



हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड Hindustan Petroleum Corporation Limited

(A Maharatna Company)

Participant ID	
Participant Name	
Test Center Name	iON Digital Zone iDZ Kuberpur
Test Date	16/08/2025
Test Time	9:00 AM - 11:30 AM
Subject	Jr Executive Electrical Engineer Ref

Section: English Language

 $\ensuremath{\mathsf{Q.1}}$ Identify the INCORRECTLY spelt word in the given sentence.

Although she prepared thoroughly for the presentation, her initial embarrasment was evident when she stumbled over her opening lines.

Ans X A. thoroughly

X C. presentation

X D. initial

Question ID: 441009303272
Option 1 ID: 4410091179643
Option 2 ID: 4410091179642
Option 3 ID: 4410091179640
Option 4 ID: 4410091179641

Status : **Answered** Chosen Option : **B**

Q.2 Identify the INCORRECTLY spelt word in the given sentence.

The newly opened restuarant, despite its lavish decor and promising menu, struggled to attract a consistent customer base due to its remote location.

Ans X

X A. decor

X B. lavish
X C. remote

D. restuarant

Question ID: 441009303260

Option 1 ID: 4410091179596

Option 2 ID: 4410091179598

Option 3 ID: 4410091179599

Option 4 ID : 4410091179597

Status: Answered

Chosen Option : **D**



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Q.3 Select the most appropriate articles to fill in the blanks.

_ inspiring talk on ethics and followed it up with ____ hour-long question-She delivered _ and-answer session.

Ans

A. an; an

X B. a; an

X C. a; a

X D. an; a

Question ID: 441009299224 Option 1 ID: 4410091163932 Option 2 ID: 4410091163933 Option 3 ID: 4410091163930 Option 4 ID: 4410091163931

Status: Answered

Chosen Option: A

Q.4 Select the option that can be used as a one-word substitute for the highlighted phrase in the given sentence.

The officer was dismissed from service for disregarding official duties.

Ans X A. dutiful

X B. responsible

X C. authoritative

D. negligence

Question ID: 441009303058 Option 1 ID: 4410091178814 Option 2 ID: 4410091178812 Option 3 ID: 4410091178815 Option 4 ID: 4410091178813

Status: Answered

Chosen Option : D

Q.5 Identify the INCORRECTLY spelt word in the given sentence.

The museum curator emphasised the artefacts' autenticity, claiming they had been verified by renowned historians and archaeologists.

Ans X A. emphasised

X B. artefacts

X C. renowned D. autenticity

Question ID: 441009303281

Option 1 ID: 4410091179676 Option 2 ID: 4410091179677

Option 3 ID: 4410091179679 Option 4 ID: 4410091179678

Status: Answered

Chosen Option : D



D. a; an



> Question ID: 441009299217 Option 1 ID: 4410091163904 Option 2 ID: 4410091163903 Option 3 ID: 4410091163905 Option 4 ID: 4410091163902

Status : Answered

Chosen Option: D

Q.7 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. They captivate users with short, visually stimulating content that ranges from dance challenges and comedy skits to educational snippets and senseless videos.

B. Social media platforms, online gaming, and streaming services have created an engaging yet addictive digital ecosystem.

C. In today's digital era, people from all walks of life are increasingly drawn to the virtual world, spending countless hours glued to their screens rather than engaging in real-world activities.

D. While initially sought as a break from daily routines, reels often trap users in an endless cycle of mindless scrolling that detracts from productivity and long-term goals.

E. Among these, reels have emerged as a dominant form of entertainment.

Ans

A. CBEAD

➤ B. DCAEB
➤ C. AEDCB

X D. BACDE

Q.8 Select the most appropriate option to fill in the blank.

Despite his extensive knowledge, his arguments often appeared _____ to the discerning audience.

Ans

X A. articulate

B. fallacious

X C. verbose

X D. succinct

Question ID: 441009299232 Option 1 ID: 4410091163964 Option 2 ID: 4410091163963 Option 3 ID: 4410091163962 Option 4 ID: 4410091163965

Status : **Answered**

Chosen Option : B





Q.9 Select the most appropriate options to fill in the blanks.

____ he was tired, he continued working late into the night ____ he had a deadline to meet.

Ans

A. Although; because

X B. Yet; as

X C. Unless; because

X D. Since; so

Question ID: 441009299273
Option 1 ID: 4410091164112
Option 2 ID: 4410091164111
Option 3 ID: 4410091164110
Option 4 ID: 4410091164113

Status : **Answered**

Chosen Option: A

Q.10 Identify the INCORRECTLY spelt word in the given sentence and select the option that

The ancient manuscript was preserved in a specially designed hermatical chamber to prevent deterioration.

Ans

A. hermetical

rectifies it.

X B. manuskript

X C. chembar

X D. deteriorration

Question ID: 441009303294 Option 1 ID: 4410091179729 Option 2 ID: 4410091179731 Option 3 ID: 4410091179728 Option 4 ID: 4410091179730

Status : Answered

Chosen Option : A

Q.11 Identify the INCORRECTLY spelt word in the given sentence and select the option that rectifies it.

The artist's use of vibrant hues brought a sense of dynamism and exuberence to the otherwise sombre canvas.

Ans

X A. dynamysm

X B. sombber

X C. huews

D. exuberance

Question ID: 441009303304

Option 1 ID: 4410091179769 Option 2 ID: 4410091179771 Option 3 ID: 4410091179768

Option 4 ID : **4410091179770** Status : **Answered**

Chosen Option : B





Q.12 Identify the INCORRECTLY spelt word in the given sentence and select the option that rectifies it.

The cruise ship navigated through the serene waters of the achipaelago, offering breathtaking views of secluded islets.

Ans

X A. serenne

X B. seckluded

X C. navvigated

D. archipelago

Question ID : **441009303310** Option 1 ID : **4410091179801** Option 2 ID : **4410091179800**

Option 3 ID : **4410091179802** Option 4 ID : **4410091179803**

Status : Answered

Chosen Option : ${\bf A}$

Comprehension:

Read the given passage carefully and answer the questions that follow.

In the times of turbulence, the mind easily spirals into anxiety and impulsive reactions. Trying to achieve emotional stability while facing rough seas could be one of the reasons why living mindfully - pausing to reflect - is gaining popularity.

The 13th Century Buddhist priest Nichiren urged us to 'become masters of our minds, rather than letting our minds master us', teaching the importance of building an unwavering self that is not swayed by the fickle nature of human emotions.

These days, the constant barrage of information often leads to mental exhaustion. In contrast, the Buddhist principle of mastering one's mind empowers us to reclaim our mental focus. It could be defined as the discipline of directing our attention to the present, free from the weight of past regrets or future fears. In doing so, we begin to tap our own innate wisdom and compassion- igniting an inner transformation that reshapes how we relate to ourselves and others.

SubQuestion No: 13

Q.13 Identify the tone of the passage.

Ans 🧼

A. Reflective

X B. Tragic

X C. Narrative

X D. Romantic

Question ID: 441009306954

Option 1 ID: 4410091194503

Option 2 ID: 4410091194504

Option 3 ID: 4410091194505

Option 4 ID: 4410091194506

Status : **Answered**

Chosen Option: A





Comprehension:

Read the given passage carefully and answer the questions that follow.

In the times of turbulence, the mind easily spirals into anxiety and impulsive reactions. Trying to achieve emotional stability while facing rough seas could be one of the reasons why living mindfully - pausing to reflect - is gaining popularity.

The 13th Century Buddhist priest Nichiren urged us to 'become masters of our minds, rather than letting our minds master us', teaching the importance of building an unwavering self that is not swayed by the fickle nature of human emotions.

These days, the constant barrage of information often leads to mental exhaustion. In contrast, the Buddhist principle of mastering one's mind empowers us to reclaim our mental focus. It could be defined as the discipline of directing our attention to the present, free from the weight of past regrets or future fears. In doing so, we begin to tap our own innate wisdom and compassion- igniting an inner transformation that reshapes how we relate to ourselves and others.

SubQuestion No: 14

Q.14 Select the correct ANTONYM of the word 'innate' as used in the passage.

A. Acquired

X B. Traditional

X C. Cultural

X D. Foreign

Ouestion ID: 441009306955 Option 1 ID: 4410091194507 Option 2 ID: 4410091194510 Option 3 ID: 4410091194509 Option 4 ID: 4410091194508 Status: Answered

Chosen Option: A

Comprehension:

Read the given passage carefully and answer the questions that follow.

In the times of turbulence, the mind easily spirals into anxiety and impulsive reactions. Trying to achieve emotional stability while facing rough seas could be one of the reasons why living mindfully - pausing to reflect - is gaining popularity.

The 13th Century Buddhist priest Nichiren urged us to 'become masters of our minds, rather than letting our minds master us', teaching the importance of building an unwavering self that is not swayed by the fickle nature of human emotions.

These days, the constant barrage of information often leads to mental exhaustion. In contrast, the Buddhist principle of mastering one's mind empowers us to reclaim our mental focus. It could be defined as the discipline of directing our attention to the present, free from the weight of past regrets or future fears. In doing so, we begin to tap our own innate wisdom and compassion- igniting an inner transformation that reshapes how we relate to ourselves and others.

SubQuestion No: 15

Q.15 Select the most suitable title for the passage from the given options.

Ans X A. Way that leads to Mental Exhaustion

X B. Emotional Instability: Need of An Hour

C. The outcomes of impulsive reactions

D. The Benefits of Being Mindful

Question ID: 441009306956

Option 1 ID: 4410091194512 Option 2 ID: 4410091194514

Option 3 ID: 4410091194513 Option 4 ID: 4410091194511

Status: Answered

Chosen Option: D





Comprehension:

Read the given passage carefully and answer the questions that follow.

In the times of turbulence, the mind easily spirals into anxiety and impulsive reactions. Trying to achieve emotional stability while facing rough seas could be one of the reasons why living mindfully - pausing to reflect - is gaining popularity.

The 13th Century Buddhist priest Nichiren urged us to 'become masters of our minds, rather than letting our minds master us', teaching the importance of building an unwavering self that is not swayed by the fickle nature of human emotions.

These days, the constant barrage of information often leads to mental exhaustion. In contrast, the Buddhist principle of mastering one's mind empowers us to reclaim our mental focus. It could be defined as the discipline of directing our attention to the present, free from the weight of past regrets or future fears. In doing so, we begin to tap our own innate wisdom and compassion- igniting an inner transformation that reshapes how we relate to ourselves and others.

SubQuestion No: 16

Q.16 Which century priest is mentioned in the passage?

Ans X A. 18th Century

X B. 21st Century

X C. 10th Century

✓ D. 13th Century

Question ID: 441009306957 Option 1 ID: 4410091194516 Option 2 ID: 4410091194518 Option 3 ID: 4410091194515 Option 4 ID: 4410091194517

Status : Answered

Chosen Option : ${\bf D}$

Comprehension:

Read the given passage carefully and answer the questions that follow.

In the times of turbulence, the mind easily spirals into anxiety and impulsive reactions. Trying to achieve emotional stability while facing rough seas could be one of the reasons why living mindfully - pausing to reflect - is gaining popularity.

The 13th Century Buddhist priest Nichiren urged us to 'become masters of our minds, rather than letting our minds master us', teaching the importance of building an unwavering self that is not swayed by the fickle nature of human emotions.

These days, the constant barrage of information often leads to mental exhaustion. In contrast, the Buddhist principle of mastering one's mind empowers us to reclaim our mental focus. It could be defined as the discipline of directing our attention to the present, free from the weight of past regrets or future fears. In doing so, we begin to tap our own innate wisdom and compassion- igniting an inner transformation that reshapes how we relate to ourselves and others.

