## AddaE47

## Combined Higher Secondary Level Examination 2024 Tier I

| Exam Date | $05 / 07 / 2024$ |
| :--- | :--- |
| Exam Time | $9: 00 \mathrm{AM}-10: 00 \mathrm{AM}$ |
| Subject | CHSL Exam 2024 Tier I |

## Section : English Language

Q. 1 The following sentence has been divided into four parts. Identify the part that contains an error. This is / a doll / and there is / a umbrella.

Ans

1. This is
2. a doll
3. and there is
4. a umbrella.
Q. 2 The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error mark 'No error' as your answer. The aeroplane took down / without the passengers after / making a sudden announcement.

Ans
$X$ 1. making a sudden announcement
2. No error
3. without the passengers after
4. The aeroplane took down
Q. 3 The following sentence has been split into four segments. Identify the segment that contains an error. She shall being / travelling / by this time / tomorrow.

Ans
X

1. travelling
2. She shall being3. by this time
X 4. tomorrow
Q. 4 Parts of the following sentence have been given as options. Select the option that contains an error. Emily is a American living in Paris for her work.
Ans
3. a American
4. living in Paris
5. Emily is
6. for her work

## 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.
The Sun is about 1.4 million kilometres (1) $\qquad$ diameter, while the Earth is about 13,000 kilometers wide. This indicates that the Sun's width would need to be filled by more than one hundred Earths. Sunspots are dreary (2) $\qquad$ on the Sun's surface that are two thousand degrees Celsius cooler than the rest of the surface. The coolest piece of the sunspot is the dim focus called the umbra. The penumbra surrounds it. On the Sun's surface, some sunspots are just specks. Additionally, they appear in groups up to ten times larger than Earth. They can sometimes reach 200,000 miles in length. As the Sun rotates, these groups (3) $\qquad$ to travel across the Sun over two weeks. Every 11 years, the number of sunspots reaches its maximum. The solar or sunspot cycle (4) $\qquad$ to this. The Earth's weather may become more extreme and warm during the peak of sunspot activity. According to the (5) $\qquad$ made by satellites like Nimbus 7, when sunspots are at their largest, less heat reaches Earth.

SubQuestion No: 5
Q. 5 Select the most appropriate option to fill in blank number 1.

Ans 1. in
$\times 2$. of
$X$ 3. on
$X 4$. at

## 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.
The Sun is about 1.4 million kilometres (1) $\qquad$ diameter, while the Earth is about 13,000 kilometers wide. This indicates that the Sun's width would need to be filled by more than one hundred Earths. Sunspots are dreary (2) $\qquad$ on the Sun's surface that are two thousand degrees Celsius cooler than the rest of the surface. The coolest piece of the sunspot is the dim focus called the umbra. The penumbra surrounds it. On the Sun's surface, some sunspots are just specks. Additionally, they appear in groups up to ten times larger than Earth. They can sometimes reach 200,000 miles in length. As the Sun rotates, these groups (3) $\qquad$ to travel across the Sun over two weeks. Every 11 years, the number of sunspots reaches its maximum. The solar or sunspot cycle (4) $\qquad$ to this. The Earth's weather may become more extreme and warm during the peak of sunspot activity. According to the (5) $\qquad$ made by satellites like Nimbus 7, when sunspots are at their largest, less heat reaches Earth.

## SubQuestion No: 6

Q. 6 Select the most appropriate option to fill in blank number 2.

Ans 1.regions
$X$ 2. section
$X$ 3. belt
X 4. province


## 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.
The Sun is about 1.4 million kilometres (1) $\qquad$ diameter, while the Earth is about 13,000 kilometers wide. This indicates that the Sun's width would need to be filled by more than one hundred Earths. Sunspots are dreary (2) $\qquad$ on the Sun's surface that are two thousand degrees Celsius cooler than the rest of the surface. The coolest piece of the sunspot is the dim focus called the umbra. The penumbra surrounds it. On the Sun's surface, some sunspots are just specks. Additionally, they appear in groups up to ten times larger than Earth. They can sometimes reach 200,000 miles in length. As the Sun rotates, these groups (3) $\qquad$ to travel across the
Sun over two weeks. Every 11 years, the number of sunspots reaches its maximum. The solar or sunspot cycle (4) $\qquad$ to this. The Earth's weather may become more extreme and warm during the peak of sunspot activity. According to the (5) $\qquad$ made by satellites like Nimbus 7, when sunspots are at their largest, less heat reaches Earth.

