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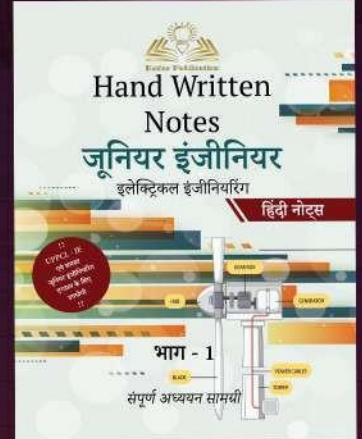
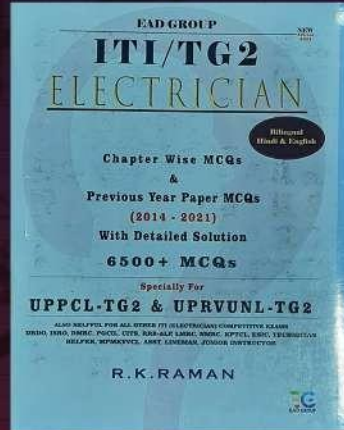
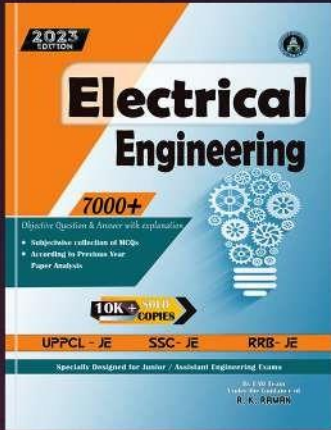
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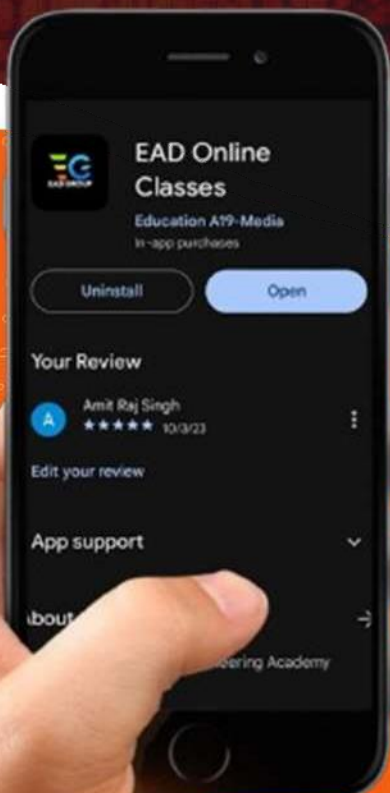
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Junior Engineer Civil Mechanical Electrical and Quantity Surveying and Contracts Examination 2022

| | |
|----------------|---------------------------------|
| Roll Number | |
| Candidate Name | |
| Venue Name | |
| Exam Date | 16/11/2022 |
| Exam Time | 5:00 PM - 7:00 PM |
| Subject | Junior Engineer 2022 Electrical |

Section : General Intelligence and Reasoning

Q.1 Six friends, A, B, C, D, E, and F are seated in a row facing north. There are exactly two seats to the left of B. F is an immediate neighbour of both B and D. E is not at either of the extreme seats of the row. C is not an immediate neighbour of E. If A and D decide to swap their positions, what will be the new position of A?

- Ans
- 1. Third from the right end
 - 2. Second to the left of F
 - 3. Third to the right of E
 - 4. Extreme right of the row

Question ID : 26433068372

Status : Not Answered

Chosen Option : --

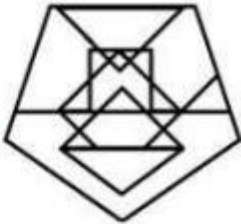
EAD GROUP

Q.2 Select the option figure in which the given figure is embedded (rotation is NOT allowed).



Ans
Ans

X 1.



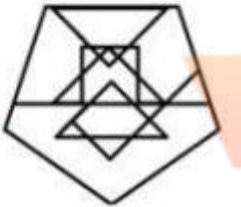
X 2.



✓ 3.



X 4.



Question ID : 26433057378

Status : Answered

Chosen Option : 3

Q.3 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.

$$12 * 10 * 41 * 100 * 61$$

Ans ✓ x, +, =, +

X

X

X 4. x, -, =, -

Question ID : 26433057952

Status : Answered

Chosen Option : 1

Q.4 Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.
 $15 : 60 :: 9 : ? :: 10 : 35$

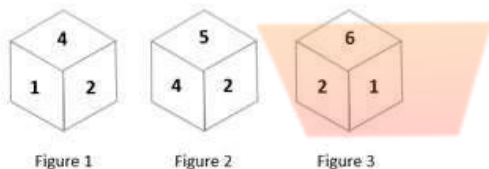
- Ans 1. 39
 2. 30
 3. 45
 4. 27

Question ID : 26433057578
 Status : Not Answered
 Chosen Option : --

Q.5 Which letter cluster will replace the question mark (?) to complete the given series?
 WIDU, CVYI, ?, OVOK, UIJY

- Ans 1. IITW
 2. IHRE
 3. IHRE
 4. IITW

Q.6 Three different positions of the same dice are shown (Figures 1-3). Find the number on the face opposite to the face having '3'.



- Ans 1. 2
 2. 4
 3. 5
 4. 6

Question ID : 26433076574
 Status : Answered
 Chosen Option : 1

Q.7 In a code language, 'TURNIP' is coded as WXUQLS and 'ORANGE' is coded as RUDQJH. How will 'GRAPES' be coded in the same language?

- Ans 1. JVDSHW
 2. JUDSHV
 3. KVDSHU
 4. JUESHV

Question ID : 26433057893
 Status : Answered
 Chosen Option : 2





Q.8 Which of the following numbers will replace the question mark (?) in the given series?
2, 5, 13, 36, ?

- Ans** 1. 104
 2. 110
 3. 108
 4. 105

Question ID : 26433067884
Status : Not Answered
Chosen Option : --

Q.9 Select the option that is embedded in the given figure (rotation is NOT allowed).

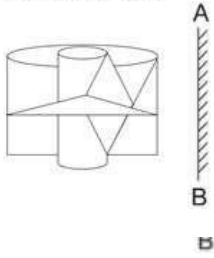


- Ans** 1. 
 2. 
 3. 
 4. 

Question ID : 26433058103
Status : Answered
Chosen Option : 1

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Q.10 Select the correct mirror image of the given figure when the mirror is placed at 'AB' as shown.



Ans

- 1.
- 2.
- 3.
- 4.



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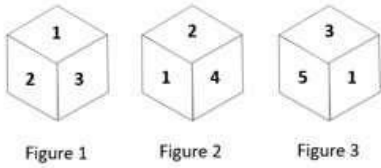
Question ID : 26433057805
Status : Answered
Chosen Option : 4

Q.11 Which of the following numbers will replace the question mark (?) and complete the given number series?
5, 6, 14, 45, ?

- Ans
- 2.
 - 3.
 - 4.

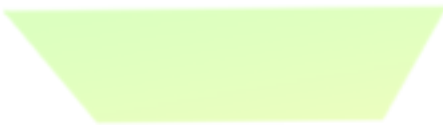
Question ID : 26433067476
Status : Not Answered
Chosen Option : --

Q.12 Three different positions of the same dice are shown (Figures 1-3). Find the number on the face opposite to the face having '6'.



Ans 1. 1

2. 5



Question ID : 26433076568
 Status : Answered
 Chosen Option : 1

Q.13 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Neuter
2. Newman
3. Neurology
4. Nuisance
5. Newfoundland
6. Neutral
7. Newest



Ans



Question ID : 26433067555
 Status : Answered
 Chosen Option : 3

Q.14 Select the number from among the given options that can replace the question mark (?) in the following series.

211, 158, 187, ?, 163, 110, 139

Ans 1.

3.

4.

Question ID : 26433057033
 Status : Not Answered
 Chosen Option : --

Q.15 Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.

10 : -400 :: 4 : ? :: 6 : -72

- Ans
- 1. -24
 - 2. -20
 - 3. -28
 - 4. -16

Question ID : 26433092718

Status : Answered

Chosen Option : 1

Q.16 सही विकल्प का चयन करें जो निम्नलिखित शब्दों के तार्किक और सार्थक क्रम-विन्यास को इंगित करता है।

1. जॉब पोस्ट
2. जॉब ऑफर
3. वैकेंसी
4. सेलेक्शन
5. इंटरव्यू

- Ans
- -
 -
 -

Question ID : 26433067759

Status : Answered

Chosen Option : 3

Q.17 Select the combination of letters that when sequentially placed in the blanks of the given series, will complete the series.

G _ H _ HH _ _ H G _ H

- Ans
- 1. HG HGH
 - 2. HHGGH
 - HGGHH
 -

Question ID : 26433057733

Status : Not Answered

Chosen Option : --

Q.18 Which letter-cluster will replace the question mark (?) to complete the given series?

MWYP, QAWN, ?, YISJ, CMQH

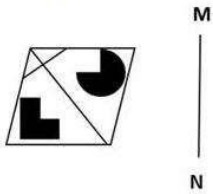
- Ans
- 1. SBYO
 - 2. RCXM
 - 3. SCXN
 - 4. UEUL

Question ID : 26433068046

Status : Answered

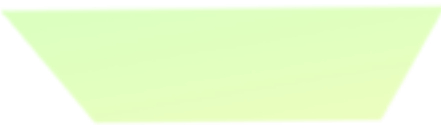
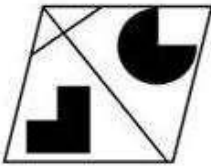
Chosen Option : 4

Q.19 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



Ans

1.



