

हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड  
Hindustan Petroleum Corporation Limited  
(A Maharatna Company)

Participant ID	
Participant Name	
Test Center Name	Bharat Institute of Technology
Test Date	27/03/2025
Test Time	9:00 AM - 11:30 AM
Subject	Electrical Engineer

Section : English Language

Q.1 Select the correct option that can substitute the highlighted word segment in the given sentence.

She remained calm and composed during the intense debate, carefully choosing her words to counter every argument.

- Ans  1. barking up the wrong tree  
 2. thinking on her feet  
 3. letting the cat out of the bag  
 4. crying over spilled milk

Question ID : 4410096621  
Option 1 ID : 44100926236  
Option 2 ID : 44100926235  
Option 3 ID : 44100926238  
Option 4 ID : 44100926237  
Status : Answered

Chosen Option : 2

Q.2 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. It is also a different question from 'What antecedent factors—for example, personal ity, IQ, risk profile, or quality of network—make the process go faster or more smoothly?'  
B. Despite the trends, the study of career transitioning is still in its infancy.  
C. There is plenty of how-to advice, but we still know precious little about exactly how people change careers.  
D. 'How' one changes careers is a very different question from 'when' or 'with what frequency within a given population'.

- Ans  1. ABCD  
 2. DABC  
 3. CADB  
 4. BCDA

Question ID : 4410096575  
Option 1 ID : 44100926054  
Option 2 ID : 44100926053  
Option 3 ID : 44100926052  
Option 4 ID : 44100926051  
Status : Answered

Chosen Option : 2

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Q.3 Select the most appropriate synonym of the given word.

Knave

- Ans  1. Vigilant  
 2. Villain  
 3. Vibrant  
 4. Veneration

Question ID : 4410096645  
Option 1 ID : 44100926332  
Option 2 ID : 44100926331  
Option 3 ID : 44100926333  
Option 4 ID : 44100926334  
Status : Answered  
Chosen Option : 4

Q.4 Select the most appropriate option to fill in the blank.

Despite the heavy rain, the hikers remained \_\_\_\_ and continued their journey up the mountain.

- Ans  1. determined  
 2. careless  
 3. reluctant  
 4. indifferent

Question ID : 4410095494  
Option 1 ID : 44100921770  
Option 2 ID : 44100921771  
Option 3 ID : 44100921772  
Option 4 ID : 44100921773  
Status : Answered  
Chosen Option : 1

Q.5 Select the most appropriate ANTONYM of the given word.

Licentious

- Ans  1. Lubricous  
 2. Prosperous  
 3. Virtuous  
 4. Lecherous

Question ID : 4410096637  
Option 1 ID : 44100926301  
Option 2 ID : 44100926300  
Option 3 ID : 44100926299  
Option 4 ID : 44100926302  
Status : Not Answered  
Chosen Option : --

Q.6 Select the most appropriate option to fill in the blank.

He always dreamed of becoming \_\_\_\_\_ university professor, so he worked hard to achieve his goal.

- Ans
- 1. the
  - 2. some
  - 3. an
  - 4. a

Question ID : 4410095491  
Option 1 ID : 44100921758  
Option 2 ID : 44100921761  
Option 3 ID : 44100921759  
Option 4 ID : 44100921760  
Status : Answered  
Chosen Option : 4

Q.7 Select the most appropriate option to fill in the blank.

She completed her work \_\_\_\_\_, ensuring there were no mistakes.

- Ans
- 1. carelessly
  - 2. meticulously
  - 3. hastily
  - 4. recklessly

Question ID : 4410095496  
Option 1 ID : 44100921779  
Option 2 ID : 44100921778  
Option 3 ID : 44100921780  
Option 4 ID : 44100921781  
Status : Answered  
Chosen Option : 2

Q.8 Select the option that can be used as a one-word substitute for the underlined segment in the given sentence.

Dr. Geller gave a detailed, interesting, and engaging lecture on the Jurassic Age.

- Ans
- 1. fancy
  - 2. flowery
  - 3. farcical
  - 4. fascinating

Question ID : 4410096583  
Option 1 ID : 44100926085  
Option 2 ID : 44100926086  
Option 3 ID : 44100926084  
Option 4 ID : 44100926083  
Status : Answered  
Chosen Option : 3

Q.9 Select the option that can be used as a one-word substitute for the underlined segment in the given sentence.

I love to travel but to I hate going to Adam's house as the journey is excessively long and exhausting.

- Ans
- 1. toddler
  - 2. tempting
  - 3. taxidermy
  - 4. tedious

Question ID : 4410096579  
Option 1 ID : 44100926069  
Option 2 ID : 44100926068  
Option 3 ID : 44100926070  
Option 4 ID : 44100926067  
Status : Answered  
Chosen Option : 2

Q.10 Select the correct spelling of the underlined incorrectly spelt word in the given sentence.

The beneficiary of the grant was a scholar working on indigenous linguistic traditions.

- Ans
- 1. beneficiary
  - 2. beneficiary
  - 3. benificiary
  - 4. benefeciery

Question ID : 4410096664  
Option 1 ID : 44100926409  
Option 2 ID : 44100926407  
Option 3 ID : 44100926410  
Option 4 ID : 44100926408  
Status : Answered  
Chosen Option : 2

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

The researchers focused \_\_\_\_\_ the impact of colonial policies on indigenous languages.

- Ans
- 1. at
  - 2. on
  - 3. about
  - 4. for

Question ID : 4410095562  
Option 1 ID : 44100922030  
Option 2 ID : 44100922031  
Option 3 ID : 44100922033  
Option 4 ID : 44100922032  
Status : Answered  
Chosen Option : 2

Q.12 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. He made about 14,000 predictions in his lifetime, and by 1970, 12,000 of those predictions had come true and 2,000 were still in the future.
- B. Cayce is a very interesting prophet.
- C. Out of 12,000 predictions, that's incredible
- D. And in all those predictions, he made only one tiny mistake.

- Ans
- 1. DCBA
  - 2. BACD
  - 3. BADC
  - 4. ABCD

Question ID : 4410096571

Option 1 ID : 44100926038

Option 2 ID : 44100926037

Option 3 ID : 44100926035

Option 4 ID : 44100926036

Status : Answered

Chosen Option : 2



**Comprehension:**

Read the given passage and answer the questions that follow.

Informed consent is fundamental to the ethical and legal doctrines respecting research participants' voluntary participation in clinical research, enshrined in such documents as the 1947 Nuremberg Code; reaffirmed in the 1964 Declaration of Helsinki, revised in 1975, and the 1978 Belmont Report; and codified in the United States in the 1981 Common Rule, revised in 2018 and implemented in 2019. Informed consent generally is understood to represent a process, with the informed consent document having a central role. The characteristics of a well-designed consent form are well known: the document must contain information, some statutorily defined, necessary to allow a participant to make an informed decision; be written at a reading level appropriate for its audience; and be of a length that enables complete and thorough reading. Yet, the content and structure of this document has been the subject of discussion for at least three decades, with a consistent consensus throughout this time that these documents are too difficult to read, too complex, and too long and, as a result, frequently fail to facilitate truly informed consent by study participants.

While much of the blame for the failure to provide sufficiently detailed, readable and brief consent forms has been laid at the feet of sponsors and investigators, the reality is that while it is possible to incorporate two of these three elements into a consent form, it is all but impossible to incorporate all three, i.e., concise, sufficiently detailed yet easily readable, for anything but the simplest of clinical trials. The study by Emmanuel and Boyle reviews the consent forms for the COVID-19 vaccine phase III randomised clinical trials conducted by four major pharmaceutical companies that resulted in US regulatory approvals for three of the four vaccines, in the context of these issues.

The study by Emmanuel and Boyle highlights the deficiencies of the COVID-19 vaccine trial consent forms in these areas, proposes revised consent form language to improve readability, understanding and length, and underscores how the medical community has not responded adequately to the decades-long valid criticisms concerning informed consent forms. The revisions proposed by Emmanuel and Boyle to the relatively straightforward COVID-19 vaccine trials' consent forms yielded a document that was substantially longer than ideal, with an overall higher-grade reading level than optimal, underscoring the fundamental inability to successfully incorporate all three of the desirable qualities for a consent form into a single document.

**SubQuestion No : 13**

**Q.13 Which document first enshrined the principle of informed consent in clinical research?**

- Ans  1. The 1964 Declaration of Helsinki  
 2. The 1947 Nuremberg Code  
 3. The 1978 Belmont Report  
 4. The 1981 Common Rule

Question ID : 44100931796

Option 1 ID : 441009126668

Option 2 ID : 441009126669

Option 3 ID : 441009126670

Option 4 ID : 441009126671

Status : Answered

Chosen Option : 2

**Comprehension:**

Read the given passage and answer the questions that follow.

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**SubQuestion No : 14**

**Q.14 What is one key criticism of informed consent documents over the past three decades?**

- Ans
- 1. They are too short and lack detail.
  - 2. They are only used in the United States.
  - 3. They are not required in clinical trials.
  - 4. They fail to properly inform study participants.

Question ID : 44100931795

Option 1 ID : 441009126664

Option 2 ID : 441009126667

Option 3 ID : 441009126666

Option 4 ID : 441009126665

Status : Answered

Chosen Option : 4



**Comprehension:**

Read the given passage and answer the questions that follow.

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**SubQuestion No : 15**

**Q.15 According to the passage, what challenge arises when drafting an ideal informed consent form?**

- Ans
- 1. Ensuring all participants sign the document
  - 2. Obtaining regulatory approval
  - 3. Translating it into multiple languages
  - 4. Balancing conciseness, detail and readability

Question ID : 44100931794

Option 1 ID : 441009126663

Option 2 ID : 441009126662

Option 3 ID : 441009126661

Option 4 ID : 441009126660

Status : Answered

Chosen Option : 4

**Comprehension:**

Read the given passage and answer the questions that follow.

Informed consent is fundamental to the ethical and legal doctrines respecting research participants' voluntary participation in clinical research, enshrined in such documents as the 1947 Nuremberg Code; reaffirmed in the 1964 Declaration of Helsinki, revised in 1975, and the 1978 Belmont Report; and codified in the United States in the 1981 Common Rule, revised in 2018 and implemented in 2019. Informed consent generally is understood to represent a process, with the informed consent document having a central role. The characteristics of a well-designed consent form are well known: the document must contain information, some statutorily defined, necessary to allow a participant to make an informed decision; be written at a reading level appropriate for its audience; and be of a length that enables complete and thorough reading. Yet, the content and structure of this document has been the subject of discussion for at least three decades, with a consistent consensus throughout this time that these documents are too difficult to read, too complex, and too long and, as a result, frequently fail to facilitate truly informed consent by study participants.

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**SubQuestion No : 16**

**Q.16 Select the most appropriate synonym of given word.**

**Deficiencies**

- Ans  1. Strength  
 2. Shortcomings  
 3. Enhancements  
 4. Improvements

Question ID : 44100931792

Option 1 ID : 441009126653

Option 2 ID : 441009126654

Option 3 ID : 441009126655

Option 4 ID : 441009126652

Status : Answered

Chosen Option : 2

**Comprehension:**

Read the given passage and answer the questions that follow.

Informed consent is fundamental to the ethical and legal doctrines respecting research participants' voluntary participation in clinical research, enshrined in such documents as the 1947 Nuremberg Code; reaffirmed in the 1964 Declaration of Helsinki, revised in 1975, and the 1978 Belmont Report; and codified in the United States in the 1981 Common Rule, revised in 2018 and implemented in 2019. Informed consent generally is understood to represent a process, with the informed consent document having a central role. The characteristics of a well-designed consent form are well known: the document must contain information, some statutorily defined, necessary to allow a participant to make an informed decision; be written at a reading level appropriate for its audience; and be of a length that enables complete and thorough reading. Yet, the content and structure of this document has been the subject of discussion for at least three decades, with a consistent consensus throughout this time that these documents are too difficult to read, too complex, and too long and, as a result, frequently fail to facilitate truly informed consent by study participants.

