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Participant Name	
Test Center Name	
Test Date	22/06/2024
Test Time	12:30 PM - 2:30 PM
Subject	Assistant Engineer (Civil)

Section : General intelligence and Reasoning Ability

Q.1 Refer to the given letter, number, symbol series and answer the question that follows.

(Left) Y £ # 4 • G W Π P Q € \$ = 9 J 2 Δ V M Σ √ (Right)

If all the numbers are dropped from the series, which of the following will be 9th from the left?

- Ans
- 1. Π
 - 2. Q
 - 3. W
 - 4. =

Question ID : 630680757083
Option 1 ID : 6306802967318
Option 2 ID : 6306802967317
Option 3 ID : 6306802967316
Option 4 ID : 6306802967319

Q.2 What should come in place of '?' in the given series?

103 98 93 88 83 ?

- Ans
- 1. 68
 - 2. 78
 - 3. 76
 - 4. 74

Question ID : 630680554462
Option 1 ID : 6306802192111
Option 2 ID : 6306802192110
Option 3 ID : 6306802192109
Option 4 ID : 6306802192108

Q.3 Three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which is the letter-cluster pair that does not belong to that group?

(Note: The odd man out is not based on the number of consonants/vowels or their position in the letter-cluster.)

- Ans
- 1. VY – FI
 - 2. CZ – IK
 - 3. KN – UX
 - 4. LO – VY

Question ID : 630680404829
 Option 1 ID : 6306801578809
 Option 2 ID : 6306801578807
 Option 3 ID : 6306801578808
 Option 4 ID : 6306801578810

Q.4 In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Which numbers should replace X and Y so that the pattern followed by the two numbers on the left side of :: is the same as that on the right side of :: ?

(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.)
 X : 19 :: 37 : Y

- Ans
- 1. X = 15, Y = 41
 - 2. X = 18, Y = 44
 - 3. X = 17, Y = 42
 - 4. X = 15, Y = 45

Question ID : 630680394144
 Option 1 ID : 6306801536869
 Option 2 ID : 6306801536868
 Option 3 ID : 6306801536866
 Option 4 ID : 6306801536867

Q.5 Seven people, A, B, C, D, E, F and G, are sitting in a straight row, facing north. A sits second from the right of the row. Only 2 people sit between A and C. Only 3 people sit between B and G. B is an immediate neighbour of A. E is an immediate neighbour of G. F is not an immediate neighbour of C. Who sits at the extreme left end of the row?

- Ans
- 1. D
 - 2. F
 - 3. E
 - 4. G

Question ID : 630680521143
 Option 1 ID : 6306802036998
 Option 2 ID : 6306802036997
 Option 3 ID : 6306802036999
 Option 4 ID : 6306802037000

Q.6 L is the only daughter of C. D is the mother of L, M and O. Y is the daughter of L. K is the husband of the daughter of D. Z is the daughter of M. How is O related to Y?

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

Question ID : 63068084149
 Option 1 ID : 630680326124
 Option 2 ID : 630680326127
 Option 3 ID : 630680326126
 Option 4 ID : 630680326125

Q.7 Six colleagues (P, Q, R, S, T, U) live in a six-floor building. The lowermost floor in the building is numbered 1, the floor above it, number 2 and so on till the topmost floor is numbered 6. T lives in an even-numbered floor, but not on the topmost floor. Only two people live between Q and P. P lives on the top most floor. S lives immediately above U. Only S lives between Q and U. How many people live between R and S?

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

Question ID : 630680545358
 Option 1 ID : 6306802132087
 Option 2 ID : 6306802132085
 Option 3 ID : 6306802132084
 Option 4 ID : 6306802132086

Q.8 ABCD is related to ZYXW in a certain way based on the English alphabetical order. In the same way, GHIJ is related to TSRQ. To which of the following is MNOP related to, following the same logic?

- Ans
- 1. KLMN
 - 2. NMPO
 - 3. NMLK
 - 4. OPNM

Question ID : 63068083717
 Option 1 ID : 630680324486
 Option 2 ID : 630680324484
 Option 3 ID : 630680324485
 Option 4 ID : 630680324487

Q.9 If '÷' means 'multiplication', 'x' means 'addition', '+' means 'subtraction' and '-' means 'division', then what will come in place of the question mark (?) in the following equation?
 $72 \times 30 - 5 \div 79 + 4 = ?$

- Ans
- 1. 545
 - 2. 543
 - 3. 542
 - 4. 544

Question ID : 630680549815
 Option 1 ID : 6306802149640
 Option 2 ID : 6306802149642
 Option 3 ID : 6306802149641
 Option 4 ID : 6306802149643

Q.10 If '+' and 'x' are interchanged and '-' and '÷' are interchanged, what will come in place of the question mark (?) in the given equation?

$$10 - 5 \div 2 + 3 \times 5 = ?$$

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

Question ID : 630680373925

Option 1 ID : 6306801456974

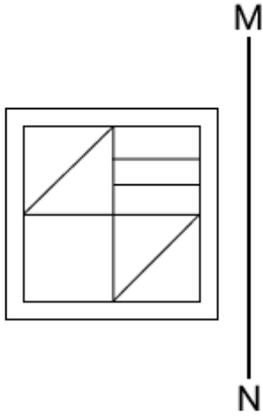
Option 2 ID : 6306801456972

Option 3 ID : 6306801456971

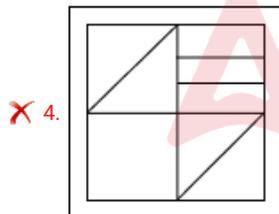
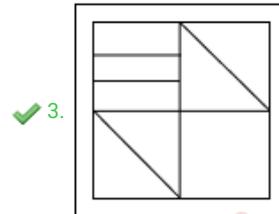
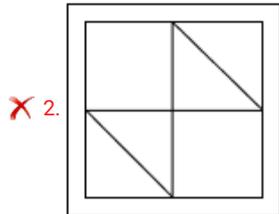
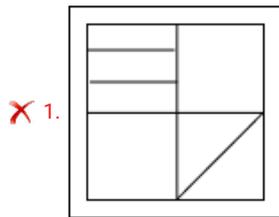
Option 4 ID : 6306801456973



Q.11 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



Ans



Question ID : 630680561120
 Option 1 ID : 6306802195373
 Option 2 ID : 6306802195376
 Option 3 ID : 6306802195375
 Option 4 ID : 6306802195374

Q.12 YV23 is related to UR21 in a certain way. In the same way, OL29 is related to KH27. To which of the following is QN25 related to, following the same logic?

- Ans
- 1. MJ27
 - 2. MJ23
 - 3. LI23
 - 4. NK23

Question ID : 63068083715
Option 1 ID : 630680324479
Option 2 ID : 630680324478
Option 3 ID : 630680324477
Option 4 ID : 630680324476

Q.13 If 'W' is added before each of the following words, then which of them will form a meaningful English word?

BAN
BOT
MUG
HAT

- Ans
- 1. HAT only
 - 2. BAN only
 - 3. BOT only
 - 4. MUG only

Question ID : 630680404212
Option 1 ID : 6306801576369
Option 2 ID : 6306801576366
Option 3 ID : 6306801576367
Option 4 ID : 6306801576368

Q.14 Pointing to a photograph of a person, X said, "His only sister's father is the only son of my grandfather". How is X related to the person in the photograph?

- Ans
- 1. Mother
 - 2. Daughter
 - 3. Sister
 - 4. Aunt

Question ID : 63068058816
Option 1 ID : 630680226887
Option 2 ID : 630680226888
Option 3 ID : 630680226886
Option 4 ID : 630680226889

Q.15 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 their 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.)

(27, 39, 51)
(41, 53, 65)

- Ans
- 1. (49, 71, 83)
 - 2. (38, 60, 82)
 - 3. (23, 35, 57)
 - 4. (32, 44, 56)

Question ID : 630680536148
Option 1 ID : 6306802095910
Option 2 ID : 6306802095911
Option 3 ID : 6306802095909
Option 4 ID : 6306802095908

Q.16 What should come in place of '?' in the given series?

417 420 425 432 441 ?

- Ans
- 1. 453
 - 2. 452
 - 3. 454
 - 4. 451

Question ID : 630680554468
Option 1 ID : 6306802191226
Option 2 ID : 6306802191225
Option 3 ID : 6306802191227
Option 4 ID : 6306802191224

Q.17 In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Which numbers should replace X and Y so that the pattern followed by the two numbers on the left side of '::' is same as that on the right side of '::'?

(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)

X : 142 :: 18 : Y

- Ans
- 1. X = 12, Y = 322
 - 2. X = 11, Y = 322
 - 3. X = 11, Y = 324
 - 4. X = 12, Y = 324

Question ID : 630680366432
Option 1 ID : 6306801427247
Option 2 ID : 6306801427246
Option 3 ID : 6306801427248
Option 4 ID : 6306801427245

Q.18 Three of the following word pairs are alike in some manner and hence form a group. Which word pair does NOT belong to that group?
(Note: The words in the pairs must be considered as meaningful English words and must not be grouped based on the number of letters/number of consonants/vowels in the words.)

- Ans
- 1. Hypocrisy-Deceit
 - 2. Feeble-Sturdy
 - 3. Abundant-Sparse
 - 4. Conceal-Divulge

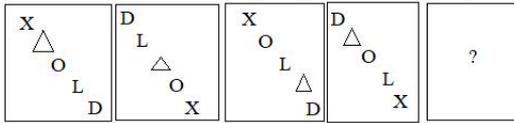
Question ID : 630680404868
Option 1 ID : 6306801578966
Option 2 ID : 6306801578965
Option 3 ID : 6306801578963
Option 4 ID : 6306801578964

Q.19 If '+' means '-', 'x' means '+', '÷' means 'x', '-' means '÷', then what is '?' in the given equation?
 $5 + 1 \div 112 - 2 \times 94 = ?$

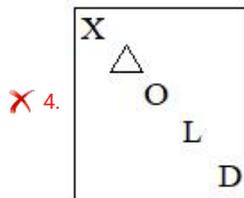
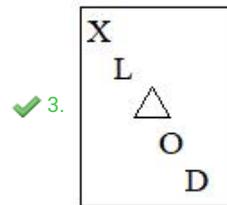
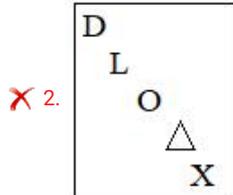
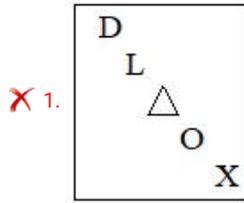
- Ans
- 1. 42
 - 2. 154
 - 3. 155
 - 4. 43

Question ID : 63068053359
Option 1 ID : 630680205522
Option 2 ID : 630680205523
Option 3 ID : 630680205524
Option 4 ID : 630680205525

Q.20 Select the figure from among the given options that can replace the question mark (?) in the following series.



Ans



Question ID : 63068057470
 Option 1 ID : 630680221722
 Option 2 ID : 630680221724
 Option 3 ID : 630680221725
 Option 4 ID : 630680221723

Section : General Awareness

Q.1 Which of these festivals of Arunachal Pradesh is a monastic festival held every year for three days starting from the twenty-eighth day of the eleventh lunar month to drive away evil forces and to ward off any natural calamities?

- Ans
- ✗ 1. Losar
 - ✗ 2. Dree festival
 - ✗ 3. Solung
 - ✓ 4. Torgya

Question ID : 63068087485
 Option 1 ID : 630680339325
 Option 2 ID : 630680339328
 Option 3 ID : 630680339326
 Option 4 ID : 630680339327

Q.2 Which of the following laws of production function considers at least one factor of production as constant?

- Ans
- 1. Cobb Douglas production function
 - 2. CES production function
 - 3. Law of diminishing marginal product
 - 4. Law of returns to scale

Question ID : 630680324418
 Option 1 ID : 6306801262155
 Option 2 ID : 6306801262156
 Option 3 ID : 6306801262153
 Option 4 ID : 6306801262154

Q.3 Paona Brajabashi was a freedom fighter who resisted the British forces in the Kingdom of _____.

- Ans
- 1. Manipur
 - 2. Guler
 - 3. Tripura
 - 4. Sambalpur

Question ID : 630680270087
 Option 1 ID : 6306801049602
 Option 2 ID : 6306801049601
 Option 3 ID : 6306801049600
 Option 4 ID : 6306801049599

Q.4 Which of the following foods is rich in Vitamin D?

- Ans
- 1. Carrot
 - 2. Egg yolk
 - 3. Lentils
 - 4. Broccoli

Question ID : 630680608936
 Option 1 ID : 6306802382827
 Option 2 ID : 6306802382824
 Option 3 ID : 6306802382826
 Option 4 ID : 6306802382825

Q.5 Suppose a factory manufactures footwear, which of the following is treated as externalities?

- Ans
- 1. The amount borrowed by proprietors of the footwear company from outside India
 - 2. Pollution caused by the water, along with chemicals used in the production process
 - 3. All the expenditures with regard to the export of footwear and import of raw materials
 - 4. Profits and export earnings of footwear companies if they are engaged in exports

Question ID : 630680422532
 Option 1 ID : 6306801648567
 Option 2 ID : 6306801648565
 Option 3 ID : 6306801648564
 Option 4 ID : 6306801648566

Q.6 As a progressive step, the government has decided that 'Adult Education' will be replaced by

- Ans
- 1. Education and Lifelong Learning
 - 2. Education For All
 - 3. Education and Life
 - 4. DISHA

Question ID : 630680183663
Option 1 ID : 630680711661
Option 2 ID : 630680711663
Option 3 ID : 630680711662
Option 4 ID : 630680711664

Q.7 Which of the following statements are correct about the Scheme For Protection And Preservation Of Endangered Languages (SPPEL)?

- i) It creates awareness on translation and promotes translation.
- ii) It was instituted by the Ministry of Education in 2013.
- iii) Its mission is to save and preserve the endangered languages of the country through digital documentation and archiving.
- iv) Its mission is to save endangered languages of the world.

- Ans
- 1. ii and iii
 - 2. i and ii
 - 3. i and iv
 - 4. i and iii

Question ID : 630680394005
Option 1 ID : 6306801536324
Option 2 ID : 6306801536322
Option 3 ID : 6306801536325
Option 4 ID : 6306801536323

Q.8 Who among the following led the Payyannur and Calicut Salt Satyagrahas and was chosen as the first Satyagrahi from Kerala in the individual satyagraha movement launched by Gandhiji?

