

Junior Engineer Civil Mechanical and Electrical Examination 2024 Paper I

Roll Number	
Candidate Name	
Venue Name	
Exam Date	05/06/2024
Exam Time	5:00 PM - 7:00 PM
Subject	Junior Engineer 2024 Electrical Paper I

Section : General Intelligence and Reasoning

Q.1 The position of how many letters will remain unchanged if each of the letters in the word CLOSURE is arranged in the English alphabetical order?

- Ans ☒ 1. One
☐ 2. Two
☐ 3. Three
☐ 4. Four

Question ID : 630680449454
Option 1 ID : 6306801754941
Option 2 ID : 6306801754942
Option 3 ID : 6306801754943
Option 4 ID : 6306801754944
Status : Answered
Chosen Option : 1

Q.2 HGCA is related to LKGE in a certain way based on the English alphabetical order. In the same way, BKOM is related to FOSQ. To which of the following is NSJD related, following the same logic?

- Ans ☐ 1. PLNH
☐ 2. HSRD
☐ 3. LPRY
☒ 4. RWNH

Question ID : 630680377695
Option 1 ID : 6306801471840
Option 2 ID : 6306801471841
Option 3 ID : 6306801471842
Option 4 ID : 6306801471839
Status : Answered
Chosen Option : 4

Q.3 L, M, N, O, P and Q are sitting around a circular table facing the centre (not necessarily in the same order). M is sitting to the immediate right of Q. L is sitting to the immediate left of O. Q is sitting to the immediate right of O. P is sitting to the immediate left of L. Who is sitting to the immediate right of M?

- Ans ☐ 1. P
☐ 2. O
☒ 3. N
☐ 4. L

Question ID : 630680377009
Option 1 ID : 6306801469100
Option 2 ID : 6306801469102
Option 3 ID : 6306801469099
Option 4 ID : 6306801469101
Status : Answered
Chosen Option : 3

Q.4 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
HNL, JPN, LRP, NTR, ?

- Ans ☒ 1. VPT
☒ 2. PTV
☒ 3. VTP
☒ 4. PVT

Question ID : 630680376921
Option 1 ID : 6306801468747
Option 2 ID : 6306801468749
Option 3 ID : 6306801468748
Option 4 ID : 6306801468750
Status : Answered
Chosen Option : 4

Q.5 Rahul walked 20 m towards the north. Then he turned right and walked 20 m. Then he turned right and walked 10 m. He then turned right and walked 10 m. In what direction is he headed?

- Ans ☒ 1. East
☒ 2. West
☒ 3. South
☒ 4. North

Question ID : 630680377025
Option 1 ID : 6306801469165
Option 2 ID : 6306801469166
Option 3 ID : 6306801469164
Option 4 ID : 6306801469163
Status : Answered
Chosen Option : 2

Q.6 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.)
(12, 8, 28)
(34, 9, 52)

- Ans ☒ 1. (62, 11, 84)
☒ 2. (15, 25, 60)
☒ 3. (49, 12, 71)
☒ 4. (54, 13, 70)

Question ID : 630680376812
Option 1 ID : 6306801468312
Option 2 ID : 6306801468314
Option 3 ID : 6306801468313
Option 4 ID : 6306801468311
Status : Answered
Chosen Option : 1

Q.7 In a Zoological park, seven giraffes L, M, R, E, V, Z and Y have different heights. R is taller than E but shorter than Y. Z is taller than M but shorter than V. L is taller than R but shorter than V. Y is shorter than M but taller than E. M is shorter than Z. Which among the seven is the shortest?

- Ans ☒ 1. E
☒ 2. L
☒ 3. Y
☒ 4. R

Question ID : 630680519091
Option 1 ID : 6306802028825
Option 2 ID : 6306802028826
Option 3 ID : 6306802028824
Option 4 ID : 6306802028827
Status : Answered
Chosen Option : 1

Q.8 TILE is related to VLNH in a certain way based on the English alphabetical order. In the same way, RAMP is related to TDOS. To which of the following is SORT related, following the same logic?

- Ans ☒ 1. URTW
☒ 2. VRTV
☒ 3. VRTW
☒ 4. URTV

Question ID : 630680376876
Option 1 ID : 6306801468569
Option 2 ID : 6306801468567
Option 3 ID : 6306801468570
Option 4 ID : 6306801468568
Status : Answered
Chosen Option : 1

Q.9 What will come in place of the question mark (?) in the following equation if '+' and '-' are interchanged?
 $63 \div 9 - 14 \times 11 + 28 = ?$

- Ans ☒ 1. 129
☒ 2. 138
☒ 3. 133
☒ 4. 135

Question ID : 630680376973
Option 1 ID : 6306801468958
Option 2 ID : 6306801468957
Option 3 ID : 6306801468955
Option 4 ID : 6306801468956
Status : Answered
Chosen Option : 3

Q.10 Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.
1. House
2. Curtain
3. Window
4. Room
5. Wall

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

Question ID : 630680565853
Option 1 ID : 6306802212378
Option 2 ID : 6306802212376
Option 3 ID : 6306802212379
Option 4 ID : 6306802212377
Status : Answered
Chosen Option : 3

Q.11 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
RJG, NFC, JBY, FXU, ?

- Ans  1. BSQ
 2. ATP
 3. ATQ
 4. BTQ

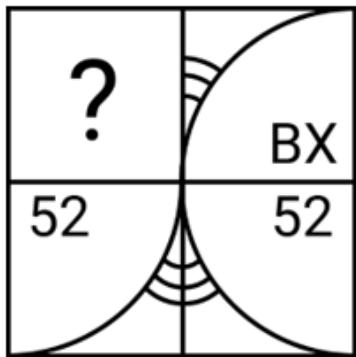
Question ID : 630680376692
Option 1 ID : 6306801467833
Option 2 ID : 6306801467834
Option 3 ID : 6306801467831
Option 4 ID : 6306801467832
Status : Answered
Chosen Option : 4

Q.12 Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.
1. School
2. Graduation
3. Birth
4. Doctorate
5. Under-graduation

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

Question ID : 630680395039
Option 1 ID : 6306801540424
Option 2 ID : 6306801540425
Option 3 ID : 6306801540426
Option 4 ID : 6306801540427
Status : Answered
Chosen Option : 1

Q.13 Select the figure from the options that can replace the question mark (?) and complete the given pattern.



Ans

✗ 1.



✗ 2.



✓ 3.



✗ 4.



Question ID : 630680524806

Option 1 ID : 6306802051323

Option 2 ID : 6306802051326

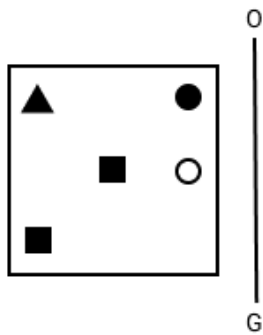
Option 3 ID : 6306802051324

Option 4 ID : 6306802051325

Status : Answered

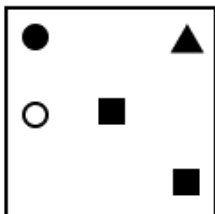
Chosen Option : 3

Q.14 Select the correct mirror image of the given figure when the mirror is placed at OG as shown below.

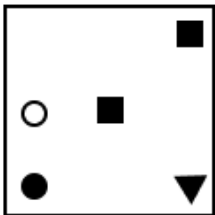


Ans

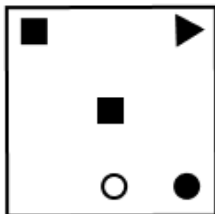
✓ 1.



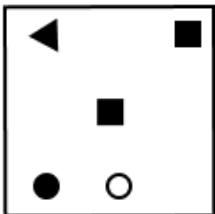
✗ 2.



✗ 3.



✗ 4.



Question ID : 630680462563

Option 1 ID : 6306801806455

Option 2 ID : 6306801806456

Option 3 ID : 6306801806457

Option 4 ID : 6306801806458

Status : Answered

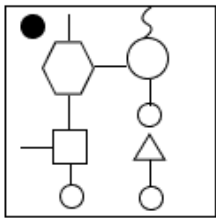
Chosen Option : 1

Q.15 Select the option figure in which the given figure is embedded as its part (rotation is NOT allowed).

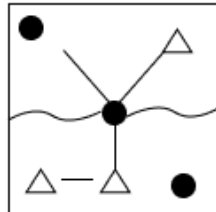


Ans

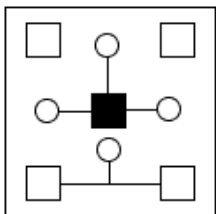
✗ 1.



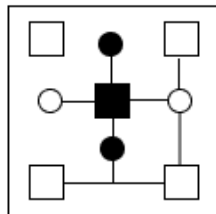
✗ 2.



✗ 3.



✓ 4.



Question ID : 630680422226

Option 1 ID : 6306801647340

Option 2 ID : 6306801647341

Option 3 ID : 6306801647342

Option 4 ID : 6306801647343

Status : Answered

Chosen Option : 4

Q.16 In a certain code language,
'A + B' means 'A is the mother 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 T related to O if 'P + N - S ÷ O + M × T'?

Ans ✗ 1. Son's son

✗ 2. Son

✓ 3. Daughter's husband

✗ 4. Daughter's son

Question ID : 630680378714

Option 1 ID : 6306801475905

Option 2 ID : 6306801475903

Option 3 ID : 6306801475904

Option 4 ID : 6306801475906

Status : Answered

Chosen Option : 3

Q.17 Which of the following numbers will replace the question mark (?) in the given series?
30, 31, 36, 45, 62, ?

Ans  1. 88

 2. 87

 3. 85

 4. 90

Question ID : 630680389945

Option 1 ID : 6306801520238

Option 2 ID : 6306801520239

Option 3 ID : 6306801520241

Option 4 ID : 6306801520240

Status : Answered

Chosen Option : 2

Q.18 Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(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.)

Cockroach : Nymph

Ans  1. Sheep : Fawn

 2. Bear : Foal

 3. Swan : Cygnet

 4. Horse : Chick

Question ID : 630680565343

Option 1 ID : 6306802210348

Option 2 ID : 6306802210349

Option 3 ID : 6306802210346

Option 4 ID : 6306802210347

Status : Answered

Chosen Option : 3

Q.19 42 is related to 21 following a certain logic. Following the same logic, 26 is related to 13. To which of the following is 68 related following the same logic?

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

Ans  1. 30

 2. 32

 3. 34

 4. 36

Question ID : 630680396687

Option 1 ID : 6306801546836

Option 2 ID : 6306801546837

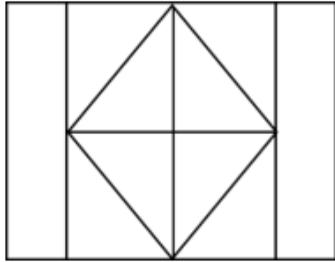
Option 3 ID : 6306801546838

Option 4 ID : 6306801546839

Status : Answered

Chosen Option : 3

Q.20 How many triangles are there in the given figure?



- Ans ☒ 1. 14
☒ 2. 12
☒ 3. 18
☒ 4. 16

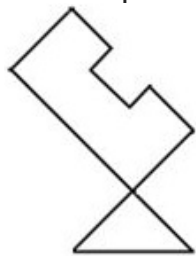
Question ID : 630680524408
Option 1 ID : 6306802049732
Option 2 ID : 6306802049731
Option 3 ID : 6306802049734
Option 4 ID : 6306802049733
Status : Answered
Chosen Option : 4

Q.21 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.)
(120, 96, 54)
(108, 84, 42)

- Ans ☒ 1. (128, 96, 60)
☒ 2. (92, 68, 40)
☒ 3. (116, 92, 62)
☒ 4. (124, 100, 58)

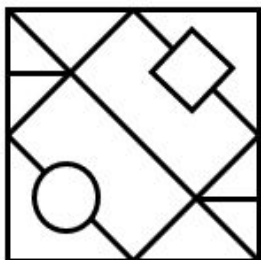
Question ID : 630680388984
Option 1 ID : 6306801516401
Option 2 ID : 6306801516400
Option 3 ID : 6306801516399
Option 4 ID : 6306801516398
Status : Not Answered
Chosen Option : --

Q.22 Select the option in which the given figure is embedded (rotation is NOT allowed).



Ans

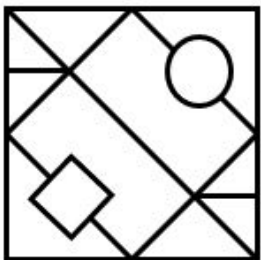
✓ 1.



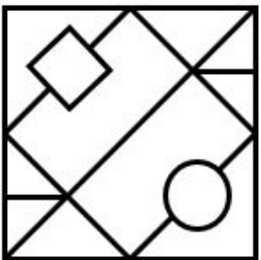
✗ 2.



✗ 3.



✗ 4.



Question ID : 630680524480

Option 1 ID : 6306802050021

Option 2 ID : 6306802050022

Option 3 ID : 6306802050019

Option 4 ID : 6306802050020

Status : Answered

Chosen Option : 1

Q.23 FJGK is related to HLIM in a certain way based on the English alphabetical order. In the same way, IMJN is related to KOLP. To which of the following is OSPT related, following the same logic?

