Combined Higher Secondary Level Examination 2023 Tier I

Roll Number	
Candidate Name	
Venue Name	iON Digital Zone iDZ Laxman Nagar
Exam Date	14/08/2023
Exam Time	2:30 PM - 3:30 PM
Subject	CHSL Exam 2023 Tier I

Section : **English Language**

Q.1 **Select the option that can be used as a one-word substitute for the underlined segment.**

The new technology was much more <u>productive and achieved maximum output with minimum wasted effort or expense</u>.

Ans ✔ 1. efficient

✗ 2. elaborate

✗ 3. rapid

✗ 4. magnificent

Question ID : **264330149815**
Status : **Answered**
Chosen Option : **1**

Q.2 **Select the most appropriate ANTONYM to substitute the underlined word in the following sentence.**

There was an <u>interminable</u> struggle from his part in his fight against cancer.

Ans ✗ 1. overwhelming

✗ 2. inappropriate

✗ 3. unsustainable

✔ 4. intermittent

Question ID : **264330148929**
Status : **Answered**
Chosen Option : **4**

Q.3 **The following sentence has been split into four segments. Identify the segment that contains a spelling error.**

Majority of the people / do not comprehend / the vissicitudes / of regular life.

Ans ✗ 1. Majority of the people

✔ 2. the vissicitudes

✗ 3. of regular life

✗ 4. do not comprehend

Question ID : **264330143194**
Status : **Answered**
Chosen Option : **3**

Q.4 **Select the option that expresses the given sentence in active voice.**
The victim was found innocent as well as honest by the police.

Ans ✖ 1. The police find the victim innocent as well as honest.

✖ 2. The police has found the victim innocent and honest.

✔ 3. The police found the victim innocent as well as honest.

✖ 4. The police finds the victim innocent and honest.

Question ID : **264330151291**

Status : **Answered**

Chosen Option : **3**

Q.5 **Select the most appropriate synonym of the bracketed word in the following sentence to fill in the blank.**

She looked _____ (amazed) when she heard the news.

Ans ✖ 1. inspired

✖ 2. afflicted

✖ 3. induced

✔ 4. astonished

Question ID : **264330142651**

Status : **Answered**

Chosen Option : **4**

Q.6 **The following sentence has been divided into four parts. One of them contains an error. Select the part that contains the error from the given options.**
This boy / is cleverest / of all / in the class.

Ans ✖ 1. in the class

✖ 2. This boy

✔ 3. is cleverest

✖ 4. of all

Question ID : **264330147559**

Status : **Answered**

Chosen Option : **4**

Q.7 **Select the most appropriate ANTONYM of the given word.**
Dominate

Ans ✖ 1. Protect

✖ 2. Cover

✖ 3. Open

✔ 4. Liberate

Question ID : **264330141294**

Status : **Answered**

Chosen Option : **1**

Q.8 Parts of a sentence are given below in jumbled order. Arrange the parts in the correct order to form a meaningful sentence.
A. featuring the fool, or jester, who represented the weaknesses,
B. fool's literature is the allegorical satires
C. popular throughout Europe from the 15th to the 17th century,
D. vices, and grotesqueries of contemporary society

Ans ✅ 1. BCAD

❌ 2. DABC

❌ 3. CABD

❌ 4. ACDB

Question ID : **264330147537**
Status : **Answered**
Chosen Option : **1**

Q.9 Select the option that can be used as a one-word substitute for the given group of words.
Free time; time at one's own disposal

Ans ✅ 1. Leisure

❌ 2. Legible

❌ 3. Lethal

❌ 4. Legion

Question ID : **264330143639**
Status : **Answered**
Chosen Option : **1**

Q.10 Select the most appropriate option that can substitute the underlined words in the given sentence.

Despite facing numerous obstacles and setbacks, the determined entrepreneur refused to give up on her dream of creating a successful startup that would transform the sector.

Ans ❌ 1. that will improvise the sector

❌ 2. that shall redesign the industry

❌ 3. that could socialise the sector

✅ 4. that would revolutionise the industry

Question ID : **264330144139**
Status : **Answered**
Chosen Option : **4**

Q.11 Select the most appropriate synonym of the given word.
Fraudulent

Ans ❌ 1. Genuine

✅ 2. Counterfeit

❌ 3. Unimaginative

❌ 4. Dissimilar

Question ID : **264330143207**
Status : **Answered**
Chosen Option : **2**

Q.12 Select the appropriate ANTONYM of the underlined word to fill in the blank.
We should try to <u>pacify</u> the situation and not _____ it further.

Ans ✗ 1. mitigate

✗ 2. standardise

✗ 3. illustrate

✓ 4. aggravate

Question ID : **264330149753**
Status : **Answered**
Chosen Option : **4**

Q.13 Select the most appropriate ANTONYM of the given underline word.
We sell magazines, groceries and <u>sundry</u> articles.