SubQuestion No: 17

Q.17 What does the Buddhist principle of mastering one's mind empower us to do?

Ans X A. Erase all relevant information

X B. Be anxious and act impulsively

C. Become masters of one's mind

X D. Revisit the traumas of the past

Question ID : **441009306958** Option 1 ID : **4410091194521** Option 2 ID : **4410091194522**

Option 3 ID : **4410091194519** Option 4 ID : **4410091194520**

Status: Answered

Chosen Option : C

Section: Quantitative Aptitude





Q.1 एक कार 84 km की दूरी 56 मिनट में तय करती है। यदि इसकी चाल में 18 km/hr की कमी कर दी जाए, तो कार द्वारा समान दूरी तय करने में लिया गया समय ज्ञात कीजिए।

Ans 🗙 A. 72 मिनट

\chi B. 68 मिनट

🗙 C. 64 मिनट

🥓 D. 70 मिनट

Question ID: 441009339916 Option 1 ID: 4410091325708 Option 2 ID: 4410091325706 Option 3 ID: 4410091325705

Option 4 ID: 4410091325707 Status: Answered

Chosen Option : D

Q.2 In how many days could P, Q, and R together complete the same work, if P can do it in 40 days, Q can finish it in 80 days, and R can finish it in 120 days?

Ans

$$\times$$
 A $21\frac{6}{11}$ days

$$\times$$
 B. $21\frac{5}{11}$ days

$$\checkmark$$
 ○ 21 $\frac{9}{11}$ days
 \checkmark ○ 21 $\frac{8}{11}$ days

$$\times 0.21 \frac{8}{11}$$
 days

Question ID: 441009337230

Option 1 ID: 4410091314925 Option 2 ID: 4410091314924

Option 3 ID: 4410091314927

Option 4 ID: 4410091314926

Status: Answered

Chosen Option: C

Q.3 एक स्टीमर की धारा के अनुकूल चाल 56 km/hr और धारा की चाल 14 km/hr है। स्टीमर द्वारा धारा के प्रतिकूल 84 km और धारा के अनुकूल 84 km की दूरी तय करने में लिया गया कुल समय ज्ञात कीजिए।

Ans

$$\checkmark$$
 D. $4\frac{1}{2}$ \overrightarrow{u}

Question ID: 441009339923

Option 1 ID: 4410091325733

Option 2 ID: 4410091325736 Option 3 ID: 4410091325734

Option 4 ID: 4410091325735

Status: Answered

Chosen Option : A





Q.4 एक स्टोर ₹2,100 मूल्य के एक उत्पाद पर 12%, 15% और 18% की तीन क्रमिक छूट प्रदान करता है। उत्पाद का अंतिम विक्रय मूल्य (दो दशमलव स्थानों तक पूर्णांकित) कितना है?

X B. ₹1,385.96

X C. ₹1,305.15

X D. ₹1,417.28

Question ID: 441009337241

Option 1 ID : 4410091314968

Option 2 ID : **4410091314970** Option 3 ID : **4410091314969**

Option 4 ID: 4410091314971

Status: Answered

Chosen Option : A

Q.5 मोज़े बेचने वाली एक दुकान पर एक ऑफर के तहत, ग्राहकों को 4 जोड़ी मोज़े खरीदने पर 6 जोड़ी मोज़े मुफ़्त मिल रहे थे। ग्राहक को मिलने वाली छूट ज्ञात कीजिए।

Ans X A. 65%

✓ B. 60%

X C. 50%

X D. 55%

Question ID: 441009334452

Option 1 ID : 4410091303769

Option 2 ID: 4410091303768

Option 3 ID: 4410091303766

Option 4 ID : **4410091303767** Status : **Answered**

Chosen Option : B

Q.6 उस सबसे बड़े वृत्त की परिधि (m में) ज्ञात कीजिए जिसे एक <mark>आयत में अंकित किया जा सकता है</mark> जिसकी विमाएं 28 m और 192 m दी गई हैं।

$$\pi = \frac{22}{7}$$
 लीजिए।

Ans X A. 86

X B. 98

✓ C. 88

X D. 80

विमाएं

Question ID : **4410091116784** Option 1 ID : **4410094403025**

Option 2 ID : 4410094403026

Option 3 ID : **4410094403024** Option 4 ID : **4410094403027**

Status : Answered

Chosen Option : A





Q.7 एक कॉलेज के 49 विद्यार्थियों का माध्य भार 60 kg है। यदि शिक्षक का भार भी इसमें शामिल कर लिया जाए, तो माध्य 600 ग्राम बढ़ जाता है। शिक्षक का भार (kg में) ज्ञात कीजिए।

Ans X A. 95

X B. 80

X C. 85

✓ D. 90

Question ID: 441009309935

Option 1 ID: 4410091206251 Option 2 ID: 4410091206248

Option 3 ID: 4410091206249 Option 4 ID: 4410091206250

Status: Answered

Chosen Option : ${\bf D}$

Q.8 एक कस्बे की जनसंख्या 10% वार्षिक दर से बढ़ रही है। यदि कस्बे की वर्तमान जनसंख्या 725,000 है, तो दो वर्षों में कस्बे की जनसंख्या ज्ञात कीजिए।

Ans X A. 7,77,250

X B. 9,67,250

√ C. 8,77,250

X D. 9,77,250

Question ID: 441009310205

Option 1 ID: 4410091207304 Option 2 ID: 4410091207307

Option 3 ID: 4410091207305 Option 4 ID: 4410091207306

Status: Answered

Chosen Option : C

Q.9 निम्नलिखित आँकडों का बहलक ज्ञात कीजिए (दश<mark>मलव के दो स्थानों तक सही</mark>)।

		8				, ·
वर्ग	0-8	8-16	16-24	24-32	32-40	40-48
अन्तराल						
बारंबारता	5	7	12	8	10	6

Ans X A. 21.05

X B. 22.82

X C. 19.23

✓ D. 20.44

Question ID: 441009339815

Option 1 ID: 4410091325293

Option 2 ID: 4410091325294 Option 3 ID: 4410091325291

Option 4 ID: 4410091325292

Status: Answered

Chosen Option: B





Q.10 एक कक्षा के विद्यार्थियों द्वारा प्राप्त अंकों का औसत 80 है। कक्षा में लड़कियों के औसत अंक 92 हैं और लड़कों के औसत अंक 72 हैं। कक्षा में लड़कों का प्रतिशत ज्ञात कीजिए।

Ans X A. 50%

X B. 65%

✓ C. 60%

X D. 55%

Question ID: 441009309948

Option 1 ID: 4410091206300

Option 2 ID: 4410091206303

Option 3 ID: 4410091206302

Option 4 ID: 4410091206301

Status: Answered

Chosen Option : ${\bf D}$

Q.11 Find the HCF of A(x) = $4x^3 - 6x^2 - 4x + 6$ and B(x) = $6x^2 + 16x + 10$.

Ans $X = A \cdot 2(x - 1)$

 \times B. (2x + 1)

√ C. 2(x + 1)

 \times D. (2x - 1)

Question ID: 441009311485

Option 1 ID: 4410091212356

Option 2 ID: 4410091212358

Option 3 ID: 4410091212357

Option 4 ID: 4410091212359 Status: Answered

Chosen Option : ${\bf C}$

Q.12 7 पेन और 3 नोटबुक की कीमत ₹153 है। 8 नोटबुक की कीम<mark>त 2 पेन की कीमत से ₹98 अधि</mark>क है। 5 पेन और 6 नोटबुक की कीमत ज्ञात कीजिए।

Ans X A. ₹167

⊘ B. ₹171

X C. ₹166

X D. ₹170

Question ID: 4410091123923

Option 1 ID: 4410094431254

Option 2 ID: 4410094431253

Option 3 ID: 4410094431256

Option 4 ID: 4410094431255

Status: Not Answered

Chosen Option: --





Q.13 If the equation $3x^2 + kx + 4 = 0$, k > 0, has real and equal roots, then the value of k satisfies the equation:39

Ans $\times A.2k^2 - \sqrt{5}k - 1036 = 0$

 \times B. $k^2 - \sqrt{4}k - 964 = 0$

 \times c. $2k^2 + \sqrt{2}k - 1036 = 0$

 \checkmark D. $k^2 - \sqrt{3}k - 36 = 0$

Question ID : 4410091123933 Option 1 ID : 4410094431296

Option 2 ID : **4410094431294** Option 3 ID : **4410094431295** Option 4 ID : **4410094431293**

Status : **Answered**

Chosen Option : B

Q.14 P और Q ने क्रमशः ₹64,000 और ₹56,000 का निवेश करके एक साझेदारी शुरू की। 4 महीने बाद P ने ₹8,000 निकाल लिए जबकि Q ने ₹8,000 और निवेश किए। 8 महीने बाद R, ₹48,000 की पूँजी के साथ व्यवसाय में शामिल हो गया। वर्ष के अंत में, उन्हें ₹48,909 का लाभ हुआ। Q का हिस्सा R के हिस्से से कितना अधिक है?

Ans X A. ₹16,213

X B. ₹16,105

✓ C. ₹16,303

X D. ₹16,586

Question ID: 441009339784

Option 1 ID: **4410091325171**Option 2 ID: **4410091325170**Option 3 ID: **4410091325172**

Option 4 ID: 4410091325173

Status: Not Answered

Chosen Option: --

Q.15 एक समद्विबाहु समलम्ब चतुर्भुज की समांतर भुजाएँ 24 cm और 36 cm हैं। यदि असमांतर भुजाओं में से एक की लंबाई 10 cm है, तो समलम्ब चतुर्भुज का क्षेत्रफल (cm² में) कितना होगा?

Ans X A. 360

✓ B. 240

X C. 300

X D. 180

Question ID: 4410091117137

Option 1 ID: 4410094404438

Option 2 ID: 4410094404436

Option 3 ID: 4410094404437

Option 4 ID: 4410094404439

Status : Not Answered

Chosen Option: --



Q.16 मान लीजिए C_1 और C_2 दो वृत्त हैं जिनके केंद्र P=(2,-7) और Q=(-7,5) हैं और जिनकी त्रिज्याएँ क्रमशः 5cm और 8 cm हैं। ${\rm C_1}$ और ${\rm C_2}$ पर उभयनिष्ठ स्पर्श रेखाओं की संख्या ज्ञात कीजिए।

Ans X A. 1

X B. 2

√ C. 4

X D. 3

Question ID: 4410091117057

Option 1 ID: 4410094404119

Option 2 ID: 4410094404116

Option 3 ID: 4410094404118

Option 4 ID: 4410094404117

Status: Not Answered

Chosen Option: --

Q.17 132 भरे हुए गेहूं के बैग को 8.4 m व्यास और H m ऊंचाई वाले एक गोल ड्रम में खाली किया जाता है। यदि प्रत्येक गेहूं के बैंग का स्थान $21 \times 10^5 \text{ cm}^3$ है, तो H का मान ज्ञात कीजिए।

का उपयोग कीजिए।

Ans X A. 8.1

✓ B. 5

X C. 7

X D. 6.5

Question ID: 4410091117084

Option 1 ID: 4410094404227

Option 2 ID: 4410094404226

Option 3 ID: 4410094404224

Option 4 ID: 4410094404225

Status: Not Answered

Chosen Option: --

Q.18 28 संख्याओं का औसत 45 है<mark>। यदि</mark> एक संख्या हटा <mark>दी</mark> जाए, तो औ<mark>स</mark>त 44 हो जाता है। ह<mark>टाई गई संख्या ज्</mark>ञात कीजिए।

