| Exam Date | 09/12/2022 |
| :--- | :--- |
| Exam Time | 9:00 AM - 10:00 AM |
| Subject | Combined Graduate Level Examination Tier I 2022 |

Section: General Intelligence and Reasoning
Q. 1 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 conclusions logically follow(s) from the statements.
Statements:
All Cadbury are Nestle.
No Nestle is Amul.
Some Cadbury are Britannia.
Conclusions:
I. Some Nestle are Britannia.
II. No Amul is a Cadbury.
III. No Amul is Britannia.

Ans

1. Only conclusions I and II follow
< 2. Only conclusion I follows
X 3. Only conclusion II follows
2. Only conclusions I and III follow
Q. 2 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans

Q. 3 In the following question, four number pairs are given. In each pair the number on left side of $(-)$ is related to the number of the right side of $(-)$ with some Logic/Rule/Relation. Three pairs are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (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)

1. 5-23
2. 11 - 123
3. $9-83$
4. $7-51$
Q. 4 In the following question, select the missing number from the given series.

600, 565, 530, 495, 460,?
Ans
$\times 1.420$
< 2.428
(3.430
4. 425
Q. 5 Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.
8: 448:: 9 : ? :: 11: 847
Ans
$\times 1.576$
$\times 2.577$
3. 567
$\times 4.562$
Q. 6 Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)
Bull : Cow :: Gander : ?
Ans
$\times 1$. Doe
2. Goose
3. Mare
4. Hen
Q. 7 Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

Ans

1. UVZ
2. MNP
3. XYA
4. QRT
Q. 8 Select the figure that will come next in the following figure series.


Ans

Q. 9 If $L+M$ means that $L$ is the father of $M, L \times B$ means that $L$ is the mother of $M, L-M$ means that $L$ is the brother of $M$ then which of the following expression shows that $A$ is the paternal uncle of $B$ ?

Ans
$\times 1 . A-C+B$
2. $A-B+C$
3. $A+B-C$
4. $A-B \times C$

## Q. 10 Which of the following letter clusters will replace the question mark (?) and complete

 the following letter cluster series?DW, FU, IR, NM, UF, ?
Ans
X 1.FV
X 2. GU
3. FU

X 4.EV
Q. 11 In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

## Statements:

I. All T are G.
II. All G are H .

Conclusions:
I. All T are H.
II. No $G$ is $T$.
III. All H are G.

Ans
$\times 1$. All conclusion follows
$X$ 2. Only conclusion III follows
3. Only conclusion I follows
4. Only conclusion II follows
Q. 12 Which two signs and two numbers should be interchanged in the following equation to make it correct?
$\mathbf{4 0 - 2 2 0} \div \mathbf{2 \times 2 + 2 0} \mathbf{~} \mathbf{2 0 0}$
Ans

1. 20 and 40 , + and -
2. 2 and $20, \div$ and +

X 3. 220 and $40,+$ and $\times$
4. 220 and $20, \div$ and $\times$
Q. 13 Which two signs should be interchanged to make the given equation correct? 7 * $9+3 \div 7-3=25$
Ans

1. $\div$ and *
2. $\div$ and +
3.     + and *
4.     + and -
Q. 14 After interchanging the given two numbers and two signs what will be the values of equation (I) and (II) respectively?
$x$ and,- 4 and 2
I. $7-5 \times 4+8 \div 2$
II. $\mathbf{7 \times 3 - 8 \div 2 + 4}$

Ans $\quad \times 1.25,23$
X 2.37,25
3.35,3
-4.41,47
Q. 15 Select the correct mirror image of the given figure when the mirror is placed at ' $A B^{\prime}$ ' as shown.


Ans


## Q. 16 Today is Friday. After 55 days, it will be:

Ans $\quad \times 1$. Tuesday
2. Thursday

X 3. Wednesday
4. Monday
Q. 17 Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
$(19,23,4)$
(13, 27, 14)
Ans

1. $(25,26,2)$
2. $(25,27,4)$
3. $(25,27,2)$
4. $(25,26,4)$
Q. 18 A-B means ' $A$ is the mother of $B$ '
$A$ * $B$ means ' $A$ is the sister of $B$ '
$A \% B$ means ' $A$ is the husband of $B$ '
$A \$ B$ means ' $A$ is the son of $B$ '
If $Z^{*} A \$ B-C$ * $\%$, then how is $Z$ related to $E$ ?
Ans
5. Sister
6. Wife3. Husband's sister
7. Mother-in-law

Q. 19 Select the option figure in which the given figure ( X ) is embedded as its part (rotation is NOT allowed).
(8)


Ans
$\times 1$

$<2$.

$\checkmark 3$

$\times 4$.

Q. 20 Select the set in which the numbers are related in the same way as are the numbers of the following set.
(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)
(182, 170, 97)
$(156,128,92)$
Ans
X 1. $(156,194,79)$
2. $(121,102,61)$
3. $(98,74,54)$
4. $(138,130,73)$
Q. 21 A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
NTSM, QNBA, THKO, WBTC, ?
Ans
$\times$ 1. NMOP
2. ZVCQ

X 3. RMNO
4.ZYQR
Q. 22 In a certain code language, 'ANIMISM' is written as 'INAMMSI' and 'EAGERLY' is written as 'GAEEYLR'. How will 'FULFILL' be written in that language?
Ans
< 1. LUFFLIL
2. LUFFLL

X 3. LUFFIIL
4. LUFLFLI
Q. 23 Select the word-pair that best represents a similar relationship to the one expressed in the given pair of words.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Carpenter : Hammer
Ans

1. Fisherman : Net
2. Butcher : Meat
3. Mechanic: Car
4. Nurse : Patient
Q. 24 Which figure should replace the question mark (?) if the series were to be continued?


Ans

Q. 25 In a certain code language, 'FELLOW' is written as 'NGHYQN' and 'PURPLE' is written as 'TWRGNR'. How will 'SUPRISED' be written in that language?
Ans

1. UWRTKUGF
2. KUGFUWRT
< 3. TRUWFGUK
3. TRWUFGUK

Section: General Awareness
Q. 1 Aid or auxiliary to trade includes which of the following?

Ans
X 1. Production
$\times 2$. Selling
X 3. Buying

- 4. Warehousing


## Q. 2 Nrityabharati Kathak Dance Academy in Pune was established by which of the

 following Sangeet Natak Akademi Awardees?Ans

1. Rohini Bhate

X 2. Roshan Kumari
X 3. Kumidini Lakhia
X 4. Sitara Devi
Q. 3 The Government of $\qquad$ launched Mukhyamantri Chaa Srami Kalyan Prakalpa Scheme for tea garden workers.

Ans
X 1. Kerala
2. Assam
3. Tripura
4. Andhra Pradesh
Q. 4 The world's longest river the Nile flows through which of the following continent?

Ans

1. Africa
2. North America
$X$ 3. South America
$X$ 4. Europe
Q. 5 Taking cognizance of the pandemic situation in 2021, the Ministry of Ayush, Gol decided the message of International Day of Yoga 2021 celebration will be:
Ans
X 1. Yoga at Home
3. Be with Yoga, Be at Home!
$X$ 3. Yoga at Home, Yoga with Family!
X 4. Home Yoga and Yoga Home
Question ID: $\mathbf{2 6 4 3 3 0 6 4 2 8 2}$
Status : Answered
Chosen Option : $\mathbf{3}$
Q. 6 Which of the following is NOT a capital expenditure?

Ans $\quad \times 1$. Loans and advances by the central government
X 2. Expenditure on the acquisition of land
3. Investment in shares
4. Subsidies payment
Q. 7 Padma Shri awardee, Gulabo Sapera is a $\qquad$ dancer of Rajasthan.
Ans
X 1. Bhavai
2. Terah Taali
3. Kalbelia
4. Ghoomar

Question ID : 26433064305
Status : Not Answered
Chosen Option: --
Q. 8 The region of Ganga Brahmaputra basin lies in $\qquad$ .
Ans
X $1.10^{\circ} \mathrm{N}$ to $10^{\circ} \mathrm{N}$ latitude

- 2. $30^{\circ} \mathrm{N}$ to $50^{\circ} \mathrm{N}$ latitude

X $3.5^{\circ} \mathrm{N}$ to $10^{\circ} \mathrm{N}$ latitude
4. $10^{\circ} \mathrm{N}$ to $30^{\circ} \mathrm{N}$ latitude
Q. 9 Which state government launched the Matrushakti Udaymita Scheme to provide support to women entrepreneurs?

Ans
X 1. Madhya Pradesh
X 2. Rajasthan
3. Haryana
4. Gujarat
Q. 10 Which of the following revolutionaries stated during his trial that "he did not wish to glorify the cult of the bomb and pistol but wanted a revolution in society"?

Ans

1. Bhagat Singh
2. Surya Sen
3. Sachindra Nath Sanyal
4. Barindra Kumar Ghosh
Q. 11 Abhinav Bharat Society was a secret society of revolutionaries. It was established in
$\qquad$
Ans
5. Bombay Presidency

X 2. United Provinces
3. Punjab Province
4. Calcutta Presidency
Q. 12 The British physicist named Paul Dirac was known to have introduced the concept of _ in 1930.
Ans

1. thermal ionisation
$X$ 2. cosmic radiation
X 3. nuclear model of atom
2. antiparticle
Q. 13 Which of the following was awarded to Bharatnatyam dancer, Priyadarshini Govind in 1998?

Ans
X 1. Tagore Ratna
2. Kalaimamani
3. Nritya Choodamani
4. Kalidas Samman
Q. 14 Which special order of the courts means "arrested person should be presented before the court"?

Ans

1. Habeas corpus

X 2. Mandamus
X 3. Certiorari
4. Quo warranto
Q. 15 A judge of the Supreme Court can be removed only on the grounds of $\qquad$ -.

Ans
X 1. disrespect of the Constitution
2. proven misbehaviour or incapacity
$X$ 3. murder charges
X 4. lack of knowledge
Question ID : $\mathbf{2 6 4 3 3 0 6 4 8 4 5}$
Status : Answered
Chosen Option : $\mathbf{2}$

## Q. 16 Which of the following has discovered the sea route to India $1498 ?$

Ans $\times$ 1. Clive Lord
$X$ 2. Henry the sailor
3. Captain Hudson
4. Vasco Da Gama
Q. 17 Which of the following is the first 'smoke-free state' in India?

Ans
X 1. Rajasthan
2. Uttarakhand
3. Bihar
4. Himachal Pradesh

Question ID : 264330105293
Status: Answered
Chosen Option: $\mathbf{4}$
Q. 18 What is the distance of the penalty mark from the midpoint of the goal post in football?

Ans $\times 1.10 \mathrm{~m}$
$\times 2.15 \mathrm{~m}$

* 3.11 m
4.13 m
Q. 19 Which of the following type of house remains were found in Mehrgarh site of Harappan civilization?

Ans
X 1. Triangular or circular
X 2. Rectangular or circular
3. Square or rectangular
4. Circular or square
Q. 20 In 1893, which Swiss chemist was the first to understand the molecular structures of inorganic substances - chemical compounds that do not contain carbon?
Ans

1. Alfred Werner
2. William Ramsay
3. George de Hevesy
4. John Dalton
$\qquad$ gas is used for the manufacturing of bleaching powder.
Ans
. Nitrogen
X 2. Sulphur
X 3. Oxygen
5. Chlorine
Q. 22 Which of the following dance forms is associated with the state of Himachal Pradesh?

Ans
X 1. Rauf
2. Dhaman
3. Phagua
4. Koli
Q. 23 In which of the following groups, are all plants monoecious?

Ans

1. Maize, Papaya, Poplar and Rose
2. Papaya, Poplar, Rose and Fig
3. Maize, Cucumber, Fig and Melon
4. Cucumber, Papaya, Poplar and Rose
Q. 24 The annual growth rate percentage population in India gradually started declining in the year $\qquad$ .

Ans
$\times 1.1991$
2. 1981
3. 1971
4. 1951
Q. 25 In which year Gay Lussac's Law of Gaseous Volumes was given by Gay Lussac?

Ans
$\times 1.1812$
2. 1800
3. 1808
4. 1802
Q. $1 \cos ^{3} 60-\cos ^{3} 240-\cos ^{3} 360=$ $\qquad$ .