Ans ✗ 1. Diverse

✗ 2. careless

✓ 3. Scanty

✗ 4. Profuse

Question ID : **264330150197**
Status : **Answered**
Chosen Option : **3**

Q.14 Select the option that expresses the given sentence in active voice.
The entrance of the museum was opened by the official.

Ans ✓ 1. The official opened the entrance of the museum.

✗ 2. The official had opened the entrance of the museum.

✗ 3. The official open the entrance of the museum.

✗ 4. The officials opening the entrance of the museum.

Question ID : **264330143038**
Status : **Answered**
Chosen Option : **1**

Q.15 Select the most appropriate meaning of the given idiom.

Cry for the moon

Ans ✗ 1. To start performing better

✗ 2. To have patience

✓ 3. To desire the unattainable

✗ 4. To be extremely happy

Question ID : **264330142635**
Status : **Answered**
Chosen Option : **3**

Q.16 Select the option with the correct spelling that can replace the underlined word in the given sentence.
Employees were <u>lay of</u> from work due to the recession.

Ans ✔ 1. laid off

✘ 2. laid of

✘ 3. lay off

✘ 4. layed off

Q.17 Identify the error in the use of preposition in the given sentence and select the correct option.
Her family lost their way on Daman.

Ans ✘ 1. over

✔ 2. in

✘ 3. upon

✘ 4. of

Q.18 Select the most appropriate option that can substitute the underlined segment in the given sentence.
Amal <u>brightened of when they</u> said he could go with them.

Ans ✘ 1. brightened in when they

✘ 2. brightened on when they

✘ 3. brightened upon when they

✔ 4. brightened up when they

Q.19 Select the most appropriate option that can substitute the underlined words in the given sentence.

Instead of taking the time to do the job properly, they decided to <u>cut corners</u> and save time by using cheap materials.

Ans ✘ 1. avoid someone or something intentionally

✘ 2. physically cut a corner off of something

✔ 3. take a shortcut for easy way out in order to save efforts

✘ 4. break a promise or commitment

Q.20 Select the option that can be used as a one-word substitute for the underlined group of words.

Henny Penny is <u>a story that is passed down from generation to generation through spoken word</u>.

Ans ✔ 1. folktale

✗ 2. fable

✗ 3. epic

✗ 4. parable

Comprehension:

In the following passage some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Five centuries after Leonardo da Vinci painted the Mona Lisa (1503–19), the portrait hangs behind bulletproof glass (1)_____ the Louvre Museum and draws thousands of jostling spectators each day. It is the most famous painting in the world, and yet, when viewers manage to see the artwork up close, they are likely to be (2)_____ by the small subdued portrait of an ordinary woman. She's dressed modestly in a translucent veil, dark robes, and no jewellery. Much has been said about her smile and gaze, but viewers still might wonder what all the (3)_____ is about. Along with the mysteries of the sitter's identity and her (4)_____ look, the reason for the work's popularity is one of its many conundrums. Although many theories have attempted to pinpoint one reason for the art piece's celebrity, the most compelling arguments insist that there is no one explanation. The Mona Lisa's fame is the result of many chance circumstances combined with the painting's (5)_____ appeal.

SubQuestion No : 21

Q.21 Select the most appropriate option to fill in blank number 1.

Ans ✔ 1. within

✗ 2. beside

✗ 3. toward

✗ 4. outside

Comprehension:

In the following passage some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Five centuries after Leonardo da Vinci painted the Mona Lisa (1503–19), the portrait hangs behind bulletproof glass (1)_____ the Louvre Museum and draws thousands of jostling spectators each day. It is the most famous painting in the world, and yet, when viewers manage to see the artwork up close, they are likely to be (2)_____ by the small subdued portrait of an ordinary woman. She's dressed modestly in a translucent veil, dark robes, and no jewellery. Much has been said about her smile and gaze, but viewers still might wonder what all the (3)_____ is about. Along with the mysteries of the sitter's identity and her (4)_____ look, the reason for the work's popularity is one of its many conundrums. Although many theories have attempted to pinpoint one reason for the art piece's celebrity, the most compelling arguments insist that there is no one explanation. The Mona Lisa's fame is the result of many chance circumstances combined with the painting's (5)_____ appeal.