## SubQuestion No: 7

Q. 7 Select the most appropriate option to fill in blank number 3.

Ans $\quad \times 1$.act
$X$ 2. show
$X$ 3. shape
4. appear

## 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.
The Sun is about 1.4 million kilometres (1) $\qquad$ diameter, while the Earth is about 13,000 kilometers wide. This indicates that the Sun's width would need to be filled by more than one hundred Earths. Sunspots are dreary (2) $\qquad$ on the Sun's surface that are two thousand degrees Celsius cooler than the rest of the surface. The coolest piece of the sunspot is the dim focus called the umbra. The penumbra surrounds it. On the Sun's surface, some sunspots are just specks. Additionally, they appear in groups up to ten times larger than Earth. They can sometimes reach 200,000 miles in length. As the Sun rotates, these groups (3) $\qquad$ to travel across the
Sun over two weeks. Every 11 years, the number of sunspots reaches its maximum. The solar or sunspot cycle (4) $\qquad$ to this. The Earth's weather may become more extreme and warm during the peak of sunspot activity. According to the (5) $\qquad$ made by satellites like Nimbus 7, when sunspots are at their largest, less heat reaches Earth.

SubQuestion No: 8
Q. 8 Select the most appropriate option to fill in blank number 4.

Ans 1.refers
2. pass
$X$ 3. cite
X 4. entrust

## 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.
The Sun is about 1.4 million kilometres (1) $\qquad$ diameter, while the Earth is about 13,000 kilometers wide. This indicates that the Sun's width would need to be filled by more than one hundred Earths. Sunspots are dreary (2) $\qquad$ on the Sun's surface that are two thousand degrees Celsius cooler than the rest of the surface. The coolest piece of the sunspot is the dim focus called the umbra. The penumbra surrounds it. On the Sun's surface, some sunspots are just specks. Additionally, they appear in groups up to ten times larger than Earth. They can sometimes reach 200,000 miles in length. As the Sun rotates, these groups (3) $\qquad$ to travel across the
Sun over two weeks. Every 11 years, the number of sunspots reaches its maximum. The solar or sunspot cycle (4) $\qquad$ to this. The Earth's weather may become more extreme and warm during the peak of sunspot activity. According to the (5) $\qquad$ made by satellites like Nimbus 7, when sunspots are at their largest, less heat reaches Earth.

## SubQuestion No: 9

Q. 9 Select the most appropriate option to fill in blank number 5.

Ans $\quad X$ 1. perceptions2. inspections
3. observations
4. invalidations
Q. 10 Select the most appropriate option that can substitute the underlined word segment in the following sentence. They are leaving there coats there.
Ans

1. their coats there
$X$ 2. they're coats there
$X$ 3. there coats their
2. their coats their
Q. 11 Select the most appropriate synonym of the word 'Swap' from the given sentence.

The original buyer attempted to resell the tickets online because there was no option to exchange them for a new date.
Ans
$X 1$. resell
2. exchange
$\times 3$. original
4. option
Q. 12 Select the most appropriate ANTONYM for the underlined word in the given sentence. He feels that wealthy people view him with contempt because he is poor.
3. Scorn

X 4. Obscurity
Q. 13 Select the most appropriate option to fill in the blank.

She went on a shopping spree with her friend and made him $\qquad$ the fat bill.
Ans
$X$ 1. paid
X 2. do
$\checkmark$
3. pay
4. give
Q. 14 Identify the incorrectly spelt word and select its correct spelling.

You shall recieve proper pay for your work.
Ans $X$

1. resieve

X 2. propper3. receive
4. propeer
Q. 15 Select the most appropriate ANTONYM of the given word.

Transient
Ans 1. Permanent
X 2. Transparent
X 3. Transitory
$X$ 4. Irregular
Q. 16 Select the most appropriate ANTONYM of the given word.

Innocent
Ans

1. Guilty

X 2. Mischievous
X 3. Unfair
X 4. Righteous
Q. 17 Select the correct spelling of the underlined word.