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**SubQuestion No : 17**

**Q.17 Select the most appropriate ANTONYM of the given word.**

**Concise**

Ans ✓ 1. Lengthy

✗ 2. Precise

✗ 3. Readable

✗ 4. Clear

Question ID : 44100931793

Option 1 ID : 441009126657

Option 2 ID : 441009126658

Option 3 ID : 441009126659

Option 4 ID : 441009126656

Status : Answered

Chosen Option : 1

Q.1 Simplify  $\frac{x^4 + x^2 + 1}{x^2 + x + 1}$ .

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

Question ID : 44100940534

Option 1 ID : 441009161640

Option 2 ID : 441009161642

Option 3 ID : 441009161643

Option 4 ID : 441009161641

Status : Not Answered

Chosen Option : --

Q.2 दो संख्याओं का ल.स.प. (LCM), उनके म.स.प. (HCF) का 392 गुना है। यदि LCM और HCF का योगफल 1965 है और उनमें से एक संख्या 245 है, तो दूसरी संख्या ज्ञात कीजिए।

- Ans
- 1. 35
  - 2. 40
  - 3. 45
  - 4. 80

Question ID : 44100936883

Option 1 ID : 441009147025

Option 2 ID : 441009147026

Option 3 ID : 441009147027

Option 4 ID : 441009147028

Status : Answered

Chosen Option : 2

Q.3 दो साइकिल सवार, X से Y तक 18 km/hr और 24 km/hr की चाल से यात्रा करते हैं। यदि उनमें से एक को गंतव्य तक पहुंचने में दूसरे की तुलना में 15 मिनट कम समय लगता है, तो X और Y के बीच की दूरी (km में) ज्ञात कीजिए।

- Ans
- 1. 18
  - 2. 40
  - 3. 30
  - 4. 20

Question ID : 44100939068

Option 1 ID : 441009155806

Option 2 ID : 441009155808

Option 3 ID : 441009155807

Option 4 ID : 441009155805

Status : Answered

Chosen Option : 1

Q.4 निम्नलिखित में से कौन-सा, एक द्विघात समीकरण नहीं है?

Ans  1.  $K(3K-7) = (K+2)^2$

2.  $(2K-3)(K+1) = (K-3)(2K+6)$

3.  $(K+2)^2+5 = 5K-17$

4.  $(K-7)^2+5K = 3K^2-8$

Question ID : 44100930257

Option 1 ID : 441009120392

Option 2 ID : 441009120394

Option 3 ID : 441009120393

Option 4 ID : 441009120395

Status : Answered

Chosen Option : 2

Q.5 केन्द्रक G और माधिका AM वाले  $\triangle ABC$  में,  $AG = 16$  cm,  $AC = 25$  cm और  $\angle AMC = 90^\circ$  है।  $\triangle ABC$  का क्षेत्रफल (sq.cm में) ज्ञात कीजिए।

Ans  1. 158

2. 154

3. 168

4. 162

Question ID : 44100937973

Option 1 ID : 441009151469

Option 2 ID : 441009151468

Option 3 ID : 441009151471

Option 4 ID : 441009151470

Status : Answered

Chosen Option : 3

Q.6 दी गई तालिका एक परीक्षा में अलग-अलग अंक प्राप्त करने वाले विद्यार्थियों की संख्या दर्शाती है।

अंक	10	20	30	40	50	60	70
बारंबारता	5	8	12	15	14	10	6

दिए गए आँकड़ा समुच्चय का बहुलक क्या है?

Ans  1. 40

2. 50

3. 14

4. 15

Question ID : 44100939702

Option 1 ID : 441009158336

Option 2 ID : 441009158339

Option 3 ID : 441009158338

Option 4 ID : 441009158337

Status : Answered

Chosen Option : 1

Q.7 Simplify  $\frac{5^{2x} \times 25^x \times 125}{625^x}$ .

- Ans
- 1.  $5^{3x}$
  - 2. 25
  - 3. 125
  - 4.  $5^{-2x}$

Question ID : 44100936992

Option 1 ID : 441009147461

Option 2 ID : 441009147462

Option 3 ID : 441009147464

Option 4 ID : 441009147463

Status : Answered

Chosen Option : 3

Q.8 एक व्यक्ति अपनी बचत को अपने पुत्र, पुत्री और पत्नी के बीच इस तरह बांटता है कि पुत्री के हिस्से और पत्नी के हिस्से का अनुपात, साथ ही पत्नी के हिस्से और पुत्र के हिस्से का अनुपात 5 : 3 है। यदि पुत्री को पुत्र से ₹56,000 अधिक मिलते हैं, तो व्यक्ति की कुल बचत (₹ में) ज्ञात कीजिए।

- Ans
- 1. ₹1,74,400
  - 2. ₹1,72,200
  - 3. ₹1,73,600
  - 4. ₹1,71,500

Question ID : 44100934668

Option 1 ID : 441009138073

Option 2 ID : 441009138071

Option 3 ID : 441009138072

Option 4 ID : 441009138070

Status : Answered

Chosen Option : 4

Q.9 एक दुकानदार किसी वस्तु को 20% लाभ पर बेचता है। यदि उसने इसे ₹200 कम में बेचा होता, तो उसे 20% की हानि होती। वस्तु का क्रय मूल्य (₹ में) ज्ञात कीजिए।

- Ans
- 1. ₹500
  - 2. ₹400
  - 3. ₹550
  - 4. ₹450

Question ID : 44100932426

Option 1 ID : 441009129181

Option 2 ID : 441009129179

Option 3 ID : 441009129182

Option 4 ID : 441009129180

Status : Not Answered

Chosen Option : --

Q.10 भाजक, भागफल का 45 गुना और शेषफल का 9 गुना है। यदि भागफल 25 है, तो भाज्य ज्ञात करें।

- Ans
- 1. 24,150
  - 2. 10,250
  - 3. 28,250
  - 4. 28,275

Question ID : 44100936816  
 Option 1 ID : 441009146758  
 Option 2 ID : 441009146760  
 Option 3 ID : 441009146759  
 Option 4 ID : 441009146757  
 Status : Answered  
 Chosen Option : 3

Q.11 यदि  $L = \cos A + \sin A$  और  $M = \sec A + \operatorname{cosec} A$  है, तो  $M \times (L^2 - 1)$  का मान ज्ञात कीजिए।

- Ans
- 1. 2L
  - 2. M
  - 3. 2M
  - 4. L

Question ID : 44100943834  
 Option 1 ID : 441009174789  
 Option 2 ID : 441009174788  
 Option 3 ID : 441009174790  
 Option 4 ID : 441009174787  
 Status : Answered  
 Chosen Option : 1

Q.12 एक भिन्न में, अंश का तिगुना, हर के दुगुने से पाँच अधिक है। यदि अंश और हर में 3 जोड़ दिया जाए, तो बनने वाला नया भिन्न  $\frac{3}{4}$  है। मूल भिन्न ज्ञात कीजिए।

- Ans
- 1.  $\frac{17}{23}$
  - 2.  $\frac{12}{17}$
  - 3.  $\frac{31}{41}$
  - 4.  $\frac{21}{29}$

Question ID : 44100928132  
 Option 1 ID : 441009112061  
 Option 2 ID : 441009112060  
 Option 3 ID : 441009112063  
 Option 4 ID : 441009112062  
 Status : Answered  
 Chosen Option : 4

Q.13 If  $\frac{21.5}{5} + \frac{21}{6} - \frac{13.5}{15} = \frac{x}{3} + \frac{17}{30}$ , the value of x is:

Ans  1. 19

2. 20.5

3. 19.5

4. 20

Question ID : 63068032107

Option 1 ID : 630680127908

Option 2 ID : 630680127911

Option 3 ID : 630680127909

Option 4 ID : 630680127910

Status : Answered

Chosen Option : 1

Q.14 A train goes from one place to another place at a speed of 60 km/hr. At what speed should it return to have an average speed of 48 km/hr?

Ans  1. 50 km/hr

2. 60 km/hr

3. 40 km/hr

4. 55 km/hr

Question ID : 44100939052

Option 1 ID : 441009155745

Option 2 ID : 441009155742

Option 3 ID : 441009155743

Option 4 ID : 441009155744

Status : Answered

Chosen Option : 3

Q.15 ₹30,000 की धनराशि को 8 : 7 के अनुपात में आंशिक रूप से 4% और आंशिक रूप से R% वार्षिक साधारण ब्याज दर पर निवेश किया जाता है। यदि 2 वर्ष के बाद प्राप्त कुल ब्याज ₹3,520 है, तो R का मान ज्ञात कीजिए।

Ans  1. 7

2. 6

3. 8

4. 9

Question ID : 44100931260

Option 1 ID : 441009124527

Option 2 ID : 441009124526

Option 3 ID : 441009124528

Option 4 ID : 441009124529

Status : Answered

Chosen Option : 3



Q.16 एक कंपनी, 15 कर्मचारियों का वेतन (हजार, ₹ में) निम्नानुसार दर्ज करती है:  
25, 28, 30, 32, 35, 37, 40, 42, 45, 48, 50, 52, 55, 58 और 60  
माध्यिका वेतन (₹ में) ज्ञात कीजिए।

- Ans  1. 43,500  
 2. 42,000  
 3. 42,500  
 4. 43,000

Question ID : 44100939709

Option 1 ID : 441009158369

Option 2 ID : 441009158366

Option 3 ID : 441009158367

Option 4 ID : 441009158368

Status : Answered

Chosen Option : 2

Q.17 एक लम्ब वृत्तीय शंकु और एक लम्ब वृत्तीय बेलन की ऊंचाइयों का अनुपात 3 : 4 है, तथा उनके आधारों की त्रिज्याओं का अनुपात 2 : 3 है। यदि बेलन का आयतन  $216 \text{ cm}^3$  है, तो शंकु का आयतन ( $\text{cm}^3$  में) ज्ञात कीजिए।

- Ans  1. 18  
 2. 24  
 3. 20  
 4. 22

Question ID : 44100938184

Option 1 ID : 441009152300

Option 2 ID : 441009152303

Option 3 ID : 441009152301

Option 4 ID : 441009152302

Status : Answered

Chosen Option : 2

Q.18

यदि  $n$  संख्याओं  $P_1, P_2, P_3, \dots, P_n$  का औसत  $\bar{p}$  है, तो  $\sum_{i=1}^n (p_i - \bar{p})$  का मान किसके बराबर है?

- Ans  1.  $n$   
 2.  $n\bar{p}$   
 3.  $\bar{p}$   
 4. 0

Question ID : 44100936750

Option 1 ID : 441009146502

Option 2 ID : 441009146503

Option 3 ID : 441009146504

Option 4 ID : 441009146501

Status : Not Answered

Chosen Option : --

Q.19 बेलन A की त्रिज्या और ऊँचाई क्रमशः 5 cm और 6 cm है। बेलन B की त्रिज्या, A की त्रिज्या की दोगुनी है, और इसकी ऊँचाई, A की ऊँचाई की आधी है। A के संपूर्ण पृष्ठीय क्षेत्रफल और B के वक्र पृष्ठीय क्षेत्रफल का अनुपात कितना है?

- Ans
- 1. 10 : 11
  - 2. 13 : 14
  - 3. 12 : 13
  - 4. 11 : 6

Question ID : 44100938212

Option 1 ID : 441009152412

Option 2 ID : 441009152415

Option 3 ID : 441009152414

Option 4 ID : 441009152413

Status : Not Answered

Chosen Option : --

Q.20 The sum of the digits of a two-digit number is 15. If the new number formed by reversing the digits is greater than the original number by 27, find the sum of the original number and the number obtained on reversing the digits.