Ans

1. $\frac{-3}{4}$
2. $\frac{-7}{5}$
3. $\frac{-3}{5}$
4. $\frac{-9}{7}$
Q. 2 If $x+y+z=0$, then the value of $\frac{x^{2}}{y z}+\frac{y^{2}}{z x}+\frac{z^{2}}{x y}$ is:

Ans
$\times 21$
$\times 3.0$
4. 2
Q. 3 Three candidates $\mathrm{P}, \mathrm{Q}$ and R participated in an election. P got $35 \%$ more votes than Q , and $R$ got $15 \%$ more votes than $Q$. P overtook R by $\mathbf{2 , 4 1 2}$ votes. If $90 \%$ voters voted and no invalid or illegal votes were cast, then what was the number of voters in the voting list?
Ans

1. 46,900
2. 42,800
3. 42,210
4. 48,500
Q. 4 Two cities $A$ and $B$ are 135 km apart on a straight track. One car starts from $A$ at 8 a.m. and travels towards B at $25 \mathrm{~km} / \mathrm{h}$. Another car starts from B at $9 \mathrm{a} . \mathrm{m}$. and travels towards A at a speed of $30 \mathrm{~km} / \mathrm{h}$. At what time will they meet?
Ans
5. 11 a.m.
6. 10 a.m.
7. 10.45 a.m.
8. 11.30 a.m.
Q. 5 Three successive discounts of $10 \%$ is equivalent to a single discount of:

Ans
. $27.1 \%$

- 2. $19.0 \%$

X 3. $25.1 \%$
4. $26.2 \%$
Q. 6 If PT is a tangent at T to a circle whose centre is O and $\mathrm{OP}=\mathbf{1 7} \mathrm{cm}$ and $\mathrm{OT}=8 \mathrm{~cm}$, find the length of the tangent segment PT.
Ans
1.13 cm
2. 14 cm
3. 16 cm
4. 15 cm

Q. 7 The LCM of 96, 136 and 504 is:

Ans

- 1.34272

2. 36548
$\times 3.25872$
3. 28564
Q. 8 A dealer sells his goods at a profit of $20 \%$, but uses a weight of 800 g in place of a kg weight. Find his real gain percentage.
Ans
X $1.40 \%$

- 2. $44 \%$
3.50\%

4. $42 \%$
Q. 9 The circumference of the two circles is 264 cm and 396 cm respectively. What is the difference between their radii?

Ans
X 1.25 cm

- 2.32 cm
$\times 3.16 \mathrm{~cm}$
4.21 cm
Q. 10 In triangle $\mathrm{ABC}, \angle \mathrm{B}=90^{\circ}$, and $\angle \mathrm{C}=45^{\circ}$. If $\mathrm{AC}=2 \sqrt{2} \mathrm{~cm}$, then the length of BC is:

Ans
$X 1.3 \mathrm{~cm}$

- 2.2 cm
$\times 3.1 \mathrm{~cm}$
X 4.4 cm
Q. 11 In how much time will a sum of Rs. 10200 amounts to Rs. 19125 at the rate of 12.5 percent per annum at simple interest?
Ans
X 1.6 years
$\times 2.5$ years
$\times 3.8$ years4.7 years
Q. 12 The import and export of a country (in lakhs rupees) during a certain period of time is given in the following bar-graph.

Read the bar-graph carefully and answer the following question.


During which year the difference between import and export is minimum?
Ans

- 1. 2018-19

2. 2019-20
3. 2016-17

- 4. 2017-18
Q. 13 If $5 \sin ^{2} A+3 \cos ^{2} A=4,0<A<90^{\circ}$, then what is the value of $\tan A$ ?

Ans
$\times 1.0$
$\times 2.3$

- 3.1
$\times 4.2$
Q. 14 In a hotel, there are 120 staff members. Their average weight is 62.5 kg . When one of the staff members leaves the hotel, the average weight is reduced by $\mathbf{2 5 0} \mathbf{~ g}$. Find the weight of the staff member who left the hotel.
Ans
Х 1.64 .25 kg
< 2.78 .75 kg
3.90 .50 kg
4.92 .25 kg
Q. 15 Anshu, Swati and Rajni can finish a work in 4 days if they work together. However,

Anshu alone will take 9 days to complete the work, and Swati alone will complete the work in 12 days. How many days will Rajni alone take to complete the work?

Ans

1. 18
(2. 12
< 3.24
4.16
Q. 16

The value of $\frac{(p-q)^{3}+(q-r)^{3}+(r-p)^{3}}{12(p-q)(q-r)(r-p)}$, where $p \neq q \neq r$, is equal to:
Ans
×1. $\frac{1}{9}$
×2. $\frac{1}{3}$
-3. $\frac{1}{4}$
x4. $\frac{1}{2}$
Q. 17 Calculate the mean from the following table.

| Scores | Frequencies |
| :---: | :---: |
| $0-10$ | 2 |
| $10-20$ | 4 |
| $20-30$ | 12 |
| $30-40$ | 21 |
| $40-50$ | 6 |
| $50-60$ | 3 |
| $60-70$ | 2 |

Ans

1. 34.2
2. 33.4
3. 32.6
4. 35.8
Q. 18 The table given below shows the number of books sold by 7 shops.

| Shops | Books |
| :---: | :---: |
| A | 34 |
| B | 48 |
| C | 50 |
| D | 100 |
| E | 64 |
| F | 110 |
| G | 16 |

What is the difference between number of books sold by A and B together and the number of books sold by $E$ and $F$ together?
Ans
$\times 1.82$
$\times 2.96$
3. 92
4. 174
Q. 19 ABC is an isosceles triangle such that $\mathrm{AB}=\mathrm{AC}, \angle \mathrm{ABC}=55^{\circ}$, and AD is the median to the base BC . Find the measure of $\angle B A D$.
Ans
$\times 1.50^{\circ}$
$\times 2.55^{\circ}$
3. $35^{\circ}$
4. $90^{\circ}$
Q. 20 What is the value of $(a+b)^{3}-a^{3}+b^{3}$ ?

Ans
X1. $-3 a b(a-b)+2 b^{3}$
2. $3 a b(a+b)+2 b^{3}$
3. $3 a b(a-b) b^{3}$
4. $-3 a b(a+b)+b^{3}$
Q. 21 What is the value of $\sin 28^{\circ} \sin 35^{\circ} \sin 45^{\circ} \sec 62^{\circ} \sec 55^{\circ}$ ?

Ans
$\times 1.2$
2. $\frac{1}{\sqrt{2}}$
3. $\sqrt{2}$
4. $1 / 2$
Q. 22

The third proportional of $a$ and $\frac{b^{4}}{4 a}$ is:

Ans
$\times 1 \cdot \frac{b^{8}}{16 a^{2}}$
X2. $\frac{b^{8}}{8 a^{2}}$
X 3. $\frac{\mathrm{b}^{8}}{8 \mathrm{a}^{3}}$
4. $\frac{b^{8}}{16 a^{3}}$
Q. 23 A solid cone of height 42 cm with diameter of its base 42 cm is cut out from a wooden solid sphere of radius $\mathbf{2 4} \mathrm{cm}$. Find the percentage of wood wasted correct to two places of decimal.
Ans
X $1.75 .56 \%$
2. $56.65 \%$
3. $66.50 \%$

X 4.67.50\%
Q. 24 The largest 5-digit number that is exactly divisible by 88 is:

Ans

1. 99968
2. 99689
$\times 3.68999$
3. 66698
Q. 25 The following table shows the marks of three students in different subjects. Marks in all subjects are from 100.

| Name | Maths | Hindi | Science | English | IT | Sanskrit |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ajay | 73 | 78 | 81 | 88 | 77 | 70 |
| Sudhir | 71 | 78 | 84 | 77 | 70 | 71 |
| Suman | 72 | 77 | 82 | 92 | 71 | 72 |

In which of the following subjects did the students perform the best in aggregate?
Ans
X 1. Hindi
X 2. IT
3. English
4. Science

Section : English Comprehension

## Q. 1 Select the most appropriate option to complete the given sentence.

The news of his arrest spread rapidly in every $\qquad$ of the city.
Ans
$\times 1$. rack and ruin
2. ins and outs
3. nook and corner
4. life and soul

## Q. 2 Select the correct passive form of the given sentence.

A stranger buys flowers for the dead man's grave.
Ans
$X 1$. Flowers is bought by a stranger for the dead man's grave.
X 2. Flowers were bought by a stranger for the dead man's grave.
3. Flowers have been bought by a stranger for the dead man's grave.
4. Flowers are bought by a stranger for the dead man's grave.
Q. 3 Select the correct direct form of the given sentence.

He said that he was sorry for all that.
Ans

1. "I am sorry for all then." He says.

X 2. "I was sorry for all this." He said.3. "I am sorry for all that." He says.
4. "I am sorry for all this." He said.
Q. 4 Select the most appropriate synonym of the underlined word in the given sentence.

I could not sleep because I was too eager, so I got up early and dressed.
Ans

1. Apathetic
2. Tensed
$\times$ 3. Satisfied
3. Exhilarated
Q. 5 Select the INCORRECTLY spelt word in the following sentence.

The ruthless story of Pankaj's assassination in the Carribean islands is thrilling to read.
Ans
$X$ 1. Thrilling
2. Carribean
3. assassination
4. ruthless
Q. 6 Select the option that expresses the given sentence in passive voice.

The sewage water smells foul.
Ans
$X 1$. Foul is smelt by the sewage water.
$\times 2$. The sewage water is foul when it is smelt.
X 3. The sewage water has a foul smell.
4. Passive construction is not possible.
Q. 7 Select the most appropriate option to fill in the blank.

The activist is working really hard and was determined to $\qquad$ for this cause.
Ans
$X$ 1. have feet of clay
X 2. blow his own trumpet

* 3. move heaven and earth

X 4 . keep the wolf from the door
Q. 8 Select the INCORRECTLY spelt word in the following sentence.

Being a conscentious and single-minded person, Tubai has become inquisitive and perseverant in exploring young talents.
Ans

1. inquisitive
2. perseverant
3. conscentious
4. exploring
Q. 9 Select the option that can be used as a one-word substitute for the given group of words.
A battle or anything involving or causing much bloodshed
Ans
5. Autocracy
6. Sanguinary
$X$ 3. Ineffable
7. Redtapism
Q. 10 Rearrange the parts of the sentence in correct order.

In addition to
P. primary threat to the Kemp's ridley sea turtle
Q. capture in fishing gear like shrimp
R. threatened nesting habitat, accidental
S. trawls and gill nets continues to be the

Ans
X 1. SPQR
X 2. SQRP
3. RQSP
<4.PQSR

## Q. 11 Select the most appropriate synonym of the underlined word.

The heavy and abundant rainfall has a major role to play in the production of crops.
Ans
$X$ 1. Cyclonic
2. Intermittent
3. Ample
4. Prolonged
Q. 12 Select the most appropriate option that can substitute the underlined segment in the given sentence.
Computers and mobile phones have become a necessary and important part of our lives.

Ans

1. a requisite
2. an essential
$X$ 3. a required
$\times 4$. a needed

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

Truth can never be concealed from anyone.
Ans
X 1. Separated
$\times 2$. Borrowed
3. Disguised
4. Snatched
Q. 14 Select the most appropriate option that can substitute the underlined segment in the given sentence.

He will talk about nothing but films.
Ans
$X$ 1. was talking at
$\times 2$. is talking in
3. shall talking of
4. talks about
Q. 15 Parts of the following sentence have been given as options. Select the option that contains a grammatical error.

She is quiet a generous woman / to have donated / such a large amount / for the flood affected people.
Ans
$X$ 1. to have donated
2. for the flood affected people.
$X$ 3. such a large amount
4. She is quiet a generous woman
Q. 16 Select the most appropriate option to fill in the blank. He is diligent, therefore he will $\qquad$ .
Ans

1. remain
2. succeed
3. fail
4. fall


## Q. 17 Select the sentence with the appropriate use of preposition.

Ans $\times 1$. He arrived to Sunday morning.
$\times 2$. He arrived at Sunday morning.

- 3. He arrived in Sunday morning.

4. He arrived on Sunday morning.
Q. 18 Select the most appropriate option to substitute the underlined segment in the given sentence.
After a prolonged discussion, Gayatri got a permission from her parents to study law.
Ans
$\times$ 1. got the permission
5. got proper permission
6. got permission
7. got her permission

## Q. 19 Select the most appropriate meaning of the underlined idiom that can be substituted in

 the following sentence.I begged him to reconsider my application, but he put his foot down.
Ans
$X$ 1. stamped his foot down
$X$ 2. agreed to reconsider
3. refused to yield
4. did not run
Q. 20 Select the most appropriate ANTONYM of the given word.

Care
Ans
X 1. Concern
2. Disregard

X 3. Worry
4. Attention


## 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.

Child marriage is a kind of right exploitation as to (1) $\square$ in practically all areas, the kid must be at least 18 years old. As a result, marrying off a kid before they reach the age of (2) $\qquad$ is an exploitation of their right. The long-standing (3) $\qquad$ of child marriage is one of the most prevalent reasons of child marriage. The elders want to plan for the (4) $\qquad$ of their family, so they marry off the children to establish their position. Most crucially, poor individuals marry children to get rid of their debts, taxes, dowry, and other (5) $\qquad$ -.

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

Ans
< 1. bind
X 2. mature
3. marry
<4. vote

## 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.

Child marriage is a kind of right exploitation as to (1) $\qquad$ in practically all areas, the kid must be at least 18 years old. As a result, marrying off a kid before they reach the age of (2) $\qquad$ is an exploitation of their right. The long-standing (3) $\qquad$ of child marriage is one of the most prevalent reasons of child marriage. The elders want to plan for the (4) $\qquad$ of their family, so they marry off the children to establish their position. Most crucially, poor individuals marry children to get rid of their debts, taxes, dowry, and other (5)

SubQuestion No : 22

## Q. 22 Select the most appropriate answer to fill in blank 2.

Ans $\times$ 1. restrain
2. adult
3. consent
4. growth

## 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.

Child marriage is a kind of right exploitation as to (1) $\square$ in practically all areas, the kid must be at least 18 years old. As a result, marrying off a kid before they reach the age of (2) $\qquad$ is an exploitation of their right. The long-standing (3) $\qquad$ of child
marriage is one of the most prevalent reasons of child marriage. The elders want to plan for the (4) $\qquad$ of their family, so they marry off the children to establish their position. Most crucially, poor individuals marry children to get rid of their debts, taxes, dowry, and other (5) $\qquad$ -

SubQuestion No: 23
Q. 23 Select the most appropriate answer to fill in blank 3.