SubQuestion No : 22

Q.22 **Select the most appropriate option to fill in blank number 2.**

Ans ✗ 1. composed

✗ 2. unfazed

✓ 3. baffled

✗ 4. fine

Question ID : **264330149577**
Status : **Answered**
Chosen Option : **2**

Comprehension:

In the following passage some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Five centuries after Leonardo da Vinci painted the Mona Lisa (1503–19), the portrait hangs behind bulletproof glass (1)_____ the Louvre Museum and draws thousands of jostling spectators each day. It is the most famous painting in the world, and yet, when viewers manage to see the artwork up close, they are likely to be (2)_____ by the small subdued portrait of an ordinary woman. She's dressed modestly in a translucent veil, dark robes, and no jewellery. Much has been said about her smile and gaze, but viewers still might wonder what all the (3)_____ is about. Along with the mysteries of the sitter's identity and her (4)_____ look, the reason for the work's popularity is one of its many conundrums. Although many theories have attempted to pinpoint one reason for the art piece's celebrity, the most compelling arguments insist that there is no one explanation. The Mona Lisa's fame is the result of many chance circumstances combined with the painting's (5)_____ appeal.

SubQuestion No : 23

Q.23 **Select the most appropriate option to fill in blank number 3.**

Ans ✓ 1. fuss

✗ 2. unease

✗ 3. cavil

✗ 4. censure

Question ID : **264330149578**
Status : **Answered**
Chosen Option : **1**

Comprehension:

In the following passage some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Five centuries after Leonardo da Vinci painted the Mona Lisa (1503–19), the portrait hangs behind bulletproof glass (1)_____ the Louvre Museum and draws thousands of jostling spectators each day. It is the most famous painting in the world, and yet, when viewers manage to see the artwork up close, they are likely to be (2)_____ by the small subdued portrait of an ordinary woman. She's dressed modestly in a translucent veil, dark robes, and no jewellery. Much has been said about her smile and gaze, but viewers still might wonder what all the (3)_____ is about. Along with the mysteries of the sitter's identity and her (4)_____ look, the reason for the work's popularity is one of its many conundrums. Although many theories have attempted to pinpoint one reason for the art piece's celebrity, the most compelling arguments insist that there is no one explanation. The Mona Lisa's fame is the result of many chance circumstances combined with the painting's (5)_____ appeal.

SubQuestion No : 24

Q.24 Select the most appropriate option to fill in blank number 4.

Ans ✗ 1. dark

   ✗ 2. occult

   ✓ 3. enigmatic

   ✗ 4. murky

Question ID : **264330149579**
Status : **Answered**
Chosen Option : **3**

Comprehension:

In the following passage some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Five centuries after Leonardo da Vinci painted the Mona Lisa (1503–19), the portrait hangs behind bulletproof glass (1)_____ the Louvre Museum and draws thousands of jostling spectators each day. It is the most famous painting in the world, and yet, when viewers manage to see the artwork up close, they are likely to be (2)_____ by the small subdued portrait of an ordinary woman. She's dressed modestly in a translucent veil, dark robes, and no jewellery. Much has been said about her smile and gaze, but viewers still might wonder what all the (3)_____ is about. Along with the mysteries of the sitter's identity and her (4)_____ look, the reason for the work's popularity is one of its many conundrums. Although many theories have attempted to pinpoint one reason for the art piece's celebrity, the most compelling arguments insist that there is no one explanation. The Mona Lisa's fame is the result of many chance circumstances combined with the painting's (5)_____ appeal.

SubQuestion No : 25

Q.25 Select the most appropriate option to fill in blank number 5.

Ans ✓ 1. inherent

   ✗ 2. focal

   ✗ 3. limited

   ✗ 4. logical

Question ID : **264330149580**
Status : **Answered**
Chosen Option : **1**

Section : **General Intelligence**

Q.1 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

M

Ty5j3law |

N

Ans ✔ 1. wɒlƐjϨγT

✖ 2. wɒlƐjϨɅT

✖ 3. wɒlƐϨjγT

✖ 4. ʍɒlƐjϨɅT
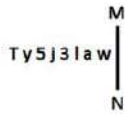
Question ID : **264330146707**
Status : **Answered**
Chosen Option : **1**

Q.2 If 19 June 2001 is Tuesday, then what will be the day of the week on 21 August 2009?

Ans ✖ 1. Sunday

✔ 2. Friday

✖ 3. Thursday

✖ 4. Monday

Question ID : **264330146563**
Status : **Answered**
Chosen Option : **2**

Q.3 Select the term from among the given options that can replace the question mark (?) in the following series based on the English alphabetical order.

GAF, GEF, GIF, GOF, ?

Ans ✔ 1. GUF

✖ 2. GTF

✖ 3. GRF

✖ 4. GSF

Question ID : **264330146861**
Status : **Answered**
Chosen Option : **1**

Q.4 In a certain code language, 'MINER' is coded as '56342' and 'ANIME' is coded as '63457'. What is the code for 'R' in the given code language?

Ans ✖ 1. 6

✖ 2. 3

✖ 3. 5

✔ 4. 2

Question ID : **264330147209**
Status : **Answered**
Chosen Option : **4**

Q.5 In a month of 29 days, the second Thursday falls on the 13th day of the month. What day of the week will be the second last day of the month?

