

Junior Engineer Civil Mechanical and Electrical Examination 2024 Paper I

Roll Number	
Candidate Name	
Venue Name	
Exam Date	06/06/2024
Exam Time	9:00 AM - 11:00 AM
Subject	Junior Engineer 2024 Civil Paper I

Section : General Intelligence and Reasoning

Q.1 In a certain code language, 'FISH' is coded as '3517' and 'SALT' is coded as '4258'.
What is the code for 'S' in the given code language?

Ans ☒ 1. 5

☒ 2. 1

☒ 3. 4

☒ 4. 8

Question ID : 630680388411

Option 1 ID : 6306801514162

Option 2 ID : 6306801514163

Option 3 ID : 6306801514164

Option 4 ID : 6306801514165

Status : Answered

Chosen Option : 1

Q.2 What will come in place of the question mark (?) in the following equation if '÷' and 'x' are interchanged?
 $132 \times 12 \div 9 + 27 - 51 = ?$

Ans ☒ 1. 70

☒ 2. 65

☒ 3. 78

☒ 4. 75

Question ID : 630680376478

Option 1 ID : 6306801466982

Option 2 ID : 6306801466980

Option 3 ID : 6306801466981

Option 4 ID : 6306801466979

Status : Answered

Chosen Option : 4

Q.3 LHKG is related to JFIE in a certain way based on the English alphabetical order. In the same way, RNQM is related to PLOK. To which of the following is UQTP related, following the same logic?

Ans ☒ 1. OSRN

☒ 2. SONR

☒ 3. SORN

☒ 4. OSNR

Question ID : 630680376567

Option 1 ID : 6306801467336

Option 2 ID : 6306801467337

Option 3 ID : 6306801467338

Option 4 ID : 6306801467335

Status : Answered

Chosen Option : 3

Q.4 BHJL and CJMP are related to each other in a certain way based on the English alphabetical order. In the same way, CIKM and DKNQ are related to each other. Which of the following is related to DJLN, following the same logic?

- Ans ☒ 1. ELOR
☒ 2. EOLR
☒ 3. OELR
☒ 4. OERL

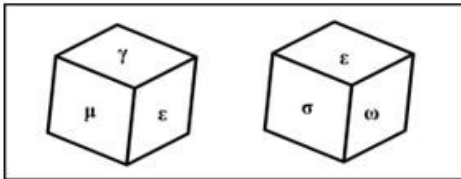
Question ID : 630680379162
Option 1 ID : 6306801477695
Option 2 ID : 6306801477696
Option 3 ID : 6306801477697
Option 4 ID : 6306801477698
Status : Answered
Chosen Option : 1

Q.5 OJNL is related to NIMK in a certain way based on the English alphabetical order. In the same way, LGKI is related to KFIH. To which of the following is IDHF related, following the same logic?

- Ans ☒ 1. HCGE
☒ 2. HCEG
☒ 3. HEGC
☒ 4. HECG

Question ID : 630680466954
Option 1 ID : 6306801823786
Option 2 ID : 6306801823787
Option 3 ID : 6306801823788
Option 4 ID : 6306801823789
Status : Answered
Chosen Option : 1

Q.6 A dice has its faces marked by symbols σ , Δ , μ , ϵ , ω and γ . Two positions of the same dice are shown below. Which face is opposite to face Δ ?



- Ans ☒ 1. γ
☒ 2. σ
☒ 3. ϵ
☒ 4. μ

Question ID : 630680524640
Option 1 ID : 6306802050661
Option 2 ID : 6306802050660
Option 3 ID : 6306802050659
Option 4 ID : 6306802050662
Status : Answered
Chosen Option : 3

Q.7 BKOT is related to DMQV in a certain way based on the English alphabetical order. In the same way, JHAP is related to LJCR. To which of the following is NEIM related, following the same logic?

- Ans
- ☒ 1. POLS
 - ☒ 2. ADNG
 - ☒ 3. PGKO
 - ☒ 4. HJTF

Question ID : 630680377694
Option 1 ID : 6306801471837
Option 2 ID : 6306801471838
Option 3 ID : 6306801471835
Option 4 ID : 6306801471836
Status : Answered
Chosen Option : 3

Q.8 8 is related to 88 following a certain logic. Following the same logic, 12 is related to 132. To which of the following is 51 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. 561
 - ☒ 2. 562
 - ☒ 3. 563
 - ☒ 4. 564

Question ID : 630680397506
Option 1 ID : 6306801549942
Option 2 ID : 6306801549943
Option 3 ID : 6306801549944
Option 4 ID : 6306801549945
Status : Answered
Chosen Option : 1

Q.9 What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and 'x' and '+' are interchanged?
 $15 \times 11 \div 49 - 7 + 3 = ?$

- Ans
- ☒ 1. 15
 - ☒ 2. -5
 - ☒ 3. 5
 - ☒ 4. -15

Question ID : 630680377617
Option 1 ID : 6306801471530
Option 2 ID : 6306801471528
Option 3 ID : 6306801471529
Option 4 ID : 6306801471527
Status : Answered
Chosen Option : 3

Q.10 What should come in place of the question mark (?) in the given series?
8, 24, 49, 85, 134, ?

Ans  1. 191

 2. 180

 3. 198

 4. 181

Question ID : 630680382728

Option 1 ID : 6306801491827

Option 2 ID : 6306801491830

Option 3 ID : 6306801491828

Option 4 ID : 6306801491829

Status : Answered

Chosen Option : 3

Q.11 In a certain code language, 'GATE' is coded as '3579' and 'THIN' is coded as '4236'.
What is the code for 'T' in that language?

Ans  1. 7

 2. 3

 3. 2

 4. 4

Question ID : 630680376701

Option 1 ID : 6306801467867

Option 2 ID : 6306801467870

Option 3 ID : 6306801467869

Option 4 ID : 6306801467868

Status : Answered

Chosen Option : 2

Q.12 Select the option that indicates the arrangement of the following words in meaningful and logical order.

1. Adult
2. Infant
3. Adolescent
4. Old age
5. Toddler

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

 2. 2, 1, 5, 4, 3

 3. 5, 1, 3, 2, 4

 4. 4, 1, 3, 2, 5

Question ID : 630680404450

Option 1 ID : 6306801577300

Option 2 ID : 6306801577301

Option 3 ID : 6306801577302

Option 4 ID : 6306801577303

Status : Answered

Chosen Option : 1

Q.13 In a certain code language,
'A + B' means 'A is the father of B',
'A - B' means 'A is the mother of B',
'A × B' means 'A is the brother of B',
'A ÷ B' means 'A is the sister of B' and
'A * B' means 'A is the husband of B'.
How is T related to R if 'P ÷ R + Q × S - T * U'?

- Ans ☒ 1. Son's daughter
☒ 2. Daughter's son
☒ 3. Daughter's daughter
☒ 4. Son's son

Question ID : 630680376886

Option 1 ID : 6306801468608

Option 2 ID : 6306801468610

Option 3 ID : 6306801468609

Option 4 ID : 6306801468607

Status : Answered

Chosen Option : 2

Q.14 Anil starts from point A and drives 6 km towards the east. He then takes a left turn, drives 2 km, turns right, and drives 3 km. He then takes a right turn and drives 5 km. He takes a final right turn, drives 9 km, and stops at point P.
How far (shortest distance) and towards which direction should he drive in order to reach point A again?
(All turns are 90° turns only, unless specified.)

- Ans ☒ 1. 6 km towards the east
☒ 2. 3 km towards the north
☒ 3. 3 km towards the west
☒ 4. 6 km towards the south

Question ID : 630680377444

Option 1 ID : 6306801470841

Option 2 ID : 6306801470840

Option 3 ID : 6306801470842

Option 4 ID : 6306801470839

Status : Answered

Chosen Option : 2

Q.15 What will come in the place of the question mark (?) in the following equation, if '+' and '÷' are interchanged and '×' and '-' are interchanged?
 $19 \times 6 \div 10 - 2 + 1 = ?$

- Ans ☒ 1. 36
☒ 2. 28
☒ 3. 48
☒ 4. 33

Question ID : 630680377711

Option 1 ID : 6306801471905

Option 2 ID : 6306801471904

Option 3 ID : 6306801471906

Option 4 ID : 6306801471903

Status : Answered

Chosen Option : 4

Q.16 Six babies Ria, Sia, Tia, Urja, Vani and Winnie are born one after the other but not necessarily in the same order. All of them were born in different cities. Only two babies were born before the one who was born in Raipur. Only one baby was born between Sia, who was born in Delhi and the baby born in Raipur. Tia was born before Urja and just after the baby born in Haridwar. Tia was not born in Raipur. Ria was born in Bhopal and just before Vani. Tia was born immediately before the baby born in Ballia. Winnie was not born in Pune. Where was Winnie born?

- Ans ☒ 1. Delhi
☒ 2. Pune
☒ 3. Haridwar
☒ 4. Ballia

Question ID : 630680521122
Option 1 ID : 6306802036914
Option 2 ID : 6306802036913
Option 3 ID : 6306802036916
Option 4 ID : 6306802036915
Status : Answered
Chosen Option : 3

Q.17 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 curlers are serums.
• Some curlers are oils.
Conclusion (I): No oil is a serum.
Conclusion (II): All oils are serums.

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

Question ID : 630680378911
Option 1 ID : 6306801476691
Option 2 ID : 6306801476693
Option 3 ID : 6306801476694
Option 4 ID : 6306801476692
Status : Answered
Chosen Option : 2

Q.18 M, O, N, S, T, E, and R are sitting around a circular table, facing the centre (not necessarily in the same order). O sits to the immediate right of M. M sits second to the right of S. E sits third to the left of S. T sits second to the right of R. Who are the immediate neighbours of N?

- Ans ☒ 1. R and M
☒ 2. E and R
☒ 3. S and T
☒ 4. E and O

Question ID : 630680377627
Option 1 ID : 6306801471569
Option 2 ID : 6306801471568
Option 3 ID : 6306801471570
Option 4 ID : 6306801471567
Status : Answered
Chosen Option : 2

Q.19 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 conclusions logically follow(s) from the statements.

Statements: Some guitars are drums. Some drums are violins. No drum is a flute.

Conclusion (I): No flute is a violin.

Conclusion (II): Some flutes are guitars.

Ans ☒ 1. Neither conclusion (I) nor (II) follows

☐ 2. Only conclusion (I) follows

☐ 3. Only conclusion (II) follows

☐ 4. Both conclusions (I) and (II) follow

Question ID : 630680376526

Option 1 ID : 6306801467173

Option 2 ID : 6306801467171

Option 3 ID : 6306801467172

Option 4 ID : 6306801467174

Status : Answered

Chosen Option : 1

Q.20 What should come in place of the question mark (?) in the given series based on the

English alphabetical order?

PEB, SIE, VMH, YQK, BUN, ?

Ans ☐ 1. DQM

☒ 2. EYQ

☐ 3. EXQ

☐ 4. CSL

Question ID : 630680379363

Option 1 ID : 6306801478496

Option 2 ID : 6306801478498

Option 3 ID : 6306801478497

Option 4 ID : 6306801478495

Status : Answered

Chosen Option : 2

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

English alphabetical order?

SJF, ZQM, GXT, NEA, ?

Ans ☒ 1. ULH

☐ 2. ULG

☐ 3. YLG

☐ 4. YLH

Question ID : 630680376694

Option 1 ID : 6306801467839

Option 2 ID : 6306801467841

Option 3 ID : 6306801467842

Option 4 ID : 6306801467840

Status : Answered

Chosen Option : 2

Q.22 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
ECG, IGK, MKO, QOS, ?

- Ans  1. URV
 2. USW
 3. TSV
 4. USV

Question ID : 630680394866
Option 1 ID : 6306801539748
Option 2 ID : 6306801539749
Option 3 ID : 6306801539751
Option 4 ID : 6306801539750
Status : Answered
Chosen Option : 2

Q.23 In a certain code language, 'FRIAR' is coded as '20' and 'FREEDOM' is coded as '28'.
What is the code for 'FARROW' in the given language?

- Ans  1. 17
 2. 18
 3. 24
 4. 22

Question ID : 630680375915
Option 1 ID : 6306801464731
Option 2 ID : 6306801464732
Option 3 ID : 6306801464734
Option 4 ID : 6306801464733
Status : Answered
Chosen Option : 3

Q.24 If 'A' stands for '+', 'B' stands for 'x', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark '?' in the following equation?

$$28 \text{ B } 4 \text{ D } 20 \text{ A } 5 \text{ C } 8 = ?$$

- Ans  1. 117
 2. 116
 3. 122
 4. 119

Question ID : 630680502800
Option 1 ID : 6306801964781
Option 2 ID : 6306801964782
Option 3 ID : 6306801964783
Option 4 ID : 6306801964784
Status : Answered
Chosen Option : 2

Q.25 AE 56 is related to EI 60 in a certain way. In the same way, WA 91 is related to AE 95. To which of the following is XB 77 related, following the same logic?

Ans ✓ 1. BF 81

✗ 2. HN 81

✗ 3. PT 18

✗ 4. IK 81

Question ID : 630680376957

Option 1 ID : 6306801468893

Option 2 ID : 6306801468891

Option 3 ID : 6306801468894

Option 4 ID : 6306801468892

Status : Answered

Chosen Option : 1

Q.26 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.)