- Ans
- 1. 165
  - 2. 128
  - 3. 139
  - 4. 157

Question ID : 44100928106

Option 1 ID : 441009111959

Option 2 ID : 441009111956

Option 3 ID : 441009111957

Option 4 ID : 441009111958

Status : Answered

Chosen Option : 1

Q.21 दो रेलगाड़ियाँ, जिनमें से प्रत्येक 120 मीटर लंबी है, विपरीत दिशाओं में चल रही हैं और एक दूसरे को 6 सेकंड में पार करती हैं। यदि उनमें से एक रेलगाड़ी 150 मीटर लंबे प्लेटफॉर्म को 18 सेकंड में पार करती है, तो उनकी चाल का अनुपात क्या हो सकता है?

- Ans
- 1. 3 : 4
  - 2. 2 : 3
  - 3. 4 : 1
  - 4. 3 : 5

Question ID : 44100939082

Option 1 ID : 441009155861

Option 2 ID : 441009155864

Option 3 ID : 441009155862

Option 4 ID : 441009155863

Status : Answered

Chosen Option : 4

Q.22 एक व्यक्ति को धारा की दिशा में 18 km नाव चलाने में 2 hr लगते हैं और धारा के विपरीत दिशा में उतनी ही दूरी तक नाव चलाने में 3 hr लगते हैं। धारा की चाल ज्ञात करें।

- Ans
- 1. 1.2 km/hr
  - 2. 2 km/hr
  - 3. 1.5 km/hr
  - 4. 3 km/hr

Question ID : 44100937165  
 Option 1 ID : 441009148188  
 Option 2 ID : 441009148186  
 Option 3 ID : 441009148187  
 Option 4 ID : 441009148185  
 Status : Answered  
 Chosen Option : 4

Q.23 The average weight of the first 11 students in a class is 96 kg, and the weight of the 12<sup>th</sup> student is 33 kg more than the average weight of all 12 students. The weight of the 12<sup>th</sup> student is:

- Ans
- 1. 140.18 kg
  - 2. 132 kg
  - 3. 96 kg
  - 4. 131 kg

Question ID : 44100936765  
 Option 1 ID : 441009146559  
 Option 2 ID : 441009146558  
 Option 3 ID : 441009146560  
 Option 4 ID : 441009146557  
 Status : Answered  
 Chosen Option : 2

Q.24 यदि  $\alpha$  और  $\beta$  द्विघात समीकरण  $ax^2 + bx + c = 0$  के मूल हैं, तो  $(\alpha^2 + \beta^2 + 5\alpha\beta) - \frac{1}{\alpha} - \frac{1}{\beta}$  का मान ज्ञात कीजिए।

- Ans
- 1.  $\frac{b^2a^2 + 3ca + b^2c^2}{a^2c}$
  - 2.  $\frac{b^2 + 3ca + ba^2}{a^2}$
  - 3.  $\frac{b^2c + 3c + a^2}{a^2c}$
  - 4.  $\frac{b^2c + 3c^2a + ba^2}{a^2c}$

Question ID : 44100930210  
 Option 1 ID : 441009120208  
 Option 2 ID : 441009120205  
 Option 3 ID : 441009120206  
 Option 4 ID : 441009120207  
 Status : Not Answered  
 Chosen Option : --

Q.25 खाद्य तेल की कीमत में पहले 20% की कमी की जाती है। फिर घटी हुई कीमत में 20% की वृद्धि की जाती है। यदि नई कीमत, मूल कीमत से ₹20 कम है, तो मूल कीमत ज्ञात कीजिए।

- Ans
- 1. ₹350
  - 2. ₹500
  - 3. ₹200
  - 4. ₹400

Question ID : 44100937077  
Option 1 ID : 441009147804  
Option 2 ID : 441009147802  
Option 3 ID : 441009147803  
Option 4 ID : 441009147801  
Status : Answered  
Chosen Option : 2

Q.26 राम और मोहन किसी कार्य को क्रमशः 8 दिन और 12 दिन में पूरा कर सकते हैं। वे साथ मिलकर काम करना शुरू करते हैं, लेकिन 2 दिन बाद राम काम करना छोड़ देता है। शेष कार्य पूरा करने में मोहन को कितना समय लगेगा?

- Ans
- 1. 5 दिन
  - 2. 6 दिन
  - 3. 7 दिन
  - 4. 8 दिन

Question ID : 44100937119  
Option 1 ID : 441009147965  
Option 2 ID : 441009147966  
Option 3 ID : 441009147967  
Option 4 ID : 441009147968  
Status : Answered  
Chosen Option : 3

Q.27 केंद्र O के एक वृत्त में, एक चाप AB केंद्र पर  $60^\circ$  का कोण आंतरित करती है। परिधि के एक बिंदु C पर उसी चाप द्वारा आंतरित किए गए कोण की माप कितनी है?

- Ans
- 1.  $120^\circ$
  - 2.  $60^\circ$
  - 3.  $15^\circ$
  - 4.  $30^\circ$

Question ID : 44100938857  
Option 1 ID : 441009154971  
Option 2 ID : 441009154972  
Option 3 ID : 441009154974  
Option 4 ID : 441009154973  
Status : Answered  
Chosen Option : 4

Q.28 एक व्यापारी ₹1,120 के अंकित मूल्य पर 10% की छूट देने के बाद 12% का लाभ प्राप्त करना चाहता है। यदि कोई छूट नहीं दी जाती, तो लाभ प्रतिशत कितना होता?

Ans  1.  $24\frac{5}{9}\%$

2.  $24\frac{4}{9}\%$

3.  $25\frac{5}{9}\%$

4.  $25\frac{4}{9}\%$

Question ID : 44100932713

Option 1 ID : 441009130075

Option 2 ID : 441009130074

Option 3 ID : 441009130076

Option 4 ID : 441009130077

Status : Answered

Chosen Option : 2

Q.29 तीन नल, P, Q और S, एक खाली टंकी को 15 मिनट में भर सकते हैं। नल P अकेले इसे 30 मिनट में भर सकता है और नल Q अकेले इसे 45 मिनट में भर सकता है। नल S अकेले टंकी को भरने में कितना समय लेगा?

Ans  1. 60 मिनट

2. 90 मिनट

3. 45 मिनट

4. 30 मिनट

Question ID : 44100939027

Option 1 ID : 441009155646

Option 2 ID : 441009155648

Option 3 ID : 441009155649

Option 4 ID : 441009155647

Status : Answered

Chosen Option : 2

Q.30 किसी निश्चित धनराशि को 10% वार्षिक चक्रवृद्धि ब्याज दर पर एक वर्ष के लिए उधार दिया जाता है। यदि ब्याज, वार्षिक की जगह अर्धवार्षिक रूप से संयोजित किया जाए, तो ₹240 अधिक प्राप्त होंगे। उधार दिया गया मूलधन ज्ञात कीजिए।

- Ans  1. ₹96,000  
 2. ₹88,000  
 3. ₹92,000  
 4. ₹84,000

Question ID : 44100931268

Option 1 ID : 441009124561

Option 2 ID : 441009124559

Option 3 ID : 441009124560

Option 4 ID : 441009124558

Status : Not Answered

Chosen Option : --

Q.31 X की आय का 10% = Y की आय का 15% = Z की आय का 25% है। यदि कुल आय ₹18,600 है, तो Y की आय कितनी है?

- Ans  1. ₹6,000  
 2. ₹9,000  
 3. ₹36,000  
 4. ₹6,200

Question ID : 44100937069

Option 1 ID : 441009147769

Option 2 ID : 441009147770

Option 3 ID : 441009147771

Option 4 ID : 441009147772

Status : Answered

Chosen Option : 1

Q.32 एक दुकानदार ₹1,800 अंकित मूल्य वाला योनेक्स बैडमिंटन रैकेट 18% की छूट पर बेचता है और प्रत्येक रैकेट के साथ ₹288 मूल्य वाला एक शटल कॉक मुफ्त देता है। यदि दुकानदार को इस लेन-देन में 20% का लाभ होता है, तो प्रत्येक रैकेट का क्रय मूल्य ज्ञात कीजिए।

- Ans  1. ₹1,200  
 2. ₹820  
 3. ₹1,000  
 4. ₹990

Question ID : 44100937138

Option 1 ID : 441009148046

Option 2 ID : 441009148048

Option 3 ID : 441009148045

Option 4 ID : 441009148047

Status : Answered

Chosen Option : 4

Q.33 28 kg, 42 kg और 70 kg की धारिता वाले तीन डिब्बे, तीन प्रकार के चावलों क्रमशः A प्रकार, B प्रकार और C प्रकार से पूरी तरह भरे हुए हैं। एकसमान मिश्रण बनाने के लिए तीनों प्रकार के चावलों को अच्छी तरह से मिलाया जाता है। फिर इस मिश्रण को तीनों डिब्बों में वापस भरा जाता है। पुनर्भरण के बाद, तीसरे डिब्बे में C प्रकार का कितने kg चावल मौजूद होगा?

Ans  1. 35

2. 38

3. 32

4. 36

Question ID : 44100931249

Option 1 ID : 441009124483

Option 2 ID : 441009124485

Option 3 ID : 441009124482

Option 4 ID : 441009124484

Status : Answered

Chosen Option : 2

Q.34 यदि  $a \neq b$ ,  $c > 0$  है और  $(a + c) : (b + c)$  का वर्गानुपात  $a : b$  है, तो  $a$  और  $b$  का माध्यानुपाती ज्ञात कीजिए।

Ans  1.  $\sqrt{c}$

2.  $c^2$

3.  $c$

4.  $\frac{1}{c}$

Question ID : 44100934557

Option 1 ID : 441009137632

Option 2 ID : 441009137631

Option 3 ID : 441009137630

Option 4 ID : 441009137633

Status : Not Answered

Chosen Option : --

Section : Intellectual Potential Test

Q.1 If 'A' stands for '+', 'B' stands for 'x', 'C' stands for '+' and 'D' stands for '-', then what will come in place of the question mark (?) in the following equation?

27 A 3 D 15 C 11 B 2 = ?

Ans  1. 12

2. 16

3. 9

4. 3

Question ID : 4410091155

Option 1 ID : 4410094615

Option 2 ID : 4410094616

Option 3 ID : 4410094614

Option 4 ID : 4410094613

Status : Answered

Chosen Option : 2

Q.2 Ketan starts from Point Y and drives 24 km towards the north. He then turns left and drives 23 km, takes a left and drives 91 km. He then takes a left turn and drives 41 km. He takes a left turn, drives 67 km, turns right and drives 29 km to stop at Point Z. How far (shortest distance) and towards which direction should he drive in order to reach Point Y again? (All turns are 90 degrees turns only, unless specified.)

- Ans
- 1. 51 km towards the east
  - 2. 49 km towards the west
  - 3. 47 km towards the west
  - 4. 48 km towards the east

Question ID : 441009371  
Option 1 ID : 4410091473  
Option 2 ID : 4410091476  
Option 3 ID : 4410091475  
Option 4 ID : 4410091474  
Status : Answered  
Chosen Option : 3

Q.3 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 actors are dancers.  
All dancers are singers.

Conclusions:

(I) All actors are singers.  
(II) Some singers are dancers.

- Ans
- 1. Only conclusion (II) follows.
  - 2. Both conclusions (I) and (II) follow.
  - 3. Only conclusion (I) follows.
  - 4. Neither conclusion (I) nor (II) follows.

Question ID : 44100983  
Option 1 ID : 441009324  
Option 2 ID : 441009321  
Option 3 ID : 441009323  
Option 4 ID : 441009322  
Status : Answered  
Chosen Option : 2



Q.4 यह प्रश्न दिए गए शब्दों पर आधारित है।

ELF PUT HOP JAB

प्रत्येक शब्द में, प्रत्येक स्वर को अंग्रेजी वर्णमाला क्रम में उसके ठीक बाद वाले अक्षर को छोड़कर उसके अगले अक्षर से बदल दिया जाता है और प्रत्येक व्यंजन को अंग्रेजी वर्णमाला क्रम में उसके ठीक पहले वाले अक्षर से बदल दिया जाता है। इस प्रकार बने कितने अक्षर-समूहों में कोई स्वर नहीं होगा?

