## Combined Higher Secondary Level Examination 2020 (Tier-l)

| Roll Number |  |
| :--- | :--- |
| Candidate Name |  |
| Venue Name |  |
| Exam Date | $10 / 08 / 2021$ |
| Exam Time | $9: 00$ AM - 10:00 AM |
| Subject | Combined Higher Secondary Level Exam 2020 |

## Section : English Language

Q. 1 Select the option that can be used as a one-word substitute for the given group of words.

A large cage, building or enclosure to keep birds
Ans
X 1.Zoo
2. Apiary
3. Aquarium
4. Aviary
Q. 2 Select the most appropriate antonym of the given word.

Expunge
Ans

- 1 . Insert

2 2. Deplete
3.Exhaust
(4. Remove
Q. 3 Select the most appropriate ANTONYM of the given word.

Uphold
Ans
Х 1 . Support
2. Maintain3. Endorse

- 4 Oppose
Q. 4 Given below are four sentences in jumbled order. Select the option that gives their correct order.
A. His school was closed as it was the height of summer.
B. It was on one such day that Ranji discovered a pool in the forest.
C. As he had no friends yet, he wandered alone in the hills and forests.
D. Ranji had been less than a month in Rajpur.

Ans
X1. ACBD
Х2. CBDA
Х3.BADC
4. DACB
Question ID: $\mathbf{6 5 4 9 7 8 9 3 6 3}$
Status : Not Attempted and
Marked For Review
Q. 5 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 Prime Minister chair a high-level meeting / with senior officials / to review the Covid situation.
Ans
1 1. with senior officials

- 2. The Prime Minister chair a high-level meeting

3. to review the Covid situation

X 4 . No error
Q. 6 Select the most appropriate word to fill in the blank.

In the past month, the price of oil has $\qquad$ several times.
Ans

1. fumbled
2. fluctuated
3.faltered
(4. failed
Q. 7 Select the most appropriate one-word substitution for the given words.

Leather straps put around a horse's head to control it
Ans

- 1. bridle
< 2 . bridal
X 3. saddle
(4. stirrup
Q. 8 Select the correct indirect form of the given sentence.

Mother said, "All the guests will arrive tonight."
Ans

- 1. Mother said that all the guests would arrive that night.

2. Mother said that all the guests will arrive tonight.
3. Mother told that all the guests would arrive tonight.
4. Mother said that all the guests will arrive that night.
Q. 9 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.
A. The word Jama means 'a robe or shawl' and War means 'Yard (the measuring unit)'.
B. Jamawar (also spelled as Jamavar) is a fabric that has its roots in Kashmir.
C. People in the earlier times used to buy a yard of the shawl to protect themselves from the chilly winter.
D. The Jamawar is an adulterated form of Pashmina silk since it contains a blend of cotton and wool.
Ans
5. BACD

X 2. BCAD
Х 3 . DCBA
Х4. DCAB
Q. 10 Select the most appropriate meaning of the given idiom.

Rank and file
Ans

1. The manager of a personnel department

- 2. Ordinary workers in a company

Х 3. Financial activities in a firm
4. A very well-organised company
Q. 11 Select the most appropriate meaning of the underlined idiom in the given sentence.

My brother has decided to settle in London for good.
Ans

- 1. forever

X 2. briefly
X 3.for a better income

- 4. for a promotion
Q. 12 Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

Unless someone makes a complaint, they will not clear the garbage from the street.
Ans
Х 1. Without someone makes a complaint

- 2. No substitution required

3. Despite someone makes a complaint

X 4. Except someone makes a complaint
Q. 13 Select the INCORRECTLY spelt word.

Ans
Х 1 . Plump
X 2 . Muscle
X 3. Gnaw

- 4. Rinckle
Q. 14 In the given sentence, identify the segment which contains a grammatical error.

We are yet living in the same house.
Ans
< 1 . We are
X 2 . same house
X 3 in the
4. yet living
Q. 15 Select the most appropriate synonym of the given word.

FORSAKE
Ans

- 1. desert
< 2 . hold
>3. claim
< 4. help
Q. 16 Select the most appropriate synonym of the given word.

Profuse
Ans

1. Meagre

- 2. Abundant

X 3. Limited
(4. Consistent
Q. 17 Select the option that expresses the given sentence in passive voice.

The clouds hid the sun.
Ans

- 1. The sun was hidden by the clouds.

2. The sun is hidden by the clouds.
3. The clouds are hid by the sun.
4. The sun was hide by the clouds.

## Q. 18 Select the misspelt word.

Ans
X 1 1.mature
2. mischief3. misrable
4. moisture
Q. 19 Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution'.

How long have you being seating on this bench?
Ans

1. being sat
(2. No substitution

- 3. been sitting

4. been seating
Q. 20 Fill in the blank with most appropriate word.

The air $\qquad$ has gone up significantly.
Ans
X 1. rent
X 2 . charge
> 3.cost

- 4. fare


## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Kashmiri carpets have been appreciated since a long time for their intricate work. Their uniqueness (1) $\qquad$ in their manufacturing. These carpets are (2) $\qquad$ handmade and are knotted, not tufted. You can (3) ___ different carpets from a variety of silk or woolen ones. These are (4) $\qquad$ in colourful themes. The main art of carpet manufacturing is (5) $\qquad$ with the knotting. These knots determine the durability and value of the carpet.

SubQuestion No : 21
Q. 21 Select the most appropriate option to fill in blank no. 1 .

Ans

1. is lying
(2. lying
$\checkmark$
2. lies4. lie

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Kashmiri carpets have been appreciated since a long time for their intricate work. Their uniqueness (1) $\qquad$ in their manufacturing. These carpets are (2) $\qquad$ handmade and are knotted, not tufted. You can (3) $\qquad$ different carpets from a variety of silk or woolen ones. These are (4) $\qquad$ in colourful themes. The main art of carpet manufacturing is (5) $\qquad$ with the knotting. These knots determine the durability and value of the carpet.

SubQuestion No: 22
Q. 22 Select the most appropriate option to fill in blank no. 2.

Ans $\quad$ 1. absolutely
(2. merely

X 3. simply
4. purely

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Kashmiri carpets have been appreciated since a long time for their intricate work. Their uniqueness (1) $\qquad$ in their manufacturing. These carpets are (2) $\qquad$ handmade and are knotted, not tufted. You can (3) $\qquad$ different carpets from a variety of silk or woolen ones.
These are (4) $\qquad$ in colourful themes. The main art of carpet manufacturing is (5) $\qquad$
with the knotting. These knots determine the durability and value of the carpet.
SubQuestion No: 23
Q. 23 Select the most appropriate option to fill in blank no. 3.

Ans
入 1. indicate
< 2. elect
3. choose

4 4. decide

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Kashmiri carpets have been appreciated since a long time for their intricate work. Their uniqueness (1) $\qquad$ in their manufacturing. These carpets are (2) $\qquad$ handmade and are knotted, not tufted. You can (3) $\qquad$ different carpets from a variety of silk or woolen ones. These are (4) ___ in colourful themes. The main art of carpet manufacturing is (5) $\qquad$ with the knotting. These knots determine the durability and value of the carpet.

SubQuestion No : 24
Q. 24 Select the most appropriate option to fill in blank no. 4.

Ans $\quad$ 1. devised
2. designed
3. defined
4. described

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Kashmiri carpets have been appreciated since a long time for their intricate work. Their uniqueness (1) $\qquad$ in their manufacturing. These carpets are (2) $\qquad$ handmade and are knotted, not tufted. You can (3) $\qquad$ different carpets from a variety of silk or woolen ones. These are (4) $\qquad$ in colourful themes. The main art of carpet manufacturing is (5) $\qquad$
with the knotting. These knots determine the durability and value of the carpet.
SubQuestion No : 25
Q. 25 Select the most appropriate option to fill in blank no. 5 .

Ans
X 1. assisted
X 2. abetted
3 3. attended

- 4. associated
Q. 1 The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?


Ans
$>1$

2.

$>3$

Q. 2 Four options have been given, out of which three are alike in some manner and one is different. Select the option that is different.

Ans
X 1 . Delhi
Х 2. Puducherry

- 3. Chandigarh
- 4. Jammu \& Kashmir
Q. 3 Select the option that is embedded in the given figure (rotation is NOT allowed).


Ans

Q. 4 Select the figure that will replace the question mark (?) in the following figure series.


Ans

Q. 5 Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the one that is different.

Ans
X1.17:291
Х 2.15:227

- $3.13: 169$

Х4.11:123
Q. 6 Select the option in which the numbers share the same relationship as that shared by the numbers in the given set.
$(7,4,33)$
Ans

1. $(9,5,56)$

Х ${ }_{2}(7,4,71)$
X 3 . $(8,5,40)$
X4. $(11,8,175)$
Q. 7 Which two digits need to be interchanged so as to balance the given equation?
$75 \div 18+51 \times 8-82=87$
Ans
X 1.7 and 8
X2. 1 and 5

- 3.5 and 2

X4. 8 and 2
Q. 8 How many triangles are there in the figure given below?

Q. 9 उस विकल्प का चयन कीजिए जिसका तीसरे शब्द से वही संबंध है, जो दूसरे शब्द का पहले शब्द से है।

बिस्तर : गद्दा :: कुर्सी :?
Ans

1. बोरा
2. कुशन
3. तकिया
4. फॉम

## Q. 10 If Raman is the brother of the son of Kshitij's son, how is Raman related to Kshitij?

Ans 1.Grandson
Х 2 . Nephew
X3. Cousin
>4. Son
Q. 11 Which of the following Venn diagrams best represents the words given below?

Engineers, Educated Persons, Males
Ans

Q. 12 Select the word-pair in which the two words are related in the same way as are the two words in the following word-pair.

Growth: Expansion
Ans
X 1. Child: Birth
2. Urge: Request

ㄱ․ First: Last
(4. Temporary: Permanent
Q. 13 Three of the following four letter-clusters are alike in a certain way and one is different. Select the odd one.
Ans


Х 2 . LNQU
入3.QSVZ
Х4.ACFJ
Q. 14 Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.