Tranquil : Violent

Ans ✗ 1. Wicked : Vicious

✗ 2. Zeal : Eagerness

✗ 3. Vigilant : Alert

✓ 4. Timid : Bold

Question ID : 630680571451

Option 1 ID : 6306802234842

Option 2 ID : 6306802234844

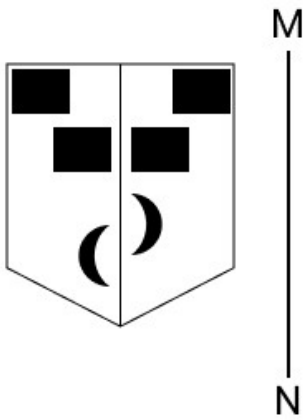
Option 3 ID : 6306802234841

Option 4 ID : 6306802234843

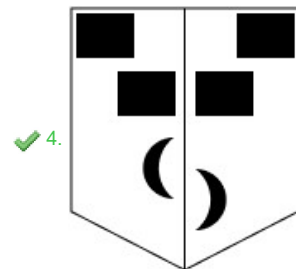
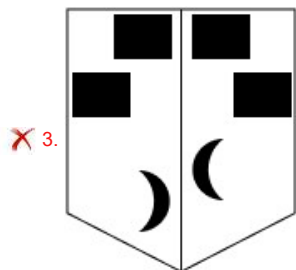
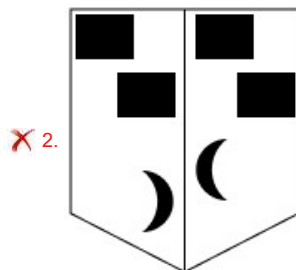
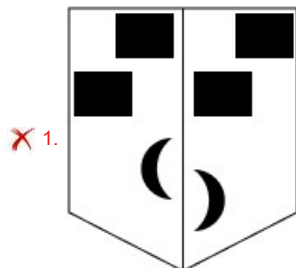
Status : Answered

Chosen Option : 4

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



Ans



Question ID : 630680456660

Option 1 ID : 6306801783603

Option 2 ID : 6306801783604

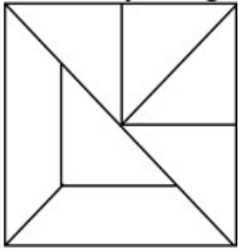
Option 3 ID : 6306801783605

Option 4 ID : 6306801783606

Status : Answered

Chosen Option : 4

Q.28 How many triangles are there in the given figure?



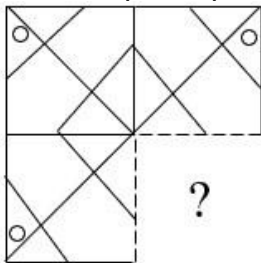
- Ans
- ☒ 1. 7
 - ☒ 2. 10
 - ☒ 3. 8
 - ☒ 4. 9

Question ID : 630680524410
 Option 1 ID : 6306802049739
 Option 2 ID : 6306802049742
 Option 3 ID : 6306802049740
 Option 4 ID : 6306802049741

Status : Answered

Chosen Option : 4

Q.29 Select the option figure that can replace the question mark (?) in the figure given below to complete the pattern.



Ans

- ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Question ID : 630680525484
 Option 1 ID : 6306802054021
 Option 2 ID : 6306802054020
 Option 3 ID : 6306802054022
 Option 4 ID : 6306802054023

Status : Answered

Chosen Option : 1

Q.30 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
MBT, ODV, QFX, SHZ, UJB, ?

Ans ☒ 1. WLD

☒ 2. ULD

☒ 3. VLE

☒ 4. ULE

Question ID : 630680395302

Option 1 ID : 6306801541412

Option 2 ID : 6306801541414

Option 3 ID : 6306801541413

Option 4 ID : 6306801541415

Status : Answered

Chosen Option : 1

Q.31 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



Ans ☒ 1. T € 2 9 K

☒ 2. K 9 2 € T

☒ 3. T € 2 9 K

☒ 4. K € 2 9 T

Question ID : 630680456095

Option 1 ID : 6306801781319

Option 2 ID : 6306801781320

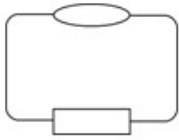
Option 3 ID : 6306801781321

Option 4 ID : 6306801781322

Status : Answered

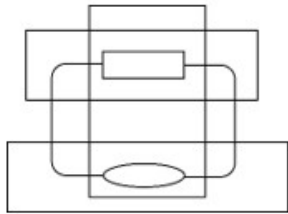
Chosen Option : 1

Q.32 Select the option in which the given figure is embedded (rotation is NOT allowed).

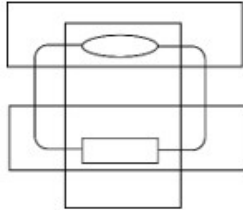


Ans

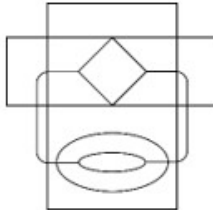
✗ 1.



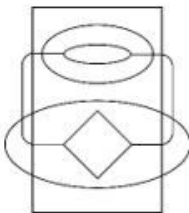
✓ 2.



✗ 3.



✗ 4.



Question ID : 630680524582

Option 1 ID : 6306802050427

Option 2 ID : 6306802050430

Option 3 ID : 6306802050429

Option 4 ID : 6306802050428

Status : Answered

Chosen Option : 2

Q.33 Select the triad in which the numbers are related to each other in the same way as are the numbers of the given triads.

(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 /deleting /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.)
(279, 246, 213)
(184, 151, 118)

Ans ☒ 1. (169, 132, 103)

☒ 2. (194, 151, 108)

☒ 3. (225, 196, 123)

☒ 4. (176, 145, 119)

Question ID : 630680392058

Option 1 ID : 6306801528609

Option 2 ID : 6306801528606

Option 3 ID : 6306801528608

Option 4 ID : 6306801528607

Status : Answered

Chosen Option : 2

Q.34 In a certain code language, 'why him though' is coded as 'kl gi ok' and 'though is he' is coded as 'ok bi yg'. How is 'though' coded in the given language?

Ans ☒ 1. ok

☒ 2. bi

☒ 3. gi

☒ 4. kl

Question ID : 630680377684

Option 1 ID : 6306801471797

Option 2 ID : 6306801471798

Option 3 ID : 6306801471796

Option 4 ID : 6306801471795

Status : Answered

Chosen Option : 1

Q.35 In a certain code language,

'M × N' means 'M is the daughter of N',

'M + N' means 'M is the father of N',

'M % N' means 'M is the mother of N', and

'M – N' means 'M is the brother of N'.

How is P related to K if 'P % Q + R – T × K'?

Ans ☒ 1. Mother's sister

☒ 2. Brother's wife

☒ 3. Son's wife

☒ 4. Husband's mother

Question ID : 630680377454

Option 1 ID : 6306801470881

Option 2 ID : 6306801470880

Option 3 ID : 6306801470879

Option 4 ID : 6306801470882

Status : Answered

Chosen Option : 4

Q.36 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
DAG, FCI, HEK, JGM, ?

- Ans
- ☐ 1. KGN
 - ☐ 2. NLQ
 - ☒ 3. LIO
 - ☐ 4. MJP

Question ID : 630680379936
Option 1 ID : 6306801480781
Option 2 ID : 6306801480779
Option 3 ID : 6306801480782
Option 4 ID : 6306801480780
Status : Answered
Chosen Option : 3

Q.37 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)
(100, 15)
(118, 18)

- Ans
- ☒ 1. (94, 14)
 - ☐ 2. (80, 13)
 - ☐ 3. (100, 16)
 - ☐ 4. (120, 17)

Question ID : 630680375857
Option 1 ID : 6306801464500
Option 2 ID : 6306801464499
Option 3 ID : 6306801464501
Option 4 ID : 6306801464502
Status : Answered
Chosen Option : 1

Q.38 Select the option in which the numbers share the same relationship as that shared by the given pairs of numbers.

2 : 16
3 : 81

(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. 4 : 64
 - ☐ 2. 2 : 32
 - ☒ 3. 4 : 256
 - ☐ 4. 6 : 216

Question ID : 630680387168
Option 1 ID : 6306801509367
Option 2 ID : 6306801509368
Option 3 ID : 6306801509366
Option 4 ID : 6306801509369
Status : Answered
Chosen Option : 3


Q.39 In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. 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.)

(15, 55)

(12, 43)

Ans  1. (10, 40)

 2. (9, 30)

 3. (8, 42)

 4. (7, 23)

Question ID : 630680377729

Option 1 ID : 6306801471978

Option 2 ID : 6306801471977

Option 3 ID : 6306801471976

Option 4 ID : 6306801471975

Status : Answered

Chosen Option : 4

Q.40 What should come in place of the question mark (?) in the given series?

6, 15, 34, 63, 102, ?

Ans  1. 151

 2. 113

 3. 105

 4. 131

Question ID : 630680380558

Option 1 ID : 6306801483219

Option 2 ID : 6306801483221

Option 3 ID : 6306801483220

Option 4 ID : 6306801483222

Status : Answered

Chosen Option : 1

Q.41 What should come in place of the question mark (?) in the given series?

28, 29, 27, 30, 26, ?

Ans  1. 24

 2. 25

 3. 32

 4. 31

Question ID : 630680378755

Option 1 ID : 6306801476067

Option 2 ID : 6306801476068

Option 3 ID : 6306801476070

Option 4 ID : 6306801476069

Status : Answered

Chosen Option : 4

Q.42 Select the option that indicates the correct arrangement of the given words in a logical and meaningful order.

1. Asia
2. Guwahati
3. North Eastern Indian State
4. South Asia
5. Assam

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

Question ID : **630680518918**

Option 1 ID : **6306802028135**

Option 2 ID : **6306802028132**

Option 3 ID : **6306802028134**

Option 4 ID : **6306802028133**

Status : **Answered**

Chosen Option : **3**

Q.43 17 is related to 237 following a certain logic. Following the same logic, 9 is related to 125. To which of the following is 12 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. 166
 2. 132
 3. 167
 4. 179

Question ID : **630680451717**

Option 1 ID : **6306801763954**

Option 2 ID : **6306801763955**

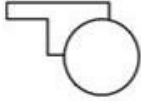
Option 3 ID : **6306801763956**

Option 4 ID : **6306801763957**

Status : **Answered**

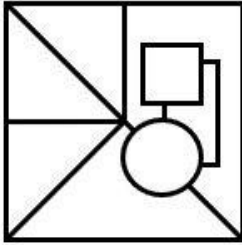
Chosen Option : **3**

Q.44 Select the option in which the given figure is embedded (rotation is NOT allowed).

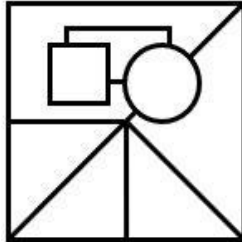


Ans

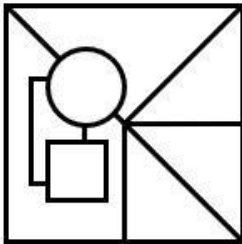
✗ 1.



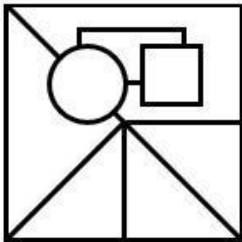
✓ 2.



✗ 3.



✗ 4.



Question ID : 630680524476

Option 1 ID : 6306802050005

Option 2 ID : 6306802050006

Option 3 ID : 6306802050003

Option 4 ID : 6306802050004

Status : Answered

Chosen Option : 2

Q.45 Rajat drove for 4 km from point A, towards the west. He took a left turn and drove for 4 km. He took a left turn again and drove for 8 km and then he took a right turn and drove for 3 km. Again, he took a right turn and drove for 4 km. At last, he took a right turn and drove for 6 km and stopped at point B. How far (shortest distance) and towards which direction should he drive in order to reach point A again?
(All turns are 90° turns only, unless specified.)

- Ans ☒ 1. 2 km towards the south
☒ 2. 2 km towards the north
☒ 3. 3 km towards the north
☒ 4. 1 km towards the north

Question ID : 630680378981
Option 1 ID : 6306801476972
Option 2 ID : 6306801476971
Option 3 ID : 6306801476974
Option 4 ID : 6306801476973
Status : Answered
Chosen Option : 4

Q.46 The position(s) of how many letters will remain unchanged if each of the letters in the word CLANGED is arranged in the English alphabetical order?

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

Question ID : 630680396643
Option 1 ID : 6306801546664
Option 2 ID : 6306801546665
Option 3 ID : 6306801546666
Option 4 ID : 6306801546667
Status : Answered
Chosen Option : 2

Q.47 SUWY is related to ZXVT in a certain way based on the English alphabetical order. In the same way, JLNP is related to QOMK. To which of the following is ACEG related, following the same logic?

- Ans ☒ 1. FHBD
☒ 2. DHBF
☒ 3. BDFH
☒ 4. HFDB

Question ID : 630680375829
Option 1 ID : 6306801464388
Option 2 ID : 6306801464389
Option 3 ID : 6306801464387
Option 4 ID : 6306801464390
Status : Answered
Chosen Option : 4

Q.48 What should come in place of ? in the given series based on the English alphabetical order?

GMC, JPF, MSI, PVL, ?

- Ans ☒ 1. RYP
☒ 2. QXO
☒ 3. QZP
☒ 4. SYO

Question ID : 630680375972
Option 1 ID : 6306801464962
Option 2 ID : 6306801464961
Option 3 ID : 6306801464959
Option 4 ID : 6306801464960
Status : Answered
Chosen Option : 4

Q.49 A, B, C, D, E, F, and G are sitting around a circular table, facing the centre (not necessarily in the same order). Only 2 people sit between C and F when counted from the right of C. A and D are immediate neighbours of G. E sits to the immediate left of B. Only 1 person sits between E and D when counted from the right of D. Who is sitting to the immediate right of G?