- Ans  1. QUVR
 2. QVUR
 3. QURV
 4. QVRU

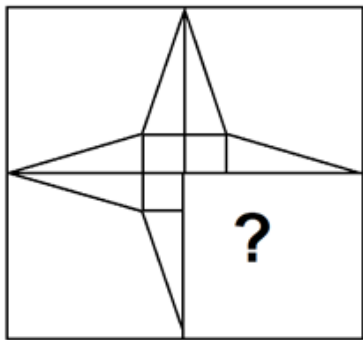
Question ID : 630680376718
Option 1 ID : 6306801467937
Option 2 ID : 6306801467935
Option 3 ID : 6306801467938
Option 4 ID : 6306801467936
Status : Answered
Chosen Option : 3

Q.24 In a certain code language, 'HIDE' is coded as '3795' and 'DOWN' is coded as '4287'. What is the code for 'D' in the given code language?

- Ans  1. 4
 2. 2
 3. 9
 4. 7

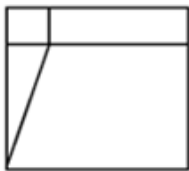
Question ID : 630680377192
Option 1 ID : 6306801469831
Option 2 ID : 6306801469834
Option 3 ID : 6306801469832
Option 4 ID : 6306801469833
Status : Answered
Chosen Option : 4

Q.25 Select the option figure that will replace the question mark (?) in the figure given below to complete the pattern.

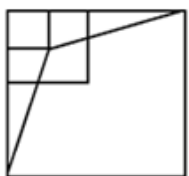


Ans

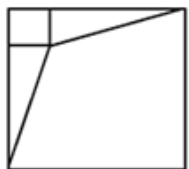
✗ 1.



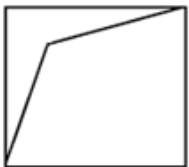
✗ 2.



✓ 3.



✗ 4.



Question ID : 630680525607

Option 1 ID : 6306802054513

Option 2 ID : 6306802054512

Option 3 ID : 6306802054514

Option 4 ID : 6306802054515

Status : Answered

Chosen Option : 3

Q.26 Aishwarya starts from her office in north direction. She turns to her left then to her right and finally after walking some more, she turns to her left. In which direction is she facing now?

Ans ✗ 1. East

✓ 2. West

✗ 3. North

✗ 4. South

Question ID : 630680385560

Option 1 ID : 6306801503020

Option 2 ID : 6306801503018

Option 3 ID : 6306801503019

Option 4 ID : 6306801503021

Status : Answered

Chosen Option : 2

Q.27 In a certain code language, 'TAKERS' is coded as '045%^1' and 'TALKER' is coded as '1*450%'. What is the code for 'L' in the given code language?

Ans  1. 0

 2. *

 3. ^

 4. 5

Question ID : 630680384343

Option 1 ID : 6306801498260

Option 2 ID : 6306801498259

Option 3 ID : 6306801498258

Option 4 ID : 6306801498261

Status : Answered

Chosen Option : 2

Q.28 Select the option in which the numbers share the same relationship as that shared by the given pairs of numbers.

100 : 20

60 : 12

(NOTE: Operations should be performed on the whole number, 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.)

Ans  1. 120 : 12

 2. 54 : 6

 3. 45 : 9

 4. 144 : 12

Question ID : 630680387169

Option 1 ID : 6306801509371

Option 2 ID : 6306801509370

Option 3 ID : 6306801509373

Option 4 ID : 6306801509372

Status : Answered

Chosen Option : 3

Q.29 What should come in place of the question mark (?) in the given series based on the

English alphabetical order?

SVX, QTV, ORT, MPR, ?

Ans  1. LOR

 2. NRP

 3. KNP

 4. KMP

Question ID : 630680379935

Option 1 ID : 6306801480776

Option 2 ID : 6306801480778

Option 3 ID : 6306801480775

Option 4 ID : 6306801480777

Status : Answered

Chosen Option : 3

Q.30 In a certain code language, 'BANISH' is coded as '9' and 'AMORPHOUS' is coded as '12'. What is the code for 'AMNESTY' in the given language?

- Ans  1. 16
 2. 10
 3. 11
 4. 9

Question ID : 630680375916
Option 1 ID : 6306801464738
Option 2 ID : 6306801464735
Option 3 ID : 6306801464736
Option 4 ID : 6306801464737
Status : Answered
Chosen Option : 4

Q.31 In a certain code language,
'A + B' means 'A is the mother 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 P related to T if 'P + Q × R > S = T'?

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

Question ID : 630680376685
Option 1 ID : 6306801467806
Option 2 ID : 6306801467804
Option 3 ID : 6306801467805
Option 4 ID : 6306801467803
Status : Answered
Chosen Option : 4

Q.32 The position(s) of how many letters will remain unchanged if each of the letters in the word 'HANGOVER' is arranged in alphabetical order?

- Ans  1. Two
 2. Three
 3. Four
 4. Zero

Question ID : 630680375960
Option 1 ID : 6306801464911
Option 2 ID : 6306801464912
Option 3 ID : 6306801464914
Option 4 ID : 6306801464913
Status : Answered
Chosen Option : 4

Q.33 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 pens are red. All red are blue.
Conclusion 1: All pens are blue.
Conclusion 2: Some pens are not red.

- Ans ☒ 1. Only conclusion 1 follows
☒ 2. Both conclusion 1 and 2 follow
☒ 3. Only conclusion 2 follows
☒ 4. Neither conclusion 1 nor 2 follows

Question ID : 630680381041
Option 1 ID : 6306801485139
Option 2 ID : 6306801485142
Option 3 ID : 6306801485140
Option 4 ID : 6306801485141
Status : Answered
Chosen Option : 4

Q.34 MK 4 is related to OM 2 in a certain way. In the same way, QS 6 is related to SU 3. To which of the following is XU 8 related, following the same logic?

- Ans ☒ 1. ZW 4
☒ 2. XE 7
☒ 3. ST 5
☒ 4. GX 5

Question ID : 630680378692
Option 1 ID : 6306801475817
Option 2 ID : 6306801475816
Option 3 ID : 6306801475818
Option 4 ID : 6306801475815
Status : Answered
Chosen Option : 1

Q.35 16 is related to 225 following a certain logic. Following the same logic, 7 is related to 99. To which of the following is 11 related following the same logic?
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- Ans ☒ 1. 155
☒ 2. 159
☒ 3. 158
☒ 4. 150

Question ID : 630680451716
Option 1 ID : 6306801763950
Option 2 ID : 6306801763951
Option 3 ID : 6306801763952
Option 4 ID : 6306801763953
Status : Answered
Chosen Option : 1

Q.36 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



- Ans
- ☒ 1. m d ə T ɒ
 - ☒ 2. w b ə T ɒ
 - ☒ 3. w b ə 4 T
 - ☒ 4. m p ə ɒ ɒ

Question ID : 630680524859
Option 1 ID : 6306802051536
Option 2 ID : 6306802051537
Option 3 ID : 6306802051535
Option 4 ID : 6306802051538
Status : Answered
Chosen Option : 2

Q.37 What should come in place of the question mark (?) in the given series?
25, 30, 40, 55, 75, ?

- Ans
- ☒ 1. 95
 - ☒ 2. 100
 - ☒ 3. 90
 - ☒ 4. 105

Question ID : 630680377719
Option 1 ID : 6306801471936
Option 2 ID : 6306801471937
Option 3 ID : 6306801471935
Option 4 ID : 6306801471938
Status : Answered
Chosen Option : 2

Q.38 What should come in place of the question mark (?) in the given series based on the English alphabetical order?

MGA, HBV, CWQ, XRL, ?

- Ans
- ☒ 1. SGM
 - ☒ 2. SMG
 - ☒ 3. GMS
 - ☒ 4. GSM

Question ID : 630680528607
Option 1 ID : 6306802066437
Option 2 ID : 6306802066438
Option 3 ID : 6306802066439
Option 4 ID : 6306802066440
Status : Answered
Chosen Option : 2

Q.39 Which two numbers should be interchanged to make the given equation correct?
 $(176 \div 4) + (22 \times 8) - (2 \times 20) = 70$
(Note: Interchange should be done of entire number and not individual digits of a given number)

- Ans ☒ 1. 4 and 8
☒ 2. 2 and 4
☒ 3. 22 and 20
☒ 4. 2 and 8

Question ID : 630680378794
Option 1 ID : 6306801476225
Option 2 ID : 6306801476226
Option 3 ID : 6306801476224
Option 4 ID : 6306801476223
Status : Answered
Chosen Option : 1

Q.40 What should come in place of the question mark (?) in the given series?
14, 19, 29, 44, 64, ?

- Ans ☒ 1. 89
☒ 2. 88
☒ 3. 84
☒ 4. 82

Question ID : 630680377841
Option 1 ID : 6306801472426
Option 2 ID : 6306801472425
Option 3 ID : 6306801472424
Option 4 ID : 6306801472423
Status : Answered
Chosen Option : 1

Q.41 42 is related to 14 following a certain logic. Following the same logic, 33 is related to 11. To which of the following is 75 related following the same logic?

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

- Ans ☒ 1. 15
☒ 2. 25
☒ 3. 35
☒ 4. 45

Question ID : 630680396935
Option 1 ID : 6306801547804
Option 2 ID : 6306801547805
Option 3 ID : 6306801547806
Option 4 ID : 6306801547807
Status : Answered
Chosen Option : 2

Q.42 Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.

Statements: Some horses are rocks. Some rocks are leaves. No rock is a tree.

Conclusions:

(I) No horse is a tree.

(II) At least some leaves are trees.

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

Question ID : 630680376863
Option 1 ID : 6306801468516
Option 2 ID : 6306801468517
Option 3 ID : 6306801468515
Option 4 ID : 6306801468518
Status : Answered
Chosen Option : 1

Q.43 In a certain code language, 'he was good' is coded as 'ik bu oy' and 'was she there' is coded as 'bu ha no'. How is 'was' coded in the given language?

- Ans ☒ 1. bu
☒ 2. ha
☒ 3. ik
☒ 4. no

Question ID : 630680377688
Option 1 ID : 6306801471811
Option 2 ID : 6306801471814
Option 3 ID : 6306801471812
Option 4 ID : 6306801471813
Status : Answered
Chosen Option : 1

Q.44 If A means +, B means −, C means × and D means ÷, then what will come in place of the question mark (?) in the following equation?
21 A 18 D 2 B 3 C 5 = ?

- Ans ☒ 1. 14
☒ 2. 15
☒ 3. 17
☒ 4. 16

Question ID : 630680376942
Option 1 ID : 6306801468832
Option 2 ID : 6306801468831
Option 3 ID : 6306801468834
Option 4 ID : 6306801468833
Status : Answered
Chosen Option : 2

Q.45 KSNJ is related to MUPL in a certain way based on the English alphabetical order. In the same way, NVQM is related to PXSO. To which of the following is EMHD related, following the same logic?

- Ans ☒ 1. GOJF
- ☐ 2. GOFJ
- ☐ 3. OGJF
- ☐ 4. OGfJ

Question ID : 630680444383
Option 1 ID : 6306801734808
Option 2 ID : 6306801734809
Option 3 ID : 6306801734810
Option 4 ID : 6306801734811
Status : Answered
Chosen Option : 1

Q.46 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
STA, WXE, ABI, EFM, ?

- Ans ☒ 1. IJQ
- ☐ 2. JPS
- ☐ 3. JIS
- ☐ 4. KKP

Question ID : 630680382498
Option 1 ID : 6306801490907
Option 2 ID : 6306801490910
Option 3 ID : 6306801490909
Option 4 ID : 6306801490908
Status : Answered
Chosen Option : 1

Q.47 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
HLP, TXB, FJN, RVZ, DHL, ?

- Ans ☐ 1. PTY
- ☐ 2. QTY
- ☐ 3. QSX
- ☒ 4. PTX

Question ID : 630680378630
Option 1 ID : 6306801475567
Option 2 ID : 6306801475568
Option 3 ID : 6306801475569
Option 4 ID : 6306801475570
Status : Answered
Chosen Option : 4

Q.48 What will come in place of the question mark (?) in the following equation if '+' and '-' are interchanged and 'x' and '÷' are interchanged?
 $20 \times 5 - 13 + 3 \div 4 = ?$

- Ans ☒ 1. 12
☒ 2. 5
☒ 3. 10
☒ 4. 7

Question ID : 630680376798
Option 1 ID : 6306801468258
Option 2 ID : 6306801468255
Option 3 ID : 6306801468257
Option 4 ID : 6306801468256
Status : Answered
Chosen Option : 2

Q.49 L, M, N, O, P, Q, and R are sitting around a circular table, facing the centre. L sits second to the right of M. N sits third to the right of L. O sits second to the left of N. P is not an immediate neighbour of N. Q sits to the immediate right of O. How many people are sitting between L and R when counted from the left of L?

- Ans ☒ 1. Zero
☒ 2. One
☒ 3. Three
☒ 4. Two

Question ID : 630680377644
Option 1 ID : 6306801471635
Option 2 ID : 6306801471636
Option 3 ID : 6306801471638
Option 4 ID : 6306801471637
Status : Answered
Chosen Option : 4

Q.50 GKHL is related to IMJN in a certain way based on the English alphabetical order. In the same way, KOLP is related to MQNR. To which of the following is NROS related, following the same logic?