Ans

1. custom

X 2. taboo
$X$ 3. faith
$\times 4$. hassle

## 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.

Child marriage is a kind of right exploitation as to (1) $\qquad$ in practically all areas, the kid must be at least 18 years old. As a result, marrying off a kid before they reach the age of (2) $\qquad$ is an exploitation of their right. The long-standing (3) $\qquad$ of child marriage is one of the most prevalent reasons of child marriage. The elders want to plan for the (4) $\qquad$ of their family, so they marry off the children to establish their position. Most crucially, poor individuals marry children to get rid of their debts, taxes, dowry, and other (5)

SubQuestion No : 24

## Q. 24 Select the most appropriate answer to fill in blank 4.

Ans $\times 1$. evolution
2. extension
3. coalition
4. creation

## 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.

Child marriage is a kind of right exploitation as to (1) $\square$ in practically all areas, the kid must be at least 18 years old. As a result, marrying off a kid before they reach the age of (2) $\qquad$ is an exploitation of their right. The long-standing (3) $\qquad$ of child marriage is one of the most prevalent reasons of child marriage. The elders want to plan for the (4) $\qquad$ of their family, so they marry off the children to establish their position. Most crucially, poor individuals marry children to get rid of their debts, taxes, dowry, and other (5) $\qquad$ -

SubQuestion No: 25
Q. 25 Select the most appropriate answer to fill in blank 5.

Ans
$X$ 1. evils
2. activities
3. obligations

X 4. mitigations

| Exam Date | $09 / 12 / 2022$ |
| :--- | :--- |
| Exam Time | $11: 45 \mathrm{AM}-12: 45$ PM |
| Subject | Combined Graduate Level Examination Tier I 2022 |

Section: General Intelligence and Reasoning
Q. 1 In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
Statements:
I. All A are M.
II. No $M$ is $B$.

Conclusion:
I. Some M are A.
II. Some B are M.
III. Some $A$ are B.

Ans
$X$ 1. Both conclusions I and III follows
2. Both conclusions II and III follows
3. Only conclusion I follows
4. Only conclusion II follows
Q. 2 Select the set in which the numbers are related in the same way as are the numbers of the following set.
(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).
(56, 22, 26)
$(34,20,18)$
Ans

1. $(78,54,44)$
2. $(23,8,10)$
3. $(58,16,21)$
4. $(45,12,33)$
Q. 3 Which letter cluster will replace the question mark (?) to complete the given series? CBOM, FCQN, ?, LEUP, OFWQ
Ans
X 1. HDSO
5. IDSO
6. IDSP

X 4. IDTO

## Q. 4 Select the option that is related to the third word in the same way as the second word

 is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)Dentist : Teeth :: Dermatologist : ?
Ans

1. Bones
2. Blood vessels

X 3. Blood
4. Skin
Q. 5 Select the set in which the numbers are related in the same way as are the numbers of the following set.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(21, 225, 9)
$(12,49,2)$
Ans

1. $(14,64,2)$

X 2. $(11,18,7)$
3. $(15,54,3)$
4. $(13,81,6)$
Q. 6 Four different positions of the same dice are shown, the six faces of which are numbered 1 to 6 . Select the number that will be on the face opposite to the one showing ' 3 '.


Ans
$\times 1.5$
$\times 2.6$
$\times 3.1$
4. 2

Q． 7 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below．

## PNe32YCA <br> м

Ans
bИ6 3 Ј Y C $\forall$
bИe 3 乙人C $\forall$
bИ635人C
× ${ }^{4}$ N635人C

Q． 8 In a certain code language，＇ADAPTATION＇is written as＇DAPAATITNO＇，‘SKATEBOARD＇
is written as＇KSTABEAODR＇．How will＇LIGHTBOARD＇be written in that language？
Ans
$X$ 1．ILHGBATODR
2．ILHGBTAODR
X 3．ILHGBTOADR
4．ILHGTBAODR

Q． 9 In a certain code language，＇SHIRTS＇is written as＇LKVVWU＇and＇KURTAS＇is written as＇UXNVDW＇．How will＇FABRIC＇be written in that language？
Ans
X 1．EELBLU
2．EDIFLU
3．DEIGLV
4．EDIGLU

Q． 10 By interchanging the given two signs and numbers which of the following equation
will be not correct？

+ and $\times, 5$ and 4
l． $4+8 \times 5-7 \div 1=37$
II． $5 \times 3-4+6 \div 2=-8$
Ans
X 1 ．Only II
2．Neither I nor II
X 3．Only I
4．Both I and II
Q. 11 If $A \times B$ means that $A$ is the mother of $B, A-B$ means that $A$ is the father of $B, A \div B$ means that $A$ is the sister of $B$, then which of the following expression shows that $P$ is the paternal grandmother of $R$ ?
Ans
$X 1 . P \div R-Q$
$X 2 . P \times Q \div R$
$X 3 . Q \times P-R$

4. $P \times Q-R$
Q. 12 Which number will replace the question mark (?) in the following series?
$3,13,53,213$, ?, 3413
Ans
X 1.1053
5. 853
$\times 3.953$
6. 753
Q. 13 Select the option figure in which the given figure $(\mathrm{X})$ is embedded as its part
(rotation is NOT allowed).

(X)

Ans

${ }^{3}$

$\times 4$

Q. 14 Select the odd group of numbers. (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. (137-142-147)
2. (117-122-129)

X 3. (103-108-113)
$\times$ 4. (131-136-141)
Q. 15 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 conclusions logically follow(s) from the statements.

Statements:
Some clowns are artists.
All artists are smart.
All smarts are rich.
Conclusions:
I. All artists are rich.
II. Some clowns are smart.
III. All clowns are artists.

Ans

1. All conclusions follow.
2. Both conclusions II and III follow.
3. Both conclusions I and II follow.

X 4. Both conclusions I and III follow.
Q. 16 Which two signs and two numbers should be interchanged in the following equation to make it correct?
$\mathbf{6 0 \times 3 + 6 6 0 \div 6 - 2 0 = 2 9 0}$
Ans

1. 6 and $660, \times$ and $\div$
2. 20 and $6,+$ and -
3. 20 and $60,+$ and $\times$
4. 20 and $660,+$ and $\div$
Q. 17 Select the option that represents the correct order of the given words as they would appear in an English dictionary.
1- Perpend
2- Perplex
3- Pernicious
4- Perpetrate
5- Perpetual
Ans
X 1.3,1,5, 4, 2
X 2.1,3,5, 4, 2
X 3.1,3,4,5,2

- $4.3,1,4,5,2$
Q. 18 Which two signs should be interchanged to make the given equation correct?
$81+3 \div 9 * 5-12=60$
Ans

1. $\div$ and +

X 2. + and *
X $3 . \div$ and -
$\times 4$. + and -
Q. 19 Three of the following letter-clusters are alike in some manner and hence form a group. Which letter-cluster does not belong to that group?
Ans
< 1. MKOJ
2. URWQ
3. EQGP
4. XFWE
Q.20 A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
NMR, QFZ, TYH, WRP, ?
Ans
X 1. ZRS
2. ZKX

X 3. ZXY
4. ZAM

## Q. $21 A$ \& $B$ means ' $A$ is the wife of $B$ '

A \# B means ' $A$ is the sister of $B$ '
$A @ B$ means ' $A$ is the husband of $B$ '
$A \% B$ means ' $A$ is the father of $B$ '
If $S \& T \% R @ P \# Q$, then how is $S$ related to $P$ ?
Ans

1. Mother-in-law
2. Wife
3. Sister
4. Mother
Q. 22 Select the figure that will come next in the following figure series.


Ans

Q. 23 Select the option that is related to the third word in the same way as the second word is related to the first word.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)
Horse : Stable :: Hen : ?
Ans
$X$ 1. Farm
X 2. Pen

- 3. Coop

4. Shed
Q. 24 Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
$(76,75,1)$
(90, 87, 9)
Ans
X $1 .(100,85,125)$
5. $(56,48,64)$
$\times 3 .(16,4,57)$
X 4. $(87,56,900)$
Q. 25 Select the figure that will come next in the following series.


Ans

$\times 3$.

$\times 4$.


## Section: General Awareness

Q. 1 Buckminsterfullerene is a nanoparticle characterised by spherical geometry and a hollow interior which contains how many carbon atoms?

Ans

1. 60
$\times 2.50$
$\times 3.40$
-4.70
Q. 2 The pH of a neutral solution is $\qquad$ -.

Ans
1.7
$\times 2.0$
$\times 3.8$
4. 14

## Q. 3 Total deposits with Post Office savings organisations are included in which money supply aggregate?

Ans

$\times 2$. M3
3. M4
4. M2
Q. 4 India's first high-speed rail line is being constructed between (as of February 2022):

Ans
X 1. Mumbai-Pune
2. Delhi-Meerut
3. Mumbai-Ahmedabad
4. Delhi-Mumbai
Q. 5 Which of the following is NOT mentioned in the Indian Constitution as a Fundamental Duty?

Ans 1. To respect elders
$\times 2$. To promote harmony
X 3. To safeguard public property
4. To defend the country
Q. 6 Who among the following received the MS Subbulakshmi Award from the Tamil Nadu Eyal Isai Nataka Manram for the year 2020?
Ans $\quad \times 1$. Harini
2. Vani Jairam
3. L.R.Eswari
4. Saindhavi

## Q. 7 In August 2022, Uttarakhand Chief Minister named which cricketer as the brand

 ambassador of the state?Ans

1. Rishabh Pant
2. Hardik Pandya
3. Yuvraj Singh
$\times 4$. Virat Kohli
Q. 8 Police of which State/UT launched the Anubhuti-QR Code-based feedback system in February 2022?
Ans
4. Madhya Pradesh
5. Goa
6. Maharashtra
7. Delhi
Q. 9 The first session of All India Depressed Classes congress was held at $\qquad$ in 1930.

Ans

1. Nagpur
$X$ 2. Surat
$\times$ 3. Delhi
X 4. Kanpur
Q. 10 Which of the following cities did not hosted matches of FIFA U-17 Women's World Cup 2022 in India?

Ans

1. New Delhi
2. Navi Mumbai
3. Goa
4. Bhubaneswar (available as marketed surplus) was sold by the farmers in the market.
Ans
5. Rice and gram
$\times 2$. Wheat and maize
6. Wheat and rice
7. Wheat and gram
Q. 12 Which of the following rivers flow through a rift valley?

Ans
$X 1$. Son
X 2. Koshi3. Luni
4. Tapi
Q. 13 $\qquad$ unemployment occurs with changes in economic activity over the business
cycle.
Ans $\quad \times$ 1. Frictional
2. Cyclical
$X$ 3. Structural
4. Technological
Q. 14 Which of the following territories to the south and north were made part of the Chola kingdom by the successors of the ruler Vijayalaya?
Ans

1. Pallava and Chera
2. Pandyan and Pallava

X 3. Rashtrakuta and Chera
4. Vakataka and Satvahana
Q. 15 Sharodi Saikia is an exponent of which Indian classical dance form?

Ans 1. Sattriya
X 2. Kuchipudi
X 3. Bharatanatyam
4. Kathak
Q. 16 Kumkum Mohanty, an Odissi dancer received which of the following awards in 2005?

Ans
$X$ 1. Padma Bhushan
2. Kalidas Samman
3. Padma Shri

X 4. Padma Vibhushan
$\qquad$ is the fundamental structural unit of living organisms.

1. Organ system
$\times$ 2. Tissue
X 3. Organ
2. Cell
Q. 18 Which of the following commissions recommended that "the appointment of Governor should be non-partisan"?
Ans
3. Fazal Ali Commission

X 2. Rajmannar commission
3. Sarkaria commission
4. Mandal commission
Q. 19 The Ennum Ezhuthum scheme was launched by the Tamil Nadu government to ensure foundational Literacy and Numeracy by 2025. This scheme was launched to bridge the learning gap among students aged $\qquad$

1. between 10 and 15
2. under 5
3. under 8
4. between 6 and 10
Q. 20 Which act allows the government to confiscate the assets of newspaper in case of publishing anything "objectionable"?

Ans
(1. Ilbert Act, 1883
2. Vernacular Press Act, 1878
3. Media Act, 1883
4. Newspaper Act, 1855
Q. 21 Which of the following is a festival of merriment and heralds the Assamese New Year and the onset of spring?

Ans
X 1. Ali-ai-ligang
X 2. Me-Dum-Me-Phi
3. Bohag Bihu

X 4. Kati Bihu

## Q. 22 The lava plateaus are rich in which kind of soil?

Ans
X 1. Laterite soil
2. Alluvial soil

X 3. Red soil
4. Black soil
Q. 23 The T-20 Cricket World Cup for women was held in which country in 2020?