Question ID : 26433056108

Status : Answered

Chosen Option : 3

Q.20 Select the correct combination of mathematical signs that can sequentially replace \diamond and balance the given equation.

$$75 \diamond 26 \diamond 45 \diamond 3 \diamond 6 \diamond 4 \diamond 10$$

Ans

$\times, \times,$

$2.-,$

$\times, \times,$

$4.-, +, +, \times, =, +$

Question ID : 26433067484

Status : Not Answered

Chosen Option : --

Q.21 Which of the following interchanges of signs would make the given equation correct?
 $195 \times 39 \div 3 + 58 - 23 = 50$

- Ans 1. \times and $+$
 2. \div and $+$
 3. $-$ and $+$
 4. $+$ and \times

Question ID : 26433057938

Status : Answered

Chosen Option : 1

Q.22 In a certain code language, 'CAUGHT' is written as 'AYSEFR' and 'PERFECT' is written as 'NCPDCAR'. How will 'REALIZE' be written in that language?

- Ans PCYJGXC

Question ID : 26433056579

Status : Answered

Chosen Option : 1

Q.23 उस शब्द-युग्म का चयन कीजिए, जिसके दो शब्द आपस में उसी प्रकार संबंधित हैं, जिस प्रकार से दिए गए शब्द-युग्म के दो शब्द आपस में संबंधित हैं।
 (शब्दों को अर्थपूर्ण अंग्रेजी / हिंदी शब्दों के रूप में माना जाना चाहिए और इन्हें शब्द में अक्षरों की संख्या / व्यंजनों की संख्या / स्वरों की संख्या के आधार पर एक दूसरे से संबद्ध नहीं किया जाना चाहिए।)
 डुबाना : ऊपर उठाना

- Ans 1. स्पष्ट : अस्पष्ट
 2. उल्लासित : हँसमुख
 3. टपकाना : इंजेक्ट करना
 4. शमन : राहत

Question ID : 26433068484

Status : Answered

Chosen Option : 2

Q.24 उस विकल्प का चयन करें जो तीसरे शब्द से उसी प्रकार संबंधित है जिस प्रकार दूसरा शब्द पहले शब्द से संबंधित है। (शब्दों को अर्थपूर्ण हिन्दी शब्दों के रूप में माना जाना चाहिए और इन्हें शब्द में अक्षरों की संख्या/व्यंजनों की संख्या/स्वरों की संख्या के आधार पर एक-दूसरे से संबद्ध नहीं किया जाना चाहिए।)
 ध्यान न देना : ध्यान देना :: बुझाना : ?

- Ans
 2. ठंडा करना
 3. बाहर निकालना
 4. प्रज्वलित करना

Question ID : 26433067389

Status : Answered

Chosen Option : 4

Q.25 In a certain code language, 'PRISON' is written as 'QTJUPP' and 'RECORD' is written as 'SGDQSF'. How will 'OBTAIN' be written in that language?

- Ans 1. PDUCLLO
 2. PDUDKO
 3. PDECKO
 4. PDUCLJP

Question ID : 26433056915
 Status : Answered
 Chosen Option : 4

Q.26 L, M, N, O, P, Q and R are seven friends of different heights. O is taller than five of his friends. P is taller than only L. M is taller than three of his friends and shorter than three of his friends. R is not the tallest. Q is immediately shorter than M. Who amongst the seven friends is the tallest?

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

Question ID : 26433068756
 Status : Not Answered
 Chosen Option : --

Q.27 Select the correct mirror image of the given figure when the mirror is placed at MN as shown.



- Ans 1. apZ7da
 2. a b 7 5 r t y
 3. a p Z 7 d a
 4. a b 7 5 r t y

Question ID : 26433055957
 Status : Answered
 Chosen Option : 2

Q.28 'A + B' का अर्थ है कि A, B का भाई है.
 'A - B' का अर्थ है कि A, B का पिता है.
 'A × B' का अर्थ है कि A, B की बहन है.
 'A ÷ B' का अर्थ है कि A, B की माता है.
 यदि $P \times M \div S \times R - T + Q$ है, तो निम्नलिखित में से कौन-सा कथन सही नहीं है?

- Ans 1. P, T के पिता की माता की बहन है।
 2. R, Q का पिता है।
 3. S, Q की माता है।
 4. P, R की माता की बहन है।

Question ID : 26433056925
 Status : Answered
 Chosen Option : 3

Q.29 Person A starts moving towards the North and walks 4 km. He then turns right and walks 8 km. He takes a left turn and walks 2 km and then turns left again and walks 8 km. How much and in which direction does he need to walk now to reach the point from where he started?

- Ans 1. 6 km South
 2. 2 km North
 3. 2 km South
 4. 4 km North

Question ID : 26433068158
 Status : Answered
 Chosen Option : 1

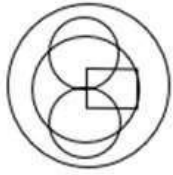
Q.30 Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
 Rooster : Hen :: Fox : ?

- Ans 1. Vixen
 2. Ewe
 3. Wolf
 4. Doe

Question ID : 26433065627
 Status : Answered
 Chosen Option : 2

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Q.31 Select the option that is embedded in the given figure (rotation is NOT allowed).



Ans



Question ID : 26433058098

Status : Answered

Chosen Option : 1

Q.32 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.

H F _ H F D _ H F _ V H F D V _ _ D V

- Ans
- ✗ 1. DDVVHF
 - ✓ DVVDHF
 - ✗ 3. DVDDHF
 - ✗ 4. DVHHDF

Question ID : 26433056240

Status : Not Answered

Chosen Option : --

Q.33 Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)

Waiter : Restaurant :: Chef : ?

- Ans
- ✗ 1. Hotel
 - ✗ 2. Food
 - ✗ 3. Food
 - ✓ 4. Kitchen

Question ID : 26433067361

Status : Answered

Chosen Option : 4

Q.34 Two statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All diamonds are gems.

All gems are ornaments.

Conclusions:

I. Some ornaments are diamonds.

. All ornaments are gems.

Ans 1. Neither conclusion I nor II follows

2. Only conclusion II follows

3. Only conclusion I follows

Question ID : 26433056692

Status : Answered

Chosen Option : 3

Q.35 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1.Grapevine

2.Grudge

3.Grapple

4.Grunt

5.Grapes

6.Gruelling

7.Grumpy

Ans 1.

2.

Question ID : 26433067554

Status : Answered

Chosen Option : 2

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Statements:

All metals are solids.

Some solids are conductors

No conductor is black.

Ans 1. Only conclusion III follows

2. Only conclusion II follows.

3. All conclusions I, II and III follow.

4. None of the conclusions follow

Question ID : 26433057927

Status : Answered

Chosen Option : 4

Q.37 सही विकल्प का चयन करें जो निम्नलिखित शब्दों के तार्किक और सार्थक क्रम-विन्यास को इंगित करता है। (ऊपर से नीचे)

1. टखना
2. पैर (Feet)
3. घुटना
4. जांघ
5. पैर की उंगलियां

Ans 1. 4, 3, 1, 2, 5

2. 1, 3, 2, 4, 5

3. 4, 3, 1, 5, 2

4. 3, 4, 1, 5, 2

Question ID : 26433067754

Status : Answered

Chosen Option : 1

Q.38 Select the set in which the numbers are related in the same way as are the numbers of the given 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.)

(14, 29, 59)

(6, 13, 27)

Ans 1. (1

2. (1

3. (9, 20, 42)

4. (5,

Question ID : 26433057085

Status : Answered

Chosen Option : 1

Q.39 J, K, L, M, N, O, P are sitting in a circle facing the centre. N is the immediate neighbour of J and M. P is not the immediate neighbour of O and L. O is to the immediate right of J. Who sits to the immediate right of N?

Ans 1. M

2.

3.

4. O

Question ID : 26433056545

Status : Not Answered

Chosen Option : --

EAD GROUP

Q.40 In a certain code language, 'OTHERS' is written as 'RQDGSN' and 'SCHOOL' is written as 'KNNGBR'.How will 'SPORTS' be written in that language?

- Ans
- 1. RSQOOQ
 - 2. RTQNOR
 - 3. RSQNPR
 - 4. RSQNOR

Question ID : 26433056665
Status : Not Answered
Chosen Option : --

Q.41 गोपी, किशन का भाई है। राम, किशन के पिता हैं। गीता, किशन की बहन है। गीता, गोपी से किस प्रकार संबंधित है?

- Ans
- 1. पुत्री
 - 2. माँ
 - 3. बहन
 - 4. पत्नी

Question ID : 26433070337
Status : Answered
Chosen Option : 3

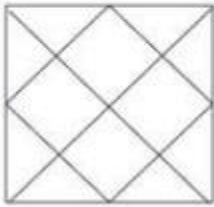
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Q.42 Select the option in which the given figure is embedded (rotation is NOT allowed).

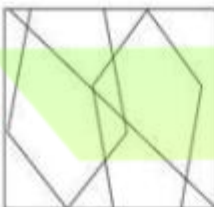


Ans

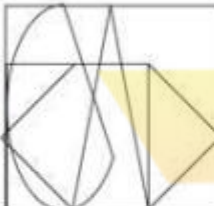
✗ 1.