- Ans ☒ 1. TPQU
☒ 2. PTQU
☒ 3. TPUQ
☒ 4. PTUQ

Question ID : 630680376569
Option 1 ID : 6306801467343
Option 2 ID : 6306801467346
Option 3 ID : 6306801467344
Option 4 ID : 6306801467345
Status : Answered
Chosen Option : 2

Section : General Awareness

Q.1 What was the main objection against the Directive Principles of State Policy in the Constituent Assembly?

- Ans
- ☒ 1. The state was responsible for these policies
 - ☒ 2. They were an instrument of instructions
 - ☒ 3. They were considered as novel features
 - ☒ 4. They were non justiciable in character

Question ID : 630680511438
Option 1 ID : 6306801998885
Option 2 ID : 6306801998884
Option 3 ID : 6306801998883
Option 4 ID : 6306801998882
Status : Answered
Chosen Option : 4

Q.2 When two nuclei fuse together forming one nucleus during cell fusion, it is known as:

- Ans
- ☒ 1. synkaryon
 - ☒ 2. eukaryon
 - ☒ 3. heterokaryon
 - ☒ 4. syncytium

Question ID : 630680399212
Option 1 ID : 6306801556795
Option 2 ID : 6306801556796
Option 3 ID : 6306801556797
Option 4 ID : 6306801556798
Status : Answered
Chosen Option : 1

Q.3 In the context of a Microsoft Excel sheet, what does the term 'workbook' mean?

- Ans
- ☒ 1. A single sheet within a file
 - ☒ 2. The entire Microsoft Excel file
 - ☒ 3. A formula used in calculations
 - ☒ 4. A chart or graph

Question ID : 630680571823
Option 1 ID : 6306802236193
Option 2 ID : 6306802236194
Option 3 ID : 6306802236195
Option 4 ID : 6306802236196
Status : Answered
Chosen Option : 3

Q.4 Who is the ultimate interpreter of the Constitution?

- Ans
- ☒ 1. President
 - ☒ 2. Speaker
 - ☒ 3. District Courts
 - ☒ 4. Supreme Court

Question ID : 630680511449
Option 1 ID : 6306801998928
Option 2 ID : 6306801998929
Option 3 ID : 6306801998927
Option 4 ID : 6306801998926
Status : Answered
Chosen Option : 1

Q.5 A low pitched but louder sound has _____.

- Ans ☒ 1. lower frequency and higher amplitude
- ☐ 2. higher frequency and lower amplitude
- ☐ 3. lower frequency and lower amplitude
- ☐ 4. higher frequency and higher amplitude

Question ID : 630680419681
Option 1 ID : 6306801637217
Option 2 ID : 6306801637218
Option 3 ID : 6306801637219
Option 4 ID : 6306801637220
Status : Answered
Chosen Option : 4

Q.6 In the 1830's, which Scottish man was Commissioned by the East India Company to prepare reports on Education and progress in the native schools of Bengal and Bihar?

- Ans ☒ 1. William Adam
- ☐ 2. Joseph Hartog
- ☐ 3. John Sargent
- ☐ 4. Anthony Mc Donnel

Question ID : 630680511592
Option 1 ID : 6306801999493
Option 2 ID : 6306801999490
Option 3 ID : 6306801999491
Option 4 ID : 6306801999492
Status : Answered
Chosen Option : 3

Q.7 In 2023, who among the following individuals served as the governor of Telangana?

- Ans ☐ 1. Baby Rani Maurya
- ☐ 2. Kalraj Mishra
- ☐ 3. Ganesh Lal
- ☒ 4. Tamilisai Soundararajan

Question ID : 630680513910
Option 1 ID : 6306802008267
Option 2 ID : 6306802008268
Option 3 ID : 6306802008266
Option 4 ID : 6306802008265
Status : Answered
Chosen Option : 1

Q.8 On which date did the cantonment of Meerut break out in military mutiny during the 1857 movement?

- Ans ☐ 1. 30 March 1857
- ☒ 2. 10 May 1857
- ☐ 3. 30 May 1857
- ☐ 4. 09 April 1857

Question ID : 630680511558
Option 1 ID : 6306801999357
Option 2 ID : 6306801999356
Option 3 ID : 6306801999354
Option 4 ID : 6306801999355
Status : Answered
Chosen Option : 3

Q.9 Which of the following is NOT included while estimating National Income?
I.Goods sold by street hawkers
II.Services of housewives
III.Production of vegetable in kitchen garden

- Ans ☒ 1. All I, II and III
☒ 2. Only II and III
☒ 3. Only III
☒ 4. Only I and II

Question ID : 630680512400
Option 1 ID : 6306802002573
Option 2 ID : 6306802002571
Option 3 ID : 6306802002572
Option 4 ID : 6306802002570
Status : Answered
Chosen Option : 1

Q.10 After realising the deadly effects of depleting the ozone layer, under which programme was the decision taken to ban the usage of CFC?

- Ans ☒ 1. United Nations Development Programme
☒ 2. Natural State Environmental Programme
☒ 3. United Nations Environment Programme
☒ 4. Federal Energy Management Programme

Question ID : 630680403332
Option 1 ID : 6306801572837
Option 2 ID : 6306801572838
Option 3 ID : 6306801572839
Option 4 ID : 6306801572840
Status : Answered
Chosen Option : 3

Q.11 Which of the following states has launched the 'Mo Ghara' or 'My Home' scheme, with an aim to transform kutcha houses into pucca ones?

- Ans ☒ 1. West Bengal
☒ 2. Chhattisgarh
☒ 3. Odisha
☒ 4. Jharkhand

Question ID : 630680513785
Option 1 ID : 6306802007765
Option 2 ID : 6306802007767
Option 3 ID : 6306802007768
Option 4 ID : 6306802007766
Status : Answered
Chosen Option : 1

Q.12 The animals or plants which can inbreed successfully must belong to the same _____.

- Ans
- ☐ 1. country
 - ☐ 2. planet
 - ☐ 3. locality
 - ☒ 4. species

Question ID : 630680539378
Option 1 ID : 6306802108642
Option 2 ID : 6306802108641
Option 3 ID : 6306802108643
Option 4 ID : 6306802108640
Status : Answered
Chosen Option : 4

Q.13 Which Nationalist Democratic Progressive Party (NDPP) leader was sworn in as the fifth Chief Minister of Nagaland in March 2023?

- Ans
- ☐ 1. Wanweiroy Kharlukhi
 - ☐ 2. Chingwang Konyak
 - ☐ 3. Tokheho Yephthomi
 - ☒ 4. Neiphiu Rio

Question ID : 630680412267
Option 1 ID : 6306801607891
Option 2 ID : 6306801607892
Option 3 ID : 6306801607893
Option 4 ID : 6306801607894
Status : Answered
Chosen Option : 4

Q.14 Before starting a 5 day and 5 night excursion, Mr. Patel provided all his students with battery powered flash lights. He also gave them some extra batteries to use as spare. Then Mr. Patel asked them whether they know how the batteries will produce electricity and help them. What do you think the correct answer to his question is?

- Ans
- ☒ 1. Electricity is produced by the chemicals stored in the battery
 - ☐ 2. Electricity is produced by friction between the battery and the flash light
 - ☐ 3. Electricity is saved in the battery from the factory that produces it
 - ☐ 4. Battery extracts electricity from the environment and passes it to the flash light

Question ID : 630680401741
Option 1 ID : 6306801566730
Option 2 ID : 6306801566731
Option 3 ID : 6306801566732
Option 4 ID : 6306801566733
Status : Answered
Chosen Option : 1

Q.15 What is the name of the compound with the formula N_2O_5 ?

- Ans
- ☐ 1. Nitric oxide
 - ☐ 2. Nitrous oxide
 - ☒ 3. Dinitrogen pentoxide
 - ☐ 4. Nitrogen dioxide

Question ID : 630680540122
Option 1 ID : 6306802111589
Option 2 ID : 6306802111588
Option 3 ID : 6306802111590
Option 4 ID : 6306802111591
Status : Answered
Chosen Option : 3

Q.16 The Arid soils are developed in the western part of which state from the following?

- Ans
- ☐ 1. Assam
 - ☐ 2. Bihar
 - ☐ 3. Telangana
 - ☒ 4. Rajasthan

Question ID : 630680511023
Option 1 ID : 6306801997222
Option 2 ID : 6306801997224
Option 3 ID : 6306801997223
Option 4 ID : 6306801997225
Status : Answered
Chosen Option : 3

Q.17 According to Census of India 2011, which state recorded negative population growth rate?

- Ans
- ☐ 1. Manipur
 - ☒ 2. Nagaland
 - ☐ 3. Sikkim
 - ☐ 4. Kerala

Question ID : 630680477701
Option 1 ID : 6306801865952
Option 2 ID : 6306801865953
Option 3 ID : 6306801865954
Option 4 ID : 6306801865955
Status : Answered
Chosen Option : 2

Q.18 What is the main content of the Fourth Schedule in the Constitution of India?

- Ans
- ☐ 1. Directive Principles of State Policy
 - ☐ 2. Allocation of seats in the Lok Sabha
 - ☐ 3. Provisions for State Legislature
 - ☒ 4. Allocation of seats in the Council of States

Question ID : 630680804341
Option 1 ID : 6306803151098
Option 2 ID : 6306803151095
Option 3 ID : 6306803151097
Option 4 ID : 6306803151096
Status : Answered
Chosen Option : 4

Q.19 Who marked the historic moment by unveiling the 'Yashobhoomi' convention centre in Delhi in September 2023?

- Ans** ☒ 1. Arvind Kejriwal
- ☒ 2. Dharmendra Pradhan
- ☒ 3. Narendra Modi
- ☒ 4. Droupadi Murmu

Question ID : 630680412653
Option 1 ID : 6306801609435
Option 2 ID : 6306801609436
Option 3 ID : 6306801609437
Option 4 ID : 6306801609438
Status : Answered
Chosen Option : 4

Q.20 Who among the following scientists discovered free living cells in pond water for the first time?

- Ans** ☒ 1. Robert Hooke
- ☒ 2. Robert Brown
- ☒ 3. Anton Van Leeuwenhoek
- ☒ 4. Franz Bauer

Question ID : 630680565191
Option 1 ID : 6306802209737
Option 2 ID : 6306802209740
Option 3 ID : 6306802209738
Option 4 ID : 6306802209739
Status : Answered
Chosen Option : 1

Q.21 A village is established in a region where land meets the ocean. What is this region called?

- Ans** ☒ 1. Tropical Region
- ☒ 2. Coastal Region
- ☒ 3. Sea Beach
- ☒ 4. Marshy Land

Question ID : 630680546841
Option 1 ID : 6306802137934
Option 2 ID : 6306802137933
Option 3 ID : 6306802137931
Option 4 ID : 6306802137932
Status : Answered
Chosen Option : 1

Q.22 On cold pressing groundnut, oils are released. This indicates the presence of _____.

- Ans ☒ 1. Carbohydrates
☒ 2. Fats
☒ 3. Vitamins
☒ 4. Proteins

Question ID : 630680539582
Option 1 ID : 6306802109457
Option 2 ID : 6306802109458
Option 3 ID : 6306802109459
Option 4 ID : 6306802109460
Status : Answered
Chosen Option : 2

Q.23 The largest river system of Rajasthan is _____.

- Ans ☒ 1. Luni
☒ 2. Kaveri
☒ 3. Bhima
☒ 4. Tapi

Question ID : 630680564469
Option 1 ID : 6306802206807
Option 2 ID : 6306802206809
Option 3 ID : 6306802206810
Option 4 ID : 6306802206808
Status : Answered
Chosen Option : 1

Q.24 Pascal is the SI unit of _____, which is defined as a force of 1 N applied uniformly over an area of 1 m².

- Ans ☒ 1. mass density
☒ 2. energy
☒ 3. power
☒ 4. pressure

Question ID : 630680403591
Option 1 ID : 6306801573859
Option 2 ID : 6306801573858
Option 3 ID : 6306801573861
Option 4 ID : 6306801573860
Status : Answered
Chosen Option : 4

Q.25 The process by which molecules from a region of higher concentration move to a region of lower concentration is known as:

- Ans ☒ 1. evaporation
☒ 2. boiling
☒ 3. diffusion
☒ 4. melting

Question ID : 630680402647
Option 1 ID : 6306801570187
Option 2 ID : 6306801570188
Option 3 ID : 6306801570189
Option 4 ID : 6306801570190
Status : Answered
Chosen Option : 3

Q.26 In which Union Territory is the 'slash and burn' agriculture known as 'Dipa'?

- Ans ☒ 1. Jammu and Kashmir
- ☒ 2. Ladakh
- ☒ 3. Dadra & Nagar Haveli and Daman & Diu
- ☒ 4. Andaman and Nicobar Islands

Question ID : 630680510948
Option 1 ID : 6306801996924
Option 2 ID : 6306801996923
Option 3 ID : 6306801996925
Option 4 ID : 6306801996922
Status : Answered
Chosen Option : 3

Q.27 When was the First Five-Year Plan of India launched?