- Ans
- 1. Lalithambika Antharjanam
 - 2. Koyapalli Kelappan
 - 3. Janaki Amma
 - 4. Sarojini Naidu

Question ID : 630680305328
Option 1 ID : 6306801187702
Option 2 ID : 6306801187703
Option 3 ID : 6306801187704
Option 4 ID : 6306801187701

Q.9 According to the recent report titled 'Spare the Air' by Greenpeace India, which city in India was identified as the most polluted in July 2023?

- Ans
- 1. Chennai
 - 2. Mumbai
 - 3. Bengaluru
 - 4. Kolkata

Question ID : 630680780430
Option 1 ID : 6306803058813
Option 2 ID : 6306803058812
Option 3 ID : 6306803058811
Option 4 ID : 6306803058814

Q.10 What is the total number of medals India won at the Asia Cup 2024 archery stage-1 tournament?

- Ans 1. 8
 2. 14
 3. 17
 4. 10

Question ID : 630680766539
 Option 1 ID : 6306803004472
 Option 2 ID : 6306803004469
 Option 3 ID : 6306803004471
 Option 4 ID : 6306803004470

Q.11 Which of the following is NOT correct regarding the office of Attorney-General of India?

- Ans 1. The Attorney-General shall hold office during the pleasure of the President.
 2. In the performance of his duties, the Attorney-General shall have right of audience in all courts in the territory of India.
 3. The Attorney-General shall receive such remuneration as the Parliament may determine.
 4. The President shall appoint a person who is qualified to be appointed a Judge of the Supreme Court to be Attorney-General for India.

Question ID : 630680218585
 Option 1 ID : 630680848248
 Option 2 ID : 630680848249
 Option 3 ID : 630680848250
 Option 4 ID : 630680848247

Q.12 Match the following rivers and dams.

<u>River</u>	<u>Dam</u>
a) Bhagirathi	i) Srisaïlam dam
b) Krishna	ii) Sardar Sarovar dam
c) Narmada	iii) Hirakud dam
d) Mahanadi	iv) Tehri Dam

- Ans 1. a) iv, b) i, c) ii, d) iii
 2. a) i, b) ii, c) iii, d) iv
 3. a) iv, b) iii, c) i, d) ii
 4. a) i, b) ii, c) iv, d) iii

Question ID : 630680511127
 Option 1 ID : 6306801997639
 Option 2 ID : 6306801997641
 Option 3 ID : 6306801997640
 Option 4 ID : 6306801997638

Q.13 Which of the following is NOT a dimension used to measure Multidimensional Poverty Index (MPI) by the NITI Aayog?

- Ans
- 1. Health
 - 2. Education
 - 3. Standard of Living
 - 4. Purchasing Power Parity

Question ID : 630680639115
Option 1 ID : 6306802502193
Option 2 ID : 6306802502194
Option 3 ID : 6306802502195
Option 4 ID : 6306802502196

Q.14 How many districts are there in Andaman and Nicobar Islands?

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

Question ID : 630680305037
Option 1 ID : 6306801186694
Option 2 ID : 6306801186696
Option 3 ID : 6306801186695
Option 4 ID : 6306801186693

Q.15 As per the Indian Constitution, Article ____ states that no laws can be made that take away fundamental rights.

- Ans
- 1. 13(3)
 - 2. 13(2)
 - 3. 13(4)
 - 4. 13(1)

Question ID : 630680551172
Option 1 ID : 6306802154917
Option 2 ID : 6306802154916
Option 3 ID : 6306802154918
Option 4 ID : 6306802154915

Q.16 Which of the following dietary deficiencies produces megaloblastic anaemia?

- Ans
- 1. Pyridoxine
 - 2. Niacin
 - 3. Folic acid
 - 4. Cobalamin

Question ID : 630680321348
Option 1 ID : 6306801250102
Option 2 ID : 6306801250104
Option 3 ID : 6306801250103
Option 4 ID : 6306801250101

Q.17 Which of the following systems led to the launch of Champaran Satyagraha in Bihar by Mahatma Gandhi?

- Ans 1. Tinkathia
 2. Zamindari
 3. Dahsala
 4. Mahalwari

Question ID : 630680303395
Option 1 ID : 6306801180230
Option 2 ID : 6306801180233
Option 3 ID : 6306801180231
Option 4 ID : 6306801180232

Q.18 In which of the following states is the Similipal Biosphere Reserve situated?

- Ans 1. Madhya Pradesh
 2. Kerala
 3. Uttarakhand
 4. Odisha

Question ID : 630680511273
Option 1 ID : 6306801998224
Option 2 ID : 6306801998222
Option 3 ID : 6306801998225
Option 4 ID : 6306801998223

Q.19 In which of the following languages has the biography been awarded the Sahitya Akademi Award 2021?

- Ans 1. Tamil
 2. Kannada
 3. Malayalam
 4. Sindhi

Question ID : 630680512316
Option 1 ID : 6306802002234
Option 2 ID : 6306802002237
Option 3 ID : 6306802002235
Option 4 ID : 6306802002236

Q.20 Who amongst the following has received the National Technology Awards (Main) for 2023?

- Ans 1. Think Tree Innovations
 2. Wipro
 3. Reliance
 4. MyLab Discovery Solutions

Question ID : 630680780424
Option 1 ID : 6306803058787
Option 2 ID : 6306803058788
Option 3 ID : 6306803058789
Option 4 ID : 6306803058790

Q.1 The table represents the population of a village from 2017 to 2021.

Year	No. of men	No. of women	No. of children	Total	Increase / decrease (+/-)
2017	75104	70387	-----	2479647	-----
2018	80391	72561	-----	-----	21360+
2019	-----	73143	30214	259322	-----
2020	79539	-----	35160	-----	6337-
2021	81274	73935	33789	188998,	-----

Increase or decrease in population in 2021 over that in 2020

- Ans
- 1. 70,324+
 - 2. 63,987-
 - 3. 70,324-
 - 4. 63,987+

Question ID : 630680398764
 Option 1 ID : 6306801555060
 Option 2 ID : 6306801555058
 Option 3 ID : 6306801555061
 Option 4 ID : 6306801555059

Q.2 Rajesh marks an article at 25% above cost price but allows 10% discount for cash payment. If he sells the item for ₹14,400, then find his cost price.

- Ans
- 1. ₹16,000
 - 2. ₹12,800
 - 3. ₹16,800
 - 4. ₹18,200

Question ID : 630680219111
 Option 1 ID : 630680850343
 Option 2 ID : 630680850346
 Option 3 ID : 630680850345
 Option 4 ID : 630680850344

Q.3 If three numbers are in the ratio of 3 : 4 : 5 and their LCM is 4200, then their HCF is:

- Ans
- 1. 70
 - 2. 25
 - 3. 30
 - 4. 35

Question ID : 630680469534
 Option 1 ID : 6306801833905
 Option 2 ID : 6306801833904
 Option 3 ID : 6306801833903
 Option 4 ID : 6306801833906

Q.4 Find the value of $(10)^{98} \div (10)^{95}$.

- Ans
- 1. 10
 - 2. 100
 - 3. 10,000
 - 4. 1,000

Question ID : 63068091835
Option 1 ID : 630680356075
Option 2 ID : 630680356076
Option 3 ID : 630680356077
Option 4 ID : 630680356074

Q.5 A and B together can complete a work in 12 days. A alone can complete it in 20 days. If B does the work only for half a day daily, then in how many days will A and B together complete the work?

- Ans
- 1. 20
 - 2. 10
 - 3. 15
 - 4. 11

Question ID : 630680101790
Option 1 ID : 630680395523
Option 2 ID : 630680395521
Option 3 ID : 630680395522
Option 4 ID : 630680395520

Q.6 The cost of a paint is ₹190 per kg. If 1 kg of this paint covers 12 square feet, then how much will it cost to paint the outside of a cube of side 4 feet.

- Ans
- 1. ₹1,530
 - 2. ₹1,510
 - 3. ₹1,500
 - 4. ₹1,520

Question ID : 630680526660
Option 1 ID : 6306802058709
Option 2 ID : 6306802058707
Option 3 ID : 6306802058706
Option 4 ID : 6306802058708

Q.7 A solid cylindrical brick of radius 0.5 m and height 10 m is to be formed from cement and concrete. How much mixture of cement and concrete is needed (in kg)? Consider the weight of the mixture is 10 kg/m^3 .

- Ans
- 1. 20π
 - 2. 2.5π
 - 3. 25π
 - 4. 15π

Question ID : 630680135942
Option 1 ID : 630680526477
Option 2 ID : 630680526475
Option 3 ID : 630680526474
Option 4 ID : 630680526476

Q.8 $6^7 \times 3^7 \times 2^7 = 6^K$, the value of K is....

- Ans
- 1. 7
 - 2. 6^7
 - 3. 6^{14}
 - 4. 14

Question ID : 63068086502
 Option 1 ID : 630680335416
 Option 2 ID : 630680335417
 Option 3 ID : 630680335419
 Option 4 ID : 630680335418

Q.9 The average of three numbers is 20. If two numbers are 16 and 22, the third number is:

- Ans
- 1. 23
 - 2. 24
 - 3. 22
 - 4. 21

Question ID : 630680552118
 Option 1 ID : 6306802158699
 Option 2 ID : 6306802158700
 Option 3 ID : 6306802158697
 Option 4 ID : 6306802158698

Q.10 A solid metallic cylinder of base radius 6 cm and height 8 cm is melted to form cones, each of height 4 cm and base radius 4 mm. The number of cones formed is:

- Ans
- 1. 1450
 - 2. 1300
 - 3. 1400
 - 4. 1350

Question ID : 630680387737
 Option 1 ID : 6306801511585
 Option 2 ID : 6306801511582
 Option 3 ID : 6306801511584
 Option 4 ID : 6306801511583

Q.11 If $a : b = 5 : 6$, then the value of $(6a - b) : (3a + 2b)$ is:

- Ans
- 1. 5 : 9
 - 2. 8 : 3
 - 3. 6 : 5
 - 4. 8 : 9

Question ID : 630680629411
 Option 1 ID : 6306802463716
 Option 2 ID : 6306802463717
 Option 3 ID : 6306802463714
 Option 4 ID : 6306802463715

Q.12 A car travelling at a speed of 60 km/hr can complete a journey in 12 hours. How long will it take to travel the same distance at 90 km/hr?

- Ans
- 1. 8 hours
 - 2. 1.5 hours
 - 3. 7.5 hours
 - 4. 5 hours

Question ID : 630680629803
Option 1 ID : 6306802465106
Option 2 ID : 6306802465109
Option 3 ID : 6306802465108
Option 4 ID : 6306802465107

Q.13 What annual installment will discharge a debt of ₹6,450 due in 4 years at 5% simple interest per annum?

- Ans
- 1. ₹1,750
 - 2. ₹2,000
 - 3. ₹1,875
 - 4. ₹1,500

Question ID : 630680139493
Option 1 ID : 630680540039
Option 2 ID : 630680540041
Option 3 ID : 630680540040
Option 4 ID : 630680540038

Q.14 In a college election between two candidates, the winner obtained 56% of the total votes and defeated his opponent by 360 votes. If 100% votes were casted, the number of votes obtained by the winner is:

- Ans
- 1. 1680
 - 2. 1575
 - 3. 1320
 - 4. 1440

Question ID : 630680543489
Option 1 ID : 6306802124801
Option 2 ID : 6306802124802
Option 3 ID : 6306802124804
Option 4 ID : 6306802124803

Q.15 A and B share profit in a ratio of 7 : 8, whereas B and C share profit in a ratio of 5 : 6. If the monthly profit is ₹15,252, then the profit share of C is:

- Ans
- 1. ₹992 more than B
 - 2. ₹620 less than A
 - 3. ₹1,612 more than A
 - 4. ₹372 more than the difference of A and B

Question ID : 630680516301
Option 1 ID : 6306802017605
Option 2 ID : 6306802017606
Option 3 ID : 6306802017608
Option 4 ID : 6306802017607

Q.16 A loan of Rs.3,280 is to be paid back in two equal half-yearly installments. How much will each installment be, if the interest is compounded half yearly, at the rate of 10% per annum.

- Ans
- 1. Rs.2,205
 - 2. Rs.1,764
 - 3. Rs.1,640
 - 4. Rs.1,968

Question ID : 63068059945
 Option 1 ID : 630680231353
 Option 2 ID : 630680231350
 Option 3 ID : 630680231351
 Option 4 ID : 630680231352

Q.17 Two trains start at the same time from stations A and B, respectively, and travel towards each other at a speed of 60 km/h and 40 km/h, respectively. At the time they meet, the faster train has travelled 60 km more than the slower train. What is the distance between the two stations?

- Ans
- 1. 300 km
 - 2. 450 km
 - 3. 360 km
 - 4. 420 km

Question ID : 630680206532
 Option 1 ID : 630680800735
 Option 2 ID : 630680800738
 Option 3 ID : 630680800736
 Option 4 ID : 630680800737

Q.18 When the number increases by 40%, it becomes 8400. What is the original number?

- Ans
- 1. 6000
 - 2. 4650
 - 3. 3400
 - 4. 5470

Question ID : 630680636455
 Option 1 ID : 6306802491557
 Option 2 ID : 6306802491555
 Option 3 ID : 6306802491554
 Option 4 ID : 6306802491556

Q.19 A person sold two vans for ₹12,00,000 each. On one van he gains 14% and on the other he loses 14%. Find his gain or loss.

- Ans
- 1. Gain 1.96%
 - 2. Gain 4%
 - 3. No loss no gain
 - 4. Loss 1.96%

Question ID : 630680489204
 Option 1 ID : 6306801914650
 Option 2 ID : 6306801914649
 Option 3 ID : 6306801914647
 Option 4 ID : 6306801914648

Q.20 Study the given table and answer the question that follows.

A school conducts two examinations per semester. The given table shows the results of classes VIII, IX and X during the last semester.

Result	Students in class VIII	Students in class IX	Students in class X
Passed in both the examinations	2340	3420	4320
Failed in both the examinations	960	690	660
Passed in only one examination	180	90	25

The number of students who passed at least one examination in class X is:

- Ans**
- 1. 685
 - 2. 25
 - 3. 4345
 - 4. 4980

Question ID : 630680816423
 Option 1 ID : 6306803197968
 Option 2 ID : 6306803197967
 Option 3 ID : 6306803197965
 Option 4 ID : 6306803197966

Section : English Language and Comprehension

Q.1 Select the INCORRECTLY spelt word.