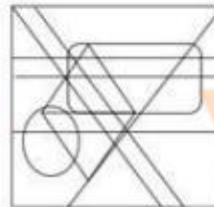
✗ 2.



✗ 3.

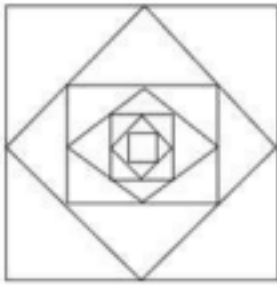


✓ 4.



EAD GROUP

Q.43 How many triangles are there in the given figure?



- Ans
- 1. 20
 - 2. 24
 - 3. 28
 - 4. 18

Question ID : 26433066054
Status : Answered
Chosen Option : 1

Q.44 If \div means $+$, $+$ means $-$, $-$ means \times , and \times means \div , then which of the following equations is correct?

- Ans
- 1. $15 - 3 + 10 \times 5 + 5 = 46$
 - 2. $15 - 3 + 10 \times 5 + 5 = 48$
 - 3. $15 - 3 + 10 \times 5 + 5 = 50$
 - 4. $15 - 3 + 10 \times 5 + 5 = 55$

Question ID : 26433062775
Status : Not Answered
Chosen Option : --

Q.45 Select the set in which the numbers are related in the same way as are the numbers of the following set.

(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)
(4, 131, 5)
(2, -11, 3)

- Ans
- 1. (1, -5, 2)
 - 2. (8, 1120, 9)
 - 3. (6, 953, 7)
 - 4. (2, -31, 4)

Question ID : 26433067935
Status : Not Answered
Chosen Option : --

Q.46 Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.

62 : 39 :: 78 : ? :: 58 : 37

- Ans 1. 52
 2. 49
 3. 43
 4. 47

Question ID : 26433057583

Status : Not Answered

Chosen Option : --

Q.47 उस विकल्प का चयन कीजिए, जो कार के दिए गए भागों की तार्किक और सार्थक क्रम में सही व्यवस्था को इंगित करता है।

1. विंडशील्ड
2. हेडलाइट
3. बूट
4. स्टीयरिंग
5. सीटें

- Ans 1.
 2.
 3.
 4.

Question ID : 26433074509

Status : Answered

Chosen Option : 3

Q.48 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.

_ M E A A _ T M M _ _ A N _ M _ E A _ N T

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

Question ID : 26433067745

Status : Not Answered

Chosen Option : --

- Ans 1. उत्तर-पश्चिम
 2. दक्षिण-पश्चिम
 3. पश्चिम
 4. उत्तर

Question ID : 26433076692

Status : Answered

Chosen Option : 2

Q.50 Select the option that is related to the third word in the same way as the second word is related to the first word.

(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Drawing : Paper :: Driving : ?

- Ans
- 1. Driver
 - 2. Steering
 - 3. Wheel
 - 4. Road

Question ID : 26433055933

Status : Answered

Chosen Option : 4

Section : General Awareness

Q.1 In December 2021, what is the amount of overdraft for which the provision was made under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) for verified SHG members having accounts under the Prime Minister Jan Dhan Yojana with Banks?

- Ans
- 1. ₹5,000
 - 2. ₹10,000
 - 3. ₹15,000
 - 4. ₹2,000

Question ID : 26433082835

Status : Not Answered

Chosen Option : --

Q.2 The Halda festival is celebrated in which of the following states of India?

- Ans
- 1. Maharashtra
 - 2. Meghalaya
 - 3. Karnataka
 - 4. Himachal Pradesh

Question ID : 26433064333

Status : Answered

Chosen Option : 4

Q.3 According to the sport, identify which of the following sportspersons is different from the rest.

- Ans
- 1. Kapil Dev
 - 2. Anil Kumble
 - 3. Leander Paes
 - 4. Rahul Dravid

Question ID : 264330100726

Status : Answered

Chosen Option : 3

Q.4 Which of the following phylums represent triploblastic animals?

- Ans 1. Protozoa, Nematoda and Porifera
 2. Platyhelminthes, Echinodermata and Chordata
 3. Annelida, Platyhelminthes and Porifera
 4. Protozoa, Platyhelminthes and Porifera

Question ID : 26433054029
Status : Not Answered
Chosen Option : --

Q.5 Who among the following leaders called Bal Gangadhar Tilak as 'the maker of modern India'?

- Ans 1. Lala Lajpat Rai

 3. Jawaharla

Question ID : 26433081955
Status : Answered
Chosen Option : 1

Q.6 निम्नलिखित में से कौन सा शाकाहारी नहीं है?

- Ans

Question ID : 264330100710
Status : Answered
Chosen Option : 3

Q.7 What is the mass number of nitrogen?

- Ans
 2.
 3.

Question ID : 264330100705
Status : Answered
Chosen Option : 4

Q.8 Which national park, located in a north-eastern state, is famous for being the only park in India to have four big cat species namely panther, tiger, cloud leopard and snow leopard?

- Ans
- 1. Dachigam National Park
 - 2. Namdapha National Park
 - 3. Periyar National Park
 - 4. Nanda Devi National Park

Question ID : 26433055131
Status : Answered
Chosen Option : 4

Q.9 Which is the only streptococcal species widely used in food fermentation, especially for yogurt manufacturing?

- Ans
- 1. Streptococcus pyogenes
 -
 - 3. Streptococcus viridans
 -

Question ID : 26433055810
Status : Not Answered
Chosen Option : --

Q.10 Hideki Yukawa, who received the Nobel Prize in 1949, is well known for which discovery?

- Ans
- 1. Measurement of electronic charge
 -
 - 3. Cascade process of cosmic radiation
 -

Question ID : 264330100015
Status : Not Answered
Chosen Option : --

Q.11 Operation Flood is associated with:

- Ans
- 1. pulses
 - milk
 -
 - 4. potatoes

Question ID : 26433054810
Status : Answered
Chosen Option : 3

Q.12 At present, how many fundamental duties are mentioned in the Indian Constitution?

- Ans
- 1. 13
 - 2. 12
 - 3. 10
 - 4. 11

Question ID : 26433064818
Status : Answered
Chosen Option : 4

Q.13 If one flies from north to south over India, which would be the correct order of the rivers?

- 1) Kaveri
- 2) Mahanadi
- 3) Krishna
- 4) Ganga
- 5) Godavari

- Ans
- 1.
 -
 - 3.
 -

Question ID : 26433092852
Status : Answered
Chosen Option : 2

Q.14 Which of the following Ministries launched Y-Break App for working professionals in September 2021?

- Ans
- 1. Ministry of Health and Family welfare
 -
 - 3. Ministry of Defence
 - Ministry of AYUSH

Question ID : 26433082810
Status : Not Answered
Chosen Option : --

Q.15 Which of the following laws works in constant pressure?

- Ans
- 1. Boyle's law
 -
 - 3. Thomson's law
 - 4. Graham's law

Question ID : 26433064134
Status : Answered
Chosen Option : 2

Q.16 When did the United Nations declare the World Physics Year, also known as the Einstein Year, to mark the 100th anniversary of the physicist Albert Einstein?

- Ans
- 1. 2004
 - 2. 2002
 - 3. 2006
 - 4. 2005

Question ID : 264330100045
Status : Not Answered
Chosen Option : --

Q.17 Based on evidence from seismic waves, heat flows and meteorites, which layer of Earth is made up of rock that represents 84% of the Earth's total volume?

- Ans
- 1. Crust
 - 2. Mantle
 - 3. Oceanic crust
 - 4. Inner

Question ID : 26433055825
Status : Answered
Chosen Option : 2

Q.18 As of 10 April 2022, who among the following has been the longest serving Prime Minister of India?

- Ans
- 1. Manmohan Singh
 - 2. Indira Gandhi
 - 3. Narendra Modi
 - 4. Jawahar Lal Nehru

Question ID : 26433054540
Status : Answered
Chosen Option : 4

Q.19 Love can best be expressed in which form of rasa?

- Ans
- 1. Bibhatsa rasa
 - 2. Bhakti rasa
 - 3. Veera rasa
 - 4. Prema rasa

Question ID : 26433086569
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.20 In March 2022, who broke the legendary Kapil Dev's, 40-year-old record of 'the fastest Test Fifty' by an Indian?

- Ans 1. MS Dhoni
 2. R Ashwin
 3. Rishabh Pant
 4. Shreyas Iyer

Question ID : 26433055053
 Status : Answered
 Chosen Option : 3

Q.21

Dr Jitendra Singh (Union Minister of State (Independent Charge) Science and Technology) launched the Amrit Grand Challenge Programme titled _____ in September 2021, to identify 75 innovations in Telemedicine, AI, Digital Health and BIG Data by Start-ups and Entrepreneurs.

- Ans 1.

 4.

Question ID : 26433081801
 Status : Not Answered
 Chosen Option : --

Q.22 Which protein is naturally found in some grains including wheat, barley and rye?

- Ans 1. Maltase

 3. Pepsin
 4. Renin

Question ID : 26433054051
 Status : Not Answered
 Chosen Option : --

Q.23 प्रोबायोटिक्स को किस प्रकार परिभाषित किया जा सकता है?