- Ans ☒ 1. C
☒ 2. B
☒ 3. A
☒ 4. D

Question ID : 630680376589
Option 1 ID : 6306801467425
Option 2 ID : 6306801467424
Option 3 ID : 6306801467423
Option 4 ID : 6306801467426
Status : Answered
Chosen Option : 4

Q.50 The position(s) of how many letters will remain unchanged if each of the letters in the word 'ALIMONY' is arranged in the English alphabetical order?

- Ans ☒ 1. Three
☒ 2. Two
☒ 3. None
☒ 4. Four

Question ID : 630680392222
Option 1 ID : 6306801529235
Option 2 ID : 6306801529234
Option 3 ID : 6306801529236
Option 4 ID : 6306801529237
Status : Answered
Chosen Option : 2

Section : General Awareness

Q.1 Which cell organelle is the energy factory of cells and is an important hub for intracellular interactions with other organelles?

- Ans** ☒ 1. Peroxisomes
☒ 2. Golgi apparatus
☒ 3. Lysosomes
☒ 4. Mitochondria

Question ID : **630680404309**
Option 1 ID : **6306801576737**
Option 2 ID : **6306801576735**
Option 3 ID : **6306801576736**
Option 4 ID : **6306801576734**
Status : **Answered**
Chosen Option : 2

Q.2 Which piece in a chess game can move in an 'L' shape – two squares vertically and one horizontally, and vice versa?

- Ans** ☒ 1. Knight
☒ 2. Bishop
☒ 3. Queen
☒ 4. Rook

Question ID : **630680430547**
Option 1 ID : **6306801680209**
Option 2 ID : **6306801680210**
Option 3 ID : **6306801680211**
Option 4 ID : **6306801680212**
Status : **Answered**
Chosen Option : 2

Q.3 In may 2023, _____, the Comptroller and Auditor General of India (CAG), has been re-elected as the External Auditor of the World Health Organization (WHO) for a four-year term from 2024 to 2027.

- Ans** ☒ 1. KK Venugopal
☒ 2. G C Murmu
☒ 3. Sushil Chandra
☒ 4. Kailasavadivoo Sivan

Question ID : **630680394948**
Option 1 ID : **6306801540062**
Option 2 ID : **6306801540060**
Option 3 ID : **6306801540063**
Option 4 ID : **6306801540061**
Status : **Answered**
Chosen Option : 4

Q.4 Which of the following minerals is essential for maintaining healthy bones and teeth?

- Ans ☒ 1. Sodium
☒ 2. Fluoride
☒ 3. Potassium
☒ 4. Phosphorus

Question ID : 630680540483
Option 1 ID : 6306802113012
Option 2 ID : 6306802113014
Option 3 ID : 6306802113011
Option 4 ID : 6306802113013
Status : Answered
Chosen Option : 1

Q.5 Which of the following is/are most essential for growth and development?

- Ans ☒ 1. Protein
☒ 2. Salts
☒ 3. Spices
☒ 4. High sugar

Question ID : 630680544734
Option 1 ID : 6306802129698
Option 2 ID : 6306802129699
Option 3 ID : 6306802129701
Option 4 ID : 6306802129700
Status : Answered
Chosen Option : 1

Q.6 Calculate personal income from the following data.

- I.National Income = ₹1,000
II. Corporate tax = ₹10
III. Subsidies = ₹5
IV. Undistributed profits = ₹15
V. Rent = ₹15

- Ans ☒ 1. ₹980
☒ 2. ₹1,000
☒ 3. ₹950
☒ 4. ₹975

Question ID : 630680512399
Option 1 ID : 6306802002568
Option 2 ID : 6306802002569
Option 3 ID : 6306802002566
Option 4 ID : 6306802002567
Status : Answered
Chosen Option : 4

Q.7 If the atomic mass of carbon is 12.011, that of hydrogen is 1.008 and that of oxygen is 15.999, then calculate the molecular mass of C_2H_4O .

- Ans
- ☐ 1. 40.053
 - ☐ 2. 34.053
 - ☒ 3. 44.053
 - ☐ 4. 16.053

Question ID : 630680401863
Option 1 ID : 6306801567222
Option 2 ID : 6306801567223
Option 3 ID : 6306801567224
Option 4 ID : 6306801567225
Status : Answered
Chosen Option : 3

Q.8 In which plant tissue does photosynthesis primarily occur?

- Ans
- ☐ 1. Xylem
 - ☐ 2. Phloem
 - ☒ 3. Mesophyll
 - ☐ 4. Epidermis

Question ID : 630680540423
Option 1 ID : 6306802112780
Option 2 ID : 6306802112781
Option 3 ID : 6306802112782
Option 4 ID : 6306802112779
Status : Answered
Chosen Option : 1

Q.9 What is the full form of 'CC' in the context of email?

- Ans
- ☐ 1. Common Copy
 - ☒ 2. Carbon Copy
 - ☐ 3. Confidential Copy
 - ☐ 4. Copy Communication

Question ID : 630680571940
Option 1 ID : 6306802236656
Option 2 ID : 6306802236657
Option 3 ID : 6306802236658
Option 4 ID : 6306802236659
Status : Answered
Chosen Option : 2

Q.10 _____ was announced as part of the Atma Nirbhar Bharat Package in 2020 with the objective to help businesses including MSMEs to meet their operational liabilities and resume businesses in view of the distress caused by the COVID-19 crisis, by providing Member Lending Institutions (MLIs), 100 percent guarantee against any losses suffered by them due to non-repayment of the ECLGS funding by borrowers.'

Ans ☒ 1. Emergency Credit Line Guarantee Scheme

☐ 2. Mission Karmayogi

☐ 3. Sahakar Pragya Yojana

☐ 4. Stand-up India

Question ID : 630680481139

Option 1 ID : 6306801879124

Option 2 ID : 6306801879125

Option 3 ID : 6306801879126

Option 4 ID : 6306801879127

Status : Answered

Chosen Option : 1

Q.11 The Parliamentary government is also known by which other names?

1: Cabinet government

2: Responsible government

3: Westminster model of government

4: Fixed executive system of government

Ans ☐ 1. Only 1, 3 and 4

☒ 2. Only 1, 2 and 3

☐ 3. Only 1, 2 and 4

☐ 4. Only 2, 3 and 4

Question ID : 630680426506

Option 1 ID : 6306801664110

Option 2 ID : 6306801664111

Option 3 ID : 6306801664112

Option 4 ID : 6306801664113

Status : Answered

Chosen Option : 1

Q.12 Which of the following is not a rock?

Ans ☐ 1. Limestone

☒ 2. Quartz

☐ 3. Marble

☐ 4. Granite

Question ID : 630680546829

Option 1 ID : 6306802137884

Option 2 ID : 6306802137886

Option 3 ID : 6306802137883

Option 4 ID : 6306802137885

Status : Answered

Chosen Option : 1

Q.13 Soy milk is produced from:

- Ans ☒ 1. cow
☒ 2. goat
☒ 3. buffalo
☒ 4. soyabeans

Question ID : 630680396869
Option 1 ID : 6306801547544
Option 2 ID : 6306801547545
Option 3 ID : 6306801547546
Option 4 ID : 6306801547547
Status : Answered
Chosen Option : 4

Q.14 Which Article of the Constitution of India guarantees the Right to Constitutional Remedies?

- Ans ☒ 1. Article 28
☒ 2. Article 29
☒ 3. Article 30
☒ 4. Article 32

Question ID : 630680426439
Option 1 ID : 6306801663842
Option 2 ID : 6306801663843
Option 3 ID : 6306801663844
Option 4 ID : 6306801663845
Status : Not Answered
Chosen Option : --

Q.15 Sachindra Nath Sanyal established a branch of Anushilan Samiti at Patna in which of the following years?

- Ans ☒ 1. 1920
☒ 2. 1925
☒ 3. 1929
☒ 4. 1913

Question ID : 630680511597
Option 1 ID : 6306801999511
Option 2 ID : 6306801999512
Option 3 ID : 6306801999513
Option 4 ID : 6306801999510
Status : Answered
Chosen Option : 1

Q.16 A man started working in a factory where he needed to deal with steam and boiling water regularly. On the first day, his doctor warned him to be more careful of the steam because burns caused by steam can be more severe than that of hot water. What is the reason behind this?

- Ans
- ☐ 1. Steam cannot be seen
 - ☐ 2. Steam is odourless
 - ☒ 3. Steam has more latent heat of vaporisation
 - ☐ 4. Steam can remain stuck to the body

Question ID : **630680402654**
Option 1 ID : **6306801570215**
Option 2 ID : **6306801570216**
Option 3 ID : **6306801570217**
Option 4 ID : **6306801570218**
Status : **Answered**
Chosen Option : **3**

Q.17 All India Padma Shri Mohd. Shahid Invitational Prize Money Men's Hockey Tournament 2023 was organised in _____, Uttar Pradesh.

- Ans
- ☐ 1. Kanpur
 - ☐ 2. Lucknow
 - ☒ 3. Varanasi
 - ☐ 4. Gorakhpur

Question ID : **630680460158**
Option 1 ID : **6306801797078**
Option 2 ID : **6306801797079**
Option 3 ID : **6306801797080**
Option 4 ID : **6306801797081**
Status : **Answered**
Chosen Option : **2**

Q.18 According to 'Basic Animal Husbandry Statistics 2023', which state has the highest production of Milk during the year 2022-2023?

- Ans
- ☒ 1. Uttar Pradesh
 - ☐ 2. Gujarat
 - ☐ 3. Maharashtra
 - ☐ 4. Rajasthan

Question ID : **630680510947**
Option 1 ID : **6306801996920**
Option 2 ID : **6306801996919**
Option 3 ID : **6306801996918**
Option 4 ID : **6306801996921**
Status : **Answered**
Chosen Option : **2**

Q.19 Which of the following princely states was annexed by the East India Company in the year 1852 AD under the Doctrine of Lapse?

- Ans ☒ 1. Udaipur
☐ 2. Satara
☐ 3. Sambalpur
☐ 4. Nagpur

Question ID : 630680511563
Option 1 ID : 6306801999377
Option 2 ID : 6306801999375
Option 3 ID : 6306801999374
Option 4 ID : 6306801999376
Status : Not Answered
Chosen Option : --

Q.20 What was the child sex-ratio as per Census 2011 of India?

- Ans ☐ 1. 1000
☐ 2. 890
☒ 3. 919
☐ 4. 1024

Question ID : 630680477218
Option 1 ID : 6306801864033
Option 2 ID : 6306801864034
Option 3 ID : 6306801864035
Option 4 ID : 6306801864036
Status : Not Answered
Chosen Option : --

Q.21 Who discovered the staining technique called 'Black Reaction', which was capable of revealing neurons in their entirety?

- Ans ☐ 1. Robert Remak
☐ 2. Albert Kolliker
☒ 3. Camillo Golgi
☐ 4. Jacques Loeb

Question ID : 630680404310
Option 1 ID : 6306801576742
Option 2 ID : 6306801576743
Option 3 ID : 6306801576744
Option 4 ID : 6306801576745
Status : Not Answered
Chosen Option : --

Q.22 The Malwa Plateau is located in which of the following states?

- Ans ☐ 1. Jharkhand
☐ 2. Karnataka
☐ 3. Tamil Nadu
☒ 4. Madhya Pradesh

Question ID : 630680510930
Option 1 ID : 6306801996851
Option 2 ID : 6306801996853
Option 3 ID : 6306801996852
Option 4 ID : 6306801996850
Status : Not Answered
Chosen Option : --

Q.23 In 1946, BN Rao was formally appointed as _____ to the core drafting Committee of the Indian Constitution.

- Ans** ☒ 1. Constitutional Advisor
 ☐ 2. Chief Draftsman
 ☐ 3. Vice-Chairman
 ☐ 4. Anglo-Indian Representative

Question ID : 630680493461
Option 1 ID : 6306801927583
Option 2 ID : 6306801927584
Option 3 ID : 6306801927585
Option 4 ID : 6306801927586
Status : Answered
Chosen Option : 2

Q.24 Who among the following was the first and the longest serving attorney general of India?

- Ans** ☐ 1. Milon Kumar Banerji
 ☐ 2. Niren De
 ☒ 3. Motilal Chimanlal Setalvad
 ☐ 4. Lal Narayan Sinha

Question ID : 630680407970
Option 1 ID : 6306801590754
Option 2 ID : 6306801590755
Option 3 ID : 6306801590756
Option 4 ID : 6306801590757
Status : Not Answered
Chosen Option : --

Q.25 Ajit Pawar, who took oath as the Deputy Chief Minister of Maharashtra on 2 July 2023, belongs to which political party?

- Ans** ☒ 1. Nationalist Congress Party (NCP)
 ☐ 2. Jan Adhikar Party (JAP)
 ☐ 3. Rashtriya Samaj Paksha (RSP)
 ☐ 4. Maharashtra Navnirman Sena (MNS)

Question ID : 630680412661
Option 1 ID : 6306801609467
Option 2 ID : 6306801609468
Option 3 ID : 6306801609469
Option 4 ID : 6306801609470
Status : Not Answered
Chosen Option : --

Q.26 Who among the following was the governor of Telangana as the end of 2023?

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

Question ID : 630680513793
Option 1 ID : 6306802007797
Option 2 ID : 6306802007798
Option 3 ID : 6306802007799
Option 4 ID : 6306802007800
Status : Answered
Chosen Option : 2

Q.27 What is the impact of ocean acidification on coral reefs and shell-forming organisms?