- Ans
- 1. एक
  - 2. दो
  - 3. तीन
  - 4. एक भी नहीं

Question ID : 441009525

Option 1 ID : 4410092087

Option 2 ID : 4410092088

Option 3 ID : 4410092089

Option 4 ID : 4410092086

Status : Answered

Chosen Option : 4

Q.5 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
- 1. MP-QA
  - 2. SB-GY
  - 3. VY-ZJ
  - 4. YB-CM

Question ID : 441009549

Option 1 ID : 4410092184

Option 2 ID : 4410092183

Option 3 ID : 4410092182

Option 4 ID : 4410092185

Status : Answered

Chosen Option : 2

Q.6 Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of ::?

# : HLG :: OSN : %

- Ans
- 1. # = LPK; % = KOI
  - 2. # = LPK; % = KPJ
  - 3. # = LPM; % = KOJ
  - 4. # = LPK; % = KOJ

Question ID : 44100967

Option 1 ID : 441009258

Option 2 ID : 441009260

Option 3 ID : 441009259

Option 4 ID : 441009257

Status : Answered

Chosen Option : 4

Q.7 A, B, C, D, M, N, और O एक गोल मेज के परितः उसके केंद्र की ओर अभिमुख होकर बैठे हैं। O के दाईं ओर से गिनने पर, O और M के बीच केवल एक व्यक्ति बैठा है। M और B के बीच केवल एक व्यक्ति बैठा है। O और D के बीच केवल एक व्यक्ति बैठा है। C और B के बीच केवल दो व्यक्ति बैठे हैं। A और D के बीच केवल एक व्यक्ति बैठा है। N के दाईं ओर तीसरे स्थान पर कौन बैठा है?

- Ans
- 1. A
  - 2. D
  - 3. C
  - 4. M

Question ID : 441009352  
 Option 1 ID : 4410091397  
 Option 2 ID : 4410091399  
 Option 3 ID : 4410091398  
 Option 4 ID : 4410091400  
 Status : Answered  
 Chosen Option : 4

Q.8 सात व्यक्ति L, M, N, O, R, S और T, एक गोल मेज के परितः उसके केंद्र की ओर अभिमुख होकर बैठे हैं। L के दाईं ओर से गिनने पर, N और L के बीच केवल तीन व्यक्ति बैठे हैं। O, L के दाईं ओर दूसरे स्थान पर बैठा है। R और N दोनों का निकटतम पड़ोसी T है। S, L का निकटतम पड़ोसी नहीं है। M के निकटतम पड़ोसी निम्नलिखित में से कौन हैं?

- Ans
- 1. L और R
  - 2. N और T
  - 3. O और L
  - 4. S और N

Question ID : 441009275  
 Option 1 ID : 4410091089  
 Option 2 ID : 4410091091  
 Option 3 ID : 4410091090  
 Option 4 ID : 4410091092  
 Status : Answered  
 Chosen Option : 3

Q.9 सात व्यक्ति A, C, G, K, M, S और Y, एक गोल मेज के परितः उसके केंद्र की ओर अभिमुख होकर बैठे हैं, लेकिन जरूरी नहीं कि वे इसी क्रम में बैठे हों। A, K के ठीक दाएं पड़ोस में बैठा है। A और C के बीच केवल दो व्यक्ति बैठे हैं। G, C के बाएं दूसरे स्थान पर बैठा है। M, S के ठीक दाएं पड़ोस में बैठा है। Y के बाएं तीसरे स्थान पर कौन बैठा है?

- Ans
- 1. C
  - 2. K
  - 3. A
  - 4. M

Question ID : 441009870  
 Option 1 ID : 4410093468  
 Option 2 ID : 4410093470  
 Option 3 ID : 4410093467  
 Option 4 ID : 4410093469  
 Status : Answered  
 Chosen Option : 2

Q.10 निम्नलिखित अक्षर और प्रतीक श्रृंखला का संदर्भ लें तथा नीचे दिए गए प्रश्न का उत्तर दें। गिनती केवल बाएं से दाएं की जानी है।

(बाएं) H Q E K \ / \ S + U \* / K E W P ^ D N (दाएं)

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

- Ans
- 1. तीन
  - 2. चार
  - 3. दो
  - 4. एक

Question ID : 441009521  
 Option 1 ID : 4410092072  
 Option 2 ID : 4410092073  
 Option 3 ID : 4410092071  
 Option 4 ID : 4410092070  
 Status : Answered  
 Chosen Option : 3

Q.11 यह प्रश्न नीचे दी गई पाँच, तीन-अंकीय संख्याओं पर आधारित है।

(बाएं) 387 857 235 496 217 (दाएं)

(उदाहरण: 697 - पहला अंक = 6, दूसरा अंक = 9 और तीसरा अंक = 7)  
 (नोट: सभी संक्रियाएँ बाएं से दाएं की जानी है।)

यदि सबसे बड़ी संख्या के दूसरे अंक को सबसे छोटी संख्या के तीसरे अंक में जोड़ा जाए, तो परिणाम क्या प्राप्त होगा?

- Ans
- 1. 9
  - 2. 10
  - 3. 11
  - 4. 12

Question ID : 441009526  
 Option 1 ID : 4410092090  
 Option 2 ID : 4410092091  
 Option 3 ID : 4410092092  
 Option 4 ID : 4410092093  
 Status : Answered  
 Chosen Option : 4

Q.12 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:

Some rings are tones.  
No tones are sounds.

Conclusions:

(I): All rings are sounds.  
(II): All tones are rings.

- Ans  1. Both conclusions I and II follow.  
 2. Neither conclusion I nor II follows.  
 3. Only conclusion I follows.  
 4. Only conclusion II follows.

Question ID : 441009862

Option 1 ID : 4410093438

Option 2 ID : 4410093437

Option 3 ID : 4410093435

Option 4 ID : 4410093436

Status : Answered

Chosen Option : 2

Q.13 निम्नलिखित अक्षर और प्रतीक श्रृंखला का संदर्भ लें तथा नीचे दिए गए प्रश्न का उत्तर दें। गिनती केवल बाएं से दाएं की जानी है।

(बाएं) U M B & > H @ L = & N % K A £ U E \* D F C < Q (दाएं)

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

- Ans  1. एक  
 2. दो  
 3. चार  
 4. तीन

Question ID : 441009381

Option 1 ID : 4410091516

Option 2 ID : 4410091515

Option 3 ID : 4410091514

Option 4 ID : 4410091513

Status : Answered

Chosen Option : 2

Q.14 If 'A' stands for '+', 'B' stands for 'x', 'C' stands for '+' and 'D' stands for '-', then what will come in place of the question mark (?) in the following equation?

$$23 C 56 A 7 D 9 B 2 = ?$$

- Ans
- 1. 9
  - 2. 18
  - 3. 13
  - 4. 4

Question ID : 4410091154

Option 1 ID : 4410094610

Option 2 ID : 4410094612

Option 3 ID : 4410094611

Option 4 ID : 4410094609

Status : Answered

Chosen Option : 3

Q.15 निम्नलिखित संख्या-युग्मों में, प्रथम संख्या पर कुछ गणितीय संक्रियाएँ लागू करके दूसरी संख्या प्राप्त की जाती है। उस विकल्प का चयन कीजिए जिसमें संख्याएँ उसी प्रकार संबंधित हैं जिस प्रकार निम्नलिखित संख्या-युग्मों की संख्याएँ संबंधित हैं।

(नोट: संख्याओं को उनके घटक अंकों में तोड़े बिना, पूर्ण संख्याओं पर संक्रियाएँ की जानी चाहिए। उदाहरण के लिए 13 को लीजिए - 13 पर संक्रियाएँ जैसे कि 13 में जोड़ना / घटाना / गुणा करना आदि 13 पर ही किया जा सकता है। 13 को 1 और 3 में तोड़ना तथा फिर 1 और 3 पर गणितीय संक्रियाएँ करने की अनुमति नहीं है।)

50, 74  
66, 90

- Ans
- 1. 42, 66
  - 2. 74, 108
  - 3. 80, 94
  - 4. 45, 60

Question ID : 4410091191

Option 1 ID : 4410094759

Option 2 ID : 4410094758

Option 3 ID : 4410094757

Option 4 ID : 4410094760

Status : Answered

Chosen Option : 1

Q.16 What should come in place of the question mark (?) in the given series?

10 27 45 64 84 ?

- Ans
- 1. 111
  - 2. 116
  - 3. 105
  - 4. 101

Question ID : 4410091319

Option 1 ID : 4410095271

Option 2 ID : 4410095272

Option 3 ID : 4410095270

Option 4 ID : 4410095269

Status : Answered

Chosen Option : 3

Q.17 Seven boxes A, C, E, G, I, K, and M are kept one over the other but not necessarily in the same order. Exactly five boxes are kept between E and C. G is kept immediately above C. Only one box is kept between E and M. K is kept immediately above A. How many boxes are kept below I?

- Ans
- 1. None
  - 2. Three
  - 3. Five
  - 4. Six

Question ID : 441009277  
 Option 1 ID : 4410091097  
 Option 2 ID : 4410091098  
 Option 3 ID : 4410091099  
 Option 4 ID : 4410091100  
 Status : Answered  
 Chosen Option : 2

Q.18 Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.

HPK : NTQ  
 DRV : JVB

- Ans
- 1. HOC : NUI
  - 2. ARL : GXP
  - 3. KTP : QXV
  - 4. KUJ : OZN

Question ID : 441009858  
 Option 1 ID : 4410093419  
 Option 2 ID : 4410093422  
 Option 3 ID : 4410093420  
 Option 4 ID : 4410093421  
 Status : Answered  
 Chosen Option : 3

Q.19 Select the triad that follows the same pattern as that followed by the two triads given below. Both triads follow the same pattern.

NP - MR - LT  
 FH - EJ - DL

- Ans
- 1. SU - RW - QY
  - 2. FM - EL - DK
  - 3. LN - MO - NP
  - 4. OQ - MS - KT

Question ID : 441009300  
 Option 1 ID : 4410091190  
 Option 2 ID : 4410091191  
 Option 3 ID : 4410091189  
 Option 4 ID : 4410091192  
 Status : Answered  
 Chosen Option : 1

Q.20 H, I, J, K, M, N और O में से प्रत्येक की परीक्षा सोमवार से शुरू होकर रविवार को समाप्त होने वाले उसी सप्ताह के अलग-अलग दिन है। H से पहले किसी की भी परीक्षा नहीं है। H और M के बीच केवल तीन व्यक्तियों की परीक्षा है। M और I के बीच केवल एक व्यक्ति की परीक्षा है। N की परीक्षा बुधवार को है। O की परीक्षा K की परीक्षा के बाद के किसी दिन, लेकिन J की परीक्षा से पहले किसी दिन है। O की परीक्षा सप्ताह के किस दिन है?

- Ans  1. गुरुवार  
 2. सोमवार  
 3. मंगलवार  
 4. शनिवार

Question ID : 441009363  
 Option 1 ID : 4410091443  
 Option 2 ID : 4410091441  
 Option 3 ID : 4410091442  
 Option 4 ID : 4410091444  
 Status : Answered  
 Chosen Option : 1

Q.21 What should come in place of the question mark (?) in the given series based on the English alphabetical order?

WKG UHC SEY QBU OYQ ?

- Ans  1. MVM  
 2. LWN  
 3. NTM  
 4. NUL

Question ID : 441009360  
 Option 1 ID : 4410091430  
 Option 2 ID : 4410091431  
 Option 3 ID : 4410091432  
 Option 4 ID : 4410091429  
 Status : Answered  
 Chosen Option : 1

Q.22 What should come in place of the question mark (?) in the given series?