1. Universe
2. Chennai
3. World
4. Asia
5. Tamil Nadu

Ans

Q. 15 Select the combination of letters that when sequentially placed in the blanks of the given letter series will complete the series.
a_bcd__ abbc_dea__cd_e
Ans
X 1. adebdda
2. adedabd

X 3. adabded
X 4. dabdade
Q. 16 Select the correct mirror image of the given figure when the mirror is placed at the right side.

GRS?@915
Ans
X
x 2 евгј@дJг
× 519@? SRG

- टノе@؟टяอ
Q. 17 In a certain code language, ENDORSE is written as VMWLIHV. How will INSTRUCT be written in that language?
Ans

1. SNRGSAOT
2. SMSGSZPR
3. RMSHRZPG
4. RMHGIFXG
Q. 18 Select the number from among the given options that can replace the question mark (?) in the following series.
$8,24,48,80, ?, 168$
Ans
Х 1.122
X 2.116

- 3.120
>4.118
Q. 19 Vishal has a total of $₹ 4,100$ in the denominations of $5,10,20$ and 50 rupee notes. He has an equal number of 5 and 10 rupee notes. The number of 20 rupee notes is double the number of 5 rupee notes. The number of 50 rupee notes is thrice the number of 10 rupee notes. How many 5 rupee notes are there with Vishal?
Ans
Х 1.10
Х 2.40
X 3.30

4. 20
Q. 20 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:
All computers are calculators.
All calculators are boxes.
Conclusions:
I. All computers are boxes.
II. Some boxes are computers.

Ans
v 1. Both conclusions I and II follow.
2 2. Only conclusion II follows.
3. Neither conclusion I nor II follows.
4. Only conclusion I follows.
Q. 21 In a code language, if FORTUNE is written as 716192122156, then how will OCTOBER be written in the same language?

Ans
Х 1.16420173819
2. 16421163619

Х 3.14422163519
Х 4.1532063618
Q. 22 Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6 . Which number is on the face opposite to the face showing ' 2 '?


Ans
Х1.3
入2. 6
Х 3.5

- 4.1
Q. 23 Select the option in which the numbers are related in the same way as are the numbers of the following set.

29:36:39
Ans

1. $48: 52: 55$

Х2.54:58:61
Х3.69:72:76
Х4.78:79:82
Q. 24 Select the option that is related to the third term in the same way as the second term is related to the first term.

DEBONAIR: EDRIOBAN: :HALLMARK:?
Ans
X 1. llamkRam
X 2. AHKRLLMA
3. AHKRLLAM

Х4. AHLLAMKR
Q. 25 Select the option that is related to the third number in the same way as the second number is related to the first number.

6:27::9:?
Ans

- 1.66
$\times 2.74$
Х 3.110
X 4.95
Q. 1 A solid metallic sphere of radius 10 cm is melted and recast into spheres of radius 2 cm each. How many such spheres can be made?
Ans
X1. 64
$\times 2.216$
$\times 3.100$
- 4.125
Q. 2 There are 3 groups of persons - male, female and children. There are 20 males and the number of females and children taken together is 4 more than that of the males. The average weight of males is 54 kg , that of females is 49 kg and that of children is 30 kg . If the average weight of the whole group is 48.25 kg , then what is the difference between the number of females and the number of children?
Ans
$\times 1.17$
- 2. 10
$\times 3.7$
$\times 4.14$
Q. 3

If $x+\frac{1}{15 x}=3$, then the value of $9 x^{3}+\frac{1}{375 x^{3}}$ will be:
Ans
-1. 237.6
$\times 2.376 .2$
$\times 3.273 .6$
$\times 4.367 .2$
Q. 4 Simplify the given expression.
$\left(x-\frac{2}{x}\right)^{3}-\left(x+\frac{2}{x}\right)^{3}$
Ans

$$
\begin{aligned}
& \text { 1. }-4\left(3 x+\frac{4}{x^{3}}\right) \\
& \times 2.4\left(3 x-\frac{4}{x^{3}}\right) \\
& \times \text { 3. }-4\left(x+\frac{4}{x^{3}}\right) \\
& \times 4.2\left(x-\frac{4}{x^{3}}\right)
\end{aligned}
$$

Q. 5 Study the given graph and answer the question that follows.


By what percentage is the average expenditure of the company in 2014, 2016 and 2018 less than the revenue in $2017 ?$
Ans
X 1. $37.5 \%$
X 2. $56.25 \%$
X 3. $63.27 \%$

- 4. $38.75 \%$
Q. 6 Evaluate the following expression.
$\frac{3\left(\cot ^{2} 46^{\circ}-\sec ^{2} 44^{\circ}\right)}{2\left(\sin ^{2} 28^{\circ}+\sin ^{2} 62^{\circ}\right)}+\frac{2 \cos ^{2} 60^{\circ} \tan ^{2} 33^{\circ} \tan ^{2} 57^{\circ}}{\sec ^{2}\left(90^{\circ}-\theta\right)-\cot ^{2} \theta}$
Ans 1. -1
$\times 2.1$
X 3. -2
$\times 4.2$
Q. 7 Nalini's younger brother is 12 years old. If the ratio of the age of Nalini to that of her brother is $7: 6$, then what will be ratio in their ages 6 years hence?
Ans
-1. $10: 9$
$\times 2.13: 12$
X 3. 17:15
$\times 4.10: 6$
Q. $816 \frac{1}{4} \div\left[2 \frac{1}{6}+\left\{4 \frac{1}{3}-\left(2 \frac{1}{2}+\frac{3}{4}\right)\right\}\right]$ is equal to:

Ans
X1. 6
$\times 2.4$

- 3.5
$\times 4.3$
Q. 9 The number of students enrolled in different streams at Senior Secondary level in five schools is shown in the bar graph.

What is the ratio of the number of students of science stream of schools A, B and D taken together to the number of students of vocational stream in schools B, D and E taken together?


Ans
X 1. $94: 65$
X 2. 178:125
Х 3. $7: 5$

- 4. $89: 65$
Q. 10 ABC is a triangle inscribed in a circle and $\angle \mathrm{ACB}$ is equal to $35^{\circ}$. P is a point on the circle on the side AB , opposite to C . What is the value of $\angle \mathrm{APB}$ in degrees?
Ans
X 1.72 .5
- 2. 145
$\times 3.175$
$\times 4.70$
Q. 11 Let $O$ be the centre of a circle and AC be the diameter. $B D$ is a chord intersecting AC at $E$. AD and AB are joined. If $\angle B O C=40^{\circ}$ and $\angle A O D=120^{\circ}$, then $\angle B E C$ is equal to:
Ans
X $1.55^{\circ}$
- $2.80^{\circ}$
$\times$ 3. $90^{\circ}$
$\times 4.70^{\circ}$
Q. 12 The simple interest on a sum of $₹ 12,000$ at the end of 5 years is $₹ 6,000$. What would have been the compound interest on the same sum at the same rate for 3 years when compounded annually?

Ans
X 1. ₹ 3,970

- 2. ₹ 3,972

X 3. ₹3,600
X4. ₹ 2,520
Q. 1310 men or 15 women can complete a work in 30 days. In how many days can 15 men and 27 women complete the work?

Ans
$\times 1.6 \frac{1}{11}$
X2. $5 \frac{1}{11}$
X $3.11 \frac{1}{11}$

- $4.9 \frac{1}{11}$
Q. 14 A person saves $25 \%$ of his income. If his income increases by $20 \%$ and his saving remains the same, then what will be the increased percentage of his expenditure?

Ans
X1. 20
$\times 2.26$
$\times 3.30$

- 4. $26 \frac{2}{3}$
Q. 15 Study the given bar graph and answer the question that follows.

The bar graph shows the exports of cars of types A and B (in ₹ million).


What is the ratio of the total exports of cars of type A in 2016 and 2018 to the total exports of cars of type B in 2015 and 2017?
Ans

- 1. $23: 21$

X 2. 15:29
X 3. 18:23
X4. $21: 23$
Q. 16 If $x^{6}-6 \sqrt{6} y^{6}=\left(x^{2}+A y^{2}\right)\left(x^{4}+B x^{2} y^{2}+C y^{4}\right)$, then what will be the value of $\left(A^{2}-B^{2}+C^{2}\right)$ ?

Ans
$\times 1.27$
$\times 2.42$

- 3.36

X4.18
Q. 17 Students of Primary, Middle, Secondary and Sr. Secondary classes collected donation for a Relief Fund as shown in the given pie chart. If the donation collected from Middle classes was $₹ 6,750$, then how much more money was collected by Middle classes as compared to Secondary classes?


Ans
X 1. ₹ 6,075
X 2. ₹ 1,125

- 3. ₹675

X4. ₹ 2,025
Q. 18 For $\theta: 0^{\circ}<\theta<90^{\circ}$
$3 \sec \theta+4 \cos \theta=4 \sqrt{3}$, find the value of $(1-\sin \theta+\cos \theta)$.
Ans
X $1 . \frac{1+2 \sqrt{3}}{2}$

- 2. $\frac{1+\sqrt{3}}{2}$

X3. $\frac{1-\sqrt{3}}{2}$
X4. $\frac{1-2 \sqrt{3}}{2}$
Q. 19 An article is sold at a certain price. If it is sold at $33 \frac{1}{3} \%$ of this price, there is a loss of $33 \frac{1}{3} \%$. What is the percentage profit or percentage loss when it is sold at $40 \%$ of the original selling price?

Ans
X 1. Loss 12\%
X 2. Profit $18 \%$

- 3. Loss $20 \%$

X 4. Profit $15 \%$
Q. 20 In triangle $A B C, A D$ is the internal bisector of $\angle A$ meeting $B C$ at $D$. If $B D=3.6 \mathrm{~cm}$ and $B C=8 \mathrm{~cm}$, then the ratio of $A B$ to $A C$ will be:

Ans
X1.11:9
X2. 7:13
$\times 3.13: 7$

- 4. $9: 11$
Q. 21 In $\triangle A B C$, points $D$ and $E$ are on $A B$ and $A C$, respectively, such that $D E$ is parallel to $B C$. If $A D=3 \mathrm{~cm}, B D=6 \mathrm{~cm}$ and $A E=2 \mathrm{~cm}$, then find the length of $C E$.