- Ans
 2. एंडोटॉक्सिन पैदा करने वाले बैक्टीरिया, जिससे दस्त हो सकता है
 3. मनुष्यों के प्रोटोजोआ परजीवी
 4. जीवित सूक्ष्मजीव जिनका उपभोग या शरीर पर लगाने पर स्वास्थ्य के लिए लाभकारी हो सकते हैं

Question ID : 26433054037
 Status : Not Attempted and Marked For Review
 Chosen Option : --

Q.24 Which of the following is NOT a function of money?

- Ans 1. Unit of account
 2. Price stability
 3. Store of value
 4. Medium of exchange

Question ID : 26433065424
Status : Not Answered
Chosen Option : --

Q.25 The disqualification of the membership of a State Legislature is laid down in which Article of the Indian Constitution?

- Ans 1. Article 190
 2. Article 191
 3. Article 144
 4. Article 14

Question ID : 26433089975
Status : Answered
Chosen Option : 2

Q.26 According to the Köppen type of climate, the code Af represents:

1. humid subtropical climate
 2. marine west coast climate
 3. tropical wet climate
 4. tropical monsoon climate

Question ID : 26433059144
Status : Not Answered
Chosen Option : --

Q.27 Who was the author of Buddhacharita?

- Ans 1. Ashvaghosha
 2. Vasumitra
 3. Hala
 4. Nagarjuna

Question ID : 26433065575
Status : Not Answered
Chosen Option : --

Q.28 Consider the following statements about the retreating monsoon of India.

- 1) The months of October and November are known for retreating monsoons.
- 2) The South-west monsoons becomes South-east monsoons.
- 3) A bulk of the rainfall of the Coromondal coast is derived from these depressions and cyclones.
- 4) In northern India, it is comparatively dry and temperatures begin to fall.
- 5) Three-fourths of the total rain in the country is received during the retreating monsoon season.

Which of the above are true?

- Ans
- 1. All except 5
 - 2. Only statements 1, 3 and 4
 - 3. Only statements 2, 3 and 4
 -

Question ID : 26433055313
Status : Not Answered
Chosen Option : --

Q.29 In which of the following decades was there a negative growth rate of population in India?

- Ans
- 1. 1971-1981
 - 2. 1911-1921
 - 3. 1931-1941
 - 4. 1951-1961

Question ID : 26433089249
Status : Not Answered
Chosen Option : --

Q.30 Which article of the Constitution of India guarantees equality of opportunity for all citizens in matters relating to employment and appointment to any office under the state?

- Ans
- 1. Article 17
 - 2. Article 19
 - 3. Article 16
 - 4. Article 18

Question ID : 26433089266
Status : Answered
Chosen Option : 2

Q.31 _____ was the Governor General of India when the Permanent Settlement was introduced.

- Ans
- 1. Lord Cornwallis
 - 2. Lord Irwin
 - 3. Lord William Bentinck
 - 4. Lord Linlithgow

Question ID : 26433089139
Status : Answered
Chosen Option : 3

Q.32 In which year was the last Fundamental Duty inserted in the list of duties in the Constitution?

- Ans 1. 2004
 2. 2002
 3. 2001
 4. 2003

Question ID : 26433071652
Status : Answered
Chosen Option : 1

Q.33 उस दर्पण का नाम बताइए, जो कारों के पार्श्व दर्पण में उपयोग किया जाता है?

- Ans 1. परवलयिक
 2. समतल
 3. उत्तल
 4. अक्षतल

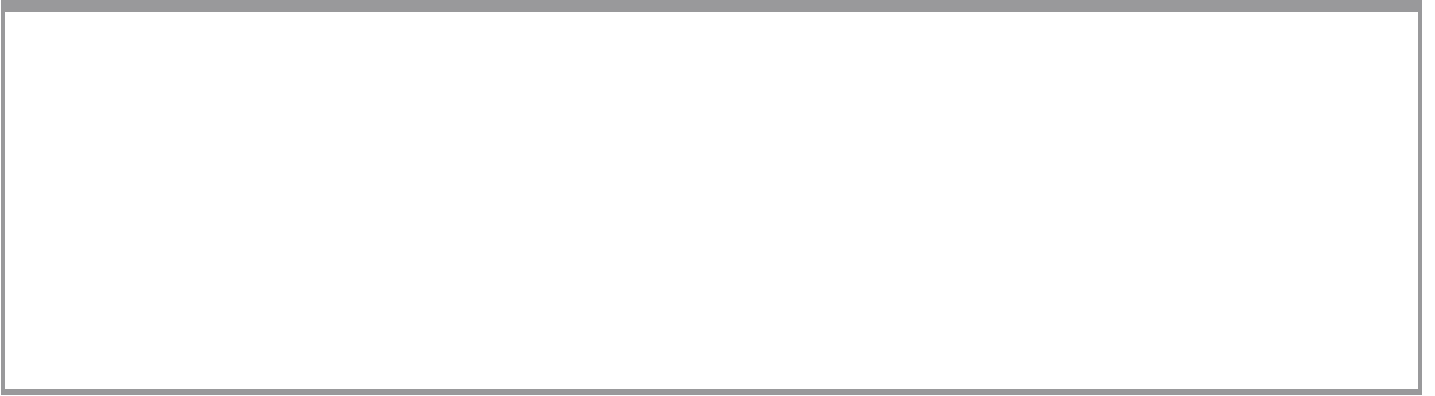
Question ID : 26433064408
Status : Answered
Chosen Option : 3

Q.34 Which cell organelle is tubular in form and lacks ribosomes and are associated with the production and metabolism of fats and steroid hormones?

- Ans 1. Vacuoles
 2. Smooth endoplasmic reticulum
 3. Lysosome
 4. Cytosol

Question ID : 26433055122
Status : Answered
Chosen Option : 3

EAD GROUP



EAD GROUP

Q.36 Which is the third layer of soil from the top?

- Ans 1. Substratum
 2. Sub soil
 3. Unweathered parent rock
 4. Top soil

Question ID : 26433086759
Status : Not Answered
Chosen Option : --

Q.37 Which of the following organisations publishes the 'WORLD ECONOMIC OUTLOOK' report?

- Ans 1. Reserve Bank of India
 2. World Economic Forum
 3. Asian Development Bank
 4. International Monetary Fund

Question ID : 264330100712
Status : Not Answered
Chosen Option : --

Q.38 Which team became the first Indian sports team to unveil an official team logo in the metaverse in February 2022?

- Ans 1. Chennai Super Kings
 2. Mumbai Indians
 3. Gujarat Titans
 4. Kolkata Knight Riders

Question ID : 26433081837
Status : Answered
Chosen Option : 1

Q.39 Which of the following is the main objective of Golden Quadrilateral Super Highways?

- Ans 1. To link a state capital with the different district headquarters
 2. To reduce the time and distance between the mega cities
 3. To reduce the time and distance between the mega cities
 4. To link a state capital with the different district headquarters

Question ID : 264330100084
Status : Answered
Chosen Option : 3

Q.40 In India, what type of unemployment is created due to lack of employable skills among the educated youths in India?

- Ans
- 1. Structural unemployment
 - 2. Educated unemployment
 - 3. Cyclical unemployment
 - 4. Technological unemployment

Question ID : 264330100024
Status : Answered
Chosen Option : 4

Q.41 Which of the following is a major component of bio-gas?

- Ans
- 1. Propane
 - 2. Methane
 - 3. Hexane
 - 4. Butane

Question ID : 264330100701
Status : Answered
Chosen Option : 2

Q.42 In March 2022, who was sworn in as the Chief Minister of Punjab?

- Ans
- 1. Bhagwant Mann
 - 2. Charan Singh
 - 3. Navjot Singh Sidhu
 - 4. Amarinder Singh

Question ID : 26433081820
Status : Answered
Chosen Option : 4

Q.43 Which of the following through its Micro Credit Innovations Department has continued its role as the facilitator of microfinance initiatives in the country?

- Ans
- 1. NABARD
 - 2. SIDBI
 - 3. IDBI
 - 4. IFCI

Question ID : 26433064856
Status : Not Answered
Chosen Option : --

Q.44 The 3rd edition of the SAFF U-18 Women's Football Championship was held in _____ in March 2022.

- Ans
- 1. Madhya Pradesh
 - 2. Maharashtra
 - 3. Jharkhand
 - 4. Bihar

Question ID : 26433089935
Status : Not Answered
Chosen Option : --

Q.45 Who among the following opened his dance school by the name 'Kalashram'?

- Ans
- 1. Birju Maharaj
 -
 - 3. Shambhu Maharaj
 -

Question ID : 26433072886
Status : Answered
Chosen Option : 1

Q.46 Which of the following is an example of an oscillatory motion?

- Ans
- 1. Dropping of an object from a height
 - 2. To and fro motion of a simple pendulum
 - 3. Moving of a bus in a circular path
 - 4. Moving of an object in a straight line

Question ID : 264330100743
Status : Answered
Chosen Option : 2

Q.47 In which of the following Nobel Peace Prize Concerts did Ustad Amjad Ali Khan perform the 'Rage for Peace' along with his sons Ayaan Ali Khan and Amaan Ali Khan?

- Ans
- -
 -
 -

Question ID : 26433054463
Status : Not Answered
Chosen Option : --

Q.48 The famous tribal revolt of _____ took place in 1906 in Assam against British policies.