Ans $\times 1$. United Kingdom
$X$ 2. India
X 3. West Indies
4. Australia
Q. 24 Which of the following is known as ammonia?

Ans

1. $\mathrm{NH}_{3}$
$X$ 2. $\mathrm{PH}_{3}$
$X$ 3. $\mathrm{NO}_{3}$
X 4. $\mathrm{NO}_{2}$
Q. 25 Ashoka appointed $\qquad$ to solve the social problems in his region.
Ans $\times$ 1.samaharta
$X$ 2. nyayadheesh
X 3. amatya
2. dhamma mahamatta
Q. 1 The table given below shows the number of officers working in six companies.

| Companies | Officers |
| :---: | :---: |
| D | 400 |
| E | 500 |
| F | 600 |
| G | 350 |
| H | 450 |
| I | 800 |

What is the total number of officers working in all the companies?
Ans
$\times 1.2900$
$\times 2.2600$
3. 3400
4. 3100
Q. 2 If $\cos (A-B)=\frac{\sqrt{3}}{2}$, and $\cos (A+B)=0$, where $A$ and $B$ are positive acute angles and $A \geq B$, then the measures of $A$ and $B$ are:
Ans
$\times 1.80^{\circ}$ and $10^{\circ}$
2. $60^{\circ}$ and $30^{\circ}$
3. $70^{\circ}$ and $20^{\circ}$
$4.50^{\circ}$ and $40^{\circ}$
Q. 3 A person travels in a car at $40 \mathrm{~km} / \mathrm{h}$ for 3 hours, on a bike at $30 \mathrm{~km} / \mathrm{h}$ for 2 hours, and in a train at $80 \mathrm{~km} / \mathrm{h}$ for 5 hours. What is the average speed at which he travelled?
Ans
$\times 1.56 \mathrm{~km} / \mathrm{h}$
2. $60 \mathrm{~km} / \mathrm{h}$
3. $62 \mathrm{~km} / \mathrm{h}$
4. $58 \mathrm{~km} / \mathrm{h}$
Q. 4 If $x^{2}+\frac{1}{x^{2}}=66$, the value of $x-\frac{1}{x}$ is $\qquad$ -

Ans
X 1.10
2. 8
$\times 3.9$
$\times 4.6$
Q. 5 If $\tan A=\frac{2}{3}$, then find $\sin A$.

Ans

1. $\frac{1}{3}$
2. $\frac{2}{\sqrt{13}}$

- 3. $\frac{2}{3}$

X4. $\frac{3}{\sqrt{13}}$
Q. 620 men can finish a work in 220 days, but at the end of 90 days, 20 additional men are employed. In how many more days will the work be completed?
Ans
$\times 1.50$
<2. 60
万. 3.65
4. 55
Q. 7 If $\frac{\sin \theta+\cos \theta}{\sin \theta-\cos \theta}=\frac{3}{2}$, then the value of $\sin ^{4} \theta-\cos ^{4} \theta$ is:

Ans
$\times 1 . \frac{5}{12}$
2. $\frac{12}{13}$
3. $\frac{11}{12}$

X4. $\frac{5}{13}$
Q. 8 The length of the side of a cube is 2.8 cm . What is the volume of the largest sphere that can be taken out of the cube?
Ans

1. $11.50 \mathrm{~cm}^{3}$
2. $1.15 \mathrm{~cm}^{3}$
3. $11.55 \mathrm{~cm}^{3}$
4. $115 \mathrm{~cm}^{3}$
Q. 9 In a circle of radius 3 cm , two chords of length 2 cm and 3 cm lie on the same side of a diameter. What is the perpendicular distance between the two chords?
Ans
X1. $\frac{4 \sqrt{3}-3 \sqrt{2}}{2} \mathrm{~cm}$
5. $\frac{4 \sqrt{2}-3 \sqrt{3}}{2} \mathrm{~cm}$

X 3. $\frac{4 \sqrt{2}-3 \sqrt{3}}{3} \mathrm{~cm}$
X4. $\frac{4 \sqrt{2}-3 \sqrt{3}}{4} \mathrm{~cm}$
Q. 10

If $\mathrm{k}+\frac{1}{\mathrm{k}}=4$, then what is the value of $\mathrm{k}^{4}+\frac{1}{\mathrm{k}^{4}}$ ?
Ans
$\times 1.410$
$\times 2.192$
$\times 3.212$
-4. 194
Q. 11

The ratio of candidates passing and failing within the State.

| State | A | B | C |
| :---: | :---: | :---: | :---: |
| No. of Students <br> (in lakh) | 1.50 | 1.40 | 1.75 |


| State | Passing: Failing |
| :---: | :---: |
| A | $6: 5$ |
| B | $3: 4$ |
| C | $8: 2$ |

What is the number of passing students in State B?
Ans

1. 0.6 lakh

X 2. 0.7 lakh
3. 0.4 lakh
4. 0.3 lakh
Q. 12 The following pie chart shows the spending of a country on Swachh Bharat Abhiyan in various states during
a particular year. Total spending of the country $=1620$ crores
Study the pie chart and answer the following question.
CHARI SHOWING SPENDING OF A COUNTRY ON SWACHH BHARAI
ABHIYAN IN VARIOUS STATES DURING A PARTICULAR YEAR


How much less money is spent on state P than on state S ?
Ans
$\times 1.211$ crores
$\times 2.211 .2$ crores
X 3.205 crores
4. 210.6 crores
Q. 13 The LCM of 144,360 and 450 is:

Ans
$\times 1.4800$

- 2.3600
(3.7200
$\times 4.2400$
Q. 14 A shopkeeper offers a cash discount of $₹ 85$ first and then two successive discounts of $10 \%$ and $2 \%$ on the marked price of a fan. If the marked price of the fan is ₹ 1,285 , what is its selling price (in ₹)?
Ans

1. 1058.4
2. 1000.4
(3.958.4
3. 1100
Q. 15 Sofia sold an iPhone at the cost of Rs. 46,068 at a loss of $12 \%$. At what cost will she have to sell it to get a profit of $\mathbf{1 8 \%}$ ?
Ans
4. Rs.61,773
5. Rs. 65,773
(3.Rs.58,350
6. Rs. 52,350
Q. 16 If the number 123456789 is divided by 9 , then the remainder is:

Ans
7. 0
$\times 2.1$
$\times 3.2$
4.3
Q. 17 Menu and Daya travel from point A to B, a distance of 105 km , at speeds of $10 \mathrm{~km} / \mathrm{h}$ and $25 \mathrm{~km} / \mathrm{h}$, respectively. Daya reaches point B first and returns immediately and meets Menu at point C. Find the distance from point A to point $\mathbf{C}$.
Ans
$\times 1.35 \mathrm{~km}$
, 2.60 km
$\times 3.45 \mathrm{~km}$
4.62 km
Q. 18 If $36: 81:: X: 63$, what is the value of $X$ ?

Ans $\times 1.30$
$\times 2.31$
3. 28
4. 29
Q. 19 Triangle $A B C$ and $D E F$ are similar. If $A B=92 \mathrm{~cm}, B C=48 \mathrm{~cm}, A C=120 \mathrm{~cm}$, and the length of the smallest side of DEF is $\mathbf{2 0 0 ~ c m}$, then find the length of the longest side of triangle DEF?

Ans

1. 400 cm
2. 225 cm
3.350 cm
4.500 cm
Q. 20 In an election contested between two candidates, $15 \%$ of the total voters did not cast their votes and 100 votes got disqualified. The candidate who won the election won it by securing $45 \%$ of the total votes and won by a margin of 400 votes. Find the total number of voters?

Ans

1. 6,000
2. 3,600
3. 10,000
4. 3,500
Q. 21 Study the given pie-chart and answer the question that follows.

The pie-chart shows the expenditure by a family on different heads.


The angle formed by the sector representing education at the centre of the circle is:
Ans

1. $45^{\circ}$

- $2.54^{\circ}$
$\times 3.67^{\circ}$
$\times 4.60^{\circ}$
Q. 22 Two angles of a triangle are equal and the third angle measures $78^{\circ}$. What is the measure of each of the unknown angles?

Ans
$\times 1.50^{\circ}$

- $2.51^{\circ}$
$\times 3.49$
$\times 4.52^{\circ}$
Q. 23 What is the present value of Rs. 10,000 received in 2 years, if the interest rate is $\mathbf{1 2 \%}$ per year discounted semi-annually?
Ans
X 1. Rs. $7,020.94$
X 2. Rs. $7,920.90$

3. Rs. 7,920.94

X 4. Rs.7,900.94
Q. 24 A conical vessel (solid) is made of iron. Its base radius is $\mathbf{7 c m}$ and height is $\mathbf{1 5} \mathbf{~ c m}$. If the weight of the iron per cubic centimetre is 15 g , what is the weight of the vessel?
Ans
<1. 13.55 kg
2. 12.55 kg
3.14 .55 kg
4. 11.55 kg
Q. 25 If $p+q=6$ and $p q=4$, then what is the value of $3\left(p^{3}+q^{3}\right)$ ?

Ans $\times 1.512$
2. 144

X 3.288
4. 432

## Section : English Comprehension

Q. 1 Select the most appropriate synonym of the underlined word in the given sentence.

Try to be frugal with your hard-earned money.
Ans
X 1. Imprudent
2. Economical
3. Negligent
4. Honest

Q. 2 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.
A.lt is considered the biggest carnival event in the world.
B.Rio carnival is celebrated every year before lent.
C.A typical Rio carnival is filled with floats, revelers and adornments from numerous

Samba schools in Rio.
D.Every school is specially ordered to follow their parade entries.

Ans

1. BACD

- 2. ABDC

3. BCDA
4. ACDB

## Q. 3 Select the INCORRECTLY spelt word.

Ans

1. Laproscopy
2. Generate

X 3. Intermittent
4. Guise
Q. 4 The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

A book market / was been operated by some readers / in the street when / they reached there.
Ans
$X$ 1. they reached there.
2. A book market
3. was been operated by some readers
4. in the street when
Q. 5 Select the most appropriate collocating word to fill in the blank.

The girl has $\qquad$ chances winning the match.
Ans
$\times 1$. bountiful
2. high
$\times$ 3. light
$\times 4$. hefty
Q. 6 Select the most appropriate synonym of the underlined word.

No one was prepared for the environmental calamity that hit the town in the middle of the night.
Ans
X 1. Damage
2. Catastrophe

X 3. Degradation
<4. Stress
Q. 7 Select the option that can be used as a one-word substitute for the given group of words.

Something which is worth believing
Ans

1. Spurious
< 2. Expedient
2. Credible
3. Impending

## Q. 8 Select the option that expresses the given sentence in passive voice.

somebody is following us.
Ans

1. Somebody had been following us.
$\times 2$. Somebody is following us.
$X 3$. We have been following by somebody.
2. We're being followed by somebody.
Q. 9 The question below consists of a set of labeled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph. P. The division was usually based on temperature, which allows for different vegetation growth.
Q. Köppen's map used different colors and shades to represent the different climate zones of the world.
R. Wladimir Köppen developed a climate classification system at the end of the 19th century.
S. The system divides the world into five climate zones.

Ans

1. RSPQ
2. SPQR
3. QPSR

- 4.RPQS
Q. 10 Select the most appropriate meaning of the given idiom.


## Fair-weather friends

Ans

1. A person who is friends with you during the night
2. A person who is friends with you every day
3. A person whose friendship cannot be relied on in times
$X$ 4. A person who is friends with you in difficult times
Q. 11 Select the option that expresses the given sentence in passive voice.

The child broke many toys in the shop. He even threw the paintings.
Ans $\quad$ 1. Many toys in the shop have been broken by the child. Even the paintings were thrown by him.
X 2. Many toys in the shop were broken by the child. Even the paintings have been thrown by him.
3. Many toys in the shop were broken by the child. Even the paintings were thrown by him.
4. Many toys in the shop were broken by the child. He has even thrown the paintings.
Q. 12 Select the sentence that uses the idiom correctly.

Ans

1. Ranita was not selected for the job as she got cold feet.
2. Walking bare feet on grass gave him cold feet.
3. After too much cycling Arun got cold feet.
4. One can swim easily with cold feet.
Q. 13 Select the correct direct form of the given sentence.

The doctor said that they had performed their bit.
Ans

1. The doctor said, "We performed our bit."
2. The doctor said, "We are performing our bit."
3. The doctor said, "We have performed our bit."
4. The doctor says, "We had performed our bit."
Q. 14 Select the most appropriate synonym of the given word.

## Demolish

Ans
X 1. Create
X 2. Fabricate
3. Ruin
4. Shape
Q. 15 Select the most appropriate ANTONYM of the given word.

## Abundant

Ans

1. Minimal
2. Aplenty
$X$ 3. Plentiful
$X$ 4. Fertile
Q. 16 The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

Children listens to people / speaking around them / for a long time before / they begin to speak.
Ans

1. Children listens to people
2. speaking around them
3. they begin to speak
4. for a long time before
Q. 17 Rearrange the parts of the sentence in correct order.