- Ans
- ☒ 1. Ocean acidification has no impact on coral reefs.
 - ☒ 2. Ocean acidification enhances coral growth.
 - ☒ 3. Ocean acidification weakens coral skeletons and affects shell formation.
 - ☒ 4. Ocean acidification increases coral biodiversity.

Question ID : 630680615263
Option 1 ID : 6306802407726
Option 2 ID : 6306802407727
Option 3 ID : 6306802407728
Option 4 ID : 6306802407729
Status : Not Answered
Chosen Option : --

Q.28 Which food item has pH value between 2 and 3? This value makes it acidic.

- Ans
- ☒ 1. Blackberry juice
 - ☒ 2. Lemon juice
 - ☒ 3. Apple juice
 - ☒ 4. Tomato juice

Question ID : 630680404437
Option 1 ID : 6306801577250
Option 2 ID : 6306801577248
Option 3 ID : 6306801577249
Option 4 ID : 6306801577251
Status : Answered
Chosen Option : 2

Q.29 Which of the following is NOT a vector quantity?

- Ans
- ☒ 1. Acceleration
 - ☒ 2. Velocity
 - ☒ 3. Force
 - ☒ 4. Mass

Question ID : 630680407782
Option 1 ID : 6306801590069
Option 2 ID : 6306801590066
Option 3 ID : 6306801590067
Option 4 ID : 6306801590068
Status : Answered
Chosen Option : 4

Q.30 According to Census of India 2011, which state recorded the highest literacy rate in India?

- Ans
- ☒ 1. Kerala
 - ☒ 2. Goa
 - ☒ 3. Punjab
 - ☒ 4. Mizoram

Question ID : 630680477338
Option 1 ID : 6306801864509
Option 2 ID : 6306801864510
Option 3 ID : 6306801864511
Option 4 ID : 6306801864512
Status : Answered
Chosen Option : 1

Q.31 Which of the following is INCORRECT about cooking of food?

- Ans
- ☐ 1. Makes it easier to digest
 - ☐ 2. Results in the loss of certain nutrients
 - ☐ 3. Destroys vitamin C easily
 - ☒ 4. Destroys vitamin D easily

Question ID : 630680595217
Option 1 ID : 6306802329069
Option 2 ID : 6306802329070
Option 3 ID : 6306802329071
Option 4 ID : 6306802329072
Status : Answered
Chosen Option : 2

Q.32 Basanti Bisht, a Padma Shri awardee, is an Indian folk singer from which of the following states?

- Ans
- ☒ 1. Uttarakhand
 - ☐ 2. Rajasthan
 - ☐ 3. Maharashtra
 - ☐ 4. Punjab

Question ID : 630680415788
Option 1 ID : 6306801621902
Option 2 ID : 6306801621900
Option 3 ID : 6306801621901
Option 4 ID : 6306801621899
Status : Answered
Chosen Option : 3

Q.33 In electricity overloading cannot be caused by:

- Ans
- ☐ 1. connecting too many appliances to a single socket
 - ☐ 2. accidental hike in the supply voltage
 - ☐ 3. the live wire coming in direct contact with the neutral wire
 - ☒ 4. the live wire and the neutral wire coming into contact through a heavy resistance

Question ID : 630680419682
Option 1 ID : 6306801637221
Option 2 ID : 6306801637222
Option 3 ID : 6306801637223
Option 4 ID : 6306801637224
Status : Answered
Chosen Option : 1

Q.34 Which of the following parts of an email is used to indicate the sender and recipient details, as well as the date and time?

- Ans
- ☐ 1. Subject line
 - ☐ 2. Body
 - ☒ 3. Email header
 - ☐ 4. Attachment

Question ID : 630680571950
Option 1 ID : 6306802236696
Option 2 ID : 6306802236697
Option 3 ID : 6306802236698
Option 4 ID : 6306802236699
Status : Answered
Chosen Option : 3

Q.35 What specialised nerve cells does the phylum Cnidaria have to capture and stun prey such as water fleas and plankton?

- Ans ☒ 1. collar cell
☒ 2. stinging cell
☒ 3. flame cell
☒ 4. chief cell

Question ID : 630680404149
Option 1 ID : 6306801576082
Option 2 ID : 6306801576083
Option 3 ID : 6306801576084
Option 4 ID : 6306801576085
Status : Not Answered
Chosen Option : --

Q.36 As of March 2023, who among the following is the Union Minister of Jal Shakti?

- Ans ☒ 1. Dharmendra Pradhan
☒ 2. Ramesh Pokhriyal
☒ 3. Gajendra Singh Shekhawat
☒ 4. Giriraj Singh

Question ID : 630680513887
Option 1 ID : 6306802008176
Option 2 ID : 6306802008173
Option 3 ID : 6306802008175
Option 4 ID : 6306802008174
Status : Not Answered
Chosen Option : --

Q.37 Who among the following Sultans of the Khilji dynasty started giving cash salary to his soldiers and controlled the market during his reign?

- Ans ☒ 1. Jalal-ud-din Khilji
☒ 2. Qutb-ud-din Mubarak
☒ 3. Shihab-ud-din Omar
☒ 4. Alauddin Khilji

Question ID : 630680511628
Option 1 ID : 6306801999635
Option 2 ID : 6306801999636
Option 3 ID : 6306801999637
Option 4 ID : 6306801999634
Status : Not Answered
Chosen Option : --

Q.38 Which level of ecological organisation includes all the different species living in a particular area?

- Ans ☒ 1. Community
☒ 2. Population
☒ 3. Ecosystem
☒ 4. Habitat

Question ID : 630680412052
Option 1 ID : 6306801607043
Option 2 ID : 6306801607044
Option 3 ID : 6306801607045
Option 4 ID : 6306801607046
Status : Answered
Chosen Option : 3

Q.39 Which of the following bills was introduced in the Rajya Sabha by the Ministry of Law and Justice on 10 August 2023?

- Ans** ☒ 1. The Chief Election Commissioner and other Election Commissioners (Appointment Conditions of Service and Term of Office) Bill, 2023
- ☒ 2. The Bharatiya Nyaya Sanhita Bill, 2023
- ☒ 3. The Digital Personal Data Protection Bill, 2023
- ☒ 4. The Repealing and Amending Bill, 2023

Question ID : 630680411230

Option 1 ID : 6306801603672

Option 2 ID : 6306801603673

Option 3 ID : 6306801603674

Option 4 ID : 6306801603675

Status : Not Answered

Chosen Option : --

Q.40 Anupama Bhagwat is associated with which of the following musical instruments?

- Ans** ☒ 1. Mridangam
- ☒ 2. Sitar
- ☒ 3. Sarangi
- ☒ 4. Surbahar

Question ID : 630680412047

Option 1 ID : 6306801607023

Option 2 ID : 6306801607025

Option 3 ID : 6306801607026

Option 4 ID : 6306801607024

Status : Not Answered

Chosen Option : --

Q.41 Identify whether the following statements are true (T) or false (F) with respect to the weather conditions of a place and select the correct option.

- A. It refers to change in temperature over a few years.
- B. It depends on the elevation of the area.
- C. It refers to temperature fluctuation within a day.

- Ans** ☒ 1. FFF
- ☒ 2. TTT
- ☒ 3. TTF
- ☒ 4. FTT

Question ID : 630680546822

Option 1 ID : 6306802137856

Option 2 ID : 6306802137855

Option 3 ID : 6306802137857

Option 4 ID : 6306802137854

Status : Answered

Chosen Option : 2

Q.42 In business, what is a 'supply chain'?

- Ans
- ☒ 1. A series of businesses that supply products to one another
 - ☒ 2. The chain of command in a corporation
 - ☒ 3. A network of all entities involved in producing and delivering a product
 - ☒ 4. The total stock of a product in a market

Question ID : 630680460238
Option 1 ID : 6306801797398
Option 2 ID : 6306801797399
Option 3 ID : 6306801797400
Option 4 ID : 6306801797401
Status : Answered
Chosen Option : 3

Q.43 Which of the following institutions is referred to as 'lender of last resort'?

- Ans
- ☒ 1. NABARD
 - ☒ 2. SBI
 - ☒ 3. RBI
 - ☒ 4. SEBI

Question ID : 630680402075
Option 1 ID : 6306801567992
Option 2 ID : 6306801567993
Option 3 ID : 6306801567994
Option 4 ID : 6306801567995
Status : Answered
Chosen Option : 3

Q.44 The National Awards to Teachers were first instituted in _____.

- Ans
- ☒ 1. 1958
 - ☒ 2. 1972
 - ☒ 3. 1947
 - ☒ 4. 1964

Question ID : 630680394645
Option 1 ID : 6306801538867
Option 2 ID : 6306801538869
Option 3 ID : 6306801538866
Option 4 ID : 6306801538868
Status : Not Answered
Chosen Option : --

Q.45 The '_____ Devi Narmade' scheme has been undertaken by the government of Madhya Pradesh for the conservation of River Narmada.

- Ans
- ☒ 1. Namami
 - ☒ 2. Pavitra
 - ☒ 3. Jal
 - ☒ 4. Mata

Question ID : 630680510966
Option 1 ID : 6306801996996
Option 2 ID : 6306801996997
Option 3 ID : 6306801996995
Option 4 ID : 6306801996994
Status : Not Answered
Chosen Option : --

Q.46 The Amrit Bharat Station Scheme launched in 2023 envisages to take-up _____ stations for upgradation/modernisation over the Indian Railway.

- Ans
- ☒ 1. 1108
 - ☒ 2. 1234
 - ☒ 3. 1309
 - ☒ 4. 1405

Question ID : 630680455410
Option 1 ID : 6306801778554
Option 2 ID : 6306801778555
Option 3 ID : 6306801778556
Option 4 ID : 6306801778557
Status : Not Answered
Chosen Option : --

Q.47 In December 1885, _____ delegates from various parts of India established the Indian National Congress.

- Ans
- ☒ 1. 43
 - ☒ 2. 57
 - ☒ 3. 61
 - ☒ 4. 72

Question ID : 630680572364
Option 1 ID : 6306802238296
Option 2 ID : 6306802238297
Option 3 ID : 6306802238298
Option 4 ID : 6306802238299
Status : Not Answered
Chosen Option : --

Q.48 The SI unit of which fundamental physical quantity is named in the honour of Charles Augustin Coulomb?

- Ans
- ☒ 1. Electric field
 - ☒ 2. Electric current density
 - ☒ 3. Electric power
 - ☒ 4. Electric charge

Question ID : 630680402060
Option 1 ID : 6306801567940
Option 2 ID : 6306801567941
Option 3 ID : 6306801567939
Option 4 ID : 6306801567938
Status : Answered
Chosen Option : 4

Q.49 Which of the following is NOT a part of the Directive Principles of State Policy of the Constitution of India?

- Ans** ☒ 1. Protection and improvement of environment and safeguarding of forests and wildlife
☒ 2. Protection of monuments and places and objects of national importance
☒ 3. Provision for early childhood care and education to children below the age of six years
☒ 4. Provision for protection of minority regions in Rajasthan

Question ID : 630680568380

Option 1 ID : 6306802222329

Option 2 ID : 6306802222330

Option 3 ID : 6306802222331

Option 4 ID : 6306802222332

Status : Not Answered

Chosen Option : --

Q.50 The Greek letter 'Omega' is used to represent which physical quantity in the International System of Units (SI)?

- Ans** ☒ 1. Electrical conductance
☒ 2. Electric displacement field
☒ 3. Electric potential difference
☒ 4. Electric resistance

Question ID : 630680402071

Option 1 ID : 6306801567977

Option 2 ID : 6306801567979

Option 3 ID : 6306801567978

Option 4 ID : 6306801567976

Status : Answered

Chosen Option : 4

Section : General Engineering Civil and Structural

Q.1 A downward pointing equilateral triangle, having a red border and a white background is a:

- Ans** ☒ 1. give way sign
☒ 2. warning sign
☒ 3. danger sign
☒ 4. stop sign

Question ID : 630680509076

Option 1 ID : 6306801989601

Option 2 ID : 6306801989599

Option 3 ID : 6306801989602

Option 4 ID : 6306801989600

Status : Answered

Chosen Option : 1

Q.2 A T-section is designated by ISNT 150 @ 223.7 N/m. What are the meanings of 150 and 223.7?

- Ans
- ☒ 1. It is 150 mm thick and the self-weight is 223.7 kg per metre length.
 - ☒ 2. It is 150 mm deep and the self-weight is 223.7 kg per metre length.
 - ☒ 3. It is 150 mm deep and the self-weight is 223.7 N per metre length.
 - ☒ 4. It is 150 mm thick and the self-weight is 223.7 N per metre length.

Question ID : 630680509643

Option 1 ID : 6306801991780

Option 2 ID : 6306801991777

Option 3 ID : 6306801991778

Option 4 ID : 6306801991779

Status : Answered

Chosen Option : 4

Q.3 The following observation was made for a construction project where RL of the bench mark (BM) at Point A (bottom of a lintel) was 101.50 m. The staff reading (inverted) on BM was 2.25 m and the reading at Point B on ground before the instrument was shifted was 1.05 m. After the change point, the staff reading to Point B measured 1.35 m. If the last reading was taken at the bottom of a canopy (Point C) with staff inverted was 4.100 m, RL of Point C was _____.