Ans
$X 1.6 \mathrm{~cm}$
$\times 2.16 \mathrm{~cm}$
$\times 3.8 \mathrm{~cm}$

- 4. 4 cm
Q. 22 After allowing a discount of $15 \%$ on the marked price of an article, it was sold for $₹ 425$. Had the discount not been given, the profit would have been $25 \%$. What was the cost price (in $₹$ ) of the article?
Ans
X 1.325
$\times 2.450$
$\times 3.500$
- 4. 400
Q. 23 What is the sum of all the possible values of k for which a seven-digit number 23 k 567 k is divisible by 3 ?

Ans

- 1.15
$\times 2.3$
$\times 3.109$
$\times 4.16$
Q. 24 Sunil can row a boat 20 km upstream in 1 hour 15 minutes. If the speed of the current of the river is $2 \mathrm{~km} / \mathrm{h}$, then how much time will he take to row the boat 30 km downstream?
Ans
X 1.1 h 10 m
X 2. 1 h 45 m
- 3. 1 h 30 m

X 4.1 h 20 m
Q. 25

If $\tan \theta=\frac{4}{3}$, then the value of $\frac{9 \sin \theta+12 \cos \theta}{27 \cos \theta-20 \sin \theta}$ will be equal to:
Ans
-1. 72
$\times 2.36$
$\times 3.18$
$\times 4.100$

## Section : General Awareness

## Q. 1 Which part of India did the Nizams of Asafjahi dynasty rule?

Ans
Х 1. Western kingdoms
Х 2. Eastern states

- 3. Deccan provinces

X 4. Northern India
Q. 2 Who among the following is the youngest mayor in India as of January 2021?

Ans
1 1. Sabitha Beegam

- 2. Arya Rajendran

X 3. Rekha Priyadarshini
X 4. Mekala Kavya
Q. 3 Which of the following places in India has 0\% forest area as per the Indian State of Forest Report 2019?
Ans

1. Andaman and Nicobar Islands
2. Puducherry
3. Lakshadweep

X4.Goa
Q. 4 Who among the following was a Portuguese writer who wrote about the trade and society in south India?

Ans

1. Niccolao Manucci
2. Francois Bernier

Х 3. Jean-Baptiste Tavernier
4. Duarte Barbosa
Q. 5 'Maand' is primarily a traditional folk singing style from $\qquad$
Ans 1. Madhya Pradesh
2. Jharkhand
3. Rajasthan

X4. Bihar
Q. 6 Which of the following types of computer is used in climate research and weather forecasting?
Ans

1. Mainframe computers

X 2. Micro-computers

- 3. Supercomputers

4. Mini-computers
Q. 7 Who among the following introduced the concept of electric field for the first time?

Ans $\quad$ 1. Blaise Pascal

- 2. Michael Faraday

X 3. Charles Augustin de Coulomb
Х 4. Joseph Henry
Q. 8 Which of the following keys will you press in Windows 10 to turn the volume up?

Ans $\chi_{1 .}$ F4
> ${ }_{2 .}{ }^{\text {F }}$
Х ${ }^{2}$.F6

- 4 . F8
Q. 9 Who among the following Indian cricketers holds the record of most number of catches taken by a non-wicketkeeper while standing in the slip cordon, as of January 2021?
Ans
X 1.VVS Laxman
X 2. Manoj Prabhakar
- 3. Rahul Dravid

4. Javagal Srinath
Q. 10 Which of the following is the state flower of Manipur?

Ans
1 1. Foxtail Orchids

- 2. Shirui Lily

X 3. Pink Rhododendron
X 4. Retusa
Q. 11 Which of the following months was celebrated as 'Nutrition Month' in India in the year 2020?

Ans
Х 1 . December
Х 2 . November

- 3. September
$>$ 4. August
Q. 12 Who among the following was awarded the International Children's Peace Prize 2020?

Ans

1. Malala Yousafzai

- 2. Sadat Rahman

X 3. Greta Thunberg
X4. Neha Gupta
Q. 13 'Nikshay Poshan Yojana' is a scheme introduced by the Government of India to provide nutritional support to $\qquad$ patients.
Ans
X 1. diabetes
< 2 . arthritis

- 3. tuberculosis

X4. cancer
Q. 14 Chemicals called $\qquad$ link to form proteins.
Ans
X 1. oxalic acids
$\checkmark 2$
2. amino acids

X 3. citric acids
X4. nitric acids
Q. 15 In which of the following cities was the 89th Annual General Meeting of the Board of Control for Cricket in India held?
Ans

1. Ahmedabad

X 2. Indore
X 3. Lucknow
<4. Nagpur
Q. 16 Which of the following has a tetragonal crystal system?

Ans
Х 1. Potassium nitrate
Х 2 . Zinc oxide
3. Cadmium sulphide

- 4. Calcium sulphate
Q. 17 Which of the following states emerged as a separate state in 1963?

Ans
-1. Nagaland
X 2. Mizoram
3. Arunachal Pradesh
(4. Tripura
Q. 18 When was the Editors Guild of India founded?

Ans
Х 1.1982

- 2.1978

Х 3.1956
×4.1989
Q. 19 Which present day Indian state came into existence as the Mysore state in 1953?

Ans
< 1. Kerala
$\checkmark$
2. Karnataka
(3. Tamil Nadu
(4. Andhra Pradesh
Q. 20 Where was the world's largest solar tree installed in India in 2020?

Ans
1 1 . Jaipur

- 2. Durgapur

X 3. Bokaro
X4. Bhopal
Q. 21 Which of the following Articles of the Constitution of India mentions 'Continuance of the rights of citizenship'?
Ans
X 1 . Article 12

- 2. Article 10

X 3. Article 9
(4. Article 11
Q. 22 Who among the following athletes was the first ever youth ambassador of United Nations International Children's Emergency Fund (UNICEF) India?
Ans

1. Dutee Chand

X 2. KT Irfan
Х 3 . Neeraj Chopra
4. Hima Das
Q. 23 Where was the first factory of the Indian Iron and Steel Company (IISCO) set up?

Ans
< 1. Durgapur
X 2. Jabalpur
③. Jamshedpur

- 4. Hirapur
Q. 24 Which of the following states has the longest roadway network as on March 2021?

Ans

1. Rajasthan

- 2. Maharashtra

X 3. Madhya Pradesh
X4. Gujarat
Q. 25 'Rahide' is a long scarf worn by the women of $\qquad$ to protect their head from cool breeze as well as to show their traditional social affinity.
Ans
X 1. Madhya Pradesh
2. Himachal Pradesh

X 3. Uttar Pradesh
4. Arunachal Pradesh

## Combined Higher Secondary Level Examination 2020 (Tier-I)

| Roll Number |  |
| :--- | :--- |
| Candidate |  |
| Name |  |
| Venue Name |  |
| Exam Date | $10 / 08 / 2021$ |
| Exam Time | $12: 00$ PM $-1: 00$ PM |
| Subject | Combined Higher Secondary Level Exam 2020 |

Section : English Language
Q. 1 Select the INCORRECTLY spelt word.

Ans

1. movement
2. executive

- 3. dissappear

4. development
Q. 2 Select the most appropriate ANTONYM of the given word.

REPULSION
Ans
Х 1. complacence

- 2. attraction3. addiction

4. disgust
Q. 3 Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

This is the student which won the first prize in the recitation.
Ans
X 1. whose won
2. whom won
v 3. who won
4. No substitution required
Q. 4 Select the word which means the same as the group of words given.

A professional who works with patients who have heart problems
Ans
\$1. orthopedic
X 2. urologist

- 3. cardiologist
(4. paediatrician
Q. 5 Select the option that can be used as a one-word substitute for the given group of words.

The study of ancient civilisations and cultures by examining their sites
Ans

- 1. Archaeology
$\times 2$

2. Entomology
< 3. Etymology
(4.Arachnology
Q. 6 Select the most appropriate synonym of the given word.

DILEMMA
Ans

- 1. predicament

Х 2. importance
X 3. attraction
X 4. fascination
Q. 7 The following sentence has been divided into four segments. Select the segment that contains a grammatical error from the given options.

I am going / to home / soon after the / programme gets over.
Ans

1. soon after the

- 2. to home

Х 3 .lam going
4. programme gets over
Q. 8 Select the correct passive form of the given sentence.

Shashi was enjoying the game.
Ans
1 1 . The game is being enjoyed by Shashi.
2. The game was enjoying by Shashi.
3. The game has been enjoyed by Shashi.
v 4. The game was being enjoyed by Shashi.
Q. 9 In the given sentence, identify the segment which contains a grammatical error.

Due to the lockdown most schools teaches students through online classes.
Ans

1. most schools

- 2. teaches students

X 3. Due to the lockdown
4. through online classes
Q. 10 Select the option that expresses the given sentence in reported speech.

My mother said to me, "Aravind, the baby has been crying all day."
Ans

1. My mother said Aravind that the baby has been crying all the day.

- 2. My mother told me that the baby had been crying all day.

3. My mother told to Aravind why the baby has been crying all day.
4. Aravind told my mother that the baby had been crying all day.
Q. 11 Select the most appropriate ANTONYM of the given word.

Lucid
Ans
Х 1 . Clear
X 2. Acidic
3. Obvious

- 4. Confusing
Q. 12 Select the most appropriate meaning of the given idiom.

Burn the midnight oil
Ans

1. burn things using oil
2. work many nights at a stretch
3. create problems in the night
4. work late into the night
Q. 13 Select the most appropriate word to fill in the blank.

The government is making air bags $\qquad$ for front seat passengers in all cars.
Ans

- 1. compulsory

X 2. suggested
3. temporary
(4. registered
Q. 14 Given below are four jumbled sentences. Out of the given options, select the one that gives their correct order.
A. I sat patiently through them knowing they were not for me.
B. The headmaster read the list of qualities this year's best student award had - most giving, contributed most to society, and so on.
C. At my high school graduation, the awards were being presented for achievement, contribution to the school, the community, scholarship, and more.
D. But when I heard my name called, I began to cry as I could not believe that I was actually chosen for the award.

Ans
X1.BACD
X 2 . CBDA

- 3. CABD

Х4.BDCA
Q. 15 Select the most appropriate meaning of the given idiom.