He is one of the most underated players in the team.
Ans $\quad \times 1$. Undereted
X 2. Underatted
3. Underrated
$\times$
4. Underreted
Q. 18 Select the most appropriate meaning of the given idiom.

To be at daggers drawn
Ans $\quad \times 1$. To be about to collapse
2. Ready to fight
$X$ 3. Under suspicion
$X 4$. To be under control
Q. 19 The following sentence has been split into four segments. Identify the segment that contains a grammatical error. The hotel room, / which we / booked, / isn't enough big.
Ans

1. isn't enough big
2. The hotel room
3. which we
4. booked,
Q. 20 Select the most appropriate synonym of the given word.

Appalled
Ans

1. Applied
2. Clap
3. Disgusted
$\times 4$. Allied
Q. 21 Select the most appropriate ANTONYM of the given word. Cramped
Ans $\quad X$ 1. Filthy
4. Spacious

X 3. Tight
X 4. Crammed
Q. 22 Select the most appropriate option that can substitute the underlined word in the given sentence.

Even in cold weather, the reliable car always started on the first try.
Ans

1. dependable

X 2. inaccurate
$X$ 3. erratic
X 4. flaky
Q. 23 Select the most appropriate meaning of the given idiom. To cost an arm and a leg
Ans $\quad X 1$. Someone is badly hurt
2. Something is very expensive
3. Someone does not have money to buy something
4. Someone has borne losses
Q. 24 Select the most appropriate ANTONYM of the underlined word.

The news gave him inexpressible ecstasy.
Ans
$X$ 1. Delight
X 2. Passion
$\checkmark$
3. Depression
$X$
4. Disappointment
Q. 25 Select the most appropriate option that can substitute the underlined segment in the given sentence.

Mrs. Lakshmi's purchases add around to ₹2,650.
Ans $\quad X 1$. purchases add out to
2. purchases add from to
3. purchases add up to
4. purchases add for to
Q. 1 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.


Ans

$\times 2$


$\times 3$.


Q. 2 Select the set in which the numbers are related in the same way as are the numbers of the following sets.
$(11,8,352)$
$(15,6,360)$
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding/subtracting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
Ans
X 1. $(11,7,231)$
2. $(8,9,352)$
3. $(16,5,320)$
4. $(17,6,102)$
Q. 3 Which two numbers should be interchanged to make the given equation correct?
$(99-42+11)+(36 \div 6) \times 7-50=73$
(NOTE: Numbers must be interchanged and not the constituent digits e.g. if 2 and 3 are to be interchanged in the equation $43 \times 3+4 \div 2$, then interchanged equation is $43 \times 2+4 \div 3$ )

## Ans <br> - 1.50 and 99

2. 50 and 11
3.7 and 11
3. 42 and 36
Q. 4 Select the correct mirror image of the given combination when the mirror is placed at MN as shown below.
$\left.\operatorname{Vb} 72 \mathrm{mR}\right|_{\mathrm{N}} ^{\mathrm{M}}$
Ans $X$ 1. Я ms $\int \mathrm{d} \Lambda$
$\times$ 2. ym Z LdV
$\times$ 3. $2 \mathrm{mR} \Gamma \mathrm{dV}$

- 4. $\mathrm{m} S \Gamma \mathrm{dV}$
Q. 5 Select the correct mirror image of the given figure when the mirror is placed at MN.
R 4 bmL2
N

Ans
$x$ 1. $Z\lrcorner m q t y$
x2. 2 」mbdy

- 3. $\varsigma \perp \mathrm{mld}$ Я
$\times 4 . S\rceil m d \perp$ Я
Q. 6 If 4 December 2014 was Thursday, then what was the day of the week on 10 December 2018?

Ans $\quad$ 1. Wednesday
$X$ 2. Tuesday
3. Monday
4. Friday
Q. 7 If 18 August 2000 was Friday, then what was the day of the week on 21 August 2005?

Ans
$X 1$. Friday
2. Wednesday
3. Monday
4. Sunday
Q. 8 Select the option in which the given figure is embedded. (Rotation is NOT allowed.)