Ans ✅ 1. Friday

❌ 2. Wednesday

❌ 3. Sunday

❌ 4. Saturday

Q.6 What will come in the place of the question mark (?) in the following equation, if

'+' and '×' are interchanged and '−' and '÷' are interchanged?

$105 − 15 ÷ 13 + 3 × 27 = ?$

Ans ❌ 1. 58

✅ 2. −5

❌ 3. 16

❌ 4. 23

Q.7 What should come in place of X in the given series?

5 10 20 37 63 X

Ans ✅ 1. 100

❌ 2. 105

❌ 3. 95

❌ 4. 90

Q.8 Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.

146 : 438 :: 316 : 948 :: 556 : ?

Ans ❌ 1. 2400

❌ 2. 1822

✅ 3. 1668

❌ 4. 2016

Q.9 CHMZ is related to WRMZ in a certain way based on the English alphabetical order. In the same way, NPWY is related to LJCA. Which of the given options is DGNO related to following the same logic?

Ans
   ✗ 1. ONGD

   ✔ 2. VSLK

   ✗ 3. KECF

   ✗ 4. CFMN

Q.10 What should come in place of the question mark (?) in the given series?

9   14   ?   24   29   34

Ans
   ✗ 1. 18

   ✔ 2. 19

   ✗ 3. 21

   ✗ 4. 20

Q.11 In a certain code language,

A + B means 'A is the daughter of B',
A – B means 'A is the wife of B',
A × B means 'A is the brother of B',
A ÷ B means 'A is the father of B'.

Based on the above, how is P related to T if 'P + Q – R ÷ S × T'?

Ans
   ✔ 1. Sister

   ✗ 2. Mother's sister

   ✗ 3. Daughter

   ✗ 4. Mother

Q.12 11 is related to 1210 following a certain logic. Following the same logic, 13 is related to 1690. To which of the following is 17 related to, following the same logic?

Ans ✗ 1. 2690

✗ 2. 2990

✗ 3. 2790

✓ 4. 2890

Q.13 How many triangles are there in the given figure?

Ans ✗ 1. 5

✗ 2. 4

✗ 3. 6

✓ 4. 8
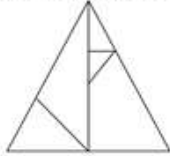
Q.14 What should come in place of ? in the given series based on the English alphabetical order?

JYB   LVD   NSF   PPH   ?

Ans ✗ 1. SMK

✗ 2. TMK

✓ 3. RMJ

✗ 4. SNJ

Q.15 In a certain code language , 'HOUSE' is coded as '23617' and 'MOUSE', is coded as '61235'. What is the code for 'H' in the given code language?

Ans ✗ 1. 6

✗ 2. 5

✓ 3. 7

✗ 4. 2

Q.16 In a certain code language,

'A × B' means 'A is the sister of B',
'A # B' means 'A is the mother of B',
'A $ B' means 'A is the father of B'.

Based on the above, how is X related to R if X # P $ Q × R?

Ans ✗ 1. Father

✓ 2. Father's mother

✗ 3. Father's father

✗ 4. Son's son

Question ID : **264330147420**
Status : **Answered**
Chosen Option : **2**

Q.17 What will come in the place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?

11 ÷ 42 × 3 − 41 + 27 = ?

Ans ✓ 1. 168

✗ 2. 171

✗ 3. 155

✗ 4. 159

Question ID : **264330146400**
Status : **Answered**
Chosen Option : **1**

Q.18 Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.
Statements:
Some tables are green.
All green is lawn.
All lawn is soft.
Conclusions:
(I): All tables are green.
(II): Some green is lawn.

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

✓ 2. Only conclusion (II) follows

✗ 3. Only conclusion (I) follows
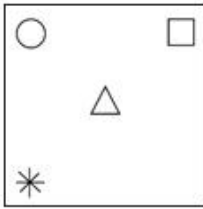
✗ 4. Both conclusions (I) and (II) follow

Question ID : **264330152112**
Status : **Answered**
Chosen Option : **2**

Q.19 Identify the figure given in the options which when put in place of the question mark (?) will logically complete the series.
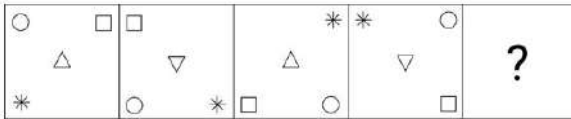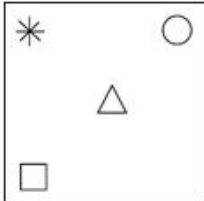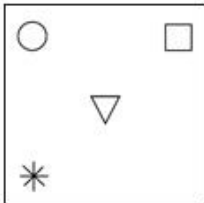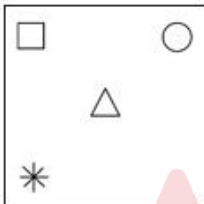

Ans

✔ 1.