To come round
Ans

1. To meet someone by chance

Х 2. To spend a lot of time with someone
3. To go round and round
4. To become conscious again
Q. 16 Select the INCORRECTLY spelt word.

Ans $\times$ 1. Temporary

- 2. Subsikuent

X 3. Permanent
4. Dominant
Q. 17 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.
A. The test procedure starts at 10 a.m. in all the test centres.
B. When you enter the test hall, you should have your Test Admit Card with you.
C. You are, therefore, required to reach the test centre by 9.30 a.m.
D. Remember that, if you report after 10 a.m., you will not be admitted.

Ans
Х 1. DBAC

- 2. $A C D B$

Х 3 DACB
入4. CADB
Q. 18 Select the most appropriate synonym of the given word.

Emerge
Ans

1. Appear

Х 2 . Erase
Х 3 . Close
Х4. Enforce
Q. 19 Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution'.

The migrant said that he did not planning to come back to the city for quite some time.
Ans
11. No substitution
2. was not planned
3. do not planning

- 4. did not plan
Q. 20 Select the most appropriate word to fill in the blank.

The mother monkey picked up her baby and climbed up the tree to $\qquad$ _.

Ans

- 1. safety

入 2. ability
3 3. cruelty
(4. agility

Comprehension:
In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

An open-minded person can very easily accept as well as respect the (1) $\qquad$ person's viewpoint or ideas. Such a person willingly and cordially (2) $\qquad$ to others' views, accepts
their different ideas, and even goes ahead to implement them (3) $\qquad$ With an open mindset, positive and vibrant energy (4) $\qquad$ that not only helps such people (5)____ also keeps other people around them happy.

SubQuestion No : 21
Q. 21 Select the most appropriate option for blank No. 1.

Ans
X1. each
(2. every

X 3. either
$\checkmark$
4. other

## Comprehension:

In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

An open-minded person can very easily accept as well as respect the (1) $\qquad$ person's viewpoint or ideas. Such a person willingly and cordially (2) $\qquad$ to others' views, accepts their different ideas, and even goes ahead to implement them (3) $\qquad$ With an open
mindset, positive and vibrant energy (4) $\qquad$ that not only helps such people (5)____ also keeps other people around them happy.

SubQuestion No : 22
Q. 22 Select the most appropriate option for blank No. 2.

Ans
入1. listening
2. listen

- 3. listens

4. listened

## Comprehension:

In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

An open-minded person can very easily accept as well as respect the (1) $\qquad$ person's viewpoint or ideas. Such a person willingly and cordially (2) $\qquad$ to others' views, accepts their different ideas, and even goes ahead to implement them (3) $\qquad$ With an open mindset, positive and vibrant energy (4) $\qquad$ that not only helps such people (5)____ also
keeps other people around them happy.
SubQuestion No: 23
Q. 23 Select the most appropriate option for blank No. 3.

Ans
Х 1. eventfully
(2. habitually

- 3. successfully

X 4. clearly

## Comprehension:

In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

An open-minded person can very easily accept as well as respect the (1) $\qquad$ person's viewpoint or ideas. Such a person willingly and cordially (2) $\qquad$ to others' views, accepts their different ideas, and even goes ahead to implement them (3) $\qquad$ With an open
mindset, positive and vibrant energy (4) $\qquad$ that not only helps such people (5)____ also
keeps other people around them happy.
SubQuestion No : 24
Q. 24 Select the most appropriate option for blank No. 4.

Ans
1 1. was being created
2. had been created

3 3. was created

- 4 . is created


## Comprehension:

In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

An open-minded person can very easily accept as well as respect the (1) $\qquad$ person's viewpoint or ideas. Such a person willingly and cordially (2) $\qquad$ to others' views, accepts their different ideas, and even goes ahead to implement them (3) $\qquad$ With an open mindset, positive and vibrant energy (4) $\qquad$ that not only helps such people (5)____ also
keeps other people around them happy.
SubQuestion No : 25
Q. 25 Select the most appropriate option for blank No. 5.

Ans
1 1 . and
X 2 . when
X 3. even4. but
Q. 1 How many triangles are there in the given figure?


Ans
X 1.12
X 2.14

- 3.13
$\times 4.15$
Q. 2 In a family, Divya and Monika are sisters. Monika is the mother of Anamika. Kishore is the son of Anamika. Lillu is the son of Divya. How is Anamika related to Lillu?

Ans
< 1 . Sister-in-law
\$2. Niece

- 3. Cousin
(4. Mother
Q. 3 Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.
Ans
< 1. TWZCF
- 2. BEGLN
< 3. DGJMP
< 4. HKNQT
Q. 4 Select the number that can replace the question mark (?) in the following series.
$1,2,10,37, ?, 226$
Ans
- 1.101

Х 2.89
Х 3.98
<4.73
Q. 5 Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.

1. Fragile
2. Freedom
3. Fresher
4. Fraudster
5. Frame

Ans
> $1.1,5,2,4,3$
(2.1,4,5,2,3

- $3.1,5,4,2,3$
( $4.2,5,4,3,1$
Q. 6 Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

BIOLOGY : COUMUHZ : : CHEMISTRY : ?
Ans
<1. DAKNOTUSZ
v 2. DIINOTUSZ
< 3. DJINUTUSZ
入4. DIONUTASZ
Q. 7 Which of the following equations will be correct when the signs + and $\times$, and the numbers 3 and 6 are interchanged?

Ans
\1. $11 \times 6+3=69$
<2. $7+3 \times 6=48$
< $3.9 \times 3+6=33$
4. $12 \times 3+6=30$
Q. 8 Three of the following four number triads are alike in a certain way and one is different. Select the one that is different.
Ans

1. $(111,222,333)$
< 2. $(108,300,501)$
<3. $(201,402,603)$

- 4. $(202,404,909)$
Q. 9 Two statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:
Some managers are bosses.
Some doctors are managers.
Conclusions:
I. Some managers are executives.
II. Some doctors are bosses.

Ans

- 1. Neither conclusion I nor II follows .

2. Both conclusions I and II follow .
3. Only conclusion II follows .
4. Only conclusion I follows .
Q. 10 Select the combination of letters that when sequentially placed in the blanks of the given letter series will complete the series.
```
T_R__S_DT_RD_S_D
```

Ans
Xi.STSRRTR

X2.SDTDSTT
X 3.DSTRTTR

- 4.SDTRSTR
Q. 11 Three of the following four words are alike in a certain way and one is different. Select the odd one.
Ans

1. Engineer
2. Designer
3. Architect

- 4. Doctor
Q. 12 In a certain code language, DORM is coded as 4303626 and FIRST is coded as 69363840. How will CANCER be coded in that language?
Ans
\$1.61283638
>2. 612661036
- 3.31283536
(4. 322831036
Q. 13 Select the option in which the words share the same relationship as that shared by the given pair of words.

Warrior : Battlefield
Ans
X 1. Umpire: Cricket

- 2. Actor: Stage
( 3. Sports : Ground
(4. Soldier: Army
Q. 14 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans

Q. 15 Select the option in which the given figure is embedded.


Ans

Q. 16 Select the option in which the numbers are related in the same way as are the numbers of the following set.
$(5,14,350)$
Ans
X $1 .(8,16,340)$
X 2 . $(3,20,380)$
X $3 .(6,12,232)$
4. $(7,9,441)$
Q. 17 Select the option that is related to the fourth number in the same way as the first number is related to the second number and the fifth number is related to the sixth number.

68:4::?:7::220:6
Ans
Х 1.220
X2. 112

- 3.3474. 301
Q. 18 Select the correct mirror image of the given figure when the mirror is placed to the right side of the figure.


Ans

Q. 19 The sum of the salaries of three persons, $A, B$ and $C$, is $₹ 66,500$. $B$ 's salary is half the salary of C. B's salary is $125 \%$ of A's salary. What is the salary of C?

Ans
Х 1. ₹30,000
> 2. ₹28,000
>3. ₹ 34,000
4. ₹ 35,000
Q. 20 Select the Venn diagram that best represents the relationship between the following classes.

Mammals, Animals, Giraffe
Ans
$\times 1 .(0)$
$\times 2$.

$\times 4$
Q. 21 If in a code language, GOD is coded as 15 and DEVIL is coded as 43 , then how will you code HUMEN?

Ans

- 1.42
>2. 72
X 3.81
Х 4.56
Q. 22 'Eye' is related to 'Glasses' in the same way as $\qquad$ ' is related to 'Dialyser'.
Ans
Х 1 . Heart
X ${ }^{2}$. Ear
- 3. Kidney
(4. Spine
Q. 23 A cube is made by folding the given sheet. In the cube so formed, what would be the symbol on the opposite side of '@'?

Ans
X1.\#
X 2. \%

- 3. \$

X4. \&
Q. 24 A paper is folded and cut as shown in the following figure. How will it appear when unfolded?


Ans

Q. 25 Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different.
Ans
Х1.17:204
2.9:99

Х3.7:84
Х4.11:132
Q. 1 Study the given graph and answer the question that follows.

Production (in thousands) of two types of Vehicles A and B by a company during 2013 to 2018

$31 \frac{1}{4} \%$ of the total number of vehicles of type A produced in 2013, 2015 and 2017 is equal to the number of vehicles of type B produced in the year:

Ans
X 1. 2017
X2. 2018
X 3. 2015
4. 2016
Q. 2 If $S$ is a point on side $Q R$ of a triangle $P Q R$ such that $Q S=10 \mathrm{~cm}, Q R=18 \mathrm{~cm}$ and $\angle P S R=\angle Q P R$, then the length of $P R$ will be:

Ans
X 1.16 cm

- 2. 12 cm
$\times 3.15 \mathrm{~cm}$
$\times 4.14 \mathrm{~cm}$
Q. 3 The marked price of a juicer mixer is $₹ 5,500$, and three successive discounts of $40 \%, 30 \%$ and $20 \%$ are given on this marked price. The selling price of the juicer mixer is:
Ans
X 1. ₹ 1,835
X 2. ₹ 1,868
- 3. ₹ 1,848

X4. ₹ 1,858
Q. 4 In any triangle, if the angles are in the ratio $1: 2: 3$, then what will be the ratio of the sides opposite to them?