✓ A. 72 Ans

X B. 70

X C. 81

X D. 68

Question ID: 441009317974

Option 1 ID: 4410091238363

Option 2 ID: 4410091238362

Option 3 ID: 4410091238364

Option 4 ID: 4410091238361

Status: Answered

Chosen Option : A



Q.19 A और B एक काम को 30 दिनों में कर सकते हैं, B और C इसे 40 दिनों में कर सकते हैं, A और C इसे 50 दिनों में कर सकते हैं। तीनों मिलकर उस काम को कितने दिनों में कर सकते

✔ C. 25
$$\frac{25}{47}$$
 दिन

Question ID: 441009339902

Option 1 ID: 4410091325647

Option 2 ID: 4410091325646

Option 3 ID: 4410091325648

Option 4 ID: 4410091325645

Status: Answered

Chosen Option: C

Q.20 81 cm भुजा वाले घन का संपूर्ण पृष्ठीय क्षेत्रफल ज्ञात कीजिए।

Ans X A. 39340 cm²

X B. 39357 cm²

✓ C. 39366 cm²

X D. 39439 cm²

Question ID: 4410091117031

Option 1 ID: 4410094404013

Option 2 ID: 4410094404014

Option 3 ID: 4410094404012

Option 4 ID: 4410094404015

Status: Answered

Chosen Option : ${\bf C}$

Find the value of
$$\sqrt{\frac{\sqrt{512} \times \sqrt{1250} + \sqrt{243} \times \sqrt{14700}}{\sqrt{625} \times \sqrt{81} + \sqrt{16807} \times \sqrt{6300}}}$$

$$\times$$
 A. $\sqrt{\frac{237}{1763}}$

$$\times$$
 B. $\sqrt{\frac{420}{2063}}$

$$\checkmark$$
 C. $\sqrt{\frac{538}{2103}}$

$$\times$$
 D. $\sqrt{\frac{131}{1498}}$

Question ID: 441009326963

Option 1 ID: 4410091274217

Option 2 ID: 4410091274218

Option 3 ID: 4410091274219

Option 4 ID: 4410091274216

Status: Not Answered

Chosen Option: --





Q.22 For the first 19 natural numbers, whose weights equal the corresponding number, what is the weighted arithmetic mean?

✓ A. 13

X B. 11

X C. 12

X D. 14

Question ID: 441009338021

Option 1 ID: 4410091318062 Option 2 ID: 4410091318060

Option 3 ID: 4410091318061 Option 4 ID: 4410091318063

Status: Answered

Chosen Option: B

Q.23 दो उम्मीदवारों के बीच हुए एक चुनाव में, 88% मतदाताओं ने अपने मत डाले, जिनमें से 8% मत अवैध घोषित कर दिए गए। विजेता उम्मीदवार को 4807 मत मिले, जो कुल वैध मतों का 95% था। उस चुनाव में नामांकित मतदाताओं की कुल संख्या ज्ञात कीजिए।

Ans X A. 6380

X B. 6720

X C. 6560

D. 6250

Question ID: 441009337168

Option 1 ID: 4410091314685

Option 2 ID: 4410091314687

Option 3 ID: 4410091314686 Option 4 ID: 4410091314684

Status: Answered

Chosen Option : D

Q.24 यदि ब्याज वार्षिक रूप से संयोजित होता है, तो ₹18,944 क<mark>ी राशि किस</mark> वार्षिक दर पर <mark>3 वर्षों में</mark> ₹26,973 हो जाएगी?

Ans X A. 10.2%

X B. 11.8%

X C. 8.6%

✓ D. 12.5%

Question ID: 441009318222

Option 1 ID: 4410091239350

Option 2 ID: 4410091239351

Option 3 ID: 4410091239349

Option 4 ID: 4410091239352

Status: Answered

Chosen Option: B





Q.25 दो संख्याओं के बीच का अनुपात 13:19 है। यदि उनके बीच का अंतर 372 है, तो दोनों संख्याओं का योग ज्ञात कीजिए।

Ans X A. 1689

X B. 1769

X C. 1824

✓ D. 1984

Question ID: 441009339759

Option 1 ID : 4410091325070

Option 2 ID: 4410091325071 Option 3 ID: 4410091325072

Option 4 ID : **4410091325073**

Status: Answered

Chosen Option : D

0.26 एक व्यक्ति ने एक पुराना टाइपराइटर ₹1,800 में खरीदा और उसकी मरम्मत पर ₹350 खर्च किए। उसने उसे ₹2,580 में बेच दिया। उसका लाभ प्रतिशत ज्ञात कीजिए।

Ans X A. 18%

X B. 17%

✓ C. 20%

X D. 19%

Question ID: 441009337198

Option 1 ID: 4410091314805

Option 2 ID: 4410091314804

Option 3 ID: 4410091314807

Option 4 ID: 4410091314806

Status : Answered

Chosen Option : C

Q.27 दिन के एक निश्चित समय पर 5 m ऊँचे एक खंभे की छाया क<mark>ी लंबाई 8.5 m है। उस दूसरे खंभे की</mark> ऊँचाई क्या है जिसकी छाया उस समय 136 m लंबी है?

Ans 🗙 A. 83 मीटर

🗶 C. 65 मीटर

\chi D. 78 मीटर

4//

Question ID: 441009326755

Option 1 ID: 4410091273395

Option 2 ID: 4410091273394

Option 3 ID : **4410091273392**

Option 4 ID: 4410091273393

Status: Answered

Chosen Option : ${\bf B}$



Q.28 नीचे दिए गए विकल्पों में से कौन-सा विकल्प 1728 x^3 + 343 y^3 + 3024 x^2 y + 1764 $\mathrm{x}\mathrm{y}^2\mathrm{y}$ के समतुल्य है?

Ans \times A. $(12x + 10y)^3$

 \checkmark B. $(12x + 7y)^3$

 \times C. $(14x + 7y)^3$

X D. $(7x + 12y)^3$

Question ID: 4410091124001

Option 1 ID: 4410094431568

Option 2 ID: 4410094431565

Option 3 ID: 4410094431567

Option 4 ID: 4410094431566

Status: Answered

Chosen Option: B

 $^{ extsf{Q.29}}(8+\sqrt{48}\,)$ और $(4-\sqrt{12})$ का माध्यानुपाती ज्ञात कीजिए।

Ans \times A. $3\sqrt{3}$

 \times B. $3\sqrt{2}$

 \times c. $2\sqrt{3}$

 \checkmark D. $2\sqrt{2}$

Question ID: 441009337481

Option 1 ID: 4410091315891

Option 2 ID: 4410091315889

Option 3 ID: 4410091315890

Option 4 ID: **4410091315888**Status: **Not Answered**

Chosen Option: --

Q.30 Shawan bought an electric scooter for ₹1,20,000 and sold it for ₹1,40,000. Find the percentage profit made on the sale of the electric scooter.

Δn.

 \times A. $14\frac{2}{3}\%$

 \times B. 15 $\frac{2}{3}$ %

 \times C. 13 $\frac{2}{3}$ %

 \checkmark D. $16\frac{2}{3}\%$

Question ID: 441009334297

Option 1 ID: 4410091303126

Option 2 ID: 4410091303127

Option 3 ID: 4410091303125

Option 4 ID: 4410091303128

Status: Answered

Chosen Option : **D**





Q.31 कोई बस पहले आधे भाग में 160 km/hr और दूसरे आधे भाग में 90 km/hr की चाल से यात्रा करती है, और अपनी यात्रा 14 घंटे में पूरी करती है। यात्रा की कुल दूरी कितने किलोमीटर थी?

Ans X A. 1712.8 km

X C. 1812.8 km

X D. 1512.8 km

Question ID: 441009337237

Option 1 ID: **4410091314954** Option 2 ID: **4410091314953**

Option 3 ID: 4410091314955

Option 4 ID: 4410091314952

Status: Answered

Chosen Option: B

Q.32 भारी बारिश के कारण रमन को ₹6,880 की सब्ज़ियाँ ₹5,504 में बेचनी पड़ीं। उसे कितना प्रतिशत नुकसान हुआ?

X B. 18%

X C. 21%

X D. 19%

Question ID: 441009337205

Option 1 ID: 4410091314830

Option 2 ID: 4410091314828

Option 3 ID : **4410091314831** Option 4 ID : **4410091314829**

Status : Answered

Chosen Option: A

Q.33 एक आयताकार मैदान की लंबाई उसकी चौड़ाई से 31 m अधि<mark>क है। इसका क्षेत्रफल 33066 m²</mark> है। इसकी चौड़ाई (m में) ज्ञात कीजिए।

Ans X A. 158

✓ B. 167

X C. 178

X D. 172

Adda 247

Question ID: 4410091123989 Option 1 ID: 4410094431519 Option 2 ID: 4410094431517 Option 3 ID: 4410094431518

Option 4 ID : **4410094431520**

Status : **Answered**

Chosen Option : \boldsymbol{B}





Q.34 21 और 78 के बीच सभी अभाज्य संख्याओं का योग ज्ञात कीजिए।

Ans 🛹 A. 635

X B. 565

X C. 615

X D. 535

Question ID: 441009311464

Option 1 ID: 4410091212278 Option 2 ID: 4410091212276

Option 3 ID: 4410091212277

Option 4 ID: 4410091212275 Status: Answered

Chosen Option: A

Section: Intellectual Potential Test

Q.1 निम्नलिखित में संख्याओं और शब्दों के ऐसे युग्म हैं, जो एक निश्चित तरीके से एक-दूसरे से संबंधित हैं। निम्नलिखित चार संख्या-शब्द युग्मों में से तीन एकसमान हैं, क्योंकि इनमें समान संबंध है और इस प्रकार वे एक ग्रुप बनाते हैं। कौन-सा संख्या-शब्द युग्म, उस ग्रुप से संबंधित नहीं है?

Ans 💢 A. वर्ग-4

🥓 B. पंचभुज-6

🟋 C. आयत-4

X D. त्रिभुज-3

Question ID: 4410091145726

Option 1 ID: 4410094517861

Option 2 ID: 4410094517860

Option 3 ID: 4410094517863

Option 4 ID: 4410094517862 Status: Answered

Chosen Option: B

Q.2 Select the set in which the numbers are related in the same way as are the numbers of the following sets.

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

(131, 142, 546)

(120, 142, 524)

Ans X A. (142, 154, 296)

X B. (122, 106, 228)

C. (104, 112, 432) X D. (152, 123, 275)

> Question ID: 4410091125716 Option 1 ID: 4410094438409

Option 2 ID: 4410094438408

Option 3 ID: 4410094438407 Option 4 ID: 4410094438410

Status: Answered

Chosen Option: C





Q.3 In the following series, only one letter-cluster is incorrect. Select the INCORRECT lettercluster.

ZDH JNR TWA DHL NRV1014

Ans X A. DHL

✓ B. TWA

X C. NRV

X D. JNR

Question ID: 4410091145809

Option 1 ID : 4410094518195

Option 2 ID : **4410094518192** Option 3 ID : **4410094518193**

Option 4 ID : **4410094518194**

Status: Answered

Chosen Option: B

Q.4 छह डिब्बे U, V, W, X, Y और Z एक के ऊपर एक करके रखे गए हैं, लेकिन जरूरी नहीं कि वे इसी क्रम में हों। V और Y के बीच केवल दो डिब्बे रखे गए हैं। V को Y के ऊपर रखा गया है। W के ऊपर केवल चार डिब्बे रखे गए हैं। U को X के ऊपर रखा गया है। न तो X और न ही Y को सबसे नीचे रखा गया है। नीचे से चौथे स्थान पर कौन-सा डिब्बा रखा गया है?