✘ 2.

✘ 3.

✘ 4.

Question ID : 264330147219
Status : **Answered**
Chosen Option : **1**

Q.20 Which of the following letter-clusters will replace the question mark (?) in the given series to make it logically complete?
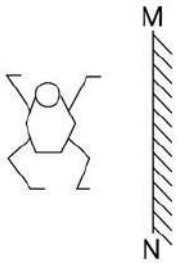
MF 99, OD 109, ?, SZ 129, UX 139

Ans ✘ 1. PC 120

✘ 2. PB 109

✘ 3. QC 105

✔ 4. QB 119

Question ID : 264330147260
Status : **Answered**
Chosen Option : **4**

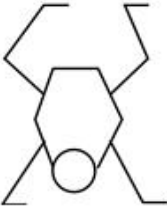**Q.21** Select the correct mirror image of the given figure when the mirror is placed at MN as shown.

Ans

1.

2.

3.

4.

Q.22 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '–', what will come in place of the question mark '?' in the following equation?

1024 A 32 B 11 D 57 C 121 = ?

Ans

1. 107

2. 421

3. 436

4. 416

Q.23 Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.

PWMA, UBRF, ZGWK, ?

Ans ✔ 1. ELBP

✘ 2. DFQR

✘ 3. DKAO

✘ 4. FMDQ

Question ID : **264330147051**
Status : **Answered**
Chosen Option : **1**

Q.24 Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusions logically follow/s from the given statements.

Statements:
All rubbers are folders.
Some folders are computers.
All computers are envelopes.
Conclusions:
(I): All folders are rubbers.
(II): Some computers are folders.

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

✔ 2. Only conclusion (II) follows

✘ 3. Only conclusion (I) follows

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

Question ID : **264330152106**
Status : **Answered**
Chosen Option : **2**

Q.25 Which number will replace the question mark (?) to complete the given series?

3, 7, 15, 31, 63, 127, ?

Ans ✘ 1. 245

✘ 2. 250

✘ 3. 260

✔ 4. 255

Question ID : **264330150694**
Status : **Answered**
Chosen Option : **4**

Section : **Quantitative Aptitude**

Q.1 If $p + q = 12$ and $pq = 14$, then find the value of $p^2 - pq + q^2$.

Ans
- ✗ 1. 192
- ✗ 2. 181
- ✔ 3. 102
- ✗ 4. 144

Question ID : **264330147988**
Status : **Answered**
Chosen Option : **3**

Q.2 Rajat, Pooja and Abha participate in the election. If the total votes polled are 40,000 and 10% of votes are invalid, Rajat got 36% of valid votes and Pooja got 40% of valid votes, then find the number of votes Abha got.

Ans
- ✗ 1. 9245
- ✗ 2. 1024
- ✔ 3. 8640
- ✗ 4. 5760

Question ID : **264330148888**
Status : **Answered**
Chosen Option : **3**

Q.3 A transverse common tangent is drawn to two circles of radius 8.5 cm and 5.5 cm. The centres of the two circles are 18 cm apart. What is the length (in cm) of the tangent?

Ans
- ✗ 1. $10\sqrt{3}$
- ✗ 2. $10\sqrt{2}$
- ✔ 3. $8\sqrt{2}$
- ✗ 4. $8\sqrt{3}$

Question ID : **264330147801**
Status : **Not Answered**
Chosen Option : **--**

Q.4 If an article is sold for ₹402, there is a loss of 33%. At what price should it be sold to get 37% profit?

Ans
- ✗ 1. ₹911
- ✗ 2. ₹618
- ✔ 3. ₹822
- ✗ 4. ₹781

Question ID : **264330148786**
Status : **Answered**
Chosen Option : **3**

Q.5 What is the mean proportional of 8.41 and 16.81?

Ans ✗ 1. 13.69

✗ 2. 9.88

✔ 3. 11.89

✗ 4. 12.79

Q.6 If a 10-digit number $620x976y52$ is divisible by 88, then the least value of $(x^2 + y^2)$ will be:

Ans ✗ 1. 8

✗ 2. 7

✗ 3. 11

✔ 4. 10

Q.7 If ₹2,000 is invested at a simple interest rate of 5% per annum and the interest is added to the principal after 10 years, then in how many years will it amount to ₹4,000 at the same rate of interest?

Ans ✗ 1. $18\frac{2}{3}$ years

✗ 2. $16\frac{1}{3}$ years

✔ 3. $16\frac{2}{3}$ years

✗ 4. $18\frac{1}{3}$ years

Q.8 The marked price of a shirt is ₹2,000. It is sold at a discount of 15%. The shopkeeper has allowed a further discount of 5% due to off season. Find the selling price of the shirt.