- Ans
- ☒ 1. 102.65 m
 - ☒ 2. 102.30 m
 - ☒ 3. 103.65 m
 - ☒ 4. 103.30 m

Question ID : 630680506210

Option 1 ID : 6306801978358

Option 2 ID : 6306801978359

Option 3 ID : 6306801978360

Option 4 ID : 6306801978357

Status : Not Answered

Chosen Option : --

Q.4 Which characteristic of fine aggregates indicates their ability to retain water and affects the workability of concrete or mortar mix?

- Ans
- ☒ 1. Particle size distribution
 - ☒ 2. Water absorption
 - ☒ 3. Fineness modulus
 - ☒ 4. Specific gravity

Question ID : 630680357663

Option 1 ID : 6306801392643

Option 2 ID : 6306801392644

Option 3 ID : 6306801392642

Option 4 ID : 6306801392641

Status : Answered

Chosen Option : 2

Q.5 Which of the following statements are correct with respect to grain size distribution curve?
I: The grain size distribution curve, having a horizontal line (parallel to x-axis) for some distance, shows poorly graded soil.
II: The grain size distribution curve, having a horizontal line (parallel to x-axis) for some distance, shows gap graded soil.
III: If the value of C_u (coefficient of uniformity) is large, it shows the presence of wide range of size of particles.
IV: If the value of C_u (coefficient of uniformity) is large, it shows the presence of narrow range of size of particles.

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

Question ID : 630680504532
Option 1 ID : 6306801971692
Option 2 ID : 6306801971689
Option 3 ID : 6306801971690
Option 4 ID : 6306801971691
Status : Not Answered
Chosen Option : --

Q.6 Which of the following sewer sections has the least perimeter for a given cross-sectional area?

- Ans
- ☐ 1. Rectangular sewer
 - ☐ 2. Egg-shaped sewer
 - ☐ 3. Parabolic sewer
 - ☒ 4. Circular sewer

Question ID : 630680509479
Option 1 ID : 6306801991186
Option 2 ID : 6306801991188
Option 3 ID : 6306801991187
Option 4 ID : 6306801991185
Status : Not Answered
Chosen Option : --

Q.7 What is the meaning of a signal 'Left arm extended' given by a surveyor?

- Ans
- ☒ 1. Continue to move towards your left
 - ☐ 2. Move considerably towards your left
 - ☐ 3. Plumb the rod towards your left
 - ☐ 4. Move slowly towards your left

Question ID : 630680163142
Option 1 ID : 630680631793
Option 2 ID : 630680631794
Option 3 ID : 630680631795
Option 4 ID : 630680631792
Status : Answered
Chosen Option : 4

Q.8 Which of the following defects in timber occurs due to the faulty method of seasoning of timber?

- Ans ☒ 1. Burl
☒ 2. Wet rot
☒ 3. Shakes
☒ 4. Honeycombing

Question ID : 630680509685

Option 1 ID : 6306801991946

Option 2 ID : 6306801991947

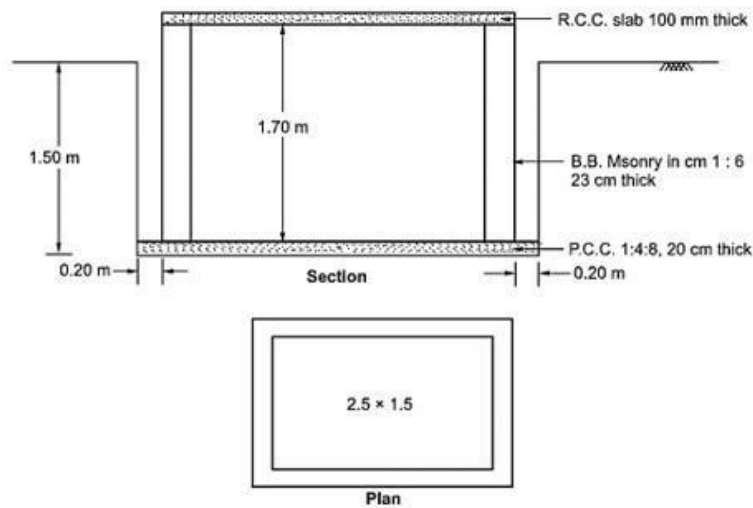
Option 3 ID : 6306801991948

Option 4 ID : 6306801991945

Status : Answered

Chosen Option : 4

Q.9 Calculate the quantity of excavation of foundation for the given water tank.



- Ans ☒ 1. $1.36 \times 4.36 \times 1.5 \text{ m}^3$
☒ 2. $3.36 \times 2.36 \times 1.5 \text{ m}^3$
☒ 3. $2.36 \times 5.36 \times 1.5 \text{ m}^3$
☒ 4. $4.36 \times 2.36 \times 1.5 \text{ m}^3$

Question ID : 630680339570

Option 1 ID : 6306801320803

Option 2 ID : 6306801320801

Option 3 ID : 6306801320804

Option 4 ID : 6306801320802

Status : Not Answered

Chosen Option : --

Q.10 Which of the following operation is meant for manual or automatic process by which air present in a centrifugal pump and its suction line is removed by filling liquid.

- Ans
- ☐ 1. starting of the electric motor
 - ☐ 2. closure of the delivery valve
 - ☐ 3. the lubrication
 - ☒ 4. closure of the suction valve

Question ID : 630680206154

Option 1 ID : 630680799417

Option 2 ID : 630680799416

Option 3 ID : 630680799418

Option 4 ID : 630680799415

Status : Answered

Chosen Option : 1

Q.11 What is potential head?

- Ans
- ☐ 1. Kinetic energy per unit weight of fluid particle
 - ☒ 2. Potential energy per unit weight of fluid particle
 - ☐ 3. Potential energy per unit mass of fluid particle
 - ☐ 4. Pressure energy per unit weight of fluid particle

Question ID : 630680506971

Option 1 ID : 6306801981390

Option 2 ID : 6306801981391

Option 3 ID : 6306801981392

Option 4 ID : 6306801981389

Status : Not Answered

Chosen Option : --

Q.12 Which of the following is a requirement for thermal insulation in materials?

- Ans
- ☐ 1. High temperature resistance
 - ☒ 2. Low thermal conductivity
 - ☐ 3. High permeability
 - ☐ 4. Low density

Question ID : 630680198726

Option 1 ID : 630680770864

Option 2 ID : 630680770865

Option 3 ID : 630680770866

Option 4 ID : 630680770863

Status : Answered

Chosen Option : 1

Q.13 Which of the following precaution is generally followed in cold weather concreting and not in hot weather concreting?

- Ans
- ☐ 1. Covering the finished concrete surface by impermeable sheet
 - ☐ 2. Sprinkling of formwork with cooled water
 - ☒ 3. Use of an air-entraining agent
 - ☐ 4. Cooling of aggregates

Question ID : 630680503283

Option 1 ID : 6306801966719

Option 2 ID : 6306801966718

Option 3 ID : 6306801966720

Option 4 ID : 6306801966717

Status : Answered

Chosen Option : 1

Q.14 In a barometer, air is trapped in the space labelled 'A' above the mercury level in the tube of the barometer, which measures 730 mmHg. If the atmospheric pressure is 750 mmHg, then the pressure of the trapped air is:

- Ans ☒ 1. 20 mmHg
 ☐ 2. 730 mmHg
 ☐ 3. 750 mmHg
 ☐ 4. 745 mmHg

Question ID : 630680506948
Option 1 ID : 6306801981298
Option 2 ID : 6306801981297
Option 3 ID : 6306801981300
Option 4 ID : 6306801981299
Status : Answered
Chosen Option : 4

Q.15 Which of the following is NOT a bio-pesticide that helps in reducing soil pollution?

- Ans ☐ 1. *Azadirachta indica*
 ☐ 2. *Bacillus thuringiensis*
 ☐ 3. *Trichogramma*
 ☒ 4. Endosulphan

Question ID : 630680509504
Option 1 ID : 6306801991286
Option 2 ID : 6306801991285
Option 3 ID : 6306801991287
Option 4 ID : 6306801991288
Status : Not Answered
Chosen Option : --

Q.16 The modulus of elasticity of a material is:

- Ans ☐ 1. not referred to as Young's modulus
 ☒ 2. only defined in the linearly elastic region
 ☐ 3. having the same unit as that of strain
 ☐ 4. equal to the slope of the strain–stress curve

Question ID : 630680509117
Option 1 ID : 6306801989766
Option 2 ID : 6306801989763
Option 3 ID : 6306801989765
Option 4 ID : 6306801989764
Status : Answered
Chosen Option : 4

Q.17 Estimate the earthwork quantity by trapezoidal formula method, for the construction of an approach road, whose length is 500m, base width of embankment =10m, height of embankment=70 cm and side slope = 1H:2V.

- Ans
- ☒ 1. 5000 cu. m
 - ☒ 2. 4500 cu. m
 - ☒ 3. 2500 cu. m
 - ☒ 4. 3377.5 cu. m

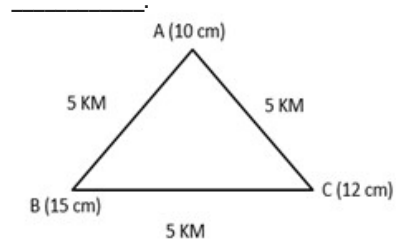
Question ID : 630680504084
Option 1 ID : 6306801969899
Option 2 ID : 6306801969900
Option 3 ID : 6306801969897
Option 4 ID : 6306801969898
Status : Not Answered
Chosen Option : --

Q.18 A road embankment with cross-sectional area of 100 m² is constructed with an average gradient of 1 in 50 from contour 200 m to 250 m. Find the volume of the earth work.

- Ans
- ☒ 1. 5000 m³
 - ☒ 2. 250000 m³
 - ☒ 3. 22500 m³
 - ☒ 4. 1250000 m³

Question ID : 630680506242
Option 1 ID : 6306801978485
Option 2 ID : 6306801978486
Option 3 ID : 6306801978488
Option 4 ID : 6306801978487
Status : Not Answered
Chosen Option : --

Q.19 The figure below represents a catchment area with the precipitations observed in a year. The mean precipitation calculated by using the Thiessen polygon method is



- Ans
- ☒ 1. 14.46 cm
 - ☒ 2. 13.45 cm
 - ☒ 3. 12.33 cm
 - ☒ 4. 11.28 cm

Question ID : 630680504301
Option 1 ID : 6306801970767
Option 2 ID : 6306801970765
Option 3 ID : 6306801970766
Option 4 ID : 6306801970768
Status : Not Answered
Chosen Option : --

Q.20 Hazard markers should reflect _____ light, visible at least from a distance of about _____.

- Ans
- ☒ 1. yellow; 500 m
 - ☒ 2. red; 150 m
 - ☒ 3. red; 500 m
 - ☒ 4. yellow; 150 m

Question ID : 630680509069
Option 1 ID : 6306801989574
Option 2 ID : 6306801989571
Option 3 ID : 6306801989573
Option 4 ID : 6306801989572
Status : Not Answered
Chosen Option : --

Q.21 Select the correct statement while designing a singly reinforced beam in the limit state method.

- Ans
- ☒ 1. Only over reinforced beams are designed.
 - ☒ 2. Under reinforced beams have brittle failure.
 - ☒ 3. A designer may have multiple solutions.
 - ☒ 4. Under reinforced beams have minimum cross section area.

Question ID : 630680509664
Option 1 ID : 6306801991862
Option 2 ID : 6306801991864
Option 3 ID : 6306801991861
Option 4 ID : 6306801991863
Status : Not Answered
Chosen Option : --

Q.22 During construction of roads, a feature that facilitates drainage of the pavement laterally is called _____.

- Ans
- ☒ 1. camber
 - ☒ 2. shoulder
 - ☒ 3. median
 - ☒ 4. kerbs

Question ID : 630680198262
Option 1 ID : 630680769222
Option 2 ID : 630680769220
Option 3 ID : 630680769221
Option 4 ID : 630680769219
Status : Answered
Chosen Option : 1

Q.23 Which of the following methods is/are used for disposal of the municipal solid waste?

I: Sanitary landfilling

II: Shredding or pulverisation

III: Barging out into the sea

Ans ☒ 1. Only II

☒ 2. All of I, II and III

☒ 3. Only I

☒ 4. Only I and II

Question ID : 630680509492

Option 1 ID : 6306801991239

Option 2 ID : 6306801991240

Option 3 ID : 6306801991237

Option 4 ID : 6306801991238

Status : Answered

Chosen Option : 3

Q.24 The upper limit on percentage longitudinal reinforcement in an RCC column has been kept in mind to serve which of the given option?

Ans ☒ 1. To stop buckling of the column

☒ 2. To limit the size of the column

☒ 3. To limit the ductility of the column

☒ 4. To cater easy placement and compaction of concrete in the column

Question ID : 630680509655

Option 1 ID : 6306801991828

Option 2 ID : 6306801991825

Option 3 ID : 6306801991826

Option 4 ID : 6306801991827

Status : Answered

Chosen Option : 3

Q.25 Match the following.

Type of Water Pollution	Agent
I. Physical pollution	A. Sewage
II. Chemical pollution	B. Chromium
III. Bacteriological pollution	C. Fungi

Ans ☒ 1. I-B, II-C, III-A

☒ 2. I-A, II-C, III-B

☒ 3. I-A, II-B, III-C

☒ 4. I-B, II-A, III-C

Question ID : 630680509498

Option 1 ID : 6306801991264

Option 2 ID : 6306801991262

Option 3 ID : 6306801991261

Option 4 ID : 6306801991263

Status : Answered

Chosen Option : 3

Q.26 Which of the following municipal solid wastes CANNOT be recycled?