Ans X A. Z

X B. U

✓ C. X

X D. V

Question ID: 4410091146733

Option 1 ID: 4410094521890

Option 2 ID: 4410094521889

Option 3 ID: 4410094521888

Option 4 ID: 4410094521891

Status : Answered

Chosen Option: C

Q.5 Two sets of numbers are given below. In each set of numbers, certain mathematical operation(s) on the first number result(s) in the second number. Similarly, certain mathematical operation(s) on the second number result(s) in the third number and so on. Which of the given options follows the same set of operations as in the given sets? (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding to/subtracting from/multiplying with 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

Ans X A. 17 – 55 – 58 – 64

X B. 13 - 35 - 32 - 40

✓ C. 8 − 20 − 23 − 31

X D. 4 - 10 - 11 - 19

Question ID: 4410091125660

Option 1 ID: 4410094438186

Option 2 ID : 4410094438185

Option 3 ID : **4410094438183** Option 4 ID : **4410094438184**

Status : **Answered**

Chosen Option : C





Q.6 Select the triad which follows the same pattern as that followed by the two triads given below. Both triads follow the same pattern.

BI-EL-GJ DK-GN-IL1144

X A. EM-IP-KO Ans

X B. FM-IP-KO

C. FM-IP-KN

X D. EM-IP-LO

Question ID: 4410091145939 Option 1 ID: 4410094518714 Option 2 ID: 4410094518713 Option 3 ID: 4410094518712 Option 4 ID: 4410094518715

Status: Answered

Chosen Option : \boldsymbol{C}

 ${\bf Q.7} \ \ {\bf Read \ the \ given \ statements \ and \ conclusions \ carefully. \ Assuming \ that \ the \ information \ given \ in}$ 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 statements.

Statements:

All trades are businesses. Some businesses are partnerships.

Conclusions:

- I. Some trades are partnerships.
- II. All trades are partnerships.

A. Neither conclusion I nor II follows.

X B. Only conclusion II follows.

X C. Both conclusions I and II follow.

D. Only conclusion I follows.

Question ID: 4410091146664 Option 1 ID: 4410094521615 Option 2 ID: 4410094521613 Option 3 ID: 4410094521614 Option 4 ID: 4410094521612 Status: Answered

Chosen Option : D

Q.8 In the following series, only one letter-cluster is incorrect. Select the INCORRECT lettercluster.

YZC EFI KLO QRU VWC1015

Ans X A. KLO

B. VWC

X C. QRU

💢 D. EFI

Question ID: 4410091145810

Option 1 ID: 4410094518199 Option 2 ID: 4410094518196 Option 3 ID: 4410094518197

Option 4 ID: 4410094518198 Status : **Answered**

Chosen Option: B





Q.9 निम्नलिखित में से किस अक्षर-समूह के द्वारा # और % को प्रतिस्थापित किया जाना चाहिए ताकि :: के बाईं ओर के अक्षर-समूह युग्म के बीच का पैटर्न और संबंध के समान हों?

RJV:#::DLZ:%

Ans X A. # = RIW, % = DJA

X B. # = SLU, % = HKC

X C. # = PJV, % = BMD

✓ D. # = QIW, % = CKA

Question ID: 4410091145707 Option 1 ID: 4410094517786 Option 2 ID: 4410094517784 Option 3 ID: 4410094517785 Option 4 ID: 4410094517787

 $\mbox{Status: {\bf Answered}} \\ \mbox{Chosen Option: } {\bf D} \\ \mbox{}$

Q.10 In a certain code language,

A + B means 'A is the son of B',

A - B means 'A is the brother of B',

A x B means 'A is the wife of B', and

A ÷ B means 'A is the father of B'.

Based on the above, how is L related to P if 'L + M - N x O \div P'?

Ans X A. Father's brother's son

X B. Father's sister's son

X C. Mother's sister's son

D. Mother's brother's son

Question ID: 4410091146071 Option 1 ID: 4410094519242 Option 2 ID: 4410094519243 Option 3 ID: 4410094519241 Option 4 ID: 4410094519240

Status : Answered

Chosen Option: D

Q.11 A, B, C, D, E, F and G are sitting around a circular table facing the centre.

Only two people sit between E and F when counted from the left of F. B sits third to the left of G. A sits to the immediate right of G. A sits second to the left of E. D is an immediate neighbour of B. Who sits third to the right of D?1161

Ans 🧼 A. A

X B. F

X C. C

X D. B

Question ID : **4410091145956** Option 1 ID : **4410094518780**

Option 2 ID: 4410094518783 Option 3 ID: 4410094518782 Option 4 ID: 4410094518781

Status: Answered

Chosen Option : C





Q.12 What should come in place of the question mark (?) in the given series?

11 13 19 21 27 ?

Ans 🗼 A. 29

X B. 28

X C. 32

X D. 34

Question ID: 4410091126019

Option 1 ID: 4410094439619

Option 2 ID: 4410094439621

Option 3 ID: 4410094439620

Option 4 ID: 4410094439622

Status : **Answered** Chosen Option : A

Q.13 What should come in place of the question mark (?) in the given series?

12 15 22 25 32 35 ?

Ans X A. 45

X B. 38

X C. 41

√ D. 42

Question ID: 4410091126022

Option 1 ID: 4410094439633

Option 2 ID: 4410094439632

Option 3 ID: 4410094439634

Option 4 ID: 4410094439631 Status: Answered

Chosen Option : D

Q.14 P, Q, R, S, T, U और V में से प्रत्येक की परीक्षा सोमवार से शु<mark>रू होकर रविवार को समाप्त होने वाले</mark> एक ही सप्ताह के अलग-अलग दिन होती है। V की परीक्षा गुरुवार को होती है। S और U के बीच केवल 4 व्यक्तियों की परीक्षा होती है, जिनमें से किस<mark>ी की</mark> भी परीक्षा रविवा<mark>र को नहीं होती है। T की परीक्षा, Q से ठीक पहले होती है। R</mark> की परीक्षा शुक्रवार को नहीं होती है। S की परीक्षा Q के बाद नहीं होती है। मंगलवार को किसकी परीक्षा है?

Ans X A. U

※ B. R

X C. S ✓ D. T

Question ID: 4410091146307

Option 1 ID: 4410094520187

Option 2 ID: 4410094520186

Option 3 ID: 4410094520185 Option 4 ID: 4410094520184

Status: Answered

Chosen Option : D





Q.15 Island Y is to the east of Island W. Island Y is to the west of Island V. Island V is to the south of Island U. Island X is to the east of Island U. What is the direction of Island X with respect to Island W?

Ans X A. North-west

X B. South-west

X C. South-east

D. North-east

Question ID: 4410091145968 Option 1 ID: 4410094518829 Option 2 ID: 4410094518830 Option 3 ID: 4410094518828 Option 4 ID: 4410094518831

Status : **Answered**

Chosen Option : D

Q.16 A, B, C, D, E, F and G are sitting around a circular table facing the centre. Only two people sit between A and B when counted from the right of A. Only two people sit between B and D when counted from the right of B. Only three people sit between A and F when counted from the left of F. C sits to the immediate left of G. Who sits third to the left of C?

Ans X A. A

X B. F

✓ C. E

X D. B

Question ID : 4410091145957 Option 1 ID : 4410094518786 Option 2 ID : 4410094518785

Option 3 ID : **4410094518784** Option 4 ID : **4410094518787**

Status : **Answered** Chosen Option : **C**

Q.17 Each of the digits in the number 692571 is arranged in descending order from left to right.

The position(s) of how many digits will remain unchanged as compared to that in the original number?

Ans 🥪

A. Two

X B. One

C. Four

D. Three

Question ID: 4410091126266

Option 1 ID: 4410094440608

Option 2 ID: 4410094440607

Option 3 ID: 4410094440610

Option 4 ID: 4410094440609

Status : Answered

Chosen Option : A





Q.18 Each of the digits in the number 2419637 is arranged in ascending order from left to right. The position of how many digits will remain unchanged as compared to that in the original number?

Ans X A. Two

X B. Four

X C. Three

D. One

Question ID: 4410091126324 Option 1 ID: 4410094440840 Option 2 ID: 4410094440842 Option 3 ID: 4410094440841

Option 4 ID: 4410094440839

Status : **Answered**

Chosen Option: D

Q.19 Seven people, A, B, C, D, E, F and G, are sitting in a row, facing north. Only two people sit to the left of C. Only three people sit between C and B. Only one person sits between B and F. A sits to the immediate left of D. E is not an immediate neighbour of B. How many people sit to the right of G?1216

Ans X A. Four

X B. Two

C. One

X D. Three

Question ID: 4410091146011

Option 1 ID: 4410094519003 Option 2 ID: 4410094519001

Option 3 ID: 4410094519000

Option 4 ID: 4410094519002

Status: Answered

Chosen Option: C

Q.20 सात डिब्बे, A, B, C, D, E, F और G, एक के ऊपर एक रखे गए हैं, लेकिन जरूरी नहीं कि इसी क्रम में रखे गए हों। D को नीचे से दूसरे स्थान पर औ<mark>र G</mark> को ऊपर से दूस<mark>रे स</mark>्थान पर रख<mark>ा ग</mark>या है। F और C <mark>के बीच केवल एक डिब्बा</mark> रखा गया है। F को C के ऊपर <mark>किसी</mark> एक स्थान पर र<mark>खा</mark> गया है, और E को F के ऊपर किसी एक स्थान पर रखा गया है। A और B के बीच दो <mark>डिब्बे रखे</mark> गए हैं। B, G के ठीक ऊपर रखा गया है। E और D के बीच कितने डिब्बे रखे गए हैं?

Ans 💢 A. एक

🟋 B. पांच

🥓 C. दो 🟋 D. तीन

Question ID: 4410091146682

Option 1 ID: 4410094521687

Option 2 ID: 4410094521686

Option 3 ID: 4410094521685

Option 4 ID: 4410094521684

Status: Answered

Chosen Option : C





Q.21 In a certain code language,

'A + B' means 'A is the son of B',

'A - B' means 'A is the brother of B',

'A \times B' means 'A is the wife of B' and 'A \div B' means 'A is the father of B'.

How is M related to Q if 'M - N + $0 \times P \div Q'$?

Ans X A. Husband

X B. Father

X C. Son

D. Brother

Question ID: 4410091146316

Option 1 ID: 4410094520221

Option 2 ID: 4410094520222

Option 3 ID: 4410094520223

Option 4 ID: 4410094520220

Status: Answered

Chosen Option : D

Q.22 यदि संख्या 935678 में प्रत्येक सम अंक में 1 जोड़ दिया जाए तथा प्रत्येक विषम अंक में से 2 घटा दिया जाए, तो इस प्रकार बनी नई संख्या में कितने अंक एक से अधिक बार आएंगे?

Ans 💢 A. चार

🟋 B. दो

🗙 C. तीन

🥓 D. एक

Question ID: 4410091126267

Option 1 ID: 4410094440614

Option 2 ID: 4410094440612

Option 3 ID : **4410094440613** Option 4 ID : **4410094440611**

Status : **Answered**

Chosen Option : D

Q.23 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.)

Ans X A. NQL

🔀 B. KNI

C. HKE

D. QTO

Question ID : 4410091145947

Option 1 ID : 4410094518746

Option 2 ID: 4410094518745

Option 3 ID: 4410094518744

Option 4 ID: 4410094518747

Status : Answered

Chosen Option : B





Q.24 निम्नलिखित अक्षर और प्रतीक श्रृंखला का संदर्भ लीजिए और उसके आधार पर नीचे दिए गए प्रश्न का उत्तर दीजिए। गिनती केवल बाएँ से दाएँ की जानी है।

(बाएँ) D @ \$ I X * © % Q K L # O R # Z & I R \$ Y U (दाएँ)

ऐसे कितने अक्षर हैं जिनमें से प्रत्येक के ठीक पहले एक अक्षर है और ठीक बाद भी एक अक्षर है?