- Ans
- 1. Haipou Jadonang
 - 2. Tirot Sing
 - 3. Kalicharan Brahma
 - 4. Songram Sangma

Question ID : 26433085272
Status : Not Answered
Chosen Option : --

Q.49 Which port is known as 'Gateway of Eastern India'?

- Ans
- 1. Kolkata Port
 - 2. Paradip Port
 - 3. Visakhapatnam Port
 - 4. Port Blair Port

Question ID : 264330100073
Status : Not Answered
Chosen Option : --

Q.50 Deficiency of which vitamin can cause skin disorders, hyperaemia (excess blood) and swelling of the mouth and throat, angular stomatitis (sores on the corners of the mouth) and hair loss?

- Ans
- 1. Vitamin A
 - 2. Vitamin B2
 - 3. Vitamin D
 - 4. Vitamin C

Question ID : 26433055113
Status : Not Answered
Chosen Option : --

Section : Part B General Engineering Electrical

Q.1 The resistivity of a wire depends on:

- Ans
- 1. both the length and area of the cross-section of the wire
 - 2. only the radius of the wire
 - 3. the nature of the material of the wire
 - 4. only the length of the wire

Question ID : 26433096404
Status : Answered
Chosen Option : 3

Q.2 Which of the following options is true with respect to extending the range of a wattmeter using instrument transformers?

- Ans
- 1. The secondary winding of potential transformer is connected in series with the pressure coil of wattmeter and voltmeter.
 - 2. The primary winding of potential transformer is connected in series with the load.
 - 3. The primary winding of current transformer is connected in parallel with the load.
 - 4. The secondary winding of current transformer is connected in series with the current coil of wattmeter and ammeter.

Question ID : 26433096902

Status : Answered

Chosen Option : 4

Q.3 When a rated load with 0.8 lagging power factor is supplied, the terminal voltage of a three phase star connected alternator with a certain interference is 6600 V (line-to-line value). With the same interference, the voltage developed in the open circuit is 7154 V (phase value). What will be the value of voltage regulation of the alternator?

- Ans
- 1. 46.7%
 - 2. -46.7%
 - 3. 14.54%
 - 4. 87.8%

Question ID : 26433096548

Status : Answered

Chosen Option : 1

Q.4 If I_f is the full load current/phase and $\%X_s$ is the percentage synchronous reactance, maximum power output of an alternator is:

- Ans
- 1. $P_{\max} = \frac{EI_f \times 100}{\%X_s}$
 - 2. $P_{\max} = \frac{\%X_s I_f \times 100}{E}$
 - 3. $P_{\max} = \frac{\%X_s \times 100}{EI_f}$
 - 4. $P_{\max} = \frac{I_f \times 100}{EX_s}$

Question ID : 26433096659

Status : Answered

Chosen Option : 1

Q.5 Choose the correct classification for Hydro power plant.

- Ans
- 1. Non-renewable source of energy
 - 2. Conventional source of energy
 - 3. Non-conventional source of energy
 - 4. Continuous source of energy

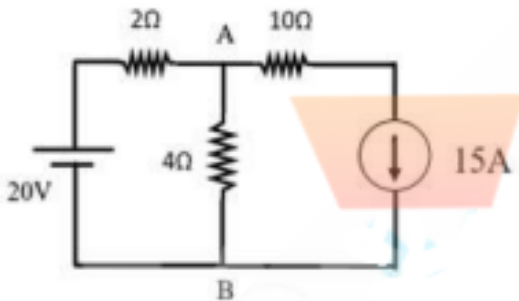
Question ID : 26433096614
 Status : Answered
 Chosen Option : 2

Q.6 The diffusion capacitance for a silicon diode with 20mA forward current, if the charge carrier transit time is 70 ns, is _____.

- Ans
- 1. 1 nF
 - 2. 1 mF
 - 3. 2 nF
 - 4. 2 mF

Question ID : 26433096049
 Status : Answered
 Chosen Option : 3

Q.7 The current in the 4Ω resistor in the figure shown below is:



- Ans
- 1. $-\frac{20}{3}$ A and flowing from A to B
 - 2. $\frac{5}{3}$ A and flowing from A to B
 - 3. $\frac{5}{3}$ A and flowing from B to A
 - 4. zero

Question ID : 26433096441
 Status : Answered
 Chosen Option : 3

Q.8 The active and lagging reactive components of current taken by an AC circuit from a 200 V supply are 40A and 30A, respectively. What is the value of admittance of the circuit?

- Ans 1. 0.13 S
 2. 0.25 S
 3. 0.52 S
 4. 0.31 S

Question ID : 26433095553
 Status : Answered
 Chosen Option : 1

Q.9 The area under daily integrated load duration curve is equal to the

- Ans 1. voltage generated per day

 3. current generated per day

Question ID : 26433096606
 Status : Answered
 Chosen Option : 4

Q.10 The ratio of the RMS value to the average value of an AC is known as:

- Ans 1. amplitude factor
 2. peak factor

Question ID : 26433095580
 Status : Answered
 Chosen Option : 3

Q.11 A circuit has an inductance of 20H. If the current in the circuit changes at the rate of 50mA/sec, then self-induced EMF is _____.

- Ans 1.
 V
 3.
 4. mV

Question ID : 26433096390
 Status : Answered
 Chosen Option : 2

Q.12 Under phantom loading testing of an energy meter, the power required to test is

- Ans
- 1. infinite
 - 2. 1
 - 3. very low
 - 4. very high

Question ID : 26433096906
Status : Answered
Chosen Option : 3

Q.13 What is the power factor angle of an RC series circuit?

- Ans
- 1. $\tan^{-1}\left(\frac{CR}{W}\right)$
 - 2. $\tan^{-1}\left(\frac{1}{WC R}\right)$
 - 3. $\tan^{-1}\left(\frac{R}{CW}\right)$
 - 4. $\tan^{-1}\left(\frac{W}{CR}\right)$

Question ID : 26433095561
Status : Answered
Chosen Option : 2

Q.14 Which of the following concepts is applied in instruments of the electro-dynamometer type?

- Ans
- 1. The force between two current carrying coils
 - 2. The force between two permanent magnets
 - 3. The force between two permanent magnets
 - 4. The force between two permanent magnets

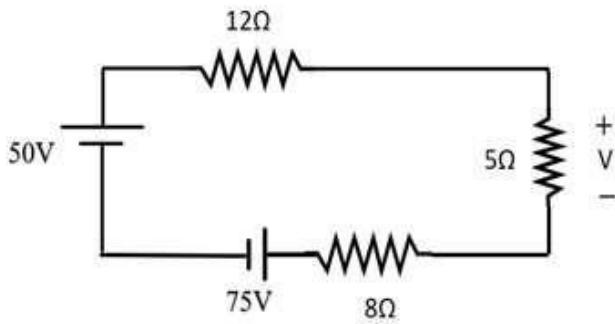
Question ID : 26433096492
Status : Answered
Chosen Option : 1

Q.15 Which of the following statements is NOT true about bandwidth in an RLC parallel circuit?

- Ans
- 1. Formula for calculating bandwidth is the same for series and parallel circuit
 - 2. Bandwidth is the ratio of quality factor to the resonant frequency
 - 3. Bandwidth is the ratio of quality factor to the resonant frequency
 - 4. Bandwidth is defined as the size of frequency range that is passed or rejected by the tuned circuit.

Question ID : 26433095550
Status : Answered
Chosen Option : 3

Q.16 The voltage across a 5Ω resistor is:



- Ans
- 1. -5V
 - 2. 5V
 - 3. 10V
 - 4. 25V

Question ID : 26433096442

Status : Answered

Chosen Option : 1

Q.17 Which of the following statements is

- Ans
- 1. Future extension is easy for outdoor substation
 - 2. Outdoor substation requires less space as compared to indoor substation
 - 3. Outdoor substation requires more space as compared to indoor substation
 - 4. The cost of outdoor substation is higher than indoor substation

Question ID : 26433099240

Status : Answered

Chosen Option : 4

Q.18 A 4-pole, DC series motor has a wave connected armature with 200 conductors. The flux per pole is 20 m Wb when the motor is drawing 20 A from the supply. The back EMF of the motor is 200 V. Calculate the speed of the motor under this condition.

- Ans
- 1. 1500 rpm
 - 2. 1374 rpm
 - 3. 1893 rpm
 - 4. 1450 rpm

Question ID : 26433096088

Status : Answered

Chosen Option : 1

Q.19 Demand factor is taken as a _____.

- Ans
- 1. time dependent quantity
 - 2. time independent quantity
 - 3. current dependent quantity
 - 4. current independent quantity

Question ID : 26433099561

Status : Answered

Chosen Option : 1

Q.20 Before taking work in hand, even the contractor following good management practices may be unaware of _____.

- Ans
- 1. contingencies
 - 2. analysis of costs
 - 3. specifications
 - 4. availability of products

Question ID : 26433099549
Status : Answered
Chosen Option : 1

Q.21 The load factor is defined as the

- Ans
- 1. average load divided by the average load in a specified time period
 - 2. average load divided by the peak load in a particular time period
 - 3. average load divided by the peak load in a particular time period
 - 4. average load divided by the average load in a specified time period

Question ID : 26433096595
Status : Answered
Chosen Option : 3

Q.22 For applications such as induction furnace control,

- Ans
- 1. single value capacitor run motor
 - 2. capacitor start capacitor run motor
 - 3. shaded pole single phase motor
 - 4. capacitor start capacitor run motor

Question ID : 26433099626
Status : Answered
Chosen Option : 1

Q.23 The logical method of estimating for electrical works does NOT involve which of the following processes?

