

## Junior Engineer Civil Mechanical and Electrical Examination 2024 Paper I

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

### Section : General Intelligence and Reasoning

**Q.1** 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.)

Pressure : Pascal

- Ans ☒ 1. Work : Joule  
☒ 2. Momentum : Newton  
☒ 3. Force : Watt  
☒ 4. Electric Current : Kelvin

Question ID : 630680565341  
Option 1 ID : 6306802210339  
Option 2 ID : 6306802210340  
Option 3 ID : 6306802210338  
Option 4 ID : 6306802210341

Status : Answered

Chosen Option : 3

**Q.2** Select the correct option that indicates the arrangement of the following words in a logical and meaningful order (in terms of food chain).

1. Grass
2. Grasshopper
3. Frog
4. Snake
5. Eagle

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

Question ID : 630680395048  
Option 1 ID : 6306801540460  
Option 2 ID : 6306801540461  
Option 3 ID : 6306801540462  
Option 4 ID : 6306801540463

Status : Answered

Chosen Option : 1

**Q.3** CEG is related to KMO in a certain way based on the English alphabetical order. In the same way, GIK is related to OQS. To which of the following is MOQ related, following the same logic?

- Ans
- ☒ 1. LNP
  - ☒ 2. BDF
  - ☒ 3. UWY
  - ☒ 4. IKM

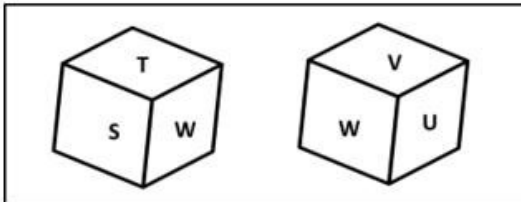
Question ID : 630680375831  
Option 1 ID : 6306801464397  
Option 2 ID : 6306801464395  
Option 3 ID : 6306801464398  
Option 4 ID : 6306801464396  
Status : Answered  
Chosen Option : 3

**Q.4** In a certain code language, 'he is right' is coded as 'ab yo km' and 'right now here' is coded as 'km gh bd'. How is 'right' coded in the given language?

- Ans
- ☒ 1. gh
  - ☒ 2. yo
  - ☒ 3. ab
  - ☒ 4. km

Question ID : 630680377685  
Option 1 ID : 6306801471802  
Option 2 ID : 6306801471800  
Option 3 ID : 6306801471799  
Option 4 ID : 6306801471801  
Status : Answered  
Chosen Option : 4

**Q.5** A dice has its faces marked by letters R, S, T, U, V and W. Two positions of the same dice are shown below. Which face is opposite to face R?



- Ans
- ☒ 1. V
  - ☒ 2. T
  - ☒ 3. W
  - ☒ 4. S

Question ID : 630680524641  
Option 1 ID : 6306802050666  
Option 2 ID : 6306802050663  
Option 3 ID : 6306802050665  
Option 4 ID : 6306802050664  
Status : Answered  
Chosen Option : 3

**Q.6** Select the set in which the numbers are related in the same way as are the numbers of the following sets.


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

(6, 18, 123)

(17, 9, 168)

Ans  1. (18, 5, 100)

 2. (14, 8, 127)

 3. (21, 7, 147)

 4. (20, 6, 94)

Question ID : 630680378065

Option 1 ID : 6306801473321

Option 2 ID : 6306801473320

Option 3 ID : 6306801473319

Option 4 ID : 6306801473322

Status : Answered

Chosen Option : 3

**Q.7** In a certain code language, 'FISH' is coded as '7913' and 'SALE' is coded as '8641'. What is the code for 'S' in the given language?

Ans  1. 3

 2. 8

 3. 4

 4. 1

Question ID : 630680376550

Option 1 ID : 6306801467268

Option 2 ID : 6306801467270

Option 3 ID : 6306801467269

Option 4 ID : 6306801467267


Status : Answered

Chosen Option : 4

**Q.8** What should come in place of the question mark (?) in the given series based on the English alphabetical order?  
LFC, IDZ, FBW, CZT, ZXQ, ?

Ans  1. UWM

 2. WVN

 3. XZR

 4. XYP

Question ID : 630680379362

Option 1 ID : 6306801478494

Option 2 ID : 6306801478491

Option 3 ID : 6306801478493

Option 4 ID : 6306801478492

Status : Answered

Chosen Option : 2

**Q.9** Seven friends S, Q, K, P, E, C and N have different ages. S is older than N but younger than E. K is older than P. Q is younger than E. C is younger than K. N is older than P. C is older than P. K is younger than Q. Which among them is the oldest?

- Ans ☒ 1. E  
☒ 2. K  
☒ 3. Q  
☒ 4. N

Question ID : 630680519093  
Option 1 ID : 6306802028834  
Option 2 ID : 6306802028832  
Option 3 ID : 6306802028833  
Option 4 ID : 6306802028835  
Status : Answered  
Chosen Option : 1

**Q.10** What will come in place of the question mark (?) in the following equation if '+' and '-' are interchanged and '×' and '÷' are interchanged?

$$42 \times 6 + 5 \div 8 - 34 = ?$$

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

Question ID : 630680376972  
Option 1 ID : 6306801468953  
Option 2 ID : 6306801468952  
Option 3 ID : 6306801468951  
Option 4 ID : 6306801468954  
Status : Answered  
Chosen Option : 4

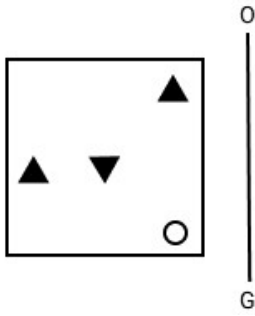
**Q.11** If '+' means 'subtraction', '-' means 'division', '÷' means 'multiplication' and '×' means 'addition', then what will come in place of the question mark (?) in the following equation?

$$30 - 5 \times 2960 \div 74 \div 4 = ?$$

- Ans ☒ 1. 2671  
☒ 2. 2670  
☒ 3. 2673  
☒ 4. 2674

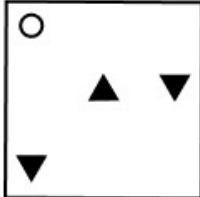
Question ID : 630680549694  
Option 1 ID : 6306802149208  
Option 2 ID : 6306802149209  
Option 3 ID : 6306802149210  
Option 4 ID : 6306802149211  
Status : Answered  
Chosen Option : 2

Q.12 Select the correct mirror image of the given figure when the mirror is placed at OG as shown below.

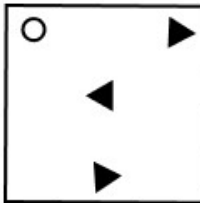


Ans

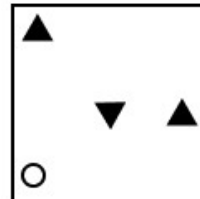
☒ 1.



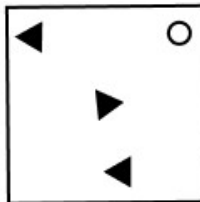
☒ 2.



☒ 3.



☒ 4.



Question ID : 630680462561

Option 1 ID : 6306801806447

Option 2 ID : 6306801806448

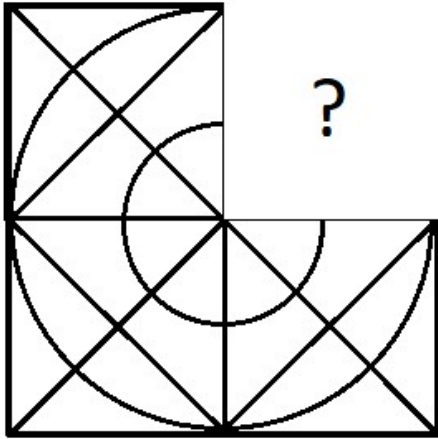
Option 3 ID : 6306801806449

Option 4 ID : 6306801806450

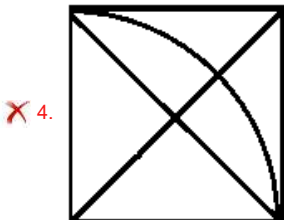
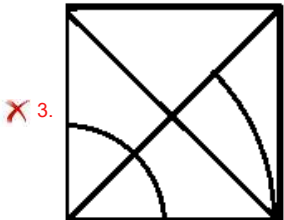
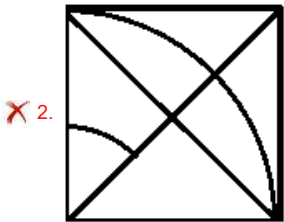
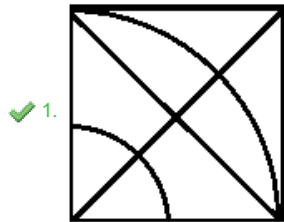
Status : Answered

Chosen Option : 3

Q.13 Select the option figure that will replace the question mark (?) in the figure given below to complete the pattern.



Ans



Question ID : 630680525512

Option 1 ID : 6306802054133

Option 2 ID : 6306802054135

Option 3 ID : 6306802054132

Option 4 ID : 6306802054134

Status : Answered

Chosen Option : 1

Q.14 What should come in place of the question mark (?) in the given series based on the English alphabetical order?  
FZP, DYU, BXZ, ZWE, ?

- Ans
- ☒ 1. YOU
  - ☒ 2. ZUM
  - ☒ 3. XVJ
  - ☒ 4. YWN

Question ID : 630680386937  
Option 1 ID : 6306801508461  
Option 2 ID : 6306801508459  
Option 3 ID : 6306801508460  
Option 4 ID : 6306801508458  
Status : Answered  
Chosen Option : 3

Q.15 PTOS is related to NRMQ in a certain way based on the English alphabetical order. In the same way, JNIM is related to HLGK. To which of the following is QUPT related, following the same logic?

- Ans
- ☒ 1. SORN
  - ☒ 2. SONR
  - ☒ 3. OSNR
  - ☒ 4. OSRN

Question ID : 630680376570  
Option 1 ID : 6306801467347  
Option 2 ID : 6306801467348  
Option 3 ID : 6306801467349  
Option 4 ID : 6306801467350  
Status : Answered  
Chosen Option : 3

Q.16 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



- Ans
- ☒ 1. M 7 % Y G
  - ☒ 2. W 7 % Y G
  - ☒ 3. M 7 % Y G
  - ☒ 4. M 7 % Y G

Question ID : 630680456653  
Option 1 ID : 6306801783575  
Option 2 ID : 6306801783576  
Option 3 ID : 6306801783577  
Option 4 ID : 6306801783578  
Status : Answered  
Chosen Option : 2

**Q.17** What should come in place of the question mark (?) in the given series based on the English alphabetical order  
PRT, LNP, HJL, DFH, ?

- Ans ☒ 1. ZBD  
☐ 2. YBD  
☐ 3. ZAD  
☐ 4. YAD

Question ID : 630680376903  
Option 1 ID : 6306801468676  
Option 2 ID : 6306801468678  
Option 3 ID : 6306801468675  
Option 4 ID : 6306801468677  
Status : Answered  
Chosen Option : 1

**Q.18** 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.)  
(16, 9, 14)  
(33, 11, 44)

- Ans ☐ 1. (22, 6, 30)  
☒ 2. (18, 7, 22)  
☐ 3. (17, 4, 22)  
☐ 4. (41, 23, 25)

Question ID : 630680376815  
Option 1 ID : 6306801468324  
Option 2 ID : 6306801468323  
Option 3 ID : 6306801468326  
Option 4 ID : 6306801468325  
Status : Answered  
Chosen Option : 2

**Q.19** What will come in place of the question mark (?) in the following equation if '+' and '-' are interchanged and 'x' and '÷' are interchanged?  
 $55 \times 5 - 3 \div 6 + 12 = ?$

- Ans ☐ 1. 21  
☐ 2. 15  
☒ 3. 17  
☐ 4. 13

Question ID : 630680376797  
Option 1 ID : 6306801468254  
Option 2 ID : 6306801468252  
Option 3 ID : 6306801468253  
Option 4 ID : 6306801468251  
Status : Answered  
Chosen Option : 3



**Q.20** Dilip starts from point A and drives 6 km towards the North. He then takes a right turn and drives 2 km. He then takes a left turn and drives 3 km. He then takes a left turn and drives 7 km. He takes a final left turn and drives 9 km to reach point B. How far (shortest distance) and towards which direction should he drive in order to reach Point A again? (All turns are 90 degrees turns only unless specified)

- Ans ☒ 1. 5 km East  
☐ 2. 3 km East  
☐ 3. 5 km West  
☐ 4. 6 km West

Question ID : 630680376854  
Option 1 ID : 6306801468481  
Option 2 ID : 6306801468479  
Option 3 ID : 6306801468482  
Option 4 ID : 6306801468480  
Status : Answered  
Chosen Option : 1

**Q.21** The position(s) of how many letters will remain unchanged if each of the letters in the word PLANKED is arranged in the English alphabetical order?

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

Question ID : 630680396642  
Option 1 ID : 6306801546660  
Option 2 ID : 6306801546661  
Option 3 ID : 6306801546662  
Option 4 ID : 6306801546663  
Status : Answered  
Chosen Option : 2

**Q.22** P, Q, R, S, T, U and V are sitting around a circular table facing the centre (not necessarily in the same order). P is sitting to the immediate left of V. R is sitting to the immediate right of T. U is sitting to the immediate left of P and immediate right of S. Q is sitting to the immediate left of S. T is sitting to the immediate right of V. Who is sitting to the immediate left of Q?

- Ans ☐ 1. P  
☒ 2. R  
☐ 3. V  
☐ 4. U

Question ID : 630680377011  
Option 1 ID : 6306801469108  
Option 2 ID : 6306801469109  
Option 3 ID : 6306801469110  
Option 4 ID : 6306801469107  
Status : Answered  
Chosen Option : 2

**Q.23** Select the option in which the numbers share the same relationship as that shared by the given number triads.

9-5-1

14-10-6

(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. 21-16-14

☒ 2. 25-21-19

☒ 3. 30-28-26

☒ 4. 20-16-12

Question ID : 630680387175

Option 1 ID : 6306801509395

Option 2 ID : 6306801509396

Option 3 ID : 6306801509397

Option 4 ID : 6306801509394

Status : Answered

Chosen Option : 4

**Q.24** CE 13 is related to GI 19 in a certain way. In the same way, KM 19 is related to OQ 25. To which of the following is SU 17 related, following the same logic?