- Ans ☒ 1. Plastics
☒ 2. Fruit peelings
☒ 3. Glasses
☒ 4. Papers

Question ID : 630680509515
Option 1 ID : 6306801991331
Option 2 ID : 6306801991329
Option 3 ID : 6306801991332
Option 4 ID : 6306801991330
Status : Answered
Chosen Option : 1

Q.27 Which of the following factors is NOT considered while preparing a detailed estimate?

- Ans ☒ 1. Specifications for different items of work
☒ 2. Departmental charges
☒ 3. Transportation of materials
☒ 4. Quantity of the materials

Question ID : 630680504073
Option 1 ID : 6306801969855
Option 2 ID : 6306801969853
Option 3 ID : 6306801969856
Option 4 ID : 6306801969854
Status : Answered
Chosen Option : 2

Q.28 Select the option that is appropriate regarding the following two statements labelled Assertion and Reason.

Assertion: Rivers that flow through catchment areas having steep slopes carry a lot of sediment.

Reason: Steep slopes lead to high velocity of the flow, which causes more erosion of the surface soil.

- Ans ☒ 1. Both Assertion and Reason are false.
☒ 2. Assertion is true, but Reason is false.
☒ 3. Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
☒ 4. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

Question ID : 630680504335
Option 1 ID : 6306801970904
Option 2 ID : 6306801970903
Option 3 ID : 6306801970902
Option 4 ID : 6306801970901
Status : Answered
Chosen Option : 4

Q.29 In the context of vehicular characteristics and efficiency of brakes, braking distance is:

- Ans ☒ 1. inversely proportional to design coefficient of friction
- ☒ 2. directly proportional to design coefficient of friction
- ☒ 3. inversely proportional to speed of vehicle
- ☒ 4. directly proportional to speed of vehicle

Question ID : 630680377343
Option 1 ID : 6306801470436
Option 2 ID : 6306801470435
Option 3 ID : 6306801470437
Option 4 ID : 6306801470438
Status : Answered
Chosen Option : 4

Q.30 Identify whether the following statements about sanitary landfill are true or false.

Statement I: There is continuous evolution of foul gases near the fill side.

Statement II: During rainy season, leachate may come out of the dump.

Statement III: The method requires further treatments for completion.

- Ans ☒ 1. Statement I is true, but Statements II and III are false
- ☒ 2. Statements I and II are true, but Statement III is false
- ☒ 3. Statements I and II are false and Statement III is true
- ☒ 4. Statements I and III are true, but Statement II is false

Question ID : 630680509488
Option 1 ID : 6306801991222
Option 2 ID : 6306801991221
Option 3 ID : 6306801991223
Option 4 ID : 6306801991224
Status : Not Answered
Chosen Option : --

Q.31 The prestressed concrete pavements for highways can be built without joints in continuous length up to how many metres?

- Ans ☒ 1. 45 metres
- ☒ 2. 60 metres
- ☒ 3. 90 metres
- ☒ 4. 120 metres

Question ID : 630680509456
Option 1 ID : 6306801991096
Option 2 ID : 6306801991093
Option 3 ID : 6306801991095
Option 4 ID : 6306801991094
Status : Not Answered
Chosen Option : --

Q.32 The velocity components of a two-dimensional plane motion of a fluid with constant density are $u = 2x - x^2y$ and $v = xy^2 - 2y$. Which of the following is the correct statement?

- Ans ☒ 1. The fluid is compressible and flow is steady.
☒ 2. The fluid is incompressible and flow is unsteady.
☒ 3. The fluid is compressible and flow is unsteady.
☒ 4. The fluid is incompressible and flow is steady.

Question ID : 630680506969

Option 1 ID : 6306801981383

Option 2 ID : 6306801981382

Option 3 ID : 6306801981384

Option 4 ID : 6306801981381

Status : Not Answered

Chosen Option : --

Q.33 As per IS 456:2000, the maximum compressive strain at highly compressed fiber in RCC column subjected to bending and axial compression is given by: (Consider no tension in the section).

- Ans ☒ 1. $0.0035 - 0.75 \times (\text{strain at the least compressed extreme fiber})$
☒ 2. $0.0035 + 0.75 \times (\text{strain at the least compressed extreme fiber})$
☒ 3. $0.002 + 0.75 \times (\text{strain at the least compressed extreme fiber})$
☒ 4. $0.002 - 0.75 \times (\text{strain at the least compressed extreme fiber})$

Question ID : 630680509666

Option 1 ID : 6306801991870

Option 2 ID : 6306801991869

Option 3 ID : 6306801991871

Option 4 ID : 6306801991872

Status : Not Answered

Chosen Option : --

Q.34 Continuity equation used for fluid flowing through pipes is based on principle of

- Ans ☒ 1. Conservation of energy
☒ 2. Conservation of momentum
☒ 3. Conservation of energy and momentum
☒ 4. Conservation of mass

Question ID : 630680506970

Option 1 ID : 6306801981385

Option 2 ID : 6306801981386

Option 3 ID : 6306801981388

Option 4 ID : 6306801981387

Status : Answered

Chosen Option : 3

Q.35 Net positive suction head(NPSH), which plays an important role in the proper selection of pumps is given by _____

- Ans
- ☐ 1. the ratio of Suction head and the liquids vapor head
 - ☐ 2. the sum of Suction head and the liquids vapor head
 - ☐ 3. the product of Suction head and the liquids vapor head
 - ☒ 4. the difference between Suction head and the liquids vapor head

Question ID : 630680506957
Option 1 ID : 6306801981335
Option 2 ID : 6306801981334
Option 3 ID : 6306801981336
Option 4 ID : 6306801981333
Status : Not Answered
Chosen Option : --

Q.36 Which of the following is a limitation of lightweight concrete when compared to conventional type concrete?

- Ans
- ☐ 1. Reduced density
 - ☒ 2. Increased permeability
 - ☐ 3. Enhanced thermal property
 - ☐ 4. Higher fire resistance

Question ID : 630680340572
Option 1 ID : 6306801324729
Option 2 ID : 6306801324731
Option 3 ID : 6306801324732
Option 4 ID : 6306801324730
Status : Not Answered
Chosen Option : --

Q.37 The waste from printers, scanners, refrigerators, etc. is called _____.

- Ans
- ☐ 1. electrical waste
 - ☐ 2. industrial waste
 - ☒ 3. e-waste
 - ☐ 4. municipal waste

Question ID : 630680509487
Option 1 ID : 6306801991219
Option 2 ID : 6306801991218
Option 3 ID : 6306801991217
Option 4 ID : 6306801991220
Status : Answered
Chosen Option : 3

Q.38 What amount of principle reinforcement materials is used in pultrusion process?

- Ans
- ☒ 1. 40% – 70%
 - ☐ 2. 22% – 38%
 - ☐ 3. 85% – 92%
 - ☐ 4. 5% – 22%

Question ID : 630680198721
Option 1 ID : 630680770845
Option 2 ID : 630680770844
Option 3 ID : 630680770846
Option 4 ID : 630680770843
Status : Not Answered
Chosen Option : --

Q.39 A cantilever beam AB of length 'l' is subjected to a downward load 'P' at its free end and an upward load 'P' at a distance of 'x' from the free end. The shear force will be _____.

- Ans
- ☒ 1. equal to 2P, only at the free end
 - ☒ 2. equal to 2P, between the two point loads
 - ☒ 3. equal to P/2, only at the free end
 - ☒ 4. equal to P, between the two point loads

Question ID : 630680338732
Option 1 ID : 6306801317582
Option 2 ID : 6306801317584
Option 3 ID : 6306801317581
Option 4 ID : 6306801317583
Status : Answered
Chosen Option : 3

Q.40 As per IS 456 :2000, the permissible limit for inorganic solids present in water that is used for construction activities is _____

- Ans
- ☒ 1. 3000 mg/l
 - ☒ 2. 1100 mg/l
 - ☒ 3. 2400 mg/l
 - ☒ 4. 150 mg/l

Question ID : 630680199420
Option 1 ID : 630680773322
Option 2 ID : 630680773320
Option 3 ID : 630680773321
Option 4 ID : 630680773319
Status : Answered
Chosen Option : 3

Q.41 In which type of the finish is the booster or chisel used to make non-continuous parallel marks on the stone surface? These marks may be horizontal, inclined, or vertical.

- Ans
- ☒ 1. Dragged or combed finish
 - ☒ 2. Rubbed finish
 - ☒ 3. Hammer dressed finish
 - ☒ 4. Furrowed finish dressing of stones

Question ID : 630680509689
Option 1 ID : 6306801991963
Option 2 ID : 6306801991961
Option 3 ID : 6306801991964
Option 4 ID : 6306801991962
Status : Answered
Chosen Option : 1

Q.42 Automatic rain gauges are in the form of a pen mounted on a clock-driven chart and can give a permanent, automatic rainfall record. Which of the following is an example of automatic rain gauge?

- Ans ☒ 1. Hydrometer
☒ 2. Float type rain gauge
☒ 3. Hygrometer
☒ 4. Symon's rain gauge

Question ID : 630680504285

Option 1 ID : 6306801970703

Option 2 ID : 6306801970702

Option 3 ID : 6306801970704

Option 4 ID : 6306801970701

Status : Answered

Chosen Option : 4

Q.43 Absolute pressure is equal to:

- Ans ☒ 1. Gauge pressure – Atmospheric pressure
☒ 2. Gauge pressure + Atmospheric pressure
☒ 3. Atmospheric pressure – Gauge pressure
☒ 4. Atmospheric pressure × Gauge pressure

Question ID : 630680506949

Option 1 ID : 6306801981301

Option 2 ID : 6306801981303

Option 3 ID : 6306801981302

Option 4 ID : 6306801981304

Status : Answered

Chosen Option : 3

Q.44 Which of the following factors contribute(s) to reducing soil pollution?

I: Treating the water courses (drainage line treatment)

II: Gabion structure

III: Use of microbial pesticides

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

Question ID : 630680509505

Option 1 ID : 6306801991292

Option 2 ID : 6306801991291

Option 3 ID : 6306801991289

Option 4 ID : 6306801991290

Status : Not Answered

Chosen Option : --

Q.45 What is the application of geotechnical engineering in highway pavement design ?

- Ans ☒ 1. Determination of traffic load
- ☒ 2. Designing the thickness of flexible pavements
- ☒ 3. Designing of the footing for rigid pavements
- ☒ 4. Analysis of stability of the camber slope

Question ID : 630680181873

Option 1 ID : 630680704727

Option 2 ID : 630680704726

Option 3 ID : 630680704728

Option 4 ID : 630680704729

Status : Not Answered

Chosen Option : --

Q.46 The elements included in the road margins are:

- Ans ☒ 1. footpath, shoulder, median, frontage road
- ☒ 2. frontage road, shoulder, median, kerbs
- ☒ 3. embankment slope, driveway, carriageway, median
- ☒ 4. frontage road, parking lane, footpath, drive way

Question ID : 630680509452

Option 1 ID : 6306801991079

Option 2 ID : 6306801991077

Option 3 ID : 6306801991078

Option 4 ID : 6306801991080

Status : Answered

Chosen Option : 3

Q.47 _____ is that branch of science which deals with behaviour of the fluids(liquids or gases) at rest as well as in motion.

- Ans ☒ 1. Hydrokinematics
- ☒ 2. Fluid mechanics
- ☒ 3. Hydrostatics
- ☒ 4. Hydrokinetics

Question ID : 630680206165

Option 1 ID : 630680799461

Option 2 ID : 630680799459

Option 3 ID : 630680799460

Option 4 ID : 630680799462

Status : Answered

Chosen Option : 2

Q.48 What is the primary factor that governs the shear strength of sands?

- Ans ☒ 1. Pore pressure
- ☒ 2. Cohesion
- ☒ 3. Void ratio
- ☒ 4. Friction angle

Question ID : 630680375892

Option 1 ID : 6306801464641

Option 2 ID : 6306801464639

Option 3 ID : 6306801464642

Option 4 ID : 6306801464640

Status : Answered

Chosen Option : 3

Q.49 Which types of trees grow inwards and fibrous mass is seen in their longitudinal sections?

Ans ☒ 1. Endogenous trees

☒ 2. Deciduous

☒ 3. Exogenous trees

☒ 4. Conifers

Question ID : 630680509696

Option 1 ID : 6306801991989

Option 2 ID : 6306801991992

Option 3 ID : 6306801991990

Option 4 ID : 6306801991991

Status : Answered

Chosen Option : 2

Q.50 The passive earth pressure for a soil is -----

Ans ☒ 1. equal to earth pressure at rest

☒ 2. equal to active earth pressure

☒ 3. always greater than active earth pressure

☒ 4. always less than the earth pressure at rest

Question ID : 630680504546

Option 1 ID : 6306801971747

Option 2 ID : 6306801971746

Option 3 ID : 6306801971745

Option 4 ID : 6306801971748

Status : Not Answered

Chosen Option : --

Q.51 Calculate the effective length of a steel column of length 3 m that is effectively held in position at both ends and restrained in rotation at one end?

Ans ☒ 1. 1 m

☒ 2. 2.4 m

☒ 3. 3.4 m

☒ 4. 1.4 m

Question ID : 630680377316

Option 1 ID : 6306801470330

Option 2 ID : 6306801470327

Option 3 ID : 6306801470329

Option 4 ID : 6306801470328

Status : Not Answered

Chosen Option : --

Q.52 The temperature at which vitrification of low melting clay bricks occurs at a temperature of ____.