- Ans ☒ 1. 1950
- ☒ 2. 1951
- ☒ 3. 1956
- ☒ 4. 1961

Question ID : 630680460139
Option 1 ID : 6306801797002
Option 2 ID : 6306801797003
Option 3 ID : 6306801797004
Option 4 ID : 6306801797005
Status : Answered
Chosen Option : 1

Q.28 Based on which committee recommendations, RBI introduced a comprehensive regulatory framework for NBFC-MFIs?

- Ans ☒ 1. Gadgil committee
- ☒ 2. Malegam committee
- ☒ 3. Kelkar committee
- ☒ 4. Rangarajan committee

Question ID : 630680401332
Option 1 ID : 6306801565129
Option 2 ID : 6306801565130
Option 3 ID : 6306801565131
Option 4 ID : 6306801565132
Status : Answered
Chosen Option : 3

Q.29 Which one of the following has the largest population in a food chain?

- Ans ☒ 1. Decomposers
- ☒ 2. Primary consumers
- ☒ 3. Producers
- ☒ 4. Secondary consumers

Question ID : 630680540577
Option 1 ID : 6306802113386
Option 2 ID : 6306802113384
Option 3 ID : 6306802113383
Option 4 ID : 6306802113385
Status : Answered
Chosen Option : 1

Q.30 Which of the following sports events was NEVER hosted by India?

- Ans ☒ 1. Commonwealth Games
☒ 2. Asian Games
☒ 3. ICC Men World Cup Cricket
☒ 4. Olympics

Question ID : 630680510861
Option 1 ID : 6306801996575
Option 2 ID : 6306801996577
Option 3 ID : 6306801996576
Option 4 ID : 6306801996574
Status : Answered
Chosen Option : 1

Q.31 In which of the following groups of the periodic table is the metallic element 'silver' found?

- Ans ☒ 1. Group 11
☒ 2. Group 15
☒ 3. Group 7
☒ 4. Group 3

Question ID : 630680403020
Option 1 ID : 6306801571653
Option 2 ID : 6306801571654
Option 3 ID : 6306801571652
Option 4 ID : 6306801571651
Status : Answered
Chosen Option : 3

Q.32 Which species of sponges is commonly called glass sponge due to the presence of silica spicules?

- Ans ☒ 1. Calcareo
☒ 2. Spongilla
☒ 3. Planaria
☒ 4. Euplectella

Question ID : 630680404146
Option 1 ID : 6306801576071
Option 2 ID : 6306801576072
Option 3 ID : 6306801576073
Option 4 ID : 6306801576070
Status : Answered
Chosen Option : 2

Q.33 "Meri LiFE" (My life) app was launched in May 2023 by union minister Shri Bhupender Yadav. Which ministry does he belong?

- Ans ☒ 1. Ministry of Earth Sciences
☒ 2. Ministry of Environment, Forest and Climate Change
☒ 3. Ministry of Agriculture and Farmers Welfare
☒ 4. Ministry of Health and Family Welfare

Question ID : 630680412711
Option 1 ID : 6306801609667
Option 2 ID : 6306801609668
Option 3 ID : 6306801609669
Option 4 ID : 6306801609670
Status : Answered
Chosen Option : 3

Q.34 Which of the following is an example of formation of metamorphic rocks?

- Ans ☒ 1. Formation of Chalk
- ☒ 2. Formation of Sandstone
- ☒ 3. Formation of Slate
- ☒ 4. Formation of Limestone

Question ID : 630680546828
Option 1 ID : 6306802137881
Option 2 ID : 6306802137882
Option 3 ID : 6306802137879
Option 4 ID : 6306802137880
Status : Answered
Chosen Option : 2

Q.35 What is the height of the Kanchenjunga peak?

- Ans ☒ 1. 8958 m
- ☒ 2. 8598 m
- ☒ 3. 8859 m
- ☒ 4. 8527 m

Question ID : 630680510967
Option 1 ID : 6306801996999
Option 2 ID : 6306801996998
Option 3 ID : 6306801997000
Option 4 ID : 6306801997001
Status : Answered
Chosen Option : 4

Q.36 Who along with Barry Marshall, was awarded the Nobel Prize in Physiology or Medicine in 2005 for discovering that stomach ulcer is an infectious disease caused by bacteria?

- Ans ☒ 1. Jean Paul Vuillemin
- ☒ 2. Robert Koch
- ☒ 3. Gabriel Pouchet
- ☒ 4. Robin Warren

Question ID : 630680404299
Option 1 ID : 6306801576694
Option 2 ID : 6306801576695
Option 3 ID : 6306801576696
Option 4 ID : 6306801576697
Status : Answered
Chosen Option : 3

Q.37 Food digested in the stomach passes through the intestines so that the blood vessels can absorb essential nutrients for the functioning and growth of the body. What is this process known as?

- Ans ☒ 1. Transmission
☒ 2. Assimilation
☒ 3. Transfusion
☒ 4. Integration

Question ID : 630680539638
Option 1 ID : 6306802109677
Option 2 ID : 6306802109678
Option 3 ID : 6306802109679
Option 4 ID : 6306802109680
Status : Answered
Chosen Option : 2

Q.38 Which chemical compound is responsible for the spicy taste in chilli peppers?

- Ans ☒ 1. Capsaicin
☒ 2. Caffeine
☒ 3. Ethanol
☒ 4. Tannin

Question ID : 630680412076
Option 1 ID : 6306801607139
Option 2 ID : 6306801607140
Option 3 ID : 6306801607141
Option 4 ID : 6306801607142
Status : Answered
Chosen Option : 1

Q.39 What does the CONCATENATE function do in Microsoft Excel?

- Ans ☒ 1. Combines text from multiple cells into one cell
☒ 2. Splits text into separate cells
☒ 3. Converts text to uppercase
☒ 4. Finds the average of a range of cells

Question ID : 630680571924
Option 1 ID : 6306802236592
Option 2 ID : 6306802236593
Option 3 ID : 6306802236594
Option 4 ID : 6306802236595
Status : Answered
Chosen Option : 3

Q.40 In which year was the Integrated Child Development Scheme (ICDS) launched in India?

- Ans ☒ 1. 1975
☒ 2. 1984
☒ 3. 1978
☒ 4. 1982

Question ID : 630680394644
Option 1 ID : 6306801538862
Option 2 ID : 6306801538865
Option 3 ID : 6306801538863
Option 4 ID : 6306801538864
Status : Answered
Chosen Option : 3

Q.41 According to Article 58 of the Constitution of India, no person shall be eligible for election as President unless he is a citizen of India, has completed the age of ____ and is qualified for election as a member of the House of the People.

- Ans
- ☐ 1. 27 years
 - ☐ 2. 30 years
 - ☒ 3. 35 years
 - ☐ 4. 40 years

Question ID : 630680407801
Option 1 ID : 6306801590142
Option 2 ID : 6306801590143
Option 3 ID : 6306801590144
Option 4 ID : 6306801590145
Status : Answered
Chosen Option : 3

Q.42 Who composed the music for the film Kashmir ki Kali?

- Ans
- ☐ 1. Naushad
 - ☒ 2. OP Nayyar
 - ☐ 3. Hemant Kumar
 - ☐ 4. Salil Chowdhury

Question ID : 630680701406
Option 1 ID : 6306802747562
Option 2 ID : 6306802747561
Option 3 ID : 6306802747563
Option 4 ID : 6306802747564
Status : Answered
Chosen Option : 3

Q.43 Who inspired Indians by raising the slogan 'Freedom is my birthright and I shall have it!'?

- Ans
- ☐ 1. Swami Vivekananda
 - ☐ 2. Sachindra Nath Sanyal
 - ☐ 3. Bhagat Singh
 - ☒ 4. Bal Gangadhar Tilak

Question ID : 630680572374
Option 1 ID : 6306802238336
Option 2 ID : 6306802238337
Option 3 ID : 6306802238338
Option 4 ID : 6306802238339
Status : Answered
Chosen Option : 4

Q.44 Which word has been substituted for the words 'Unity of the Nation' in the 42nd Amendment Act of the Preamble of the Constitution of India?

- Ans ☒ 1. Unity and honesty of the nation
☒ 2. Unity and equity of the nation
☒ 3. Unity and integrity of the nation
☒ 4. Unity and morality of the nation

Question ID : 630680493456
Option 1 ID : 6306801927563
Option 2 ID : 6306801927564
Option 3 ID : 6306801927565
Option 4 ID : 6306801927566
Status : Answered
Chosen Option : 3

Q.45 India defeated West Indies in which of the following World Cup finals?

- Ans ☒ 1. 1983 England
☒ 2. 2007 West Indies
☒ 3. 2019 England
☒ 4. 2003 South Africa

Question ID : 630680436000
Option 1 ID : 6306801701949
Option 2 ID : 6306801701950
Option 3 ID : 6306801701951
Option 4 ID : 6306801701952
Status : Answered
Chosen Option : 1

Q.46 The Registration of Births and Deaths (Amendment) Bill was introduced in the Lok Sabha by which ministry on 26 July 2023?

- Ans ☒ 1. Ministry of Home Affairs
☒ 2. Ministry of Women and Child Development
☒ 3. Ministry of Health and Family Welfare
☒ 4. Ministry of Information and Broadcasting

Question ID : 630680411229
Option 1 ID : 6306801603668
Option 2 ID : 6306801603669
Option 3 ID : 6306801603670
Option 4 ID : 6306801603671
Status : Answered
Chosen Option : 3

Q.47 The Pala rulers achieved their domination in which province of India?

- Ans ☒ 1. Kashmir
☒ 2. Bengal
☒ 3. Orissa
☒ 4. Assam

Question ID : 630680511625
Option 1 ID : 6306801999624
Option 2 ID : 6306801999622
Option 3 ID : 6306801999623
Option 4 ID : 6306801999625
Status : Answered
Chosen Option : 2

Q.48 Which Minister led the Indian delegation in the meeting of the digital and technology ministers of G7 countries held in Japan on 29 and 30 April 2023?

- Ans ☒ 1. Ashwini Vaishnaw
☐ 2. Ajay Bhatt
☐ 3. Bhupendra Yadav
☐ 4. Sarbananda Sonowal

Question ID : 630680469624
Option 1 ID : 6306801834259
Option 2 ID : 6306801834260
Option 3 ID : 6306801834261
Option 4 ID : 6306801834262
Status : Answered
Chosen Option : 1

Q.49 According to Census 2011 of India, which of the following groups of union territories has the highest urban population?

- Ans ☒ 1. Chandigarh and Lakshadweep
☐ 2. Daman & Diu and Lakshadweep
☐ 3. Puducherry and Lakshadweep
☐ 4. Puducherry and Chandigarh

Question ID : 630680477226
Option 1 ID : 6306801864065
Option 2 ID : 6306801864066
Option 3 ID : 6306801864067
Option 4 ID : 6306801864068
Status : Answered
Chosen Option : 1

Q.50 Kala Ramnath is associated with which of the following gharanas?

- Ans ☐ 1. Indore gharana
☐ 2. Agra gharana
☒ 3. Mewati gharana
☐ 4. Bhendibazaar gharana

Question ID : 630680413011
Option 1 ID : 6306801610867
Option 2 ID : 6306801610869
Option 3 ID : 6306801610870
Option 4 ID : 6306801610868
Status : Answered
Chosen Option : 3

Section : General Engineering Electrical

Q.1 In the context of magnetic circuits, the value of the leakage coefficient for electrical machines is usually about _____.

Ans ☒ 1. 1.15 to 1.25

☐ 2. 1.5 to 1.75

☐ 3. 0.5 to 1

☐ 4. 1.25 to 1.5

Question ID : 630680504223

Option 1 ID : 6306801970454

Option 2 ID : 6306801970456

Option 3 ID : 6306801970453

Option 4 ID : 6306801970455

Status : Answered

Chosen Option : 1

Q.2 1 ampere of current is equal to how many number of electrons?

Ans ☐ 1. 6.25×10^{-18}

☐ 2. 4.25×10^{-18}

☐ 3. 4.25×10^{18}

☒ 4. 6.25×10^{18}

Question ID : 630680340658

Option 1 ID : 6306801325076

Option 2 ID : 6306801325075

Option 3 ID : 6306801325073

Option 4 ID : 6306801325074

Status : Answered

Chosen Option : 4

Q.3 Which of the following systems is NOT a part of the operating mechanism in a single-phase energy meter?

Ans ☐ 1. Braking system

☒ 2. Energy system

☐ 3. Driving system

☐ 4. Registering system

Question ID : 630680217936

Option 1 ID : 630680845652

Option 2 ID : 630680845653

Option 3 ID : 630680845651

Option 4 ID : 630680845654

Status : Answered

Chosen Option : 4

Q.4 The magnetic flux through a coil having a single turn is varying according to the relation $\phi = (5t^2 + 4t + 10)$ wb. Determine the impedance of the coil if the induced current through the coil is 5A at $t = 2$ seconds.