Ans ✗ 1. ₹1,710

✔ 2. ₹1,615

✗ 3. ₹1,650

✗ 4. ₹1,700

Q.9 If $\cos 5\alpha = \sin\alpha$ and $5\alpha < 90°$, then the value of $\tan 2\alpha$ is :

Ans   ✗ 1. $\sqrt{2}$

   ✗ 2. $\dfrac{1}{\sqrt{2}}$

   ✔ 3. $\dfrac{1}{\sqrt{3}}$

   ✗ 4. $\sqrt{3}$

Q.10 A 10-litre solution of milk and water contains 8 litres of milk. 2 litres of the solution is replaced by pure milk and mixed. The process is repeated two more times. How much milk (in litres) is present in the mixture so obtained?

Ans   ✔ 1. 8.976

   ✗ 2. 8.597

   ✗ 3. 8.796

   ✗ 4. 8.679

Q.11 In a 120 metre race, P beats S by 6 metres. If S starts with a head start of 7.5 metres and it is a 100 metre race, then who wins the race and how many metres? (Correct to 2 decimal places)

Ans   ✔ 1. S, 2.63

   ✗ 2. P, 3.63

   ✗ 3. S, 3.63

   ✗ 4. P, 2.63

Q.12 The Pie chart shows the percentage distributions of total number of laptops (both Dell and HP) sold by six stores in March.

Refer to the pie chart and table carefully and answer the given questions.

Total number = 11200

Ratio of the numbers of Dell and HP sold

Stores	Ratio
A	5 : 4
B	7 : 6
C	1 : 4
D	11 : 10
E	4 : 3
F	3 : 1

What is the central angle corresponding to the total number of laptops (both Dell and HP) sold by store E? (correct to one decimal place)

Ans   ✗ 1. 43.2°

   ✗ 2. 64.8°

   ✔ 3. 50.4°

   ✗ 4. 63.2°

Q.13 The value of $\dfrac{1+\sin A}{\cos A} + \dfrac{\cos A}{1+\sin A}$ is:

Ans   ✔ 1. 2 sec A

   ✗ 2. 2 cosec A

   ✗ 3. sec A

   ✗ 4. cosec A

Q.14 $\overline{CT}$ is a tangent to a circle at the point T on the circle. Chord $\overline{AB}$ of the circle is extended to meet the tangent $\overline{CT}$ at the point C. If m $(\overline{AB})$ = 3 cm and m $(\overline{BC})$ = 2.4 cm, find the length (in cm) of the tangent $\overline{CT}$.

Ans   ✗ 1. 4.2

   ✔ 2. 3.6

   ✗ 3. 3.2

   ✗ 4. 4.0

Q.15 If $\left(y^2 + \frac{1}{y^2}\right) = 167$ and $y > 0$, find the value of $\left(y + \frac{1}{y}\right)$.

Ans ✔ 1. 13

✘ 2. $-\sqrt{165}$

✘ 3. $\sqrt{165}$

✘ 4. -13

Q.16 Find the surface area of a sphere whose radius is 3.5 cm $\left(use\ \pi = \frac{22}{7}\right)$.

Ans ✔ 1. $154\ cm^2$

✘ 2. $152\ cm^2$

✘ 3. $146\ cm^2$

✘ 4. $160\ cm^2$

Q.17 Simplify the given expression. $\frac{(x+3)^3 + (x-3)^3}{x^2 + 27}$

Ans ✘ 1. $3x$

✘ 2. x

✘ 3. $4x$

✔ 4. $2x$

Q.18 In a triangle $\triangle PQR$, the bisectors of $\angle P$ and $\angle R$ meet at a point M inside the triangle. If the measurement of $\angle PMR = 127°$, then the measurement of $\angle Q$ is:

Ans ✘ 1. $90°$

✔ 2. $74°$

✘ 3. $180°$

✘ 4. $106°$

Q.19 Jason can do a piece of work alone in 23.4 days, while Rafique can do the same piece of work alone in 39 days. In how many days can the duo complete the same work if they work together?

Ans

✗ 1. 14.750

✔ 2. 14.625

✗ 3. 14.875

✗ 4. 14.375

Q.20 The table given below shows the number of aerated drinks A, B, C, D, manufactured (in thousands) by a company over the years.

YEAR	Aerated Drinks			
	A	B	C	D
2019	250	200	140	115
2020	200	230	170	120
2021	260	210	195	135
2022	275	175	190	155

In which year was the cumulative manufacturing of aerated drinks B and C the highest?