9 18 36 63 99 ?

- Ans  1. 126  
 2. 144  
 3. 132  
 4. 138

Question ID : 4410091172  
 Option 1 ID : 4410094681  
 Option 2 ID : 4410094684  
 Option 3 ID : 4410094682  
 Option 4 ID : 4410094683  
 Status : Answered  
 Chosen Option : 2

Q.23 In a certain code language,

'A + B' means 'A is the son of B',  
'A - B' means 'A is the brother of B',  
'A × B' means 'A is the wife of B' and  
'A ÷ B' means 'A is the father of B'.

How is D related to J if 'D × F + G - H ÷ J'?

- Ans  1. Mother's sister's son's wife  
 2. Father's brother's son's wife  
 3. Mother's brother's son's wife  
 4. Father's sister's son's wife

Question ID : 44100973

Option 1 ID : 441009284

Option 2 ID : 441009281

Option 3 ID : 441009283

Option 4 ID : 441009282

Status : Answered

Chosen Option : 2

Q.24 वह समुच्चय चुनिए जिसमें संख्याएँ उसी प्रकार संबंधित हैं जिस प्रकार निम्नलिखित समुच्चयों की संख्याएँ संबंधित हैं।

(नोट: संख्याओं को उनके घटक अंकों में तोड़े बिना, गणितीय संक्रियाएँ केवल पूर्ण संख्याओं पर ही करनी हैं। उदाहरण के लिए 13 लीजिए, 13 पर जोड़ना, घटाना या गुणा करना जैसे संक्रियाएँ की जा सकती हैं, लेकिन 13 को 1 और 3 में तोड़ना और फिर 1 और 3 पर गणितीय संक्रिया करने की अनुमति नहीं है।)

(106, 45, 61)

(110, 55, 55)

- Ans  1. (85, 30, 55)  
 2. (62, 20, 32)  
 3. (22, 7, 29)  
 4. (48, 28, 30)

Question ID : 4410091194

Option 1 ID : 4410094770

Option 2 ID : 4410094772

Option 3 ID : 4410094771

Option 4 ID : 4410094769

Status : Answered

Chosen Option : 1



Q.25 सात बॉक्स 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। B को D के ठीक ऊपर रखा गया है। F को C के ठीक ऊपर रखा गया है। केवल E को A के ऊपर रखा गया है। B के ऊपर केवल दो बॉक्स रखे गए हैं। F को नीचे से तीसरे स्थान पर नहीं रखा गया है। G के नीचे कितने बॉक्स रखे गए हैं?

- Ans
- 1. चार
  - 2. तीन
  - 3. एक
  - 4. दो

Question ID : 44100961  
Option 1 ID : 441009236  
Option 2 ID : 441009235  
Option 3 ID : 441009233  
Option 4 ID : 441009234  
Status : Answered  
Chosen Option : 4

Q.26 In a certain code language, 'respect your parents' is coded as 'ab cd ef' and 'parents know everything' is coded as 'ef gf lk'. How is 'parents' coded in the given language?

- Ans
- 1. ef
  - 2. cd
  - 3. lk
  - 4. ab

Question ID : 44100938943  
Option 1 ID : 441009155319  
Option 2 ID : 441009155320  
Option 3 ID : 441009155321  
Option 4 ID : 441009155322  
Status : Answered  
Chosen Option : 1

Q.27 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 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)

(56, 28, 30)  
(98, 49, 51)

- Ans
- 1. (36, 18, 22)
  - 2. (178, 90, 92)
  - 3. (144, 72, 74)
  - 4. (162, 83, 85)

Question ID : 4410091740  
Option 1 ID : 4410096955  
Option 2 ID : 4410096953  
Option 3 ID : 4410096956  
Option 4 ID : 4410096954  
Status : Answered  
Chosen Option : 3

Q.28 If + means -, - means ×, × means ÷, ÷ means +, then what will come in place of the question mark (?) in the following equation?  
 $60 \times 6 + 11 - 2 \div 20 = ?$

- Ans
- 1. 5
  - 2. 16
  - 3. 12
  - 4. 8

Question ID : 4410091298  
Option 1 ID : 4410095188  
Option 2 ID : 4410095185  
Option 3 ID : 4410095186  
Option 4 ID : 4410095187  
Status : Answered  
Chosen Option : 4

Q.29 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
- 1. OR-TW
  - 2. BE-GJ
  - 3. FI-KO
  - 4. HK-MP

Question ID : 44100939760  
Option 1 ID : 441009158572  
Option 2 ID : 441009158569  
Option 3 ID : 441009158570  
Option 4 ID : 441009158571  
Status : Answered  
Chosen Option : 3

Q.30 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
- 1. HA - LV
  - 2. XG - BB
  - 3. VE - ZB
  - 4. PQ - TL

Question ID : 441009350  
Option 1 ID : 4410091389  
Option 2 ID : 4410091392  
Option 3 ID : 4410091391  
Option 4 ID : 4410091390  
Status : Answered  
Chosen Option : 3

Q.31 In a certain code language, 'LAMP' is coded as '3192' and 'PALE' is coded as '1432'. What is the code for 'E' in the given code language?

- Ans
- 1. 1
  - 2. 3
  - 3. 9
  - 4. 4

Question ID : 441009370  
Option 1 ID : 4410091471  
Option 2 ID : 4410091472  
Option 3 ID : 4410091470  
Option 4 ID : 4410091469  
Status : Answered  
Chosen Option : 4

Q.32 संख्या 2471836 में प्रत्येक अंक को बाएं से दाएं आरोही क्रम में व्यवस्थित किया जाता है। मूल संख्या की तुलना में कितने अंकों की स्थिति अपरिवर्तित रहेगी?

- Ans
- 1. एक
  - 2. एक भी नहीं
  - 3. तीन
  - 4. दो

Question ID : 4410091227  
Option 1 ID : 4410094902  
Option 2 ID : 4410094901  
Option 3 ID : 4410094904  
Option 4 ID : 4410094903  
Status : Answered  
Chosen Option : 2

Q.33 What should come in place of the question mark (?) in the given series based on the English alphabetical order?

KGU HCP EYK BUF YQA ?

- Ans
- 1. UMW
  - 2. UNX
  - 3. WLU
  - 4. VMV

Question ID : 441009362  
Option 1 ID : 4410091437  
Option 2 ID : 4410091440  
Option 3 ID : 4410091438  
Option 4 ID : 4410091439  
Status : Answered  
Chosen Option : 4

Q.34 D is the mother of F. F is the brother of G. G is the wife of H. H is the father of J. How is D related to J?

- Ans
- 1. Mother's sister
  - 2. Father's sister
  - 3. Father's mother
  - 4. Mother's mother

Question ID : 44100979  
Option 1 ID : 441009306  
Option 2 ID : 441009308  
Option 3 ID : 441009307  
Option 4 ID : 441009305  
Status : Answered  
Chosen Option : 4

Section : Domain Knowledge

Q.1 What does a higher star rating on an appliance indicate about its performance?

- Ans
- 1. High energy efficiency and lower energy consumption
  - 2. Lower efficiency
  - 3. Greater energy consumption
  - 4. Lower upfront cost

Question ID : 44100943206  
Option 1 ID : 441009172289  
Option 2 ID : 441009172288  
Option 3 ID : 441009172287  
Option 4 ID : 441009172290  
Status : Answered  
Chosen Option : 1

Q.2 Primary Substation receives power from:

- Ans
- 1. distribution substation
  - 2. load
  - 3. generating station
  - 4. step-down substation

Question ID : 44100989917  
Option 1 ID : 441009357829  
Option 2 ID : 441009357827  
Option 3 ID : 441009357826  
Option 4 ID : 441009357828  
Status : Answered  
Chosen Option : 3

Q.3 In a conventional pitch-controlled turbine, how does the blade adjust its pitch?

- Ans
- 1. The blade uses an external control surface like an aileron
  - 2. Only the inner part of the blade rotates
  - 3. The entire blade rotates about its radial axis
  - 4. The entire blade changes shape without rotating

Question ID : 44100952085  
Option 1 ID : 441009207466  
Option 2 ID : 441009207465  
Option 3 ID : 441009207464  
Option 4 ID : 441009207467  
Status : Answered  
Chosen Option : 1

Q.4 The LPC2141 microcontroller features \_\_\_\_\_ pins.

- Ans
- 1. 40
  - 2. 64
  - 3. 32
  - 4. 60

Question ID : 44100998397  
Option 1 ID : 441009391678  
Option 2 ID : 441009391680  
Option 3 ID : 441009391677  
Option 4 ID : 441009391679  
Status : Not Answered  
Chosen Option : --

Q.5 The function of a pulse transformer used in the firing circuit is to:

- Ans
- 1. isolate low-voltage gate circuit from high-voltage anode circuit
  - 2. generate voltage pulses
  - 3. feed voltage pulses to gate cathode circuit
  - 4. turn ON SCR

Question ID : 44100982056  
Option 1 ID : 441009325878  
Option 2 ID : 441009325877  
Option 3 ID : 441009325879  
Option 4 ID : 441009325880  
Status : Answered  
Chosen Option : 3

Q.6 Which of the following AC distribution systems is most reliable?

- Ans
- 1. Isolator distribution system
  - 2. Radial distribution system
  - 3. Ring main distribution system
  - 4. Feeder distribution system

Question ID : 44100989893  
Option 1 ID : 441009357733  
Option 2 ID : 441009357731  
Option 3 ID : 441009357730  
Option 4 ID : 441009357732  
Status : Answered  
Chosen Option : 3

Q.7 In a squirrel cage induction generator, where does the reactive power required for operation come from?

- Ans
- 1. The stator of the generator
  - 2. The grid side power source
  - 3. The power converter
  - 4. The turbine rotor

Question ID : 44100952069  
Option 1 ID : 441009207402  
Option 2 ID : 441009207401  
Option 3 ID : 441009207403  
Option 4 ID : 441009207400  
Status : Answered  
Chosen Option : 1

Q.8 Why is it beneficial to install a separate transformer for lighting system?

- Ans
- 1. It ensures stable voltage and reduces losses.
  - 2. It increases energy losses.
  - 3. It decreases initial costs.
  - 4. It increases overall power consumption.

Question ID : 44100957652  
Option 1 ID : 441009229478  
Option 2 ID : 441009229475  
Option 3 ID : 441009229476  
Option 4 ID : 441009229477  
Status : Answered  
Chosen Option : 1

Q.9 Class C commutation used for turning off the thyristor is also known as:

- Ans
- 1. load commutation
  - 2. complementary commutation
  - 3. impulse commutation
  - 4. line commutation

Question ID : 44100982077  
Option 1 ID : 441009325961  
Option 2 ID : 441009325963  
Option 3 ID : 441009325964  
Option 4 ID : 441009325962  
Status : Answered  
Chosen Option : 2

Q.10 In a purely resistive AC circuit, the reactive power is \_\_\_\_\_.

- Ans
- 1. maximum
  - 2. equal to active power
  - 3. always negative
  - 4. zero

Question ID : 44100993004  
Option 1 ID : 441009369708  
Option 2 ID : 441009369705  
Option 3 ID : 441009369706  
Option 4 ID : 441009369707  
Status : Answered  
Chosen Option : 4

Q.11 What does a power tower in CSP systems primarily do?

- Ans
- 1. It generates electricity directly through photovoltaic panels.
  - 2. It stores solar energy for later use.
  - 3. It concentrates sunlight onto a central receiver using mirrors.
  - 4. It distributes electricity to the power grid.

Question ID : 44100952358  
Option 1 ID : 441009208530  
Option 2 ID : 441009208529  
Option 3 ID : 441009208528  
Option 4 ID : 441009208531  
Status : Answered  
Chosen Option : 4

Q.12 What is the formula for calculating units generated per annum?