- Ans**
- 1. Devasted
 - 2. Hospitality
 - 3. Uncertain
 - 4. Occasions

Question ID : 630680816405
 Option 1 ID : 6306803197899
 Option 2 ID : 6306803197898
 Option 3 ID : 6306803197900
 Option 4 ID : 6306803197901

Q.2 Sentences of a paragraph are given below in jumbled order. Select the option that arranges them in the correct logical sequence to form a meaningful paragraph.

- A. Kids' lives, to be fair, aren't always conducive to solitude; the younger ones require supervision, and the older ones are often busy trying to fit in.
- B. But still, psychologists today believe some crucial development can happen when young people are left to themselves.
- C. It's true that time spent alone typically increases over a lifetime, and that throughout much of American history, children hardly had any privacy or free time at all.
- D. Researchers dwell on whether kids have too much alone time, adults don't tend to consider whether kids have enough of it.

- Ans**
- 1. D, A, C, B
 - 2. C, A, B, D
 - 3. D, B, C, A
 - 4. C, D, B, A

Question ID : 630680176805
 Option 1 ID : 630680685434
 Option 2 ID : 630680685435
 Option 3 ID : 630680685433
 Option 4 ID : 630680685432

Q.3 Select the option with the correct spelling to substitute the underlined word in the given sentence.

The amatuer golfer proved everyone wrong by winning the tournament.

- Ans
- 1. amateuer
 - 2. amature
 - 3. amateur
 - 4. amatuyer

Question ID : 630680517555
 Option 1 ID : 6306802022619
 Option 2 ID : 6306802022618
 Option 3 ID : 6306802022616
 Option 4 ID : 6306802022617

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

Half the year, he tours the country _____ the caravan behind his lorry.

- Ans
- 1. tows
 - 2. towing
 - 3. tow
 - 4. towed

Question ID : 630680295299
 Option 1 ID : 6306801148922
 Option 2 ID : 6306801148921
 Option 3 ID : 6306801148920
 Option 4 ID : 6306801148923

Q.5 Select the most appropriate option to fill in the blank.

Diamond is one of ____ hardest materials found on Earth.

- Ans
- 1. an
 - 2. no article
 - 3. the
 - 4. a

Question ID : 630680316315
 Option 1 ID : 6306801230894
 Option 2 ID : 6306801230896
 Option 3 ID : 6306801230895
 Option 4 ID : 6306801230893

Q.6 Select the most appropriate ANTONYM of the given word.

Abandon

- Ans
- 1. Remove
 - 2. Keep
 - 3. Confiscate
 - 4. Eradicate

Question ID : 630680324600
 Option 1 ID : 6306801262858
 Option 2 ID : 6306801262857
 Option 3 ID : 6306801262860
 Option 4 ID : 6306801262859

Q.7 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. Reading is a wonderful way to enrich one's life and expand one's knowledge. It has numerous benefits for both the mind and the body.
2. Additionally, reading can be a form of relaxation and entertainment, transporting readers to different worlds and exposing them to diverse perspectives.
3. Reading regularly can improve one's vocabulary, cognitive skills and memory retention.
4. It can also reduce stress levels, improve focus, and enhance empathy and understanding of others.

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

Question ID : 630680204369
 Option 1 ID : 630680792559
 Option 2 ID : 630680792562
 Option 3 ID : 630680792561
 Option 4 ID : 630680792560

Q.8 Select the most appropriate degree of comparison to fill in the blank.
 India is _____ than Australia.

- Ans
- 1. more populous
 - 2. populous
 - 3. least populous
 - 4. most populous

Question ID : 630680146573
 Option 1 ID : 630680567175
 Option 2 ID : 630680567174
 Option 3 ID : 630680567177
 Option 4 ID : 630680567176

Q.9 Sentences of a paragraph are given below in jumbled order. Select the most logical order of sentences from the given options to construct a meaningful and coherent paragraph.

1. There are certain euthanasia cases that are not too contentious.
2. These days, everyone agrees that euthanasia used to further eugenics programmes was ethically repugnant.
3. For example, it is virtually commonly agreed that killing a patient against their choice (involuntary, aggressive/active, other-administered) is wrong.
4. Under the pressure of advancing the Aryan 'race' and lowering social expenditures, Adolf Hitler implemented a campaign in Germany in the late 1930s and early 1940s to eliminate children with impairments (with or without their parents' consent).

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

Question ID : 630680196398
 Option 1 ID : 630680761961
 Option 2 ID : 630680761959
 Option 3 ID : 630680761960
 Option 4 ID : 630680761962

Q.10 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

- A. The revolution in Information Technology threatens to rupture the social fabric of India by enriching a few at the cost of many.
B. It has, as yet, failed to touch the lives of the average citizen and India is nowhere close to being a knowledge economy or society.
C. This year, the export of software products is expected to account for 33 per cent of global software export, marking a surge that will generate employment.
D. In a very short time and quite unexpectedly, the country has risen to considerable eminence in the world of Information Technology.

Ans 1. BCAD

2. ADCB

3. CABD

4. DBAC

Question ID : 630680156791

Option 1 ID : 630680606804

Option 2 ID : 630680606806

Option 3 ID : 630680606805

Option 4 ID : 630680606807

Q.11 Select the most appropriate meaning of the given proverb.
The apple doesn't fall far from the tree.

Ans 1. A man usually has a similar character or similar qualities to his friends.

2. A child usually has a no similar character or similar qualities to his or her parents.

3. A woman usually has a similar character or similar qualities to her relatives.

4. A child usually has a similar character or similar qualities to his or her parents.

Question ID : 630680180667

Option 1 ID : 630680700164

Option 2 ID : 630680700167

Option 3 ID : 630680700165

Option 4 ID : 630680700166

Q.12 Select the most appropriate meaning of the given proverb.

A stitch in time saves nine.

Ans 1. It is better to deal the problem at an early stage and prevent it from getting worse.

2. It is better to deal the problem than not facing it.

3. It is better to deal the problem and get the result.

4. It is better to deal the problem which is going to harm.

Question ID : 63068069316

Option 1 ID : 630680267942

Option 2 ID : 630680267945

Option 3 ID : 630680267943

Option 4 ID : 630680267944

Q.13 Select the most appropriate ANTONYM of the underlined word in the given sentence.

My heart was filled with remorse as I left him when he needed me the most.

- Ans
- 1. satisfaction
 - 2. conviction
 - 3. arrogance
 - 4. penitence

Question ID : 630680551311
Option 1 ID : 6306802155463
Option 2 ID : 6306802155466
Option 3 ID : 6306802155465
Option 4 ID : 6306802155464

Q.14 Select the most appropriate verb to fill in the blank.
The time left for the submission of examination papers ____ 10 minutes.

- Ans
- 1. has
 - 2. are
 - 3. have
 - 4. is

Question ID : 630680196526
Option 1 ID : 630680762405
Option 2 ID : 630680762403
Option 3 ID : 630680762406
Option 4 ID : 630680762404

Q.15 Select the most appropriate option to fill in the blank.
_____ all over the world have published photos of the royal couple.

- Ans
- 1. A magazine
 - 2. The magazines
 - 3. An magazine
 - 4. In magazines

Question ID : 630680309957
Option 1 ID : 6306801205975
Option 2 ID : 6306801205974
Option 3 ID : 6306801205976
Option 4 ID : 6306801205973

Comprehension:

Read the given passage and answer the questions that follow.

Crossing a road with traffic is often dangerous for wildlife, especially for slower, ground-dwellers. Collisions with vehicles almost always lead to the death or serious injury of the animal, and the numbers involved are almost unbelievable. For example, about a million individuals of all species are killed every day on the roads of the US. In North America overall, the cumulative scale of all this road kill now surpasses hunting as the main cause of death in larger species. It is now regarded by researchers as an 'evolutionary novel threat'. While some types of mammals such as deer (being much more conspicuous) dominate the statistics, the numbers of smaller, less obvious groups such as birds and amphibians are enormous. Of course, not every road is dangerous. Some have very little traffic or virtually none at night. Certain species have learned to avoid vehicles and cross when it is safe. And even shockingly large road kill tolls do not mean that a species or local population is imperilled. Having a lot of visible road kill may simply indicate that the species is plentiful in the area. Certainly, the enormous number of white-tailed deer in North America or roe deer in Europe killed through collisions with vehicles has had a negligible impact on their abundance. There is, however, powerful evidence that collisions with vehicles can drive species to the point of extinction. Infamously, during the 1980s, around 10 per cent of the entire Florida panther population of was killed annually. In Tasmania, a simple road upgrade led to the elimination of a rare marsupial carnivore.

While the sight of dead animals along the roadside is troubling, other influences may be far more important. For many species, it is not the traffic that is the problem: it is the road and the associated space that matters. In extreme cases, some animals – small forest-dwelling birds or rodents, for example – simply will not cross even a small road, whether cars are present or not. For these species, the gap may be a complete barrier to their movement. This so-called 'barrier effect' is one the most significant discoveries made recently by scientists studying roads.

SubQuestion No : 16

Q.16 Which of the following is the most appropriate meaning of the term 'imperil'?

- Ans
- 1. Destroy
 - 2. Elaborate
 - 3. Endanger
 - 4. Influence

Question ID : 630680135510
Option 1 ID : 630680524763
Option 2 ID : 630680524764
Option 3 ID : 630680524762
Option 4 ID : 630680524765

Comprehension:

Read the given passage and answer the questions that follow.

Crossing a road with traffic is often dangerous for wildlife, especially for slower, ground-dwellers. Collisions with vehicles almost always lead to the death or serious injury of the animal, and the numbers involved are almost unbelievable. For example, about a million individuals of all species are killed every day on the roads of the US. In North America overall, the cumulative scale of all this road kill now surpasses hunting as the main cause of death in larger species. It is now regarded by researchers as an 'evolutionary novel threat'. While some types of mammals such as deer (being much more conspicuous) dominate the statistics, the numbers of smaller, less obvious groups such as birds and amphibians are enormous. Of course, not every road is dangerous. Some have very little traffic or virtually none at night. Certain species have learned to avoid vehicles and cross when it is safe. And even shockingly large road kill tolls do not mean that a species or local population is imperilled. Having a lot of visible road kill may simply indicate that the species is plentiful in the area. Certainly, the enormous number of white-tailed deer in North America or roe deer in Europe killed through collisions with vehicles has had a negligible impact on their abundance. There is, however, powerful evidence that collisions with vehicles can drive species to the point of extinction. Infamously, during the 1980s, around 10 per cent of the entire Florida panther population of was killed annually. In Tasmania, a simple road upgrade led to the elimination of a rare marsupial carnivore.

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SubQuestion No : 17

Q.17 Identify the fact given in the passage.

- Ans**
- 1. Large species cross roads when it is safe.
 - 2. Lot of roadkill indicates that the species is near extinction.
 - 3. The 'barrier effect' pertains to the use of fences along roads.
 - 4. Certain species do not cross even small roads.

Question ID : 630680135512

Option 1 ID : 630680524770

Option 2 ID : 630680524772

Option 3 ID : 630680524773

Option 4 ID : 630680524771

Comprehension:

Read the given passage and answer the questions that follow.

Crossing a road with traffic is often dangerous for wildlife, especially for slower, ground-dwellers. Collisions with vehicles almost always lead to the death or serious injury of the animal, and the numbers involved are almost unbelievable. For example, about a million individuals of all species are killed every day on the roads of the US. In North America overall, the cumulative scale of all this road kill now surpasses hunting as the main cause of death in larger species. It is now regarded by researchers as an 'evolutionary novel threat'. While some types of mammals such as deer (being much more conspicuous) dominate the statistics, the numbers of smaller, less obvious groups such as birds and amphibians are enormous. Of course, not every road is dangerous. Some have very little traffic or virtually none at night. Certain species have learned to avoid vehicles and cross when it is safe. And even shockingly large road kill tolls do not mean that a species or local population is imperilled. Having a lot of visible road kill may simply indicate that the species is plentiful in the area. Certainly, the enormous number of white-tailed deer in North America or roe deer in Europe killed through collisions with vehicles has had a negligible impact on their abundance. There is, however, powerful evidence that collisions with vehicles can drive species to the point of extinction. Infamously, during the 1980s, around 10 per cent of the entire Florida panther population of was killed annually. In Tasmania, a simple road upgrade led to the elimination of a rare marsupial carnivore.

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SubQuestion No : 18

Q.18 Which of the following inferences can be drawn from the passage?

- Ans**
- 1. Road killing is not a major threat to the population of animals.
 - 2. Frequent collisions with vehicles can wipe out certain species.
 - 3. Ground dwelling, large species are the most vulnerable species.
 - 4. Animals should be kept within fences to protect them from accidents.

Question ID : 630680135511

Option 1 ID : 630680524767

Option 2 ID : 630680524768

Option 3 ID : 630680524769

Option 4 ID : 630680524766

Comprehension:

Read the given passage and answer the questions that follow.

Crossing a road with traffic is often dangerous for wildlife, especially for slower, ground-dwellers. Collisions with vehicles almost always lead to the death or serious injury of the animal, and the numbers involved are almost unbelievable. For example, about a million individuals of all species are killed every day on the roads of the US. In North America overall, the cumulative scale of all this road kill now surpasses hunting as the main cause of death in larger species. It is now regarded by researchers as an 'evolutionary novel threat'. While some types of mammals such as deer (being much more conspicuous) dominate the statistics, the numbers of smaller, less obvious groups such as birds and amphibians are enormous. Of course, not every road is dangerous. Some have very little traffic or virtually none at night. Certain species have learned to avoid vehicles and cross when it is safe. And even shockingly large road kill tolls do not mean that a species or local population is imperilled. Having a lot of visible road kill may simply indicate that the species is plentiful in the area. Certainly, the enormous number of white-tailed deer in North America or roe deer in Europe killed through collisions with vehicles has had a negligible impact on their abundance. There is, however, powerful evidence that collisions with vehicles can drive species to the point of extinction. Infamously, during the 1980s, around 10 per cent of the entire Florida panther population of was killed annually. In Tasmania, a simple road upgrade led to the elimination of a rare marsupial carnivore.

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SubQuestion No : 19

Q.19 Select an appropriate title for the passage.