The issue of
P. compulsory vaccination is difficult
Q. multiple interests all protected by human
R. because the governments need to consider
S. rights law and strike a fair balance between them

Ans

1. PRQS
$\times$ 2. PQRS
X 3.RSPQ
X 4. QSPR
Q. 18 Select the correct spelling of the underlined word from the following options.

Handover that peace of paper to me so that I can evaluate the authenticity of his amorous claims.
Ans
X 1. peice
2. peices
$\times$ 3. pieces
4. piece
Q. 19 Select the most appropriate option to fill in the blank.

The crowing witch released a $\qquad$ cackle as she turned the boy into a beast.
Ans
$X$ 1. gentle
X 2. low
3. loud
4. soft

## Q. 20 Rearrange the parts of the sentence in correct order.

We looked for
P. strong relationships at locations in the
Q. genome that are not well studied in
R. apple and looked for which compounds we
S. could identify and which had nutritional value

Ans

1. QSRP
2. QRPS
3. SPQR
4. PQRS

## 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.

Swaminathan had a table on which all his things, his coat, cap, slate, ink-bottle, and books, were thrown in a confused (1) $\qquad$ He sat on his stool and shut his eyes to (2) $\qquad$ in
Profit and Loss; then there was English - he had to copy down a page from his English lesson and write dictionary meanings of (4) $\qquad$ words; and then there was Geography. And only two hours before him to do all this heap of work and get (5) $\qquad$ for school.

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

Ans

1. heap
$\times 2$. deal
2. order
3. load

## 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.

Swaminathan had a table on which all his things, his coat, cap, slate, ink-bottle, and books, were thrown in a confused (1) $\qquad$ He sat on his stool and shut his eyes to (2) what work he had for the day: first of course there was Arithmetic - those five (3) $\qquad$ in Profit and Loss; then there was English - he had to copy down a page from his English lesson and write dictionary meanings of (4) words; and then there was Geography.
And only two hours before him to do all this heap of work and get (5) $\qquad$ for school.

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

Ans
$X 1$. guess
2. recollect
3. imagine
4. estimate

## 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.

Swaminathan had a table on which all his things, his coat, cap, slate, ink-bottle, and books, were thrown in a confused (1) $\qquad$ He sat on his stool and shut his eyes to (2) $\qquad$ in Profit and Loss; then there was English - he had to copy down a page from his English lesson and write dictionary meanings of (4) $\qquad$ words; and then there was Geography. And only two hours before him to do all this heap of work and get (5) $\qquad$ for school.

SubQuestion No : 23
Q. 23 Select the most appropriate option to fill in blank number 3.
$X$ 1. disputes
2. puzzles
$X$ 3. debates
4. conditions

## 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.

Swaminathan had a table on which all his things, his coat, cap, slate, ink-bottle, and books, were thrown in a confused (1) $\qquad$ He sat on his stool and shut his eyes to (2) what work he had for the day: first of course there was Arithmetic - those five (3) $\qquad$ in
Profit and Loss; then there was English - he had to copy down a page from his English
lesson and write dictionary meanings of (4) words; and then there was Geography.
And only two hours before him to do all this heap of work and get (5) $\qquad$ for school.

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

Ans
$\times 1$. rigid
2. awkward
3. difficult

X 4. visible

## 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.

Swaminathan had a table on which all his things, his coat, cap, slate, ink-bottle, and books, were thrown in a confused (1) He sat on his stool and shut his eyes to (2) $\qquad$ in what work he had for the day: first of course there was Arithmetic - those five (3) $\qquad$ Profit and Loss; then there was English - he had to copy down a page from his English lesson and write dictionary meanings of (4) $\qquad$ words; and then there was Geography. And only two hours before him to do all this heap of work and get (5) $\qquad$ for school.

SubQuestion No : 25
Q. 25 Select the most appropriate option to fill in blank number 5.

Ans $\times$ 1. alert
$\times 2$. fit
3. ready
4. fixed

| Exam Date | $09 / 12 / 2022$ |
| :--- | :--- |
| Exam Time | $2: 30$ PM - 3:30 PM |
| Subject | Combined Graduate Level Examination Tier I 2022 |

## Section : General Intelligence and Reasoning

Q. 1 Select the option that is related to the fourth term in the same way as the first term is related to the second term and the fifth term is related to the sixth term.
7:330:: ? : 203 :: 9 : 716
Ans
$\times 1.14$
2. 16
3.6
4. 4
Q. $2 A+B$ means ' $A$ is the father of $B$ ' $A$ - B means ' $A$ is the mother of $B$ ' A \% B means ' $A$ is the brother of $B$ '
$A$ \& $B$ means ' $A$ is the son of $B$ '
If $\mathbf{P}-\mathbf{Q} \% \mathbf{R \& S}+\mathrm{T}$, then how is P related to $\mathbf{T}$ ?
Ans

1. Mother-in-law
2. Sister
3. Mother
4. Daughter
Q. 3 By Interchanging the given two numbers which of the following equation will be correct? 8 and 2

Ans
人 $1.7 \div 2-8 \times 4+1=0$
X2. $2 \times 4-8+5 \div 1=50$
3. $8 \times 4+6-2 \div 1=6$
$4.8 \times 4-9 \div 3+2=35$
Q. 4 Which two numbers, from amongst the given options, should be interchanged to make the given equation correct?
$18+(12 \times 6)+(63 \div 7) \times 4+(27)^{\frac{1}{2}}-11=112$
Ans
$\times 1.18$ and 11
X 2.12 and 4

- 3.6 and 4

4. 18 and 12
Q. 5 Which of the following letter clusters will replace the question mark (?) and complete the following letter cluster series?
OG, RL, XQ, GV, ?
Ans
5. SA

X 2. RZ
X 3. SB
$\times 4 . \mathrm{RA}$
Q. 6 Select the option that represents the correct order of the given words as they would appear in an English dictionary.
1- History
2- Historian
3- Hobnail
4- Historical
5- Hobnob
Ans
X 1.4, 1, 2, 5, 3
2. $2,4,1,3,5$

X 3.2,1, 4, 5, 3
<4.1,2,4,3,5
Q. 7 Select the option that is related to the third word in the same way as the second word is related to the first word.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Milk : Litre :: Sugar : ?
Ans

1. Hectare
2. Kilometer

X 3. Metre
4. Kilogram
Q. 8 In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

## Statements:

I. All R are H.
II. Some T are R.

Conclusion:
I. All H are R.
II. All $T$ are $H$.
III. No $R$ is $T$.

Ans

1. Neither conclusion follows
2. Both conclusions I and II follows
3. All conclusion follows

X 4. Only conclusion III follows
Q. 9 In a certain code language, 'KNIGHT' is written as 'PMRTSG' and 'FELLOW' is written as 'UVOOLD'. How will 'DECENT' be written in that language?
Ans
X 1. WXVVMG
2. WVXVMG

X 3. WVXMVG
X 4. WVXVGM
Q. 10 In a certain code language, 'FUND' is written as 'FOVH' and 'SEND' is written as 'FOFU'. How will 'GIFT' be written in that language?
Ans

1. HIGW
2. IKGV
3. VGJI

X4. IIGV
Q. 11 If $A+B$ means that $A$ is the father of $B, A \div B$ means that $A$ is the mother of $B, A \times B$ means that $A$ is the brother of $B$ then which of the following expression shows that $Q$ is the sister of $P$ ?

Ans
X1. $P \times Q+R$
X2. $P+R \times Q$
3. $P \times Q \div R$
(4. $Q \times P \div R$
Q. 12 Select the word-pair that best represents a similar relationship to the one expressed in the given pair of words
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Length : Metre
Ans

1. Electric current : Ampere
< 2. Mass: Heavy
2. Temperature : Hot
3. Volume : Light
Q. 13 Select the option figure which is embedded in the given figure (rotation is NOT allowed).

Q. 14 Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

Ans
X 1. XYZ
2. LNM
$\times 3 . A B C$
4. IJK
Q. 15 Select the set in which the numbers are related in the same way as are the numbers of the following set.
(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).
$(56,6,34)$
$(102,27,78)$
Ans
X 1. $(79,51,103)$
2. $(76,34,72)$
3. $(63,23,55)$

X 4. $(52,22,38)$
Q. 16 By Interchanging the given two numbers which of the following equation will be correct?
5 and 9
Ans
X1.9-5 $\times 4+6 \div 3=30$
人2. $9 \times 3+5 \div 1-6=20$
< $3.7 \times 9+5-8 \div 4=40$
$4.9 \times 4+5-8 \div 2=25$
Q. 17 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 conclusions logically follow(s) from the statements.
Statements:
Some apples are fruits.
All fruits are vegetables.
No vegetable is healthy.

## Conclusions:

I- No apple is healthy.
II- No healthy is vegetable.
III- Some vegetables are apples.
X 1 . Only conclusions I and II follow.
X 2. Only conclusions I and III follow.3. All conclusions follow.
4. Only conclusions II and III follow.
Q. 18 Select the figure from among the given options that can replace the question mark
(?) in the following series.


Ans

Q. 19 In the following question, four number pairs are given. In each pair the number on left side of $(-)$ is related to the number of the right side of $(-)$ with some
Logic/Rule/Relation. Three pairs are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (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 1.32-65
X 2.12-25
-3.28-56
4. $26-53$
Q. 20 Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.
27:713:: 32 : ? :: 35 : 1209
Ans

1. 1024
2. 1100
3. 1105
4. 1008
Q. 21 Select the correct mirror image of the given combination when the mirror is placed at line MN as shown.

Gkr42h $\left.\right|_{N} ^{M}$
Ans
x1. AてAyk
$x$ 2. $\mathrm{n} S 4 \mathrm{r} \geqslant \mathrm{D}$


- 4sAy才
Q. 22 Three different positions of the same dice are shown. Find the number on the face opposite the face showing ' 1 '.


Figure 1

-1.2
$\times 2.6$
$\times 3.3$
$\times 4.4$
Q. 23 Select the figure that will replace the question mark (?) in the following figure series.


Ans

$\times 2$.

-3.

$\times 4$.

Q. 24 Which of the following number will replace the question mark (?) in the given series?

137, 114, ?, 91, 183
Ans
$\times 1.145$
2. 160
$\times 3.125$
X4. 112
Q. 25 A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
SMQ, WUZ, ACI, EKR, ?
Ans

1. ISA
2. IMR
× 3.NMR
X 4. QRT

Section: General Awareness
Q. 1 How many Lok Sabha constituencies are there in India?

Ans
X 1.553
$\times 2.523$

- 3.543
$\times 4.533$
Q. 2 In 1887, the Royal Society, London gave the Davy Medal for the 'discovery of the periodic law of chemical elements' to

Ans

1. AEB de Chancourtois

X 2. Dmitri Mendeleev
3. Lothar Meyer
4. John Alexander Newland
Q. 3 Name the committee formed for the Village and Small-scale Industries in 1955?

Ans
X 1. Rangarajan Committee
X 2. Basel Committee
3. Karve Committee

X 4. Narasimhan Committee
Q. 4 In November 2022, technology Transfer Scheme is implemented by which of these states?

X 1. Uttar Pradesh
2. Andhra Pradesh

X 3. Maharashtra
4. Kerala

1. Dantidurga

X 2. Govinda I
$X$ 3. Dhruva Dharavarsha
X 4. Krishna I
Q. 6 Which of the following Acts of the British Parliament stated that a member of the British Cabinet was appointed Secretary of State for India?
Ans
X 1. Indian Council Act of 1861
2. Government of India Act of 1858
3. Regulating Act, 1773
4. Charter Act of 1853
Q. 7 Against whom was the Battle of Plassey (1751) fought by the English Company led by Robert Clive?
Ans
$\times$ 1. Nizam of Awadh
2. Siraj Ud Daulah
3. Murshid Quli Khan
4. Shaan Nawab
Q. 8 In July 2022, the Supreme Court accepted the report of the Banthia Commission. In its report, the commission recommended that OBCs should be given up to $\qquad$ reservation in local bodies.
Ans

1. 27 percent

- 2.15 percent

X 3.24 percent
X 4.20 percent
Q. 9 The mode of transport to reach the most remote and distant areas which are most inaccessible is $\qquad$ -
Ans
$X 1$. Waterways
X 2. Roadways3. Railways
4. Airways
Q. 10 How many rights are mentioned under "Right to Equality"?

Ans
X 1.3
2. 6
3.5
4. 4
Q. 11 Which low-calorie sweetener has the chemical formula $\mathrm{C}_{14} \mathrm{H}_{18} \mathrm{~N}_{2} \mathrm{O}_{5}$ that is two hundred times sweeter than sugar?

Ans
X 1. Saccharin
2. Aspartame
3. Sucralose
4. Neotame

## Question ID : 26433092181 <br> Status: Marked For Review

Q. 12 Techniques of making silk were first invented in China around $\qquad$ years ago.
Ans

* 1.7000

2. 3000
$\times 3.9000$

- 4.5000
Q. 13 The first edition of the Common wealth Youth Games was organised in which of the following years?
Ans

1. 2008
2. 2012
3. 2000
4. 2016
Q. 14 The ceremony that marks the end of Republic Day celebrations is $\qquad$ .