- Ans** ☒ 1. 4.8 Ω
☒ 2. 4 Ω
☒ 3. 8.4 Ω
☒ 4. 40 Ω

Question ID : 630680504202
Option 1 ID : 6306801970371
Option 2 ID : 6306801970369
Option 3 ID : 6306801970372
Option 4 ID : 6306801970370
Status : Answered
Chosen Option : 1

Q.5 In an unbiased pnp transistor, the barrier voltages are _____ on the base and _____ on the emitter and collector.

- Ans** ☒ 1. negative; negative
☒ 2. positive; positive
☒ 3. negative; positive
☒ 4. positive; negative

Question ID : 630680502538
Option 1 ID : 6306801963736
Option 2 ID : 6306801963737
Option 3 ID : 6306801963734
Option 4 ID : 6306801963735
Status : Answered
Chosen Option : 1

Q.6 A signal applied to a CRO has a rising time of 0.5 μ s. Its bandwidth is:

- Ans** ☒ 1. 0.2 MHz
☒ 2. 0.07 MHz
☒ 3. 0.7 MHz
☒ 4. 0.05 MHz

Question ID : 630680509389
Option 1 ID : 6306801990846
Option 2 ID : 6306801990845
Option 3 ID : 6306801990844
Option 4 ID : 6306801990843
Status : Answered
Chosen Option : 3

Q.7 In radial distribution system, the consumers are dependent on _____ and _____.

- Ans** ☒ 1. multiple feeder, multiple distributor
☒ 2. multiple feeder, single distributor
☒ 3. single feeder, single distributor
☒ 4. single feeder, multiple distributor

Question ID : 630680503851
Option 1 ID : 6306801968968
Option 2 ID : 6306801968965
Option 3 ID : 6306801968967
Option 4 ID : 6306801968966
Status : Answered
Chosen Option : 3

Q.8 Which of the following statements is FALSE in the context of the characteristics of synchronous motors?

- Ans** ☒ 1. They have constant speed operation.
☒ 2. Synchronous motors have high power factor correction.
☒ 3. They have low operating efficiency.
☒ 4. They are made in large sizes.

Question ID : 630680337171
Option 1 ID : 6306801311407
Option 2 ID : 6306801311405
Option 3 ID : 6306801311406
Option 4 ID : 6306801311408
Status : Answered
Chosen Option : 3

Q.9 With the increase in voltage level of the distribution network, the weight and corresponding cost of the conductor material will be _____ and _____, respectively, for the same voltage drop.

- Ans** ☒ 1. increased; decreased
☒ 2. decreased; decreased
☒ 3. increased; increased
☒ 4. decreased; increased

Question ID : 630680503818
Option 1 ID : 6306801968834
Option 2 ID : 6306801968835
Option 3 ID : 6306801968836
Option 4 ID : 6306801968833
Status : Answered
Chosen Option : 2

Q.10 In the shaded-pole induction motor, the shading coil fitted on the _____ is called _____.

- Ans
- ☐ 1. auxiliary pole; shading pole
 - ☐ 2. main pole; non-shading pole
 - ☒ 3. main pole; shading pole
 - ☐ 4. auxiliary pole; non-shading pole

Question ID : 630680509537
Option 1 ID : 6306801991419
Option 2 ID : 6306801991418
Option 3 ID : 6306801991420
Option 4 ID : 6306801991417
Status : Answered
Chosen Option : 3

Q.11 The ratio of the mean spherical candle power to the mean horizontal candle power is called _____.

- Ans
- ☒ 1. reduction factor
 - ☐ 2. utilization factor
 - ☐ 3. beam factor
 - ☐ 4. lamp efficiency

Question ID : 630680401395
Option 1 ID : 6306801565371
Option 2 ID : 6306801565372
Option 3 ID : 6306801565373
Option 4 ID : 6306801565370
Status : Answered
Chosen Option : 1

Q.12 What is the armature-circuit-resistance speed control method for DC motor?

- Ans
- ☐ 1. Variation of armature terminal voltage
 - ☐ 2. Variation of resistance in the field circuit
 - ☒ 3. Variation of resistance in the armature circuit
 - ☐ 4. Variation of field flux

Question ID : 630680503353
Option 1 ID : 6306801966993
Option 2 ID : 6306801966994
Option 3 ID : 6306801966995
Option 4 ID : 6306801966996
Status : Answered
Chosen Option : 3

Q.13 Which of the following statements is true about the voltage control of DC motors?

- Ans ☒ 1. The field current is kept constant and the terminal voltage is varied to obtain speed control.
- ☒ 2. The application of this method is restricted to separately excited DC motors.
- ☒ 3. The terminal voltage is kept constant and the field current is varied so as to obtain speed control.
- ☒ 4. The application of this method is restricted to self-excited DC motors.

Question ID : 630680503380
Option 1 ID : 6306801967104
Option 2 ID : 6306801967102
Option 3 ID : 6306801967101
Option 4 ID : 6306801967103
Status : Answered
Chosen Option : 2

Q.14 A voltage source of $V(t) = (10t^3 - 5t + 10)$ Volt is applied across a 10F capacitor, the current through the capacitor at $t = 2$ sec is _____.

- Ans ☒ 1. 1100 A
- ☒ 2. 1150 A
- ☒ 3. 1160 A
- ☒ 4. 1000 A

Question ID : 630680504176
Option 1 ID : 6306801970266
Option 2 ID : 6306801970265
Option 3 ID : 6306801970268
Option 4 ID : 6306801970267
Status : Answered
Chosen Option : 2

Q.15 A series R-L-C circuit having $R = 5 \Omega$, $L = 400$ H and $C = 4$ F is fed from a $400 \angle 0^\circ$ volt supply. Then the voltage across the capacitor at resonance will be _____.

- Ans ☒ 1. 200 V
- ☒ 2. 800 V
- ☒ 3. 400 V
- ☒ 4. 1000 V

Question ID : 630680209218
Option 1 ID : 630680811089
Option 2 ID : 630680811087
Option 3 ID : 630680811088
Option 4 ID : 630680811090
Status : Answered
Chosen Option : 3

Q.16 Which of the following statements is NOT true about DC signal?

- Ans ☒ 1. A DC voltage is always negative or always positive.
- ☒ 2. A DC voltage has both positive and negative values with change in time.
- ☒ 3. Cell, batteries and regulated power supplies provide a steady DC that is ideal for an electronic circuit.
- ☒ 4. Pure Direct Current always has a constant value.

Question ID : 630680504257

Option 1 ID : 6306801970590

Option 2 ID : 6306801970592

Option 3 ID : 6306801970591

Option 4 ID : 6306801970589

Status : Answered

Chosen Option : 2

Q.17 If $R_1 = 1\ \Omega$; $R_2 = 2\ \Omega$; $R_3 = 3\ \Omega$; R_2 and R_3 are connected in parallel and the combination is in series with R_1 , then the total resistance will be _____.

- Ans ☒ 1. $1.2\ \Omega$
- ☒ 2. $1.5\ \Omega$
- ☒ 3. $2.8\ \Omega$
- ☒ 4. $2.2\ \Omega$

Question ID : 630680504233

Option 1 ID : 6306801970493

Option 2 ID : 6306801970494

Option 3 ID : 6306801970496

Option 4 ID : 6306801970495

Status : Answered

Chosen Option : 4

Q.18 The wattmeter method is used to measure power in a three-phase load. The wattmeter readings are 200 W and -35 W. Find the respective values of active power and reactive power.

- Ans ☒ 1. 165 W and $235\sqrt{3}$ VAR
- ☒ 2. 165 W and $\frac{50}{\sqrt{3}}$ VAR
- ☒ 3. 235 W and $\frac{150}{\sqrt{3}}$ VAR
- ☒ 4. 235 W and $50\sqrt{3}$ VAR

Question ID : 630680509385

Option 1 ID : 6306801990827

Option 2 ID : 6306801990830

Option 3 ID : 6306801990828

Option 4 ID : 6306801990829

Status : Answered

Chosen Option : 1

Q.19 The current reverser in the earth tester converts _____.

- Ans ☒ 1. AC to AC
☒ 2. DC to DC
☒ 3. DC to AC
☒ 4. AC to DC

Question ID : 630680396182
Option 1 ID : 6306801544843
Option 2 ID : 6306801544842
Option 3 ID : 6306801544840
Option 4 ID : 6306801544841
Status : Answered
Chosen Option : 3

Q.20 Ten capacitors, each of capacitance 20 μ F, are first connected in series and then in parallel. The ratio of the equivalent capacitance in series to the equivalent capacitance in parallel is:

- Ans ☒ 1. 1/100
☒ 2. 1/200
☒ 3. 1/400
☒ 4. 1/250

Question ID : 630680504466
Option 1 ID : 6306801971426
Option 2 ID : 6306801971427
Option 3 ID : 6306801971425
Option 4 ID : 6306801971428
Status : Answered
Chosen Option : 1

Q.21 Which of the following is a pure resistive device?

- Ans ☒ 1. Transformer
☒ 2. Heater
☒ 3. Generator
☒ 4. Motor

Question ID : 630680340668
Option 1 ID : 6306801325113
Option 2 ID : 6306801325116
Option 3 ID : 6306801325114
Option 4 ID : 6306801325115
Status : Answered
Chosen Option : 2

Q.22 The maximum efficiency in the transmission of bulk AC power will be achieved when the power factor of the load is:

- Ans ☒ 1. slightly less than unity leading
☒ 2. slightly less than unity lagging
☒ 3. considerably less than unity
☒ 4. unity

Question ID : 630680503831
Option 1 ID : 6306801968886
Option 2 ID : 6306801968885
Option 3 ID : 6306801968888
Option 4 ID : 6306801968887
Status : Answered
Chosen Option : 2

Q.23 What type of boilers are suitable for low-maintenance cost, small size and low-pressure plants?

- Ans
- ☐ 1. High-pressure boilers
 - ☐ 2. Supercritical boilers
 - ☐ 3. Water tube boilers
 - ☒ 4. Fire tube boilers

Question ID : 630680374444
Option 1 ID : 6306801458958
Option 2 ID : 6306801458957
Option 3 ID : 6306801458955
Option 4 ID : 6306801458956
Status : Answered
Chosen Option : 3

Q.24 Which of the following is correct with reference to step up single-phase transformer?

- Ans
- ☐ 1. Turn ratio $\neq$ Transformation ratio
 - ☐ 2. Turn ratio $>$ Transformation ratio
 - ☒ 3. Turn ratio = Transformation ratio
 - ☐ 4. Turn ratio $<$ Transformation ratio

Question ID : 630680426278
Option 1 ID : 6306801663218
Option 2 ID : 6306801663216
Option 3 ID : 6306801663215
Option 4 ID : 6306801663217
Status : Answered
Chosen Option : 4

Q.25 In a thermal power plant, the overall efficiency can be determined using which of the following?

- Ans
- ☐ 1. Rankine Cycle Efficiency
 - ☐ 2. Carnot Cycle Efficiency
 - ☒ 3. Boiler Efficiency $\times$ Generator Efficiency $\times$ Turbine Efficiency
 - ☐ 4. Regenerative Cycle Efficiency

Question ID : 630680333501
Option 1 ID : 6306801297278
Option 2 ID : 6306801297280
Option 3 ID : 6306801297277
Option 4 ID : 6306801297279
Status : Answered
Chosen Option : 3

Q.26 The torque developed by a 3-phase induction motor least depends on which the following options ?

- Ans
- ☐ 1. rotor power factor
 - ☒ 2. shaft diameter
 - ☐ 3. rotor EMF
 - ☐ 4. rotor current

Question ID : 630680509557
Option 1 ID : 6306801991498
Option 2 ID : 6306801991500
Option 3 ID : 6306801991499
Option 4 ID : 6306801991497
Status : Answered
Chosen Option : 2

Q.27 प्राक्कलन के सामान्य सिद्धांतों के अनुसार, जब भी व्यावहारिक हो, _____ के बाद ही कार्य निष्पादित करना लाभदायक होता है।

- Ans
- ☒ 1. निविदाओं का मूल्यांकन करने
 - ☒ 2. क्रय आदेश देने
 - ☒ 3. बिलों का भुगतान करने
 - ☒ 4. निविदाएं आमंत्रित करने

Question ID : 630680363619
Option 1 ID : 6306801416222
Option 2 ID : 6306801416224
Option 3 ID : 6306801416223
Option 4 ID : 6306801416221
Status : Answered
Chosen Option : 1

Q.28 Which of the following effects is predominant when a dielectric material is polarised?

- Ans
- ☒ 1. Charged particles re-orientate themselves in the out phase with the electric field.
 - ☒ 2. It makes charged particles free to move.
 - ☒ 3. It makes charged particles free to move and causes current to flow in the material.
 - ☒ 4. It causes current to flow in the material.

Question ID : 630680503973
Option 1 ID : 6306801969455
Option 2 ID : 6306801969453
Option 3 ID : 6306801969456
Option 4 ID : 6306801969454
Status : Answered
Chosen Option : 1

Q.29 In an electrodynamic instrument, what happens to the torque when the current flowing through the coil is decreased?

- Ans
- ☒ 1. The torque decreases.
 - ☒ 2. The torque becomes zero.
 - ☒ 3. The torque remains constant.
 - ☒ 4. The torque increases.