Ans ☒ 1. YZ 23

☒ 2. LI 23

☒ 3. WY 23

☒ 4. MP 21

Question ID : 630680376956

Option 1 ID : 6306801468887

Option 2 ID : 6306801468890

Option 3 ID : 6306801468888

Option 4 ID : 6306801468889

Status : Answered

Chosen Option : 3

**Q.25** In a certain code language,

A @ B means 'A is the mother of B'

A – B means 'A is the brother of B'

A % B means 'A is the son of B'

A ÷ B means 'A is the father of B'

Based on the above, how is E related to M if 'E % F ÷ G – H @ M'?

Ans ☒ 1. Mother's father

☒ 2. Mother's brother

☒ 3. Brother

☒ 4. Father

Question ID : 630680376958

Option 1 ID : 6306801468896

Option 2 ID : 6306801468897

Option 3 ID : 6306801468898

Option 4 ID : 6306801468895

Status : Answered

Chosen Option : 2

**Q.26** What should come in place of the question mark (?) in the given series based on the English alphabetical order?  
VUR, TSP, RQN, POL, ?

- Ans ☒ 1. MLI  
☒ 2. NMK  
☒ 3. NMJ  
☒ 4. MLK

Question ID : 630680379934  
Option 1 ID : 6306801480771  
Option 2 ID : 6306801480774  
Option 3 ID : 6306801480772  
Option 4 ID : 6306801480773  
Status : Answered  
Chosen Option : 3

**Q.27** Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.  
1. State  
2. Village  
3. District  
4. Nation  
5. House

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

Question ID : 630680565837  
Option 1 ID : 6306802212300  
Option 2 ID : 6306802212301  
Option 3 ID : 6306802212303  
Option 4 ID : 6306802212302  
Status : Answered  
Chosen Option : 2

**Q.28** 'UV 4' is related to 'WX 16' in a certain way based on the English alphabetical and numerical order. In the same way, 'PQ 3' is related to 'RS 9'. To which of the following is 'AB 5' related following the same logic?

- Ans ☒ 1. CD 10  
☒ 2. AC 25  
☒ 3. CE 25  
☒ 4. CD 25

Question ID : 630680377765  
Option 1 ID : 6306801472119  
Option 2 ID : 6306801472122  
Option 3 ID : 6306801472121  
Option 4 ID : 6306801472120  
Status : Answered  
Chosen Option : 4

**Q.29** 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 phones are tablets. Some tablets are laptops.

Conclusion 1: Some laptops are phones.

Conclusion 2: No phone is a laptop.

Ans  1. Both conclusion (1) and conclusion (2) follow

 2. Only conclusion (2) follows

 3. Only conclusion (1) follows

 4. None of the conclusions follow

Question ID : 630680381549

Option 1 ID : 6306801487129

Option 2 ID : 6306801487128

Option 3 ID : 6306801487127

Option 4 ID : 6306801487130

Status : Answered

Chosen Option : 4

**Q.30** In a certain code language, 'DYO' is coded as '44' and 'PDX' is coded as '44'. What is the code for 'ZMB' in the given language?

Ans  1. 48

 2. 56

 3. 52

 4. 41

Question ID : 630680390912

Option 1 ID : 6306801524065

Option 2 ID : 6306801524064

Option 3 ID : 6306801524063

Option 4 ID : 6306801524062

Status : Answered

Chosen Option : 4

**Q.31** What should come in place of the question mark (?) in the given series?  
54, 43, 33, 24, 16, ?

Ans  1. 8

 2. 6

 3. 11

 4. 9

Question ID : 630680380559

Option 1 ID : 6306801483226

Option 2 ID : 6306801483223

Option 3 ID : 6306801483224

Option 4 ID : 6306801483225

Status : Answered

Chosen Option : 4

Q.32 In a certain code language,  
'A + B' means 'A is the husband of B',  
'A - B' means 'A is the wife of B',  
'A × B' means 'A is the father of B', and  
'A ÷ B' means 'A is the sister of B'.  
How is P related to T if 'P - Q × R ÷ S + T'?

- Ans ☐ 1. Father's mother  
☒ 2. Husband's mother  
☐ 3. Brother's wife  
☐ 4. Son's wife

Question ID : 630680377457  
Option 1 ID : 6306801470893  
Option 2 ID : 6306801470894  
Option 3 ID : 6306801470892  
Option 4 ID : 6306801470891  
Status : Answered  
Chosen Option : 2

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

CGPY, KOXG, SWFO, AENW, ?

- Ans ☒ 1. IMVE  
☐ 2. IVEB  
☐ 3. IMNJ  
☐ 4. IKJU

Question ID : 630680469533  
Option 1 ID : 6306801833899  
Option 2 ID : 6306801833900  
Option 3 ID : 6306801833901  
Option 4 ID : 6306801833902  
Status : Answered  
Chosen Option : 1

Q.34 PUQT is related to RWSV in a certain way based on the English alphabetical order. In the same way, SXTW is related to UZVY. To which of the following is KPLO related, following the same logic?

- Ans ☐ 1. NRMQ  
☒ 2. MRNQ  
☐ 3. MRNP  
☐ 4. NRQM


Question ID : 630680379504  
Option 1 ID : 6306801479060  
Option 2 ID : 6306801479062  
Option 3 ID : 6306801479061  
Option 4 ID : 6306801479059  
Status : Answered  
Chosen Option : 3

**Q.35** 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.)

(218, 121, 97)

(254, 138, 116)

Ans  1. (267, 118, 129)

 2. (312, 194, 128)

 3. (296, 147, 156)

 4. (325, 184, 141)

Question ID : 630680392059

Option 1 ID : 6306801528612

Option 2 ID : 6306801528613

Option 3 ID : 6306801528611

Option 4 ID : 6306801528610

Status : Answered

Chosen Option : 4

**Q.36** 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: All plants are rocks. All rocks are lakes. No lake is a kite.

Conclusions:

(I) No rock is a kite.

(II) At least some lakes are plants.

Ans  1. Only conclusion (II) follows.

 2. Both conclusions (I) and (II) follow.

 3. Neither conclusion (I) nor (II) follows.

 4. Only conclusion (I) follows.

Question ID : 630680376862

Option 1 ID : 6306801468512

Option 2 ID : 6306801468514

Option 3 ID : 6306801468513

Option 4 ID : 6306801468511

Status : Answered

Chosen Option : 4

**Q.37** What should come in place of the question mark (?) in the given series based on the English alphabetical order?  
NTZ, LRX, JPV, HNT, ?

Ans  1. FMR

 2. GLR

 3. GLN

 4. FLR

Question ID : 630680376691

Option 1 ID : 6306801467829

Option 2 ID : 6306801467828

Option 3 ID : 6306801467830

Option 4 ID : 6306801467827

Status : Answered

Chosen Option : 4

**Q.38** 'TOUR' is related to 'VQWT' in a certain way based on the English alphabetical order. In the same way, 'QLRO' is related to 'SNTQ'. To which of the following is 'MHNK' related following the same logic?

- Ans
- ☒ 1. OJMP
  - ☒ 2. JOPM
  - ☒ 3. JOMP
  - ☒ 4. OJPM

Question ID : **630680387671**

Option 1 ID : **6306801511334**

Option 2 ID : **6306801511337**

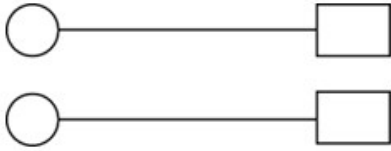
Option 3 ID : **6306801511336**

Option 4 ID : **6306801511335**

Status : **Answered**

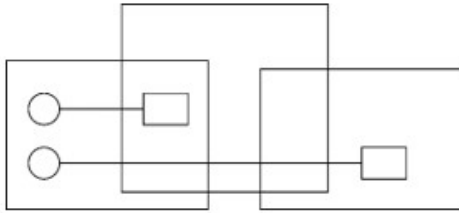
Chosen Option : **4**

Q.39 Select the option in which the given figure is embedded (rotation is NOT allowed).

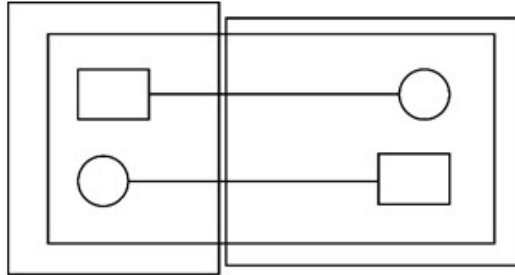


Ans

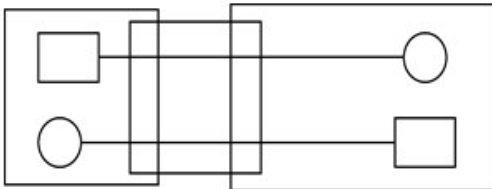
✗ 1.



✗ 2.



✗ 3.



✓ 4.



Question ID : 630680524583

Option 1 ID : 6306802050434

Option 2 ID : 6306802050431

Option 3 ID : 6306802050433

Option 4 ID : 6306802050432

Status : Answered

Chosen Option : 4



**Q.40** What should come in place of the question mark (?) in the given series?  
44, 48, 52, 56, 60, 64, ?

Ans ☒ 1. 68

☐ 2. 72

☐ 3. 70

☐ 4. 66

Question ID : 630680380563

Option 1 ID : 6306801483240

Option 2 ID : 6306801483241

Option 3 ID : 6306801483242

Option 4 ID : 6306801483239

Status : Answered

Chosen Option : 1

**Q.41** A, B, C, D, P, Q, and R are sitting around a circular table, facing the centre (not necessarily in the same order). Only three people sit between D and R when counted from the right of R. B is an immediate neighbour of both R and Q. P sits second to the left of D. C is not an immediate neighbour of D. Who is sitting third to the right of R?

Ans ☐ 1. C

☒ 2. A

☐ 3. P

☐ 4. Q

Question ID : 630680376654

Option 1 ID : 6306801467682

Option 2 ID : 6306801467679

Option 3 ID : 6306801467681

Option 4 ID : 6306801467680

Status : Answered

Chosen Option : 2

**Q.42** 123 is related to 223 following a certain logic. Following the same logic, 465 is related to 565. To which of the following is 786 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. 686

☐ 2. 786

☒ 3. 886

☐ 4. 986

Question ID : 630680397504

Option 1 ID : 6306801549934

Option 2 ID : 6306801549935

Option 3 ID : 6306801549936

Option 4 ID : 6306801549937

Status : Answered

Chosen Option : 3

**Q.43** Pillar P is to the west of Pillar Q. Pillar R is to the east of Pillar Q. Pillar T is to the north of Pillar R. Pillar U is to the south of Pillar R. What is the position of Pillar Q with respect to Pillar U?

**Ans**  1. South-West

 2. South

 3. North

 4. North-West

Question ID : **630680382479**

Option 1 ID : **6306801490834**

Option 2 ID : **6306801490833**

Option 3 ID : **6306801490831**

Option 4 ID : **6306801490832**

Status : **Answered**

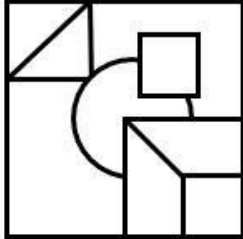
Chosen Option : **4**

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

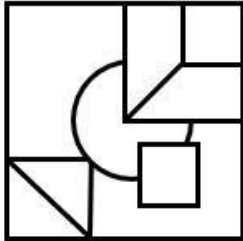


Ans

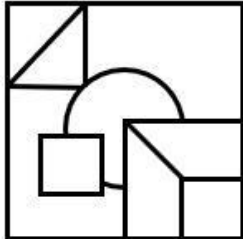
✗ 1.



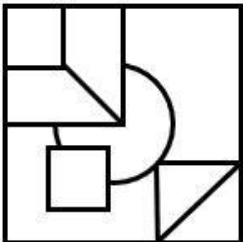
✗ 2.



✓ 3.



✗ 4.



Question ID : 630680524477

Option 1 ID : 6306802050008

Option 2 ID : 6306802050007

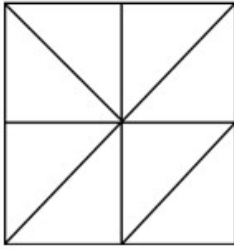
Option 3 ID : 6306802050009

Option 4 ID : 6306802050010

Status : Answered

Chosen Option : 3

Q.45 How many triangles are there in the given figure?



- Ans
- ☒ 1. 11
  - ☒ 2. 14
  - ☒ 3. 12
  - ☒ 4. 13

Question ID : 630680524412  
Option 1 ID : 6306802049747  
Option 2 ID : 6306802049750  
Option 3 ID : 6306802049748  
Option 4 ID : 6306802049749  
Status : Answered

Chosen Option : 3

Q.46 152 is related to 19 following a certain logic. Following the same logic, 232 is related to 29. To which of the following is 392 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/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.)

- Ans
- ☒ 1. 49
  - ☒ 2. 47
  - ☒ 3. 46
  - ☒ 4. 48

Question ID : 630680396907  
Option 1 ID : 6306801547699  
Option 2 ID : 6306801547697  
Option 3 ID : 6306801547696  
Option 4 ID : 6306801547698  
Status : Answered

Chosen Option : 1

Q.47 What will come in place of the question mark (?) in the following equation if '+' and '-' are interchanged and 'x' and '÷' are interchanged?  
 $4 \div 5 + 21 \times 3 - 2 = ?$

- Ans
- ☒ 1. 15
  - ☒ 2. 17
  - ☒ 3. 14
  - ☒ 4. 12

Question ID : 630680377835  
Option 1 ID : 6306801472401  
Option 2 ID : 6306801472402  
Option 3 ID : 6306801472400  
Option 4 ID : 6306801472399  
Status : Answered

Chosen Option : 1

**Q.48** In a certain code language, 'BOIL' is coded as '6428' and 'LEAD' is coded as '9671'.  
What is the code for 'L' in that language?