Ans
X $1.1: \sqrt{3}: 1$

- 2. $1: \sqrt{3}: 2$

X3. $2: 2: \sqrt{3}$
X4. $2: \sqrt{3}: 1$
Q. 5 If $\sin ^{2} x-3 \cos ^{2} x=0$, then the value of $x\left(0<x<90^{\circ}\right)$ is:

Ans
$\times 1.45^{\circ}$
X2. $30^{\circ}$

- 3. $60^{\circ}$
$\times 4.15^{\circ}$
Q. 6 The value of $\sqrt{\cos 60^{\circ} \cos 30^{\circ}-\sin 60^{\circ} \sin 30^{\circ}}$ is:

Ans
$X 1 \cdot \frac{\sqrt{3}}{2}$2. $\frac{1}{\sqrt{2}}$

- 3. 0
$\times 4.1$
Q. 7 In a workshop with 80 students and 10 resource persons, sweets were distributed at the end of the workshop. The amount spent for distributing sweets to each student was $30 \%$ of the total number of students and amount spent towards each resource person was $40 \%$ of the total number of students. The total amount spent for sweets distribution in the workshop was:

Ans
X 1. ₹ 2,400
X 2. ₹ 2,440
$X$ 3. ₹ 2,420

- 4 . $₹ 2,240$
Q. 8 In a circle with center $O, P A$ and $P B$ are tangents to the circle at $A$ and $B$, respectively, from an external point P . If, $\angle A O B=116^{\circ}$ then what is the measure of $\angle O P B$ ?
Ans
-1. $32^{\circ}$
$\times 2.90^{\circ}$
$\times 3.58^{\circ}$
$\times 4.30^{\circ}$
Q. 9 The histogram shows the marks scored by 40 students in a test with maximum 30 marks.


What is the percentage of the students who scored less than 20 marks?
Ans
X 1.50
X2. 25
X 3.87 .5

- 4.62 .5
Q. 10 If $x+\frac{1}{3 x}=5$, then the value of $27 x^{3}+\frac{1}{x^{3}}$ will be:

Ans
-1. 3240
X 2. 3024
$\times 3.3042$
$\times 4.3420$
Q. 11 Find the compound interest (in $₹$ ) on a sum of $₹ 7,500$ for 4 years if the rate of interest is $20 \%$ per annum for the first two years and $10 \%$ per annum for the next two years. (The interest is compounded annually.)

Ans
X1. 5,658
$\times 2.5,586$
X 3. 6,558

- 4. 5,568
Q. 12 Study the given pie charts and answer the question that follows.

The pie charts show the distribution of students of graduate and postgraduate levels in five different institutes $P, Q, R, S$ and $T$ in a town.
(i) Total number of students of graduate level in five different institutes $=12400$


Fig.(i)
(ii) Total number of students of postgraduate level in five different institutes $=8000$


Fig.(ii)
The difference between the average number of students of graduate level in institutes
$\mathrm{P}, \mathrm{R}$ and T to the average number of students of postgraduate level in institutes $\mathrm{P}, \mathrm{R}$ and T is:

Ans
X1. 425
X2. 426
X3. 328

- 4.428
Q. 1315 persons working 6 hours per day earn $₹ 900$. How much money will 20 persons earn, working 10 hours per day?

Ans
X 1. ₹ 1,800
X 2. ₹ 1,500

- 3. ₹ 2,000

X4. ₹ 2,100
Q. $14 x, y$ and $z$ are three positive numbers such that $y$ is $\frac{4}{5}$ times of $x$ and $z$ is $\frac{5}{8}$ times of $y$. If the average of reciprocals of the numbers $x, y$ and $z$ is $\frac{17}{240}$, then the average of 3 times of $x$ and 5 times of $y$ will be:
Ans
-1. 70
$\times 2.60$
X 3. 40
$\times 4.45$
Q. 15 If $2 x+3 y+4 z=11,8 x^{3}+27 y^{3}+64 z^{3}=105$ and $x y z=1$, then the value $4 x^{2}+9 y^{2}+16 z^{2}-6 x y-12 y z-8 x z$ is:

Ans
-1. 3
X2. 4
>3. 5
>4. 6
Q. 16 If $1+4 x^{2}+16 x^{4}=512$, and $1-2 x+4 x^{2}=64$, then the value of $1+2 x+4 x^{2}$ is:

Ans
X 1.6

- 2.8
$\times 3.12$
$\times 4.10$
Q. 17 With a speed of $48 \mathrm{~km} / \mathrm{h}$, Raghu is able to complete his journey in 2 hours 28 minutes. If he wants to cover the same distance in 1 hour 36 minutes, then what should be his new speed?

Ans
X 1. $72 \mathrm{~km} / \mathrm{h}$
X2. $64 \mathrm{~km} / \mathrm{h}$
X $3.66 \mathrm{~km} / \mathrm{h}$

- 4. $74 \mathrm{~km} / \mathrm{h}$
Q. 18 The sum of the squares of the sides of a rhombus is $1600 \mathrm{~cm}^{2}$. What is the side of the rhombus?

Ans
X 1.15 cm

- 2. 20 cm

X 3. 25 cm
$\times 4.10 \mathrm{~cm}$
Q. 19 If the length of a chord of a circle, that makes an angle of $60^{\circ}$ with the tangent drawn at one end point of the chord, is $8 \sqrt{3} \mathrm{~cm}$, then the radius of the circle will be:

Ans
-1. 8 cm
$\times 2.5 \mathrm{~cm}$
X 3.6 cm
$\times 4.7 \mathrm{~cm}$
Q. 20 The sides of a triangle are in the ratio $\frac{1}{3}: \frac{1}{5}: \frac{1}{4}$ and its perimeter is 141 cm . The difference between the greatest side and the smallest side is:

Ans
X 1.18 cm
X2. 15 cm
$\times 3.12 \mathrm{~cm}$
4. 24 cm
Q. 21 If $\frac{5 \cot \theta+\sqrt{3} \operatorname{cosec} \theta}{2 \sqrt{3} \operatorname{cosec} \theta+3 \cot \theta}=1,0^{\circ}<\theta<90^{\circ}$, then the value of $\frac{\frac{7}{2} \cot ^{2} \theta-\frac{3}{4} \operatorname{cosec}^{2} \theta}{4 \sin ^{2} \theta+\frac{3}{2} \tan ^{2} \theta}$ will be:

Ans
Х1. 7
X2. 2
X3. 3

- 4.5
Q. 22 Gaurav bought some articles at 5 for $₹ 6$ and sold them at 10 for $₹ 11$. His loss percentage is:

Ans
-1. $8 \frac{1}{3} \%$
X2. $7 \frac{1}{3} \%$
人3. $7 \frac{2}{3} \%$
X4. $8 \frac{2}{3} \%$
Q. 23 If the number 4A306768B2 is divisible by both 8 and 11 , then the smallest possible values of A and B will be:

Ans

1. $\mathrm{A}=5, \mathrm{~B}=3$

X2. $\mathrm{A}=3, \mathrm{~B}=5$
X 3. $\mathrm{A}=5, \mathrm{~B}=2$
X4. $\mathrm{A}=5, \mathrm{~B}=4$
Q. 24 Study the following graph and answer the question that follows.

Number of students that appeared and qualified, from various colleges, at a scholarship examination.


What is the ratio of the number of students that appeared to the number of students that qualified at the scholarship examination from College X ?

Ans
X1.5:4
$\times 2.5: 2$
$\times 3.4: 3$
4. $5: 3$
Q. 25

The value of $\frac{284}{5} \div\left[\left(\frac{4}{5}\right) \times(15+35)-11 \frac{3}{5}\right]$ is:
Ans
-1. 2
$\times 2.1$
$\times 3.0$
$\times 4.3$

## Section: General Awareness

Q. 1 Who among the following was NOT one of the recipients of the US military decoration 'the Legion of Merit' in December 2020?
Ans
Х 1. Shinzo Abe
2. Narendra Modi

X 3. Scott Morrison

- 4. Boris Johnson
Q. 2 Which of the following national waterways has been INCORRECTLY matched with its associated river?
Ans

1. National Waterway 2-Brahmaputra

- 2. National Waterway 6 - Sutlej

X 3. National Waterway 1 - Ganga
Х 4. National Waterway 4 - Krishna
Q. 3 Who founded the famous Vikramashila University in the ninth century?

Ans
1 1. Ballala Sena
X 2 . Gopala
Х 3. Samanta Sena

- 4. Dharmapala
Q. 4 Which country was the host of the 15th G20 Leaders' Summit 2020?

Ans 1. Saudi Arabia
X 2. The US
X 3. China
Х4. India
Q. 5 The legal provisions governing the management of foreign exchange reserves are laid down in the Reserve Bank of India Act,
Ans
Х1. 1947
Х 2.1971
Х 3.1923

- 4.1934
Q. 6 Who among the following won the 'Golden Boot' at FIFA World Cup 2018?

Ans
v 1. Harry Kane
Х 2. Kylian Mbappe
X 3. Luka Modric
(4. Paul Pogba
Q. 7 The nucleus of a cell is surrounded by a jelly-like substance called:

Ans

- 1. cytoplasm

X 2. deltoid
X 3. stomata
(4. cell membrane
Q. 8 Which of the following Union Ministries of India launched a pilot 'Pey Jal Survekshan' on 16 February 2021?
Ans

1. Ministry of Environment, Forest and Climate Change

- 2. Ministry of Housing and Urban Affairs
( 3. Ministry of Jal Shakti

4. Ministry of Earth Sciences
Q. 9 Who was the Governor-General of Bengal when the Permanent Settlement was introduced there in 1793?

Ans
人 1. Warren Hastings
Х 2. Sir John Shore
X 3. Sir John Macpherson

- 4. Lord Cornwallis
Q. 10 Which of the following is the largest bituminous coalfield in India?