Question ID : 630680509367
Option 1 ID : 6306801990756
Option 2 ID : 6306801990758
Option 3 ID : 6306801990757
Option 4 ID : 6306801990755
Status : Answered
Chosen Option : 1

Q.30 What is the primary purpose of a back-to-back power electronic converter (PEC) in type-C doubly-fed induction generator wind power plants?

- Ans
- ☒ 1. To regulate wind turbine speed
 - ☒ 2. To convert mechanical power to electrical power
 - ☒ 3. To control reactive power production
 - ☒ 4. To match stator and rotor frequencies

Question ID : 630680426252
Option 1 ID : 6306801663113
Option 2 ID : 6306801663111
Option 3 ID : 6306801663114
Option 4 ID : 6306801663112
Status : Answered
Chosen Option : 3

Q.31 What is the correct order of the following operations, performed for conducting the estimation?
a) Wiring layout
b) Calculation of the total number of connections
c) Selection of the main switch board

- Ans ☒ 1. b, c, a
☒ 2. a, b, c
☒ 3. a, c, b
☒ 4. c, a, b

Question ID : 630680508362
Option 1 ID : 6306801986791
Option 2 ID : 6306801986789
Option 3 ID : 6306801986790
Option 4 ID : 6306801986792
Status : Answered
Chosen Option : 2

Q.32 Which crop is primarily used to produce biomass alcohol fuel or ethanol in India?

- Ans ☒ 1. Rice
☒ 2. Sugarcane
☒ 3. Wheat
☒ 4. Corn

Question ID : 630680426247
Option 1 ID : 6306801663093
Option 2 ID : 6306801663091
Option 3 ID : 6306801663094
Option 4 ID : 6306801663092
Status : Answered
Chosen Option : 2

Q.33 Which of the following is/are true regarding the significance of the 'barrier' in the rotor of a synchronous reluctance motor?
1. It prevents the rotor from rotating at synchronous speed.
2. It helps to reduce eddy current losses in the rotor.
3. It increases the magnetic flux density in the rotor.
4. It improves the torque characteristics of the motor.

- Ans ☒ 1. Only 2
☒ 2. Only 1 and 4
☒ 3. Both 1 and 3
☒ 4. Both 2 and 4

Question ID : 630680315920
Option 1 ID : 6306801229350
Option 2 ID : 6306801229349
Option 3 ID : 6306801229352
Option 4 ID : 6306801229351
Status : Answered
Chosen Option : 4

Q.34 In ring distribution scheme, _____ of a _____ transformer form a loop.

- Ans ☒ 1. primaries, power
☒ 2. primaries, distribution
☒ 3. secondaries, power
☒ 4. secondaries, distribution

Question ID : 630680503847
Option 1 ID : 6306801968949
Option 2 ID : 6306801968950
Option 3 ID : 6306801968951
Option 4 ID : 6306801968952
Status : Answered
Chosen Option : 2

Q.35 The plant capacity factor is related to _____.

- Ans ☒ 1. plant impedance
☒ 2. plant resistance
☒ 3. plant operating frequency
☒ 4. plant reactance

Question ID : 630680333443
Option 1 ID : 6306801297048
Option 2 ID : 6306801297045
Option 3 ID : 6306801297046
Option 4 ID : 6306801297047
Status : Answered
Chosen Option : 3

Q.36 Which of the following statements are correct?
(a) Lenz's law is based on the conservation of charge.
(b) Lenz's law gives the direction of induced current.
(c) Lenz's law is based on the conservation of energy.

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

Question ID : 630680504204
Option 1 ID : 6306801970380
Option 2 ID : 6306801970378
Option 3 ID : 6306801970377
Option 4 ID : 6306801970379
Status : Answered
Chosen Option : 1

Q.37 A light source with a candle worth of power produces _____.

- Ans ☒ 1. one lumen / watt
☒ 2. one lumen / meter
☒ 3. one lumen / radian
☒ 4. one lumen / steradian

Question ID : 630680508377
Option 1 ID : 6306801986851
Option 2 ID : 6306801986850
Option 3 ID : 6306801986849
Option 4 ID : 6306801986852
Status : Answered
Chosen Option : 4

Q.38 The deflecting torque in an electrostatic instrument can be calibrated by _____.

- Ans
- ☐ 1. adjusting the spring constant
 - ☐ 2. adjusting the damping
 - ☐ 3. adjusting the frequency
 - ☒ 4. adjusting the potential difference between the plates

Question ID : 630680509377
Option 1 ID : 6306801990795
Option 2 ID : 6306801990796
Option 3 ID : 6306801990797
Option 4 ID : 6306801990798
Status : Answered
Chosen Option : 4

Q.39 The sum of instantaneous powers in the three phases in a three-phase system:

- Ans
- ☐ 1. is zero
 - ☒ 2. remains constant
 - ☐ 3. thrice the line frequency
 - ☐ 4. twice the line frequency

Question ID : 630680504471
Option 1 ID : 6306801971445
Option 2 ID : 6306801971446
Option 3 ID : 6306801971447
Option 4 ID : 6306801971448
Status : Answered
Chosen Option : 1

Q.40 Which of the following lamps is NOT a discharge lamp?

- Ans
- ☒ 1. Incandescent lamp
 - ☐ 2. Neon lamp
 - ☐ 3. Sodium vapour lamp
 - ☐ 4. Mercury vapour Lamp

Question ID : 630680508378
Option 1 ID : 6306801986855
Option 2 ID : 6306801986856
Option 3 ID : 6306801986854
Option 4 ID : 6306801986853
Status : Answered
Chosen Option : 1

Q.41 In the context of electromagnetism, according to Fleming's left-hand rule, the thumb indicates the _____.

- Ans
- ☐ 1. direction of the magnetic field
 - ☐ 2. length of the conductor
 - ☒ 3. direction of the motion of the conductor
 - ☐ 4. direction of the current

Question ID : 630680504220
Option 1 ID : 6306801970441
Option 2 ID : 6306801970444
Option 3 ID : 6306801970443
Option 4 ID : 6306801970442
Status : Answered
Chosen Option : 3

Q.42 A three-phase star connected load draws 3600 VAR when the line voltage is 200 V and the line current is $10\sqrt{3}$ A. The power factor is _____.

- Ans
- ☒ 1. 0.6
 - ☒ 2. 0.8
 - ☒ 3. 1
 - ☒ 4. zero

Question ID : 630680209228
Option 1 ID : 630680811127
Option 2 ID : 630680811129
Option 3 ID : 630680811128
Option 4 ID : 630680811130
Status : Answered
Chosen Option : 2

Q.43 What is the correction factor of the wattmeter at a lagging power factor?
(Where, ϕ is the phase angle between the voltage applied to the pressure coil and the current in the current coil and β is the angle between the voltage applied to the pressure coil and the current in the pressure coil.)

- Ans
- ☒ 1. $\frac{\cos \Phi}{\cos \beta \cos(\Phi + \beta)}$
 - ☒ 2. $\frac{\cos \Phi}{\cos \beta \sin(\Phi - \beta)}$
 - ☒ 3. $\frac{\cos \Phi}{\cos \beta \cos(\Phi - \beta)}$
 - ☒ 4. $\frac{\cos \Phi}{\cos \beta \sin(\Phi + \beta)}$

Question ID : 630680509368
Option 1 ID : 6306801990762
Option 2 ID : 6306801990759
Option 3 ID : 6306801990761
Option 4 ID : 6306801990760
Status : Not Answered
Chosen Option : --

Q.44 What is Cold Reserve Capacity in a power system?

- Ans
- ☒ 1. The power generating capacity that is permanently shut down.
 - ☒ 2. The power generating capacity that is readily available and online, ready to be dispatched.
 - ☒ 3. The power generating capacity that is unavailable due to maintenance or other reasons.
 - ☒ 4. The power generating capacity that is not currently in use but can be brought online when needed.

Question ID : 630680374436
Option 1 ID : 6306801458926
Option 2 ID : 6306801458923
Option 3 ID : 6306801458925
Option 4 ID : 6306801458924
Status : Answered
Chosen Option : 2

Q.45 Which of the following is correct for a step down single-phase transformer?

- Ans
- ☐ 1. Input volt ampere $\neq$ output volt ampere
 - ☐ 2. Input volt ampere $>$ output volt ampere
 - ☒ 3. Input volt ampere $=$ output volt ampere
 - ☐ 4. Input volt ampere $<$ output volt ampere

Question ID : 630680380932

Option 1 ID : 6306801484718

Option 2 ID : 6306801484716

Option 3 ID : 6306801484715

Option 4 ID : 6306801484717

Status : Answered

Chosen Option : 3

Q.46 A capacitor of capacitive reactance 5Ω is connected across a 220V, 50Hz supply. Calculate the maximum current drawn by the capacitor.

- Ans
- ☐ 1. 40 A
 - ☐ 2. 44 A
 - ☒ 3. $44\sqrt{2}A$
 - ☐ 4. 100 A

Question ID : 630680504184

Option 1 ID : 6306801970300

Option 2 ID : 6306801970297

Option 3 ID : 6306801970299

Option 4 ID : 6306801970298

Status : Answered

Chosen Option : 3

Q.47 With respect to AC fundamentals of an electrical signal, the ratio of the area under the curve to the base is called _____.

- Ans
- ☐ 1. RMS value
 - ☒ 2. average value
 - ☐ 3. peak value
 - ☐ 4. effective value

Question ID : 630680504247

Option 1 ID : 6306801970551

Option 2 ID : 6306801970550

Option 3 ID : 6306801970549

Option 4 ID : 6306801970552

Status : Answered

Chosen Option : 2

Q.48 In nominal pi method, the line to neutral capacitance is:

- Ans ☒ 1. divided into two halves
- ☐ 2. assumed lumped at the midpoint
- ☐ 3. assumed lumped at the receiving end
- ☐ 4. assumed lumped at the sending end

Question ID : 630680503836

Option 1 ID : 6306801968908

Option 2 ID : 6306801968905

Option 3 ID : 6306801968906

Option 4 ID : 6306801968907

Status : Answered

Chosen Option : 1

Q.49 Slip is 1 when rotor is_____.

- Ans ☒ 1. stationary
- ☐ 2. rotating with synchronous speed
- ☐ 3. rotating at a speed lower than synchronous speed
- ☐ 4. rotating at a speed higher than synchronous speed

Question ID : 630680509581

Option 1 ID : 6306801991593

Option 2 ID : 6306801991594

Option 3 ID : 6306801991595

Option 4 ID : 6306801991596

Status : Answered

Chosen Option : 1

Q.50 A DC source of EMF E volts and internal resistance R ohms is connected to a variable load and it is adjusted such that the load absorbs maximum power from the source. The maximum power delivered from the source to the load is:

- Ans ☐ 1. $\frac{E^2}{R}$
- ☐ 2. $\frac{E^2}{2R}$
- ☒ 3. $\frac{E^2}{4R}$
- ☐ 4. $\frac{2E^2}{R}$

Question ID : 630680334681

Option 1 ID : 6306801301981

Option 2 ID : 6306801301983

Option 3 ID : 6306801301982

Option 4 ID : 6306801301984

Status : Answered

Chosen Option : 3

Q.51 An uneven air gap in the stator and the rotor of a squirrel cage induction motor will lead to _____ during operation.

Ans ☒ 1. increased vibrations

☐ 2. increased current

☐ 3. increased torque

☐ 4. increased speed

Question ID : 630680509565

Option 1 ID : 6306801991532

Option 2 ID : 6306801991529

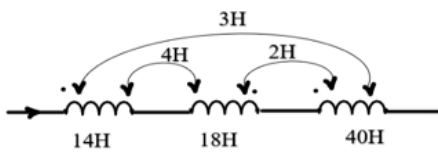
Option 3 ID : 6306801991530

Option 4 ID : 6306801991531

Status : Answered

Chosen Option : 1

Q.52 For the three coupled coils shown below, the total inductance will be _____.



Ans ☐ 1. 60 H

☐ 2. 90 H

☒ 3. 66 H

☐ 4. 81 H

Question ID : 630680504198

Option 1 ID : 6306801970354

Option 2 ID : 6306801970355

Option 3 ID : 6306801970356

Option 4 ID : 6306801970353

Status : Answered

Chosen Option : 3

Q.53 The Fermi level position _____ in the energy band diagram of a p-n junction at equilibrium states.

Ans ☐ 1. does not exist

☐ 2. is uphill for electrons to cross the junction

☐ 3. is downhill for electrons to cross the junction

☒ 4. is constant for electrons to cross the junction

Question ID : 630680502504

Option 1 ID : 6306801963601

Option 2 ID : 6306801963599

Option 3 ID : 6306801963600

Option 4 ID : 6306801963598

Status : Answered

Chosen Option : 1

Q.54 In electromagnetism, the work done on a unit n-pole in moving once around any complete path will be equal to the product of the current and the number of turns enclosed by that path is stated by _____.

- Ans ☒ 1. Coulomb's law
☒ 2. Lenz's law
☒ 3. Laplace's law
☒ 4. Work's law

Question ID : 630680504163
Option 1 ID : 6306801970216
Option 2 ID : 6306801970215
Option 3 ID : 6306801970213
Option 4 ID : 6306801970214
Status : Answered
Chosen Option : 3

Q.55 A 6-pole, 250 V wave connected shunt motor running at 955 rpm has 1200 armature conductors and useful flux/pole of 10m Wb. The armature and field resistance are 0.5 Ω and 250 Ω , respectively. If the motor draws 20 A from the supply mains, then the value of torque developed by the motor is _____.