- Ans
- 1. Maximum demand  $\times$  Average load  $\times$  8760
  - 2. (Maximum demand  $\times$  Load factor) / 8760
  - 3. Maximum demand  $\times$  Load factor  $\times$  8760
  - 4. (Maximum demand  $\times$  8760) / Load factor

Question ID : 44100960052  
Option 1 ID : 441009239148  
Option 2 ID : 441009239149  
Option 3 ID : 441009239147  
Option 4 ID : 441009239150  
Status : Answered  
Chosen Option : 2

Q.13 What is the primary purpose of high-temperature heat energy in a bottoming cycle of a co-generation system?

- Ans
- 1. To be released into the environment as waste heat
  - 2. To improve fuel combustion efficiency
  - 3. To be directly converted into mechanical energy
  - 4. To be utilised in processes other than power generation

Question ID : 44100957622  
Option 1 ID : 441009229358  
Option 2 ID : 441009229355  
Option 3 ID : 441009229357  
Option 4 ID : 441009229356  
Status : Answered  
Chosen Option : 3

Q.14 What does the plant capacity factor represent?

- Ans
- 1. The ratio of actual energy produced to the maximum possible energy that could have been generated
  - 2. The ratio of actual energy produced to the total connected load
  - 3. The ratio of connected load to the plant capacity
  - 4. The ratio of maximum demand to the average demand

Question ID : 44100960055  
Option 1 ID : 441009239160  
Option 2 ID : 441009239159  
Option 3 ID : 441009239162  
Option 4 ID : 441009239161  
Status : Answered  
Chosen Option : 1



Q.15 What was the main cause of the Northern India grid failure on 30<sup>th</sup> July 2012?

- Ans
- 1. Failure of a major hydroelectric plant
  - 2. Overdrawing of power by the Northern Region and imbalance in load flow
  - 3. A sudden drop in power generation
  - 4. Cyberattack on power infrastructure

Question ID : 44100960077  
Option 1 ID : 441009239246  
Option 2 ID : 441009239244  
Option 3 ID : 441009239243  
Option 4 ID : 441009239245  
Status : Answered  
Chosen Option : 2

Q.16 What is the role of the Prescaler in a counter module?

- Ans
- 1. To slow down the input signal before counting
  - 2. To increase the counting speed
  - 3. To store the count value
  - 4. To reset the counter

Question ID : 44100998393  
Option 1 ID : 441009391666  
Option 2 ID : 441009391665  
Option 3 ID : 441009391667  
Option 4 ID : 441009391668  
Status : Not Answered  
Chosen Option : --

Q.17 How does a solar charge controller prevent overcharging of a battery?

- Ans
- 1. By disconnecting the PV array from the battery or regulating the charging current
  - 2. By increasing the load on the battery
  - 3. By reducing the PV array voltage
  - 4. By discharging the battery completely

Question ID : 44100952510  
Option 1 ID : 441009209128  
Option 2 ID : 441009209131  
Option 3 ID : 441009209130  
Option 4 ID : 441009209129  
Status : Answered  
Chosen Option : 1

Q.18 If a load draws 4 kW real power and 3 kVAR reactive power, what is the apparent power?

- Ans
- 1. 9 kVA
  - 2. 4 kVA
  - 3. 3 kVA
  - 4. 5 kVA

Question ID : 44100992835  
Option 1 ID : 441009369544  
Option 2 ID : 441009369542  
Option 3 ID : 441009369543  
Option 4 ID : 441009369541  
Status : Answered  
Chosen Option : 4

Q.19 How is mutual-GMD ( $D_m$ ) between two conductors defined?

- Ans
- 1. The mean radius of each conductor
  - 2. The geometric mean of all possible distances between the conductors
  - 3. The arithmetic mean of all distances between the conductors
  - 4. The sum of conductor spacings

Question ID : 44100928771  
Option 1 ID : 441009114593  
Option 2 ID : 441009114591  
Option 3 ID : 441009114590  
Option 4 ID : 441009114592  
Status : Answered  
Chosen Option : 2

Q.20 The total Turn ON time of a thyristor is the sum of the \_\_\_\_\_.

- Ans
- 1. reverse recovery time and gate recovery time
  - 2. delay time and rise time only
  - 3. delay time, rise time and gate recovery time
  - 4. delay time, rise time and spread time

Question ID : 44100982048  
Option 1 ID : 441009325839  
Option 2 ID : 441009325837  
Option 3 ID : 441009325840  
Option 4 ID : 441009325838  
Status : Answered  
Chosen Option : 4

Q.21 Damper winding is provided in a synchronous motor:

- Ans
- 1. to increase synchronous reactance
  - 2. to reduce armature reaction
  - 3. to increase effective DC resistance
  - 4. to start the motor

Question ID : 44100987383  
Option 1 ID : 441009347372  
Option 2 ID : 441009347371  
Option 3 ID : 441009347374  
Option 4 ID : 441009347373  
Status : Answered  
Chosen Option : 4

Q.22 Which of the following is correct regarding the primary and secondary windings of an isolation transformer?

- Ans
- 1. Electrically and magnetically connected
  - 2. Electrically isolated but magnetically coupled
  - 3. Connected in series
  - 4. Connected in parallel

Question ID : 44100968477  
Option 1 ID : 441009272538  
Option 2 ID : 441009272537  
Option 3 ID : 441009272536  
Option 4 ID : 441009272535  
Status : Answered  
Chosen Option : 2

Q.23 What is primary use of Megger in measurement?

- Ans
- 1. Measuring insulation resistance
  - 2. Measuring current in a power line
  - 3. Measuring voltage in a DC circuit
  - 4. Measuring frequency in an AC circuit

Question ID : 44100973756  
Option 1 ID : 441009293324  
Option 2 ID : 441009293325  
Option 3 ID : 441009293323  
Option 4 ID : 441009293322  
Status : Answered  
Chosen Option : 1

Q.24 Gate pulse is required in a conventional SCR to:

- Ans
- 1. maintain conduction
  - 2. turn OFF the device only
  - 3. turn ON and turn OFF the device
  - 4. turn ON the device only

Question ID : 44100982098  
Option 1 ID : 441009326056  
Option 2 ID : 441009326054  
Option 3 ID : 441009326055  
Option 4 ID : 441009326053  
Status : Not Answered  
Chosen Option : --

Q.25 In the All-Day Efficiency calculation, which of the following is included in the losses?

- Ans
- 1. Only core losses
  - 2. Only copper losses
  - 3. Only mechanical losses
  - 4. Core and copper losses

Question ID : 44100968493  
Option 1 ID : 441009272599  
Option 2 ID : 441009272600  
Option 3 ID : 441009272602  
Option 4 ID : 441009272601  
Status : Answered  
Chosen Option : 4

Q.26 Which component of a wind turbine requires frequent lubrication to prevent wear?

- Ans
- 1. Gearbox and bearings
  - 2. Tower foundation
  - 3. Rotor blades
  - 4. Transformer

Question ID : 44100952115  
Option 1 ID : 441009207580  
Option 2 ID : 441009207581  
Option 3 ID : 441009207579  
Option 4 ID : 441009207582  
Status : Answered  
Chosen Option : 1

Q.27 Which of the following is/are NOT a key factor of power quality issue in the system?

- Ans
- 1. Harmonic distortion
  - 2. Voltage sags
  - 3. Power factor improvement
  - 4. Voltage surges

Question ID : 44100957648  
Option 1 ID : 441009229460  
Option 2 ID : 441009229459  
Option 3 ID : 441009229462  
Option 4 ID : 441009229461  
Status : Answered  
Chosen Option : 2

Q.28 Which addressing mode is used in the following 8051 instruction?

MOV A, R0

- Ans
- 1. Register Addressing
  - 2. Indirect Addressing
  - 3. Direct Addressing
  - 4. Immediate Addressing

Question ID : 44100996886  
Option 1 ID : 441009385573  
Option 2 ID : 441009385572  
Option 3 ID : 441009385574  
Option 4 ID : 441009385571  
Status : Answered  
Chosen Option : 1

Q.29 What is the typical source of controlling torque in Moving Iron (MI) instruments?

- Ans
- 1. Gravitational pull
  - 2. Spring mechanism
  - 3. Electromagnetic force
  - 4. Friction

Question ID : 44100973704  
Option 1 ID : 441009293128  
Option 2 ID : 441009293126  
Option 3 ID : 441009293127  
Option 4 ID : 441009293129  
Status : Answered  
Chosen Option : 2

Q.30 Overcurrent protection in thyristor circuit can be achieved through the use of:

- Ans
- 1. Zener Diode
  - 2. Metal Oxide Varistors
  - 3. Snubber Circuit
  - 4. fast acting current limiting fuse

Question ID : 44100982027  
Option 1 ID : 441009325755  
Option 2 ID : 441009325753  
Option 3 ID : 441009325754  
Option 4 ID : 441009325756  
Status : Answered  
Chosen Option : 4

Q.31 What is the main purpose of a pulse transformer?

- Ans
- 1. To transfer electrical pulses from one circuit to another with minimal distortion
  - 2. To deliver continuous current to the load
  - 3. To step up voltage for high-frequency signals
  - 4. To provide electrical isolation between primary and secondary windings

Question ID : 44100968485  
Option 1 ID : 441009272569  
Option 2 ID : 441009272568  
Option 3 ID : 441009272567  
Option 4 ID : 441009272570  
Status : Answered  
Chosen Option : 1

Q.32 A sinusoidal voltage is given by  $v(t) = 200 \sin(314t + 30^\circ)$ . What is the correct phasor representation of this voltage?

- Ans
- 1.  $314 \angle -200^\circ$
  - 2.  $200 \angle 30^\circ$
  - 3.  $314 \angle 200^\circ$
  - 4.  $200 \angle -30^\circ$

Question ID : 44100993088  
Option 1 ID : 441009370043  
Option 2 ID : 441009370041  
Option 3 ID : 441009370042  
Option 4 ID : 441009370040  
Status : Answered  
Chosen Option : 2

Q.33 What does a Sankey diagram indicate in an electrical system?

- Ans
- 1. Water flow
  - 2. Information flow
  - 3. Financial flow
  - 4. Energy flow

Question ID : 44100957641  
Option 1 ID : 441009229431  
Option 2 ID : 441009229433  
Option 3 ID : 441009229432  
Option 4 ID : 441009229434  
Status : Answered  
Chosen Option : 4

Q.34 How is an auto transformer different from a two-winding transformer?

- Ans
- 1. It has two separate windings.
  - 2. It can only step up the voltage.
  - 3. It uses a single winding for both primary and secondary.
  - 4. It can only step down the voltage.

Question ID : 44100968465  
Option 1 ID : 441009272487  
Option 2 ID : 441009272490  
Option 3 ID : 441009272488  
Option 4 ID : 441009272489  
Status : Answered  
Chosen Option : 3

Q.35 Which component of wind turbine maintenance is directly related to the amount of plant operation?

- Ans
- 1. Periodic testing
  - 2. Variable operation and maintenance costs
  - 3. Fixed operation and maintenance costs
  - 4. Routine checks

Question ID : 44100952099  
Option 1 ID : 441009207523  
Option 2 ID : 441009207522  
Option 3 ID : 441009207521  
Option 4 ID : 441009207520  
Status : Answered  
Chosen Option : 2

Q.36 Why was RISC architecture introduced?

- Ans
- 1. To make processors consume more power
  - 2. To simplify the instruction set for faster execution
  - 3. To replace microcontrollers
  - 4. To increase the number of instructions in a processor

Question ID : 44100998401  
Option 1 ID : 441009391703  
Option 2 ID : 441009391701  
Option 3 ID : 441009391704  
Option 4 ID : 441009391702  
Status : Answered  
Chosen Option : 2

Q.37 When should the energy audit report be provided?