Ans ☒ 1. 300°C-500°C

☒ 2. 600°C-800°C

☒ 3. 900°C-1100°C

☒ 4. 1200°C-1400°C

Question ID : 630680357636

Option 1 ID : 6306801392533

Option 2 ID : 6306801392534

Option 3 ID : 6306801392535

Option 4 ID : 6306801392536

Status : Not Answered

Chosen Option : --

Q.53 Which of the following is NOT a reason for minor head loss in pipe flow?

- Ans
- ☐ 1. loss due to a bend in the pipe
 - ☐ 2. loss due to an exit of the pipe
 - ☐ 3. loss due to an entrance of the pipe
 - ☒ 4. loss due to friction

Question ID : 630680506976

Option 1 ID : 6306801981410

Option 2 ID : 6306801981409

Option 3 ID : 6306801981412

Option 4 ID : 6306801981411

Status : Answered

Chosen Option : 2

Q.54 The material supported by a retaining wall kept above the horizontal plane at the elevation of the top of the retaining wall is known as:

- Ans
- ☐ 1. debris
 - ☒ 2. surcharge
 - ☐ 3. infill
 - ☐ 4. backfill

Question ID : 630680509654

Option 1 ID : 6306801991823

Option 2 ID : 6306801991824

Option 3 ID : 6306801991821

Option 4 ID : 6306801991822

Status : Answered

Chosen Option : 2

Q.55 As per IS 456 : 2000, the limiting value for neutral axis depth measured from extreme fibre of a singly reinforced RCC beam with rectangular cross section is _____. Consider the grade of steel as Fe-500 and 'd' is effective depth of beam section.

- Ans
- ☐ 1. 0.53 d
 - ☐ 2. 0.46 d
 - ☐ 3. 0.44 d
 - ☒ 4. 0.48 d

Question ID : 630680377295

Option 1 ID : 6306801470245

Option 2 ID : 6306801470243

Option 3 ID : 6306801470246

Option 4 ID : 6306801470244

Status : Not Answered

Chosen Option : --

Q.56 When the staff reading increases between two consecutive points, the difference between the readings shall be recorded in ____ column in case of levelling by rise and fall method.

Ans ☒ 1. Fall

☒ 2. Rise

☒ 3. R.L.

☒ 4. H.I.

Question ID : 630680506240

Option 1 ID : 6306801978478

Option 2 ID : 6306801978477

Option 3 ID : 6306801978479

Option 4 ID : 6306801978480

Status : Answered

Chosen Option : 3

Q.57 The value of dynamic gauge (G) used to calculate the super elevation is ____ for broad gauge railway tracks.

Ans ☒ 1. 1550 mm

☒ 2. 1900 mm

☒ 3. 1650 mm

☒ 4. 1750 mm

Question ID : 630680191634

Option 1 ID : 630680743157

Option 2 ID : 630680743160

Option 3 ID : 630680743159

Option 4 ID : 630680743158

Status : Not Answered

Chosen Option : --

Q.58 Select the option that is appropriate regarding the following two statements labelled Assertion and Reason.

Assertion: In urban areas, roofing on built-up areas, concrete and asphalts surfaces are major factors that inhibit infiltration and surface retention.

Reason: The presence of pervious surface areas decreases infiltration and initial losses and leads to consequent increase in the effective rainfall.

Ans ☒ 1. Both Assertion and Reason are false.

☒ 2. Assertion is true, but Reason is false.

☒ 3. Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

☒ 4. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

Question ID : 630680504298

Option 1 ID : 6306801970756

Option 2 ID : 6306801970755

Option 3 ID : 6306801970754

Option 4 ID : 6306801970753

Status : Not Answered

Chosen Option : --

Q.59 Match the following.

Bin Colour	Type of Biomedical Waste
I. Yellow	A. To be incinerated
II. Red	B. To be autoclaved
III. Black	C. For burial

- Ans
- ☒ 1. I-B, II-A, III-C
 - ☒ 2. I-B, II-C, III-A
 - ☒ 3. I-A, II-B, III-C
 - ☒ 4. I-A, II-C, III-B

Question ID : 630680509463
Option 1 ID : 6306801991123
Option 2 ID : 6306801991124
Option 3 ID : 6306801991121
Option 4 ID : 6306801991122
Status : Not Answered
Chosen Option : --

Q.60 As per Kennedy's theory, the ratio of the mean velocity 'V' to the critical velocity 'VO' is known as the critical velocity ratio. It is denoted by 'm'. If $m > 1$, _____ will occur.

- Ans
- ☒ 1. scouring
 - ☒ 2. silting
 - ☒ 3. neither scouring nor silting
 - ☒ 4. both scouring and silting

Question ID : 630680504323
Option 1 ID : 6306801970854
Option 2 ID : 6306801970853
Option 3 ID : 6306801970856
Option 4 ID : 6306801970855
Status : Not Answered
Chosen Option : --

Q.61 Which of the following types of construction offers comparatively better earthquake resistance based on its structural action? Consider that the thickness and length of member to be constructed is constant for any of the following cases.

- Ans
- ☒ 1. Brickwork with English bond
 - ☒ 2. Reinforced brickwork
 - ☒ 3. Size stone masonry
 - ☒ 4. Random rubble stone masonry

Question ID : 630680326664
Option 1 ID : 6306801270736
Option 2 ID : 6306801270733
Option 3 ID : 6306801270735
Option 4 ID : 6306801270734
Status : Answered
Chosen Option : 3

Q.62 Under which of the following condition an element subjected to stresses is said to be in a state of triaxial stress?

- Ans ☐ 1. When the shear stresses acting along three mutually perpendicular directions of the element
- ☐ 2. When the stress acting along only one axis of the element
- ☐ 3. When the normal stress along two mutually perpendicular direction and shear stress along third direction
- ☒ 4. When the principal stresses acting along three mutually perpendicular directions

Question ID : 630680509113
Option 1 ID : 6306801989748
Option 2 ID : 6306801989747
Option 3 ID : 6306801989750
Option 4 ID : 6306801989749
Status : Not Answered
Chosen Option : --

Q.63 Which of the following is/are the correct reason(s) for closing errors in compass surveying at the time of traversing?

- I. The end station of a traverse generally coincides exactly with its starting station.
II. There is no error in the magnetic bearing observation.
III. There is an error in the linear distance measurement.

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

Question ID : 630680382429
Option 1 ID : 6306801490631
Option 2 ID : 6306801490634
Option 3 ID : 6306801490632
Option 4 ID : 6306801490633
Status : Not Answered
Chosen Option : --

Q.64 Which of the following types of foundation is suitable for cohesive soil with high load bearing capacity and load can be distributed over a wide area compared to other foundation types?

- Ans ☐ 1. Pier foundation
- ☐ 2. Strip foundation
- ☐ 3. Pile foundation
- ☒ 4. Raft foundation

Question ID : 630680357667
Option 1 ID : 6306801392660
Option 2 ID : 6306801392657
Option 3 ID : 6306801392658
Option 4 ID : 6306801392659
Status : Not Answered
Chosen Option : --

Q.65 Which irrigation method has the highest irrigation efficiency?

- Ans ☒ 1. Sprinkler irrigation
- ☒ 2. Drip irrigation
- ☒ 3. Furrow
- ☒ 4. Border strip irrigation

Question ID : 630680504356
Option 1 ID : 6306801970985
Option 2 ID : 6306801970986
Option 3 ID : 6306801970988
Option 4 ID : 6306801970987
Status : Answered
Chosen Option : 2

Q.66 A revised estimate should be accompanied by _____.

- Ans ☒ 1. an administrative sanction
- ☒ 2. a comparative statement
- ☒ 3. an abstract of bill
- ☒ 4. a technical sanction

Question ID : 630680504125
Option 1 ID : 6306801970063
Option 2 ID : 6306801970061
Option 3 ID : 6306801970064
Option 4 ID : 6306801970062
Status : Answered
Chosen Option : 1

Q.67 Which property of timber makes it resistant to corrosion and rust?

- Ans ☒ 1. Non-metallic composition
- ☒ 2. Low density
- ☒ 3. High moisture absorption
- ☒ 4. High strength

Question ID : 630680357671
Option 1 ID : 6306801392675
Option 2 ID : 6306801392673
Option 3 ID : 6306801392676
Option 4 ID : 6306801392674
Status : Answered
Chosen Option : 1

Q.68 An economical cross-section of an irrigation canal is formed partly in cutting and partly in filling, with the depth of cutting in canal cross-section equal to balancing depth. What does this indicate ?

- Ans ☒ 1. Quantity of earthwork in filling = Two times the quantity of earthwork in cutting
- ☒ 2. Wetted perimeter of cutting portion of canal = Wetter perimeter of the filling portion of canal
- ☒ 3. Depth of earthwork cutting = Depth of earthwork in filling
- ☒ 4. Quantity of earthwork in cutting = Quantity of earthwork in filling

Question ID : 630680504111
Option 1 ID : 6306801970008
Option 2 ID : 6306801970007
Option 3 ID : 6306801970005
Option 4 ID : 6306801970006
Status : Not Answered
Chosen Option : --

Q.69 The soil has a liquid limit of 50% and plastic limit of 25%, respectively. If the volumetric shrinkages at the liquid limit and plastic limit are 50% and 30%, respectively, determine the dry volume of soil, if the volume at liquid limit is 1 ml.

- Ans ☒ 1. 0.234 ml
☒ 2. 0.895 ml
☒ 3. 0.667 ml
☒ 4. 0.485 ml

Question ID : 630680504528
Option 1 ID : 6306801971676
Option 2 ID : 6306801971675
Option 3 ID : 6306801971673
Option 4 ID : 6306801971674
Status : Not Answered
Chosen Option : --

Q.70 As per IS standards on method of measurement of building and civil engineering works, the dimensions have to be measured to the nearest _____.

- Ans ☒ 1. 0.1 m
☒ 2. 1.0 m
☒ 3. 0.001 m
☒ 4. 0.01 m

Question ID : 630680504134
Option 1 ID : 6306801970097
Option 2 ID : 6306801970098
Option 3 ID : 6306801970100
Option 4 ID : 6306801970099
Status : Not Answered
Chosen Option : --

Q.71 Select the option that is appropriate regarding the following two statements labelled Assertion and Reason.

Assertion: Piping below the weir can be prevented by providing an impervious floor of sufficient length so that the path of percolation is increased and the exit gradient is decreased.

Reason: If the exit gradient is less than a certain critical value, the soil starts boiling and is washed away by percolating water.

- Ans ☒ 1. Both Assertion and Reason are false.
☒ 2. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
☒ 3. Assertion is true, but Reason is false.
☒ 4. Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

Question ID : 630680504320
Option 1 ID : 6306801970844
Option 2 ID : 6306801970841
Option 3 ID : 6306801970843
Option 4 ID : 6306801970842
Status : Not Answered
Chosen Option : --

Q.72 If lining is provided to the canals, seepage loss of water can be controlled and ultimately it _____ the irrigated command area of the project.

- Ans
- ☒ 1. decreases
 - ☒ 2. neither increases nor reduces
 - ☒ 3. increases
 - ☒ 4. doesn't affect

Question ID : 630680504332

Option 1 ID : 6306801970889

Option 2 ID : 6306801970892

Option 3 ID : 6306801970890

Option 4 ID : 6306801970891

Status : Answered

Chosen Option : 4

Q.73 The part of the runoff that enters the stream immediately after the rainfall is called direct runoff. The total direct runoff is the sum of _____.

- Ans
- ☒ 1. surface runoff, infiltration and evapotranspiration
 - ☒ 2. rainfalls
 - ☒ 3. surface runoff, prompt interflow and channel precipitation
 - ☒ 4. overland flow and infiltration

Question ID : 630680504297

Option 1 ID : 6306801970750

Option 2 ID : 6306801970752

Option 3 ID : 6306801970749

Option 4 ID : 6306801970751

Status : Answered

Chosen Option : 2

Q.74 For a retaining wall, the Mohr circle radius for active earth pressure is _____ the Mohr circle radius for passive earth pressure.

- Ans
- ☒ 1. equal to
 - ☒ 2. More or less depending on the angle of internal friction of soil
 - ☒ 3. less than
 - ☒ 4. more than

Question ID : 630680504552

Option 1 ID : 6306801971771

Option 2 ID : 6306801971772

Option 3 ID : 6306801971770

Option 4 ID : 6306801971769

Status : Answered

Chosen Option : 2

Q.75 Following the cubical content method of estimate for buildings, the estimated cost of building is determined by multiplying the total cubical contents of the building and (Assume specifications and construction similar to buildings in the locality)

- Ans
- ☒ 1. area of the building
 - ☒ 2. height of the building
 - ☒ 3. local cubic rate
 - ☒ 4. volume of the building

Question ID : 630680504107
Option 1 ID : 6306801969989
Option 2 ID : 6306801969992
Option 3 ID : 6306801969990
Option 4 ID : 6306801969991
Status : Answered
Chosen Option : 1

Q.76 As per IS 13311 (part 1), the natural frequency of transducers for a path length of more than 1500 mm is _____.

- Ans
- ☒ 1. greater than or equal to 50 kHz
 - ☒ 2. greater than or equal to 20 kHz
 - ☒ 3. greater than or equal to 10 kHz
 - ☒ 4. less than 5 kHz

Question ID : 630680381564
Option 1 ID : 6306801487190
Option 2 ID : 6306801487188
Option 3 ID : 6306801487189
Option 4 ID : 6306801487187
Status : Not Answered
Chosen Option : --

Q.77 Which of the following is NOT a secondary treatment unit in wastewater treatment ?