- Ans ☒ 1. 62.3 N-m
☒ 2. 65.8 N-m
☒ 3. 45.6 N-m
☒ 4. 57.9 N-m

Question ID : 630680503374
Option 1 ID : 6306801967079
Option 2 ID : 6306801967080
Option 3 ID : 6306801967077
Option 4 ID : 6306801967078
Status : Answered
Chosen Option : 4

Q.56 If the power factor of 500 KVA, 21 KW, 3-phase star connected alternator is increased from its initial value, then the efficiency of the synchronous generator will _____.

- Ans ☒ 1. become zero
☒ 2. decrease
☒ 3. remain constant
☒ 4. increase

Question ID : 630680337167
Option 1 ID : 6306801311392
Option 2 ID : 6306801311390
Option 3 ID : 6306801311391
Option 4 ID : 6306801311389
Status : Answered
Chosen Option : 4

Q.57 In an inductor, if the coil is wound on an insulating bobbin, without any magnetic material as core, then the inductor is called _____.

- Ans
- ☐ 1. variable inductor
 - ☐ 2. ferrite-cored inductor
 - ☒ 3. air-cored inductor
 - ☐ 4. iron-cored inductor

Question ID : 630680504237
Option 1 ID : 6306801970512
Option 2 ID : 6306801970511
Option 3 ID : 6306801970510
Option 4 ID : 6306801970509
Status : Answered
Chosen Option : 3

Q.58 विद्युत संस्थापन और लागत निर्धारण में निम्नलिखित में से क्या नेशनल इलेक्ट्रिकल कोड के दायरे में नहीं आता है?

- Ans
- ☒ 1. मौलिक घटकों के भेद
 - ☐ 2. सुरक्षा के संबंध में अनुशंसाएं
 - ☐ 3. सामान्य सुरक्षा प्रक्रिया
 - ☐ 4. सही मानक प्रक्रियाएं

Question ID : 630680333218
Option 1 ID : 6306801296148
Option 2 ID : 6306801296146
Option 3 ID : 6306801296145
Option 4 ID : 6306801296147
Status : Answered
Chosen Option : 1

Q.59 If the station has a thermal efficiency of 30% and electrical efficiency of 95%, find the overall efficiency of the station.

- Ans
- ☐ 1. 27.5%
 - ☒ 2. 28.5%
 - ☐ 3. 26.5%
 - ☐ 4. 29.5%

Question ID : 630680509448
Option 1 ID : 6306801991062
Option 2 ID : 6306801991063
Option 3 ID : 6306801991064
Option 4 ID : 6306801991061
Status : Answered
Chosen Option : 2

Q.60 Which of the following statements correctly explains the relation between the maximum demand and the connected load during a practical scenario in a power system?

- Ans ☒ 1. The maximum demand will always be greater than the connected load.
- ☒ 2. The maximum demand will always be less than the connected load.
- ☒ 3. The maximum demand and the connected load do not exhibit any relation with each other.
- ☒ 4. The maximum demand will always be equal to the connected load.

Question ID : 630680509420
Option 1 ID : 6306801990949
Option 2 ID : 6306801990950
Option 3 ID : 6306801990952
Option 4 ID : 6306801990951
Status : Answered
Chosen Option : 1

Q.61 A certain length of wire has its resistance measured as $20\ \Omega$ at 20°C and $40\ \Omega$ at 60°C . Calculate the temperature coefficient.

- Ans ☒ 1. $\left(\frac{1}{40}\right)/^\circ\text{C}$
- ☒ 2. $\left(\frac{1}{60}\right)/^\circ\text{C}$
- ☒ 3. 30°C
- ☒ 4. $\left(\frac{1}{30}\right)/^\circ\text{C}$

Question ID : 630680504143
Option 1 ID : 6306801970135
Option 2 ID : 6306801970134
Option 3 ID : 6306801970133
Option 4 ID : 6306801970136
Status : Not Answered
Chosen Option : --

Q.62 Total Reactive Power drawn from a three-phase balanced load where line voltage = V_P , Line current = V_L , Phase voltage = V_P and Phase current = I_P is given by:

- Ans ☒ 1. $3V_P I_P \cos\phi$
- ☒ 2. $\sqrt{3} V_L I_L \cos\phi$
- ☒ 3. $\sqrt{3} V_L I_L \sin\phi$
- ☒ 4. $\sqrt{3} V_P I_P \sin\phi$

Question ID : 630680334744
Option 1 ID : 6306801302235
Option 2 ID : 6306801302233
Option 3 ID : 6306801302236
Option 4 ID : 6306801302234
Status : Answered
Chosen Option : 3

Q.63 A conductor of length 5 m moves at an angle 30° to the direction of the magnetic field of flux density 1.4 wb/m^2 . If the velocity of the conductor is 40 m/s, then calculate the EMF induced in it.

- Ans ☒ 1. 140 volts
- ☐ 2. 100 volts
- ☐ 3. 1400 volts
- ☐ 4. 0 volt

Question ID : 630680504196
Option 1 ID : 6306801970347
Option 2 ID : 6306801970346
Option 3 ID : 6306801970345
Option 4 ID : 6306801970348
Status : Answered
Chosen Option : 1

Q.64 Mutual inductance between two magnetically coupled coils does NOT depend on which of the following?

- Ans ☒ 1. Temperature of the coil
- ☐ 2. Cross sectional area of their common core
- ☐ 3. Permeability of the core material
- ☐ 4. Number of turns of the coils

Question ID : 630680340648
Option 1 ID : 6306801325036
Option 2 ID : 6306801325034
Option 3 ID : 6306801325033
Option 4 ID : 6306801325035
Status : Answered
Chosen Option : 1

Q.65 An external resistance is added in the motor circuit during starting condition. The main purpose of this is to _____.

- Ans ☐ 1. reduce the main flux
- ☐ 2. increase the starting current
- ☒ 3. reduce the starting current
- ☐ 4. increase the main flux

Question ID : 630680503395
Option 1 ID : 6306801967161
Option 2 ID : 6306801967162
Option 3 ID : 6306801967163
Option 4 ID : 6306801967164
Status : Answered
Chosen Option : 3

Q.66 Which of the following statements is/are accurate regarding working principle of a reluctance start motor?
1. In reluctance, motor reluctance torque can occur once a ferromagnetic object is located within an exterior magnetic field, then the object can be line up through the external magnetic field.
2. The torque can be generated among the two fields which twirling the object in the region of the line through the magnetic field so the torque is used on the object to provide less reluctance for the magnetic flux.

- Ans ☒ 1. Both 1 and 2 are true
☐ 2. Both 1 and 2 are not true
☐ 3. Only 2 is true
☐ 4. Only 1 is true

Question ID : 630680315931
Option 1 ID : 6306801229395
Option 2 ID : 6306801229396
Option 3 ID : 6306801229394
Option 4 ID : 6306801229393
Status : Answered
Chosen Option : 1

Q.67 Which of the following photometric quantities measures the total amount of visible light emitted by a source in all directions?

- Ans ☐ 1. Illuminance
☒ 2. Luminous flux
☐ 3. Luminance
☐ 4. Luminous intensity

Question ID : 630680381635
Option 1 ID : 6306801487472
Option 2 ID : 6306801487471
Option 3 ID : 6306801487474
Option 4 ID : 6306801487473
Status : Answered
Chosen Option : 4

Q.68 Which of the following statements are correct about DC welding machines-MG Set?

- I) It uses non-coated type electrodes; hence the cost of electrode is cheap.
II) It uses coated type electrodes; hence the electrode is expensive.
III) It is best suited for welding thinner sheets (6 mm).
IV) The initial cost of the machine is less compared to AC welding machine.

- Ans ☐ 1. I and IV
☒ 2. I and III
☐ 3. II and III
☐ 4. II and IV

Question ID : 630680381623
Option 1 ID : 6306801487424
Option 2 ID : 6306801487423
Option 3 ID : 6306801487425
Option 4 ID : 6306801487426
Status : Answered
Chosen Option : 2

Q.69 How much energy in “kilowatt hours” is consumed in operating ten 100-watt bulbs for 20 hours per day in a month (30 days)?

- Ans
- ☐ 1. 5000 kilowatt-hours
 - ☐ 2. 10000 kilowatt-hours
 - ☐ 3. 600000 kilowatt-hours
 - ☒ 4. 600 kilowatt-hours

Question ID : 630680504210
Option 1 ID : 6306801970404
Option 2 ID : 6306801970403
Option 3 ID : 6306801970401
Option 4 ID : 6306801970402
Status : Answered
Chosen Option : 4

Q.70 In case of commercial installations, it is advisable to use light sources rendering high colour for installations so as to retain customer attention. This light should be as bright as its surroundings in the range of _____.

- Ans
- ☐ 1. 10 times
 - ☒ 2. 5 times
 - ☐ 3. 20 times
 - ☐ 4. 2 times

Question ID : 630680363636
Option 1 ID : 6306801416290
Option 2 ID : 6306801416289
Option 3 ID : 6306801416292
Option 4 ID : 6306801416291
Status : Not Answered
Chosen Option : --

Q.71 At steady-state characteristics of a DC series motor, which of the following statements are correct?

- I) The speed-torque relationship of a DC series motor is non-linear.
- II) Both the armature current and the field current of a DC series motor decrease with increasing load torque.
- III) The efficiency of a DC series motor is generally higher compared to DC shunt motor.
- IV) The efficiency of a DC series motor is generally lower compared to DC shunt motor.

- Ans
- ☐ 1. Statements I, II and IV are correct
 - ☒ 2. Only statements I and IV are correct
 - ☐ 3. Only statements I and III are correct
 - ☐ 4. Statements I, II and III correct

Question ID : 630680381588
Option 1 ID : 6306801487286
Option 2 ID : 6306801487284
Option 3 ID : 6306801487283
Option 4 ID : 6306801487285
Status : Answered
Chosen Option : 2

Q.72 Which of the following statements are correct about the errors in PMMC instruments?
I. The swamping resistance is included in series with the moving coil to reduce errors.
II. The swamping resistance is included in parallel with the moving coil to reduce errors.
III. Errors are caused by weakening of the permanent magnet due to aging.
IV. Errors are caused by weakening of the spring due to aging and temperature.

- Ans** ☒ 1. Only II, III and IV
☒ 2. Only III and IV
☒ 3. Only I, III and IV
☒ 4. Only I and III

Question ID : 630680509363
Option 1 ID : 6306801990741
Option 2 ID : 6306801990740
Option 3 ID : 6306801990739
Option 4 ID : 6306801990742
Status : Answered
Chosen Option : 1

Q.73 A Thevenin equivalent source comprises of which of the following elements?

- Ans** ☒ 1. A single current source in series with a resistance
☒ 2. A single voltage source in series with a resistance
☒ 3. A single voltage source in parallel with a resistance
☒ 4. A single current source in parallel with a resistance

Question ID : 630680334688
Option 1 ID : 6306801302011
Option 2 ID : 6306801302010
Option 3 ID : 6306801302009
Option 4 ID : 6306801302012
Status : Answered
Chosen Option : 2

Q.74 A 200-V, DC motor has an armature resistance of 0.5 Ω . It is drawing an armature current of 20 A driving a certain load. Calculate the induced EMF in the motor under this condition.

- Ans** ☒ 1. 175.8 V
☒ 2. 203.7 V
☒ 3. 190 V
☒ 4. 199.3 V

Question ID : 630680503392
Option 1 ID : 6306801967149
Option 2 ID : 6306801967152
Option 3 ID : 6306801967150
Option 4 ID : 6306801967151
Status : Answered
Chosen Option : 3

Q.75 In estimation and costing, the estimator must understand production cost, including labour and material cost of products, as well as discounts on purchases in order to:

- Ans ☒ 1. prepare schedules
☒ 2. work out profit
☒ 3. retain a list
☒ 4. gain knowledge

Question ID : 630680333216
Option 1 ID : 6306801296140
Option 2 ID : 6306801296139
Option 3 ID : 6306801296138
Option 4 ID : 6306801296137
Status : Answered
Chosen Option : 1

Q.76 The efficiency of a transmission line is ____.

- Ans ☒ 1. increased with increase in load p.f.
☒ 2. independent of load p.f.
☒ 3. increased with decrease in load p.f.
☒ 4. decreased with increase in load p.f.

Question ID : 630680503832
Option 1 ID : 6306801968891
Option 2 ID : 6306801968890
Option 3 ID : 6306801968889
Option 4 ID : 6306801968892
Status : Answered
Chosen Option : 1

Q.77 In the context of electronic components, if a number of resistances are connected and the reciprocal of the sum of individual resistances is equal to the sum of reciprocals of individual resistances, then the type of connection is called ____.

