental component of the output voltage in a Single-Pulse Modulated inverter?

Options :

- 4410096123887. ✔ Changing the width of the single pulse, δ .
- 4410096123888. ✖ Implementing a filter network at the output.
- 4410096123889. ✖ Adjusting the DC input voltage, V_s .
- 4410096123890. ✖ Varying the frequency of the carrier signal.

Question Number : 84 Question Id : 4410091563174 Question Type : MCQ Option Shuffling : Yes

In a single-phase half-wave controlled converter with an RLE load, the thyristor turns off at an angle $\omega t = \beta$ after switching on the input supply at $t = 0$. If the minimum firing angle is $\theta_1 = \sin^{-1}(E/V_m)$, and the supply angular frequency is ω rad/s, which of the following correctly gives the circuit turn-off time?

Options :

- 4410096174413. ✖ $t_c = \frac{\beta - \theta_1}{\omega}$
- 4410096174414. ✔ $t_c = \frac{2\pi + \theta_1 - \beta}{\omega}$
- 4410096174415. ✖ $t_c = \frac{\pi + \theta_1 - \beta}{\omega}$
- 4410096174416. ✖ $t_c = \frac{\pi + \beta - \theta_1}{\omega}$

Question Number : 85 Question Id : 4410091550325 Question Type : MCQ Option Shuffling : Yes

What is the primary distinguishing feature that a Gate Turn-Off (GTO) thyristor differs from a conventional Silicon Controlled Rectifier (SCR)?

Options :

- 4410096123755. ✖ It can be turned off by applying a momentary positive pulse to the gate terminal.
- 4410096123756. ✖ It can be turned off by applying a large, sustained positive current to the gate terminal.
- 4410096123757. ✔ It can be turned off by applying a large, high-amplitude negative current pulse to the gate terminal.
- 4410096123758. ✖ It turns off by reversing the anode-to-cathode voltage (natural commutation).

Question Number : 86 Question Id : 4410091559876 Question Type : MCQ Option Shuffling : Yes

A quasi square wave inverter is fired at an angle of 30° . Calculate the ratio of 3rd harmonic component in the inverter output voltage with respect to Fundamental component in the output voltage.

Options :

- 4410096161701. ✔ 0

4410096161702. ✖ 0.33

4410096161703. ✖ 0.20

4410096161704. ✖ 0.11

Question Number : 87 Question Id : 4410091563100 Question Type : MCQ Option Shuffling : Yes

Which device is a voltage-controlled power transistor?

Options :

4410096173963. ✖ BJT

4410096173964. ✔ MOSFET

4410096173965. ✖ SCR

4410096173966. ✖ GTO

Question Number : 88 Question Id : 4410091565576 Question Type : MCQ Option Shuffling : Yes

A single-phase half-wave controlled rectifier with freewheeling diode is supplying an RL load with $R = 10 \Omega$ and $L = 10\text{mH}$. If the input supply is 220 V, 50 Hz and firing angle is 60° , then what is the average output voltage of the rectifier?

Options :

4410096183766. ✖ $\frac{110\sqrt{2}}{\pi} \text{ V}$

4410096183767. ✔ $\frac{165\sqrt{2}}{\pi} \text{ V}$

4410096183768. ✖ $\frac{330\sqrt{2}}{\pi} \text{ V}$

4410096183769. ✖ $\frac{330}{\pi} \text{ V}$

Question Number : 89 Question Id : 4410091559849 Question Type : MCQ Option Shuffling : Yes

A quasi square wave inverter is fired in such a way that its 5th harmonic component became zero in the output voltage. What is the value of firing angle (α) and thus the width (d) of the output voltage, respectively?

Options :

4410096161636. ✔ $\alpha = 18^\circ, d = 144^\circ$

4410096161637. ✖ $\alpha = 36^\circ, d = 144^\circ$

4410096161638. ✖ $\alpha = 36^\circ, d = 108^\circ$

4410096161639. ✖ $\alpha = 30^\circ, d = 120^\circ$

Question Number : 90 Question Id : 4410091564081 Question Type : MCQ Option Shuffling : Yes

In a single-phase half-wave circuit (SPHWC), the discontinuous current occurs when:

Options :

4410096177921. ✖ Firing angle = 0

4410096177922. ✖ Inductance is large

4410096177923. ✔ Current becomes zero before next cycle

4410096177924. ✖ Supply voltage is high

Question Number : 91 Question Id : 4410091813199 Question Type : MCQ Option Shuffling : Yes

Which stability check ensures that a pedestal transformer foundation does not rotate due to lateral forces?