- Ans ☒ 1. 8  
☒ 2. 6  
☒ 3. 9  
☒ 4. 1

Question ID : 630680376704  
Option 1 ID : 6306801467880  
Option 2 ID : 6306801467879  
Option 3 ID : 6306801467881  
Option 4 ID : 6306801467882  
Status : Answered  
Chosen Option : 3

**Q.49** The position(s) of how many letters will remain unchanged if each of the letters in the word SMOTHER is arranged in the English alphabetical order?

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

Question ID : 630680396638  
Option 1 ID : 6306801546648  
Option 2 ID : 6306801546649  
Option 3 ID : 6306801546650  
Option 4 ID : 6306801546651  
Status : Answered  
Chosen Option : 3

**Q.50** What should come in place of the question mark (?) in the following series?

11, 17, 29, 47, 71, ?

- Ans ☒ 1. 100  
☒ 2. 99  
☒ 3. 101  
☒ 4. 102

Question ID : 630680386611  
Option 1 ID : 6306801507155  
Option 2 ID : 6306801507154  
Option 3 ID : 6306801507156  
Option 4 ID : 6306801507157  
Status : Answered  
Chosen Option : 3

Section : General Awareness

Q.1 Which of the following sentence/s is/are NOT correct?

- i. The detailed estimates of revenue receipts are usually presented in the finance bill.
- ii. Non-tax revenue of the central government mainly consists of taxes imposed on goods imported into and exported out of India.
- iii. Revenue receipts are redeemable.

Ans ☒ 1. Only i  
☒ 2. i and ii  
☒ 3. ii and iii  
☒ 4. i and iii

Question ID : 630680401267  
Option 1 ID : 6306801564873  
Option 2 ID : 6306801564874  
Option 3 ID : 6306801564875  
Option 4 ID : 6306801564876  
Status : Answered  
Chosen Option : 2

Q.2 Sahel is an area in Africa that has lost a huge area of productive land in the last century due to excessive human activities and climate change. This area is a blaring example of \_\_\_\_\_.

Ans ☒ 1. pollution  
☒ 2. endangering species  
☒ 3. desertification  
☒ 4. failed Irrigation

Question ID : 630680539286  
Option 1 ID : 6306802108287  
Option 2 ID : 6306802108286  
Option 3 ID : 6306802108284  
Option 4 ID : 6306802108285  
Status : Answered  
Chosen Option : 3

Q.3 Sangeet Natak Akademi awardee, Prabhat Sarma from Assam was an eminent player of which of the following musical instruments?

Ans ☒ 1. Sarangi  
☒ 2. Flute  
☒ 3. Tabla  
☒ 4. Sarod

Question ID : 630680415789  
Option 1 ID : 6306801621907  
Option 2 ID : 6306801621908  
Option 3 ID : 6306801621909  
Option 4 ID : 6306801621910  
Status : Not Answered  
Chosen Option : --

**Q.4** What is the frequency of an object if we know that it oscillates 100 times in 5 seconds?

- Ans
- ☐ 1. 200 Hz
  - ☐ 2. 100 Hz
  - ☐ 3. 50 Hz
  - ☒ 4. 20 Hz

Question ID : 630680539097  
Option 1 ID : 6306802107555  
Option 2 ID : 6306802107552  
Option 3 ID : 6306802107553  
Option 4 ID : 6306802107554  
Status : Answered  
Chosen Option : 4

**Q.5** In the context of internet access, Wi-Fi stands for \_\_\_\_\_.

- Ans
- ☐ 1. Wired Fidelity
  - ☒ 2. Wireless Fidelity
  - ☐ 3. Wideband Fibre
  - ☐ 4. Web Interface

Question ID : 630680572059  
Option 1 ID : 6306802237100  
Option 2 ID : 6306802237101  
Option 3 ID : 6306802237102  
Option 4 ID : 6306802237103  
Status : Answered  
Chosen Option : 2

**Q.6** As per newest notification of december 2023, the decennial Census of India to be delayed till at least \_\_\_\_\_.

- Ans
- ☐ 1. January 2024
  - ☒ 2. October 2024
  - ☐ 3. March 2024
  - ☐ 4. July 2024

Question ID : 630680513813  
Option 1 ID : 6306802007878  
Option 2 ID : 6306802007880  
Option 3 ID : 6306802007877  
Option 4 ID : 6306802007879  
Status : Answered  
Chosen Option : 2

**Q.7** Which of the following fundamental rights has been amended as a constitutional right in the form of Article 300A in the new Chapter IV Part XII of the Indian Constitution?

- Ans
- ☐ 1. Cultural and Educational Rights
  - ☐ 2. Right to Freedom of Religion
  - ☐ 3. Right against Exploitation
  - ☒ 4. Right to Property

Question ID : 630680493493  
Option 1 ID : 6306801927711  
Option 2 ID : 6306801927712  
Option 3 ID : 6306801927713  
Option 4 ID : 6306801927714  
Status : Answered  
Chosen Option : 4

**Q.8 Otto von Guericke was the most prominent person known for which invention in the 17<sup>th</sup> century?**

- Ans ☒ 1. Diesel engine  
☒ 2. Fluorescent electric lamp  
☒ 3. Air pump  
☒ 4. Barometer

Question ID : 630680402106  
Option 1 ID : 6306801568113  
Option 2 ID : 6306801568112  
Option 3 ID : 6306801568114  
Option 4 ID : 6306801568115  
Status : Answered  
Chosen Option : 3

**Q.9 Which of the following statements about the Rajasthan Minimum Guaranteed Income Bill 2023 is INCORRECT?**

- Ans ☒ 1. The bill promises 125 days of work a year for all families in the state.  
☒ 2. The bill guarantees a minimum pension of ₹1,000 per month to the elderly, specially abled, widows and single women.  
☒ 3. The minimum pension under the bill will increase by 15% every year.  
☒ 4. The bill offers free education to all residents of Rajasthan.

Question ID : 630680469603  
Option 1 ID : 6306801834175  
Option 2 ID : 6306801834176  
Option 3 ID : 6306801834177  
Option 4 ID : 6306801834178  
Status : Answered  
Chosen Option : 3

**Q.10 What is the name of the scheme announced by Arunachal Pradesh Chief Minister Pema Khandu in September 2023 for the welfare of the state's labour force?**

- Ans ☒ 1. Mukhya Mantri Shramik Suraksha Yojana  
☒ 2. Arunachal Shramik Vikas Yojana  
☒ 3. Labor Welfare Samridhi Yojana  
☒ 4. Mukhya Mantri Shramik Kalyan Yojana

Question ID : 630680469539  
Option 1 ID : 6306801833923  
Option 2 ID : 6306801833924  
Option 3 ID : 6306801833925  
Option 4 ID : 6306801833926  
Status : Not Answered  
Chosen Option : --



**Q.11 What is a small, shallow freshwater body with calm water called?**

- Ans ☒ 1. Lagoon  
☒ 2. Pond  
☒ 3. Lake  
☒ 4. River

Question ID : 630680546839  
Option 1 ID : 6306802137926  
Option 2 ID : 6306802137925  
Option 3 ID : 6306802137923  
Option 4 ID : 6306802137924  
Status : Answered  
Chosen Option : 2

**Q.12 Who has been appointed as India's first Woman Aide-De-Camp by the governor of Mizoram?**

- Ans ☒ 1. Abhilipsa Mohanty  
☒ 2. Poonam Veeram  
☒ 3. Deepa Shah  
☒ 4. Manisha Padhi

Question ID : 630680629440  
Option 1 ID : 6306802463830  
Option 2 ID : 6306802463831  
Option 3 ID : 6306802463832  
Option 4 ID : 6306802463833  
Status : Not Answered  
Chosen Option : --

**Q.13 What is the primary function of carbohydrates in the body?**

- Ans ☒ 1. To build muscle  
☒ 2. To enhance vision  
☒ 3. To regulate metabolism  
☒ 4. To provide energy

Question ID : 630680701425  
Option 1 ID : 6306802747638  
Option 2 ID : 6306802747640  
Option 3 ID : 6306802747639  
Option 4 ID : 6306802747637  
Status : Answered  
Chosen Option : 4

**Q.14 The enzyme that is essential for fat digestion is:**

- Ans ☒ 1. lipase  
☒ 2. zymase  
☒ 3. trypsin  
☒ 4. invertase

Question ID : 630680544735  
Option 1 ID : 6306802129703  
Option 2 ID : 6306802129705  
Option 3 ID : 6306802129702  
Option 4 ID : 6306802129704  
Status : Answered  
Chosen Option : 4

**Q.15 Mahatma Gandhi gave the slogan of 'Do or Die' during the \_\_\_\_\_.**

- Ans** ☒ 1. Non-Cooperation Movement  
☒ 2. Quit India Movement  
☒ 3. Kheda Satyagraha  
☒ 4. Champaran Satyagraha

Question ID : 630680572371  
Option 1 ID : 6306802238324  
Option 2 ID : 6306802238325  
Option 3 ID : 6306802238326  
Option 4 ID : 6306802238327  
Status : Answered  
Chosen Option : 2

**Q.16 What is the process by which one organism captures and consumes another organism called?**

- Ans** ☒ 1. Mutualism  
☒ 2. Competition  
☒ 3. Predation  
☒ 4. Parasitism

Question ID : 630680412056  
Option 1 ID : 6306801607059  
Option 2 ID : 6306801607060  
Option 3 ID : 6306801607061  
Option 4 ID : 6306801607062  
Status : Answered  
Chosen Option : 3

**Q.17 Which months are known for the season of retreating monsoon in India?**

- Ans** ☒ 1. October and November  
☒ 2. March and April  
☒ 3. May and June  
☒ 4. January and February

Question ID : 630680511027  
Option 1 ID : 6306801997240  
Option 2 ID : 6306801997241  
Option 3 ID : 6306801997238  
Option 4 ID : 6306801997239  
Status : Answered  
Chosen Option : 3

**Q.18 Under the Regulating Act of 1773, the Supreme Court was established by British Emperor in which of the following cities in British India?**

- Ans** ☒ 1. Bombay  
☒ 2. Madras  
☒ 3. Calcutta  
☒ 4. Delhi

Question ID : 630680511585  
Option 1 ID : 6306801999464  
Option 2 ID : 6306801999465  
Option 3 ID : 6306801999463  
Option 4 ID : 6306801999462  
Status : Answered  
Chosen Option : 3

**Q.19 Which system of India is based on the Westminster model?**

**Ans** ✓ 1. Indian Parliamentary system

- ✗ 2. Welfare State system
- ✗ 3. Federal system
- ✗ 4. Strong Centre system

Question ID : 630680426502

Option 1 ID : 6306801664094

Option 2 ID : 6306801664095

Option 3 ID : 6306801664096

Option 4 ID : 6306801664097

Status : Not Answered

Chosen Option : --

**Q.20 By what name is Vitamin B1 known which is essential for glucose metabolism and healthy nerve, muscle and heart function?**

**Ans** ✓ 1. Thiamin

- ✗ 2. Riboflavin
- ✗ 3. Niacin
- ✗ 4. Pantothenic acid

Question ID : 630680404157

Option 1 ID : 6306801576114

Option 2 ID : 6306801576115

Option 3 ID : 6306801576116

Option 4 ID : 6306801576117

Status : Answered

Chosen Option : 1

**Q.21 When did the Indigo Revolt of Bengal take place?**

**Ans** ✓ 1. 1859 C.E.

- ✗ 2. 1855 C.E.
- ✗ 3. 1852 C.E.
- ✗ 4. 1857 C.E.

Question ID : 630680511557

Option 1 ID : 6306801999353

Option 2 ID : 6306801999351

Option 3 ID : 6306801999350

Option 4 ID : 6306801999352

Status : Not Answered

Chosen Option : --

**Q.22 Which of the following steps can be taken to mitigate landslides?**

- A. Settlements to be avoided in identified landslide-prone areas
- B. Cutting of unnecessary trees and vegetation
- C. Building strong walls
- D. Not constructing drainage systems to avoid constructions

**Ans** ☒ 1. A and C

☒ 2. A and B

☒ 3. Only B and D

☒ 4. B, C and D

Question ID : 630680546832

Option 1 ID : 6306802137895

Option 2 ID : 6306802137897

Option 3 ID : 6306802137896

Option 4 ID : 6306802137898

Status : Answered

Chosen Option : 1

**Q.23 The 'Rajya Sangeeta Vidwan' award is conferred by which state?**

**Ans** ☒ 1. Tamil Nadu

☒ 2. Kerala

☒ 3. Andhra Pradesh

☒ 4. Karnataka

Question ID : 630680451218

Option 1 ID : 6306801761971

Option 2 ID : 6306801761970

Option 3 ID : 6306801761972

Option 4 ID : 6306801761973

Status : Not Answered

Chosen Option : --

**Q.24 If an atom has atomic number = 6 and number of neutrons = 10, then what is the atomic mass of the atom?**

**Ans** ☒ 1. 4

☒ 2. 16

☒ 3. 10

☒ 4. 6

Question ID : 630680401911

Option 1 ID : 6306801567390

Option 2 ID : 6306801567391

Option 3 ID : 6306801567392

Option 4 ID : 6306801567393

Status : Answered

Chosen Option : 2

**Q.25** The basophilic nucleoprotein granules that are scattered within the cytoplasm of a nerve cell and helps in the protein synthesis are known as:

Ans ☒ 1. Nissl bodies

☒ 2. Subunit of Parson

☒ 3. Oxisome

☒ 4. Golgi bodies

Question ID : 630680399223

Option 1 ID : 6306801556839

Option 2 ID : 6306801556840

Option 3 ID : 6306801556841

Option 4 ID : 6306801556842

Status : Not Answered

Chosen Option : --

**Q.26** How many items did the Swaran Singh Committee recommend to be incorporated in the Constitution of India as duties of the Indian citizen?