- Ans ☒ 1. parallel circuit
☒ 2. series-parallel circuit
☒ 3. series circuit
☒ 4. grouping circuit

Question ID : 630680504215
Option 1 ID : 6306801970422
Option 2 ID : 6306801970423
Option 3 ID : 6306801970421
Option 4 ID : 6306801970424
Status : Answered
Chosen Option : 4

Q.78 Calculate the reading that will be given by a hot-wire voltmeter when it is connected across the terminals of a generator whose voltage is given by $V(t) = (2 \sin wt + 3 \sin 3wt + 5 \sin 5wt)$ Volt.

Ans ☒ 1. $\sqrt{19}$ volts

☐ 2. $\sqrt{38}$ volts

☐ 3. 10 volts

☐ 4. 0 volt

Question ID : 630680209192

Option 1 ID : 630680810986

Option 2 ID : 630680810985

Option 3 ID : 630680810984

Option 4 ID : 630680810983

Status : Answered

Chosen Option : 1

Q.79 What happens to the reading of a wattmeter when the power factor of a circuit is changed from unity power factor to leading power factor?

Ans ☐ 1. The wattmeter reading increases

☐ 2. The wattmeter cannot measure the leading power factor

☐ 3. The wattmeter reading remains unchanged

☒ 4. The wattmeter reading decreases

Question ID : 630680509380

Option 1 ID : 6306801990809

Option 2 ID : 6306801990808

Option 3 ID : 6306801990807

Option 4 ID : 6306801990810

Status : Not Answered

Chosen Option : --

Q.80 In resistors, if the temperature is increased, then the resistance of alloys will ____.

Ans ☐ 1. become zero

☒ 2. increase

☐ 3. decrease

☐ 4. remain the same

Question ID : 630680504164

Option 1 ID : 6306801970220

Option 2 ID : 6306801970217

Option 3 ID : 6306801970218

Option 4 ID : 6306801970219

Status : Answered

Chosen Option : 3

Q.81 For a D-MOSFET when biased at $V_{GS} = 0$ V having $I_{DSS} = 30$ mA and $V_{GS}(\text{off}) = -6$ V, the drain current is equal to _____.

- Ans**
- ☒ 1. infinite
 - ☒ 2. 0 mA
 - ☒ 3. 30 mA
 - ☒ 4. 20 mA

Question ID : 630680502534
Option 1 ID : 6306801963720
Option 2 ID : 6306801963719
Option 3 ID : 6306801963718
Option 4 ID : 6306801963721
Status : Answered
Chosen Option : 3

Q.82 Cold reserve is the reserve capacity of the plant in _____ but NOT in _____.

- Ans**
- ☒ 1. service, operation
 - ☒ 2. operation, service
 - ☒ 3. service, service
 - ☒ 4. operation, operation

Question ID : 630680509426
Option 1 ID : 6306801990976
Option 2 ID : 6306801990975
Option 3 ID : 6306801990973
Option 4 ID : 6306801990974
Status : Answered
Chosen Option : 1

Q.83 In electromagnetism, the magnetic field set up by a steady current density is described by _____.

- Ans**
- ☒ 1. Ohm's law
 - ☒ 2. Laplace's law
 - ☒ 3. Faraday's law
 - ☒ 4. Lenz's law

Question ID : 630680504230
Option 1 ID : 6306801970484
Option 2 ID : 6306801970482
Option 3 ID : 6306801970483
Option 4 ID : 6306801970481
Status : Answered
Chosen Option : 2

Q.84 In a transistor of common base connection, the ratio of change in the output current to change in the input current at a constant collector-base voltage is called _____.

- Ans
- ☐ 1. input resistance factor
 - ☐ 2. output resistance factor
 - ☒ 3. current amplification factor
 - ☐ 4. base current amplification factor

Question ID : 630680504248
Option 1 ID : 6306801970554
Option 2 ID : 6306801970556
Option 3 ID : 6306801970555
Option 4 ID : 6306801970553
Status : Answered
Chosen Option : 4

Q.85 Which of the following is NOT broadly classified as a part of agrochemicals?

- Ans
- ☐ 1. Fungicides
 - ☒ 2. Digesicides
 - ☐ 3. Insecticides
 - ☐ 4. Herbicides

Question ID : 630680509429
Option 1 ID : 6306801990985
Option 2 ID : 6306801990988
Option 3 ID : 6306801990987
Option 4 ID : 6306801990986
Status : Not Answered
Chosen Option : --

Q.86 Which of the following are the properties of a good heating element?

- I) It should have low resistivity.
- II) It should have high melting point.
- III) It should have low temperature coefficient of resistance.
- IV) It should have high specific heat capacity.

- Ans
- ☐ 1. I, II and III
 - ☐ 2. I, II and IV
 - ☒ 3. Only II and III
 - ☐ 4. II, III and IV

Question ID : 630680381611
Option 1 ID : 6306801487378
Option 2 ID : 6306801487375
Option 3 ID : 6306801487376
Option 4 ID : 6306801487377
Status : Answered
Chosen Option : 4

Q.87 In an induction motor if the rotor is locked, then the rotor frequency of the induction motor will be:

- Ans ☒ 1. equal to supply frequency
☐ 2. more than supply frequency
☐ 3. less than supply frequency
☐ 4. zero

Question ID : 630680509578
Option 1 ID : 6306801991581
Option 2 ID : 6306801991582
Option 3 ID : 6306801991584
Option 4 ID : 6306801991583
Status : Answered
Chosen Option : 1

Q.88 Which is the formula for transmission line efficiency?

- Ans ☐ 1. $\text{Efficiency} = \frac{-\text{received power}}{\text{transmitted power}} \times 100$
☐ 2. $\text{Efficiency} = \text{received power} + \text{transmitted power} \times 100$
☐ 3. $\text{Efficiency} = \text{received power} - \text{transmitted power} \times 100$
☒ 4. $\text{Efficiency} = \frac{\text{received power}}{\text{transmitted power}} \times 100$

Question ID : 630680503808
Option 1 ID : 6306801968794
Option 2 ID : 6306801968795
Option 3 ID : 6306801968796
Option 4 ID : 6306801968793
Status : Answered
Chosen Option : 4

Q.89 What is the reactive power of a 3-phase, delta-connected system with line voltage of 100 V and line current of 40 A if the phase difference between the voltage and the current is 36.87°?

- Ans ☐ 1. 2.155 kVAR
☐ 2. 6.155 kVAR
☒ 3. 4.155 kVAR
☐ 4. 8.155 kVAR

Question ID : 630680504473
Option 1 ID : 6306801971456
Option 2 ID : 6306801971454
Option 3 ID : 6306801971453
Option 4 ID : 6306801971455
Status : Answered
Chosen Option : 3

Q.90 A balanced, delta-connected load has an impedance of $3\angle 30^\circ \Omega/\text{phase}$. What will be the impedance of an equivalent star-connected load?

- Ans
- ☒ 1. $2\angle 60^\circ \Omega/\text{phase}$
 - ☒ 2. $4\angle 30^\circ \Omega/\text{phase}$
 - ☒ 3. $3\angle 90^\circ \Omega/\text{phase}$
 - ☒ 4. $1\angle 30^\circ \Omega/\text{phase}$

Question ID : **630680504460**
Option 1 ID : **6306801971403**
Option 2 ID : **6306801971404**
Option 3 ID : **6306801971402**
Option 4 ID : **6306801971401**
Status : **Answered**
Chosen Option : **4**

Q.91 I , R , X_L , V_R and $\cos\phi_R$ represent voltage regulation, line current, line resistance, line reactance, receiving end voltage and load power factor of transmission line, respectively. Also, receiving end voltage is more than the sending end voltage. Identify the correct expression for the leading load power factor.

- Ans
- ☒ 1. $IR \cos\phi_R >> IX_L \cos\phi_R$
 - ☒ 2. $IR \cos\phi_R > IX_L \cos\phi_R$
 - ☒ 3. $IR \cos\phi_R < IX_L \cos\phi_R$
 - ☒ 4. $IR \cos\phi_R = IX_L \cos\phi_R$

Question ID : **630680503840**
Option 1 ID : **6306801968922**
Option 2 ID : **6306801968921**
Option 3 ID : **6306801968923**
Option 4 ID : **6306801968924**
Status : **Not Answered**
Chosen Option : **--**

Q.92 An ideal BJT acts as an open switch when:

- Ans
- ☒ 1. $V_{BE} = V_{CC}$ and $I_B = 50 \mu A$
 - ☒ 2. $V_{CE} = V_{BC}$ and $I_C = 10 \text{ mA}$
 - ☒ 3. $V_{CE} = 0$ and $I_C = 10 \text{ mA}$
 - ☒ 4. $V_{CE} = V_{CC}$ and $I_C = 0$

Question ID : **630680502512**
Option 1 ID : **6306801963633**
Option 2 ID : **6306801963632**
Option 3 ID : **6306801963631**
Option 4 ID : **6306801963630**
Status : **Not Answered**
Chosen Option : **--**

Q.93 A 400 V, 3-phase synchronous motor has armature current of 150 A. It has synchronous resistance and reactance of 0.4 Ω and 4 Ω per phase, respectively. If the power developed is 130 kW and the iron and friction losses are 1 kW, then the efficiency of the motor will be _____.

- Ans
- ☒ 1. 60%
 - ☒ 2. 81.6%
 - ☒ 3. 91.6%
 - ☒ 4. 75%

Question ID : 630680339334
Option 1 ID : 6306801319907
Option 2 ID : 6306801319905
Option 3 ID : 6306801319906
Option 4 ID : 6306801319908
Status : Answered
Chosen Option : 3

Q.94 Which of the following is a criterion used for selecting the ratio of the minimum fault current to the maximum load current in over-current protection of a transmission line?

- Ans
- ☒ 1. To increase the possibility of maloperation under normal operating conditions
 - ☒ 2. To reduce the maximum load current on the transmission line
 - ☒ 3. To prevent the possibility of maloperation under normal operating conditions
 - ☒ 4. To decrease the sensitivity of the protection system to faults

Question ID : 630680218624
Option 1 ID : 630680848403
Option 2 ID : 630680848406
Option 3 ID : 630680848405
Option 4 ID : 630680848404
Status : Answered
Chosen Option : 3

Q.95 Eight capacitors of the same value are connected in series. Their equivalent capacitance is 200 μ F, the capacitance of each capacitor is _____.

- Ans
- ☒ 1. 25 μ F
 - ☒ 2. 16 μ F
 - ☒ 3. 160 μ F
 - ☒ 4. 16×10^{-4} F

Question ID : 630680504179
Option 1 ID : 6306801970278
Option 2 ID : 6306801970277
Option 3 ID : 6306801970280
Option 4 ID : 6306801970279
Status : Answered
Chosen Option : 1

Q.96 Which of the following statements are true regarding the DC load line?

- a) It is a straight line drawn between I_C and V_{CE} .
- b) The quiescent point lies on the load line.
- c) In the DC load line, when the collector emitter voltage $V_{CE} = 0$, the collector current is maximum.

Ans ☒ 1. Only b and c
☒ 2. All of a, b and c
☒ 3. Only a and c
☒ 4. Only a and b

Question ID : 630680502510
Option 1 ID : 6306801963622
Option 2 ID : 6306801963625
Option 3 ID : 6306801963624
Option 4 ID : 6306801963623
Status : Answered
Chosen Option : 2

Q.97 The Variation in the effective width of a base in a Bipolar Junction Transistor is due to a variation in the applied _____.

Ans ☒ 1. emitter to collector voltage
☒ 2. collector current
☒ 3. base to collector voltage
☒ 4. emitter current

Question ID : 630680502502
Option 1 ID : 6306801963590
Option 2 ID : 6306801963593
Option 3 ID : 6306801963592
Option 4 ID : 6306801963591
Status : Answered
Chosen Option : 1

Q.98 Consider the following statements about equivalent circuit with core losses of single-phase motor and select the correct option.

- 1. Slip at maximum torque is calculated with the help of maximum power transfer theorem.
- 2. Torque of an induction motor $T = \frac{W}{P}$, where W = speed in rad/sec, P = Power.

Ans ☒ 1. Only 1 is true
☒ 2. Only 2 is true
☒ 3. Both 1 and 2 are true
☒ 4. Both 1 and 2 are not true

Question ID : 630680333409
Option 1 ID : 6306801296909
Option 2 ID : 6306801296910
Option 3 ID : 6306801296911
Option 4 ID : 6306801296912
Status : Answered
Chosen Option : 3

Q.99 At light load power factor of induction motors is _____.

- Ans
- ☒ 1. 0
 - ☒ 2. 0.8 to 0.9
 - ☒ 3. 1
 - ☒ 4. 0.2 to 0.4

Question ID : 630680509552
Option 1 ID : 6306801991477
Option 2 ID : 6306801991478
Option 3 ID : 6306801991480
Option 4 ID : 6306801991479
Status : Answered
Chosen Option : 4

Q.100 The hysteresis torque during the working of hysteresis motor depends on which factor?

- Ans
- ☒ 1. Stator flux, rotor flux and sine of hysteresis angle
 - ☒ 2. Stator flux only
 - ☒ 3. Rotor flux only
 - ☒ 4. Stator and rotor flux only

Question ID : 630680509533
Option 1 ID : 6306801991404
Option 2 ID : 6306801991401
Option 3 ID : 6306801991402
Option 4 ID : 6306801991403
Status : Answered
Chosen Option : 1