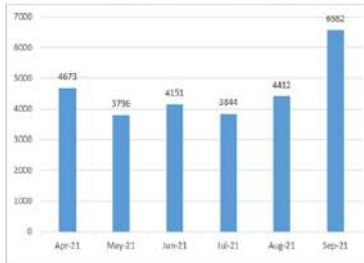**Ans**

✔ 1. 2021

✗ 2. 2019

✗ 3. 2020

✗ 4. 2022

Q.21 Simplify the given equation. $(1 + \tan^2 A)(1 + cot^2 A) = ?$

Ans

✗ 1. $\dfrac{1}{\cos^2 A(1 + \sin^2 A)}$

✔ 2. $\dfrac{1}{\sin^2 A(1 - \sin^2 A)}$

✗ 3. $\dfrac{1}{\sin^2 A + \cosec^2 A}$

✗ 4. $\dfrac{1}{\sin^2 A(1 + \cos^2 A)}$

Q.22 The following bar graph shows the number of thesis submitted in six months.

The total submission of thesis in April 21, May 21, and June 21 is what percentage of the total submission of thesis in July 21, August 21, and Sept 21? (Rounded off to two decimal places).

Ans
✔ 1. 85.17%

✘ 2. 79.12%

✘ 3. 70.21%

✘ 4. 102.34%

Q.23 Triangle ABC is similar to Δ PQR and PQ=10 cm. If the area of Δ ABC is 32 cm² and the area of Δ PQR is 50 cm²,
then the length of AB (in cm) is equal to:

Ans ✘ 1. 10

✘ 2. 4

✘ 3. 6

✔ 4. 8

Q.24 The fourth proportion of number 8, 20 and 15 is:

Ans ✔ 1. 37.5

✘ 2. 10

✘ 3. 10.6

✘ 4. 200

Q.25 A discount of 20% is given on the marked price of a cycle, and still there is a profit of 20%. If the profit is ₹800, find the marked price of the cycle.

Ans ✗ 1. ₹4,000

✗ 2. ₹5,800

✗ 3. ₹4,800

✓ 4. ₹6,000

Question ID : **264330147745**
Status : **Answered**
Chosen Option : **2**

Section : **General Awareness**

Q.1 Who among the following Indian women shuttlers is the runner-up in the Madrid Spain Masters-2023 tournament?

Ans ✗ 1. Saina Nehwal

✗ 2. Jwala Gutta

✓ 3. PV Sindhu

✗ 4. Neha Gurudutt

Question ID : **264330145974**
Status : **Answered**
Chosen Option : **3**

Q.2 Which of the following sentences is INCORRECT with regard to government budget?

Ans ✗ 1.
Government budget is a constitutional requirement in India.

✗ 2.
It is a statement of estimated receipts and expenditures of the government for the financial year.

✗ 3. It comprises two accounts.

✓ 4.
It is a statement of receipts and expenditures incurred by the government.

Question ID : **264330145850**
Status : **Answered**
Chosen Option : **1**

Q.3 Which of the following teams won the 15th edition of the Indian Premier League cricket tournament in the year 2022?

Ans ✗ 1. Chennai Super Kings

✓ 2. Gujarat Titans

✗ 3. Delhi Capitals

✗ 4. Mumbai Indians

Question ID : **264330145975**
Status : **Answered**
Chosen Option : **2**

Q.4 Which law was developed in the 1600s to describe that any force applied to a confined fluid is transmitted equally in all directions, regardless of the shape of the container?

Ans ✗ 1. Magnus's Law

✗ 2. Graham's Law

✓ 3. Pascal's Law

✗ 4. Torricelli's Law

Question ID : **264330145599**
Status : **Answered**
Chosen Option : **3**

Q.5 Which of the following Articles of the Indian Constitution enshrines that if we are observing any religious procession, then we need to remember communal harmony?

Ans ✗ 1. Article 51A (d)

✗ 2. Article 51A (c)

✗ 3. Article 51A (b)

✓ 4. Article 51A (e)

Question ID : **264330145738**
Status : **Not Answered**
Chosen Option : **--**

Q.6 Which state in India has the highest literacy rate as per Census of 2011?

Ans ✗ 1. Bihar

✗ 2. Maharashtra

✓ 3. Kerala

✗ 4. Tamil Nadu

Question ID : **264330150333**
Status : **Answered**
Chosen Option : **3**

Q.7 'Safeguarding India's Intangible Cultural Heritage and Diverse Cultural Traditions of India' is a scheme of which Ministry of the Government of India?

Ans ✓ 1. Ministry of Culture

✗ 2. Ministry of Tourism

✗ 3. Ministry of Education

✗ 4. Ministry of Urban Development

Question ID : **264330146248**
Status : **Answered**
Chosen Option : **2**

Q.8 In which of the following states did NABARD launch the EShakti project for the first time?