Ans ☒ 1. 8

☒ 2. 12

☒ 3. 6

☒ 4. 10

Question ID : 630680804336

Option 1 ID : 6306803151076

Option 2 ID : 6306803151078

Option 3 ID : 6306803151075

Option 4 ID : 6306803151077

Status : Not Answered

Chosen Option : --

**Q.27** Which disease is characterised by the body's inability to regulate blood sugar levels?

Ans ☒ 1. Hypertension

☒ 2. Asthma

☒ 3. Arthritis

☒ 4. Diabetes

Question ID : 630680701422

Option 1 ID : 6306802747627

Option 2 ID : 6306802747626

Option 3 ID : 6306802747625

Option 4 ID : 6306802747628

Status : Answered

Chosen Option : 4

**Q.28** Who was re-appointed as the Solicitor General of India for a term of three years starting from 1 July 2023?

Ans ☒ 1. Suryaprakash V Raju

☒ 2. Tushar Mehta

☒ 3. Chetan Sharma

☒ 4. Vikramjit Banerjee

Question ID : 630680412698

Option 1 ID : 6306801609615

Option 2 ID : 6306801609616

Option 3 ID : 6306801609617

Option 4 ID : 6306801609618

Status : Answered

Chosen Option : 2

**Q.29** What is the name of project undertaken by the Indian Government to conserve tigers when their population dwindled to very low numbers?

- Ans
- ☐ 1. Animal Protection
  - ☒ 2. Project Tiger
  - ☐ 3. Predator Project
  - ☐ 4. Wildlife Conservation Project

Question ID : 630680539337  
Option 1 ID : 6306802108478  
Option 2 ID : 6306802108477  
Option 3 ID : 6306802108479  
Option 4 ID : 6306802108476  
Status : Answered  
Chosen Option : 2

**Q.30** Which of the following pairs is NOT correctly matched?

- Ans
- ☒ 1. FIFA World Cup Football 2022 – Japan
  - ☐ 2. Olympics 2020 – Tokyo
  - ☐ 3. FIH Men Hockey World Cup 2023 – India
  - ☐ 4. Commonwealth Games 2022 – England

Question ID : 630680510860  
Option 1 ID : 6306801996572  
Option 2 ID : 6306801996571  
Option 3 ID : 6306801996573  
Option 4 ID : 6306801996570  
Status : Answered  
Chosen Option : 3

**Q.31** PT Usha clocked a timing of 55.42 sec in 400-metre hurdles at which of the following Olympic Games?

- Ans
- ☐ 1. 1980 Moscow
  - ☒ 2. 1984 Los Angeles
  - ☐ 3. 1948 London
  - ☐ 4. 1956 Melbourne

Question ID : 630680436001  
Option 1 ID : 6306801701953  
Option 2 ID : 6306801701954  
Option 3 ID : 6306801701955  
Option 4 ID : 6306801701956  
Status : Not Answered  
Chosen Option : --

**Q.32** What is the freezing point of water on the Celsius scale?

- Ans
- ☐ 1. 32°C
  - ☐ 2. 100°C
  - ☐ 3. 98°C
  - ☒ 4. 0°C

Question ID : 630680407794  
Option 1 ID : 6306801590115  
Option 2 ID : 6306801590114  
Option 3 ID : 6306801590117  
Option 4 ID : 6306801590116  
Status : Answered  
Chosen Option : 4

**Q.33** The supreme court has published new guidelines for which designation on 17 July 2023?

- Ans
- ☐ 1. District Judge
  - ☒ 2. Senior Advocate
  - ☐ 3. Judicial Magistrate
  - ☐ 4. Additional Senior Civil Judge

Question ID : 630680411234  
Option 1 ID : 6306801603688  
Option 2 ID : 6306801603689  
Option 3 ID : 6306801603690  
Option 4 ID : 6306801603691  
Status : Answered  
Chosen Option : 3

**Q.34** Which of the following options is used to check the spelling and grammar in a Microsoft Word document?

- Ans
- ☒ 1. Review tab
  - ☐ 2. Home tab
  - ☐ 3. Insert tab
  - ☐ 4. Format tab

Question ID : 630680577721  
Option 1 ID : 6306802259728  
Option 2 ID : 6306802259729  
Option 3 ID : 6306802259730  
Option 4 ID : 6306802259731  
Status : Answered  
Chosen Option : 1

**Q.35** According to Census of India 2011, what is the population growth rate in the Hindu community?

- Ans
- ☐ 1. 8.3%
  - ☐ 2. 24.9%
  - ☒ 3. 16.8%
  - ☐ 4. 30.2%

Question ID : 630680477719  
Option 1 ID : 6306801866024  
Option 2 ID : 6306801866025  
Option 3 ID : 6306801866026  
Option 4 ID : 6306801866027  
Status : Answered  
Chosen Option : 1

**Q.36** If the meat is cooked above 140°C, which of the following reactions occurs?

- Ans ☒ 1. Emulsification  
☒ 2. Oxidation reaction  
☒ 3. Maillard reaction  
☒ 4. Caramelisation

Question ID : 630680401856  
Option 1 ID : 6306801567196  
Option 2 ID : 6306801567197  
Option 3 ID : 6306801567194  
Option 4 ID : 6306801567195  
Status : Answered  
Chosen Option : 3

**Q.37** Which of the following lakes is located in Buldhana district of Maharashtra?

- Ans ☒ 1. Dal  
☒ 2. Bhimtal  
☒ 3. Lonar  
☒ 4. Pushkar

Question ID : 630680510950  
Option 1 ID : 6306801996931  
Option 2 ID : 6306801996932  
Option 3 ID : 6306801996930  
Option 4 ID : 6306801996933  
Status : Answered  
Chosen Option : 3

**Q.38** Who was the chairman of the task force on the production and promotion of biofertilizers constituted by NITI Aayog in 2021?

- Ans ☒ 1. Prof. Ramesh Chand  
☒ 2. Prof. Suresh Pal  
☒ 3. Prof. Vijay P Sharma  
☒ 4. Prof. Gopal Naik

Question ID : 630680488132  
Option 1 ID : 6306801906587  
Option 2 ID : 6306801906588  
Option 3 ID : 6306801906589  
Option 4 ID : 6306801906590  
Status : Answered  
Chosen Option : 1

**Q.39** If a government wants to boost economic growth in a recession, which measure is it likely to take?

- Ans ☒ 1. Increase public spending  
☒ 2. Reduce public spending  
☒ 3. Increase taxes significantly  
☒ 4. Implement strict trade barriers

Question ID : 630680535873  
Option 1 ID : 6306802094838  
Option 2 ID : 6306802094837  
Option 3 ID : 6306802094836  
Option 4 ID : 6306802094839  
Status : Answered  
Chosen Option : 1



Q.40 In dravidian style of temples the main temple tower is known as \_\_\_\_\_ .

- Ans ☒ 1. mandapa  
☒ 2. gopuram  
☒ 3. vimana  
☒ 4. shikhara

Question ID : 630680511632  
Option 1 ID : 6306801999653  
Option 2 ID : 6306801999651  
Option 3 ID : 6306801999650  
Option 4 ID : 6306801999652  
Status : Answered  
Chosen Option : 4

Q.41 Match the following.

A	Propene	1	Unsaturated 3 carbon chains with double bond
B	Propyne	2	Unsaturated 3 carbon chains with triple bond
C	Propane	3	Saturated 3 carbon bonds

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

Question ID : 630680401768  
Option 1 ID : 6306801566838  
Option 2 ID : 6306801566839  
Option 3 ID : 6306801566840  
Option 4 ID : 6306801566841  
Status : Answered  
Chosen Option : 4

Q.42 The Indian Copper Complex (ICC) is located at Ghatsila in the state of \_\_\_\_\_.

- Ans ☒ 1. Jharkhand  
☒ 2. Rajasthan  
☒ 3. Telangana  
☒ 4. Maharashtra

Question ID : 630680510980  
Option 1 ID : 6306801997051  
Option 2 ID : 6306801997050  
Option 3 ID : 6306801997052  
Option 4 ID : 6306801997053  
Status : Not Answered  
Chosen Option : --

**Q.43** Mango shower is a term used for \_\_\_\_\_.

- Ans ☒ 1. pre-monsoon showers  
☒ 2. post-monsoon showers  
☒ 3. winter showers  
☒ 4. monsoon showers

Question ID : 630680564473  
Option 1 ID : 6306802206827  
Option 2 ID : 6306802206828  
Option 3 ID : 6306802206830  
Option 4 ID : 6306802206829  
Status : Answered  
Chosen Option : 1

**Q.44** Boron is the only metalloid of which group of the periodic table?

- Ans ☒ 1. Group 5  
☒ 2. Group 16  
☒ 3. Group 10  
☒ 4. Group 13

Question ID : 630680403589  
Option 1 ID : 6306801573850  
Option 2 ID : 6306801573852  
Option 3 ID : 6306801573851  
Option 4 ID : 6306801573853  
Status : Answered  
Chosen Option : 4

**Q.45** The world's largest population of which endangered species resides in Assam's Kaziranga National Park?

- Ans ☒ 1. Shaggy horn wild ibex  
☒ 2. Bluebull  
☒ 3. One-horned rhinoceros  
☒ 4. Red panda

Question ID : 630680404428  
Option 1 ID : 6306801577212  
Option 2 ID : 6306801577213  
Option 3 ID : 6306801577214  
Option 4 ID : 6306801577215  
Status : Answered  
Chosen Option : 3

**Q.46** According to Census of India 2011, which state recorded the second highest literacy rate in India?

- Ans ☒ 1. Nagaland  
☒ 2. Goa  
☒ 3. Tripura  
☒ 4. Mizoram

Question ID : 630680477341  
Option 1 ID : 6306801864521  
Option 2 ID : 6306801864522  
Option 3 ID : 6306801864523  
Option 4 ID : 6306801864524  
Status : Answered  
Chosen Option : 2

**Q.47** Which of the following sentences is/are true?

- i. After independence, about two-thirds of India's population is now (2011 Census) literate.
- ii. In India, between 2001 and 2011, male literacy rose faster than female literacy.
- iii. Female literacy rose by about 10.4 per cent between 2001 and 2011 in India.

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

Question ID : 630680488271  
Option 1 ID : 6306801907139  
Option 2 ID : 6306801907140  
Option 3 ID : 6306801907141  
Option 4 ID : 6306801907142  
Status : Answered  
Chosen Option : 3

**Q.48** Which of the following are the functions of the National Commission for Scheduled Castes?

- 1) Providing Constitutional protection to Scheduled Castes
- 2) Investigating any case that violates the interests of Scheduled Castes
- 3) Submitting a report to the Prime Minister related to the protection of Scheduled Castes
- 4) Presenting to the President, annually and at such other times as the Commission may deem fit, reports upon the working of those safeguards

- 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 : 630680426482  
Option 1 ID : 6306801664014  
Option 2 ID : 6306801664015  
Option 3 ID : 6306801664016  
Option 4 ID : 6306801664017  
Status : Answered  
Chosen Option : 3

**Q.49** The Gujarat Assembly, on 18 September 2023, approved a bill that reserves \_\_\_\_\_ of local body seats specifically for Other Backward Classes (OBCs).

- Ans
- ☒ 1. 20%
  - ☒ 2. 27%
  - ☒ 3. 30%
  - ☒ 4. 35%

Question ID : 630680469585  
Option 1 ID : 6306801834103  
Option 2 ID : 6306801834104  
Option 3 ID : 6306801834105  
Option 4 ID : 6306801834106  
Status : Not Answered  
Chosen Option : --

**Q.50 Which of the following features was borrowed by the Constitution of India from Ireland?**

- Ans ☒ 1. Separation of Powers  
☒ 2. Directive Principles of State Policy  
☒ 3. Fundamental Rights  
☒ 4. Amendment Method

Question ID : 630680409038  
Option 1 ID : 6306801595077  
Option 2 ID : 6306801595078  
Option 3 ID : 6306801595079  
Option 4 ID : 6306801595080  
Status : Answered  
Chosen Option : 2

Section : General Engineering Civil and Structural

**Q.1 For a balanced beam section, the limit state is reached when:**

- Ans ☒ 1. there is the simultaneous crushing of concrete and breaking of steel  
☒ 2. there is the simultaneous yielding of both concrete and steel  
☒ 3. there is the simultaneous crushing of concrete and yielding of steel  
☒ 4. there is the simultaneous yielding of concrete and breaking of steel

Question ID : 630680509661  
Option 1 ID : 6306801991849  
Option 2 ID : 6306801991850  
Option 3 ID : 6306801991852  
Option 4 ID : 6306801991851  
Status : Answered  
Chosen Option : 3

**Q.2 Which of the following indicates a preliminary stage of dead knot, where the fibres of knot are not firmly held in the surrounding wood?**

- Ans ☒ 1. Tight knot  
☒ 2. Loose knot  
☒ 3. Dead knot  
☒ 4. Round knot

Question ID : 630680509694  
Option 1 ID : 6306801991984  
Option 2 ID : 6306801991982  
Option 3 ID : 6306801991981  
Option 4 ID : 6306801991983  
Status : Not Answered  
Chosen Option : --

**Q.3 Which of the following is not a primary objective of design of railway track geometric?**

- Ans ☒ 1. Carrying only light axle load  
☒ 2. Safety  
☒ 3. Smooth running  
☒ 4. Achieving maximum speed

Question ID : 630680198291

Option 1 ID : 630680769337

Option 2 ID : 630680769338

Option 3 ID : 630680769336

Option 4 ID : 630680769335

Status : Answered

Chosen Option : 1

**Q.4 A catchment area of  $10 \text{ km}^2$  has recorded a rainfall of  $25 \text{ mm/h}$ . Assuming a runoff coefficient of 0.3, the peak discharge from the catchment using the rational method is**

- Ans ☒ 1. 18.36 cumec  
☒ 2. 26.56 cumec  
☒ 3. 24.6 cumec  
☒ 4. 20.83 cumec

Question ID : 630680504304

Option 1 ID : 6306801970779

Option 2 ID : 6306801970780

Option 3 ID : 6306801970778

Option 4 ID : 6306801970777

Status : Not Answered

Chosen Option : --

**Q.5 If 90% of soil particles got retained over 2 mm sieve and 50% of soil particles got retained over 4.75 mm sieve, then the effective diameter of the soil will be:**

- Ans ☒ 1. 2 mm  
☒ 2. 4.75 mm  
☒ 3. 1.25 mm  
☒ 4. 6.75 mm

Question ID : 630680504535

Option 1 ID : 6306801971701

Option 2 ID : 6306801971702

Option 3 ID : 6306801971704

Option 4 ID : 6306801971703

Status : Answered

Chosen Option : 4

Q.6 \_\_\_\_\_ are popularly known as white ants, though they are in no way related to ants.