- Ans
- 1. Unfencing
 - 2. Wildlife protection
 - 3. Narrow roads
 - 4. Road kill

Question ID : 630680135513
Option 1 ID : 630680524775
Option 2 ID : 630680524776
Option 3 ID : 630680524777
Option 4 ID : 630680524774

Comprehension:

Read the given passage and answer the questions that follow.

Crossing a road with traffic is often dangerous for wildlife, especially for slower, ground-dwellers. Collisions with vehicles almost always lead to the death or serious injury of the animal, and the numbers involved are almost unbelievable. For example, about a million individuals of all species are killed every day on the roads of the US. In North America overall, the cumulative scale of all this road kill now surpasses hunting as the main cause of death in larger species. It is now regarded by researchers as an 'evolutionary novel threat'. While some types of mammals such as deer (being much more conspicuous) dominate the statistics, the numbers of smaller, less obvious groups such as birds and amphibians are enormous. Of course, not every road is dangerous. Some have very little traffic or virtually none at night. Certain species have learned to avoid vehicles and cross when it is safe. And even shockingly large road kill tolls do not mean that a species or local population is imperilled. Having a lot of visible road kill may simply indicate that the species is plentiful in the area. Certainly, the enormous number of white-tailed deer in North America or roe deer in Europe killed through collisions with vehicles has had a negligible impact on their abundance. There is, however, powerful evidence that collisions with vehicles can drive species to the point of extinction. Infamously, during the 1980s, around 10 per cent of the entire Florida panther population of was killed annually. In Tasmania, a simple road upgrade led to the elimination of a rare marsupial carnivore.

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SubQuestion No : 20

Q.20 Apples and walnuts grow in ____ in the Kashmir valley.

- Ans
- 1. cumulative
 - 2. conspicuous
 - 3. abundance
 - 4. confluence

Question ID : 630680135509

Option 1 ID : 630680524758

Option 2 ID : 630680524759

Option 3 ID : 630680524761

Option 4 ID : 630680524760

Section : Hindi Language and Comprehension

Q.1 "चन्द्रमा आकाश _____ चमकता है।"

सही कारक का प्रयोग कर वाक्य पूर्ण कीजिए।

- Ans
- 1. में
 - 2. से
 - 3. पर
 - 4. द्वारा

Question ID : 63068066659

Option 1 ID : 630680257507

Option 2 ID : 630680257509

Option 3 ID : 630680257506

Option 4 ID : 630680257508

Q.2 'मोहन अपने घर के पास शाम को खेलता है।' रेखांकित पद है -

- Ans
- 1. सार्वनामिक विशेषण
 - 2. कालवाचक क्रियाविशेषण
 - 3. भाववाचक संज्ञा
 - 4. रीतिवाचक क्रियाविशेषण

Question ID : 63068086146
Option 1 ID : 630680334017
Option 2 ID : 630680334016
Option 3 ID : 630680334018
Option 4 ID : 630680334019

Q.3 निम्नलिखित वाक्य में रेखांकित शब्द का अर्थ बताएं।
इसके लिए तो मैं जी-तोड़ मेहनत करूंगा।

- Ans
- 1. रातभर
 - 2. मन से हारे
 - 3. बहुत अधिक
 - 4. कल्पना स्तर पर

Question ID : 630680778023
Option 1 ID : 6306803049517
Option 2 ID : 6306803049515
Option 3 ID : 6306803049514
Option 4 ID : 6306803049516

Q.4 जीवन जीने का प्रयत्न ही अनुशासन व्यवस्था का वातावरण बनाता है। इस वाक्यांश के लिए सार्थक शब्द चुनिए।

- Ans
- 1. अनियमित
 - 2. नियमित
 - 3. अनिर्धारित
 - 4. कर्महीन

Question ID : 63068064807
Option 1 ID : 630680250197
Option 2 ID : 630680250196
Option 3 ID : 630680250194
Option 4 ID : 630680250195

Q.5 'अक्षत' का विलोम शब्द है

- Ans
- 1. धूमिल
 - 2. अन्तरंग
 - 3. व्ययन
 - 4. विक्षत

Question ID : 63068065713
Option 1 ID : 630680253806
Option 2 ID : 630680253807
Option 3 ID : 630680253808
Option 4 ID : 630680253809

Q.6 कौन - से वाक्य में वर्तनी संबंधी अशुद्धियाँ हैं? पहचानें।

- Ans
- 1. दुःखमय अतीत का विस्मरण ही सुख देता है।
 - 2. उसे व्यापार में घाटा लगा।
 - 3. वह आमिष भोजन से दूर रहता है।
 - 4. वह प्रतिदिन शीर्षाषन करता है।

Question ID : 63068064769
Option 1 ID : 630680250045
Option 2 ID : 630680250043
Option 3 ID : 630680250044
Option 4 ID : 630680250042

Q.7 लोकोक्ति का अर्थ बतावें और उत्तर के रूप में सही विकल्प चुनें।

कहाँ राजा भोज कहाँ गंगू तेली

- Ans
- 1. राजा भोज गंगू तेली से दोस्ती नहीं कर सकता
 - 2. गंगू तेली का अपना व्यापार है
 - 3. राजा भोज बड़ा आदमी है
 - 4. उच्च और साधारण की तुलना कैसी

Question ID : 630680135418
Option 1 ID : 630680524436
Option 2 ID : 630680524435
Option 3 ID : 630680524434
Option 4 ID : 630680524437

Q.8 निम्नलिखित में से दिए गए वाक्यांश के लिए कौन-सा शब्द उपयुक्त नहीं है---
बिना पलक या निमिष गिराय

- Ans
- 1. अपलक
 - 2. अनिमित्त
 - 3. निर्निमेष
 - 4. एकटक

Question ID : 630680546291
Option 1 ID : 6306802135742
Option 2 ID : 6306802135744
Option 3 ID : 6306802135741
Option 4 ID : 6306802135743

Q.9 दिए गए विकल्पों में से सर्वाधिक उपयुक्त विशेषण शब्द चुनकर वाक्य पूरा कीजिए-
'उसकी आदतें मुझसे _____ हैं।

- Ans
- 1. गुणी
 - 2. प्रिय
 - 3. उत्तम
 - 4. सर्वोत्तम

Question ID : 63068085019
Option 1 ID : 630680329581
Option 2 ID : 630680329583
Option 3 ID : 630680329582
Option 4 ID : 630680329580

Q.10 'मुख्य अतिथि ने दीप प्रज्वलित कर कार्यक्रम का शुभारंभ किया | वाक्य में रेखांकित शब्द की सही वर्तनी है -

- Ans 1. प्रज्वलित
 2. प्रज्ज्वलित
 3. प्ररज्वलित
 4. प्रज्जवलित

Question ID : 63068086022
 Option 1 ID : 630680333537
 Option 2 ID : 630680333536
 Option 3 ID : 630680333539
 Option 4 ID : 630680333538

Q.11 पिता जी ने खाना खाया में कौन सा कारक है?

- Ans 1. संप्रदान
 2. अधिकरण
 3. करण
 4. कर्त्ता

Question ID : 63068060577
 Option 1 ID : 630680233759
 Option 2 ID : 630680233761
 Option 3 ID : 630680233758
 Option 4 ID : 630680233760

Q.12 'मुट्टी गरम करना' मुहावरे का अर्थ है -

- Ans 1. घूस देना
 2. धाक जमाना
 3. सजा देना
 4. हाथ गरम करना

Question ID : 630680125672
 Option 1 ID : 630680487349
 Option 2 ID : 630680487348
 Option 3 ID : 630680487346
 Option 4 ID : 630680487347

Q.13 निम्नलिखित वाक्य को उचित क्रम में लिखें।
 दीपा दाल-चावल को बहुत अच्छे लगते हैं।

- Ans 1. दाल-चावल को दीपा बहुत अच्छे लगते हैं।
 2. बहुत अच्छे दाल-चावल दीपा को लगते हैं।
 3. दाल-चावल दीपा को बहुत अच्छे लगते हैं।
 4. लगते हैं दाल-चावल दीपा को बहुत अच्छे।

Question ID : 630680553881
 Option 1 ID : 6306802165379
 Option 2 ID : 6306802165380
 Option 3 ID : 6306802165378
 Option 4 ID : 6306802165381

Q.14 निम्नलिखित वाक्य को उचित क्रम में लिखें।
शादी में पूजा की कमला ने लहंगा पहना था।

- Ans 1. पूजा की शादी में कमला ने लहंगा पहना था।
 2. लहंगा पूजा की शादी में कमला ने पहना था।
 3. कमला ने पूजा की शादी में पहना था लहंगा।
 4. लहंगा पहना था पूजा की शादी में कमला ने।

Question ID : 630680553885
 Option 1 ID : 6306802165394
 Option 2 ID : 6306802165396
 Option 3 ID : 6306802165395
 Option 4 ID : 6306802165397

Q.15 "मैंने सुरेश _____ बुलाया।"

सही कारक का प्रयोग कर वाक्य पूर्ण कीजिए।

- Ans 1. के लिए
 2. में
 3. को
 4. से

Question ID : 63068066661
 Option 1 ID : 630680257515
 Option 2 ID : 630680257516
 Option 3 ID : 630680257517
 Option 4 ID : 630680257514

Comprehension:

"एक स्वतंत्र सत्ता के रूप में पूंजी के अस्तित्व के लिए पूंजी का केंद्रीकरण आवश्यक है। विश्व की मंडियों पर इस केंद्रीकरण का विनाशकारी प्रभाव, राजनीतिक अर्थ तंत्र के उन सन्निहित मूल कानूनों को प्रकट करता है जो हर सभ्य नगर में, अत्यंत भीमाकार परिणामों में, आजकल क्रियाशील है। इतिहास के इस बुर्जुआ काल को नई दुनिया के भौतिक आधार का निर्माण करना है- एक ओर, मानव जाति की पारस्परिक निर्भरता पर आधारित सार्वभौमिक आदान-प्रदान और इस आदान-प्रदान के साधन; और दूसरी ओर मानव की उत्पादक ताकतों का विकास और प्राकृतिक संसाधनों पर वैज्ञानिक प्रभुत्व के लिए भौतिक कायापलट। बुर्जुआ उद्योग और व्यापार नई दुनिया की इन भौतिक उत्पादन की परिस्थितियों की उसी प्रकार रचना करता है जैसे कि पृथ्वी के गर्भ में हुई क्रांतियों ने धरती की सतह पर रचना की है। जब एक महान सामाजिक क्रांति बुर्जुआ युग की देनों पर - विश्व की मंडी और उत्पादन की आधुनिक ताकतों पर- अपना प्रभुत्व कायम कर लेगी और उन्हें अत्यंत उन्नत जातियों के सामूहिक नियंत्रण के मातहत सौंप देगी, केवल उसी समय मानव प्रगति हिंदुओं की उस देवी के समान नहीं रहेगी जो केवल बलि किए हुए प्राणी की खोपड़ी से ही अमृत पान करती है।"

SubQuestion No : 16

Q.16 बुर्जुआ की विशेषता इनमें से कौन-सी नहीं है?

- Ans 1. शोषक
 2. रूढ़ीवादी
 3. शोषित
 4. पूंजीवाद का समर्थक

Question ID : 630680140377
 Option 1 ID : 630680543300
 Option 2 ID : 630680543299
 Option 3 ID : 630680543301
 Option 4 ID : 630680543298

Comprehension:

“एक स्वतंत्र सत्ता के रूप में पूंजी के अस्तित्व के लिए पूंजी का केंद्रीकरण आवश्यक है। विश्व की मंडियों पर इस केंद्रीकरण का विनाशकारी प्रभाव, राजनीतिक अर्थ तंत्र के उन सन्निहित मूल कानूनों को प्रकट करता है जो हर सभ्य नगर में, अत्यंत भीमाकार परिणामों में, आजकल क्रियाशील है। इतिहास के इस बुर्जुआ काल को नई दुनिया के भौतिक आधार का निर्माण करना है- एक ओर, मानव जाति की पारस्परिक निर्भरता पर आधारित सार्वभौमिक आदान-प्रदान और इस आदान-प्रदान के साधन; और दूसरी ओर मानव की उत्पादक ताकतों का विकास और प्राकृतिक संसाधनों पर वैज्ञानिक प्रभुत्व के लिए भौतिक कायापलट। बुर्जुआ उद्योग और व्यापार नई दुनिया की इन भौतिक उत्पादन की परिस्थितियों की उसी प्रकार रचना करता है जैसे कि पृथ्वी के गर्भ में हुई क्रांतियों ने धरती की सतह पर रचना की है। जब एक महान सामाजिक क्रांति बुर्जुआ युग की देनों पर - विश्व की मंडी और उत्पादन की आधुनिक ताकतों पर- अपना प्रभुत्व कायम कर लेगी और उन्हें अत्यंत उन्नत जातियों के सामूहिक नियंत्रण के मातहत सौंप देगी, केवल उसी समय मानव प्रगति हिंदुओं की उस देवी के समान नहीं रहेगी जो केवल बलि किए हुए प्राणी की खोपड़ी से ही अमृत पान करती है।”

SubQuestion No : 17

Q.17 गद्यांश में उन्नत जातियों के द्वारा किन पर सामूहिक नियंत्रण की संभावना व्यक्त की गई है ?

- Ans
- 1. मानव जाति का
 - 2. बुर्जुआ वर्ग का
 - 3. विनाश का
 - 4. कानून का

Question ID : 630680140374

Option 1 ID : 630680543287

Option 2 ID : 630680543289

Option 3 ID : 630680543288

Option 4 ID : 630680543286

Comprehension:

“एक स्वतंत्र सत्ता के रूप में पूंजी के अस्तित्व के लिए पूंजी का केंद्रीकरण आवश्यक है। विश्व की मंडियों पर इस केंद्रीकरण का विनाशकारी प्रभाव, राजनीतिक अर्थ तंत्र के उन सन्निहित मूल कानूनों को प्रकट करता है जो हर सभ्य नगर में, अत्यंत भीमाकार परिणामों में, आजकल क्रियाशील है। इतिहास के इस बुर्जुआ काल को नई दुनिया के भौतिक आधार का निर्माण करना है- एक ओर, मानव जाति की पारस्परिक निर्भरता पर आधारित सार्वभौमिक आदान-प्रदान और इस आदान-प्रदान के साधन; और दूसरी ओर मानव की उत्पादक ताकतों का विकास और प्राकृतिक संसाधनों पर वैज्ञानिक प्रभुत्व के लिए भौतिक कायापलट। बुर्जुआ उद्योग और व्यापार नई दुनिया की इन भौतिक उत्पादन की परिस्थितियों की उसी प्रकार रचना करता है जैसे कि पृथ्वी के गर्भ में हुई क्रांतियों ने धरती की सतह पर रचना की है। जब एक महान सामाजिक क्रांति बुर्जुआ युग की देनों पर - विश्व की मंडी और उत्पादन की आधुनिक ताकतों पर- अपना प्रभुत्व कायम कर लेगी और उन्हें अत्यंत उन्नत जातियों के सामूहिक नियंत्रण के मातहत सौंप देगी, केवल उसी समय मानव प्रगति हिंदुओं की उस देवी के समान नहीं रहेगी जो केवल बलि किए हुए प्राणी की खोपड़ी से ही अमृत पान करती है।”

SubQuestion No : 18

Q.18 किसके कारण विनाशकारी प्रभाव देखने को मिल रहे हैं?