Ans
✗ 1. West Bengal and Assam

✓ 2. Jharkhand and Maharashtra

✗ 3. Uttar Pradesh and Punjab

✗ 4. Karnataka and Andhra Pradesh

Question ID : **264330151265**
Status : **Not Answered**
Chosen Option : **--**

Q.9 Alha and Udal, who gave stiff resistance to the enemy, belonged to which of the following Rajput States?

Ans
✗ 1. Parmar

✗ 2. Kalchuri

✓ 3. Chandella

✗ 4. Gahadavala

Question ID : **264330148557**
Status : **Answered**
Chosen Option : **3**

Q.10 In 1996, Dr. Indira PP Bora, an exponent of Sattriya, was honoured with the _____.

Ans
✗ 1. Filmfare Award

✗ 2. Bharat Ratna

✓ 3. Sangeet Natak Akademi Award

✗ 4. Saraswati Samman

Question ID : **264330151257**
Status : **Answered**
Chosen Option : **4**

Q.11 Bokajan is a cement plant located in which of the following states?

Ans
✗ 1. Bihar

✓ 2. Assam

✗ 3. Madhya Pradesh

✗ 4. Andhra Pradesh

Question ID : **264330150243**
Status : **Answered**
Chosen Option : **2**

Q.12 Which of the following aggregates best describes the National Income?

Ans
✗ 1. GDP at MP
✓ 2. NNP at FC
✗ 3. NDP at MP
✗ 4. GNP at FC

Q.13 Subha Mudgal is famous for which of the following music forms?

Ans
✗ 1. Carnatic music
✗ 2. Reggae music
✗ 3. Hip hop music
✓ 4. Hindustani music

Q.14 In 1851, who discovered the phenomenon of Eddy currents which flow in closed loops within conductors in planes perpendicular to the magnetic field?

Ans
✗ 1. David Hughes
✗ 2. Charles Townes
✗ 3. Nicola Tesla
✓ 4. Leon Foucault

Q.15 What is the name of a type of waterfall with an enormous volume of water?

Ans
✗ 1. Cascade
✗ 2. Rapid
✓ 3. Cataract
✗ 4. Chute

Q.16 Indian Councils Act of _____, also called Morley-Minto Reforms, series of reform measures enacted in the British Parliament

Ans ✔ 1. 1909

✘ 2. 1919

✘ 3. 1862

✘ 4. 1935

Q.17 Hornbill festival is celebrated in which of the following states?

Ans ✔ 1. Nagaland

✘ 2. Manipur

✘ 3. Sikkim

✘ 4. Assam

Q.18 Which country came out with the first 'official' compilation of volleyball rules and was published by the YMCA?

Ans ✘ 1. Germany

✔ 2. The US

✘ 3. The UK

✘ 4. Australia

Q.19 Velocity of circulation of money is _____.

Ans ✘ 1. k times the value of transactions

✔ 2.
the number of times a unit of money changes hands during the unit period

✘ 3.
the number of times the same transactions can be repeated by a given volume of money supply

✘ 4. the ratio of money balance to the value of transactions

Q.20 Which of these is NOT true about green revolution?

Ans ✗ 1. It was funded by international agencies.

✓ 2. It was a private-sector programme for agricultural modernization.

✗ 3. It was targeted mainly in the wheat and rice-growing areas.

✗ 4. It was introduced only in areas that had assured irrigation.

Question ID : **264330144729**
Status : **Answered**
Chosen Option : **2**

Q.21 The traditional 'Cheraw' dance, in which bamboo is used, is famous in _____.

Ans ✓ 1. Mizoram

✗ 2. Goa

✗ 3. Odisha

✗ 4. Bihar

Question ID : **264330151238**
Status : **Answered**
Chosen Option : **1**

Q.22 Which of the following posts of Defence Research Development Organisation (DRDO) is in the Level I (top level) of its organisational chart?

Ans ✗ 1. Director General Technical Cluster

✓ 2. Secretary DD and R & D

✗ 3. Director General Corporate

✗ 4. Director of Laboratory

Question ID : **264330150384**
Status : **Answered**
Chosen Option : **2**

Q.23 The first-ever terrestrial plants to possess vascular tissues were:

Ans ✓ 1. pteridophyta

✗ 2. lichens

✗ 3. bryophyta

✗ 4. algae

Question ID : **264330145830**
Status : **Answered**
Chosen Option : **2**

Q.24 Bailadila range of hills are famous for which of the following minerals?

Ans ✔ 1. Iron ore

✘ 2. Zinc

✘ 3. Bauxite

✘ 4. Manganese

Question ID : **264330150252**
Status : **Answered**
Chosen Option : **2**

Q.25 The Battle of Karnal is known for the invasion of which of the following aggressors against India?

Ans ✔ 1. Nadir Shah

✘ 2. Nasir Khan

✘ 3. Ahmad Shah Abdali

✘ 4. Shah Shuja

Question ID : **264330148578**
Status : **Answered**
Chosen Option : **3**