Ans X A. 3

✓ B. 1

X C. 0

X D. 2

Question ID: 4410091144923

Option 1 ID : **4410094514651** Option 2 ID : **4410094514648** Option 3 ID : **4410094514650**

Option 4 ID : **4410094514649**

Status : **Answered**

Chosen Option : B

Q.25 In a certain code language, 'MOST' is coded as '4826' and 'OPEN' is coded as '3587'. What is the code for 'O' in the given code language? 1516

Ans X A.

⊘ B. 8

X C. 5

X D. 3

Question ID: 4410091146311

Option 1 ID: 4410094520203

Option 2 ID: 4410094520200

Option 3 ID: 4410094520202

Option 4 ID: 4410094520201

Status : **Answered**

Chosen Option: B

Q.26 दी गई संख्या, प्रतीक शृंखला क<mark>ा सं</mark>दर्भ लीजिए और <mark>नीचे दिए गए प्रश्न</mark> का उत्तर दीजिए। गि<mark>नती केवल बाएँ से दाएँ</mark> की जानी चाहिए। सभी संख्या<mark>एँ एक</mark>ल अंकीय संख्याएँ हैं।

(बाएँ) 1 & 5 * 3 ^ 6 £ \$ 2 @ 8 % 7 4 < 9 (दाएँ)

ऐसे कितने प्रतीक हैं, जिनमें से प्रत्येक के ठीक पहले एक संख्या और ठीक बाद एक अन्य संख्या है?

Ans 💢 A. तीन

🟋 B. दो

X C. एक

🛷 D. तीन से अधिक

Question ID: 4410091144855

Option 1 ID: 4410094514378

Option 2 ID: 4410094514377

Option 3 ID: 4410094514376

Option 4 ID : **4410094514379** Status : **Answered**

Chosen Option : **D**





Q.27 YIPO is related to WGRQ in a certain way based on the English alphabetical order. In the same way, MENO is related to KCPQ. To which of the given options is RTUI related, following the same logic? 976

Ans X A. RRWK

X B. RPKW

C. PRWK

X D. PPWK

Question ID: 4410091145771 Option 1 ID: 4410094518043 Option 2 ID: 4410094518040 Option 3 ID: 4410094518041 Option 4 ID: 4410094518042

Status : Answered

Chosen Option : ${\bf C}$

Q.28 Read the given statements 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:

All cups are bottles.

All bottles are jars.

No jar is a vase.

Conclusions:

(I) No cup is a vase.

(II) No bottle is a vase.421

Ans X A. Only II follows

B. Both follow

X C. Neither follows

X D. Only I follows

Question ID: 4410091145216

Option 1 ID : 4410094515822

Option 2 ID: 4410094515820

Option 3 ID : 4410094515823

Option 4 ID : **4410094515821**Status : **Answered**

Chosen Option : B

Q.29 यदि संख्या 1358374 में प्रत्येक विषम अंक में 1 जोड़ दिया जाए तथा प्रत्येक सम अंक में से 2 घटा दिया जाए, तो इस प्रकार बनी नई संख्या में कितने अंक एक से अधिक बार आएंगे?

Ans 🗙 A. दो

X B. एक

🗙 C. चार

✓ D. तीन

Question ID: 4410091126323

Option 1 ID: 4410094440836

Option 2 ID : 4410094440835

Option 3 ID : **4410094440838** Option 4 ID : **4410094440837**

Ctatus: Anguard

Status : **Answered**

Chosen Option : D





Q.30 In a certain code language, 'you work here' is coded as 'fw nr mt', 'work with you' is coded as 'bo mt nr', and 'with here work' is coded as 'nr fw bo'. (All codes are two letter codes.)

How is 'work' coded in that language?

Ans X A. fw

X C. mt

🟋 D. bo

Question ID: 4410091145689 Option 1 ID: 4410094517712 Option 2 ID: 4410094517713

Option 3 ID : **4410094517714** Option 4 ID : **4410094517715** Status : **Answered**

Chosen Option : B

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

(Left) Z L @ K M 7 # 2 N R 4 \$ 1 Q P ∞ 6 U V 9 % (Right)

If all the symbols and numbers are dropped from the series, then which of the following will be eighth in the series from the left end?

Ans X A. R

✓ B. P

X C. U

X D. Q

Question ID: 4410091146916

Option 1 ID: **4410094522623** Option 2 ID: **4410094522621** Option 3 ID: **4410094522622**

Option 4 ID: 4410094522620

Status : Answered

Chosen Option: B

Q.32 Refer to the following number and symbol series and answer the question that follows. All numbers are single-digit numbers.

(Left) 1 & 5 * 3 ^ 6 £ \$ 2 @ 8 % 7 4 < 9 (Right)

If all the symbols are dropped from the series, which of the following will be fourth from the right?

Ans

√ A. 8

X B. 6

X C. 7

X D. 2

Question ID: 4410091144852

Option 1 ID : **4410094514365** Option 2 ID : **4410094514367**

Option 3 ID: 4410094514364

Option 4 ID : **4410094514366** Status : **Answered**

Chosen Option : A



Q.33 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 X A. PJ - KE

✓ B. YF - PA

X C. SM - NH

X D. NH - IC

Question ID: 4410091145755 Option 1 ID: 4410094517976 Option 2 ID: 4410094517977

Option 3 ID : 4410094517979 Option 4 ID : 4410094517978 Status : Answered

Chosen Option : B

Q.34 13 is related to 65 following a certain logic. Following the same logic, 19 is related to 95. To which of the given options is 27 related, following the same logic?
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding to/subtracting from/multiplying with 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

Ans X A. 178

✓ B. 135

X C. 124

X D. 156

Question ID: 4410091125725

Option 1 ID: 4410094438444 Option 2 ID: 4410094438443 Option 3 ID: 4410094438446 Option 4 ID: 4410094438445

Status : Answered

Chosen Option : B

Section: Domain Knowledge

Q.1 In a delta connected 3-phase system, V_L being the line voltage of the system in volts and I_L is the line current in amperes of the system. The apparent power is given by:

Ans
$$\times$$
 A.3 $V_L I_L$

$$\times$$
 B. V_L I_L

$$\times$$
 c. $\frac{V_L I_L}{3}$

$$ightharpoonup$$
 D. $\sqrt{3}~V_L^{}~I_L^{}$

Question ID: 44100996318

Option 1 ID: 441009383318

Option 2 ID: **441009383316** Option 3 ID: **441009383319**

Option 4 ID : **441009383317** Status : **Answered**

Status . Alisv

Chosen Option : **D**





Q.2 According to Norton's theorem, any linear two-terminal network can be replaced by which of the following equivalent circuits?

Ans X A. A current source in series with a resistance

✓ B. A current source in parallel with a resistance

X C. A voltage source in parallel with a resistance

X D. A voltage source in series with a resistance

Question ID: 441009329519
Option 1 ID: 4410091284519
Option 2 ID: 4410091284520
Option 3 ID: 4410091284521
Option 4 ID: 4410091284518
Status: Answered

Chosen Option : B

Q.3 Which of the following is a key characteristic of a Sankey (energy flow) diagram used to represent energy usage in a system?

Ans X A. Energy enters the diagram from the right side and exits to the left

B. The width of each arrow corresponds to the amount of energy flow

X C. The length of the arrows represents energy quantity

X D. Energy losses are shown as upward-pointing arrows only

Question ID: 441009337736
Option 1 ID: 4410091316927
Option 2 ID: 4410091316926
Option 3 ID: 4410091316924
Option 4 ID: 4410091316925
Status: Answered

Chosen Option : D

Q.4 In the power-slip characteristic of an induction motor, what happens to power at '0' slip?

Ans 🕜 A. Power is zero

X B. Power equals input power

X C. Power is half of maximum

X D. Power is maximum

Question ID: 441009356314 Option 1 ID: 4410091391355 Option 2 ID: 4410091391357

Option 3 ID : **4410091391356** Option 4 ID : **4410091391354** Status : **Answered**

Chosen Option : $\boldsymbol{\mathsf{B}}$

Q.5 In a circuit containing pure resistance, how are the alternating voltage and current related?

Ans A. Voltage and current are in phase with each other.

 \mathbf{X} B. Voltage lags current by π/2.

 \times C. Current leads voltage by $\pi/2$.

 \times D. Voltage leads current by $\pi/2$.

Question ID: 441009329796

Option 1 ID: 4410091285616 Option 2 ID: 4410091285617 Option 3 ID: 4410091285615

Option 4 ID: 4410091285614

Status : **Answered**

Chosen Option : A





Q.6 The primary disadvantage of a single-phase semi converter compared to a full converter is that:

Ans Ans A. it can only provide positive output voltage

X B. it produces more harmonic distortion

X C. it cannot be controlled by the firing angle

X D. it is more expensive to implement

Question ID: 441009293947
Option 1 ID: 4410091142646
Option 2 ID: 4410091142645
Option 3 ID: 4410091142648
Option 4 ID: 4410091142647
Status: Answered

Chosen Option : A

Q.7 Which of the following parameters is significantly influenced by the height of an obstacle in the wind path?

Ans 🗳 A. Wind power density

X B. Wind temperature

X C. Air pressure

X D. Solar irradiance

Question ID: 441009311977
Option 1 ID: 4410091214334
Option 2 ID: 4410091214335
Option 3 ID: 4410091214336
Option 4 ID: 4410091214337
Status: Answered

Chosen Option : A

Q.8 An induction motor has rotor resistance Rr=0.5 and rotor reactance Xr=1.5. At what slip does the motor develop maximum running torque?

Δne

✓ A. 0.33

X B. 0.60 **X** C. 1.5

X D. 0.15

Adda

Question ID: 441009356338

Option 1 ID: 4410091391459

Option 2 ID: 4410091391460

Option 3 ID: 4410091391461

Option 4 ID: 4410091391458

Status: Answered

Chosen Option : A

Q.9 In a radial system, which part of the distributor carries the highest load?

Ans X A. The far end of the distributor

X B. The middle of the distributor

C. The end near the feeding point

X D. The end connected to consumers

Question ID: 441009463545

Option 1 ID : 4410091812758

Option 2 ID : 4410091812760

Option 3 ID: 4410091812759

Option 4 ID: 4410091812761

Status : Answered

Chosen Option : $\boldsymbol{\mathsf{D}}$





Q.10 What kind of system is used in a secondary distribution to supply electricity to consumers?

Ans X A. 3-phase, 3-wire system

B. 3-phase, 4-wire system

X C. Single-phase, 2-wire system

X D. DC 2-wire system

Question ID: 441009463538
Option 1 ID: 4410091812730
Option 2 ID: 4410091812732
Option 3 ID: 4410091812731
Option 4 ID: 4410091812733
Status: Answered

Chosen Option : **B**

Q.11 According to Norton's theorem, any linear two-terminal circuit can be replaced by an equivalent circuit consisting of ______.

Ans An A. a current source in parallel with an equivalent resistance

X B. a voltage source in parallel with an equivalent resistance

X C. a current source in series with an equivalent resistance

X D. a voltage source in series with an equivalent resistance

Question ID: 44100995112
Option 1 ID: 441009378393
Option 2 ID: 441009378394
Option 3 ID: 441009378395
Option 4 ID: 441009378392
Status: Answered

Chosen Option: A

Q.12 In a Schering bridge used for high voltage testing, which component is usually placed in the arm opposite to the unknown capacitor?