- Ans
- 1. Average costing of accessories
 - 2. Provide overhead charges
 - 3. Provide overhead charges
 - 4. Ascertain the quantities involved accurately

Question ID : 26433099548
Status : Not Answered
Chosen Option : --

Q.24 Which of the following statements about armature reaction of alternator is NOT correct?

- Ans 1. It increases the generated voltage and sparking at brushes reduces
2. It reduces the generated voltage by distorting the main flux and it causes sparking at the brushes.
3. When the generator is loaded, the armature carries the current; the armature current sets up its own magnetic field.
4. It depends on both load current and power factor

Question ID : 26433096558
Status : Answered
Chosen Option : 1

Q.25 How many pressure coils and current coils, respectively, are present in a three-phase dynamometer wattmeter?

- Ans 1. There is one pressure coil and one current coil
2. There are two pressure coils and one current coil
3. There are two pressure coils and two current coils
4. There are three pressure coils and three current coils

Question ID : 26433098184
Status : Answered
Chosen Option : 3

Q.26 Which of the following statements are true?

- a) The electric power from 11 kV lines is delivered to distribution sub-station.
- b) Distribution sub-stations are located near consumers localities.
- c) Distribution sub-stations step down the voltage to 400 V(L-L)

- Ans 1. (b) and (c) only
2. (a) and (c) only
3. (a), (b) and (c)
4. (a) and (b) only

Question ID : 26433099242
Status : Answered
Chosen Option : 3

Q.27 An overall power generation economics is $E = a + bKW + ckWH$, where c is

- Ans 1. waste charge
2. fixed charge
3. running charge
4. constant charge

Question ID : 26433096592
Status : Answered
Chosen Option : 3

Q.28 A machine working with DC and its construction, similar to AC synchronous machine, is a/an _____.

- Ans
- 1. induction motor
 - 2. commutator motor
 - 3. brushless DC motor
 - 4. conventional DC motor

Question ID : 26433096693
Status : Not Answered
Chosen Option : --

Q.29 All tenders received for the same contract are opened by the competent authority in person at the advertised time and place in the presence of _____.

- Ans
- 1. either agents or contractors
 - 2. either agents or contractors
 - 3. both agents and contractors
 - 4. either agents or contractors

Question ID : 26433099543
Status : Not Answered
Chosen Option : --

Q.30 If the voltage across a $5\mu\text{F}$ capacitor is $V(t) = 40 \cos(6000t)$ volt, then the current through it is:

- Ans
- 1. $1.2 \cos(6000t)$ amp
 - 2. $-1.2 \sin(6000t)$ amp
 - 3. $1.2 \sin(6000t)$ amp
 - 4. $-1.2 \cos(6000t)$ amp

Question ID : 26433096388
Status : Answered
Chosen Option : 3

Q.31 In the figure shown below, if the current I decreases at a rate of β , then $V_P - V_Q$ is:



- Ans
- 1. $L\beta$
 - 2. $L\beta$
 - 3. 0 V
 - 4. $-L\beta$

Question ID : 26433096400
Status : Answered
Chosen Option : 2

Q.32 The standard illumination level for a workshop area where detailed or fine work is done is in the range of:

- Ans
- 1. 200-300 lux
 - 2. 800-1000 lux
 - 3. more than 1000 lux
 - 4. 500-700 lux

Question ID : 26433098125
 Status : Answered
 Chosen Option : 3

Q.33 For a germanium diode having a forward current of 10mA and 30ns as charge carrier transit time, the diffusion capacitance is _____.

- Ans
- 1. nF
 - 2.
 -
 -

Question ID : 26433096052
 Status : Answered
 Chosen Option : 1

Q.34 A tender is usually accompanied with an amount called

- Ans
- 1. delivery money
 - 2. earnest money
 - 3. purchase money
 - 4. tender money

Question ID : 26433099276
 Status : Not Answered
 Chosen Option : --

Q.35 The voltage and current through a pure inductor are $V = 110 \sin(314t + 45^\circ)$ volts and $i = 11 \sin(314t - 45^\circ)$ amperes. Obtain the expression of power.

- Ans
- 1.
 -
 - 3. $P = -605 \sin 628t$
 - 4.

Question ID : 26433096122
 Status : Answered
 Chosen Option : 2

Q.36 The cable rating suitable for connecting a load of 3 kW to a single-phase supply of 230 V is _____.

- Ans
- 1. 20 A
 - 2. 10 A
 - 3. 15 A
 - 4. 5 A

Question ID : 26433099554
Status : Answered
Chosen Option : 3

Q.37 Which of the following statements regarding the absorption factor in lighting purposes is correct?

- Ans
- 1. It is defined as the ratio of total lumens available after absorption to the total lumens emitted by the source of light.
 - 2. It is defined as the ratio of the change in the brightness after the light has been absorbed by the surface.
 - 3. It is defined as the ratio of utilisation factor to the depreciation factor
 - 4. It is defined as the ratio of the candle power before and after absorption of light

Question ID : 26433098118
Status : Answered
Chosen Option : 1

Q.38 Which of the following methods can result in a square waveform?

- Ans
- 1. Multivibrators
 - 2. T-oscillator
 - 3. Hartley oscillator
 - 4. Wien bridge oscillators

Question ID : 26433096503
Status : Answered
Chosen Option : 3

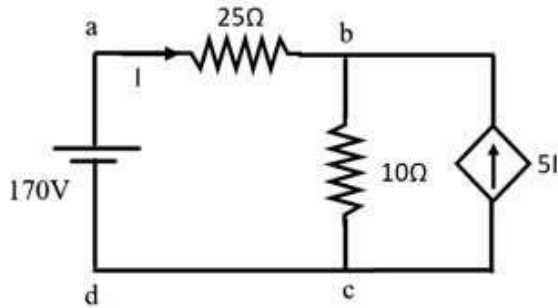
Q.39 Which of the following statements are correct with respect to the line support used in transmission and distribution lines?

- a. Must have high mechanical strength.
- b. Should have longer life.
- c. Should be light in weight without the loss of mechanical strength

- Ans
- 1. (a), (b) and (c)
 -
 - 3. (b) and (c) only
 - 4. (a) and (c) only

Question ID : 26433099262
Status : Answered
Chosen Option : 1

Q.40 In the circuit shown below, the current I is:



- Ans
- 1. 12A
 - 2. 2A
 - 3. 10A
 - 4. -2A

Question ID : 26433096477
 Status : Not Answered
 Chosen Option : --

Q.41 The direction of motion of the conductor, according to Fleming's right hand rule is indicated by _____.

- Ans
- 1. both fore finger and middle finger
 - 2. thumb
 - 3. fore finger
 - 4. middle finger

Question ID : 26433096854
 Status : Answered
 Chosen Option : 2

Q.42 Consider the following statements about characteristics of reluctance motor and select the suitable combination of correct choices.

- a. Reluctance motors cannot accelerate high inertia loads to the synchronous speed.
- b. Reluctance motors can accelerate high inertia loads to the synchronous speed
- c. Reluctance motors are cheaper than any other kind of synchronous machines.
- d. Reluctance motors have constant speed characteristics.

- Ans
- 1. a, b and d are correct
 - 2. a, c and d are correct
 - 3. b, c and d are correct
 - 4. a, b and c are correct

Question ID : 26433096569
 Status : Not Answered
 Chosen Option : --

Q.43 The ripple factor for a half-wave rectifier without filter is _____.

- Ans 1. 0.482
 2. 40.6
 3. 81.2
 4. 1.21

Question ID : 26433096056
 Status : Answered
 Chosen Option : 1

Q.44 The toroid is _____.

- Ans 1. a long straight current carrying conductor bent to form circular shape
 2. a bar magnet
 3. a solenoid bent in circular shape and ends are joined
 4. a circular carrying conductor

Question ID : 26433096920
 Status : Answered
 Chosen Option : 3

Q.45 Extra high-tension cables are used for the voltage level of _____.

- Ans 1. beyond 400 kV
 2. 0 to 1 kV
 3. 33 kV to 66 kV
 4. 132 kV to 400 kV

Question ID : 26433099251
 Status : Answered
 Chosen Option : 3

Q.46 Angle reflectors are used to provide illumination in a vertical plane, where reflectors used are of the _____.

- Ans 1. concentrating type
 2. diffusing type
 3. diffusing type
 4. concentrating type

Question ID : 26433099283
 Status : Answered
 Chosen Option : 3

Q.47 Feeders are mainly designed from the point of view of _____.

- Ans 1. frequency of the system
 2. its current carrying capacity
 3. number of tapings from it
 4. voltage drops in it

Question ID : 26433099245
 Status : Answered
 Chosen Option : 2

Q.48 What frequency does the sinusoidal signal have that occupies five horizontal divisions and three vertical divisions on a CRO for a full cycle if the time base is set to 1 ms per division?