Ans
1 1. Yellandu
2. Talcher

- 3. Rampur

4. Jharia

## Q. 11 In which of the following states is the Ajanta caves situated?

Ans
入 1. Uttar Pradesh
$\checkmark$
2. Maharashtra

X 3. Kerala
X 4. Madhya Pradesh
Q. 12 The total number of fundamental duties provided by the Constitution of India is:

Ans
X 1.29

- 2.11

Х 3.32
Х 4.19
Q. 13 On a computer keyboard, the Shift and Alt keys are examples of:

Ans
X 1. numeric keys

- 2. modifier keys

X 3.function keys
Х 4. cursor movement keys
Q. 14 With which of the following sports is the FedEx Cup associated?

Ans

- 1. Golf

X 2. Tennis
Х 3 . Football
入 4. Badminton
Q. 15 Where was 'Dev Deepawali Mahotsav' celebrated in the presence of the PM Narendra Modi in November 2020?
Ans
<1. Agra

- 2. Varanasi

Х 3. Mathura
4. Prayagraj
Q. 16 What is the meaning of the term 'collateral' in the context of the banking system?

Ans 1. Collateral is an asset of the government that is used for the protection of consumers.
2. Collateral is an asset that a borrower owns and uses this as a guarantee to a lender
until the loan is repaid.
3. Collateral is an asset that a borrower took as a loan.4. Collateral is an asset that the government provides to farmers.
Q. 17 Which of the following is the slowest type of internet connection?

Ans

- 1. Dial-up
< 2. Satellite
< 3. Cable
入4. Digital subscriber line (DSL)
Q. 18 World Thyroid Day is observed on $\qquad$
Ans
(1.30th April
(2.17th June
- 3. 25th May
<4. 23rd March
Q. 19 A mango tree is an example of a/an:

Ans
(1.pseudotroph
\$ 2. ambitroph
X 3. heterotroph
4. autotroph
Q. 20 In October 2019, who became the youngest cricketer in the world to score a double century in List A cricket?

Ans
(1. Dhruv Jurel
\$ 2. Atharva Ankolekar
X 3. Ravi Bishnoi

- 4. Yashasvi Jaiswal
Q. 21 Which of the following nations is the smallest neighbour of India in terms of area?

Ans
< 1. Nepal
< 2. Bangladesh
X 3. Afghanistan

- 4. Maldives
Q. 22 Who among the following singers was called 'Mallika-e-Ghazal' or the queen of Ghazal?

Ans
< 1. Iqbal Bano

- 2. Begum Akhtar
( 3. Suraiya
毋4. Roshan Ara Begum
Q. 23 Who is the author of the novel 'Burnt Sugar'?

Ans

- 1. Avni Doshi

Х 2. Salman Rushdie
X 3. Kiran Desai
X4. Vikas Bahl
Q. 24 Which of the following Articles of the Constitution of India makes provision for protection in respect of conviction for offences?
Ans
Х 1 . Article 21
(2. Article 19

- 3. Article 20

4. Article 18
Q. 25 Which of the following hills is situated in Andhra Pradesh?

Ans
Х 1 . Kaimur Hills
X 2. Pachmarhi Hills
3. Nagari Hills
4. Girnar Hills

## Combined Higher Secondary Level Examination 2020 (Tier-I)

| Roll Number |  |
| :--- | :--- |
| Candidate Name |  |
| Venue Name |  |
| Exam Date | 10/08/2021 |
| Exam Time | 3:00 PM - 4:00 PM |
| Subject | Combined Higher Secondary Level Exam 2020 |

## Section : English Language

Q. 1 Select the most appropriate meaning of the given idiom.

Break the ice
Ans

- 1. Make a beginning or start something

2. Cool the room for everyone
3. Arrange for a skating show
4. Make things available for a party
Q. 2 Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

Regard of whether the students were ready or not the teacher announced the dates of the test.
Ans
(1. Regarding whether
< 2. Regardless of whatsoever
X 3. No substitution required
v 4. Regardless of whether
Q. 3 Select the most appropriate synonym of the given word.

Silt
Ans
X 1. Cut
<2. Opening3. Residue
4. Incision
Q. 4 Select the INCORRECTLY spelt word.

Ans
-1. Suceed
X 2. Inherit

- 3. Implant

Х4. Accede
Q. 5 Select the option that can be used as a one-word substitute for the given group of words.

The arrangement of events or dates in the order of their occurrence.
Ans
X 1. Calendar

- 2. Chronology

X3. Chronic
(4. Routine
Q. 6 Select the most appropriate synonym of the given word.

Vacillate
Ans
X 1. Augment

- 2. Waver

3. Strengthen
(4. Fortify
Q. 7 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.
A. The country gained admission to the United Nations in 1955.
B. In 2008, however, after a decade long period of violence and turbulent negotiation with a strong Maoist insurgency, the monarchy was dissolved, and Nepal was declared a democratic republic.
C. In 1991 the kingdom established a multiparty parliamentary system.
D. Nepal, long under the rule of hereditary prime ministers favouring a policy of isolation, remained closed to the outside world until a palace revolt in 1950 restored the crown's authority in 1951.
Ans
4. DACB

X 3. DBAC
Х4.CABD
Q. 8 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.

Vidya put on her mask, / sanitise her hands / and walked into the shop.
Ans
(1. and walked into the shop
\$ 2. No error
3. Vidya put on her mask
v 4. sanitise her hands

## Q. 9 Select the most appropriate ANTONYM of the given word.

Rigid
Ans
> 1. Definite

- 2. Flexible

X 3. Adamant
(4. Firm
Q. 10 Select the option that expresses the given sentence in passive voice.

Ravi drove the car towards the highway for a trial run.
Ans

1. The car was driving towards the highway for a trial run by Ravi.
(2. The car had driven towards the highway for a trial run by Ravi.

Х 3. The car had been driven for a trial run by Ravi towards the highway.
v 4. The car was driven towards the highway for a trial run by Ravi.
Q. 11 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.
A. First, a new article comes into our offices.
B. Every article in the Encyclopedia goes through a rigorous editorial process to make sure it's clear, accurate, objective and fair.
C. The article is first reviewed by a fact checker, who uses a variety of sources to make sure the article is accurate and the facts are correct.
D. The author may be an editor at the Encyclopedia who knows that subject or a prominent scholar with specialised expertise in that field.

Ans

Q. 12 Select the most appropriate word to fill in the blank.

As the Principal was busy, she $\qquad$ a senior teacher to attend the conference on her behalf.

Ans

1. Reserved
2. Declared
3. Deputed
< 4. Committed
Q. 13 Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

If a person tests positive for Covid-19, he have to isolate himself immediately so that he does not infect others.
Ans
(1. he must have to isolate
2. he isolated himself
$\checkmark$
3. he has to isolate himself4. No substitution required
Q. 14 Select the option that expresses the given sentence in direct speech.

The customer asked the bank manager if they were working on the following Saturday.
Ans

1. The customer asked the bank manager, "Are they working on the previous Saturday?"
2. The customer said to the bank manager, "Are you working next Saturday?"
3. The customer asks the bank manager, "If you were working on the following

Saturday?"
4. The customer said to the bank manager, "Were they working on the previous

Saturday?"
Q. 15 Select the INCORRECTLY spelt word.

Ans

- 1. Preshious

Х 2. Plenary
$\times$
3. Presentable

X4. Peaceful
Q. 16 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.

Your advices were timely / and guided me / to take the right decisions.
Ans
1 1. to take the right decisions
Х 2 . No error
3. and guided me

- 4. Your advices were timely
Q. 17 Select the most appropriate ANTONYM of the given word.

Inept
Ans
X 1 . Partial
Х 2. Lacking

- 3. Competent
(4. Useless
Q. 18 Select the most appropriate meaning of the given idiom.

A lean patch
Ans

1. Cloth that is beginning to tear

X 2. A part of hair that is thin
X 3. Friendship that has ended
4. A period of poor performance
Q. 19 Select the option that can be used as a one-word substitute for the given group of words.

A place of ideal perfection especially in laws, government, and social conditions
Ans
入1. Paradise
(2. Heaven

- 3. Utopia

Х4.Aden

## Q. 20 Select the most appropriate word to fill in the blank.

Carbohydrates are so called because they $\qquad$ carbon, oxygen and hydrogen.
Ans

- 1. contain

X 2 . cover
X 3. consist
X 4. codify

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Seychelles, one of the world's smallest countries, is (1) $\qquad$ of two main island groups: the Mahé group of (2) $\qquad$ than 40 central, mountainous granitic islands and a (3) $\qquad$ group of more than 70 outer, flat, coralline islands. The islands of the Mahé group are rocky and (4) have a narrow coastal strip and a central range of hills. The (5) $\qquad$ feature of those islands, with their lush tropical vegetation, is that of high hanging gardens overlooking silver-white beaches and clear lagoons.

SubQuestion No : 21
Q. 21 Select the most appropriate option to fill in blank no. 1 .

Ans
入 1. Covered
2. Composed3. Contained4. Combined

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Seychelles, one of the world's smallest countries, is (1) $\qquad$ of two main island groups: the Mahé group of (2) $\qquad$ than 40 central, mountainous granitic islands and a (3) $\qquad$ group of more than 70 outer, flat, coralline islands. The islands of the Mahé group are rocky and (4) _ have a narrow coastal strip and a central range of hills. The (5) $\qquad$ feature of those islands, with their lush tropical vegetation, is that of high hanging gardens overlooking silver-white beaches and clear lagoons.

SubQuestion No : 22
Q. 22 Select the most appropriate option to fill in blank no. 2.

Ans

1. Further

X 2. Beyond
X 3.Extra
4. More

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Seychelles, one of the world's smallest countries, is (1) $\qquad$ of two main island groups: the Mahé group of (2) $\qquad$ than 40 central, mountainous granitic islands and a (3) $\qquad$ group of more than 70 outer, flat, coralline islands. The islands of the Mahé group are rocky and (4) have a narrow coastal strip and a central range of hills. The (5) $\qquad$ feature of those islands, with their lush tropical vegetation, is that of high hanging gardens overlooking silver-white beaches and clear lagoons.