- Ans
- 1. Only when requested by the management
  - 2. After conducting a thorough energy audit
  - 3. Before starting the audit
  - 4. During the audit process

Question ID : 44100957644  
Option 1 ID : 441009229443  
Option 2 ID : 441009229446  
Option 3 ID : 441009229444  
Option 4 ID : 441009229445  
Status : Answered  
Chosen Option : 2

Q.38 In an RC firing circuit, the firing angle can vary from:

- Ans
- 1.  $180^\circ$  to  $360^\circ$
  - 2.  $90^\circ$  to  $180^\circ$
  - 3.  $0^\circ$  to  $90^\circ$
  - 4.  $0^\circ$  to  $180^\circ$

Question ID : 44100982063  
Option 1 ID : 441009325908  
Option 2 ID : 441009325906  
Option 3 ID : 441009325905  
Option 4 ID : 441009325907  
Status : Answered  
Chosen Option : 3



Q.39 In a DC potentiometer, what does the null point indicate?

- Ans  1. The resistance has reached its maximum value.
2. The measured voltage is equal to the reference voltage.
3. The voltage is at its highest level.
4. There is no current flowing through the circuit.

Question ID : 44100973835  
Option 1 ID : 441009293570  
Option 2 ID : 441009293572  
Option 3 ID : 441009293573  
Option 4 ID : 441009293571  
Status : Answered  
Chosen Option : 2

Q.40 Why is the load factor always less than 1?

- Ans  1. Because the average load is always smaller than the maximum demand
2. Because the load factor is dependent on transmission losses
3. Because the maximum demand is always less than the average load
4. Because the power plant operates at full capacity all the time

Question ID : 44100960062  
Option 1 ID : 441009239189  
Option 2 ID : 441009239190  
Option 3 ID : 441009239187  
Option 4 ID : 441009239188  
Status : Answered  
Chosen Option : 1

Q.41 What is the name of the gas produced when biomass undergoes air gasification?

- Ans  1. Natural gas
2. Hydrogen gas
3. Methane gas
4. Producer gas

Question ID : 44100960108  
Option 1 ID : 441009239371  
Option 2 ID : 441009239374  
Option 3 ID : 441009239373  
Option 4 ID : 441009239372  
Status : Answered  
Chosen Option : 3

Q.42 In a transposition cycle, how are the conductors arranged?

- Ans
- 1. They are placed farther apart to reduce capacitance.
  - 2. They remain in the same position throughout the line.
  - 3. They are twisted together to form a bundle.
  - 4. They change positions in a repeating sequence over equal distances.

Question ID : 44100928836  
Option 1 ID : 441009114837  
Option 2 ID : 441009114834  
Option 3 ID : 441009114836  
Option 4 ID : 441009114835  
Status : Answered  
Chosen Option : 4

Q.43 A single-phase AC circuit has a voltage of 230V (RMS) and a current of 10A (RMS) with a power factor of 0.8 lagging. What is the reactive power?

- Ans
- 1. 1.38 kVAR
  - 2. 2.3 kVAR
  - 3. 1.2 kVAR
  - 4. 1.84 kVAR

Question ID : 44100992837  
Option 1 ID : 441009369754  
Option 2 ID : 441009369756  
Option 3 ID : 441009369753  
Option 4 ID : 441009369755  
Status : Answered  
Chosen Option : 1

Q.44 Which of the following distribution systems is the most economical?

- Ans
- 1. AC 3-phase 5-wire system
  - 2. AC single-phase 5-wire system
  - 3. AC 3-phase 3-wire system
  - 4. AC single-phase 2-wire system

Question ID : 44100989897  
Option 1 ID : 441009357746  
Option 2 ID : 441009357748  
Option 3 ID : 441009357747  
Option 4 ID : 441009357749  
Status : Answered  
Chosen Option : 3

Q.45 How does the use of phasors help in calculating the efficiency of a single-phase transformer?

- Ans
- 1. Phasors determine the thermal losses in the transformer.
  - 2. Phasors provide the maximum current that a transformer can handle.
  - 3. Phasors simplify the calculation of power factor and hence, power losses.
  - 4. Phasors allow calculation of instantaneous current and voltage.

Question ID : 44100968499  
Option 1 ID : 441009272626  
Option 2 ID : 441009272625  
Option 3 ID : 441009272624  
Option 4 ID : 441009272623  
Status : Answered  
Chosen Option : 4

Q.46 What is the primary function of the CPSR (Current Program Status Register) in an ARM processor?

- Ans
- 1. Managing system memory allocation
  - 2. Holding condition flags, control bits and processor mode information
  - 3. Controlling pipeline execution
  - 4. Storing general-purpose register values

Question ID : 44100998399  
Option 1 ID : 441009391686  
Option 2 ID : 441009391687  
Option 3 ID : 441009391688  
Option 4 ID : 441009391685  
Status : Not Answered  
Chosen Option : --

Q.47 A UJT exhibits negative resistance characteristics in which region?

- Ans
- 1. Below the peak point
  - 2. Between the peak point and valley point
  - 3. For all regions after the peak point
  - 4. After the valley point

Question ID : 44100982072  
Option 1 ID : 441009325941  
Option 2 ID : 441009325943  
Option 3 ID : 441009325944  
Option 4 ID : 441009325942  
Status : Not Answered  
Chosen Option : --

Q.48 What is the primary reason for the proximity effect in conductors?

- Ans
- 1. The physical movement of electrons towards the outer surface
  - 2. Uneven heating of the conductor
  - 3. Circulating currents due to mutual inductance between adjacent conductors
  - 4. The resistance of the conductor

Question ID : 44100928807  
Option 1 ID : 441009114729  
Option 2 ID : 441009114728  
Option 3 ID : 441009114726  
Option 4 ID : 441009114727  
Status : Answered  
Chosen Option : 3

Q.49 In a single phase AC circuit, supplied with a voltage  $V$  and drawing a current  $I$ , if  $\phi$  is the phase angle between  $V$  and  $I$ , what is expression for real power  $P$  consumed by the circuit.

- Ans
- 1.  $P = VI\cos\phi$
  - 2.  $P = \sqrt{3}VI\sin\phi$
  - 3.  $P = VI\sin\phi$
  - 4.  $P = 3VI\sin\phi$

Question ID : 44100993050  
Option 1 ID : 441009369893  
Option 2 ID : 441009369892  
Option 3 ID : 441009369895  
Option 4 ID : 441009369894  
Status : Answered  
Chosen Option : 1

Q.50 What is a common solid biomass waste product used for energy?

- Ans
- 1. Wood chips
  - 2. Crude oil
  - 3. Uranium
  - 4. LPG

Question ID : 44100960125  
Option 1 ID : 441009239436  
Option 2 ID : 441009239435  
Option 3 ID : 441009239438  
Option 4 ID : 441009239437  
Status : Answered  
Chosen Option : 1

Q.51 Why is energy conservation important in transformers?

- Ans
- 1. To increase the number of turns
  - 2. To decrease power losses and improve system efficiency
  - 3. To reduce the amount of power
  - 4. To increase the weight of transformers

Question ID : 44100943212  
Option 1 ID : 441009172310  
Option 2 ID : 441009172308  
Option 3 ID : 441009172307  
Option 4 ID : 441009172309  
Status : Answered  
Chosen Option : 2

Q.52 What is the purpose of an extension in moving iron instruments?

- Ans
- 1. To make the instrument more accurate
  - 2. To modify the frequency response
  - 3. To increase the deflection range
  - 4. To protect the instrument from high currents

Question ID : 44100973713  
Option 1 ID : 441009293163  
Option 2 ID : 441009293164  
Option 3 ID : 441009293162  
Option 4 ID : 441009293165  
Status : Answered  
Chosen Option : 3

Q.53 Consider the following statements regarding phase difference. Which of the following options is correct?

Statement 1: Two sinusoidal voltages are said to be in phase if their phase difference is zero.  
Statement 2: If one waveform lags another by  $90^\circ$ , then they are considered to be completely out of phase.

- Ans
- 1. Statement 1 is correct, but Statement 2 is incorrect.
  - 2. Both statements are correct, and Statement 2 is the correct explanation of Statement 1.
  - 3. Both statements are incorrect.
  - 4. Both statements are correct, but Statement 2 is not the correct explanation of Statement 1.

Question ID : 44100992662  
Option 1 ID : 441009368559  
Option 2 ID : 441009368557  
Option 3 ID : 441009368560  
Option 4 ID : 441009368558  
Status : Answered  
Chosen Option : 1

Q.54 What is the verification temperature for the resistance of the Government of India Ohm Standard?

- Ans  1. 25°C  
 2. 30°C  
 3. 35°C  
 4. 20°C

Question ID : 44100949289  
Option 1 ID : 441009196449  
Option 2 ID : 441009196450  
Option 3 ID : 441009196451  
Option 4 ID : 441009196448  
Status : Answered  
Chosen Option : 1

Q.55 What is the primary function of the controlling torque in electrostatic instruments?

- Ans  1. To maintain the movement of the system  
 2. To regulate the power supply  
 3. To provide a resisting force to the deflecting torque  
 4. To increase the sensitivity of the instrument

Question ID : 44100973690  
Option 1 ID : 441009293074  
Option 2 ID : 441009293077  
Option 3 ID : 441009293075  
Option 4 ID : 441009293076  
Status : Answered  
Chosen Option : 3

Q.56 How is a brownout different from a blackout?

- Ans  1. A brownout affects a large area, while a blackout only affects industrial consumers.  
 2. A blackout is a total power loss, while a brownout is a partial voltage reduction.  
 3. A blackout reduces voltage, while a brownout completely shuts off power.  
 4. A brownout completely cuts power, while a blackout only reduces frequency.

Question ID : 44100960068  
Option 1 ID : 441009239210  
Option 2 ID : 441009239209  
Option 3 ID : 441009239207  
Option 4 ID : 441009239208  
Status : Answered  
Chosen Option : 2

Q.57 In a parallel R-L circuit, the total current is obtained by the:

- Ans
- 1. algebraic sum of  $I_R$  and  $I_L$
  - 2. phasors sum of  $I_R$  and  $I_L$
  - 3. reciprocal of sum of  $I_R$  and  $I_L$
  - 4. multiplication of  $I_R$  and  $I_L$

Question ID : 44100991357  
Option 1 ID : 441009363660  
Option 2 ID : 441009363661  
Option 3 ID : 441009363663  
Option 4 ID : 441009363662  
Status : Answered  
Chosen Option : 2

Q.58 What is the primary principle behind the operation of an electrostatic voltmeter?

- Ans
- 1. Electromagnetic induction
  - 2. Electrostatic attraction and repulsion
  - 3. Thermal expansion
  - 4. Piezoelectric effect

Question ID : 44100973883  
Option 1 ID : 441009293714  
Option 2 ID : 441009293715  
Option 3 ID : 441009293716  
Option 4 ID : 441009293717  
Status : Answered  
Chosen Option : 2

Q.59 What preventive action can help identify potential imbalance or misalignment in a Small Wind Turbine?

- Ans
- 1. Increasing the rotor speed
  - 2. Installing a larger generator
  - 3. Painting the turbine blades frequently
  - 4. Monitoring vibration levels regularly

Question ID : 44100952196  
Option 1 ID : 441009207904  
Option 2 ID : 441009207903  
Option 3 ID : 441009207905  
Option 4 ID : 441009207906  
Status : Answered  
Chosen Option : 4

Q.60 What is the primary function of a welding transformer?

- Ans  1. To step down the voltage to provide the necessary welding current
2. To convert DC to AC
3. To provide power for industrial machines
4. To step up voltage for high-voltage applications

Question ID : 44100968481  
Option 1 ID : 441009272552  
Option 2 ID : 441009272554  
Option 3 ID : 441009272553  
Option 4 ID : 441009272551  
Status : Answered  
Chosen Option : 1

Q.61 What is the primary reason for considering capacitance effects in medium transmission lines?