- Ans
- 1. 250Hz
 - 2. 100Hz
 - 3. 1KHz
 - 4. 200Hz

Question ID : 26433096498
Status : Not Answered
Chosen Option : --

Q.49 Earthing is required to protect apparatus, equipment, machines etc. from

- Ans
- 1. excess current
 - 2. leakage current
 - 3. leakage current
 - 4. leakage impedance

Question ID : 26433099279
Status : Answered
Chosen Option : 3

Q.50 Which of the following statements does NOT come under the advantages of stationary armature in an alternator?

- Ans
- 1. It is easy to insulate sliprings which are on DC
 - 2. It needs only two slip rings on DC side
 - 3. The stator weight is less compared to rotor weight
 - 4. It needs only two slip rings on DC side

Question ID : 26433096555
Status : Answered
Chosen Option : 3

Q.51 Which of the following is the unit of reluctance?

- Ans
- 1. Ohm – meter/ampere
 - 2. Ampere – turn/weber
 - 3. Weber/meter
 - 4. Henry/ampere-meter

Question ID : 26433096846
Status : Answered
Chosen Option : 2

Q.52 The effective resistance of a 2200 V, 50 Hz, 440 KVA, single-phase alternator is 0.5Ω . On short circuit, a field current of 40 A gives the full load current of 200 A. The electromotive force on open circuit with same field excitation is 1160 V. Calculate the synchronous impedance.

- Ans
- 1. 2.8Ω
 - 2. 4.8Ω
 - 3. 3.8Ω
 - 4. 5.8Ω

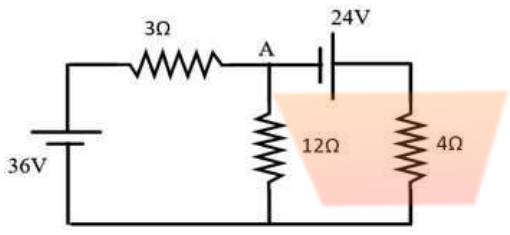
Question ID : 26433096560
 Status : Answered
 Chosen Option : 4

Q.53 The unit of magnetic flux in terms of lines of force is _____.

- Ans
- 1. $1 \text{ wb} = 10^8$ lines of force
 - 2. $1 \text{ wb} = 10^6$ lines of force
 - 3. $1 \text{ wb} = 10^{-6}$ lines of force
 - 4. $1 \text{ wb} = 10^{-8}$ lines of force

Question ID : 26433096840
 Status : Answered
 Chosen Option : 1

Q.54 In the circuit shown in the figure, find the current flowing through the 12Ω resistor.

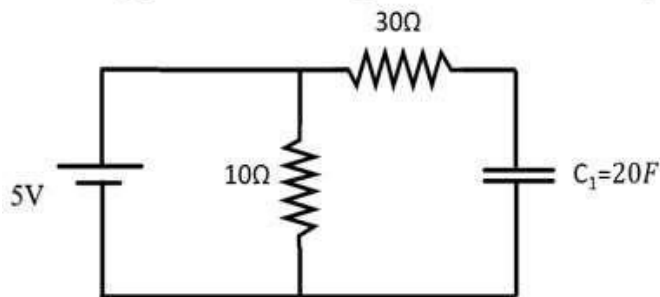


- Ans
- 1. 3A
 - 2. 0.25A
 - 3. 0.75A
 - 4. 1A

Question ID : 26433096437
 Status : Answered
 Chosen Option : 2

EAD GROUP

Q.55 The energy stored in the capacitor C_1 under steady state condition is:



- Ans
- 1. 2.8 Ω
 - 2. 4.8 Ω
 - 3. 3.8 Ω
 - 4. 5.8 Ω

Question ID : 26433096386
Status : Answered
Chosen Option : 4

Q.56 What are the signs of wattmeter W_1 and W_2 , respectively, if the power factor of the system is 0.5?

- Ans
- 1. Negative and positive
 -
 - 3. Positive and 0
 -

Question ID : 26433096900
Status : Answered
Chosen Option : 4

Q.57 Starting torque in 1-ph

- Ans
- 1. T_f and T_b are numerically unequal and oppositely directed
 -
 - 3. T_f and T_b are numerically equal and oppositely directed
 - 4. T_f and T_b are numerically equal and in same direction

Question ID : 26433098255
Status : Answered
Chosen Option : 3

Q.58 A coil having pure inductance of 0.2 H is connected in series with a $60\mu F$ capacitor. The voltage across the circuit is 230V, 50Hz. The active power consumed by the circuit is:

- Ans
- 1. 100 watts
 - 2. 0 watts
 - 3. 460 watts
 - 4. 10 watts

Question ID : 26433095559
Status : Answered
Chosen Option : 2

Q.59 A short transmission line has impedance value of 20Ω . The values of A, B, C and D parameters of the short transmission line are _____, respectively.

- Ans
- 1. 1, 20, 0, 1
 - 2. 1, 1, 1, 1
 - 3. 20, 1, 0, 20
 - 4. $1, \frac{1}{20}, 0, 1$

Question ID : 26433099228
 Status : Answered
 Chosen Option : 1

Q.60 What are the other systems, outside the driving and registering system of the single phase energy meter, make up the fundamental components of construction?

- Ans
- 1. Moving System, Braking System
 - 2. Moving System, Braking System
 - 3. Moving System, Parallel System
 - 4. Moving System, Parallel System

Question ID : 26433096494
 Status : Answered
 Chosen Option : 1

Q.61 In an E-MOSFET, the surface is coated with

- Ans
- 1. silicon dioxide
 - 2. silicon
 - 3. silicon nitride
 - 4. silicon carbide

Question ID : 26433096073
 Status : Answered
 Chosen Option : 1

Q.62 What is the voltage range generally used in medium transmission lines?

- Ans
- 1. 400 kV to 700 kV
 - 2. 20 kV to 100 kV
 - 3. More than 700 kV
 - 4. 200 kV to 400 kV

Question ID : 26433099229
 Status : Answered
 Chosen Option : 2

Q.67 A sinusoidal quantity can be expressed as:

- Ans 1. co-ordinate form only
 2. rectangular form only
 3. polar form only
 4. either polar or rectangular form

Question ID : 26433095557

Status : Answered

Chosen Option : 4

Q.68 Which of the following statements is/are FALSE with regard to shell type transformers?

- (i) Power transfer capability is more.
(ii) The main disadvantage of shell type transformers is that maintenance is not easy
(iii) The losses are high.

- Ans 1. (i) and (iii)
 2. (i) and (ii)
 3. Only (iii)
 4. Only (i)

Question ID : 26433096103

Status : Answered

Chosen Option : 2

Q.69 Consider the following statements about features of a hysteresis motor and select the suitable combination of correct choices.

- a.Its hysteresis torque remains practically constant from locked rotor to synchronous speed.
b.Hysteresis motor is able to accelerate at any load.
c.It operates quietly and does not suffer from magnetic pulsations.
d.Hysteresis motor is subject to mechanical vibrations.

- Ans 1. a, c and d are correct
 2. Only b is correct
 3. Only d is correct
 4. a, b and c are correct

Question ID : 26433096566

Status : Answered

Chosen Option : 4

Q.70 The Sun is the _____ source of energy

- Ans 1. primary
 2. secondary
 3. tertiary
 4. fourth

Question ID : 26433096623

Status : Answered

Chosen Option : 2

Q.71 Which of the following statements about film lighting is FALSE?

- Ans
- 1. A tungsten light has the maximum Colour Rendering Index used in film lighting.
 - 2. Hydrargyrum Medium Arc Iodide (HMI) are flicker-free lights.
 - 3. A tungsten light does not make use of mercury vapour lights as in fluorescent lamps.
 - 4. The colour temperature of fluorescent lamps is lower than that of incandescent lamps.

Question ID : 26433098172

Status : Answered

Chosen Option : 3

Q.72 In a series RLC circuit, $R=4\Omega$, $L=4\text{ mH}$ and $C=20\text{ }\mu\text{F}$. What is the value of Q-factor?

- Ans
- 1. 7.07
 - 2. 0.0176
 - 3. 0.0707
 - 4. 3.535
 -

Question ID : 26433095570

Status : Answered

Chosen Option : 4

Q.73 The electric potential at point A is 60 V and at B is -90 V . Find the work done by an external force and electrostatic force, respectively, in moving an electron slowly from B to A.

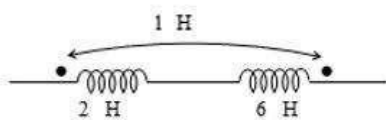
- Ans
- 1. $240 \times 10^{-19}\text{ J}$ and $240 \times 10^{-19}\text{ J}$
 - 2. $240 \times 10^{-19}\text{ J}$ and zero
 - 3. Zero and $240 \times 10^{-19}\text{ J}$
 - 4. $-240 \times 10^{-19}\text{ J}$ and $240 \times 10^{-19}\text{ J}$

Question ID : 26433098273

Status : Answered

Chosen Option : 3

Q.74 Determine the effective inductance of the series connected coupled coils as shown in the given figure.



- Ans
- 1. 12 H
 - 2. 6 H
 - 3. 13 H
 - 4. 10 H

Question ID : 26433096864
Status : Answered
Chosen Option : 2

EAD GROUP

Q.75 A 2 kVA, 200/100 V, 400 Hz transformer is desired to be used at a frequency of 50 Hz. What will be the voltage rating of the transformer at reduced frequency if the flux density remains constant?