SubQuestion No : 23

## Q. 23 Select the most appropriate option to fill in blank no. 3.

Ans $\qquad$

1. Succeeding2. Next
2. Second
3. Subsequent

## Comprehension:

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

Seychelles, one of the world's smallest countries, is (1) $\qquad$ of two main island groups: the Mahé group of (2) $\qquad$ than 40 central, mountainous granitic islands and a (3) $\qquad$ group of more than 70 outer, flat, coralline islands. The islands of the Mahé group are rocky and (4) _ have a narrow coastal strip and a central range of hills. The (5) feature of those islands, with their lush tropical vegetation, is that of high hanging gardens overlooking silver-white beaches and clear lagoons.

SubQuestion No : 24
Q. 24 Select the most appropriate option to fill in blank no. 4.

Ans

- 1. Typically

X 2. Routinely
3. Regularly

Х4. Habitually

## Comprehension：

In the following passage，some words have been deleted．Select the most appropriate option to fill in each blank．

Seychelles，one of the world＇s smallest countries，is（1） $\qquad$ of two main island groups：the Mahé group of（2） $\qquad$ than 40 central，mountainous granitic islands and a（3） $\qquad$ group of more than 70 outer，flat，coralline islands．The islands of the Mahé group are rocky and （4） $\qquad$ have a narrow coastal strip and a central range of hills．The（5） $\qquad$ feature of those islands，with their lush tropical vegetation，is that of high hanging gardens overlooking silver－white beaches and clear lagoons．

SubQuestion No ： 25
Q． 25 Select the most appropriate option to fill in blank no． 5 ．
Ans
1．Collective
入 2 ．Wide
－3．Predominant
X4．Global

## Section ：General Intelligence

Q． 1 Select the number from among the given options that can replace the question mark（？）in the following series．
$8,11,17,26,38$ ，？
Ans
－ 1.53
＞2． 56
＞3．50
× 4.58

## Q． 2 Select the option in which the numbers share the same relationship as that shared by the

 given pair of numbers．56：67
Ans
Х1．49：58
－ $2.85: 98$
人3．76：88
人4．63：75
Q. 3 Train $A$, which runs at a speed of $90 \mathrm{~km} / \mathrm{h}$, starts from Station Y at 8 a.m. Train B , which runs at a speed of $120 \mathrm{~km} / \mathrm{h}$, starts from Station $Y$ on the same route at 8.10 a.m.. If Train B catches up with Train A at $8.40 \mathrm{a} . \mathrm{m}$. at Station Z , then what is the distance between Stations Y and Z ?
Ans
Х1.54 km
X 2.62 km
$\checkmark$
3. 60 km4. 50 km
Q. 4 Sunaina introduced Ritik as the son of the brother of her mother. How is Ritik related to Sunaina?

Ans
X1. Son

- 2. Cousin

X 3. Uncle
Х4. Nephew
Q. 5 Select the option that is embedded in the given figure (rotation is NOT allowed).


Ans

v 3.

$\times 4$

Q. 6 How many cubes are there in the given figure?


Ans
$\times 1.13$
X 2.11

- 3. 12
$\times 4.14$
Q. 7 In a certain code language, TOGETHER is coded as 119 and MASTER is coded as 87. How will REVERSE be coded in that language?
Ans
<1.92
- 2.98

X 3.94
入 4.96
Q. 8 Four letter-clusters have been given in the options, out of which three letter-clusters are alike in some manner and one is different. Select the letter-cluster that is different.
Ans

Q. 9 In a certain code language, TRAILER is written as QPXGICO. How will ALMIRAH be written in that language?
Ans
X 1. XIJFOXE
2. YJKGPYF

Х 3. YIKFPXF

- 4. XJJGOYE
Q. 10 Select the option in which the numbers are related in the same way as are the numbers of the following set.

32:63:123
Ans

- $1.26: 48: 92$

Х $2.26: 51: 100$
Х $3.35: 72: 149$
> $4.33: 66: 130$
Q. 11 Select the option that is related to the third word in the same way as the second word is related to the first word.

Hollow : Worthless : : Solid : ?
Ans
v 1. Sound
< 2. sincere
Х 3. Acceptance
<4. Clear
Q. 12 Select the Venn diagram that best represents the relationship between the following classes.

Carnivorous, Frog, Amphibian
Ans
$\times 1$

$\times 2$

$\checkmark 3$.


Х 4.

Q. 13 Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.

Ans
1 1 . Confident
2. Intelligent

- 3. Coward
(4. Honest
Q. 14 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans

Q. 15 Three different positions of the same dice are shown. Select the number that will be on the face opposite to the face having the number 4 .


Ans
$\times 1.6$

- 2.1
$\times 3.3$
$\times 4.2$
Q. 16 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:
All bats are sticks.
All sticks are woods.
Conclusions:
I. Some woods are not bats.
II. All bats are woods.

Ans
X 1. Both conclusions I and II follow.
2. Neither conclusion I nor II follows.
3. Only conclusion II follows.
4. Only conclusion I follows.
Q. 17 The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?


Ans

$\times 3$



Q. 18 Select the correct mirror image of the given figure when the mirror is placed at the right side.


Ans
$\times 1$


Х 3

Х 4.

Q. 19 Select the option that is related to the third word in the same way as the second word is related to the first word.

Sacred: Profane: : Barren : ?
Ans
-1. Fertile
X 2 . Desert
X 3 . Empty
(4. Sterile
Q. 20 Select the correct option that indicates the arrangement of the given words in a logical and meaningful order.

1. Beam
2. Canopy
3. Foundation
4. Roof
5. Column

Ans
Х 1. 3-2-1-5-4

- 2. 3-5-1-4-2
>3.1-2-5-3-4
(4.5-3-1-2-4
Q. 21 Which two digits and two signs need to be interchanged so as to balance the given equation?
$98 \div 4-126+96 \times 5=266$
Ans
X1. 8 and 2 ; - and +
v 2.5 and $8 ; \times$ and $\div$
Х 3.5 and 9 ; + and $\div$
Х4. 6 and $4 ; \times$ and $\div$
Q. 22 Select the option that is related to the third term in the same way as the second term is related to the first term.

COMPETE:OCETPME:: EXTREME:?
Ans
Х 1. EMXEERT
2. RTXEEME
3. XEEMRTE

X4. XERTMEE
Q. 23 Select the option in which the numbers are related in the same way as are the numbers of the following set.
$(92,85,82)$
Ans
入 1. $(28,23,21)$
Х 2 . $(71,65,62)$

- 3. $(83,78,77)$

Х $4 .(69,66,62)$
Q. 24 Four numbers have been given, out of which three are alike in some manner and one is different. Select the number that is different.
Ans
X 1.199
X2. 1393. 183
4.163
Q. 25 Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.
$t_{\text {_ }} f e t c \_$_ $c f e$
Ans
Х1.tcfe
Х2.fetc
Х3.ecft
-4.cfet

Section : Quantitative Aptitude
Q. 1 Some families went on an outstation tour. The given histogram shows their ages.

What is the ratio of the number of persons of age less than 15 years to that of persons of age less than 30 years?


Ans
X $1.15: 38$
X 2. 15:31

- 3. $3: 7$

X4.11:19
Q. 2 When the price of an item was reduced by $20 \%$, its sales increased by $x \%$. If there is an increase of $25 \%$ in the receipt of the revenue, then the value of $x$ is :

Ans
X 1. $53.84 \%$
$\times 2.55 .75 \%$

- 3. $56.25 \%$

X4.61.5\%
Q. 3 In a trapezium $A B C D, D C \| A B, A B=16 \mathrm{~cm}$ and $D C=11.2 \mathrm{~cm}$. What is the length (in cm ) of the line segment joining the mid points of its diagonals?
Ans

1. 2.4
$\times 2.1 .8$
$\times 3.1 .2$
X4. 2.8
Q. 4 In a class of 80 students (boys and girls) there are $60 \%$ girls. The average weight of the boys is 58 kg and that of the girls is 52 kg . What is the average weight (in kg ) of the whole class?
Ans
X 1.56 .2

- 2. 54.4
$\times 3.53 .6$
X4. 55
Q. $5 \quad 775 \times 775 \times 775+225 \times 225 \times 225$
$77.5 \times 77.5+22.5 \times 22.5-77.5 \times 22.5$ is equal to:
Ans
$\times 1.100$
$\times 2.10000$
- 3. 100000
$\times 4.0 .1$
Q. 6 Study the bar graph which shows the imports and exports (in ₹) of steel of a country during 2013 to 2017 and answer the question that follows.


For how many year(s) were the imports less than $80 \%$ of the average exports (per year) of the country during the five years?

Ans
X1. 4
>2.1
>3.3

- 4.2
Q. 7 If $a+b+c=5, a^{2}+b^{2}+c^{2}=27$, and $a^{3}+b^{3}+c^{3}=125$, then the value of $\frac{\mathrm{abc}}{5}$ is:

Ans
-1. -1
X2. 5
( $3 .-5$
<4.1
Q. 8 A sum lent at simple interest amounts to ₹6,240.80 in one year and to ₹ $7,563.20$ in 4 years. The sum (in ₹) and the rate of interest per annum, respectively, are:

Ans
X 1. 6,200, 8.5\%
X 2. 5,800, 8.5\%

- 3. $5,800,7.6 \%$

X 4. $6,200,7.6 \%$
Q. 9 If the 11-digit number $4 y 6884805 x 6$ is divisible by 72 , and $x \neq y$, then the value of $\sqrt{x y}$ is:

Ans
X $1 . \sqrt{12}$

- 2. $\sqrt{6}$
<3. $\sqrt{5}$
(4. $\sqrt{8}$
Q. 10 In $\triangle P Q R, Q T \perp P R$ and $S$ is a point on $Q R$ such that $\angle P S Q=p^{\circ}$. If $\angle T Q R=44^{\circ}$ and $\angle S P R=32^{\circ}$, then the value of $p$ is:

Ans
$\times 1.72^{\circ}$
$\times 2.82^{\circ}$
$\times 3.76^{\circ}$
4. $78^{\circ}$
Q. 11 Two circles of radii 18 cm and 12 cm intersect each other and the length of their common chord is 16 cm . What is the distance (in cm ) between their centres?