- Ans
- ☐ 1. Flies
  - ☐ 2. Viruses
  - ☒ 3. Termites
  - ☐ 4. Bacteria

Question ID : 630680198727

Option 1 ID : 630680770870

Option 2 ID : 630680770869

Option 3 ID : 630680770867

Option 4 ID : 630680770868

Status : Answered

Chosen Option : 3

Q.7 Which of the following is the hazardous waste produced by petroleum refining industries?

- Ans
- ☐ 1. Lead ash
  - ☐ 2. Cyanide-containing sludge
  - ☐ 3. Tarry residues
  - ☒ 4. Spent clay-containing oil

Question ID : 630680509485

Option 1 ID : 6306801991211

Option 2 ID : 6306801991212

Option 3 ID : 6306801991210

Option 4 ID : 6306801991209

Status : Answered

Chosen Option : 1

Q.8 In the direct shear test conducted on soils, a proving ring is used to \_\_\_\_\_.

- Ans
- ☒ 1. measure the magnitude of shear load
  - ☐ 2. measure vertical strain
  - ☐ 3. measure horizontal strain
  - ☐ 4. measure horizontal stress

Question ID : 630680181902

Option 1 ID : 630680704845

Option 2 ID : 630680704843

Option 3 ID : 630680704842

Option 4 ID : 630680704844

Status : Answered

Chosen Option : 1

**Q.9 Which of the following properties should the subgrade soil have in order to be used as highway material?**

**Ans** ✓ 1. Stability, incompressibility, good drainage

✗ 2. Large changes in volume under adverse conditions of weather, stability

✗ 3. Large changes in volume under adverse conditions of weather, compressibility, good drainage

✗ 4. Ease of compaction, compressibility, stability

Question ID : 630680509459

Option 1 ID : 6306801991108

Option 2 ID : 6306801991106

Option 3 ID : 6306801991105

Option 4 ID : 6306801991107

Status : Answered

Chosen Option : 4

**Q.10 If the velocity of the fluid does NOT change with respect to time, the flow is said to be a/an:**

**Ans** ✗ 1. unsteady flow

✓ 2. steady flow

✗ 3. uniform flow

✗ 4. non-uniform flow

Question ID : 630680506963

Option 1 ID : 6306801981358

Option 2 ID : 6306801981357

Option 3 ID : 6306801981359

Option 4 ID : 6306801981360

Status : Answered

Chosen Option : 3

**Q.11 Which of the following is/are the objectives of road sign?**

i. Promote road safety

ii. Promote efficient movement of vehicles

iii. Increase design speed

iv. Calculate traffic volume

v. Provide warning for safe movement

**Ans** ✗ 1. Only i

✗ 2. i, ii, iii and v

✗ 3. Both iii and v

✓ 4. Only i, ii and v

Question ID : 630680509078

Option 1 ID : 6306801989607

Option 2 ID : 6306801989610

Option 3 ID : 6306801989608

Option 4 ID : 6306801989609

Status : Answered

Chosen Option : 4

**Q.12** A soil has a liquid limit of 40% and its plasticity index is 10%. The percentage passing through a 4.75 mm sieve is 60% and the percentage passing through a 75 micron sieve is 45%. The soil can be classified as:

- Ans ☒ 1. GM  
☒ 2. SM  
☒ 3. GC  
☒ 4. SM-SC

Question ID : 630680504507  
Option 1 ID : 6306801971589  
Option 2 ID : 6306801971591  
Option 3 ID : 6306801971590  
Option 4 ID : 6306801971592  
Status : Answered  
Chosen Option : 4

**Q.13** What will be the discharge of a single-acting pump if it has one cylinder of area  $0.5 \text{ m}^2$  and stroke of length 20 cm and if the pump has 180 rpm of speed?

- Ans ☒ 1.  $0.2 \text{ m}^3/\text{s}$   
☒ 2.  $0.3 \text{ m}^3/\text{s}$   
☒ 3.  $0.1 \text{ m}^3/\text{s}$   
☒ 4.  $0.25 \text{ m}^3/\text{s}$

Question ID : 630680506945  
Option 1 ID : 6306801981285  
Option 2 ID : 6306801981286  
Option 3 ID : 6306801981288  
Option 4 ID : 6306801981287  
Status : Answered  
Chosen Option : 2

**Q.14** The biological treatment techniques used can be classified into attached growth processes and suspended growth processes. Which of the following treatments is classified under attached growth processes?

- Ans ☒ 1. Aerated lagoon  
☒ 2. Sludge digestion system  
☒ 3. Activated sludge process  
☒ 4. Rotating biological conductor

Question ID : 630680191266  
Option 1 ID : 630680741705  
Option 2 ID : 630680741706  
Option 3 ID : 630680741708  
Option 4 ID : 630680741707  
Status : Answered  
Chosen Option : 1



**Q.15** In the laboratory determination of California Bearing Ratio (CBR) test on soils as per IS : 2720(Part 16) – 1987, the CBR values are usually reported for penetration values of :

- Ans
- ☐ 1. 5.0 mm, 7.5 mm
  - ☐ 2. 3.5 mm, 5.0 mm
  - ☐ 3. 1.5 mm, 2.5 mm
  - ☒ 4. 2.5 mm, 5.0 mm

Question ID : 630680504579

Option 1 ID : 6306801971880

Option 2 ID : 6306801971879

Option 3 ID : 6306801971877

Option 4 ID : 6306801971878

Status : Answered

Chosen Option : 4

**Q.16** Plinth area is calculated for the covered area by taking \_\_\_\_\_.

- Ans
- ☒ 1. external dimensions of the building at the floor level
  - ☐ 2. internal dimensions of the building at floor level
  - ☐ 3. both the external and internal dimension of the building at the floor level
  - ☐ 4. centre to centre length at floor level

Question ID : 630680504122

Option 1 ID : 6306801970050

Option 2 ID : 6306801970051

Option 3 ID : 6306801970052

Option 4 ID : 6306801970049

Status : Answered

Chosen Option : 3

**Q.17** The soil has a liquid limit of 50 %. Following the A-line, in the plasticity chart as per IS : 1498 – 1970, the corresponding plastic limit is :

- Ans
- ☒ 1. 28.1%
  - ☐ 2. 25%
  - ☐ 3. 21.9%
  - ☐ 4. Insufficient data

Question ID : 630680504536

Option 1 ID : 6306801971705

Option 2 ID : 6306801971707

Option 3 ID : 6306801971706

Option 4 ID : 6306801971708

Status : Answered

Chosen Option : 4

**Q.18 Which of the following statements about the secondary treatment of sewage is INCORRECT?**

- Ans ☒ 1. Oxidation of organic matter occurs in trickling filters under aerobic conditions.
- ☒ 2. Activated sludge is biologically active.
- ☒ 3. Primary treatment of sewage is not essential for efficient working of contact beds.
- ☒ 4. Secondary treatment methods are broadly divided into filtration and activated sludge process.

Question ID : 630680509501

Option 1 ID : 6306801991275

Option 2 ID : 6306801991276

Option 3 ID : 6306801991274

Option 4 ID : 6306801991273

Status : Answered

Chosen Option : 3

**Q.19 Which of the following options serves all the three objectives mentioned below?**

I: To promote human health

II: To provide a cleaner environment

III: To break the cycle of diseases

- Ans ☒ 1. Scavenging system
- ☒ 2. Distribution system
- ☒ 3. Drainage system
- ☒ 4. Sanitary system

Question ID : 630680509469

Option 1 ID : 6306801991148

Option 2 ID : 6306801991146

Option 3 ID : 6306801991147

Option 4 ID : 6306801991145

Status : Answered

Chosen Option : 4

**Q.20 The result of the soundness test of 53-grade Portland cement conducted by using Le Chatelier's apparatus shall NOT exceed \_\_\_\_\_ mm.**

- Ans ☒ 1. 10
- ☒ 2. 12
- ☒ 3. 15
- ☒ 4. 5

Question ID : 630680503288

Option 1 ID : 6306801966737

Option 2 ID : 6306801966738

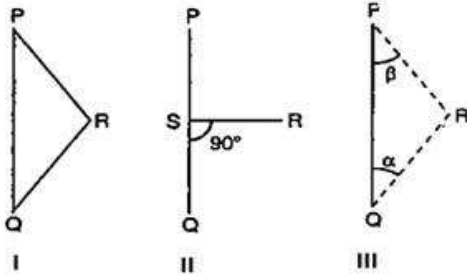
Option 3 ID : 6306801966740

Option 4 ID : 6306801966739

Status : Answered

Chosen Option : 1

Q.21 Let P and Q be the reference points on the ground. You have to establish a point R. Which of the following methods conforms to the fundamental principles of surveying?



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

Question ID : 630680192171

Option 1 ID : 630680745285

Option 2 ID : 630680745287

Option 3 ID : 630680745288

Option 4 ID : 630680745286

Status : Answered

Chosen Option : 1

Q.22 In which type of dressing of stone are about 1 cm vertical or horizontal grooves sunk with a chisel having its shape as a hollow semi-circle?

- Ans ☒ 1. Punched dressing  
☒ 2. Close picked and fine tooling  
☒ 3. Boasted or droved finish  
☒ 4. Reticulated finish

Question ID : 630680509690

Option 1 ID : 6306801991968

Option 2 ID : 6306801991967

Option 3 ID : 6306801991966

Option 4 ID : 6306801991965

Status : Answered

Chosen Option : 1

Q.23 The canal fall with a combination of a convex curve and a concave curve, which is provided for carrying the canal water from a higher level to a lower level, is known as \_\_\_\_\_.

- Ans ☒ 1. ogee fall  
☒ 2. sarda fall  
☒ 3. stepped fall  
☒ 4. rapid fall

Question ID : 630680504327

Option 1 ID : 6306801970870

Option 2 ID : 6306801970872

Option 3 ID : 6306801970871

Option 4 ID : 6306801970869

Status : Answered

Chosen Option : 1

Q.24 The curve that is generally used to avoid the obstructions like hard rocks, deep cuttings, soft gradients is called \_\_\_\_\_.

- Ans
- ☐ 1. simple curve
  - ☐ 2. transitional curve
  - ☒ 3. compound curve
  - ☐ 4. parabolic curve

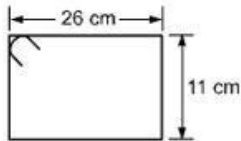
Question ID : 630680509451  
Option 1 ID : 6306801991075  
Option 2 ID : 6306801991076  
Option 3 ID : 6306801991074  
Option 4 ID : 6306801991073  
Status : Answered  
Chosen Option : 4

Q.25 The distance travelled by a vehicle after the application of brakes to a dead stop position is known as:

- Ans
- ☐ 1. distance to react
  - ☐ 2. deacceleration distance
  - ☒ 3. braking distance
  - ☐ 4. stopping distance

Question ID : 630680377342  
Option 1 ID : 6306801470433  
Option 2 ID : 6306801470434  
Option 3 ID : 6306801470431  
Option 4 ID : 6306801470432  
Status : Answered  
Chosen Option : 3

Q.26 Following IS : 2502-1963, determine the approximate total length of bar of 6 mm diameter, measured along centre line, for the stirrup shown in Figure. (Note : Take the given stirrup dimensions in Figure as internal).



- Ans
- ☐ 1. 0.448 m
  - ☒ 2. 0.884 m
  - ☐ 3. 0.848 m
  - ☐ 4. 0.440 m

Question ID : 630680339574  
Option 1 ID : 6306801320817  
Option 2 ID : 6306801320819  
Option 3 ID : 6306801320818  
Option 4 ID : 6306801320820  
Status : Answered  
Chosen Option : 1

Q.27 As per Euler's theory, buckling of the long column occurs when \_\_\_\_\_.  
(Given,  $P$  = Applied axial load and  $P_{cr}$  = Crippling load by Euler's theory)

- Ans ☒ 1.  $P = P_{cr}$   
☒ 2.  $P > P_{cr}$   
☒ 3.  $P < P_{cr}$   
☒ 4.  $P$  is of any value

Question ID : 630680338704

Option 1 ID : 6306801317470

Option 2 ID : 6306801317471

Option 3 ID : 6306801317469

Option 4 ID : 6306801317472

Status : Answered

Chosen Option : 2

Q.28 Why are air vessels fitted in reciprocating pumps?

- Ans ☒ 1. For increasing the velocity of discharge  
☒ 2. For faster discharge  
☒ 3. To reduce the head loss due to friction in suction and delivery pipe  
☒ 4. For increasing the speed of rotation of the crank

Question ID : 630680328621

Option 1 ID : 6306801278455

Option 2 ID : 6306801278454

Option 3 ID : 6306801278453

Option 4 ID : 6306801278456

Status : Answered

Chosen Option : 1

Q.29 Which of the following conditions followed in making concrete reduces the workability of concrete?