- Ans  1. To improve voltage regulation calculations
2. To increase power losses
3. To eliminate inductive reactance
4. To increase the resistance of conductors

Question ID : 44100928840  
Option 1 ID : 441009114850  
Option 2 ID : 441009114851  
Option 3 ID : 441009114853  
Option 4 ID : 441009114852  
Status : Answered  
Chosen Option : 1

Q.62 Torque in a switched reluctance motor is:

- Ans  1. inversely proportional to current
2. directly proportional to square of current
3. inversely proportional to square of current
4. directly proportional to current

Question ID : 44100989992  
Option 1 ID : 441009358137  
Option 2 ID : 441009358134  
Option 3 ID : 441009358135  
Option 4 ID : 441009358136  
Status : Not Answered  
Chosen Option : --



Q.63 Which of the following is a part of a shaded pole motor?

- Ans  1. Cage rotor  
 2. Commutator  
 3. Contactor  
 4. Brushes

Question ID : 44100987180  
Option 1 ID : 441009346514  
Option 2 ID : 441009346511  
Option 3 ID : 441009346513  
Option 4 ID : 441009346512  
Status : Answered  
Chosen Option : 1

Q.64 What is the purpose of the INTR pin in an ADC interfaced with the 8051 microcontroller?

- Ans  1. To indicate that the conversion is complete  
 2. To select the ADC input channel  
 3. To reset the ADC  
 4. To enable the ADC

Question ID : 44100997107  
Option 1 ID : 441009386468  
Option 2 ID : 441009386470  
Option 3 ID : 441009386469  
Option 4 ID : 441009386467  
Status : Not Answered  
Chosen Option : --

Q.65 When should a generator be connected to the grid, according to the synchroscope?

- Ans  1. When the synchroscope needle is at the maximum deflection  
 2. When the synchroscope needle is pointing to the 'fast' side  
 3. When the synchroscope needle is pointing to the zero position (middle)  
 4. When the synchroscope needle is pointing to the 'slow' side

Question ID : 44100973896  
Option 1 ID : 441009293757  
Option 2 ID : 441009293754  
Option 3 ID : 441009293756  
Option 4 ID : 441009293755  
Status : Answered  
Chosen Option : 3

Q.66 Which of the following characteristics is exhibited by servo motor?

- Ans
- 1. It provides precise open loop speed control.
  - 2. A torque is developed in rotor which moves where reluctance of flux is minimum.
  - 3. It can accelerate at very high inertia.
  - 4. It responds to error signal and accelerate load quickly.

Question ID : 44100989983  
Option 1 ID : 441009358103  
Option 2 ID : 441009358104  
Option 3 ID : 441009358105  
Option 4 ID : 441009358102  
Status : Answered  
Chosen Option : 2

Q.67 What is the primary function of an integrating instrument?

- Ans
- 1. To measure the instantaneous value of a physical quantity
  - 2. To measure the peak value of a quantity
  - 3. To measure the average value of a quantity over time
  - 4. To measure the voltage of AC circuits

Question ID : 44100973865  
Option 1 ID : 441009293662  
Option 2 ID : 441009293664  
Option 3 ID : 441009293663  
Option 4 ID : 441009293665  
Status : Answered  
Chosen Option : 3

Q.68 What is the primary function of a timer module in an ARM processor?

- Ans
- 1. To perform arithmetic operations
  - 2. To manage input/output operations
  - 3. To count time intervals or generate delays
  - 4. To generate clock signals

Question ID : 44100998394  
Option 1 ID : 441009391672  
Option 2 ID : 441009391670  
Option 3 ID : 441009391671  
Option 4 ID : 441009391669  
Status : Not Answered  
Chosen Option : --

Q.69 The formula for string efficiency is given by the ratio of the voltage across the whole string to the:

- Ans
- 1. voltage across each individual disc
  - 2. product of the number of discs and the voltage across the conductor
  - 3. product of the number of discs and the voltage across the disc nearest to the conductor
  - 4. number of discs and the total voltage across the string

Question ID : 44100928490  
Option 1 ID : 441009113499  
Option 2 ID : 441009113498  
Option 3 ID : 441009113496  
Option 4 ID : 441009113497  
Status : Answered  
Chosen Option : 3

Q.70 In an electric power system, the load factor is defined as:

- Ans
- 1. average load divided by the maximum load
  - 2. average load divided by the rated capacity of the system
  - 3. total energy consumed divided by the maximum load
  - 4. maximum load divided by the average load

Question ID : 44100949382  
Option 1 ID : 441009196810  
Option 2 ID : 441009196808  
Option 3 ID : 441009196811  
Option 4 ID : 441009196809  
Status : Answered  
Chosen Option : 1

Q.71 Blocked rotor test is performed on a three-phase induction motor to determine:

- Ans
- 1. no load current
  - 2. no load power factor
  - 3. power factor on the short circuit
  - 4. temperature withstand capability of the motor

Question ID : 44100988118  
Option 1 ID : 441009350411  
Option 2 ID : 441009350412  
Option 3 ID : 441009350409  
Option 4 ID : 441009350410  
Status : Answered  
Chosen Option : 4

Q.72 What happens to the size of a conductor when the voltage is increased by a factor of 'n' (assuming constant transmission efficiency)?

- Ans
- 1. Increases by  $n^2$  times
  - 2. Decreases the size to  $1/n^2$  of the original size
  - 3. Doubles the size of conductor
  - 4. Remains unchanged

Question ID : 44100952206  
Option 1 ID : 441009207946  
Option 2 ID : 441009207945  
Option 3 ID : 441009207944  
Option 4 ID : 441009207943  
Status : Answered  
Chosen Option : 2

Q.73 A single-phase AC circuit has an apparent power of 600 VA and an active power of 480 W. Calculate the power factor of the circuit.

- Ans
- 1. 0.6
  - 2. 0.707
  - 3. 0.866
  - 4. 0.8

Question ID : 44100993024  
Option 1 ID : 441009369796  
Option 2 ID : 441009369794  
Option 3 ID : 441009369795  
Option 4 ID : 441009369793  
Status : Answered  
Chosen Option : 4

Q.74 Which of the following is correct in regard to voltage regulation of a transformer?

- Ans
- 1. The ratio of full-load voltage to no-load voltage.
  - 2. The difference between primary voltage and secondary voltage at full load.
  - 3. The difference between no-load and full-load voltage, expressed as a percentage of the full-load voltage.
  - 4. The ratio of no-load voltage to full-load voltage.

Question ID : 44100949173  
Option 1 ID : 441009195988  
Option 2 ID : 441009195991  
Option 3 ID : 441009195990  
Option 4 ID : 441009195989  
Status : Answered  
Chosen Option : 3

Q.75 Which of the following is true about the diversity factor in a system?

- Ans
- 1. It is used to reduce the total connected load in a system.
  - 2. A higher diversity factor usually means higher peak loads.
  - 3. A higher diversity factor helps in reducing the maximum demand.
  - 4. It helps to determine the total cost of energy generation.

Question ID : 44100949389  
Option 1 ID : 441009196838  
Option 2 ID : 441009196837  
Option 3 ID : 441009196839  
Option 4 ID : 441009196836  
Status : Answered  
Chosen Option : 3

Q.76 Which of the following can decrease the transmission efficiency of a line?

- Ans
- 1. Using a higher power factor
  - 2. Increasing the transmission voltage
  - 3. Reducing transmission distance
  - 4. Increasing resistance of the conductor

Question ID : 44100928831  
Option 1 ID : 441009114814  
Option 2 ID : 441009114815  
Option 3 ID : 441009114817  
Option 4 ID : 441009114816  
Status : Answered  
Chosen Option : 4

Q.77 Why are primary batteries also called 'dry batteries'?

- Ans
- 1. Because they do not need maintenance
  - 2. Because they use only dry chemicals
  - 3. Because they operate without electrolyte
  - 4. Because the electrolyte is absorbed in the separator and no free liquid is present

Question ID : 44100952515  
Option 1 ID : 441009209150  
Option 2 ID : 441009209151  
Option 3 ID : 441009209148  
Option 4 ID : 441009209149  
Status : Answered  
Chosen Option : 4

Q.78 A power station has the following daily load cycle:

260 MW for 6 hours

200 MW for 8 hours

160 MW for 4 hours

100 MW for 6 hours

The power station is equipped with 4 sets of 75 MW each. What is the plant capacity factor?

Ans  1. 61.1%

2. 55.6%

3. 70.5%

4. 80.2%

Question ID : 44100960059

Option 1 ID : 441009239175

Option 2 ID : 441009239178

Option 3 ID : 441009239176

Option 4 ID : 441009239177

Status : Answered

Chosen Option : 1

Q.79 Class D commutation used for turning off the thyristor is a type of:

Ans  1. self commutation

2. line commutation

3. voltage commutation

4. external pulse commutation

Question ID : 44100982085

Option 1 ID : 441009325994

Option 2 ID : 441009325995

Option 3 ID : 441009325993

Option 4 ID : 441009325996

Status : Not Answered

Chosen Option : --

Q.80 In a synchronous motor, mechanical power developed for constant supply voltage and constant excitation will be maximum when:

Ans  1. load angle  $\delta$  will be greater than internal angle  $\theta$

2. load angle  $\delta$  will be less than internal angle  $\theta$

3. load angle  $\delta$  will be equal to internal angle  $\theta$

4. load angle  $\delta$  will be equal to zero

Question ID : 44100987417

Option 1 ID : 441009347540

Option 2 ID : 441009347541

Option 3 ID : 441009347539

Option 4 ID : 441009347542

Status : Answered

Chosen Option : 3

Q.81 Resistance start single phase induction motors are used in:

- Ans  1. domestic refrigerators  
 2. electric clocks  
 3. timing devices  
 4. instrument servos

Question ID : 44100987293  
Option 1 ID : 441009346963  
Option 2 ID : 441009346965  
Option 3 ID : 441009346964  
Option 4 ID : 441009346966  
Status : Answered  
Chosen Option : 1

Q.82 What type of solar charge controller is better suited for larger solar power systems?

- Ans  1. Pulse Width Modulation  
 2. Analog Controllers  
 3. Manual Controllers  
 4. Maximum Power Point Tracking

Question ID : 44100952525  
Option 1 ID : 441009209189  
Option 2 ID : 441009209191  
Option 3 ID : 441009209188  
Option 4 ID : 441009209190  
Status : Answered  
Chosen Option : 4

Q.83 What does the shunt branch of the transformer's equivalent circuit represent?

- Ans  1. The load on the transformer.  
 2. The series resistance and reactance.  
 3. The leakage reactance of the transformer windings.  
 4. The magnetising current and core losses.

Question ID : 44100949171  
Option 1 ID : 441009195980  
Option 2 ID : 441009195982  
Option 3 ID : 441009195983  
Option 4 ID : 441009195981  
Status : Answered  
Chosen Option : 4

Q.84 What is the purpose of the Sample and Hold circuit in an ADC?

- Ans
- 1. To hold the converted digital value
  - 2. To store the analog signal momentarily before conversion
  - 3. To amplify the signal before conversion
  - 4. To filter out noise from the input signal

Question ID : 44100998392  
Option 1 ID : 441009391664  
Option 2 ID : 441009391661  
Option 3 ID : 441009391662  
Option 4 ID : 441009391663  
Status : Not Answered  
Chosen Option : --

Q.85 Stepper motor rotational speed is determined by \_\_\_\_\_.

- Ans
- 1. load
  - 2. direction of torque developed
  - 3. synchronous speed
  - 4. step pulse frequency

Question ID : 44100989986  
Option 1 ID : 441009358115  
Option 2 ID : 441009358116  
Option 3 ID : 441009358117  
Option 4 ID : 441009358114  
Status : Answered  
Chosen Option : 4