Ans

1. the beating retreat ceremony
2. the fly-past by the Indian Air Force fighter aircraft
3. the 'At Home' ceremony at Rashtrapati Bhawan
4. the homage ceremony at National War Memorial

## Q. 15 Which of the following pairs of countries hosted the FIVB Volleyball Men's World

 Championship in 2022?Ans
$X$ 1. Bulgaria and Slovenia
X 2. Italy and Bulgaria
3. Poland and Slovenia
4. Italy and Poland
Q. 16 Polar easterlies are which kind of winds?

Ans $\times 1$. Seasonal winds
2. Permanent winds
3. Sea storm
$X$ 4. Local winds
Q. 17 took over the charge of Director General of Employees' State Insurance Corporation in October 2022.
Ans
X 1. Ravi Mittal
2. Suchitra K Ella
3. Ajay Bhushan Pandey
4. Rajendra Kumar
Q. 18 Identify the longest part of bacterial flagellum.

Ans $\quad$ 1. Basal body
2. Hook
$\times 3$. Tail
4. Filament
Question ID: $\mathbf{2 6 4 3 3 0 6 4 7 6 1}$
Status : Not Answered
Chosen Option: --
Q. 19 Borgeet, a musical composition, is used in which of the following classical dances of India?

Ans

1. Manipuri
2. Kathak
3. Sattriya
4. Bharatanatyam
Q. 20 Which of the following cells line the spongocoels and canals in members of the phylum Porifera?
Ans
X 1. Somatic cells
5. Collar cells
6. White cells
7. Sex cells
Q. 21 Chilika lake is situated in which of the following states?

Ans
X 1. Karnataka

- 2. Kerala

3. Odisha

X 4. Andhra Pradesh
Q. 22 Which of the following sites do "Not" have coal mines?

Ans

- 1. Sonipat
$X$ 2. Neyveli
$X$ 3. Korba
$\times 4$. Singareni
Q. 23 Hema Malini, a well-known Bharatnatyam dancer and Bollywood actor, received which of the following honours of Indian civilians given by the Government of India in 2000?
Ans
X 1. Bharat Ratna

2. Padma Shri

X 3. Padma Bhushan
4. Padma Vibhushan
Q. 24 Which of the following dance forms is performed to Carnatic music?

Ans
X 1. Kathak
2. Kuchipudi

X 3. Odissi
4. Sattriya
Q. 25 If marginal propensity to consume is denoted by $\mathbf{c}$, then government expenditure multiplier can be expressed as $\qquad$ -

Ans
$\times 1$. c
2. 1/1-c
3. 1/c
4. -1/c

Section: Quantitative Aptitude
Q. 1 Monty paid a simple interest of ₹ 480 on a particular sum after 2 years. The rate was $8 \%$ per annum. Find the sum.

Ans

1. ₹ 2,200

X 2. ₹2,000
3. ₹3,000
4. ₹2,500
Q. 2 The curved surface area of a right circular cone of base radius 21 cm is $594 \mathbf{~ s q . ~ c m . ~}$ What is the slant height of the cone?

Ans
$\times 1.15 \mathrm{~cm}$
$\times 2.11 \mathrm{~cm}$
3. 9 cm
4.6 cm
Q. 3 If it is given that for two right angled triangles $A B C$ and $D F E, \angle A=25^{\circ}, \angle E=25^{\circ}, \angle B=$ $\angle F=90^{\circ}$ and $A C=E D$, then which one of the following is TRUE?

Ans

1. $\triangle \mathrm{ABC} \cong \triangle F E D$
2. $\triangle \mathrm{ABC} \cong \triangle \mathrm{DFE}$
3. $\triangle \mathrm{ABC} \cong \triangle \mathrm{EFD}$
4. $\triangle \mathrm{ABC} \cong \triangle \mathrm{DEF}$

## The HCF of $\frac{1}{2}, \frac{3}{4}, \frac{5}{6}$ and $\frac{7}{8}$ is:

Ans
$\times 1 . \frac{105}{2}$
2. $\frac{1}{24}$

- 3. $\frac{7}{24}$
-4. $\frac{1}{48}$
Q. 5 The following pie-chart shows the data regarding the donors of $\mathrm{A}, \mathrm{B}, \mathrm{O}$ and AB blood groups.


The ratio of the number of donors of blood group ' $O$ ' to the average of the number of donors of blood groups ' $A$ ' and ' $A B$ ' together is:

Ans
X1.2:3
2.1:1

X 3.2:1
$\times 4.1: 2$
Q. 6 Abha and Anuj working together completed a job in $\frac{40}{9}$ days. If Abha had worked twice as efficiently as she actually did and Anuj had worked $\frac{1}{3}$ of his actual efficiency, then the work would have been completed in $\frac{60}{17}$ days. Find the time Abha would take to complete the work alone.

X 1.10 days

- 2.8 days

X 3.12 days
X 4.6 days
Q. 7

If $\mathrm{p}-\frac{1}{\mathrm{p}}=6$, then what is the value of $\mathrm{p}^{4}+\frac{1}{\mathrm{p}^{4}}$ ?
Ans
X 1.1562
X 2. 1432
3. 1442
4. 1444
Q. 8 In a 7-digit number $89476^{*}$, what is the smallest possible value of * such that the number is divisible by 8 ?

Ans

1. 2
$\times 2.1$
3.4
2. 3
Q. 9 A megastore is offering 20\% discount on all grocery items. Sakshi bought one grocery item marked at Rs. 400 . What is its cost price if the store earned a profit of $25 \%$ after giving the discount?
Ans
3. Rs. 256
4. Rs. 280
5. Rs. 380
6. Rs. 320
Q. 10 Simplify $x^{4}-15 x^{3}+15 x^{2}-15 x+40$; given $x=14$.

Ans
$\times 1.0$
2.40
$\times 3.14$

- 4.26
Q. 11 If $\triangle \mathrm{ABC} \cong \triangle \mathrm{PQR}, \mathrm{BC}=6 \mathrm{~cm}$, and $\angle \mathrm{A}=75^{\circ}$, then which one of the following is true?

Ans
X 1. $\mathrm{QR}=6 \mathrm{~cm}, \angle \mathrm{R}=75^{\circ}$
X2. $\mathrm{QR}=6 \mathrm{~cm}, \angle \mathrm{Q}=75^{\circ}$
3. $\mathrm{QR}=6 \mathrm{~cm}, \angle \mathrm{P}=75^{\circ}$

X4. $\mathrm{PR}=6 \mathrm{~cm}, \angle \mathrm{P}=75^{\circ}$
Q. 12 A thief running at speed of ' $x$ ' $k m / h$ is chased by a policeman running at a speed of 10 $\mathrm{km} / \mathrm{h}$. If the thief is ahead by 100 metres, the policeman catches the thief after 3 minutes. At what speed is the thief running (' $x$ ' being the unknown speed)?
Ans
< $1.4 \mathrm{~km} / \mathrm{h}$
2. $8 \mathrm{~km} / \mathrm{h}$
3. $10 \mathrm{~km} / \mathrm{h}$
4. $6 \mathrm{~km} / \mathrm{h}$
Q. 13 A person covers a certain distance by bus at $45 \mathrm{~km} / \mathrm{h}$ and immediately returns to the starting point by car at a speed of $80 \mathrm{~km} / \mathrm{h}$. What is his average speed during the whole journey?

Ans

1. $57.6 \mathrm{~km} / \mathrm{h}$
2. $63.2 \mathrm{~km} / \mathrm{h}$
3. $73.5 \mathrm{~km} / \mathrm{h}$
4. $45.5 \mathrm{~km} / \mathrm{h}$

Q. 14 The table given below shows the cost of two fruits in five different shops.

|  | Fruits |  |
| :---: | :---: | :---: |
| Shops | A | B |
| P | 75 | 140 |
| Q | 120 | 90 |
| R | 50 | 35 |
| S | 70 | 85 |
| T | 95 | 96 |

What is the difference between the cost of fruits $A$ and $B$ in all five shops together?
Ans
$\times 1.24$
2. 36
3. 20
4. 48
Q. 15 If $\sin \theta=\frac{8}{17}$ where $\theta$ is an acute angle, then what is the value of $\tan \theta+\cot \theta$ ?

Ans
$\frac{217}{110}$. $\frac{281}{190}$
3. $\frac{289}{120}$
$\times 4 . \frac{512}{321}$
Q. 16 In a certain shop, the profit is $130 \%$ of the cost. If the cost increases by $28 \%$ and the selling price remains constant, then what is the profit percentage to the nearest whole number?

Ans
X $1.75 \%$
$\times 2.60 \%$
3. $59 \%$
4. $80 \%$
Q. 17 The table given below shows the number of boys and girls in a school in 6 years.

| Years | Boys | Girls |
| :---: | :---: | :---: |
| A | 80 | 70 |
| B | 60 | 50 |
| C | 120 | 100 |
| D | 100 | 140 |
| E | 160 | 40 |
| F | 90 | 80 |

What is the ratio of number of boys in year $A$ and $C$ together to the number of girls in year E and F together?
Ans
$\times 1.7: 2$
$\times 2.7: 3$
3.5:3
$\times 4.5: 2$
Q. 18

If $\sin ^{2} \theta \cos ^{2} \theta=\frac{2}{9}$, then what will be the value of $\operatorname{cosec}^{2} \theta+\sec ^{2} \theta$ ?
Ans
$\times 1.7 / 2$
$\times 2.5 / 2$
3.9/2

X4. $9 \sqrt{2}$
Q. 19 The side of an equilateral triangle is 36 cm . What is the radius of the circle circumscribing this equilateral triangle?
Ans

1. $13 \sqrt{3} \mathrm{~cm}$
2. $10 \sqrt{3} \mathrm{~cm}$
-3. $12 \sqrt{3} \mathrm{~cm}$
$\times 4.9 \sqrt{3} \mathrm{~cm}$
Q. 20 The value of $\frac{146 \times 146 \times 146-143 \times 143 \times 143}{146 \times 146+143 \times 143+146 \times 143}$ is:

Ans
$\times 1.0$
2.3
$\times 3.289$
-4. 1
Q. 21 If $2 \frac{\cos ^{2} x-\sec ^{2} x}{\tan ^{2} x}=a+b \cos 2 x$, then $a, b=$ ?

Ans
$\times 1$. $\frac{-3}{2}, \frac{-1}{2}$
X2. $\frac{3}{2}, \frac{1}{2}$
3. $-3,-1$
4.3,1
Q. 22 The pie chart given below shows the sales of 7 different companies. The total sales of all these 7 companies are 3600. The sale of a particular company is shown in terms of degree with respect to the total sales of all these 7 companies.
P


Which of the following statement is correct?
I. The ratio of average sale of company $P$ and $Q$ to the average sale of $T$ and $U$ is $9: 10$.
II. The difference between the total sale of company $R$ and $S$ and the sale of $V$ is 1050.

Ans
X 1. Neither I nor II
X 2. Only II
3. Only I

X 4. Both I and II

Q. 23 Three positive numbers are in the ratio of $4: 5: 7$, and the sum of their squares is 15,210 . Find the sum of the three numbers.
Ans
<1.148
2. 156
3. 126
4. 208
Q. 24 The perpendicular distance between the centre of a circle and the longest chord of that circle is $\qquad$ _.
Ans
$\times 1$.
2. 0
< 3.2
<4. $\pi$
Q. 25 During the first year, the strength of a school increased by $12 \%$, in the second year it decreased by $12 \%$ and in the third year it increased by $10 \%$. At the end of the third year its strength was nearly 10842. What was the strength at the beginning of the first year?
Ans
X 1.8000
2. 10000
3. 6500
4. 12000

## Section : English Comprehension

Q. 1 Select the option that expresses the given sentence in passive voice.

Mary was cooking the meal.
Ans $\quad \times 1$. The meal were being cooked by Mary.
$\times 2$. The meal was already being cooked by Mary.
X 3. Mary was about to cook the meal.
4. The meal was being cooked by Mary.
Q. 2 Select the option that can be used as a one-word substitute for the given group of words.

## Strong hostility

Ans

1. Animalistic
2. Anonymity
3. Comity
4. Animosity
Q. 3 Rearrange the parts of the sentence in correct order.

American alligators were
P. now this species is classified as least concern
Q. list in 1967, their population increased and
R. once threatened by extinction but
S. after being placed on the endangered species

Ans

1. SQPR
2. RPQS
3. RSQP
4. PQSR
Q. 4 In the given sentence the underlined word may have been incorrectly spelt. Identify the option that rectifies the spelling. If there is no error in spelling, select 'No error'.

The ameteur sculptor received an award at the international sculpting competition.
Ans
$X$ 1. ameature
X 2. No error
3. amateur
4. ameateur
Q. 5 Select the INCORRECTLY spelt word.

Ans
$X$ 1. Pollen
$X$ 2. Mousy
X 3. Quasi
4. Quever
Q. 6 Select the most appropriate option that can substitute the underlined segment in the given sentence.