Ans
$\times 1$

$\times 2$


$\times 4$

Q. 9 What should come in place of ? in the given series based on the English alphabetical order?

OWL QAQ ? UIA WMF
Ans
$X$ 1. XMB
2. SEV

X 3. LQJ
X4. PNL
Q. 10 In a certain code language, ' $B A K E$ ' is coded as ' 2496 ' and 'CAKE' is coded as ' 4369 '. How is ' $B$ ' coded in that language?

Ans
$\times 1.6$

- 2.2
$\times 3.4$
$\times 4.9$
Q. 11 LJNR is related to IGLP in a certain way based on the English alphabetical order. In the same way, FDHL is related to CAFJ. To which of the following is HFJN related, following the same logic?
Ans

1. EDHL

X 2. EDGL
X 3. EBIL
4. ECHL
Q. 12 If ' $A$ ' stands for ' $\div$ ', ' $B$ ' stands for ' $x$ ', ' $C$ ' stands for ' + ' and ' $D$ ' stands for ' - ', then the resultant of which of the following will be 1049 ?

Ans

1. 94 D 11 B 180 A 4 C 60
2. 94 A 11 D 180 B 4 C 60

X 3. 94 C 11 D 180 A 4 B 60
4. 94 B 11 D 180 A 4 C 60
Q. 13 What should come in place of the question mark (?) in the given series?

32, 61, 90, 119, ?, 177
Ans

1. 148

X2. 147
$\times 3.149$
X. 146
Q. 14 If ' $A$ ' stands for ' $\div$ ', ' $B$ ' stands for ' $\times$ ', ' $C$ ' stands for ' + ' and ' $D$ ' stands for ' - ', what will come in place of the question mark (?) in the following equation?
35 B 7 D 120 A 12 C $38=$ ?
Ans $\times 1.173$
$\times 2.473$
$\times 3.373$
4. 273
Q. 15 NGPZ is related to JCLV in a certain way based on the English alphabetical order. In the same way, XDLM is related to TZHI. To which of the following is RUKV related, following the same logic?

An

1. NQRG

X 2. NGRQ
3. NQGR

X 4. NGQR
Q. 16 Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.
xy_z_xxy_zbx_yx_bx_y_z_x
Ans

1. xbxyzxxb
2. $x y x x z x x b$
3. xzxxyyzx
4. xbxxzxxb
Q. 17 How many triangles are there in the given figure?


Ans
$\times 1.17$
$\times 2.18$
3. 16
$\times 4.15$
Q. 18 In a certain code language
$A+B$ means ' $A$ is the brother of $B$ '
$A-B$ means ' $A$ is the father of $B$ '
$A \times B$ means ' $A$ is the wife of $B$ '
$A \div B$ means ' $A$ is the mother of $B$ '
Based on the above, how is $P$ related to $T$ if ' $P \div Q \times R-S+T$ '?
Ans
$X$ 1. Father's mother
2. Father's sister
$X$ 3. Mother's sister
4. Mother's mother
Q. 19161 is related to 23 following a certain logic. Following the same logic, 301 is related to 43 . To which of the following is 427 related following the same logic?
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting/multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
Ans
X 1.63
$\times 2.59$
$\times 3.57$
4. 61
Q. 20 Which two numbers should be interchanged to make the given equation correct?
$69+15-(14 \times 4) \div 2+(48 \div 3)=58$
(NOTE: Numbers must be interchanged and not the constituent digits e.g. if 2 and 3 are to be interchanged in the equation $43 \times 3+4 \div 2$, then interchanged equation is $43 \times 2+4 \div 3$ )
Ans

1. 69 and 48
2. 4 and 2
3.3 and 4
X. 48 and 15

Q. 21 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans


In a certain code language, ' CODE ' is coded as ' 1573 ' and ' DICE ' is coded as ' 7185 '. How is ' O ' coded in the given language?

Ans
$\times 1.8$
$\times 2.7$
$\times 3.5$
4. 3
Q. 23 In this question, three statements are given, followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusion(s) logically follows/follow from the statements.
Statements:
Some strawberries are oranges.
Some oranges are kiwis.
All kiwis are melons.
Conclusions:
I. No strawberry is a melon.
II. All strawberries are melons.
III. Some strawberries are kiwis.

Ans $\quad$ 1. Both conclusions II and III follow.
X 2. All conclusions I, II and III follow.
3. Neither conclusions I, II nor III follows.