Ans X A. Standard inductor

X B. Current transformer

X C. Variable inductor

D. Standard capacitor

Question ID: 441009311303 Option 1 ID: 4410091211639 Option 2 ID: 4410091211642

Option 3 ID : **4410091211640** Option 4 ID : **4410091211641** Status : **Answered**

Chosen Option : C

Q.13 In a single-phase half-wave controlled rectifier with an RL load, under steady-state conditions, the SCR continues to conduct:

Ans X A. for a fixed duration of 90° after firing

X B. only until the AC input becomes negative

C. until the current through the SCR naturally falls to zero

X D. until the gate pulse is removed

Question ID: 441009293931

Option 1 ID: 4410091142589

Option 2 ID : **4410091142586** Option 3 ID : **4410091142588**

Option 4 ID : 4410091142587

Status : **Answered**

Chosen Option : C





Q.14 Which of the following is a commonly used ADC IC to interface with the 8051 microcontroller?

Ans

X A. IC 741

X B. IC 7400

X C. IC 555

✓ D. IC 0804

Question ID: 441009372718

Option 1 ID: 4410091456476 Option 2 ID: 4410091456479 Option 3 ID: 4410091456478

Option 4 ID: 4410091456477 Status: Answered

Chosen Option: A

Q.15 Which of the following ports of the 8051 microcontroller requires pull up resistors for its functioning?

Ans X A. Port 3

✓ B. Port 0

X C. Port 1

X D. Port 2

Question ID: 441009372769

Option 1 ID: 4410091456671

Option 2 ID: 4410091456668

Option 3 ID: 4410091456669 Option 4 ID: 4410091456670

Status: Not Answered

Chosen Option: --

Q.16 What is the expression for the resonant frequency fr of a parallel RLC circuit?

Ans \times A. fr = 1/(2 π RC)

$$ightharpoonup$$
 B. fr = 1/(2 $\pi\sqrt{LC}$)

$$\times$$
 c. fr = $1/\sqrt{(L/C)}$

 \times D. fr = R/(2 π L)

Question ID: 441009329618

Option 1 ID: 4410091284910

Option 2 ID: 4410091284912

Option 3 ID: 4410091284913

Option 4 ID: 4410091284911

Status: Answered

Chosen Option: B





Q.17 In which biasing condition does a Zener diode exhibit voltage regulation behaviour?

Ans 🧼 A. Reverse bias

X B. Both forward and reverse biases

X C. Forward bias

X D. No bias

Question ID: 441009293963
Option 1 ID: 4410091142734
Option 2 ID: 4410091142736
Option 3 ID: 4410091142733
Option 4 ID: 4410091142735

Status : Answered

Chosen Option : ${\bf A}$

Q.18 What does the interconnected system reduce during peak load hours?

Ans X A. Cable length

B. Reserve power capacity

X C. Transformer size

X D. Power factor

Question ID: 441009463541 Option 1 ID: 4410091812745 Option 2 ID: 4410091812743

Option 3 ID : **4410091812744** Option 4 ID : **4410091812742** Status : **Answered**

Chosen Option: B

Q.19 What is the equivalent conductance Geq when 'n' identical conductances each of value G are connected in parallel?

Ans X A. 1/nG

X C. Gⁿ

X D. G/n

Question ID: 441009329673

Option 1 ID: 4410091285129 Option 2 ID: 4410091285128 Option 3 ID: 4410091285127 Option 4 ID: 4410091285126

Status : **Answered** Chosen Option : **B**

Q.20 What is the primary reason for maintaining the same terminal voltage and current during a source transformation?

Ans X A. To simplify internal resistance calculation

X B. To reduce the load impedance

C. To maintain the same amount of power delivered to the load

X D. To ensure the sources are connected in parallel

Question ID: 441009329489

Option 1 ID: 4410091284390 Option 2 ID: 4410091284393 Option 3 ID: 4410091284392

Option 4 ID : **4410091284391**Status : **Answered**

Chosen Option : C





Q.21 In nodal analysis, if a circuit has 'n' independent nodes, how many simultaneous equations are required to solve the node voltages?

Ans

 \times A. n + 1

X B. n − 2

X c. n

✓ D. n - 1

Question ID: 441009326509

Option 1 ID: 4410091272383 Option 2 ID: 4410091272385 Option 3 ID: 4410091272382

Option 4 ID: 4410091272384 Status: Answered

Chosen Option : D

Q.22 What is the typical cooking time of a paraboloidal dish cooker?

Ans X A. 2-3 hr

X C. 20-30 sec

X D. 6-12 hr

Question ID: 441009931042

Option 1 ID: 4410093677990 Option 2 ID: 4410093677991 Option 3 ID: 4410093677992

Option 4 ID: 4410093677993 Status: Answered

Chosen Option: B

Q.23 Which of the following ports of the 8051 microcontroller DO NOT have any alternate function?

Ans

A. Port 1

X B. Port 2

X C. Port 0

X D. Port 3

Question ID: 441009372689 Option 1 ID: 4410091456365 Option 2 ID: 4410091456366 Option 3 ID: 4410091456364 Option 4 ID: 4410091456367 Status: Not Answered

Chosen Option: --

Q.24 What is a key maintenance requirement for a single-phase induction motor?

Ans X A. Adjusting field coils

B. Lubricating bearings regularly

X C. Cleaning commutator

X D. Replacing rotor windings

Question ID: 441009355664

Option 1 ID: 4410091388771 Option 2 ID: 4410091388768 Option 3 ID: 4410091388770

Option 4 ID: 4410091388769 Status: Answered

Chosen Option : B



Q.25 What is the formula for equivalent equilateral spacing d used in inductance calculation for an unsymmetrically spaced transposed line?

$$\checkmark$$
 A d = $\sqrt[3]{(d_1 * d_2 * d_3)}$

$$\times$$
 B. $d = \frac{(d_1 + d_2 + d_3)}{3}$

$$\times$$
 D. d = min((d₁, d₂, d₃)

Question ID: 441009471488

Option 1 ID: 4410091841374 Option 2 ID: 4410091841373 Option 3 ID: 4410091841375

Option 4 ID: 4410091841376 Status: Answered

Chosen Option: A

Q.26 Which of the following is commonly used to simplify a linear electrical network for easier

Ans X A. Lenz's Law

X B. Faraday's Law

C. Superposition Theorem

X D. Joule's Law

Question ID: 441009329528

Option 1 ID: 4410091284556 Option 2 ID: 4410091284557

Option 3 ID: 4410091284554

Option 4 ID: 4410091284555

Status: Answered

Chosen Option : ${\bf C}$

Q.27 In which of the following applications is a switched reluctance motor most commonly used?

Ans X A. Analog wall clock

X B. Compact disc player

X C. AC compressor

D. Electric vehicle drive train

Question ID: 441009355535

Option 1 ID: 4410091388240

Option 2 ID: 4410091388241 Option 3 ID: 4410091388238

Option 4 ID: 4410091388239

Status: Answered

Chosen Option: C





Q.28 To measure AC current using a CRO, which of the following is typically required?

Ans X A. A low-frequency signal generator

B. A current probe or shunt resistor for current measurement

X C. A rectifier circuit to convert AC to DC

X D. A capacitive divider to reduce voltage

Question ID: 441009311467
Option 1 ID: 4410091212287
Option 2 ID: 4410091212290
Option 3 ID: 4410091212288
Option 4 ID: 4410091212289
Status: Answered

Chosen Option: C

Q.29 Which of the following best describes the purpose of using a Carey Foster bridge in inductance measurement?

Ans X A. To eliminate the effect of mutual inductance in transformer testing

X B. To measure low resistance with high precision

C. To compare two nearly equal inductances

X D. To determine capacitance in high-frequency circuits

Question ID: 441009311337 Option 1 ID: 4410091211779 Option 2 ID: 4410091211776 Option 3 ID: 4410091211777 Option 4 ID: 4410091211778 Status: Answered

Chosen Option : C

Q.30 Which of the following is NOT true about direct drive generators in wind turbines?

Ans X A. They tend to have large diameters.

B. They require a gearbox to adjust rotor speeds.

X C. They are used in variable-speed wind turbines.

X D. They often work with power electronic converters

Question ID: 44100952043
Option 1 ID: 441009207300
Option 2 ID: 441009207302
Option 3 ID: 441009207301
Option 4 ID: 441009207303
Status: Answered

Chosen Option : \boldsymbol{C}

Q.31 Which of the following is the main advantage of active stall control over passive stall control in wind turbines?

Ans X A. It increases the swept area of the rotor

 $\ensuremath{\checkmark\!\!\!\!/}$ B. It allows better regulation of power output at high wind speeds

X C. It reduces turbine weight significantly

X D. It completely eliminates the need for braking systems

Question ID: 441009312006 Option 1 ID: 4410091214453 Option 2 ID: 4410091214451

Option 3 ID : **4410091214452** Option 4 ID : **4410091214450**

Status : **Answered** Chosen Option : **B**





Q.32 What is the use of booster mirrors with a flat plate collector?

Ans X A. To decrease the reflection to atmosphere

B. To increase the beam radiation component on the absorber

X C. To increase the diffuse radiation component on the absorber

X D. To increase the reflection to atmosphere

Question ID: 441009931520
Option 1 ID: 4410093679855
Option 2 ID: 4410093679857
Option 3 ID: 4410093679856
Option 4 ID: 4410093679854
Status: Answered

Chosen Option: B

Q.33 In an oscilloscope, if the deflection sensitivity is 20 mV/cm, what is the voltage required to produce a 5 cm deflection?

Ans X A. 2 V

X C. 0.2 V

X D. 0.5 V

Question ID: 441009311521
Option 1 ID: 4410091212502
Option 2 ID: 4410091212501
Option 3 ID: 4410091212500
Option 4 ID: 4410091212503

Status : **Answered** Chosen Option : **B**

Q.34 Fleming's right-hand rule is used to determine the direction of:

X B. voltage drop in a resistor

X C. force on a current-carrying conductor

X D. magnetic field in a coil

Question ID: 441009329713

Option 1 ID: 4410091285287 Option 2 ID: 4410091285289 Option 3 ID: 4410091285288 Option 4 ID: 4410091285286

Status : Answered

Chosen Option : A

Q.35 Which of the following best describes the working principle of a Permanent Magnet Moving Coil (PMMC) instrument?

Ans X A. The coil is deflected by the mechanical force created by the battery in the circuit.

X B. The coil experiences a torque due to the interaction with the external electric field.

X C. The current causes a change in the resistance of the coil, which is measured.

D. The coil experiences a torque due to the interaction with a magnetic field generated by a permanent magnet.

> Question ID : **441009311678** Option 1 ID : **4410091213133**

Option 2 ID : **4410091213131** Option 3 ID : **4410091213134**

Option 4 ID : **4410091213132**Status : **Answered**

Chosen Option : D





Q.36 Which of the following is correct for the maximum demand of a generating plant?

(I) It determines installed capacity

(II) It is always higher than the connected load

Ans X A. Both statements I and II are correct

X C. Both statements I and II are incorrect

D. Only statement I is correct

X B. Only statement II is correct

Question ID: 441009271756
Option 1 ID: 4410091055620
Option 2 ID: 4410091055619
Option 3 ID: 4410091055621
Option 4 ID: 4410091055618
Status: Answered

Chosen Option : **D**

Q.37 Which of the following is the key reason for preventive maintenance in small wind turbines?