- Ans ☒ 1. Higher water-cement ratio in concrete  
☒ 2. Use of superplasticisers  
☒ 3. Use of round aggregates  
☒ 4. Higher aggregate-cement ratio in concrete

Question ID : 630680340615

Option 1 ID : 6306801324901

Option 2 ID : 6306801324903

Option 3 ID : 6306801324902

Option 4 ID : 6306801324904

Status : Answered

Chosen Option : 4

Q.30 The loss of life is maximum if the flood water suddenly enters the inhabited areas at night. The loss of life during the floods is considered as \_\_\_\_\_ loss.

- Ans ☒ 1. intangible  
☒ 2. measurable  
☒ 3. tangible  
☒ 4. huge and tangible

Question ID : 630680504317

Option 1 ID : 6306801970830

Option 2 ID : 6306801970831

Option 3 ID : 6306801970829

Option 4 ID : 6306801970832

Status : Answered

Chosen Option : 1

**Q.31 Which of the following statements is correct about measurement of the vertical angle while using a total station?**

- Ans ☒ 1. An electronic digital theodolite is not able to measure the vertical angle.
- ☒ 2. It is measured relative to the horizontal direction.
- ☒ 3. It is usually measured as a zenith angle.
- ☒ 4. It is measured from the instrument north in the horizontal plane.

Question ID : 630680382412

Option 1 ID : 6306801490565

Option 2 ID : 6306801490563

Option 3 ID : 6306801490564

Option 4 ID : 6306801490566

Status : Answered

Chosen Option : 3

**Q.32 Which of the following methods used for finding the slope and deflection of beams is also called the 'method of singularity function'?**

- Ans ☒ 1. Moment area method
- ☒ 2. Conjugate beam method
- ☒ 3. Macaulay's method
- ☒ 4. Mohr's Theorem method

Question ID : 630680404132

Option 1 ID : 6306801576014

Option 2 ID : 6306801576015

Option 3 ID : 6306801576016

Option 4 ID : 6306801576017

Status : Answered

Chosen Option : 1

**Q.33 In an irrigated field, the crop requires 60 cm of water in 15 days, while the effective rainfall during that period is recorded as 15 cm. Find the duty at the head of field. Assume no losses**

- Ans ☒ 1. 288 ha/cumec
- ☒ 2. 268 ha/cumec
- ☒ 3. 278 ha/cumec
- ☒ 4. 298 ha/cumec

Question ID : 630680504343

Option 1 ID : 6306801970935

Option 2 ID : 6306801970936

Option 3 ID : 6306801970933

Option 4 ID : 6306801970934

Status : Answered

Chosen Option : 1

Q.34 As per IS 1077:1992, the size of standard modular burn clay building bricks is \_\_\_\_

- Ans ☒ 1. 19 cm × 9 cm × 9 cm  
☐ 2. 25 cm × 19 cm × 9 cm  
☐ 3. 22 cm × 15 cm × 10 cm  
☐ 4. 19 cm × 18 cm × 18 cm

Question ID : 630680198760

Option 1 ID : 630680771000

Option 2 ID : 630680771001

Option 3 ID : 630680770999

Option 4 ID : 630680771002

Status : Answered

Chosen Option : 1

Q.35 The right limb of height  $h_2$  in the simple u tube manometer containing mercury is open to atmosphere, while the left limb of height  $h_1$  is connected to pipe in which a liquid of specific gravity 1 is flowing with uniform speed with  $h_1 < h_2$ . This condition gives \_\_\_\_\_ kind of pressure.

- Ans ☐ 1. negative gauge pressure  
☒ 2. positive gauge pressure  
☐ 3. atmospheric pressure  
☐ 4. absolute pressure

Question ID : 630680412948

Option 1 ID : 6306801610615

Option 2 ID : 6306801610616

Option 3 ID : 6306801610618

Option 4 ID : 6306801610617

Status : Answered

Chosen Option : 3

Q.36 As per IS 456:2000, the minimum cross sectional area of longitudinal reinforcement(irrespective of load requirement) in a RCC column of size 150x300 mm shall NOT be less than \_\_\_\_\_. Consider the limit state method of design.

- Ans ☐ 1. 240 mm<sup>2</sup>  
☒ 2. 360 mm<sup>2</sup>  
☐ 3. 440 mm<sup>2</sup>  
☐ 4. 780 mm<sup>2</sup>

Question ID : 630680326652

Option 1 ID : 6306801270685

Option 2 ID : 6306801270686

Option 3 ID : 6306801270687

Option 4 ID : 6306801270688

Status : Not Answered

Chosen Option : --

**Q.37 Which of the following factors is not accounted in the cost estimation of a reinforced concrete (RC) water tank?**

- Ans ☒ 1. Density of water  
☐ 2. Length of water tank  
☐ 3. height of water tank  
☐ 4. Thickness of RC slab and wall

Question ID : **630680504078**  
Option 1 ID : **6306801969873**  
Option 2 ID : **6306801969874**  
Option 3 ID : **6306801969875**  
Option 4 ID : **6306801969876**  
Status : **Answered**  
Chosen Option : 1

**Q.38 The markings on the kerbs are painted with which colour to increase user visibility?**

- Ans ☐ 1. Alternate white and yellow  
☐ 2. Yellow Only  
☐ 3. Black Only  
☒ 4. Alternate black and white

Question ID : **630680509068**  
Option 1 ID : **6306801989568**  
Option 2 ID : **6306801989570**  
Option 3 ID : **6306801989567**  
Option 4 ID : **6306801989569**  
Status : **Answered**  
Chosen Option : 1

**Q.39 In the case of preliminary estimate prepared per unit basis, the service units to be considered for a school and hospital are respectively \_\_\_\_\_.**

- Ans ☐ 1. bench and ward  
☒ 2. classroom and bed  
☐ 3. bench and bed  
☐ 4. classroom and ward

Question ID : **630680504120**  
Option 1 ID : **6306801970044**  
Option 2 ID : **6306801970041**  
Option 3 ID : **6306801970043**  
Option 4 ID : **6306801970042**  
Status : **Answered**  
Chosen Option : 3



**Q.40 Identify the INCORRECT statement regarding ready-mix concrete (RMC). Consider that ordinary Portland cement is used for making RMC.**

- Ans**
- ☒ 1. Ready-mix concrete in wet condition is transported by using a transit mixer from the batching plant to the construction site.
  - ☒ 2. Ready-mix concrete increases the speed of construction.
  - ☒ 3. Ready-mix concrete packed in bags should be added with a hydration activator while mixing with water.
  - ☒ 4. The mix design of RMC is tailor made to suit the placing methods of the contractor.

Question ID : 630680340573

Option 1 ID : 6306801324735

Option 2 ID : 6306801324733

Option 3 ID : 6306801324736

Option 4 ID : 6306801324734

Status : Answered

Chosen Option : 4

**Q.41 The number of days between sowing and harvesting of a crop is called the crop period. Base period is the number of days between the first watering at the time of sowing and the last water before harvesting of a crop. If the base period and the crop period are compared, \_\_\_\_\_.**

- Ans**
- ☒ 1. the base period is much higher than the crop period
  - ☒ 2. the base period is slightly more than the crop period
  - ☒ 3. the base period is slightly less than the crop period
  - ☒ 4. the base period is equal to the crop period

Question ID : 630680504287

Option 1 ID : 6306801970711

Option 2 ID : 6306801970709

Option 3 ID : 6306801970710

Option 4 ID : 6306801970712

Status : Answered

Chosen Option : 3

**Q.42 Which of the following methods make use of infra-red lamp in the determination of water content of soils ?**

- Ans**
- ☒ 1. Calcium carbide method
  - ☒ 2. Pycnometer method
  - ☒ 3. Alcohol method
  - ☒ 4. Torsional balance method

Question ID : 630680504520

Option 1 ID : 6306801971642

Option 2 ID : 6306801971644

Option 3 ID : 6306801971641

Option 4 ID : 6306801971643

Status : Answered

Chosen Option : 1

**Q.43** A reinforced concrete slab must be designed as \_\_\_\_\_ in order to develop complete the yield line pattern

- Ans ☒ 1. over reinforced  
☒ 2. shear reinforced  
☒ 3. under reinforced  
☒ 4. balanced reinforced

Question ID : 630680398043  
Option 1 ID : 6306801552189  
Option 2 ID : 6306801552186  
Option 3 ID : 6306801552188  
Option 4 ID : 6306801552187  
Status : Answered  
Chosen Option : 3

**Q.44** Laminated wood offers several advantages over solid wood. Which of the following is NOT an advantage of laminated wood?

- Ans ☒ 1. Structures can be designed with laminated wood based on the required strength and low-grade wood can be positioned accordingly.  
☒ 2. It can be used to fabricate large members that are impossible to be made from solid wood.  
☒ 3. Individual boards, which are used in laminated wood due to their relative thinness, can be properly dried without checking (cracking) and defects, such as knots, can be removed.  
☒ 4. Since laminated wood is glued, wood of only large dimensions can be used, which increases the amount of waste.

Question ID : 630680509684  
Option 1 ID : 6306801991943  
Option 2 ID : 6306801991941  
Option 3 ID : 6306801991942  
Option 4 ID : 6306801991944  
Status : Answered  
Chosen Option : 3

**Q.45** Which of the following is/are the main advantage of using a dumpy level in surveying?

- i) Simple to use  
ii) Provides accurate level of reading  
iii) Can be used at night, without light

- Ans ☒ 1. Only i  
☒ 2. Only ii  
☒ 3. Both i and ii  
☒ 4. Only iii

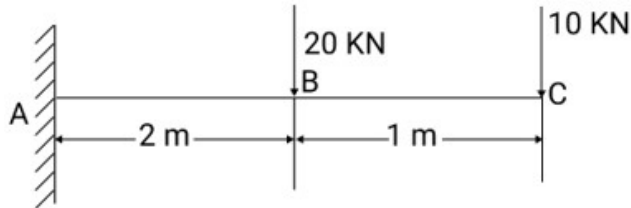
Question ID : 630680382449  
Option 1 ID : 6306801490711  
Option 2 ID : 6306801490712  
Option 3 ID : 6306801490714  
Option 4 ID : 6306801490713  
Status : Answered  
Chosen Option : 1

Q.46 \_\_\_\_\_ shall be used to strength the beam against the maximum nominal shear stress in a RC beam.

- Ans ☒ 1. shear reinforcement  
☒ 2. tension reinforcement  
☒ 3. side reinforcement  
☒ 4. compression reinforcement

Question ID : 630680398052  
Option 1 ID : 6306801552224  
Option 2 ID : 6306801552223  
Option 3 ID : 6306801552225  
Option 4 ID : 6306801552222  
Status : Answered  
Chosen Option : 1

Q.47 A cantilever beam subjected to two different point loads is shown in the figure. Calculate the slope at fixed end A. Take 'EI' as constant throughout its length.



- Ans ☒ 1. Zero  
☒ 2.  $\frac{13.33}{EI}$   
☒ 3.  $\frac{85}{EI}$   
☒ 4.  $\frac{105}{EI}$

Question ID : 630680404130  
Option 1 ID : 6306801576009  
Option 2 ID : 6306801576006  
Option 3 ID : 6306801576007  
Option 4 ID : 6306801576008  
Status : Answered  
Chosen Option : 2

Q.48 As per IS: 1562-1962, the 'Diagonal Scale – A' has a graduated length of \_\_\_\_\_.

- Ans ☒ 1. 0.15 cm  
☒ 2. 150 cm  
☒ 3. 15 cm  
☒ 4. 1.5 cm

Question ID : 630680506235  
Option 1 ID : 6306801978460  
Option 2 ID : 6306801978457  
Option 3 ID : 6306801978458  
Option 4 ID : 6306801978459  
Status : Not Answered  
Chosen Option : --

**Q.49** In case of absorption test on burnt clay building bricks as per IS 3495 (part 2);1992, bricks shall be soaked in cold water for a duration of\_\_\_\_\_ .

- Ans
- ☐ 1. 16 hours
  - ☒ 2. 24 hours
  - ☐ 3. 12 hours
  - ☐ 4. 9 hours

Question ID : 630680198663

Option 1 ID : 630680770614

Option 2 ID : 630680770611

Option 3 ID : 630680770612

Option 4 ID : 630680770613

Status : Answered

Chosen Option : 2

**Q.50** What is the maximum limit of grade compensation for the gradient on the horizontal curve along highways, if 'R' is the radius of the circular curve in metres?

- Ans
- ☐ 1.  $\frac{50}{R}$
  - ☒ 2.  $\frac{75}{R}$
  - ☐ 3.  $\frac{150}{R}$
  - ☐ 4.  $\frac{300}{R}$

Question ID : 630680191617

Option 1 ID : 630680743091

Option 2 ID : 630680743089

Option 3 ID : 630680743090

Option 4 ID : 630680743092

Status : Answered

Chosen Option : 4

**Q.51** The effective length ratio 'K' for a column in frame with no sway is limited between:

- Ans
- ☐ 1. 0 and 1.0
  - ☐ 2. 0 and 0.5
  - ☒ 3. 0.5 and 1.0
  - ☐ 4. 0.25 and 0.5

Question ID : 630680509668

Option 1 ID : 6306801991880

Option 2 ID : 6306801991877

Option 3 ID : 6306801991879

Option 4 ID : 6306801991878

Status : Not Answered

Chosen Option : --

**Q.52** What is the best side slope (n) for the most economic trapezoidal channel having depth d and base width b?

- Ans
- ☒ 1.  $\sqrt{3}$
  - ☒ 2.  $\frac{1}{\sqrt{2}}$
  - ☒ 3.  $\frac{1}{\sqrt{3}}$
  - ☒ 4.  $\sqrt{2}$

Question ID : 630680385057

Option 1 ID : 6306801501114

Option 2 ID : 6306801501116

Option 3 ID : 6306801501115

Option 4 ID : 6306801501117

Status : Answered

Chosen Option : 3

**Q.53** A school building of 15 classrooms is to be constructed and the cost of construction of the school in terms of per classroom is ₹1,50,000. Calculate the approximate cost of the proposed school building.