Options :

4410097148466. ✔ Overturning Stability

4410097148467. ✖ Sliding stability

4410097148468. ✖ Bearing capacity check

4410097148469. ✖ Settlement control

Question Number : 92 Question Id : 4410091813189 Question Type : MCQ Option Shuffling : Yes

During prolonged rainfall, the soil supporting a pedestal transformer foundation becomes fully saturated, leading to an increase in pore water pressure. Which soil parameter controlling the stability of the foundation is most likely to decrease?

Options :

4410097148426. ✔ Shear strength of soil

4410097148427. ✖ Permeability of soil

4410097148428. ✖ Compressibility of soil

4410097148429. ✖ Unit weight of soil

Question Number : 93 Question Id : 4410091792949 Question Type : MCQ Option Shuffling : Yes

During concreting in waterlogged soil, which factor primarily increases the risk of washout and loss of cement paste?

Options :

- 4410097069726. ✓ Excessive water movement
- 4410097069727. ✗ Floating of coarse aggregates
- 4410097069728. ✗ Insufficient mixing time
- 4410097069729. ✗ Low cement content

Question Number : 94 Question Id : 4410091813280 Question Type : MCQ Option Shuffling : Yes

While designing the foundation for a substation structure, which of the following loads must be considered to ensure safety and stability?

Options :

- 4410097148806. ✗ Only vertical loads
- 4410097148807. ✗ Only lateral loads
- 4410097148808. ✓ Both vertical and lateral loads
- 4410097148809. ✗ Only wind loads

Question Number : 95 Question Id : 4410091816713 Question Type : MCQ Option Shuffling : Yes

If a substation foundation is constructed in a chemically aggressive soil environment, which of the following characteristics of concrete should be prioritized to ensure durability?

Options :

- 4410097162322. ✓ Low permeability to limit ingress of moisture and harmful chemicals
- 4410097162323. ✗ Low slump to decrease workability during placement operations
- 4410097162324. ✗ High cement content to increase paste volume in the mix
- 4410097162325. ✗ Fast setting properties to accelerate early strength development

Question Number : 96 Question Id : 4410091805686 Question Type : MCQ Option Shuffling : Yes

In frequency modulation (FM), which parameter of the carrier signal remains constant during transmission?

Options :

- 4410097119406. ✓ Amplitude of the carrier signal
- 4410097119407. ✗ Frequency of the carrier signal
- 4410097119408. ✗ Phase of the message signal
- 4410097119409. ✗ Modulating frequency

Question Number : 97 Question Id : 4410091792254 Question Type : MCQ Option Shuffling : Yes

Which logic gate would be used in a digital circuit to ensure power is supplied only when multiple switches are ON simultaneously?

Options :

- 4410097067214. ✓ AND gate
- 4410097067215. ✗ OR gate
- 4410097067216. ✗ NOT gate
- 4410097067217. ✗ NOR gate

Question Number : 98 Question Id : 4410091792640 Question Type : MCQ Option Shuffling : Yes

In a digital system, which gate would you use to reverse the logical state of a signal before it enters another logic circuit?

Options :

- 4410097068506. ✗ AND Gate
- 4410097068507. ✗ OR Gate
- 4410097068508. ✓ NOT Gate
- 4410097068509. ✗ Transmission Gate

Question Number : 99 Question Id : 4410091805688 Question Type : MCQ Option Shuffling : Yes

An engineer is tasked with transmitting a high-fidelity audio signal over long distances. Considering distortion and noise immunity, which modulation type would be most appropriate and why?

Options :

- 4410097119414. ✓ FM modulation, due to its high noise immunity and fidelity.
- 4410097119415. ✗ AM modulation, due to its lower complexity.
- 4410097119416. ✗ AM modulation, as it uses less power for long-distance transmission.
- 4410097119417. ✗ FM modulation, as it requires less bandwidth.

Question Number : 100 Question Id : 4410091807785 Question Type : MCQ Option Shuffling : Yes

In the FM expression $s(t) = A_c \cos(2\pi f_c t + \beta \sin(2\pi f_m t))$, what does the term β represent?

Options :

- 4410097127474. ✓ Modulation index
- 4410097127475. ✗ Carrier frequency

4410097127476. ✖ Carrier amplitude

4410097127477. ✖ Phase deviation