Ans A. Minimise downtime and prolong turbine life

X B. Avoid energy generation

X C. Shut down power continuously

X D. Increase installation cost

Question ID: 441009312035
Option 1 ID: 4410091214567
Option 2 ID: 4410091214569
Option 3 ID: 4410091214568
Option 4 ID: 4410091214566
Status: Answered

Chosen Option : A

Q.38 Why was a UPS NOT considered critical during early DOS operating systems?

Ans X A. DOS had auto-restart features.

X B. DOS was not used on computers.

C. DOS did not require a shutdown procedure.

X D. DOS had built-in battery backup.

Question ID: 441009293918
Option 1 ID: 4410091142534
Option 2 ID: 4410091142537
Option 3 ID: 4410091142536
Option 4 ID: 4410091142535
Status: Answered

Chosen Option : C

Q.39 What is the effect of non-uniform current distribution due to the proximity effect?

Ans 🕜 A. Increased effective resistance

X B. Reduced efficiency

X C. Better power factor

X D. Increased voltage

Question ID: 441009471492

Option 1 ID: 4410091841390

Option 2 ID: 4410091841389

Option 3 ID : 4410091841392

Option 4 ID: 4410091841391

Status : Answered

Chosen Option : $\boldsymbol{\mathsf{B}}$





Q.40 What primarily determines the power developed by a synchronous generator?

Ans X A. Load power factor

B. Rotor excitation and load angle

X C. Stator resistance

X D. Rotor speed only

Question ID: 441009355785
Option 1 ID: 4410091389242
Option 2 ID: 4410091389243
Option 3 ID: 4410091389240
Option 4 ID: 4410091389241
Status: Answered

Chosen Option : **D**

Q.41 In what way does regular maintenance enhance a transformer's service life and energy performance by addressing potential issues before they lead to operational inefficiencies or failures?

Ans X A. By increasing the operating temperature

X B. By reducing the need for protective device

X C. By allowing operation beyond rated capacity

D. By identifying and addressing insulation deterioration

Question ID: 441009337581

Option 1 ID: 4410091316304

Option 2 ID: 4410091316307

Option 3 ID: 4410091316305

Option 4 ID: 4410091316306

Status: Answered

Chosen Option : **D**

Q.42 The thermal resistance of the thyristor is ___

Ans X A. independent of power loss by the thyristor

X B. directly proportional to the power loss by the thyristor

C. inversely proportional to the power dissipated by the thyristor

💢 D. always zero

Question ID: 44100988753

Option 1 ID: 441009353013 Option 2 ID: 441009353011 Option 3 ID: 441009353012 Option 4 ID: 441009353014

Status : **Answered** Chosen Option : **B**

Q.43 What is the primary function of a grid-interactive solar power system?

Ans X A. Supplies power to as well as receives power from the grid as required

X B. Works only when grid fails

C. Always supplies power to the grid

X D. Always receives power from the grid

Question ID: 441009931864

Option 1 ID: 4410093681259 Option 2 ID: 4410093681261 Option 3 ID: 4410093681258

Option 4 ID : **4410093681260** Status : **Answered**

Chosen Option: A





Q.44 In a singly fed distributor, what happens to the current as we move away from the feeding point?

Ans X A. It doubles

B. It decreases

X C. It increases

X D. It remains constant

Question ID: 441009463532 Option 1 ID: 4410091812709 Option 2 ID: 4410091812708 Option 3 ID: 4410091812706

Option 4 ID : **4410091812707**Status : **Answered**

Chosen Option : **B**

Q.45 Why is the determination of the demand factor of plants essential during cost generation?

Ans X A. It determines the power loss of the plant

X B. It calculates installed capacity of plant

X C. It is the ratio of connected load to maximum demand

D. It provides better load utilisation

Question ID: 441009271570

Option 1 ID : **4410091055102** Option 2 ID : **4410091055104** Option 3 ID : **4410091055105**

Option 4 ID: 4410091055103

Status: Answered

Chosen Option: B

Q.46 Calculate the active power (P) in a balanced three-phase delta-connected system with line voltage V_L = 400 V, line current I_L = 10 A and power factor $\cos \varphi$ = 0.8.

X B. 4800 W

X C. 6400 W

X D. 5900 W

Question ID: 441009329814

Option 1 ID: **4410091285689** Option 2 ID: **4410091285686** Option 3 ID: **4410091285688**

Option 4 ID : **4410091285687** Status : **Answered**

Chosen Option : A

Q.47 What does the superposition theorem state about the response in a circuit with multiple sources?

Ans X A. The total response is the product of the individual responses.

B. The total response is the sum of the individual responses due to each source.

X C. The total response is the difference between the individual responses.

X D. The total response is determined by the strongest source only.

Question ID: 441009329530

Option 1 ID: 4410091284562 Option 2 ID: 4410091284563 Option 3 ID: 4410091284565

Option 4 ID: **4410091284564**Status: **Answered**

Chosen Option : B





Q.48 What is the primary function of a Megger?

Ans A. To measure the insulation resistance of electrical cables and equipment

X B. To measure the power consumption of an electrical device

X C. To measure the voltage drop across conductors

X D. To measure the resistance of electrical components

Question ID: 441009326703
Option 1 ID: 4410091273177
Option 2 ID: 4410091273179
Option 3 ID: 4410091273178
Option 4 ID: 4410091273176
Status: Answered

Chosen Option: A

Q.49 Which regulation requires the State Load Dispatch Centre (SLDCs) to operate independently from state utilities?

Ans X A. National Electricity Policy 2005

X B. CERC Tariff Regulation Act 2019

X C. Energy Conversion Act 2001

D. Electricity Act 2003

Question ID: 441009281130 Option 1 ID: 4410091092447 Option 2 ID: 4410091092449 Option 3 ID: 4410091092448 Option 4 ID: 4410091092450

Status: Answered

Chosen Option : D

Q.50 How do analog sensors communicate with the 8051 microcontroller?

Ans A. By using an ADC (Analog to Digital Converter)

X B. Through UART only

X C. Directly through I/O pins

X D. By using PWM signal only

Question ID: 441009372809

Option 1 ID: 4410091456825 Option 2 ID: 4410091456827 Option 3 ID: 4410091456824 Option 4 ID: 4410091456826

 $\mbox{Status: {\bf Answered}} \\ \mbox{Chosen Option: {\bf C}} \\$

Q.51 What is the nature of armature reaction in a synchronous machine operating at zero power factor leading?

Ans X A. No effect

B. Total magnetising

X C. Total cross magnetising

X D. Partially magnetising and partially cross magnetising

Question ID: 441009355684

Option 1 ID: 4410091388843 Option 2 ID: 4410091388841 Option 3 ID: 4410091388842

Option 4 ID : **4410091388840** Status : **Answered**

Chosen Option: B





Q.52 What is the main function of solar thermal water pumps?

Ans X A. Uses solar thermal energy to circulate hot water

X B. Uses solar thermal energy to evaporate water

C. Uses solar thermal energy for the production of power to drive the pump

X D. Uses electric powered pumps to circulate water heated by solar energy

Question ID: 441009931038 Option 1 ID: 4410093677975 Option 2 ID: 4410093677974 Option 3 ID: 4410093677977 Option 4 ID: 4410093677976 Status: Answered

Chosen Option: C

Q.53 Diversity factor is usually:

Ans 🕜 A. the ratio of sum of Individual Maximum Demands to the Maximum Demand of the **Entire System**

X B. the ratio of the Maximum Demand of the Entire System to the sum of Individual Maximum Demands

X C. the ratio of the average Demand of the Entire System to the sum of Individual Maximum Demands

🗡 D. the ratio of the average Demand of the Entire System to the Maximum Demand

Question ID: 44100990958 Option 1 ID: 441009361980 Option 2 ID: 441009361981 Option 3 ID: 441009361982 Option 4 ID: 441009361983

Status: Answered Chosen Option: A

Q.54 Which of the following types of keyboard is commonly interfaced with 8051?

Ans X A. Optical keyboard

B. Matrix keyboard

X C. Mechanical keyboard

X D. Wireless keyboard

Ouestion ID: 441009372701

Option 1 ID: 4410091456414

Option 2 ID: 4410091456413

Option 3 ID: 4410091456412

Option 4 ID: 4410091456415

Status: Answered

Chosen Option: B





Q.55 What is the sequence in steps required in an agrichemical-based power plant for electricity generation?

(I)Feedstock Storage (II) Feedstock Preparation (III) Feedstock Identification (IV) Power generation

Ans X A. I, III, II and IV

X B. I, II, IV and III

X C. IV, III, II and I

✓ D. III, I, II and IV

Question ID : **441009286560**Option 1 ID : **4410091113216**Option 2 ID : **4410091113213**

Option 3 ID: **4410091113214**Option 4 ID: **4410091113215**

Status : Answered

Chosen Option: D

Q.56 In a circuit having pure inductor with an AC source, what is the phase difference between the current and voltage?

Ans X A. Voltage leads current by an angle less than $\pi/2$.

 \checkmark B. Current lags voltage by $\pi/2$.

 \times C. Current leads voltage by $\pi/2$.

X D. Voltage and current are in phase.

Question ID: 441009329788

Option 1 ID: 4410091285584

Option 2 ID: 4410091285585

Option 3 ID: **4410091285583**Option 4 ID: **4410091285582**Status: **Answered**

Chosen Option: B

Q.57 What is meant by node in an electric circuit?

Ans X A. A node is defined as a place where load is connected.

X B. A node is defined as a loop which does not contain any other loops.

C. A node is defined as a point where two or more branches are joined.

X D. A node is defined as a place where source is connected.

Question ID: 44100995194

Option 1 ID: 441009378721

Option 2 ID: 441009378723

Option 3 ID : 441009378722

Option 4 ID: 441009378720

Status : Answered

Chosen Option : C





Q.58 What is the value of Self-GMD (or GMR) for a solid round conductor of radius r?

Ans X A. r²

X B. 1.5 × r

✓ C. 0.7788 × r

X D. 2 × r

Question ID: 441009471479

Option 1 ID: 4410091841340 Option 2 ID: 4410091841338

Option 3 ID: 4410091841339 Option 4 ID: 4410091841337

Status: Answered

Chosen Option: C

Q.59 What is the main function of a snubber circuit in a TRIAC-based control system?

Ans X A. Increase load voltage

✓ B. Prevent false triggering due to high dv/dt

X C. Increase the conduction angle

X D. Provide over-current protection

Question ID: 441009293985

Option 1 ID: 4410091142846 Option 2 ID: 4410091142847

Option 3 ID: 4410091142845 Option 4 ID: 4410091142848

Status: Answered

Chosen Option : B

Q.60 What is the most accurate description of how 'direct hooking' is used to illegally access electricity?

Ans X A. Bypassing the circuit breaker to reduce voltage drop

X B. Using energy-efficient appliances to reduce consumption

C. Illegally tapping into power lines before the meter to avoid billing

X D. Installing legal sub-meters to monitor internal energy use

Question ID: 441009337653

Option 1 ID: 4410091316593 Option 2 ID: 4410091316594

Option 3 ID: 4410091316595 Option 4 ID: 4410091316592

Status: Answered

Chosen Option: C

Q.61 Which of following is NOT an example of solid biomass?

Ans X A. Wood Pellets

X B. Agriculture Waste

C. Natural Gas

X D. Municiple Solid Waste

Question ID: 441009286599

Option 1 ID: 4410091113369 Option 2 ID: 4410091113370

Option 3 ID: 4410091113371 Option 4 ID: 4410091113372

Status: Answered

Chosen Option: C





Q.62 A 3-phase synchronous generator delivers 100 kW output power. The total losses amount to 5 kW. What is the efficiency of the generator?