- Ans
- ☒ 1. ₹30,00,000
  - ☒ 2. ₹22,50,000
  - ☒ 3. ₹20,00,000
  - ☒ 4. ₹42,50,000

Question ID : 630680504119

Option 1 ID : 6306801970038

Option 2 ID : 6306801970037

Option 3 ID : 6306801970039

Option 4 ID : 6306801970040

Status : Answered

Chosen Option : 2

**Q.54** Identify the correct characteristic feature of scale chosen to draw profile of ground using profile leveling data

- Ans
- ☒ 1. Vertical distances are exaggerated as compared to horizontal distances.
  - ☒ 2. Both horizontal and vertical distances are always plotted to 1 : 1 scale.
  - ☒ 3. Horizontal distances are exaggerated as compared to vertical distances.
  - ☒ 4. Both horizontal and vertical distances are plotted to the same scale.

Question ID : 630680506227

Option 1 ID : 6306801978427

Option 2 ID : 6306801978428

Option 3 ID : 6306801978426

Option 4 ID : 6306801978425

Status : Answered

Chosen Option : 2

Q.55 A Moody diagram represents \_\_\_\_\_ as a function of Reynolds number, in a pipe flow.

- Ans
- ☒ 1. Length of pipe
  - ☒ 2. friction factor
  - ☒ 3. Kinetic head
  - ☒ 4. Flow velocity

Question ID : 630680506987  
Option 1 ID : 6306801981455  
Option 2 ID : 6306801981454  
Option 3 ID : 6306801981456  
Option 4 ID : 6306801981453  
Status : Answered  
Chosen Option : 3

Q.56 Based on Allen-Hazens experiments, the co-efficient of permeability  $k$  (cm/s) is related to the effective size of soil  $D_{10}$  (cm) as \_\_\_\_\_. (where  $C$  is a constant with a value between 100 and 150).

- Ans
- ☒ 1.  $k = C/D_{10}^2$
  - ☒ 2.  $k = D_{10}/C^2$
  - ☒ 3.  $k = CD_{10}^2$
  - ☒ 4.  $k = C^2 D_{10}$

Question ID : 630680504562  
Option 1 ID : 6306801971810  
Option 2 ID : 6306801971812  
Option 3 ID : 6306801971809  
Option 4 ID : 6306801971811  
Status : Answered  
Chosen Option : 3

Q.57 Select the option that is appropriate regarding the following two statements pertaining to lining of canals, labelled as Assertion and Reason.

Assertion: The expenditure on lining depends on the availability of construction materials and transportation charges.

Reason: To reduce the expenditure on lining, materials which are available in the vicinity of the project should be utilised.

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

Question ID : 630680504333  
Option 1 ID : 6306801970893  
Option 2 ID : 6306801970896  
Option 3 ID : 6306801970894  
Option 4 ID : 6306801970895  
Status : Answered  
Chosen Option : 3

**Q.58 Which of the following estimates mostly resembles a detailed estimate ?**

- Ans ☒ 1. Annual maintenance estimate  
☒ 2. Rough estimate  
☒ 3. Item rate estimate  
☒ 4. Quantity estimate

Question ID : 630680504088  
Option 1 ID : 6306801969913  
Option 2 ID : 6306801969916  
Option 3 ID : 6306801969915  
Option 4 ID : 6306801969914  
Status : Answered  
Chosen Option : 4

**Q.59 The specific gravity of most of the stones lies between \_\_\_\_\_.**

- Ans ☒ 1. 2 and 3  
☒ 2. 3.5 and 4  
☒ 3. 3 and 3.5  
☒ 4. 1 and 2

Question ID : 630680509697  
Option 1 ID : 6306801991994  
Option 2 ID : 6306801991996  
Option 3 ID : 6306801991995  
Option 4 ID : 6306801991993  
Status : Answered  
Chosen Option : 1

**Q.60 When pipes of different diameters are connected in series from end to end to form a pipe line, the total head loss developed is equal to \_\_\_\_**

- Ans ☒ 1. Zero  
☒ 2. sum of major head losses in each pipe  
☒ 3. Sum of local head losses only  
☒ 4. Sum of local head losses and major head losses in each pipe

Question ID : 630680506978  
Option 1 ID : 6306801981420  
Option 2 ID : 6306801981418  
Option 3 ID : 6306801981417  
Option 4 ID : 6306801981419  
Status : Answered  
Chosen Option : 4

**Q.61 Which of the following statements regarding the vertical circle of a theodolite is correct?**

- Ans ☒ 1. Both the graduation circle and the Vernier scale move with the telescope.  
☒ 2. Both the graduation circle and the Vernier scale are fixed, while the telescope moves.  
☒ 3. The graduation circle is fixed, but the Vernier scale moves with the telescope.  
☒ 4. The Vernier scale is fixed, but the graduation circle moves with the telescope.

Question ID : 630680506218  
Option 1 ID : 6306801978391  
Option 2 ID : 6306801978392  
Option 3 ID : 6306801978390  
Option 4 ID : 6306801978389  
Status : Answered  
Chosen Option : 4

**Q.62** For a project, which of the following estimate is accorded sanction in a Technical sanction ?

- Ans
- ☒ 1. Preliminary estimate
  - ☒ 2. Abstract estimate
  - ☒ 3. Detailed estimate
  - ☒ 4. Approximate estimate

Question ID : **630680504136**  
Option 1 ID : **6306801970107**  
Option 2 ID : **6306801970108**  
Option 3 ID : **6306801970105**  
Option 4 ID : **6306801970106**  
Status : **Answered**  
Chosen Option : **3**

**Q.63** Which of the following is a type of detailed estimate?

- Ans
- ☒ 1. Service unit method
  - ☒ 2. Cubical content method
  - ☒ 3. Plinth area rate method
  - ☒ 4. Revised estimate

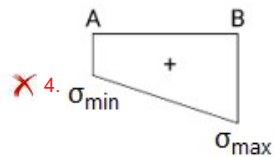
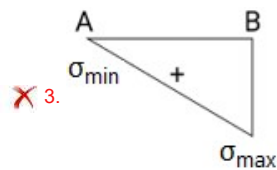
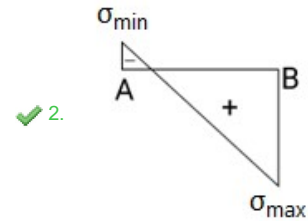
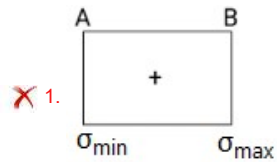
Question ID : **630680211778**  
Option 1 ID : **630680821259**  
Option 2 ID : **630680821260**  
Option 3 ID : **630680821261**  
Option 4 ID : **630680821262**  
Status : **Answered**  
Chosen Option : **1**



Q.64 Which of the following stress distribution diagrams represents the condition where the intensity of direct stress is less than the intensity of bending stress?

Where  $\sigma_{\min}$  is minimum resultant stress and  $\sigma_{\max}$  is maximum resultant stress.

Ans



Question ID : 630680404087

Option 1 ID : 6306801575834

Option 2 ID : 6306801575837

Option 3 ID : 6306801575836

Option 4 ID : 6306801575835

Status : Answered

Chosen Option : 3

Q.65 Among the following factors that can cause an error during distance measurement in chaining, the compensating error is caused by \_\_\_\_\_.

Ans ✓ 1. careless holding and marking

✗ 2. sag in chain

✗ 3. bad ranging

✗ 4. variation in temperature

Question ID : 630680506214

Option 1 ID : 6306801978376

Option 2 ID : 6306801978374

Option 3 ID : 6306801978373

Option 4 ID : 6306801978375

Status : Answered

Chosen Option : 4

**Q.66 Which of the following statements about soil pollution is INCORRECT?**

- Ans ☐ 1. Storing surplus rainwater by constructing bunds, ponds, etc. belongs to the category of area treatment method.
- ☐ 2. In temperate regions, DDT has a half-life of 10–15 years.
- ☐ 3. Irrigation water can cause salinisation of soil.
- ☒ 4. The area treatment method to prevent soil erosion involves treating the natural water courses.

Question ID : 630680509507

Option 1 ID : 6306801991300

Option 2 ID : 6306801991298

Option 3 ID : 6306801991297

Option 4 ID : 6306801991299

Status : Answered

Chosen Option : 3

**Q.67 Which property of concrete makes it advantageous for construction of bridges?**

- Ans ☒ 1. High compressive strength
- ☐ 2. Low durability
- ☐ 3. Low thermal conductivity
- ☐ 4. Low tensile strength

Question ID : 630680357647

Option 1 ID : 6306801392579

Option 2 ID : 6306801392578

Option 3 ID : 6306801392580

Option 4 ID : 6306801392577

Status : Answered

Chosen Option : 1

**Q.68 If the value of Poisson's ratio for a material is given as 0.35, then the elastic constants are related to each other as:**

- Ans ☐ 1.  $E = 1.3G$
- ☐ 2.  $K = 0.9E$
- ☒ 3.  $E = 2.7G$
- ☐ 4.  $G = 2.7E$

Question ID : 630680509119

Option 1 ID : 6306801989771

Option 2 ID : 6306801989773

Option 3 ID : 6306801989774

Option 4 ID : 6306801989772

Status : Not Answered

Chosen Option : --

**Q.69** Which of the following type of coarse aggregate is preferred in road construction, so that greatest density of road layer is achieved?

- Ans ☐ 1. Any type of aggregates  
☐ 2. Single-size aggregates  
☐ 3. porous aggregates  
☒ 4. All-in aggregates

Question ID : 630680357659  
Option 1 ID : 6306801392628  
Option 2 ID : 6306801392626  
Option 3 ID : 6306801392627  
Option 4 ID : 6306801392625  
Status : Answered  
Chosen Option : 2

**Q.70** A direct runoff hydrograph of triangular shape, caused by a storm, has a time base of 100 hours and the peak flow of 50 cumec occurring at 30 hours from the start. If the catchment area is 150 km<sup>2</sup>, the rainfall excess of the storm was \_\_\_\_\_.

- Ans ☐ 1. 5.6 cm  
☐ 2. 6.8 cm  
☐ 3. 7.2 cm  
☒ 4. 6 cm

Question ID : 630680504306  
Option 1 ID : 6306801970786  
Option 2 ID : 6306801970788  
Option 3 ID : 6306801970785  
Option 4 ID : 6306801970787  
Status : Not Answered  
Chosen Option : --

**Q.71** Find the correct statement regarding the assumption of limit state design under compression member as per IS 456:2000.

- Ans ☐ 1. The minimum compressive strain in concrete in axial compression is 0.002.  
☐ 2. The minimum compressive strain in concrete in axial compression is 0.0002.  
☒ 3. The maximum compressive strain in concrete in axial compression is 0.002.  
☐ 4. The maximum compressive strain in concrete in axial compression is 0.02.

Question ID : 630680509667  
Option 1 ID : 6306801991873  
Option 2 ID : 6306801991874  
Option 3 ID : 6306801991876  
Option 4 ID : 6306801991875  
Status : Answered  
Chosen Option : 1

**Q.72 Bernoulli's equation is applicable for:**

- Ans ☒ 1. incompressible fluids  
☒ 2. viscous fluids  
☒ 3. compressible fluids  
☒ 4. rotational fluids

Question ID : 630680506972  
Option 1 ID : 6306801981396  
Option 2 ID : 6306801981394  
Option 3 ID : 6306801981393  
Option 4 ID : 6306801981395  
Status : Answered  
Chosen Option : 1

**Q.73 Identify the canal regulation structure, used for closing the supply to the downstream of the parent canal during repairs.**

- Ans ☒ 1. cross regulator  
☒ 2. distributary regulator  
☒ 3. head regulator  
☒ 4. stream regulator

Question ID : 630680504292  
Option 1 ID : 6306801970730  
Option 2 ID : 6306801970732  
Option 3 ID : 6306801970729  
Option 4 ID : 6306801970731  
Status : Answered  
Chosen Option : 1

**Q.74 Streams passing through peaty land possess \_\_\_\_\_ colour.**

- Ans ☒ 1. black  
☒ 2. blue  
☒ 3. brown  
☒ 4. yellow

Question ID : 630680509500  
Option 1 ID : 6306801991270  
Option 2 ID : 6306801991272  
Option 3 ID : 6306801991271  
Option 4 ID : 6306801991269  
Status : Answered  
Chosen Option : 3

**Q.75 Which of the following can be used as an alternative for the blast furnace in the steel manufacturing industry for energy saving?**

- Ans ☒ 1. Pulverised coal injection  
☒ 2. Programmed coke heating  
☒ 3. Heat recovery from hot sinter  
☒ 4. Dry quenching

Question ID : 630680509513  
Option 1 ID : 6306801991321  
Option 2 ID : 6306801991322  
Option 3 ID : 6306801991324  
Option 4 ID : 6306801991323  
Status : Answered  
Chosen Option : 4

**Q.76** Which of the following statements represent(s) advantages of the separate system of sewerage?

Statement I: The load on treatment units becomes less.

Statement II: Sewers are large in diameter.

Statement III: Maintenance costs are reasonable.

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

Question ID : 630680509473  
Option 1 ID : 6306801991164  
Option 2 ID : 6306801991163  
Option 3 ID : 6306801991161  
Option 4 ID : 6306801991162  
Status : Answered  
Chosen Option : 3

**Q.77** The following are different factors that affect the diurnal variation in magnetic declination. The condition which may result in the maximum variation is \_\_\_\_\_.

- Ans ☒ 1. at the Equator during summer  
☒ 2. at the Magnetic Poles during summer  
☒ 3. at the Equator during winter  
☒ 4. at the Magnetic Poles during winter

Question ID : 630680506232  
Option 1 ID : 6306801978445  
Option 2 ID : 6306801978446  
Option 3 ID : 6306801978447  
Option 4 ID : 6306801978448  
Status : Answered  
Chosen Option : 2

**Q.78** Which of the following statements about the Noise Pollution (Regulation and Control) Rules, 2000, under the Environment Protection Act, 1986, is INCORRECT?