- Ans
- 1. स्वतंत्रता
 - 2. सामूहिक नियंत्रण
 - 3. पारस्परिक निर्भरता
 - 4. पूंजी का केंद्रीकरण

Question ID : 630680140373

Option 1 ID : 630680543282

Option 2 ID : 630680543285

Option 3 ID : 630680543284

Option 4 ID : 630680543283

Comprehension:

“एक स्वतंत्र सत्ता के रूप में पूंजी के अस्तित्व के लिए पूंजी का केंद्रीकरण आवश्यक है। विश्व की मंडियों पर इस केंद्रीकरण का विनाशकारी प्रभाव, राजनीतिक अर्थ तंत्र के उन सन्निहित मूल कानूनों को प्रकट करता है जो हर सभ्य नगर में, अत्यंत भीमाकार परिणामों में, आजकल क्रियाशील है। इतिहास के इस बुर्जुआ काल को नई दुनिया के भौतिक आधार का निर्माण करना है- एक ओर, मानव जाति की पारस्परिक निर्भरता पर आधारित सार्वभौमिक आदान-प्रदान और इस आदान-प्रदान के साधन; और दूसरी ओर मानव की उत्पादक ताकतों का विकास और प्राकृतिक संसाधनों पर वैज्ञानिक प्रभुत्व के लिए भौतिक कायापलट। बुर्जुआ उद्योग और व्यापार नई दुनिया की इन भौतिक उत्पादन की परिस्थितियों की उसी प्रकार रचना करता है जैसे कि पृथ्वी के गर्भ में हुई क्रांतियों ने धरती की सतह पर रचना की है। जब एक महान सामाजिक क्रांति बुर्जुआ युग की देनों पर - विश्व की मंडी और उत्पादन की आधुनिक ताकतों पर- अपना प्रभुत्व कायम कर लेगी और उन्हें अत्यंत उन्नत जातियों के सामूहिक नियंत्रण के मातहत सौंप देगी, केवल उसी समय मानव प्रगति हिंदुओं की उस देवी के समान नहीं रहेगी जो केवल बलि किए हुए प्राणी की खोपड़ी से ही अमृत पान करती है।”

SubQuestion No : 19**Q.19 आदान-प्रदान के साधन किन पर निर्भर हैं?**

- Ans 1. मानवजाति की पारस्परिक निर्भरता पर
 2. बुर्जुआ वर्ग के संघर्ष पर
 3. सामूहिक नियंत्रण पर
 4. भौतिक आधार पर निर्मित नई दुनिया पर

Question ID : 630680140375

Option 1 ID : 630680543290

Option 2 ID : 630680543291

Option 3 ID : 630680543293

Option 4 ID : 630680543292

Comprehension:

“एक स्वतंत्र सत्ता के रूप में पूंजी के अस्तित्व के लिए पूंजी का केंद्रीकरण आवश्यक है। विश्व की मंडियों पर इस केंद्रीकरण का विनाशकारी प्रभाव, राजनीतिक अर्थ तंत्र के उन सन्निहित मूल कानूनों को प्रकट करता है जो हर सभ्य नगर में, अत्यंत भीमाकार परिणामों में, आजकल क्रियाशील है। इतिहास के इस बुर्जुआ काल को नई दुनिया के भौतिक आधार का निर्माण करना है- एक ओर, मानव जाति की पारस्परिक निर्भरता पर आधारित सार्वभौमिक आदान-प्रदान और इस आदान-प्रदान के साधन; और दूसरी ओर मानव की उत्पादक ताकतों का विकास और प्राकृतिक संसाधनों पर वैज्ञानिक प्रभुत्व के लिए भौतिक कायापलट। बुर्जुआ उद्योग और व्यापार नई दुनिया की इन भौतिक उत्पादन की परिस्थितियों की उसी प्रकार रचना करता है जैसे कि पृथ्वी के गर्भ में हुई क्रांतियों ने धरती की सतह पर रचना की है। जब एक महान सामाजिक क्रांति बुर्जुआ युग की देनों पर - विश्व की मंडी और उत्पादन की आधुनिक ताकतों पर- अपना प्रभुत्व कायम कर लेगी और उन्हें अत्यंत उन्नत जातियों के सामूहिक नियंत्रण के मातहत सौंप देगी, केवल उसी समय मानव प्रगति हिंदुओं की उस देवी के समान नहीं रहेगी जो केवल बलि किए हुए प्राणी की खोपड़ी से ही अमृत पान करती है।”

SubQuestion No : 20**Q.20 प्राकृतिक संसाधनों पर वैज्ञानिक प्रभुत्व स्थापित करने के लिए क्या किया जा रहा है?**

- Ans 1. समाजीकरण
 2. भौतिक कायापलट
 3. आधुनिकीकरण
 4. भौतिक आधार पर निर्माण

Question ID : 630680140376

Option 1 ID : 630680543297

Option 2 ID : 630680543295

Option 3 ID : 630680543296

Option 4 ID : 630680543294

Q.1 Structural evaluation studies are carried out at regular intervals on all important roads, which carry moderate to heavy traffic. Identify the correct statement/s related to outcome of analysis of the structural evaluation data.

Based on the analysis of the structural evaluation data, it is possible to decide:

1. Whether the flexible pavement needs strengthening at that point of time.
2. If the pavement needs to be strengthened, to design the overlay thickness with the help of additional data and analysis.

- Ans
- 1. Statement 1 is false and statement 2 is true.
 - 2. Statement 1 is true and statement 2 is false.
 - 3. Both statements are correct, statement 2 does not depend on statement 1.
 - 4. Both statements are correct, and statement 2 depends on statement 1.

Question ID : 630680114801
 Option 1 ID : 630680444573
 Option 2 ID : 630680444572
 Option 3 ID : 630680444571
 Option 4 ID : 630680444570

Q.2 Which of the following processes is NOT involved in the chemical weathering of rocks?

- Ans
- 1. Carbonation
 - 2. Oxidation
 - 3. Temperature changes
 - 4. Hydrolysis

Question ID : 630680876203
 Option 1 ID : 6306803431581
 Option 2 ID : 6306803431580
 Option 3 ID : 6306803431579
 Option 4 ID : 6306803431582

Q.3 The horizontal thrust due to an increase in temperature for a parabolic two-hinged arch of height h is proportional to:

- Ans
- 1. $\frac{1}{h^2}$
 - 2. $\frac{1}{h}$
 - 3. h^2
 - 4. h

Question ID : 63068099186
 Option 1 ID : 630680385450
 Option 2 ID : 630680385451
 Option 3 ID : 630680385449
 Option 4 ID : 630680385448

Q.4 A structure is subjected to normal strains of magnitude 0.001, 0.002 in x and y directions respectively. Determine the normal strain on a plane that is inclined at 30° with strain in x-direction.

- Ans
- 1. 0.0125
 - 2. 0.002
 - 3. 0.001
 - 4. 0.00125

Question ID : 630680199033
 Option 1 ID : 630680771846
 Option 2 ID : 630680771844
 Option 3 ID : 630680771843
 Option 4 ID : 630680771845

Q.5 Which of the following types of composites are formed by embedding ceramic particles in a polymer matrix?

- Ans
- 1. Polymer-matrix composites
 - 2. Particle-reinforced composites
 - 3. Ceramic-matrix composites
 - 4. Metal-matrix composites

Question ID : 630680876294
 Option 1 ID : 6306803431945
 Option 2 ID : 6306803431946
 Option 3 ID : 6306803431944
 Option 4 ID : 6306803431943

Q.6 Identify the correct statement related to the drift current in n-type semiconductors.

- Ans
- 1. The drift current in an n-type semiconductor is in the opposite direction as that of the applied electric field.
 - 2. The drift current in an n-type semiconductor is in the same direction as that of the applied magnetic field.
 - 3. The drift current in an n-type semiconductor is in the same direction as that of the applied electric field.
 - 4. The drift current in an n-type semiconductor is in the opposite direction as that of the applied magnetic field.

Question ID : 630680361454
 Option 1 ID : 6306801407661
 Option 2 ID : 6306801407662
 Option 3 ID : 6306801407664
 Option 4 ID : 6306801407663

Q.7 Calculate the depth of water to be applied to the field, if the consumptive use requirement of the crop is 72 mm. Electrical conductivity (EC) of irrigation water = 1.4 m mho/cm. EC of leaching water = 14 m mho/cm at 25% reduction in the yield of a crop.

- Ans
- 1. 80 mm
 - 2. 70 mm
 - 3. 90 mm
 - 4. 60 mm

Question ID : 630680111661
 Option 1 ID : 630680432380
 Option 2 ID : 630680432379
 Option 3 ID : 630680432381
 Option 4 ID : 630680432378

Q.8 In case of Compton scattering, which fundamental physics properties are found to be conserved?

- Ans
- 1. Energy and momentum
 - 2. Momentum and mass
 - 3. Energy and wavelength
 - 4. Mass and energy

Question ID : 630680876298
 Option 1 ID : 6306803431961
 Option 2 ID : 6306803431962
 Option 3 ID : 6306803431960
 Option 4 ID : 6306803431959

Q.9 Axis of the given solid is inclined to the horizontal plane and parallel to the vertical plane. _____ is/are required to draw the projections.

- Ans
- 1. One stage
 - 2. Three stages
 - 3. Two stages
 - 4. Four stages

Question ID : 630680876152
 Option 1 ID : 6306803431377
 Option 2 ID : 6306803431375
 Option 3 ID : 6306803431376
 Option 4 ID : 6306803431378

Q.10 Identify the correct statement regarding the construction of Ashlar facing with brickwork backing wall.

- Ans
- 1. Face and bond stones must break joints in the face for at least half the height of standard course.
 - 2. The face stone of ashlar in each course is laid as stretchers.
 - 3. The face stone of ashlar in each course is laid as headers.
 - 4. Face and bond stones must break joints in the face for at least the height of standard course.

Question ID : 630680876249
 Option 1 ID : 6306803431766
 Option 2 ID : 6306803431765
 Option 3 ID : 6306803431763
 Option 4 ID : 6306803431764

Q.11 If $A = r^n$, then $\nabla \cdot A = ?$

- Ans
- 1. nr^{n-1}
 - 2. $(n + 1)r^n$
 - 3. $(n + 2)r^{n-1}$
 - 4. $(n + 1)r^{n-1}$

Question ID : 630680206270
 Option 1 ID : 630680799876
 Option 2 ID : 630680799878
 Option 3 ID : 630680799875
 Option 4 ID : 630680799877

Q.12 Which of the following is correct according to the first law of Faraday's electromagnetic induction?

- Ans
- 1. Whenever a conductor is placed in an electric field, emf is induced in it.
 - 2. Whenever a conductor is placed in a varying magnetic field, emf is induced in it.
 - 3. The induced emf in a coil is equal to the rate of change of energy.
 - 4. The induced emf in a coil is equal to the rate of change of flux linkage.

Question ID : 630680340640
 Option 1 ID : 6306801325002
 Option 2 ID : 6306801325001
 Option 3 ID : 6306801325004
 Option 4 ID : 6306801325003

Q.13 Read the given statements with respect to levelling and select the most appropriate option.

Statement 1: The line of sight is a line which passes through the optical centre of the objective and the intersection of cross hairs.

Statement 2: The axis of the telescope is the line which passes through the optical centres of objective and eye-piece.

- Ans
- 1. Both statement 1 and statement 2 are individually true
 - 2. Both statement 1 and statement 2 are individually false
 - 3. Statement 1 is true but statement 2 is false
 - 4. Statement 1 is false but statement 2 is true

Question ID : 630680121667
 Option 1 ID : 630680471618
 Option 2 ID : 630680471619
 Option 3 ID : 630680471620
 Option 4 ID : 630680471621

Q.14 The assumption for the trapezoidal formula method states that the mid-area of the pyramid is _____ the average area of the ends and sections at the ends are in parallel plane.

- Ans
- 1. double
 - 2. half
 - 3. one-third
 - 4. one-fourth

Question ID : 630680504072
 Option 1 ID : 6306801969852
 Option 2 ID : 6306801969850
 Option 3 ID : 6306801969851
 Option 4 ID : 6306801969849

Q.15 Depth of the gradually varied flow in an open channel is determined by the method called:

- Ans
- 1. direct step method
 - 2. circular arc method
 - 3. differentiation method
 - 4. Newton-Raphson method

Question ID : 630680108855
 Option 1 ID : 630680422313
 Option 2 ID : 630680422314
 Option 3 ID : 630680422312
 Option 4 ID : 630680422315

Q.16 Which of the following is best suited for dilution method of stream gauging?

- Ans
- 1. Meandering streams in alluvial plains
 - 2. Streams with heavy discharge
 - 3. Large turbulent streams
 - 4. Small turbulent streams

Question ID : 63068099876
 Option 1 ID : 630680388203
 Option 2 ID : 630680388202
 Option 3 ID : 630680388201
 Option 4 ID : 630680388200

Q.17 Which of the following statements is/are INCORRECT?

Statement 1: Alkyd based paints cannot be used on damp surfaces.
 Statement 2: Alkyd based paints form a non-breathable surface on drying.
 Statement 3: Alkyd based paints have a good adhesion property.
 Statement 4: Alkyd based paints are easy to apply and dries quickly.

- Ans
- 1. Statements 1 and 2 are incorrect
 - 2. Only statement 4 is incorrect
 - 3. Only statement 1 is incorrect
 - 4. Statements 1 and 4 are incorrect

Question ID : 63068099201
 Option 1 ID : 630680385508
 Option 2 ID : 630680385511
 Option 3 ID : 630680385510
 Option 4 ID : 630680385509

Q.18 What is the purpose of the Domain Name System (DNS)?