Δns

× Δ 97%

X B. 90%

X C. 92.5%

✓ D. 95.24%

Question ID: 441009355775

Option 1 ID: **4410091389203** Option 2 ID: **4410091389200** Option 3 ID: **4410091389202**

Option 4 ID : **4410091389201** Status : **Answered**

Chosen Option : **D**

Q.63 What elements contribute to the restoration of frequency stability following a sudden fault in the grid system?

Ans

A. Generator Governor Control

X B. Load Changer

X C. Surge Arrester

X D. Fuse and Circuit Breaker

Question ID: 441009281095

Option 1 ID: 4410091092310 Option 2 ID: 4410091092308 Option 3 ID: 4410091092307

Option 4 ID: **4410091092309** Status: **Answered**

Chosen Option: A

Q.64 Which design modification in an energy-efficient motor contributes most to enhancing its magnetic efficiency?

. ...

A. Use of low-loss silicon steel laminations

X B. Use of cast aluminium rotor

X C. Large air gap

X D. Shorter stator slots

Question ID: 441009337601

Option 1 ID: 4410091316387

Option 2 ID: 4410091316384

Option 3 ID: 4410091316386

Option 4 ID: 4410091316385

Status : Answered

Chosen Option : A





Q.65 What is the formula for calculating total apparent power (S) in a balanced three-phase star or delta system?

$$\checkmark$$
 A. $S = \sqrt{3} \times V_{Line} \times I_{Line}$

 \times B. S = $V_{Line} \times I_{Line}$ \times C. S = $V_{Phase} \times I_{Phase}$

 \times D. S = $\sqrt{3} \times V_{\text{Phase}} \times I_{\text{Phase}}$

Question ID: 441009329829

Option 1 ID: 4410091285746

Option 2 ID: 4410091285747 Option 3 ID: 4410091285749

Option 4 ID: 4410091285748

Status: Answered

Chosen Option: A

Q.66 Which of the following addressing modes is used in the instruction MOV A, #25H of the 8051 microcontroller?

Ans X A. Direct

X B. Register Indirect

X C. Register

D. Immediate

Question ID: 441009371080

Option 1 ID: 4410091450222

Option 2 ID: 4410091450223

Option 3 ID: 4410091450221

Option 4 ID: 4410091450220 Status: Not Answered

Chosen Option: --

Q.67 Why are BLDC motors preferred in drones and quadcopters?

Ans X A. They require no power supply

X B. They are cheaper than brushed motors

X C. They operate at lower speeds

D. They provide high torque and precise control

Question ID: 441009355529

Option 1 ID: 4410091388217

Option 2 ID: 4410091388214

Option 3 ID: 4410091388215

Option 4 ID: 4410091388216

Status: Answered

Chosen Option : **D**

Q.68 In mesh analysis, how are the directions of mesh currents chosen?

Ans X A. Must follow the direction of voltage sources

B. Can be chosen arbitrarily

X C. Must oppose each other in adjacent meshes

X D. Always in clockwise direction

Question ID: 441009326439

Option 1 ID: 4410091272078

Option 2 ID: 4410091272081

Option 3 ID: 4410091272080

Option 4 ID: 4410091272079

Status: Answered

Chosen Option: B





Q.69 Which of the following is a primary function of a measurement system?

Ans X A. To provide precise control of manufacturing processes

X B. To amplify the input signal

C. To determine the value of the measured quantity accurately

X D. To convert electrical energy into mechanical energy

Question ID: 441009311687 Option 1 ID: 4410091213167 Option 2 ID: 4410091213169 Option 3 ID: 4410091213168 Option 4 ID: 4410091213166 Status: Answered

Chosen Option: C

Q.70 Which energy source is predominantly used in India to meet national energy requirements, according to the 2025 energy scenario?

Ans 🕜 A. Coal

X B. Natural Gas

X C. Nuclear Energy

X D. Hydropower

Question ID: 441009337513
Option 1 ID: 4410091316026
Option 2 ID: 4410091316024
Option 3 ID: 4410091316025
Option 4 ID: 4410091316027
Status: Answered

Chosen Option : A

Q.71 ____ are considered as series elements in the equivalent circuit of a long transmission line.

Ans X A. Resistance and capacitance

X B. Reactance and susceptance

X C. Capacitance and conductance

D. Resistance and inductive reactance

Question ID: 441009471506

Option 1 ID: 4410091841447 Option 2 ID: 4410091841448 Option 3 ID: 4410091841445 Option 4 ID: 4410091841446

 $\mbox{Status: } \textbf{Answered} \\ \mbox{Chosen Option: } \textbf{D} \\$

Q.72 What is the primary requirement of aerodynamic surfaces on wind turbine blades?

Ans X A. To increase rotor speed

X B. To generate more power at low wind speeds

X C. To adjust the pitch angle of the blades for high wind speeds

D. For efficient power conversion process

Question ID: 44100952034

Option 1 ID: 441009207266 Option 2 ID: 441009207267 Option 3 ID: 441009207265 Option 4 ID: 441009207264

Status : **Answered**

Chosen Option : D





Q.73 What is the plant use factor of generating plant of capacity 50 MW runs at full load throughout the day?

Ans

✓ A. 1.0

X B. 2.0

X C. 0.5

X D. 0.25

Question ID: 441009272440

Option 1 ID: 4410091058315 Option 2 ID: 4410091058317 Option 3 ID: 4410091058316

Option 4 ID: 4410091058318 Status: Answered

Chosen Option: A

Q.74 What is a DIAC primarily used for in power electronics?

Ans X A. Voltage regulation

B. Triggering TRIACs

X C. Signal amplification X D. Frequency modulation

Question ID: 441009293983

Option 1 ID: 4410091142829 Option 2 ID: 4410091142830 Option 3 ID: 4410091142831

Option 4 ID: 4410091142832 Status: Answered

Chosen Option : D

Q.75 Which of the following is a conditional jump instruction in the 8051 microcontroller?

Ans X A. SJMP

X B. NOP

C. JNZ

X D. AJMP

Question ID: 441009372677

Option 1 ID: 4410091456320 Option 2 ID: 4410091456323 Option 3 ID: 4410091456322 Option 4 ID: 4410091456321

Status: Not Answered

Chosen Option: --

Q.76 During maintenance of a 3-phase induction motor, why is the vibration analysis performed?

Ans X A. To measure slip frequency

X B. To assess power factor

X C. To check the insulation resistance

D. To detect misalignment and bearing defects

Question ID: 441009356296

Option 1 ID: 4410091391284 Option 2 ID: 4410091391285 Option 3 ID: 4410091391282

Option 4 ID: 4410091391283

Status: Answered

Chosen Option: D





Q.77 What is the significance of applying an optimised load balancing approach in managing unbalanced feeders within an electrical distribution network?

Ans X A. To complicate manual balancing operations

X C. To increase the voltage, drop across feeder ends

X D. To reduce the need for transformer maintenance

Question ID: 441009337646
Option 1 ID: 4410091316565
Option 2 ID: 4410091316566
Option 3 ID: 4410091316564
Option 4 ID: 4410091316567
Status: Answered

Chosen Option : B

Q.78 In a single-phase half-wave controlled rectifier with a resistive load, if the firing angle is 90°, what is the conduction angle?

Ans 💢 A. 60°

X B. 45°

X C. 180°

✓ D. 90°

Question ID: 441009293925
Option 1 ID: 4410091142563
Option 2 ID: 4410091142562
Option 3 ID: 4410091142565
Option 4 ID: 4410091142564
Status: Answered

Chosen Option: B

Q.79 Which of the following statements best describes the energy efficiency advantage of LED bulbs compared to CFL and incandescent bulbs?

Ans A. LEDs have an efficiency of around 130 lumens per watt, making them more than twice as efficient as CFLs and over ten times more efficient than incandescent bulbs.

X B. CFL bulbs are more energy efficient than LEDs but produce lower quality light.

C. Incandescent bulbs are the most energy efficient but have a shorter lifespan than LEDs.

 \nearrow D. LEDs produce about the same light output per watt as incandescent bulbs but last longer.

Question ID: 441009337672

Option 1 ID: 4410091316669

Option 2 ID: 4410091316670

Option 3 ID : **4410091316671** Option 4 ID : **4410091316668**

Status: Answered

Chosen Option : A





Q.80 Which of the following best defines the precision of a measuring instrument?

Ans X A. Maximum error allowed by the instrument

X B. Smallest change in the input that can be detected

X C. Closeness of the measured value to the true value

✓ D. Ability of the instrument to reproduce the same reading under unchanged conditions

Question ID: 441009311365 Option 1 ID: 4410091211884 Option 2 ID: 4410091211883 Option 3 ID: 4410091211881 Option 4 ID: 4410091211882

Status : Answered

Chosen Option : $\boldsymbol{\mathsf{D}}$

Q.81 How much on-chip RAM is available in the 8051 microcontroller?

Ans X A. 4 KB OTP

✗ B. 64 KB

C. 128 bytes

X D. 256 bytes

Question ID: 441009372667

Option 1 ID: 4410091456283 Option 2 ID: 4410091456282 Option 3 ID: 4410091456280

Option 4 ID: 4410091456281

Status : Answered

Chosen Option : C

Q.82 Which device within an APFC panel detects the power factor and triggers the switching of capacitor banks?

Ans X A. Overload relay

B. Power factor relay controller

X C. Voltage regulator

X D. Current transformer

Question ID: 441009337593

Option 1 ID: 4410091316355 Option 2 ID: 4410091316352 Option 3 ID: 4410091316353

Option 4 ID : **4410091316354** Status : **Answered**

Chosen Option : B

Q.83 What is the effect of changing excitation in a synchronous motor operating at constant load?

Ans X A. Change in torque angle

X B. Change in motor speed

X C. Change in power output

D. Change in power factor

Question ID: 441009356272

Option 1 ID : 4410091391189 Option 2 ID : 4410091391186 Option 3 ID : 4410091391187

Option 4 ID: 4410091391188

Status : Answered

Chosen Option : D





Q.84 A single-phase ring distributor ABC is fed at point A. The loads at B and C are as follows:

At point B: 20 A at 0.8 power factor lagging At point C: 15 A at 0.6 power factor lagging

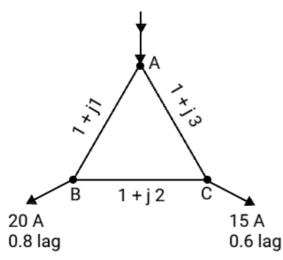
The impedances of the sections are as follows:

AB = (1 + j1) ohmBC = (1 + j2) ohmCA = (1 + j3) ohm

It is given that

Current in section AB = 16 - j12 ohm and Current in section AC = 9 - j12 ohm.

What is the value of the total current fed at point A?



Ans X A. 26 - j22 A

✓ B. 25 – j24 A

X C. 27 - j20 A

X D. 34 - j30 A

Question ID: 441009471448

Option 1 ID: 4410091841216

Option 2 ID: 4410091841214

Option 3 ID: 4410091841215 Option 4 ID: 4410091841213

Status: Not Answered

Chosen Option: --

Q.85 How does a single-phase induction motor initially start rotating?

Ans X A. Through a rotating magnetic field created by a single winding

X B. By using permanent magnets on the rotor

C. Using an auxiliary winding to create a starting torque

X D. By reversing current in the rotor

Question ID: 441009355605

Option 1 ID: 4410091388511

Option 2 ID: 4410091388513

Option 3 ID: 4410091388512

Option 4 ID: 4410091388510

Status: Answered

Chosen Option: C