- Ans ☒ 1. The day time and night time limits of noise in commercial areas are 75 dB and 70 dB, respectively.  
☒ 2. Day time shall mean the period from 6.00 a.m. to 10.00 p.m.  
☒ 3. There are three categories of zones.  
☒ 4. Silence zone is an area comprising not less than 100 m around hospitals, etc.

Question ID : 630680509508  
Option 1 ID : 6306801991302  
Option 2 ID : 6306801991304  
Option 3 ID : 6306801991301  
Option 4 ID : 6306801991303  
Status : Answered  
Chosen Option : 4

**Q.79** Calculate the design stress for a steel grade Fe-415 after applying necessary factor of safety, in case of design of RCC members in accordance with limit state design.

- Ans
- ☐ 1. 415 N/mm<sup>2</sup>
  - ☐ 2. 435 N/mm<sup>2</sup>
  - ☐ 3. 217.5 N/mm<sup>2</sup>
  - ☒ 4. 361.05 N/mm<sup>2</sup>

Question ID : 630680377292

Option 1 ID : 6306801470231

Option 2 ID : 6306801470234

Option 3 ID : 6306801470233

Option 4 ID : 6306801470232

Status : Answered

Chosen Option : 1

**Q.80** Which of the following term is used to express the process of water coming out from the concrete and accumulate at the surface of concrete during compaction?

- Ans
- ☒ 1. Bleeding
  - ☐ 2. Permeability
  - ☐ 3. Seepage
  - ☐ 4. Efflorescence

Question ID : 630680191311

Option 1 ID : 630680741885

Option 2 ID : 630680741886

Option 3 ID : 630680741888

Option 4 ID : 630680741887

Status : Answered

Chosen Option : 1

**Q.81** Identify different stages in the treatment of sewage.

- Ans
- ☐ 1. Primary treatment and disinfection
  - ☐ 2. Primary treatment and secondary treatment
  - ☐ 3. Disinfection and secondary treatment
  - ☒ 4. Primary treatment, secondary treatment and disinfection

Question ID : 630680509503

Option 1 ID : 6306801991284

Option 2 ID : 6306801991282

Option 3 ID : 6306801991283

Option 4 ID : 6306801991281

Status : Answered

Chosen Option : 4

Q.82 As per IS 456 : 2000, the design strength of a short axially loaded compression member is expressed as \_\_\_\_\_. Where,  $f_y$ =characteristic strength of the compression reinforcement,  $A_{sc}$ =area of longitudinal reinforcement for columns,  $f_{ck}$ =characteristic compressive strength of the concrete,  $A_c$ =Area of concrete.

- Ans
- ☐ 1.  $[0.87 f_{ck} A_c + f_{sc} A_{sc}]$
  - ☐ 2.  $[0.45 f_{sc} A_{sc} + f_{ck} A_c]$
  - ☐ 3.  $[0.87 f_{sc} A_{sc} + f_{ck} A_c]$
  - ☒ 4.  $[0.4 f_{ck} A_c + 0.67 f_y A_{sc}]$

Question ID : 630680398037  
Option 1 ID : 6306801552165  
Option 2 ID : 6306801552162  
Option 3 ID : 6306801552163  
Option 4 ID : 6306801552164  
Status : Answered  
Chosen Option : 3

Q.83 Which of the following methods of transportation of concrete is useful for transporting the concrete to a relatively greater distance from batching plant?

- Ans
- ☐ 1. Pump and pipe line
  - ☐ 2. Crane and bucket method
  - ☒ 3. Transit mixer
  - ☐ 4. Wheel barrow

Question ID : 630680388965  
Option 1 ID : 6306801516324  
Option 2 ID : 6306801516325  
Option 3 ID : 6306801516322  
Option 4 ID : 6306801516323  
Status : Answered  
Chosen Option : 3

Q.84 The tangent drawn to the instantaneous velocity in a flow field is called:

- Ans
- ☐ 1. timeline
  - ☒ 2. streamline
  - ☐ 3. pathline
  - ☐ 4. streakline

Question ID : 630680506961  
Option 1 ID : 6306801981352  
Option 2 ID : 6306801981351  
Option 3 ID : 6306801981349  
Option 4 ID : 6306801981350  
Status : Answered  
Chosen Option : 2

**Q.85** As per IS 2770(part I), the load at failure in a pull out test was found to be 180 kN. Calculate the bond strength if the bar diameter is 20 mm and its embedded length into concrete is 300 mm.

- Ans
- ☒ 1.  $\frac{50}{\pi}$  N/mm<sup>2</sup>
  - ☒ 2.  $\frac{10}{\pi}$  N/mm<sup>2</sup>
  - ☒ 3.  $\frac{30}{\pi}$  N/mm<sup>2</sup>
  - ☒ 4.  $\frac{15}{\pi}$  N/mm<sup>2</sup>

Question ID : 630680326657  
Option 1 ID : 6306801270708  
Option 2 ID : 6306801270706  
Option 3 ID : 6306801270705  
Option 4 ID : 6306801270707  
Status : Answered  
Chosen Option : 3

**Q.86** Which of the piles is used for compacting loose granular soil?

- Ans
- ☒ 1. Friction piles
  - ☒ 2. Compaction piles
  - ☒ 3. End bearing piles
  - ☒ 4. Tension piles

Question ID : 630680504102  
Option 1 ID : 6306801969972  
Option 2 ID : 6306801969970  
Option 3 ID : 6306801969969  
Option 4 ID : 6306801969971  
Status : Answered  
Chosen Option : 1

**Q.87** Which of the following property of water makes the raindrops to form roughly spherical structure?

- Ans
- ☒ 1. air resistance
  - ☒ 2. atmospheric pressure
  - ☒ 3. surface tension
  - ☒ 4. Acceleration due to gravity

Question ID : 630680506951  
Option 1 ID : 6306801981310  
Option 2 ID : 6306801981311  
Option 3 ID : 6306801981312  
Option 4 ID : 6306801981309  
Status : Answered  
Chosen Option : 3



**Q.88** Which of the following pairs of parameters of drinking water and their desirable limits is correctly matched (as per IS 10500: 1991)?

- Ans ☒ 1. Iron – 0.5 mg/l  
☒ 2. Chlorides – 250 mg/l  
☒ 3. Fluorides – 0.5 mg/l  
☒ 4. pH – 7

Question ID : 630680509467

Option 1 ID : 6306801991138

Option 2 ID : 6306801991140

Option 3 ID : 6306801991139

Option 4 ID : 6306801991137

Status : Answered

Chosen Option : 4

**Q.89** The suitability for a particular type of foundation does NOT depend upon the \_\_\_\_\_.

- Ans ☒ 1. magnitude of loads  
☒ 2. type of soil  
☒ 3. Optimum moisture content (OMC) of soil  
☒ 4. depth of ground water table

Question ID : 630680181875

Option 1 ID : 630680704735

Option 2 ID : 630680704736

Option 3 ID : 630680704737

Option 4 ID : 630680704734

Status : Answered

Chosen Option : 4

**Q.90** Which of the following is not a functional characteristics of kerbs used in road construction?

- Ans ☒ 1. Protects the pavement edge  
☒ 2. Presents a more finished appearance  
☒ 3. provides cross slope to the pavement so that immediate drainage of water takes place  
☒ 4. acts as a boundary between the pavement and the footpath.

Question ID : 630680198264

Option 1 ID : 630680769227

Option 2 ID : 630680769230

Option 3 ID : 630680769229

Option 4 ID : 630680769228

Status : Answered

Chosen Option : 3

**Q.91** A rectangular RCC beam section having a width of 200 mm and depth of 300 mm is subjected to a factored shear force of 60 kN. Determine the nominal shear stress acting in the section if the effective cover is 50 mm and grade of concrete is M 20 and the grade of steel is Fe 415.

- Ans ☒ 1. 1.2 N/mm<sup>2</sup>  
☒ 2. 1.4 N/mm<sup>2</sup>  
☒ 3. 1 N/mm<sup>2</sup>  
☒ 4. 0.86 N/mm<sup>2</sup>

Question ID : 630680509647  
Option 1 ID : 6306801991794  
Option 2 ID : 6306801991796  
Option 3 ID : 6306801991793  
Option 4 ID : 6306801991795  
Status : Not Answered  
Chosen Option : --

**Q.92** Assuming the stress block diagram of the rectangular concrete beam section as per IS 456-2000, the depth of the centre of compressive force measured from the neutral axis is given by: (Assuming  $X_u$  as the depth of neutral axis from top compression fiber)

- Ans ☒ 1. 0.58  $X_u$   
☒ 2. 0.36  $X_u$   
☒ 3. 0.67  $X_u$   
☒ 4. 0.42  $X_u$

Question ID : 630680509662  
Option 1 ID : 6306801991855  
Option 2 ID : 6306801991854  
Option 3 ID : 6306801991856  
Option 4 ID : 6306801991853  
Status : Answered  
Chosen Option : 2

**Q.93** Which of the given procedures should be followed before applying paint onto different components of a building?

- i) Chalking
- ii) Flaking
- iii) Removing blisters
- iv) Surface wetting

- Ans ☒ 1. Only (i)  
☒ 2. (ii) and (iii)  
☒ 3. (i), (ii) and (iii)  
☒ 4. All of (i), (ii), (iii) and (iv)

Question ID : 630680509703  
Option 1 ID : 6306801992017  
Option 2 ID : 6306801992018  
Option 3 ID : 6306801992019  
Option 4 ID : 6306801992020  
Status : Answered  
Chosen Option : 3

**Q.94** Modern electronic distance measurement (EDM) measures distance by \_\_\_\_\_

- Ans ☐ 1. measurement of wave travel time
- ☒ 2. measurement of phase difference between transmitted and reflected signals
- ☐ 3. measurement of velocity of infra-red signals
- ☐ 4. measurement by invar tape

Question ID : 630680506246  
Option 1 ID : 6306801978502  
Option 2 ID : 6306801978501  
Option 3 ID : 6306801978504  
Option 4 ID : 6306801978503  
Status : Answered  
Chosen Option : 2

**Q.95** For a given open channel, if the Chezy's coefficient (C) is decreased, then how will it affect the discharge (Q) of the flow?

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

Question ID : 630680385050  
Option 1 ID : 6306801501086  
Option 2 ID : 6306801501089  
Option 3 ID : 6306801501088  
Option 4 ID : 6306801501087  
Status : Answered  
Chosen Option : 1

**Q.96** Timber which are slow and difficult to season free from defects, are classified as based upon their behaviour to cracking and splitting during normal air-seasoning practice.

- Ans ☐ 1. Low refractory
- ☒ 2. High refractory
- ☐ 3. Moderate refractory
- ☐ 4. Null refractory

Question ID : 630680509688  
Option 1 ID : 6306801991959  
Option 2 ID : 6306801991957  
Option 3 ID : 6306801991958  
Option 4 ID : 6306801991960  
Status : Answered  
Chosen Option : 2

**Q.97** Linear strains along X, Y and Z directions in an object with homogenous material are given as 0.05, 0.10 and 0.10, respectively. The size of the object before deformation was 20 cm × 10 cm × 10 cm. Determine the volumetric strain and change in volume of the material after deformation.

- Ans ☒ 1. Volumetric strain = 0.25, change in volume = 500 mm<sup>3</sup>  
☒ 2. Volumetric strain = 0.3, change in volume = 60 × 10<sup>4</sup> mm<sup>3</sup>  
☒ 3. Volumetric strain = 0.25, change in volume = 5 × 10<sup>5</sup> mm<sup>3</sup>  
☒ 4. Volumetric strain = 0.7, change in volume = 1400 cm<sup>3</sup>

Question ID : 630680509114  
Option 1 ID : 6306801989752  
Option 2 ID : 6306801989753  
Option 3 ID : 6306801989754  
Option 4 ID : 6306801989751  
Status : Not Answered  
Chosen Option : --

**Q.98** Match the following markings drawn on the carriage way with their significances.

S. No.	Type of Line	S. No.	Significance
A	Double longitudinal solid lines	1	Guiding and regulating line
B	Broken longitudinal lines	2	Edge line
C	Solid longitudinal lines	3	Indicate centre line or lane-marking for multi-lane roads
		4	Indicate maximum restriction and are only to be crossed in case of emergency

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

Question ID : 630680509071  
Option 1 ID : 6306801989581  
Option 2 ID : 6306801989579  
Option 3 ID : 6306801989580  
Option 4 ID : 6306801989582  
Status : Answered  
Chosen Option : 2

**Q.99** Which of the following type of cement is preferred for concrete making which is used in construction of sewage treatment plants located where, soil is infested with sulphates?


- Ans ☒ 1. Rapid-hardening cement  
☒ 2. Sulphate-resisting cement  
☒ 3. Extra rapid-hardening cement  
☒ 4. Portland slag cement


Question ID : 630680503291  
Option 1 ID : 6306801966750  
Option 2 ID : 6306801966751  
Option 3 ID : 6306801966749  
Option 4 ID : 6306801966752  
Status : Answered  
Chosen Option : 2


**Q.100** Select the option that is appropriate regarding the following two statements labelled Assertion and Reason.


**Assertion:** Proper deep ploughing, which is done by tractors, requires overall less quality of water and hence, the duty is high.

**Reason:** Ploughing should be done properly and deeply so that the moisture-retaining capacity of the soil is increased.

**Ans**  1. Assertion is true, but Reason is false.

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

 3. Both Assertion and Reason are false.

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

Question ID : **630680504342**

Option 1 ID : **6306801970931**

Option 2 ID : **6306801970930**

Option 3 ID : **6306801970932**

Option 4 ID : **6306801970929**

Status : **Answered**

Chosen Option : **4**