X 4. Both conclusions I and II follow.
Q. 24 Identify the figure given in the options which when put in place of the question mark (?) will logically complete the series?


Ans

Q. 25 Three of the following four are alike in a certain way and thus form a group. Which is the one that does NOT belong to that group?
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter cluster.)
Ans

1. DGL
2. QTY
3. MPU
4. FIM

## Section : Quantitative Aptitude

Q. 1 Sapna finishes a job in 12 hours working alone. If Sapna and Riya finish the same job in 8 hours working together at their respective constant rates, then, in how many hours can Riya do the job working alone?

Ans

1. 18
2. 24
3. 16
4. 20
Q. 2 If $\tan A=a \tan B$ and $\sin A=b \sin B$, then the value of $\cos ^{2} A$ is:

Ans

1. $\frac{b^{2}-1}{a^{2}-1}$
$\times 2 \cdot \frac{a^{2}-1}{b^{2}-1}$
$\times$ 3. $\frac{b^{2}+1}{a^{2}+1}$
$\times 4 . \frac{a^{2}+1}{b^{2}+1}$
Q. 3 The distance between the centres of two circles of radii 7 cm and 5 cm is 15 cm . Find the length of the transverse common tangent to these circles.

Ans
$X 1.7 \mathrm{~cm}$
2. 13 cm
$\times 3.11 \mathrm{~cm}$

- 4.9 cm
Q. 4 A coffee maker with marked price $₹ 4,000$ is available on successive discounts of $15 \%, 10 \%$ and $5 \%$. Find the selling price of the coffee maker.
Ans

1. ₹ 2,900
(2. ₹2,903

X 3. ₹ 2,905
4. ₹ 2,907
Q. 5 A girl walking at a speed of $9 \mathrm{~km} / \mathrm{h}$ crosses a bridge in 45 minutes. Find the length of the bridge in metres.

Ans
X 1. 6349
$\times 2.6398$
3. 6750

X4. 7532

Rajesh is playing with a football having diameter of 28 cm . He wants to get a photo of his favourite player painted on the entire ball. The painter charges $₹ 2 / \mathrm{cm}^{2}$. What will be the cost (in ₹) of painting the ball (take $\pi=\frac{22}{7}$ )?

Ans

1. 4,928

X 2. 4,828
X 3.2,414
X 4.2,464
Q. 7 Study the given pie chart and answer the question that follows. The given pie chart represents the percentage of valid votes obtained by five candidates in a university election.


If candidate C has obtained 270 valid votes, then which are the two candidates for whom the difference in valid votes obtained is 45 ?
Ans 1. D and Q
$X$ 2. $Q$ and $C$
$X$ 3. C and D
X 4. A and Q

Study the given table and answer the questions that follow.
The table represents the number of candidates appeared, qualified, and selected in a national level examination from four different schools M, N, O and P over the years 2012 to 2017.

Where A: Appeared; Q: Qualified ; S:Selected

| Year | $\mathbf{M}$ |  |  |  | N |  |  |  | O |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{M}$ | P |  |  |  |  |  |  |  |  |  |  |
|  | $\mathbf{A}$ | $\mathbf{Q}$ | $\mathbf{S}$ | $\mathbf{A}$ | $\mathbf{Q}$ | $\mathbf{S}$ | $\mathbf{A}$ | $\mathbf{Q}$ | $\mathbf{S}$ | $\mathbf{A}$ | $\mathbf{Q}$ | $\mathbf{S}$ |
| 2012 | 7000 | 750 | 84 | 3000 | 400 | 34 | 2000 | 250 | 27 | 1500 | 160 | 23 |
| 2013 | 5500 | 500 | 55 | 3500 | 420 | 56 | 2500 | 340 | 36 | 2500 | 290 | 56 |
| 2014 | 6500 | 455 | 42 | 3800 | 460 | 66 | 3500 | 380 | 48 | 2700 | 480 | 67 |
| 2015 | 8500 | 854 | 89 | 4500 | 485 | 72 | 4500 | 560 | 57 | 3400 | 540 | 87 |
| 2016 | 9000 | 922 | 92 | 4690 | 678 | 86 | 5670 | 660 | 68 | 3700 | 650 | 89 |
| 2017 | 9200 | 942 | 94 | 6700 | 700 | 92 | 6780 | 680 | 89 | 4500 | 670 | 93 |

For which school is the average number of candidates selected over the years the maximum?
2. M
$\times 3 . \mathrm{N}$
X4.P
Q. 9 Monthly salary of Jitvik in the month of December 2020 was ₹ 24,800 . Every year his salary increases by $5 \%$ from the month of January. What was his salary (in ₹) in the month of February 2022?