- Ans
- 1. Filtering incoming network traffic
 - 2. Encrypting data transmitted over the network
 - 3. Translating domain names to IP addresses
 - 4. Assigning IP addresses to devices dynamically

Question ID : 630680876179
 Option 1 ID : 6306803431486
 Option 2 ID : 6306803431483
 Option 3 ID : 6306803431485
 Option 4 ID : 6306803431484

Q.19 Which of the following is NOT a conserved quantity?

- Ans
- 1. Exergy
 - 2. Energy
 - 3. Momentum
 - 4. Mass

Question ID : 630680144878
 Option 1 ID : 630680560553
 Option 2 ID : 630680560551
 Option 3 ID : 630680560552
 Option 4 ID : 630680560550

Q.20 In the quantity of domestic wastewater, if time of flow = 0, then time of concentration

- Ans
- 1. will be zero
 - 2. cannot be determined
 - 3. will be time taken to cover only the length
 - 4. will be time of entry

Question ID : 630680157786
 Option 1 ID : 630680610674
 Option 2 ID : 630680610675
 Option 3 ID : 630680610673
 Option 4 ID : 630680610672

Section : Discipline2

Q.1 Identify whether the given statements with respect to a rectangular channel section of depth 3 m are true or false.

Statements:

- A) The above mentioned channel section is the most economical rectangular channel section if its width = 1.5 m.
- B) The above mentioned channel section is the most economical rectangular channel section if its hydraulic mean depth = 1.5 m.

- Ans
- 1. Statement A is true and statement B is false
 - 2. Both statements are true
 - 3. Statement A is false and statement B is true
 - 4. Both statements are false

Question ID : 630680103437
 Option 1 ID : 630680401991
 Option 2 ID : 630680401993
 Option 3 ID : 630680401992
 Option 4 ID : 630680401994

Q.2 General shear failure in a shallow foundation is likely to take place in _____.

- Ans
- 1. loose sand and stiff clay
 - 2. medium sand and stiff clay
 - 3. dense sand and soft clay
 - 4. dense sand and stiff clay

Question ID : 630680159109
 Option 1 ID : 630680615906
 Option 2 ID : 630680615905
 Option 3 ID : 630680615907
 Option 4 ID : 630680615904

Q.3 Identify the types of formwork according to the given circumstances.
A. Used in countries where labour in de-shuttering and oiling is costly.
B. To reduce construction joints in tall cylindrical towers.
C. To reduce shuttering material cost in a multibay building.

- Ans
- 1. A. Slip formwork B. Moving formwork C. Jump formwork
 - 2. A. Lost shuttering B. Jump formwork C. Slip formwork
 - 3. A. Slip formwork B. Moving formwork C. Lost formwork
 - 4. A. Lost shuttering B. Slip formwork C. Moving formwork

Question ID : 630680876269
Option 1 ID : 6306803431846
Option 2 ID : 6306803431843
Option 3 ID : 6306803431844
Option 4 ID : 6306803431845

Q.4 The portion of the paved area which is provided adjacent to the ends of runway in case of busy airports is known as the _____.

- Ans
- 1. holding apron
 - 2. parking apron
 - 3. loading apron
 - 4. taxiway

Question ID : 630680114835
Option 1 ID : 630680444707
Option 2 ID : 630680444708
Option 3 ID : 630680444706
Option 4 ID : 630680444709

Q.5 Estimate the consumptive use for wheat for the months from November to December. The value of K is 0.65, and the percentage sunshine hours is 30% and 35% with monthly mean temperature of 20°C and 30°C, respectively.

- Ans
- 1. 30.825 inches
 - 2. 32.825 inches
 - 3. 33.825 inches
 - 4. 31.825 inches

Question ID : 630680144923
Option 1 ID : 630680560730
Option 2 ID : 630680560731
Option 3 ID : 630680560733
Option 4 ID : 630680560732

Q.6 Which of the following scales is used to measure the earthquake of magnitude 8 or greater accurately?

- Ans
- 1. Medvedev – Sponheuer -Karnik scale
 - 2. Richter scale
 - 3. Modified Mercalli scale
 - 4. Moment magnitude scale

Question ID : 630680876115
Option 1 ID : 6306803431229
Option 2 ID : 6306803431227
Option 3 ID : 6306803431228
Option 4 ID : 6306803431230

Q.7 The thermal damping characteristic is dependent on _____ of the material used in the structure.

- Ans
- 1. thermal transmittance
 - 2. thermal conductance
 - 3. thermal capacity
 - 4. surface resistance

Question ID : 630680121402
Option 1 ID : 630680470568
Option 2 ID : 630680470567
Option 3 ID : 630680470566
Option 4 ID : 630680470569

Q.8 Which of the following is NOT a characteristic of the third generation of computers?

- Ans
- 1. Shift towards time-sharing and multi-programming
 - 2. Use of integrated circuits (ICs)
 - 3. Introduction of high-level programming languages
 - 4. Utilisation of vacuum tubes for processing

Question ID : 630680876163
Option 1 ID : 6306803431421
Option 2 ID : 6306803431419
Option 3 ID : 6306803431420
Option 4 ID : 6306803431422

Q.9 In an experiment of single-slit diffraction pattern, the first minimum for red lines coincides with the first maximum of some other wavelength. If the wavelength of red colour is 3000 \AA , then the wavelength of the first maximum will be:

- Ans
- 1. 4000 \AA
 - 2. 2000 \AA
 - 3. 3000 \AA
 - 4. 1500 \AA

Question ID : 630680876301
Option 1 ID : 6306803431972
Option 2 ID : 6306803431973
Option 3 ID : 6306803431971
Option 4 ID : 6306803431974

Q.10 The integration of pdV can be performed:

- Ans
- 1. only on a quasi-static path
 - 2. only on an isobaric path
 - 3. on any path
 - 4. only on an isothermal path

Question ID : 630680147623
Option 1 ID : 630680571231
Option 2 ID : 630680571233
Option 3 ID : 630680571230
Option 4 ID : 630680571232

Q.11 The ratio of the maximum and minimum normal stresses is equal to _____ in case of pure shear.

- Ans
- 1. 0.5
 - 2. 1
 - 3. 2
 - 4. -1

Question ID : 630680102013
 Option 1 ID : 630680396411
 Option 2 ID : 630680396408
 Option 3 ID : 630680396409
 Option 4 ID : 630680396410

Q.12 The value of the integral $\int_1^2 \int_3^4 (xy + e^y) dy dx$ is:

- Ans
- 1. $\frac{21}{4} - e^4 - e^3$
 - 2. $\frac{21}{4} + e^4 + e^3$
 - 3. $\frac{21}{4} + e^4 - e^3$
 - 4. $-\frac{21}{4} + e^4 - e^3$

Question ID : 630680139752
 Option 1 ID : 630680541060
 Option 2 ID : 630680541059
 Option 3 ID : 630680541058
 Option 4 ID : 630680541061

Q.13 The water distribution mains are designed for:

- Ans
- 1. Maximum hourly demand
 - 2. Maximum daily demand
 - 3. Average daily demand
 - 4. Maximum hourly demand on maximum day

Question ID : 630680103209
 Option 1 ID : 630680401096
 Option 2 ID : 630680401095
 Option 3 ID : 630680401098
 Option 4 ID : 630680401097

Q.14 Which of the following options represents the total overlap length, including the anchorage value of hooks, required for 20 mm bars under flexural tension, according to IS 456:2000?

- Ans
- 1. 500 mm
 - 2. 800 mm
 - 3. 600 mm
 - 4. 700 mm

Question ID : 630680876213
 Option 1 ID : 6306803431622
 Option 2 ID : 6306803431619
 Option 3 ID : 6306803431620
 Option 4 ID : 6306803431621

Q.15 Determine the minimum spacing of the stirrups in a beam of 250 mm width and 400 mm effective depth, provided with 2 legged 8 Tor steel, as per IS 456.

- Ans
- 1. 250 mm
 - 2. 350 mm
 - 3. 363 mm
 - 4. 300 mm

Question ID : 630680217743
 Option 1 ID : 630680844883
 Option 2 ID : 630680844885
 Option 3 ID : 630680844886
 Option 4 ID : 630680844884

Q.16 Select the odd option with respect to source of error in transit work using theodolite.

- Ans
- 1. Error due to unequal settlement of the tripod
 - 2. Error due to vibrations caused by wind
 - 3. Error due to inaccurate levelling
 - 4. Error due to unequal atmospheric refraction due to high temperature

Question ID : 630680118488
 Option 1 ID : 630680459055
 Option 2 ID : 630680459056
 Option 3 ID : 630680459057
 Option 4 ID : 630680459054

Q.17 Which type of alloy is formed when a metalloid or non-metal is dissolved in a metal?

- Ans
- 1. Composite alloy
 - 2. Interstitial alloy
 - 3. Amorphous alloy
 - 4. Substitutional alloy

Question ID : 630680876286
 Option 1 ID : 6306803431914
 Option 2 ID : 6306803431911
 Option 3 ID : 6306803431913
 Option 4 ID : 6306803431912

Q.18 A dense sand at very low confining stress in a drained triaxial test is likely to show:

- Ans
- 1. no volume change
 - 2. contractive behaviour
 - 3. dilation behaviour
 - 4. increase in pore water pressure

Question ID : 630680114741
 Option 1 ID : 630680444331
 Option 2 ID : 630680444333
 Option 3 ID : 630680444330
 Option 4 ID : 630680444332

Q.19 The effective length of a built-up steel column is 8m and the appropriate radius of gyration of the column is 80mm. The column is to be provided with a single lacing system throughout its length. The effective slenderness ratio of the laced column as per IS: 800-2007 will be _____.

- Ans
- 1. 110
 - 2. 105
 - 3. 100
 - 4. 80

Question ID : 630680219846
 Option 1 ID : 630680853266
 Option 2 ID : 630680853265
 Option 3 ID : 630680853264
 Option 4 ID : 630680853263

Q.20 A cable of negligible weight having a span of 100 m and dip 10 m carries a load of 5 kN/m throughout its length. The maximum tension in the cable is _____.

- Ans
- 1. 773.14 kN
 - 2. 690.57 kN
 - 3. 673.14 kN
 - 4. 790.57 kN

Question ID : 630680103965
 Option 1 ID : 630680404078
 Option 2 ID : 630680404077
 Option 3 ID : 630680404076
 Option 4 ID : 630680404075

Section : Discipline3

Q.1 For well graded gravel, uniformity coefficient (U) and coefficient of curvature (C_R) will be:

- Ans
- 1. $U < 4, C_R = 1$ to 3
 - 2. $U > 6, C_R = 1$ to 3
 - 3. $U < 6, C_R = 1$ to 3
 - 4. $U > 4, C_R = 1$ to 3

Question ID : 630680114692
 Option 1 ID : 630680444136
 Option 2 ID : 630680444135
 Option 3 ID : 630680444137
 Option 4 ID : 630680444134

Q.2 Which of the following is considered to be an important lateral load transfer mechanism in reinforced concrete buildings subjected to earthquakes?

- Ans
- 1. Plinth beam
 - 2. Tie beam
 - 3. Shear wall
 - 4. Partition wall

Question ID : 630680876127
 Option 1 ID : 6306803431276
 Option 2 ID : 6306803431275
 Option 3 ID : 6306803431277
 Option 4 ID : 6306803431278

Q.3 Equivalent radius of the resisting section (b) is equal to the radius of the wheel contact area (a) when the ratio of the radius of the contact area to thickness of the slab is ____.

- Ans
- 1. greater than 1.724
 - 2. greater than 1.524
 - 3. less than 1.724
 - 4. less than 1.524

Question ID : 630680157939
Option 1 ID : 630680611285
Option 2 ID : 630680611286
Option 3 ID : 630680611284
Option 4 ID : 630680611287

Q.4 Calculate the total discharge (Q) through a rectangular channel having critical depth of 1.2 m and base width of 4 m.

- Ans
- 1. $Q = 12.5942 \text{ m}^3/\text{s}$
 - 2. $Q = 16.4685 \text{ m}^3/\text{s}$
 - 3. $Q = 19.4034 \text{ m}^3/\text{s}$
 - 4. $Q = 15.89741 \text{ m}^3/\text{s}$

Question ID : 630680103443
Option 1 ID : 630680402017
Option 2 ID : 630680402015
Option 3 ID : 630680402018
Option 4 ID : 630680402016

Q.5 Which of the following building components plays the biggest role in the stability of a structure?

- Ans
- 1. Plinth
 - 2. Foundation
 - 3. Super-structure
 - 4. Columns

Question ID : 630680876233
Option 1 ID : 6306803431700
Option 2 ID : 6306803431702
Option 3 ID : 6306803431699
Option 4 ID : 6306803431701

Q.6 The presence of excess aquatic plants in lake implies:

- Ans
- 1. mesotrophic
 - 2. oligotrophic
 - 3. eutrophication
 - 4. pollution

Question ID : 630680103219
Option 1 ID : 630680401135
Option 2 ID : 630680401136
Option 3 ID : 630680401137
Option 4 ID : 630680401138

Q.7 In which of the following types of material do the conduction band and the valence band overlap each other?

- Ans
- 1. Doped semiconductor
 - 2. Conductor
 - 3. Insulator
 - 4. Pure semiconductor

Question ID : 630680361445
 Option 1 ID : 6306801407628
 Option 2 ID : 6306801407625
 Option 3 ID : 6306801407627
 Option 4 ID : 6306801407626

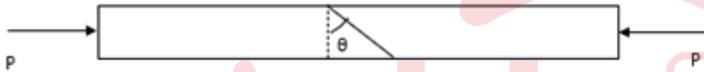
Q.8 जलभराव के नियंत्रण के संबंध में दिए गए कथनों पर विचार कीजिए और निम्नलिखित विकल्पों में से सही उत्तर का चयन कीजिए।

कथन A: नहरों और जल-मार्गों का आस्तर (lining) उनके माध्यम से पानी के रिसाव को कम करती है।
 कथन B: नहर के किनारे निर्मित नालियों को अवरुद्ध करने से नहर के पानी के रिसाव को उस क्षेत्र तक पहुँचने से रोका जा सकता है, जहाँ जलभराव होने की संभावना है।

- Ans
- 1. कथन A गलत है लेकिन कथन B सही है।
 - 2. दोनों कथन गलत हैं।
 - 3. कथन A सही है लेकिन कथन B गलत है।
 - 4. दोनों कथन सही हैं।

Question ID : 630680111657
 Option 1 ID : 630680432365
 Option 2 ID : 630680432362
 Option 3 ID : 630680432364
 Option 4 ID : 630680432363

Q.9 A prismatic bar of cross-section 'A' is subjected to compressive load 'P' as shown in the figure below. The internal resistances induced on/along the oblique plane are _____ .