We have only just enough money to live on now, and if my husband loses his job, we'll really be up again it.
Ans
$X 1$. be up gone it
$X$ 2. be up across it
X 3. be up cross it
4. be up against it
Q. 7 Select the most appropriate synonym of the underlined word.

The foreign company is chary of investing in Africa.
Ans
$X$ 1. Keen
X 2. Fervent
$\times$ 3. Confident
4. Cautious

## Q. 8 Select the most appropriate meaning of the underlined idiom.

The new intern is a greenhorn and thus his superiors take advantage of him.
Ans

1. Inexperienced

X 2. Jealous
3. Overenthusiastic
4. Sick
Q. 9 Select the most appropriate adverb to fill in the blank.

Nitha can assemble the students of her class $\qquad$ .

Ans
X 1. perfect
$X$ 2. distract
3. slow
4. quickly
Q. 10 Fill in the blank with the correct collocation.

Of course, we agree with that measure, it is $\qquad$ sensible.

Ans

1. slightly
2. hardly
3. partially
4. perfectly
Q. 11 Select the most appropriate synonym of the given word from the following sentence. Encountered
Many people have been experiencing the starting of heat wave and some of them have avoided going outside their homes.

Ans
$\times 1$. Outside
2. Starting
3. Avoided
4. Experiencing
Q. 12 Parts of the following sentence have been given as options. Select the option that contains a grammatical error.

The wedding gown / looked decently / despite being / studded wit jewels.
Ans
$X 1$. The wedding gown
2. despite being
3. looked decently
4. studded with jewels.
Q. 13 Select the most appropriate ANTONYM of the underlined word.

The soldiers were irresolute and so, they won the war for the infantry and the country.
Ans
$X$ 1. harsh
X 2. variant
( 3. default
4. decisive
Q. 14 Select the most appropriate synonym of the given word.

Anger
Ans

1. Pleasure
2. Fury
3. Comfort
4. Agony
Q. 15 Select the most appropriate option to complete the given sentence.

She raised a $\qquad$ when she saw her luggage missing.
Ans

1. hue and cry
2. spick and span
3. hand and foot
4. whip and spur
Q. 16 Select the correct direct form of the given sentence. The old man asked the boy where the postman was.
Ans
$\times 1$. The old man says to the boy, "Where is the postman?"
X 2. The old man said to the boy, "Where has been the postman?"
5. The old man said to the boy, "Where is the postman?"
6. The old man said to the boy, "Where was the postman?"
Q. 17 Select the option that expresses the given sentence in passive voice.

Sanjay rolled the marble through a small plastic pipe.
Ans

1. A small plastic pipe was rolled through a marble by Sanjay.
2. The marble was rolled through a small plastic pipe by Sanjay.
3. The marble was rolled by Sanjay in a small plastic pipe.
4. The marble through a small plastic pipe was rolled by Sanjay.
Q. 18 Select the option that can be used as a one-word substitute for the given group of words.

Murder of an infant
Ans
X 1. Foeticide
2. Feticide
3. Sacrifice
4. Infanticide
Q. 19 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.
A.If things get out of control, competition might become totally toxic.
B.Competition is the act of participating in a contest and the strive to finish first.
C.Competition enables those who effectively deal well enough to grow and realise their skills and talents.
D.The essence of competition is placing oneself against one's contemporaries and frequently against oneself.

Ans
$\times 1$. CABD
2. BDCA

X 3. DCAB

- 4. ADBC
Q. 20 Select the most appropriate option that can substitute the underlined segment in the given sentence.

Blind by a dust storm, they fell into disorder.
Ans
$X 1$. Have been blind
2. Blinded

X 3. Blinding
$X$ 4. Being blind

## 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 number.

Allegiance to one's favourite team is something that sports fans 1 $\qquad$ over a period of time. They are so attached to their favourite teams that they could display 2 $\qquad$ emotions, not just during the course of the match, but much after the actual event is over. This phenomenon, 3 $\qquad$ common across the globe, is more seen in countries like Brazil, India, the US and even the UK, where the favourite sport may not be the same in each of these nations. In spite of this craze and hysteria, sport has 4 $\qquad$ a long way. It is accepted as one of the world's most 5 $\qquad$ pastimes ever.

SubQuestion No: 21

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

Ans
X 1. crave
< 2. infer
3. develop
4. defer

## 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 number.

Allegiance to one's favourite team is something that sports fans 1 $\qquad$ over a period of time. They are so attached to their favourite teams that they could display 2 $\qquad$ emotions, not just during the course of the match, but much after the actual event is over. This phenomenon, 3 $\qquad$ common across the globe, is more seen in countries like Brazil,
India, the US and even the UK, where the favourite sport may not be the same in each of these nations. In spite of this craze and hysteria, sport has 4 $\qquad$ a long way. It is accepted as one of the world's most 5 $\qquad$ pastimes ever. $\qquad$
SubQuestion No: $\mathbf{2 2}$
Q. 22 Select the most appropriate option to fill in blank number 2.

Ans
$X 1$. hurried
2. varied

X 3. dread
4. concrete

## 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 number.

Allegiance to one's favourite team is something that sports fans 1 $\qquad$ over a period of time. They are so attached to their favourite teams that they could display 2 $\qquad$ emotions, not just during the course of the match, but much after the actual event is over. This phenomenon, 3 $\qquad$ common across the globe, is more seen in countries like Brazil, India, the US and even the UK, where the favourite sport may not be the same in each of these nations. In spite of this craze and hysteria, sport has 4 $\qquad$ a long way. It is accepted as one of the world's most 5 $\qquad$ pastimes ever.

SubQuestion No: 23

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

Ans 1.though
2. in spite of
3. as
4. despite

## 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 number.

Allegiance to one's favourite team is something that sports fans 1 $\qquad$ over a period of time. They are so attached to their favourite teams that they could display 2 $\qquad$ emotions,
not just during the course of the match, but much after the actual event is over. This
phenomenon, 3 $\qquad$ common across the globe, is more seen in countries like Brazil,
India, the US and even the UK, where the favourite sport may not be the same in each of these nations. In spite of this craze and hysteria, sport has 4 $\qquad$ a long way. It is
accepted as one of the world's most 5 $\qquad$ pastimes ever.

SubQuestion No: $\mathbf{2 4}$
Q. 24 Select the most appropriate option to fill in blank number 4.

Ans $\times$ 1.fame
X 2. came
3. come
4. game

## 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 number.

Allegiance to one's favourite team is something that sports fans 1 $\qquad$ over a period of time. They are so attached to their favourite teams that they could display 2 $\square$ not just during the course of the match, but much after the actual event is over. This phenomenon, 3 $\qquad$ common across the globe, is more seen in countries like Brazil, India, the US and even the UK, where the favourite sport may not be the same in each of these nations. In spite of this craze and hysteria, sport has 4 $\qquad$ a long way. It is accepted as one of the world's most 5 $\qquad$ pastimes ever.

SubQuestion No: 25
Q. 25 Select the most appropriate option to fill in blank number 5.

Ans 1. entertaining
2. tiresome
3. inhibited
4. detrimental

| Exam Date | $09 / 12 / 2022$ |
| :--- | :--- |
| Exam Time | 5:15 PM - 6:15 PM |
| Subject | Combined Graduate Level Examination Tier I 2022 |

Section: General Intelligence and Reasoning
Q. 1 In a certain code language, 'FLOAT' is written as 'WONZI' and 'TRIBE' is written as 'DUHEW'. How will 'GARDEN' be written in that language?

Ans
$X$ 1. QZQGDJ
X 2. QZUHDJ
3. QZUGDJ
4. QDUGHJ
Q. 2 Select the set in which the numbers are related in the same way as are the numbers of the following set.
(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)
$(21,33,31)$
(42, 17, 26)
Ans

1. $(36,14,35)$
(2. $(46,19,24)$
(3. $35,27,29)$
2. $(32,39,20)$
Q. 3 By interchanging the given two signs and numbers which of the following equation will be correct?

+ and -, 6 and 3
Ans
X1.8-3×4 $\div 6+9=18$
$2.8+4 \times 6 \div 3-9=15$
X $3.9 \div 3 \times 4-6+7=10$
<4. $6 \div 2 \times 8+3-1=20$


## Q. 4 Select the option that is related to the third word in the same way as the second word

 is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)Pain : Agony :: Anger: ?
Ans
X 1. Calm
2. Rage
$X 3$. Sad
X 4. Peace
Q. 5 Select the odd group of numbers. (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. (19-28-48)
X 2. ( $17-27-47$ )

3. (15-25-49)
4. (13-23-43)
Q. 6 By Interchanging the given two numbers which of the following equation will be correct?
1 and 9
Ans

- $1.9 \times 3-4 \div 2+1=10$

X2. $1+9 \times 3-4 \div 2=18$
X $3.9 \times 2+1-8 \div 4=12$
X $4.9-1+6 \div 2 \times 3=7$
Q. 7 Which of the following calendars will be the same as the calendar for the year 2009?

Ans
X 1.2025
2. 2015
3. 2036

X 4.2042
Q. 8 Select the option in which the given figure is embedded (rotation is NOT allowed).


Ans

$\times 4$.

Q. 9 Select the correct mirror image of the given combination when the mirror is placed at ' PQ ' as shown below.

## TRAUM8TIC

Q
Ans
$x$ כITOMUAЯT
$\checkmark$ כIT8MUAЯT
x 3 כIT8MAUЯT
x 4 JITAMUAЯT
Q. 10 Three different positions of the same dice are shown. Find the number on the face opposite the face showing ' 3 '.


Figure 1
Figure 2
Figure 3
Ans
$\times 1.2$
$\times 2.1$
$\times 3.4$
$\times 4.6$
$Q .11$ If $P \div Q$ means that $P$ is the mother of $Q, P-Q$ means that $P$ is the father of $Q, P \times Q$ means that $P$ is the sister of $Q$, then which of the following expression shows that $B$ is the daughter of A ?
Ans

- 1. $B-A \div C$

2. $A-B \div C$
3. $\mathrm{A}-\mathrm{B} \times \mathrm{C}$
4. $C \div B-A$
Q. 12 Three statements are followed by three conclusions numbered I, II and III. You have to consider these statements to be true, even if they seem to be at variance with commonly known facts. Decide which of the given conclusions logically follow/s from the given statements.
Statements:
Some watches are projectors.
All projectors are lamps.
Some heaters are watches.
Conclusions:
(I) Some heaters are projectors.
(II) Some lamps are heaters.
(III) All watches are lamps.

Ans
$X$ 1. Only conclusion II follows
2. None of the conclusions follow
< 3. Only conclusion I follows
X 4. Either conclusion I or conclusion III follows
Q. 13 Select the option that is related to the third word in the same way as the second word is related to the first word.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)
Paint : Art :: Prose : ?
Ans
$\times$ 1. Music
2. Literature
3. Drama
$X$ 4. Theatre
Q. 14 A \# $B$ means ' $A$ is the brother of $B$ '
$A @ B$ means ' $A$ is the son of $B$ '
$A$ \& $B$ means ' $A$ is the wife of $B$ '
$A \% B$ means ' $A$ is the mother of $B$ '
If $A \% B \& C \# D @ E$, then how is $B$ related to $E$ ?
Ans
$X 1$. Sister
$\times$ 2. Wife
X 3. Daughter
4. Daughter-in-law
Q. 15 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans


4

Q. 16 In the following question, select the missing number from the given series.
$15,4,-8,-21,-35$, ?
Ans $\times 1 .-48$
2. -50
$\times 3 .-49$
$\times 4 .-30$
Q. 17 A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
ABCD, EVKT, IPSJ, MJAZ, ?
Ans
X 1. RQPH
2. QDIP
3. TDIC
4. RMQR
Q. 18 Select the set in which the numbers are related in the same way as are the numbers of the following set.
(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)
$(4,21,33)$
(10, 111, 141)
Ans
X 1. $(13,45,97)$
2. $(25,53,128)$
3. $(65,60,244)$
4. $(24,52,128)$
Q. 19 Which of the following letter-clusters will replace the question mark (?) in the given series?
ARC, EPF, JNI, PLL, ?
Ans

1. WJO

X 2. QLP
X 3.WLQ
X 4. QKP
Q. 20 Three of the following letter-clusters are alike in some manner and hence form a group. Which letter-cluster does not belong to that group?

Ans
X 1. DOL
2. MIP
(3.ARI
4. NEV
Q. 21 In a certain code language, 'TEACHER' is written as 'AETCREH' and 'STUDENT' is written as 'UTSDTNE'. How will 'CLASSES' be written in that language?
Ans

1. ALCSSES

X 2. SESSALC
3.alCSESS

X 4. CLASESS
Q. 22 Which two signs should be interchanged to make the given equation correct?

81 * $9+15 \div 3-4=50$
Ans
$\times 1 .-$ and *
2. + and -
3. $\div$ and -
4. $\div$ and *
Q. 23 In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements. Statements:
I. Some A are W.
II. Some W are C.

Conclusions:
I. All A are C .
II. No C is W.
III. No W is A.

Ans

1. Neither conclusion follows
2. Only conclusion II follows
$\times$ 3. All conclusion follows
3. Only conclusion I follows
Q. 24 Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.
12: 132 :: 20 : 380 :: 2 :?
Ans
X 1.8
$\times 2.6$
$\times 3.12$
4. 2
Q. 25 Select the figure that will come next in the following series.