Ans

1. 27342

- 2. 26485

X 3.27486
$\times 4.27180$
Q. 10 The population of a town first decreased by $16 \%$ due to migration to a big city for better job opportunities. The next year, the population of the town increased by $21 \%$ as there were better facilities for jobs. What is the net percentage change (correct to 2 decimal places) in the population?
Ans $\quad \times 1$. Decrease by $2.54 \%$
X 2. Increase by 2.54\%3. Increase by $1.64 \%$
4. Decrease by $1.64 \%$
Q. 11 Simplify the following expression.
$99-[169 \div(13 \times 13)-(-4)-\{3-17+10\}]$
Ans
$\times 1.80$
$\times 2.87$
$\times 3.107$
-4. 90
Q. 12 If 3 c 2933 k is divisible by both 5 and 11 , where c and k are single digit natural numbers, then $\mathrm{c}+\mathrm{k}=$ $\qquad$ .
Ans $\quad \times 1.7$
$\times 2.8$
*. 6
4.5
Q. 13 Raju has ₹ 11,000 and starts saving ₹ 5,000 each week towards buying a new laptop. At the same time, Ramesh has ₹ 60,000 and begins spending ₹ 2,000 per week on supplies for his art class. Will there be a week when they have the same amount of money?

Ans
X 1. Yes, after 7 weeks
2. Yes, after 6 weeks
3. No, they will never have the same amount
4. Yes, after 5 weeks
Q. 14 The following line graph shows the ratio of imports to exports of two companies over the years.

Study the graph carefully and answer the question that follows.


If the exports of Company M in 2008 were ₹ 210 crores, what were the imports of the company in the same year?

Ans

1. ₹186 crores
2. ₹294 crores

X 3. ₹150 crores
4. ₹268 crores
Q. 15 A cylindrical oil tank has a radius of 5 m and a total surface area of $628 \mathrm{~m}^{2}$, what would be its curved surface area? (round off to the second decimal place)
Ans
$\times 1.371 .83 \mathrm{~m}^{2}$
$\times 2.401 .43 \mathrm{~m}^{2}$
3. $470.8 \mathrm{~m}^{2}$

X4. $481.43 \mathrm{~m}^{2}$
Q. 16 The length, breadth and height of a cuboid are in ratio of $3: 4: 5$. If the volume of the cuboid is $1620 \mathrm{~m}^{3}$, find the total surface area of the cuboid.
Ans
X $1.646 \mathrm{~m}^{2}$
2. $846 \mathrm{~m}^{2}$

X $3.423 \mathrm{~m}^{2}$
X $4.712 \mathrm{~m}^{2}$
Q. 17 The difference between $31 \%$ and $26 \%$ of votes for the same party at different places is $\mathbf{2 3 5 0}$. What is $7 \%$ of those votes?

X 1.2270
X 2.3090
X 3.4090
4. 3290
Q. 18 Ravath had to sell vegetables worth ₹ 4,960 for $₹ 4,712$ due to weather conditions. What is the loss percentage that he has incurred?
Ans
X 1.20\%
2. 10\%
3. $5 \%$
4.15\%
Q. $19 \triangle A B C$ is similar to $\triangle D E F$ and the ratio of the area of triangle $A B C$ to triangle $D E F$ is $25: 144$. If $A B=p \mathrm{~cm}, A C=q \mathrm{~cm}$ and $B C$ $=r \mathrm{~cm}$, then $D E=$ ?

Ans
$\times 1 . \frac{5}{12} q$$\frac{12}{5} q$
$\times 3 . \frac{5}{12} p$
4. $\frac{12}{5} p$
Q. 20 A sum of ₹ 18,000 gives a simple interest of ₹ 3,240 in 2 years and 3 months. The rate of interest per annum is:

Ans $\times 1.10 \%$
2. $12 \%$
3. $8 \%$

X4. $7 \%$
Q. 21 Abhishek's marks in Mathematics were incorrectly entered as 93 instead of 63 . Due to this, the average marks of the class in Mathematics got increased by 0.5 . How many students were there in the class?