- Ans
- 1. tangential
 - 2. normal and tangential
 - 3. shear
 - 4. normal

Question ID : 630680164069
 Option 1 ID : 630680635413
 Option 2 ID : 630680635414
 Option 3 ID : 630680635415
 Option 4 ID : 630680635412

Q.10 Which of the following is a construction project classified under heavy construction?

- Ans
- 1. Tunnelling
 - 2. Road culverts
 - 3. Steel plants
 - 4. Water supply and sewage works in town

Question ID : 630680121409
 Option 1 ID : 630680470597
 Option 2 ID : 630680470595
 Option 3 ID : 630680470596
 Option 4 ID : 630680470594

Q.11 A catchment has 5 rain gauge stations. In a year, the annual rainfall recorded by the gauges are as follows:

Station	A	B	C	D	E
Rainfall (cm)	40.5	50	80.5	75	65.5

Determine the percentage standard error in the estimation of mean rainfall in the existing set of rain gauges.

- Ans
- 1. 15.06%
 - 2. 16.5%
 - 3. 10.2%
 - 4. 12.05%

Question ID : 630680144919
 Option 1 ID : 630680560716
 Option 2 ID : 630680560717
 Option 3 ID : 630680560714
 Option 4 ID : 630680560715

Q.12 Which of the following statements is/are true for RCC Work?

Statement 1: The volume of reinforcement is deducted from volume of concrete.
 Statement 2: Binding wire required for binding the reinforcement is not measured separately.

- Ans
- 1. Both statement 1 and statement 2 are true
 - 2. Both statement 1 and statement 2 are false
 - 3. Statement 1 is true and statement 2 is false
 - 4. Statement 1 is false and statement 2 is true

Question ID : 630680339567
 Option 1 ID : 6306801320789
 Option 2 ID : 6306801320790
 Option 3 ID : 6306801320791
 Option 4 ID : 6306801320792

Q.13 For which of the following situations will the Zeroth Law of Thermodynamics NOT be valid?

- Ans
- 1. 100 mL of water at 25 degrees Celsius is mixed with 300 mL of water at 25 degrees Celsius
 - 2. 1000 mL of water at 15 degrees Celsius is mixed with 200 mL of water at 15 degrees Celsius
 - 3. 10 kg of wet steam at 100 degrees Celsius is mixed with 50 kg of dry and saturated steam at 100 degrees Celsius
 - 4. 20 mL of water at 20 degrees Celsius is mixed with 10 mL of sulphuric acid at 20 degrees Celsius

Question ID : 630680147632
 Option 1 ID : 630680571266
 Option 2 ID : 630680571267
 Option 3 ID : 630680571268
 Option 4 ID : 630680571269

Q.14 इंजीनियरी आरेखन के मुख्य शीर्षकों का अक्षर आकार क्या है?

- Ans
- 1. 3 mm से 5 mm
 - 2. 12 mm से 15 mm
 - 3. 6 mm से 8 mm
 - 4. 10 mm से 12 mm

Question ID : 630680876134
Option 1 ID : 6306803431304
Option 2 ID : 6306803431306
Option 3 ID : 6306803431303
Option 4 ID : 6306803431305

Q.15 If a slab has effective depth of 90 mm, then the maximum spacing of the main bar in the slab should be:

- Ans
- 1. 400 mm
 - 2. 450 mm
 - 3. 270 mm
 - 4. 300 mm

Question ID : 630680206791
Option 1 ID : 630680801765
Option 2 ID : 630680801766
Option 3 ID : 630680801763
Option 4 ID : 630680801764

Q.16 In the levelling process, the reduced level of change point is 100.355 m, the back sight and foresight readings are recorded as 0.680 and 1.320, respectively. The reduced level of line of sight at the change point is _____.

- Ans
- 1. 101.035 m
 - 2. 101.675 m
 - 3. 99.675 m
 - 4. 99.035 m

Question ID : 630680121673
Option 1 ID : 630680471642
Option 2 ID : 630680471643
Option 3 ID : 630680471644
Option 4 ID : 630680471645

Q.17 What is the term for the graphical representation of the intensity of light absorbed or transmitted by a sample as a function of wavelength?

- Ans
- 1. Chromatograph
 - 2. Conductometry
 - 3. Chromatogram
 - 4. Spectrum

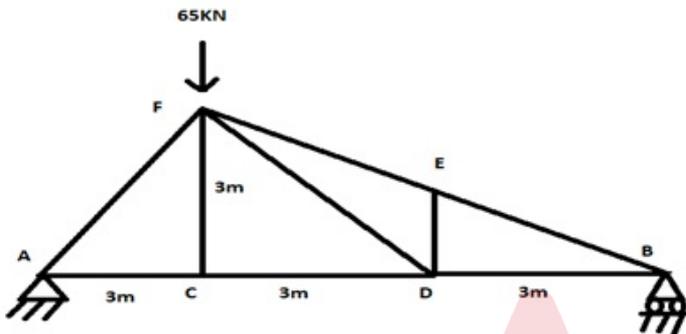
Question ID : 630680876277
Option 1 ID : 6306803431877
Option 2 ID : 6306803431876
Option 3 ID : 6306803431875
Option 4 ID : 6306803431878

Q.18 Which transmission medium is commonly used in cable television (CATV) networks?

- Ans
- 1. Wireless transmission
 - 2. Fiber optic cable
 - 3. Coaxial cable
 - 4. Twisted pair cable

Question ID : 630680876184
 Option 1 ID : 6306803431506
 Option 2 ID : 6306803431505
 Option 3 ID : 6306803431504
 Option 4 ID : 6306803431503

Q.19 Determine the force in the member CD of the given truss.



- Ans
- 1. CD = 65.01 KN
 - 2. CD = 130.02 KN
 - 3. CD = 195.03 KN
 - 4. CD = 43.34 KN

Question ID : 63068082449
 Option 1 ID : 630680319837
 Option 2 ID : 630680319839
 Option 3 ID : 630680319838
 Option 4 ID : 630680319836

Q.20 The solution of Laplace's equation $\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = 0$ in two dimensions, is of the form:

- Ans
- 1. $u(x, y) = (c_1 \cos px + c_2 \sin px)(c_3 \cos py + c_4 \sin py)$
 - 2. $u(x, y) = (c_1 e^{px} + c_2 e^{-px})(c_3 e^{py} + c_4 e^{-py})$
 - 3. $u(x, y) = (c_1 e^{px} + c_2 e^{-px})(c_3 \cos py + c_4 \sin py)$
 - 4. $u(x, y) = (c_1 \cos px + c_2 \sin px)(c_3 y + c_4)$

Question ID : 63068094795
 Option 1 ID : 630680367876
 Option 2 ID : 630680367875
 Option 3 ID : 630680367877
 Option 4 ID : 630680367878

Q.1 What will be the number of units consumed if a bulb of 100 W is kept on for 10 hours?

- Ans
- 1. 0.5 Unit
 - 2. 1 Unit
 - 3. 2 Unit
 - 4. 10 Unit

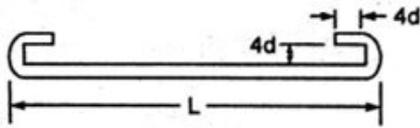
Question ID : 630680377035
 Option 1 ID : 6306801469206
 Option 2 ID : 6306801469205
 Option 3 ID : 6306801469203
 Option 4 ID : 6306801469204

Q.2 What type of projection is an orthographic projection?

- Ans
- 1. Isometric projection
 - 2. Parallel projection
 - 3. Oblique projection
 - 4. Perspective projection

Question ID : 630680876141
 Option 1 ID : 6306803431333
 Option 2 ID : 6306803431332
 Option 3 ID : 6306803431334
 Option 4 ID : 6306803431331

Q.3 For the given figure, calculate the total length of the bar.



('d' is the diameter of the bar.)

- Ans
- 1. $L + 18 d$
 - 2. $L + 22 d$
 - 3. $L + 20 d$
 - 4. $L + 16 d$

Question ID : 630680339573
 Option 1 ID : 6306801320813
 Option 2 ID : 6306801320816
 Option 3 ID : 6306801320815
 Option 4 ID : 6306801320814

Q.4 The value of electrical conductivity varies with total solid content:

- Ans
- 1. increase
 - 2. remain unchanged
 - 3. decrease
 - 4. increase up to a certain point

Question ID : 630680103206
 Option 1 ID : 630680401084
 Option 2 ID : 630680401083
 Option 3 ID : 630680401085
 Option 4 ID : 630680401086

Q.5 The total shrinkage strain is equal to:

- Ans
- 1. Autogenous shrinkage strain – Dry shrinkage strain
 - 2. Dry shrinkage strain – Autogenous shrinkage strain
 - 3. Dry shrinkage strain \times Autogenous shrinkage strain
 - 4. Dry shrinkage strain + Autogenous shrinkage strain

Question ID : 630680206811
 Option 1 ID : 630680801845
 Option 2 ID : 630680801843
 Option 3 ID : 630680801846
 Option 4 ID : 630680801844

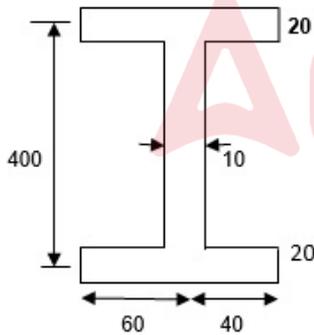
Q.6 Match the following classification of construction projects with their application.

A	Light construction project	I	Oil refinery
B	Heavy construction project	II	Thermal power plant
C	Industrial construction project	III	Harbour
		IV	Water supply system

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

Question ID : 63068099205
 Option 1 ID : 630680385527
 Option 2 ID : 630680385526
 Option 3 ID : 630680385525
 Option 4 ID : 630680385524

Q.7 Locate the shear centre for the section as shown in figure.



- Ans
- 1. 7.75 mm
 - 2. 35.75 mm
 - 3. 25.75 mm
 - 4. 15.75 mm

Question ID : 630680137582
 Option 1 ID : 630680532694
 Option 2 ID : 630680532697
 Option 3 ID : 630680532696
 Option 4 ID : 630680532695

Q.8 The metamorphic equivalent of limestone is _____

- Ans
- 1. metabasic rock
 - 2. marble
 - 3. slate
 - 4. quartzite

Question ID : 630680876195
 Option 1 ID : 6306803431547
 Option 2 ID : 6306803431549
 Option 3 ID : 6306803431550
 Option 4 ID : 6306803431548

Q.9 Calculate the discharge through a rectangular open channel 3.5 m wide having depth of water 2.5 m and bed slope 1 in 2000. (Take the value of K = 2.36 in Bazin's formula.)

- Ans
- 1. 7.57 m³/sec
 - 2. 8.75 m³/sec
 - 3. 2.33 m³/sec
 - 4. 9.64 m³/sec

Question ID : 630680103435
 Option 1 ID : 630680401985
 Option 2 ID : 630680401984
 Option 3 ID : 630680401983
 Option 4 ID : 630680401986

Q.10 In all water resources engineering projects, proper assessment can be done in works by _____ investigation.

- Ans
- 1. hydrological
 - 2. soil
 - 3. geological
 - 4. groundwater

Question ID : 630680144928
 Option 1 ID : 630680560753
 Option 2 ID : 630680560752
 Option 3 ID : 630680560750
 Option 4 ID : 630680560751

Q.11 _____ is the best method of population forecasting for a young city.

- Ans
- 1. Decrease in growth method
 - 2. Incremental increase method
 - 3. Geometric increase method
 - 4. Arithmetic method

Question ID : 630680157784
 Option 1 ID : 630680610666
 Option 2 ID : 630680610667
 Option 3 ID : 630680610664
 Option 4 ID : 630680610665

Q.12 A bolted bracket connection is to be checked as per governing equation for combined shear and tension, according to IS: 800-2007. Which of the following options represents the shape of the interaction curve for the governing equation proposed in code IS: 800-2007?

- Ans
- 1. Trapezoidal
 - 2. Elliptical
 - 3. Parabolic
 - 4. Circular

Question ID : 630680335151
 Option 1 ID : 6306801303824
 Option 2 ID : 6306801303822
 Option 3 ID : 6306801303823
 Option 4 ID : 6306801303821

Q.13 The installation of vertical sand drains in clayey soil causes the soil adjacent to the sand drains to undergo which of the following?

- Ans
- 1. Decrease in time for consolidation
 - 2. Increase in compressibility
 - 3. Increase in porosity
 - 4. Decrease in shear strength

Question ID : 630680114720
 Option 1 ID : 630680444248
 Option 2 ID : 630680444247
 Option 3 ID : 630680444246
 Option 4 ID : 630680444249

Q.14 As per IRC, the maximum overall length of a truck-trailer combination, excluding front and rear bumpers, shall be _____.

- Ans
- 1. 18 m
 - 2. 21 m
 - 3. 15 m
 - 4. 12 m

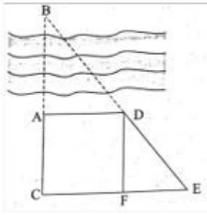
Question ID : 630680157914
 Option 1 ID : 630680611186
 Option 2 ID : 630680611187
 Option 3 ID : 630680611185
 Option 4 ID : 630680611184

Q.15 The vapour pressure of water is 0.18 m of water. In a siphonic flow, how high (in m) can the pipe be raised above the water surface level so that the siphonic action is not broken? Assume atmospheric pressure = 1.01×10^5 Pa. Specific weight of water is given as 9810 N/m³.

- Ans
- 1. 3.03
 - 2. 10.11
 - 3. 7.25
 - 4. 8.12

Question ID : 63068082842
 Option 1 ID : 630680321232
 Option 2 ID : 630680321235
 Option 3 ID : 630680321233
 Option 4 ID : 630680321234

Q.16



To determine the length of a chain crossing a water body is shown in figure, the following measurements were recorded.

CA = AD = 40 metre;

$\angle CAD = 90^\circ$;

CE = 76.8 m;

$\angle ACE = 90^\circ = \angle DFE$

The length of AB, rounded to one digit, is _____.