- Ans
- ☒ 1. Imhoff tank
 - ☒ 2. aerated lagoon
 - ☒ 3. trickling filter
 - ☒ 4. aeration tank

Question ID : 630680370946
Option 1 ID : 6306801445107
Option 2 ID : 6306801445108
Option 3 ID : 6306801445110
Option 4 ID : 6306801445109
Status : Not Answered
Chosen Option : --

Q.78 Which of the following is correct expression to compute design bending strength of a laterally unsupported beam?

Where f_{bd} = design bending compressive stress,

$\beta_b = Z_e/Z_p$, Z_e = Elastic section modulus and Z_p = Plastic section modulus

Ans ☒ 1. $M_d = Z_p f_{bd}$

☒ 2. $M_d = \beta_b Z_p f_{bd}$

☒ 3. $M_d = \beta_b f_{bd} / Z_p$

☒ 4. $M_d = \beta_b Z_p / f_{bd}$

Question ID : 630680326687

Option 1 ID : 6306801270828

Option 2 ID : 6306801270825

Option 3 ID : 6306801270827

Option 4 ID : 6306801270826

Status : Not Answered

Chosen Option : --

Q.79 The design shear strength of concrete in the RCC beam does NOT depend on the:

Ans ☒ 1. area of steel

☒ 2. grade of steel

☒ 3. grade of concrete

☒ 4. cross-sectional dimension of the beam

Question ID : 630680509649

Option 1 ID : 6306801991803

Option 2 ID : 6306801991802

Option 3 ID : 6306801991801

Option 4 ID : 6306801991804

Status : Answered

Chosen Option : 1

Q.80 The table below shows the data sheet from a levelling book. If the RL at station P is 550.50 m, then which of the following options is INCORRECT?

Station	BS	IS	FS	Remark
P	1.265			BM
Q		1.415		
R		1.715		
S	2.330		2.165	CP
T			2.930	

(BS = Back Sight, IS = Intermediate Sight, FS = Fore Sight, RL = Reduced Level, BM = Bench Mark and CP = Change Point)

(All figures are in metre.)

Ans ☒ 1. Station S is at a lower elevation than Station Q.

☒ 2. Station S is at a lower elevation than Station P.

☒ 3. Station R is at a higher elevation than Station T.

☒ 4. Station R is at a higher elevation than Station P.

Question ID : 630680506226

Option 1 ID : 6306801978424

Option 2 ID : 6306801978423

Option 3 ID : 6306801978422

Option 4 ID : 6306801978421

Status : Not Answered

Chosen Option : --

Q.81 In a fly levelling work, if the back sight staff reading is greater than fore sight staff reading, it indicates a _____ in ground level.

- Ans ☒ 1. horizontal surface
- ☒ 2. rise
- ☒ 3. level surface
- ☒ 4. fall

Question ID : 630680192190

Option 1 ID : 630680745364

Option 2 ID : 630680745361

Option 3 ID : 630680745363

Option 4 ID : 630680745362

Status : Answered

Chosen Option : 4

Q.82 Which of the following is an INCORRECT feature of the auto level instrument, used for levelling?

- Ans ☒ 1. Readings on the staff are taken automatically.
- ☒ 2. Initially, the instrument should be levelled roughly by using foot screws.
- ☒ 3. Readings on the staff are taken manually.
- ☒ 4. The auto level works on the compensator mechanism.

Question ID : 630680506212

Option 1 ID : 6306801978367

Option 2 ID : 6306801978366

Option 3 ID : 6306801978365

Option 4 ID : 6306801978368

Status : Not Answered

Chosen Option : --

Q.83 The stadia method used in tacheometric surveys generally refers to measurements taken with a _____.

- Ans ☒ 1. fixed staff reading
- ☒ 2. fixed elvation of point
- ☒ 3. tacheometer with fixed stadia hair
- ☒ 4. tacheometer with variable stadia hair

Question ID : 630680506222

Option 1 ID : 6306801978407

Option 2 ID : 6306801978408

Option 3 ID : 6306801978405

Option 4 ID : 6306801978406

Status : Not Answered

Chosen Option : --

Q.84 Which of the following steel reinforcement does not act as a shear reinforcement in RCC beams?

- Ans ☒ 1. Bent up portion of longitudinal steel
☒ 2. Stirrups perpendicular to beam axis
☒ 3. Stirrups inclined (at 45") to beam axis
☒ 4. Tension steel parallel to the beam axis

Question ID : 630680377311
Option 1 ID : 6306801470310
Option 2 ID : 6306801470307
Option 3 ID : 6306801470308
Option 4 ID : 6306801470309
Status : Not Answered
Chosen Option : --

Q.85 What would be the average flow per hour (litre/hour) water consumption if 5000 litres is used per day?

- Ans ☒ 1. 100
☒ 2. 400
☒ 3. 208.33
☒ 4. 500

Question ID : 630680504101
Option 1 ID : 6306801969965
Option 2 ID : 6306801969968
Option 3 ID : 6306801969967
Option 4 ID : 6306801969966
Status : Answered
Chosen Option : 3

Q.86 As per IS 383:2016, the maximum crushing value of coarse aggregates used for runways and other wearing surfaces shall be _____ percentage.

- Ans ☒ 1. 50
☒ 2. 10
☒ 3. 30
☒ 4. 12

Question ID : 630680191301
Option 1 ID : 630680741847
Option 2 ID : 630680741846
Option 3 ID : 630680741845
Option 4 ID : 630680741848
Status : Not Answered
Chosen Option : --

Q.87 Which of the following is a sub-surface source of water supply?

- Ans ☒ 1. Tube well
☒ 2. Streams
☒ 3. Dam
☒ 4. Reservoir

Question ID : 630680509466
Option 1 ID : 6306801991133
Option 2 ID : 6306801991136
Option 3 ID : 6306801991134
Option 4 ID : 6306801991135
Status : Answered
Chosen Option : 1

Q.88 In 'No Parking' signs, the oblique red bar is placed at an angle of _____.

- Ans
- ☐ 1. 60 degrees
 - ☐ 2. 30 degrees
 - ☒ 3. 45 degrees
 - ☐ 4. 15 degrees

Question ID : 630680509065
Option 1 ID : 6306801989558
Option 2 ID : 6306801989556
Option 3 ID : 6306801989557
Option 4 ID : 6306801989555
Status : Answered
Chosen Option : 3

Q.89 Estimate the flow cross sectional area in a triangular channel with 5 m depth, and side slope 2H:1V.

- Ans
- ☐ 1. 40 m²
 - ☐ 2. 80 m²
 - ☒ 3. 50 m²
 - ☐ 4. 60 m²

Question ID : 630680506982
Option 1 ID : 6306801981434
Option 2 ID : 6306801981436
Option 3 ID : 6306801981435
Option 4 ID : 6306801981433
Status : Not Answered
Chosen Option : --

Q.90 A sample of soil failed a triaxial test under a deviator stress of 200 kN/m² when the confining pressure was 100 kN/m². If, for the sample, the confining pressure had been 200 kN/m², what would have been the deviator stress at failure? (Assume $\Phi = 0$.)

- Ans
- ☐ 1. 100 kN/m²
 - ☒ 2. 200 kN/m²
 - ☐ 3. 500 kN/m²
 - ☐ 4. 400 kN/m²

Question ID : 630680504504
Option 1 ID : 6306801971579
Option 2 ID : 6306801971577
Option 3 ID : 6306801971580
Option 4 ID : 6306801971578
Status : Not Answered
Chosen Option : --

Q.91 The value of adopted ruling gradient on a highway road is 1 in 200. Calculate the percentage of ruling gradient provided on the road.

- Ans ☒ 1. 5%
☒ 2. 0.5%
☒ 3. 2.5%
☒ 4. 1%

Question ID : 630680198293
Option 1 ID : 630680769343
Option 2 ID : 630680769345
Option 3 ID : 630680769344
Option 4 ID : 630680769346
Status : Not Answered
Chosen Option : --

Q.92 If the specific weight of a certain liquid is 5000N/m^3 , then calculate the specific volume (in m^3/N).

- Ans ☒ 1. 0.02
☒ 2. 0.0002
☒ 3. 0.002
☒ 4. 0.2

Question ID : 630680385101
Option 1 ID : 6306801501292
Option 2 ID : 6306801501290
Option 3 ID : 6306801501291
Option 4 ID : 6306801501293
Status : Answered
Chosen Option : 2

Q.93 Which estimate is prepared for administrative approval and technical sanction?

- Ans ☒ 1. Revised estimate
☒ 2. Detailed estimate
☒ 3. Supplementary estimate
☒ 4. Complete estimate

Question ID : 630680504089
Option 1 ID : 6306801969920
Option 2 ID : 6306801969917
Option 3 ID : 6306801969918
Option 4 ID : 6306801969919
Status : Answered
Chosen Option : 1

Q.94 Consider the following statements about the stability criterion of a gravity dam.
Statement I : If the force of friction is more than the force due to water pressure, the dam is safe against sliding.
Statement II : If the resultant of the weight of the dam and the horizontal force due to water pressure lies outside the base of the dam, but within h (h = height of the dam) from the face of the dam, the dam is safe against overturning.
Statement III : To avoid tension at the base of the dam, the maximum value of eccentricity is $b/6$ on either side of geometrical axis of base section. Where, b is base width of dam. Which of the given statements is/are correct?

- Ans ☒ 1. Statements I and II
☒ 2. Statement II only
☒ 3. Statements I and III
☒ 4. Statements II and III

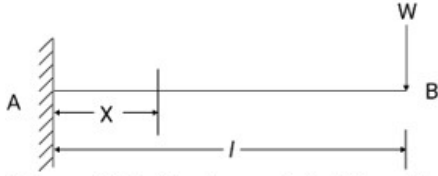
Question ID : 630680397909
Option 1 ID : 6306801551650
Option 2 ID : 6306801551653
Option 3 ID : 6306801551651
Option 4 ID : 6306801551652
Status : Not Answered
Chosen Option : --

Q.95 Due to segregation of well-mixed concrete, _____.

- Ans ☒ 1. the workability of concrete decreases
☒ 2. the strength of concrete increases
☒ 3. the durability of concrete increases
☒ 4. the permeability of concrete decreases

Question ID : 630680340614
Option 1 ID : 6306801324897
Option 2 ID : 6306801324898
Option 3 ID : 6306801324900
Option 4 ID : 6306801324899
Status : Answered
Chosen Option : 4

Q.96 Which of the following is the correct expression for slope ($\frac{dy}{dx}$) at any distance 'X' in a cantilever beam shown in the figure according to the double integration method?



Where, EI is the flexural rigidity of beam section.

- Ans
- ✓ 1. $\frac{dy}{dx} = -\frac{W}{2EI}(2lx-x^2)$
 - ✗ 2. $\frac{dy}{dx} = -\frac{W}{4EI}(2l-x)$
 - ✗ 3. $\frac{dy}{dx} = -\frac{W}{2EI}(2l-x)$
 - ✗ 4. $\frac{dy}{dx} = -\frac{W}{4EI}(2lx-x^2)$

Question ID : 630680404125

Option 1 ID : 6306801575986

Option 2 ID : 6306801575989

Option 3 ID : 6306801575988

Option 4 ID : 6306801575987

Status : Not Answered

Chosen Option : --

Q.97 All the voids of soil layer get filled with water after a heavy storm, upto a depth of 1 m from the surface. If the soil is dry below the depth of 1 m, the condition of soil upto the depth of 1 m below the surface is :

- Ans
- ✗ 1. submerged
 - ✓ 2. saturated
 - ✗ 3. capillary saturated
 - ✗ 4. dry

Question ID : 630680504522

Option 1 ID : 6306801971650

Option 2 ID : 6306801971649

Option 3 ID : 6306801971652

Option 4 ID : 6306801971651

Status : Answered

Chosen Option : 2

Q.98 Which of the following materials is used for waterproofing during the construction of foundation and for protection of the structure from seepage problems?

- Ans
- ✗ 1. Portland cement
 - ✗ 2. Furnace slag
 - ✗ 3. Plaster of Paris
 - ✓ 4. Pitch

Question ID : 630680509702

Option 1 ID : 6306801992016

Option 2 ID : 6306801992015

Option 3 ID : 6306801992013

Option 4 ID : 6306801992014

Status : Answered

Chosen Option : 3

Q.99 For a cantilever beam AB (A is fixed) of length L carrying a point load P at the free end, the slope equation obtained using double integration method is given below. Find the maximum deflection.

$$EI \frac{dy}{dx} = -P(Lx - \frac{x^2}{2})$$

E = Young's modulus

I = Moment of inertia

x is measured from the fixed end.

Ans

☒ 1. $-\frac{PL^2}{3EI}$

☒ 2. $-\frac{PL^3}{6EI}$

☒ 3. $-\frac{PL^2}{6EI}$

☒ 4. $-\frac{PL^3}{3EI}$

Question ID : 630680397936

Option 1 ID : 6306801551760

Option 2 ID : 6306801551759

Option 3 ID : 6306801551761

Option 4 ID : 6306801551758

Status : Not Answered

Chosen Option : --

Q.100 Where is lead glass commonly used in building construction?

Ans

☒ 1. False ceiling

☒ 2. Flooring works

☒ 3. Facades and windows

☒ 4. Plumbing and piping

Question ID : 630680383109

Option 1 ID : 6306801493345

Option 2 ID : 6306801493344

Option 3 ID : 6306801493343

Option 4 ID : 6306801493346

Status : Not Answered

Chosen Option : --