- Ans
- 1. 41 V
 - 2. 25 V
 - 3. 37 V
 - 4. 23 V

Question ID : 26433096090
Status : Answered
Chosen Option : 2

Q.76 The magnetisation branch of an equivalent circuit of a transformer is drawn in _____ with supply voltage.

- Ans
- 1. both series and parallel
 - parallel only
 -
 -

Question ID : 26433096696
Status : Answered
Chosen Option : 2

Q.77 Damper windings are used in synchronous generator to:

- Ans
- 1. carry magnetic flux
 -
 - 3. maintain balanced 3-phase voltage under unbalanced condition
 -

Question ID : 26433096557
Status : Answered
Chosen Option : 3

Q.78 A hydroelectric generating station is supplied from a reservoir with a capacity of 5000000 cubic metres at a head of 200 metres and total energy available of 2.044×10^6 kWh and water density = 997 kg/m^3 . Find out overall efficiency.

- Ans
- -
 - 3. 100%
 - 4. 75%

Question ID : 26433096616
Status : Not Answered
Chosen Option : --

Q.79 The susceptibility of which of the following magnetic materials is negative?

- Ans 1. Paramagnetic and ferromagnetic materials
 2. Paramagnetic materials
 3. Diamagnetic materials
 4. Ferromagnetic materials

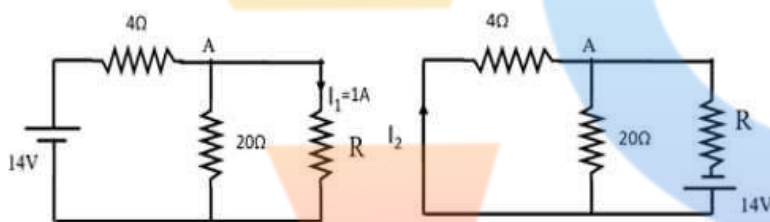
Question ID : 26433096878
 Status : Answered
 Chosen Option : 3

Q.80 Which of the following statements is

- Ans 1. Tapings are taken from the distributors for supply of consumers
 2. Voltage drop is the main consideration in design of distributors
 3. Service mains connect consumers to the distributor directly
 4. While designing a distributor, voltage drop is not considered

Question ID : 26433099243
 Status : Answered
 Chosen Option : 4

Q.81 If I_1 in the given circuit is 1A, what will be the current I_2 in the 2nd circuit?



- Ans 1. 2 A
 2. 3 A
 3. 1 A
 4. 10 A

Question ID : 26433096474
 Status : Answered
 Chosen Option : 3

Q.82 The efficiency of a large transformer under full load condition is found by conducting which of the following tests?

- Ans 1. SC test
 2. OC test
 3. Sumpner's test
 4. Core balance test

Question ID : 26433096091
 Status : Answered
 Chosen Option : 3

Q.83 The boiler generates steam at _____.

- Ans
- 1. low pressure and high temperature
 - 2. low pressure and low temperature
 - 3. high pressure and high temperature
 - 4. high pressure and low temperature

Question ID : 26433096632
Status : Answered
Chosen Option : 3

Q.84 A 4400-watt electric heater has a resistance of 11Ω . What will be the maximum permissible current?

- Ans
- 1. 200 amp
 - 2. 20 amp
 - 3. 400 amp
 - 4. 40 amp

Question ID : 26433096394
Status : Answered
Chosen Option : 2

Q.85 Norton's theorem can be applied to

- Ans
- 1. both linear and nonlinear networks
 -
 - 3. linear networks
 -

Question ID : 26433096465
Status : Answered
Chosen Option : 3

Q.86 If 5A current flows through a circuit for 5 minutes, then calculate the total

- Ans
- 1. 100 C
 - 2. 25 C
 - 3. 300 C
 - 4. 1500 C

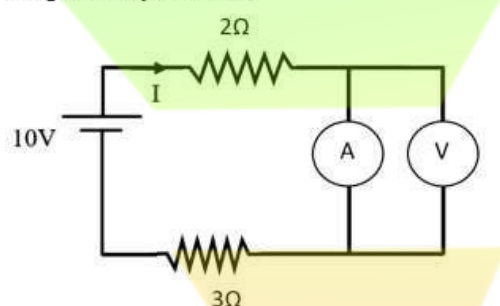
Question ID : 26433096430
Status : Answered
Chosen Option : 4

Q.87 A 230 V lamp has a total flux of 1000 lumens and takes a current of 0.5 A. The MSCP per watt of the lamp is:

- Ans 1. 0.69
 2. 6.9
 3. 0.138
 4. 1.38

Question ID : 26433098124
 Status : Answered
 Chosen Option : 4

Q.88 In the circuit shown below, the reading of the ideal ammeter and voltmeter, respectively, will be:



- Ans 1. 2A and 8V
 2. 2A and 0V
 3. 0A and 0V
 4. 0A and 8V

Question ID : 26433096458
 Status : Answered
 Chosen Option : 2

Q.89 In an electric circuit, a 10V voltage source is connected in series with a 2Ω resistance the dual of this circuit consists of:

- Ans 1. 10A current source and a 2S conductance
 2. 5A current source and a 2Ω resistance
 3. 5A current source and a 2S conductance

Question ID : 26433096459
 Status : Answered
 Chosen Option : 1

Q.90 The lifting power of a magnet is inversely proportional to _____.

- Ans 1. radius of the conductor
 2. square of the magnetic flux density
 3. absolute permeability
 4. cross-sectional area

Question ID : 26433096857
 Status : Answered
 Chosen Option : 1

Q.91 The phosphor material containing cadmium borate used in fluorescent lamps gives which of the following colour?

- Ans
- 1. Yellowish white
 - 2. Green
 - 3. Pink
 - 4. Bluish white

Question ID : 26433098196
Status : Not Answered
Chosen Option : --

Q.92 The insulating oil used in transformers is obtained by fractiona

- Ans
- 1. vegetable oil
 - 2. animal oil
 - 3. both animal oil and vegetable oil
 - 4. crude petroleum

Question ID : 26433096102
Status : Answered
Chosen Option : 4

Q.93 JFET is a/an

- Ans
- 1. antipolar
 - 2. bipolar
 - 3. tripolar
 - 4. unipolar

Question ID : 26433096067
Status : Answered
Chosen Option : 4

Q.94 A 20 m long and 10 m wide room is to be illuminated to a level of 300 lux. Find the number of lamps needed to illuminate the whole area if a lumen output of 5000 lumens is required (Given Utilisation factor = 0.7 and Maintenance factor = 0.9).

- Ans
- 1. 25
 - 2. 9
 - 3. 38
 - 4. 19

Question ID : 26433098126
Status : Answered
Chosen Option : 4

Q.95 The tripping of circuit due to earthing in case of faults saves wastage of electrical energy due to _____.

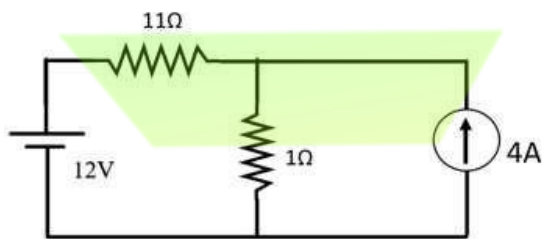
- Ans
- 1. supply frequency
 - 2. drawing of excess current
 - 3. supply of excess current
 - 4. supply of excess voltage

Question ID : 26433099280

Status : Answered

Chosen Option : 2

Q.96 For the circuit shown below, the voltage across the $1\ \Omega$ resistor is given by:



- Ans
- 1. 1V
 - 2. $\frac{22}{3}$ V
 - 3. 0V
 - 4. $\frac{2}{3}$ V

Question ID : 26433096445

Status : Answered

Chosen Option : 2

Q.97 A $120\ \Omega$ resistor is in parallel with a capacitor with a capacitive reactance of $40\ \Omega$. Both components are across a $20\ \text{V AC}$ source. What is the magnitude of the total current through the circuit?

- Ans
- 1. $\sqrt{\frac{5}{18}}$ A
 - 2. $\sqrt{\frac{1}{120}}$ A
 - 3. $\sqrt{\frac{2}{9}}$ A
 - 4. $\sqrt{\frac{1}{40}}$ A

Question ID : 26433095548

Status : Answered

Chosen Option : 1

Q.98 Which of the following statements about voltage regulation of an alternator is NOT correct?

- Ans
- 1. Steady state short-circuit conditions and stability are affected by the voltage regulation.
 - 2. Parallel operation of one alternator, with other alternators, is affected considerably by its voltage regulation.
 - 3. Voltage regulation determines the type of automatic voltage-control equipment to be used.
 - 4. Steady state short-circuit conditions and stability are not affected by the voltage regulation.

Question ID : 26433096547
Status : Not Answered
Chosen Option : --

Q.99 Which of the following statements is WRONG with respect to magnetic circuits?

- Ans
- 1. The reluctance of a magnetic circuit depends on the material used in it.
 - 2. The reluctance in magnetic circuits is analogous to the resistance in electric circuits.
 - 3. The reluctance causes the waste of energy.
 - 4. The flux in magnetic circuits is analogous to the current in electric circuits.

Question ID : 264330100953
Status : Answered
Chosen Option : 3

Q.100 The load curve is the curve showing the _____ on the power station with respect to time.

- Ans
- 1. huge load
 - 2. constant load
 - 3. less load
 - 4. variation of load

Question ID : 26433096888
Status : Answered
Chosen Option : 4

EAD GROUP