Ans 1. $2 \sqrt{5}(2+\sqrt{13})$
⒉ $2 \sqrt{5}(4-\sqrt{13})$
⒊ $2 \sqrt{5}(4+\sqrt{13})$
X4. $2 \sqrt{5}(-2+\sqrt{13})$
Q. 12 The value of $\cot ^{2} 46^{\circ}-\sec ^{2} 44^{\circ}+\left(\sin ^{2} 1^{\circ}+\sin ^{2} 3^{\circ}+\sin ^{2} 5^{\circ}+\cdots+\sin ^{2} 89^{\circ}\right)$ is:

Ans
X 1.23 .5
X2. 20.5
$\times 3.22 .5$
4. 21.5
Q. 13 If $\left(1+\cot ^{2} \theta\right)+\left(1+\left(\cot ^{2} \theta\right)^{-1}\right)$ is equal to k , then $\sqrt{\mathrm{k}}=$ ?

Ans
$X$ 1. $\sin \theta \sec \theta$
$X$ 2. $\operatorname{cosec} \theta \cos \theta$
3. $\operatorname{cosec} \theta \sec \theta$

X 4. $\sin \theta \cos \theta$
Q. 14 The sides $A B, B C$ and $A C$ of $\triangle A B C$ are $12 \mathrm{~cm}, 8 \mathrm{~cm}$ and 10 cm , respectively. A circle is inscribed in the triangle touching $A B, B C$ and $A C$ at $D, E$ and $F$, respectively. The ratio of the lengths of $A D$ to $C E$ is:

Ans
X1.5:7
X2. $3: 5$
X 3. 10:7

- $4: 3$
Q. 15 By selling a car for $₹ 6,32,500$, a showroom owner makes a profit of $15 \%$. If he sold the car at $₹ 8,10,000$, then what would be the profit percentage (correct to one decimal place)?

Ans

1. $47.3 \%$

X 2. $44.8 \%$
X 3. $41.5 \%$
X 4. 51.4\%
Q. 16 If $(x-1.5)^{3}+(x-4)^{3}+(x-3.5)^{3}=3(x-1.5)(x-4)(x-3.5)$, then what is the value of $x$ ?

Ans
X 1.1
2. 3
$\times 3.6$
$\times 4.9$
Q. 17 Study the pie chart and answer the question that follows.

The given pie chart shows the degree of cost incurred in different expenditure on the construction of a house. The total expenditure is $₹ 31,50,000$.

Degree of cost incurred in different expenditure


## - Steel <br> - Cement <br> - Brick <br> ■ Labour <br> - Miscellaneous

What is the percentage of expenditure on cement?
Ans
X 1. $30 \%$
X 2. $25 \%$
X 3. $15 \%$

- 4. $20 \%$
Q. 18 A marks her goods $25 \%$ above the cost price. She sells $25 \%$ of the goods at the marked price, $60 \%$ at $25 \%$ discount and the remaining at $10 \%$ discount. What is her overall gain or loss per cent?

Ans
X 1. Gain 15.124\%
X 2. Loss 18.175\%
X 3. Loss 3.125\%

- 4. Gain $4.375 \%$
Q. 19 Working together A, B and C can complete a piece of work in 3 days. A completes the same work in 24 days and B completes it in 6 days. How many days will C alone take to complete the same work?

Ans
X 1.18

- 2.8
$\times 3.12$
$\times 4.6$
Q. 20 A man covers $\frac{5}{12}$ of a total journey by train, $\frac{7}{18}$ of the journey by bus and the remaining 7 km on foot. His total journey (in km ) is:

Ans
-1. 36 km
X 2. 35 km
X 3.32 km
X 4.40 km
Q. 21 If $3 \cos \theta=2 \sin ^{2} \theta, 0^{\circ}<\theta<90^{\circ}$, then what is the value of $\left(\tan ^{2} \theta+\sec ^{2} \theta-\operatorname{cosec}^{2} \theta\right)$ ?

Ans
-1. $\frac{17}{3}$
人2. $-\frac{7}{3}$
X3. $-\frac{17}{3}$
×4. $\frac{7}{3}$
Q. 22 Study the graph which shows the target and actual production of ACs, (in thousands) of a factory over five months and answer the question that follows.
Target and Actual Production of AC's (in Thousands) of a factory over five months


The total target production of ACs in February, March, April and May is what percent less than the total actual production of ACs over five months? (correct to one decimal place)
Ans
X 1. $27.9 \%$
X2. $26.8 \%$
X 3. $29.7 \%$
4. $28.6 \%$
Q. 23 The volume of a right circular cone is $462 \mathrm{~cm}^{3}$. If its height is 12 cm , then the area of its base (in $\mathrm{cm}^{2}$ ) is:

Ans
X 1.124 .5
X2. 103.5

- 3. 115.5
$\times 4.98 .5$
Q. 24 What is the ratio of the mean proportional between 1.2 and 10.8 to the third proportional to 0.2 and 1.2 ?

Ans
X1.1:3
2. $1: 2$

X 3. 2:1
X4.3:1
Q. 25 If $a+b+c=11$ and $a b+b c+c a=15$, then what is the value of $a^{3}+b^{3}+c^{3}-3 a b c$ ?

Ans
X 1.368

- 2.836

X 3. 386
+4. 638

Section : General Awareness
Q. 1 Who among the following rulers belonged to the Tuluva dynasty?

Ans
1 1. Pushyamitra Sunga
2. Vishnuvardhana
3. Simha Vishnu
4. Krishnadeva Raya
Q. 2 Where was the first hot air balloon wildlife safari launched in India in December 2020?

Ans
X 1. Palamu Tiger Reserve
< 2. Ranthambore Tiger Reserve

- 3. Bandhavgarh Tiger Reserve

4. Pilibhit Tiger Reserve

## Q. 3 Which of the following quantities is measured using a torsion balance?

Ans $\times$ 1. Magnetism
> 2 . Charge
X 3. Pressure
4. Force
Q. 4 Who among the following cricketers won the Sir Garfield Sobers Award for 'ICC Male Cricketer of the Decade' in December 2020?
Ans
X 1. Steve Smith
2. Mahendra Singh Dhoni

- 3. Virat Kohli

4. Rashid Khan
Q. 5 Who among the following were awarded the Nobel Prize in Chemistry 2020 for their exemplary work in genome editing?
Ans

- 1. Jennifer A Doudna and Emmanuelle Charpentier

X 2. George P Smith and Sir Gregory P Winter
X 3. Gerard Mourou and Donna Strickland
X 4. James P Allison and Tasuku Honjo

## Q. 6 Which of the following crops is grown throughout the year in the southern states of India?

Ans
\$1. Sorghum
< 2. Maize
3. Finger millet
4. Rice
Q. 7 Who among the following travellers came to India from Uzbekistan in the 11th century?

Ans 1. Abdur Razzaq Samarquandi
(2. Francois Bernier

X 3. Ibn Battuta
4. Al-Biruni

## Q. 8 Which of the following states was NOT formed in the year 2000?

Ans $\quad$ 1. Jharkhand
2. Telangana

X 3. Uttarakhand
4. Chhattisgarh
Q. 9 Which of the following songs do the peasants of Rajasthan sing while working in fields?

Ans

- 1. Pankhida

X 2. Pandavani
> 3. Chhakri
X4. Barhamasa
Q. 10 The total population per net cultivated area of a country refers to its $\qquad$ .

Ans

- 1. physiological density

2 2. population density
( 3. agricultural density
(4. livestock density
Q. 11 Who among the following won a bronze medal at the World Athletics Championship in Paris in 2003?
Ans

1. Krishna Poonia
2. Seema Punia

X 3. PT Usha
4. Anju Bobby George
Q. 12 Which of the following soils is found in areas of heavy rainfall and high humidity?

Ans
X 1. Saline soil

- 2. Peaty soil
(3. Red soil

X 4. Yellow soil
Q. 13 An ambassador of which of the following countries was elected as the President of the United Nations Human Rights Council in January 2021?
Ans
Х1.Cuba
X 2. Libya

- 3 . Fiji

X4. Ghana
Q. 14 In which of the following states is the Shatrunjaya Hills located?

Ans

- 1. Gujarat

2. Andhra Pradesh
3. Madhya Pradesh
\$4. Karnataka
Q. 15 In which of the following years did the Reserve Bank of India liberalise the licensing policy for Urban Co-operative Banks?

Ans
< 2.1998
Х 3.1995
<4. 2001
Q. 16 The $\qquad$ is a three or four letter abbreviation that signifies the file type.
Ans

1. extension

Х 2 . search
X 3 . virus
X4.name
Q. 17 Which of the following books did the famous cricketer Sunil Gavaskar author?

Ans

1. Democracy's XI: The Great Indian Cricket Story
2. Runs 'n Ruins
3. Playing It My Way

- 4. Captain Cool
Q. 18 As per Union Budget 2020, the Government of India intends to double the country's milk processing capacity by the year $\qquad$ _.
Ans2. 2023
(3.20304. 2025
Q. 19 Which of the following ports is used to connect a computer to a wired network?

Ans

1. Universal serial bus port
2. Ethernet port

X 3. Parallel port
Х 4. Super-video port
Q. 20 Which of the following is a vector-borne disease?

Ans
X 1. Pneumonia
2. Malaria

X3.Mumps
X4. Cholera
Q. 21 Which of the following states launched India's and South-Asia's first blockchain-enabled rooftop solar trading platform in December 2020?
Ans

- 1. Uttar Pradesh

2. Gujarat
3. Rajasthan
(4. Madhya Pradesh
Q. 22 Who is the Governor of the state of Chhattisgarh as of May 2020?

Ans
\$1. Bhupesh Baghel

- 2. Anusuiya Uikey
( 3. Phagu Chauhan
(4. Ramesh Bais
Q. 23 Which of the following cells is NOT used in watches?

Ans
(1. Silver oxide cell
2. Mercury cell
3. Zinc air cell
4. Lead acid cell

## Q. 24 Where is the Rumi Darwaza located?

Ans

- 1. Lucknow
< 2. Gwalior
(3. Agra

X 4. Bhopal
Q. 25 In December 2020, the Chief Minister of $\qquad$ announced that India's biggest hockey stadium is being set up in the state.
Ans

1. Telangana

- 2

2. Odisha

X 3. West Bengal
(4.Andhra Pradesh