Ans

1. 45
$\times 2.55$
2. 60
$\times 4.50$
Q. $22 A B$ is parallel to $D C$ in a trapezium $A B C D$. It is given that $A B>D C$ and the diagonals AC and BD intersect at O . If $\mathrm{AO}=3 x-15, \mathrm{OB}=x+9, \mathrm{OC}$ $=x-5$ and $\mathrm{OD}=5$, and $x$ has two values $x_{1}$ and $x_{2}$, then the value of $\left(x_{1}^{2}+x_{2}^{2}\right)$ is:

Ans
$\times 1.45$

- 2.61
$\times 3.73$
$\times 4.56$

The given chart represents the sales of automobiles in India (by type, in million units) from the year 2011 to 2014. Study the chart and answer the question that follows.


If the same percentage increase in the number of two wheelers as in 2014 over 2013 is expected in 2015, approximately how many two wheelers will be sold in 2015 ?

Ans

1. 15.8 million
$X 2.16 .8$ million
X 3.17 .8 million
X 4.14 .8 million
Q. 24 In triangle $X Y Z, X Y=Y Z$ and $m \angle X=78^{\circ}$. Find the value of $m \angle Y$.

Ans

1. $28^{\circ}$
2. $24^{\circ}$

X $3.34^{\circ}$
4. $39^{\circ}$
Q. 25 If $a: b=3: 4, b: c=2: 3$, and $c: d=5: 6$, then $a: b: c: d$ is:

Ans

1. $15: 25: 30: 36$
2. $15: 20: 30: 36$
3. $15: 20: 35: 36$
4. $10: 20: 30: 36$

## Section : General Awareness

Q. 1 Brihadiswara Temple which exhibits Dravidian temple architecture is located in $\qquad$ .
Ans 1. Thanjavur
X 2. Dharmapuri
X 3. Madurai
X 4. Thiruvanathapuram
Q. 2 In cricket, $\qquad$ is called by the umpire when the bowler doesn't deliver the ball within reach of the batter.
Ans

1. wide
2. dead ball
3. no ball
4. yorker
Q. 3 Which of the following rocky planets is the fastest planet in our solar system - traveling through space at about 29 miles (47 kilometres) per second?

Ans

1. Earth
$\times 2$. Venus
X 3. Mars
2. Mercury
Q. 4 Who among the following rulers was a part of the Tripartite Struggle for the possession of Kannauj?

Ans 1. Dharmapala
2. Yashovarman
3. Mahendrapal

X 4. Prithvi Raj III
Q. 5 Bankim Chandra Chatterjee wrote a novel Anand Math based on which of the following rebellions/revolts?

Ans $\quad$ 1. Mappila Rebellion
2. Paika Rebellion
3. Sanyasi Rebellion
4. Kuki Revolt
Q. 6 Which of the following statement(s) is/are INCORRECT vis-à-vis Fundamental Duties?

1) They are obligatory in nature
2) Fundamental Rights and Fundamental duties are complementary to each other.
3) The introduction of Article 51A created strong base for a concrete national character and strong harmony.
4) Eleventh fundamental duty was added by $78^{\text {th }}$ constitutional amendment act.

Ans $\quad \times 1.1$ and 2
$\times 2.2$ and 3
3. Only 3
4. Only 4
Q. 7 The phenomenon of the interaction between nonallelic genes at two or more loci resulting in one gene masking the phenotypic expression of another gene, is known as:
Ans $\quad \times 1$. linkage
$X$ 2. complete inheritance
$\checkmark$
3. epistasis
4. incomplete inheritance
Q. 8 Sanjukta Panigrahi a legendary dancer is associated with which of the following dance forms?