- Ans
- 1. 45.7 m
 - 2. 44.7 m
 - 3. 45.2 m
 - 4. 43.4 m

Question ID : 630680134299

Option 1 ID : 630680520041

Option 2 ID : 630680520039

Option 3 ID : 630680520038

Option 4 ID : 630680520040

Q.17 Select the correct statement(s) from the following regarding types of stairs.

A. Doglegged stairs are usually quarter turn stairs.

B. Jackknife staircases are typically cantilevered doglegged staircases.

C. Helicoidal stairs with an open well don't have a central core.

- Ans
- 1. All the statements are correct
 - 2. A and C only
 - 3. B only
 - 4. B and C only

Question ID : 630680876262

Option 1 ID : 6306803431818

Option 2 ID : 6306803431816

Option 3 ID : 6306803431815

Option 4 ID : 6306803431817

Q.18 The foundation slide is a loose sand foundation because:

- Ans
- 1. the site has quick-sand condition
 - 2. the site has gravel packing fluidisation
 - 3. of shear failure due to hydrostatic pressure
 - 4. the site undergoes liquefaction

Question ID : 630680145239

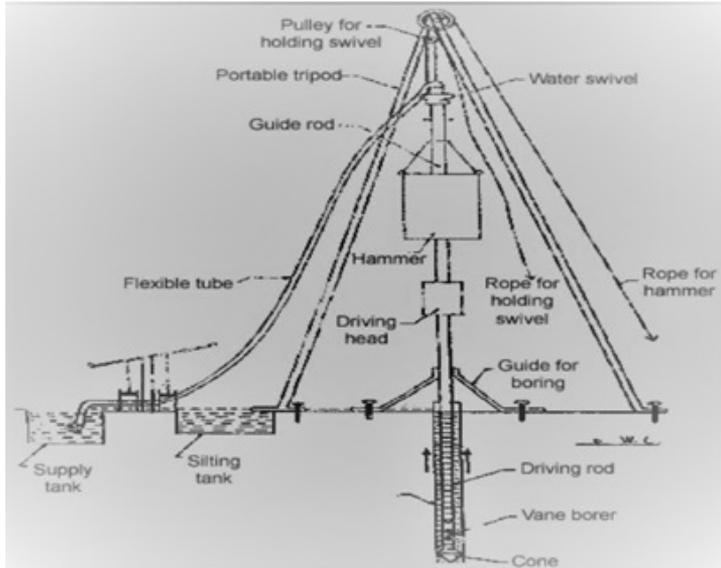
Option 1 ID : 630680561938

Option 2 ID : 630680561940

Option 3 ID : 630680561941

Option 4 ID : 630680561939

Q.19 The given figure represents:



- Ans
- 1. vane shear test
 - 2. dynamic cone penetration test
 - 3. static cone penetration test
 - 4. standard penetration test

Question ID : 630680116835
 Option 1 ID : 630680452628
 Option 2 ID : 630680452629
 Option 3 ID : 630680452626
 Option 4 ID : 630680452627

Q.20 Which of the following best describes the function of a device driver in an operating system?

- Ans
- 1. Translating high-level programming instructions into machine code
 - 2. Managing the execution of multiple processes simultaneously
 - 3. Providing an interface for users to interact with the system
 - 4. Facilitating communication between the operating system and hardware devices

Question ID : 630680876177
 Option 1 ID : 6306803431476
 Option 2 ID : 6306803431475
 Option 3 ID : 6306803431477
 Option 4 ID : 6306803431478

Section : Discipline5

Q.1 As per IRC, the recommended gradient of the ramp for a foot overbridge (FOB) is:

- Ans
- 1. 1 in 10
 - 2. 1 in 7
 - 3. 1 in 20
 - 4. 1 in 8

Question ID : 630680157918
 Option 1 ID : 630680611202
 Option 2 ID : 630680611200
 Option 3 ID : 630680611203
 Option 4 ID : 630680611201

Q.2 How fast does a rocket have to move relative to an observer for its length to be contracted to 75% of its original length?

- Ans
- 1. 0.3 c
 - 2. 0.6 c
 - 3. 0.5 c
 - 4. 0.4 c

Question ID : 630680876320
 Option 1 ID : 6306803432050
 Option 2 ID : 6306803432049
 Option 3 ID : 6306803432047
 Option 4 ID : 6306803432048

Q.3 Which of the following methods of analysis of slope is based on the consideration of equilibrium of independent slices in the slope mass?

- Ans
- 1. Newmark's method
 - 2. Taylor's method
 - 3. Bishop's rigorous method
 - 4. Swedish circle method

Question ID : 630680159098
 Option 1 ID : 630680615863
 Option 2 ID : 630680615860
 Option 3 ID : 630680615862
 Option 4 ID : 630680615861

Q.4 What is the primary objective of the estimate?

- Ans
- 1. To provide the cost of the work
 - 2. To provide the quantity of the work
 - 3. Measurement of details
 - 4. To provide the duration of the work

Question ID : 630680876218
 Option 1 ID : 6306803431640
 Option 2 ID : 6306803431639
 Option 3 ID : 6306803431642
 Option 4 ID : 6306803431641

Q.5 Which of the following processes is involved in the mechanical weathering of rocks?

- Ans
- 1. Oxidation
 - 2. Carbonation
 - 3. Frost action
 - 4. Hydrolysis

Question ID : 630680876204
 Option 1 ID : 6306803431583
 Option 2 ID : 6306803431584
 Option 3 ID : 6306803431586
 Option 4 ID : 6306803431585

Q.6 A liquid is flowing through a weir with a flow rate of 1.7 m^3 . The horizontal dimension of the model is $\frac{1}{45}$ times the horizontal dimension of the prototype and the vertical dimension of the model is $\frac{1}{12}$ times the horizontal dimension of the prototype. Calculate the discharge through the model of weir.

- Ans
- ✓ 1. $Q_m = 0.000909 \text{ m}^3/\text{s}$
 - ✗ 2. $Q_m = 0.003148 \text{ m}^3/\text{s}$
 - ✗ 3. $Q_m = 0.007207 \text{ m}^3/\text{s}$
 - ✗ 4. $Q_m = 0.000469 \text{ m}^3/\text{s}$

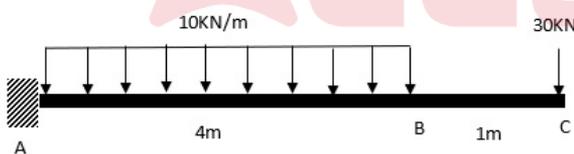
Question ID : 630680108836
 Option 1 ID : 630680422239
 Option 2 ID : 630680422237
 Option 3 ID : 630680422236
 Option 4 ID : 630680422238

Q.7 A question paper consists of 100 true or false type questions. If x denotes the number of true answers for some questions, then the probability distribution of x is:

- Ans
- ✗ 1. $100C_x \left(\frac{1}{2}\right) \left(\frac{1}{2}\right)^{100-x}; x = 0, 1, 2, \dots, 100$
 - ✗ 2. $100C_x \left(\frac{1}{2}\right)^x; x = 0, 1, 2, \dots, 100$
 - ✓ 3. $100C_x \left(\frac{1}{2}\right)^{100}; x = 0, 1, 2, \dots, 100$
 - ✗ 4. $100C_x \left(\frac{1}{2}\right)^{100-x}; x = 0, 1, 2, \dots, 100$

Question ID : 63068094019
 Option 1 ID : 630680364774
 Option 2 ID : 630680364772
 Option 3 ID : 630680364773
 Option 4 ID : 630680364771

Q.8 For the cantilever beam as shown in the given figure, the bending moment at point 'C' is _____.



- Ans
- ✗ 1. 30 KNm
 - ✗ 2. 10 KNm
 - ✗ 3. 40 KNm
 - ✓ 4. 0 KNm

Question ID : 630680102014
 Option 1 ID : 630680396412
 Option 2 ID : 630680396414
 Option 3 ID : 630680396413
 Option 4 ID : 630680396415

Q.9 In the context of dynamic analysis of structures, select the correct statement from the following.

(Here, 'SDOF' stands for Single Degree Of Freedom, whereas 'MDOF' stands for Multi-Degree Of Freedom.)

- Ans
- 1. Both single-storey and multi-storey structures are modelled as an MDOF system.
 - 2. A single-storey structure is modelled as an MDOF system and a multi-storey building as an SDOF system.
 - 3. Both single-storey and multi-storey structures are modelled as an SDOF system.
 - 4. A single-storey structure is modelled as an SDOF system and a multi-storey building as an MDOF system.

Question ID : 630680876117
Option 1 ID : 6306803431236
Option 2 ID : 6306803431238
Option 3 ID : 6306803431235
Option 4 ID : 6306803431237

Q.10 The unit of enthalpy in a Mollier chart is:

- Ans
- 1. $\frac{\text{kJ}}{\text{kg}}$
 - 2. $\frac{\text{J}}{\text{g}}$
 - 3. $\frac{\text{kJ}}{\text{g}}$
 - 4. $\frac{\text{J}}{\text{kg}}$

Question ID : 630680147663
Option 1 ID : 630680571391
Option 2 ID : 630680571392
Option 3 ID : 630680571390
Option 4 ID : 630680571393

Q.11 सभी पक्षों के साथ-साथ सिरों पर संलग्न स्पिलवे गेट का प्रकार, एक जलरोधी वेसल का निर्माण करता है, जिसे _____ कहा जाता है।

- Ans
- 1. आयताकार गेट
 - 2. फिक्स्ड व्हील गेट
 - 3. ड्रम गेट
 - 4. रेडियल गेट

Question ID : 630680145243
Option 1 ID : 630680561957
Option 2 ID : 630680561954
Option 3 ID : 630680561955
Option 4 ID : 630680561956

Q.12 Stainless steel is mainly an alloy of _____.

- Ans
- 1. steel and nickel
 - 2. steel and vanadium
 - 3. steel and chromium
 - 4. steel and copper

Question ID : 630680121392
Option 1 ID : 630680470528
Option 2 ID : 630680470526
Option 3 ID : 630680470527
Option 4 ID : 630680470529

Q.13 The variation of bending moment in a beam is given by $5x^3 - 2.5x^2 - 10x + 60$. The rate of loading is given by:

- Ans
- 1. $30x^1 - 5x^1$
 - 2. $13x^1 - 5x^0$
 - 3. $30x^1 - 5x^0$
 - 4. $3x^1 - 5x^0$

Question ID : 630680101157
Option 1 ID : 630680393150
Option 2 ID : 630680393149
Option 3 ID : 630680393151
Option 4 ID : 630680393148

Q.14 As per IS:800-2007, the numerical value of the partial safety factor used for the material of weld for field welding in case of a fillet weld is _____.

- Ans
- 1. 1.25
 - 2. 1.50
 - 3. 1.1
 - 4. 1.15

Question ID : 630680219838
Option 1 ID : 630680853233
Option 2 ID : 630680853234
Option 3 ID : 630680853231
Option 4 ID : 630680853232

Q.15 In the estimation of the stopping sight distance, the braking distance is given by _____;

where, v = Speed of the vehicle in m/s
 g = Acceleration due to gravity
 f = Friction between the wheel and the road pavement

Ans

- 1. $\frac{v^2}{4gf}$
- 2. $\frac{v^3}{2gf}$
- 3. $\frac{v^3}{4gf}$
- 4. $\frac{v^2}{2gf}$

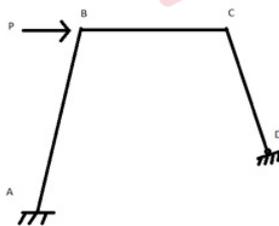
Question ID : 630680157906
 Option 1 ID : 630680611153
 Option 2 ID : 630680611154
 Option 3 ID : 630680611155
 Option 4 ID : 630680611152

Q.16 The operation in which the distances are measured using a chain and tape is called _____.

- 1. odometer method of measurement
- 2. pacing
- 3. pedometer method of measurement
- 4. chaining

Question ID : 630680121639
 Option 1 ID : 630680471509
 Option 2 ID : 630680471506
 Option 3 ID : 630680471507
 Option 4 ID : 630680471508

Q.17 Determine the ratio of sway moments for the condition: one end is fixed, and the other end is hinged.



- 1. $M_{BC} = M_{BA} = M_{CD} = 2I\delta / L^2 : 2I_1\delta_1 / L_1^2 : 2I_2\delta_2 / L_2^2$
- 2. $M_{BC} = M_{BA} = M_{CD} = 2I\delta / L : 2I_1\delta_1 / L_1 : I_2\delta_2 / L_2$
- 3. $M_{BC} = M_{BA} = M_{CD} = 2I\delta / L^2 : 2I_1\delta_1 / L_1^2 : I_2\delta_2 / L_2^2$
- 4. $M_{BC} = M_{BA} = M_{CD} = I\delta / L^2 : I_1\delta_1 / L_1^2 : I_2\delta_2 / L_2^2$

Question ID : 63068082459
 Option 1 ID : 630680319877
 Option 2 ID : 630680319878
 Option 3 ID : 630680319879
 Option 4 ID : 630680319876

Q.18 Dry density of a soil sample and its specific gravity is 18 kN/m^3 and 2.7, respectively. Find the moisture content required to have 100% saturation of the soil.

(Consider unit weight of water = 10 kN/m^3).

- Ans
- 1. 36.52%
 - 2. 20.17%
 - 3. 18.52%
 - 4. 24.70%

Question ID : 630680133463
 Option 1 ID : 630680516826
 Option 2 ID : 630680516827
 Option 3 ID : 630680516829
 Option 4 ID : 630680516828

Q.19 The depth of the neutral axis of a section is determined by equating:

- Ans
- 1. Total compressive area = Total tensile area
 - 2. Total compressive moment = Total tensile forces
 - 3. Total compressive torsion = Total tensile forces
 - 4. Total compressive force = Total tensile forces

Question ID : 630680206778
 Option 1 ID : 630680801714
 Option 2 ID : 630680801712
 Option 3 ID : 630680801713
 Option 4 ID : 630680801711

Q.20 Identify the wall bond which has 3 to 5 stretcher courses to one header bond.

- Ans
- 1. Flemish bond
 - 2. English cross bond
 - 3. English bond
 - 4. English garden wall bond

Question ID : 630680876246
 Option 1 ID : 6306803431752
 Option 2 ID : 6306803431754
 Option 3 ID : 6306803431751
 Option 4 ID : 6306803431753