Ans

1. Bihu

X 2. Laho
3. Kuchipudi
4. Odissi
Q. 9 was appointed British High Commissioner to India in April 2024.
Ans
$X$ 1. Nicholas Fenn
X 2. Philip Barton
3. Lindy Cameron

X 4. Dominic Asquith
Q. 10 Pinjore heritage festival is organised by the state of $\qquad$
Ans
$X$ 1. Jharkhand
2. Uttarakhand
3. Sikkim
4. Haryana
Q. 11 In Microsoft Word, which option allows you to exclude specific sections or types of text from the spelling and grammar check?
Ans $\quad \times 1$. spell check
2. AutoCorrect
3. Exclusion Dictionary
4. Thesaurus
Q. 12 As per Census of India 2011, which of the following groups of states recorded the lowest literacy rate?

Ans $\quad \times 1$. Rajasthan and Assam
2. Bihar and Arunachal Pradesh

X 3. Rajasthan and Jharkhand
X 4. Bihar and Madhya Pradesh
Q. 13 The Maritime Anti-Piracy Act, 2022, was enacted to give effect to which of the following?

Ans

1. United Nations Convention on the Law of the Sea relating to repression of piracy on high seas.

X 2. United Nations Convention on Oceans and Seas relating to repression of piracy on high seas.
$X$ 3. United Nations Regional seas convention relating to repression of piracy on high seas.
X 4. United Nations Treaty on Oceans relating to repression of piracy on high seas.
Q. 14 With which of the following sports is Lovlina Borgohain associated?

Ans $\quad \times$ 1. hockey
$X$ 2. cricket
$X$ 3. basketball
4. boxing
Q. 15 Which of the following states has mangrove forests?

Ans $\quad \times 1$. Telangana
2. Andhra Pradesh


X 3. Rajasthan
X 4. Manipur
Q. 16 Which state hosts the Nehru trophy boat race?

Ans $\quad \times 1$. Karnataka
$X$ 2. Tamil Nadu

- 3. Kerala

4. Goa
Q. 17 Which of the following devices is used to accelerate charged particles to high velocities?

Ans $\times 1$.cryotron
X 2. copatron
3. cosmotron
4. cyclotron
Q. 18 Which of the following options is INCORRECT?

Ans

1. Distinguished economists from India and abroad were invited to advise on India's economic development during the first fiveyear plan period.
X 2. India borrowed the idea of five-year plans from the former Soviet Union.
2. The Planning Commission of India was set up in 1950.
3. The chairmanship of the Planning Commission of India was given to the Prime Minister.
Q. 19 In which of the following states are the Pai songs accompanied by the Saria dance sung during the rain festivals?

Ans
$X$ 1. Sikkim
X 2. Uttar Pradesh
X 3. Tripura
4. Madhya Pradesh
Q. 20 The relationship between which of the following is correct?

Ans $\quad \times 1$. NDP at market price $=$ GDP at market price + depreciation
$X$ 2. Domestic income $=$ NDP at market price + net indirect taxes
X 3. GDP at market price $=$ price + quantity of final goods and services
4. National income = NDP at factor cost + net factor income from abroad
Q. 21 Match the states in column A to their ports in column B.

| Column A <br> (States) | Column B <br> (Ports) |
| :--- | :--- |
| 1. Goa | a. Mormugao Port |
| 2. West Bengal | b. Kandla Port |
| 3. Tamil Nadu | c. Tuticorin Port |
| 4. Gujarat | d. Haldia Port |

Ans 1.1-a, 2-d, 3-c, 4-b
X 2. 1-a, 2-d, 3-b, 4-c
X 3.1-d, 2-a, 3-c, 4-b
X 4. 1-a, 2-c, 3-d, 4-b
Q. 22 The $42^{\text {nd }}$ amendment of the Indian Constitution added

Ans
$X$ 1. Legislature
2. Fundamental rights
3. Fundamental duties

X 4. National anthem
Q. 23 Who among the following is a singer of Hindustani classical music?

Ans $\quad \times 1$. Aruna Sairam
$X$ 2. Sudha Ragunathan
$X$ 3. S Sowmya
4. Shubha Mudgal
Q. 24 Which organisation, in collaboration with the Central Board of Secondary Education (CBSE), and the Ministry of Education, announced the launch of the 'AI For All' initiative with the purpose of creating a basic understanding of artificial intelligence for everyone in India?

Ans

> 1. Intel
2. Infosys
3.TCS
4. IBM
Q. 25 Rows in MS-Excel are identified by:

Ans $\quad \times$ 1. letters
$X$ 2. numbers with letters
3. numbers
$X 4$. timings