Ans


## Section: General Awareness

Q. 1 Prithviraja III defeated an Afghan ruler named $\qquad$ in 1191.
Ans
X 1. Sultan Mahmud
X 2. Muhammad Ibn Abbas
X 3. Muhammad Ibn Suri
4. Sultan Muhammad Ghori

## Q. 2 Sharmila Biswas, who was awarded the 'Best Choreography Award' in 1998 by the

 Ministry of Information and Broadcasting, represents which of the following classical dance forms?Ans
X 1. Manipuri
2. Odissi

X 3. Kathakali
4. Kathak
Q. 3 The Paralympics Games - 2024 will be hosted by $\qquad$ .

Ans
$X$ 1. USA
$X$ 2. China
$\times$ 3. Spain
-4. France
Q. 4 The women of which tribe perform the traditional folk dance called Chakri?

Ans
X 1. Kaul
2. Kanjar

X 3. Gond
4. Bharia
Q. 5 Which of the following terms is NOT included in the Preamble of Indian Constitution?

Ans
$\times 1$. Sovereign
2. Justice
3. Fraternity
4. Federalism
Q. 6 The State Finance Commission is appointed every $\qquad$ years by the $\qquad$ -
Ans

1. 5 , state government
2. 5, central government

Х 3.2.5, state government
X 4.2.5, central government

## Q. 7 The Energy Conservation (Amendment) Bill, 2022 amends the Energy Conservation

 Act, 2001 to empower the central government to specify a $\qquad$ .Ans

1. carbon credit trading scheme
2. coal based station
3. coastal regulation scheme
4. eco-sensitive zone
Q. 8 The Delhi Municipal Corporation (Amendment) Bill 2022 seeks to unify the how many municipal corporations into a single one?

Ans

1. Four
2. Three
3. Two
4. Five

## Q. 9 What is the role of ribosomes of a polysome?

Ans
$X 1$. The ribosomes synthesise the fats
2. The ribosomes of a polysome translate the mRNA into proteins.
$X$ 3. The ribosomes of a polysome translate the rRNA into proteins.
4. The ribosomes of a monosome translate the rRNA into proteins.
Q. 10 Which type of tax acts as an automatic stabiliser in the economy?

Ans

1. Professional tax
2. Wealth tax
3. Capital gains tax
4. Proportional income tax
Q. 11 The world's largest river lies in which of the following continent?

Ans

1. South America
2. Australia
$\times$ 3. Africa
X 4. North America
Q. 12 In which of the following months is Gokulashtami celebrated every year as per Hindu tradition?
Ans
X 1. Vaishakh
3. Bhadrapada

X 3. Asadha
X 4. Chaitra
Q. 13 Which of the following is NOT a method of measuring national income?

Ans 1. Intermediate goods method
$X 2$. Expenditure method
$X$ 3. Income method
4. Product method
Q. 14 Sambhar Lake is situated in which of the following states?

Ans
< 1. Kerala
X 2. Madhya Pradesh
3. Rajasthan
4. Karnataka
Q. 15 Which of the following waterways separates India from Sri Lanka?

Ans $\quad \times 1$. Arabian Sea
$X$ 2. Bay of Bengal
X 3.Andaman Sea
4. Palk Strait

## Q. 16 Which of the following is the highest gravity dam in India?

Ans $\times 1$. Hirakund Dam
2. Bhakra Dam

X 3. Sardar Sarovar Dam
4. Mettur Dam
Q. 17 Identify the chemical formula of ammonium hydroxide.

Ans

1. $\mathrm{NH}_{4} \mathrm{OH}$
2. $\mathrm{NH}_{4} \mathrm{O}_{2}$
$X$ 3. $\mathrm{NH}_{3} \mathrm{O}$
X 4. $\mathrm{NH}_{2} \mathrm{OH}$
Q. 18 Which of the following sites of Harappan civilization is located near Bolan Pass?

Ans

1. Mehrgarh
2. Chirand

X 3. Gufkral
4. Koldihwa
Q. 19 How much percentage of nitrogen is present in the atmosphere?

Ans
1.78\%

- $2.89 \%$
$\times 3.67 \%$
4.71\%
Q. 20 Partition of Bengal held in $\qquad$ -.

Ans $\mathbf{X 1} 1.1901$
X 2.1903
3. 1905
4. 1907

## Q. 21 In which year was India House established by Shyamji Verma?

Ans

- 1. 1905
- 2. 1899
$\times 3.1902$
-4. 1909


## Q. 22 In September 2022, which High Court has declared the "Duare Ration" scheme as

 illegal and against the National Food Security Act?Ans
X 1. Delhi
2. Calcutta

X 3. Patna
$\times$ 4. Allahabad
Q. 23 Which country beat India in the men's hockey semi-final event at Tokyo Olympics, 2020?

Ans
X 1. Germany
$\times$ 2. Pakistan
3. Belgium
4. Australia
Q. 24 According to census 2011, the literacy rate of India is $\qquad$ .
Ans
X 1.75 .04 percent
2. 74.04 percent
$\times 3.77 .04$ percent
X 4. 76.04 percent

## Q. 25 With which instrument is Ustad Sultan Khan associated?

Ans $\times 1$. Sitar
$\times 2$. Sarod
3. Tabla
4. Sarangi
Q. 1 The pie chart given below shows the number of boys in 8 schools. The total number of boys in all these 8 school is 6000 . Number of boys in a particular school is shown as a percent of total number of boys in all these 8 schools.


Which of the following statement is correct?
$I$. The difference between number of boys in school $M$ and $Q$ are 1660.
II. The sum of number of boys in school J, K and L are 2400.

Ans
X 1. Both I and II
$\times 2$. Only 1
3. Only II

X 4. Neither I nor II
Q. 2 The remainder when $19^{19}+20$ is divided by 18 , is:

Ans
1.3
$\times 2.2$
$\times 3.1$
$\times 4.0$
Q. 3 What is the value of $\sin 75^{\circ}+\sin 15^{\circ}$ ?

Ans
$\times 1 . \frac{1}{\sqrt{2}}$
x 2. $\frac{\sqrt{3}}{2}$
3. $\sqrt{\frac{3}{2}}$
×4. $\frac{3}{\sqrt{2}}$
Q. 4 The following table shows the number of elected persons from various partics in a state assembly.

| Years <br> Party |  | 2015 | 2016 | 2017 | 2018 | 2019 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P | 62 | 70 | 52 | 90 | 82 | 80 |
| Q | 80 | 90 | 60 | 70 | 76 | 70 |
| R | 90 | 80 | 100 | 50 | 80 | 65 |
| S | 55 | 60 | 70 | 80 | 75 | 72 |

Find the difference between the number of seats won by party $R$ and party $Q$ in all the elections put together.
Ans
$\times 1.18$
2. 19
$\times 3.17$
4.20
Q. 5 The table given below shows the number of students joining in 6 different universities.

| Universities | Students |
| :---: | :---: |
| A | 275 |
| B | 215 |
| C | 350 |
| D | 250 |
| E | 450 |
| F | 170 |

What is the ratio number of students joining in university $A$ to the number of student joining in university F ?
Ans
X 1.17:39
2.51:37

X $3.34: 51$

- $4.55: 34$
Q. 6 A grocery shop is offering 10\% discount on the purchase of Rs. 500 and above. A 5\% discount is given on the purchase of value above Rs. 250 but below Rs. 500 . A discount of additional $1 \%$ is given if payment is made instantly in cash. How much would a customer have to pay by cash if he buys 25 packets of biscuits and one packet is priced at Rs. 30 ?
Ans
X 1.Rs. 670.25

2. Rs.668.25

X 3. Rs. 675
X 4. Rs. 667.05

If the ratio of corresponding sides of two similar triangles is $\sqrt{5}: \sqrt{7}$ then what is the ratio of the area of the two triangles?
Ans
x 1. $\sqrt[3]{5}: \sqrt{7}$

- 2. 25:49

3. $\sqrt{5}: \sqrt{7}$
4.5:7
Q. 8 If $\operatorname{cosec} \theta+\cot \theta=2$, then what is the value of $\operatorname{cosec} \theta$ ?

Ans
$\times$ 2. $\sqrt{2}$
$\times$ 3. $\sqrt{5}$
4. $\frac{3}{2}$
Q. 9 In the given figure, ABC is an isosceles triangle with $\mathrm{BC}=8 \mathrm{~cm}$ and $\mathrm{AB}=\mathrm{AC}$
$=5 \mathrm{~cm}$. The value of $\tan \mathrm{C}-\cot \mathrm{B}$ is $\qquad$ .


Ans
X1. $-\frac{5}{12}$
2. $-\frac{7}{12}$
-3. $\frac{7}{12}$
X4. $\frac{5}{12}$
Q. 10 The LCM of $\frac{3}{8}, \frac{5}{16}$ and $\frac{7}{2}$ is:

Ans
$\times 1.101 \frac{1}{2}$
2. $52 \frac{1}{2}$

X 3. $28 \frac{1}{2}$
X4. $25 \frac{1}{4}$
Q. 11 In an election between two candidates, a candidate who gets $64 \%$ of the votes polled is elected by a majority of 252 votes. What is the total number of votes polled?

Ans
$\times 1.950$

- 2. 90
$\times 3.850$

4. 800
Q. 12 The table given below shows the number of salesman in five companies.

| Companies | Salesman |
| :---: | :---: |
| C1 | 35 |
| C2 | 10 |
| C3 | 30 |
| C4 | 5 |
| C5 | 15 |

What is the average number of salesman in C2, C4 and C5?
Ans $\times 1.5$
2. 10
3. 15
4.20
Q. 13

If $y+\frac{1}{y}=11$, then the value of $y^{3}-\frac{1}{y^{3}}$ is:
Ans

1. $345 \sqrt{13}$
2. $360 \sqrt{13}$
3. $352 \sqrt{13}$
4. $368 \sqrt{13}$
Q. 14 The number of solid spheres, each of diameter 6 cm , that could be moulded to form a solid metal cylinder of height 90 cm and diameter 4 cm is:

Ans

1. 10
$\times 2.14$
< 3.16
2. 13
Q. 15 If $b \cos \theta=a$, then $\operatorname{cosec} \theta+\cot \theta=$ $\qquad$ .
Ans
$\times 1 . \sqrt{\frac{1}{b+a}}$
3. $\sqrt{\frac{b-a}{b+a}}$
4. $\sqrt{\frac{b+a}{b-a}}$
×4. $\sqrt{\frac{1}{b-a}}$
Q. 16

If $\left(x-\frac{1}{x}\right)^{2}=12$, what is the value of $\left(x^{2}-\frac{1}{x^{2}}\right)$, given that $x>0$ ?
Ans
$\times 1.6 \sqrt{2}$
2. $8 \sqrt{3}$
$\times 3.6 \sqrt{3}$
X4. $8 \sqrt{2}$
Q. 17 If the average of $s$ numbers is $r^{4}$ and the average of $r$ numbers is $s^{4}$, then find the average of all $r+s$ numbers?

Ans 1. $\mathrm{rs}\left(\mathrm{r}^{2}+\mathrm{s}^{2}-\mathrm{rs}\right)$
2. rs
3. $r^{2}+s^{2}$
4. $r s\left(r^{2}+s^{2}\right)$
Q. 18 A man sells two cows for Rs. 15,640 each, gaining $15 \%$ on one and losing $15 \%$ on the other. Find his total gain or loss.
Ans

1. Rs. 720 loss
2. Rs. 360 loss

X 3. Rs. 720 gain
4. Rs. 360 gain
Q. 19 Two persons $P$ and $Q$ can do a job together in 36 days. $P$ is 3 times as efficient as $Q$. In how many days can $Q$ alone complete the work?
Ans

1. 148
2. 140
3. 144
4. 146
Q. 20 The area of a sector of a circle is 88 sq . cm ., and the angle of the sector is $45^{\circ}$. Find the radius of the circle. (Use $\pi=\frac{22}{7}$ )

Ans
X 1. $3 \sqrt{ } 11 \mathrm{~cm}$
2. $4 \sqrt{ } 14 \mathrm{~cm}$

X $3.6 \sqrt{ } 13 \mathrm{~cm}$
$4.5 \sqrt{ } 14 \mathrm{~cm}$
Q. 21 What is the fourth proportional to 7, 15 and 21?

Ans
$\times 1.29$
$\times 2.30$
$\times 3.48$

- 4.45
Q. 22 A, B and C can separately do a work in 6,10 and 15 days respectively. They started to work together but $C$ left after 2 days. In how many days will the remaining work be finished?

Ans
X1. $1 \frac{2}{4}$
2. $1 \frac{1}{4}$
$\times 3.1 \frac{5}{8}$
4. $2 \frac{7}{4}$
Q. 23
$a^{3}+b^{3}+c^{3}=3 a b c$ if $\qquad$ -

Ans
X 1. $a=b=c$
2. $a+b+c=0$
X. $a+b+c=1$
4. $a+b+c=-1$
Q. 24 In how many least number of complete years a sum of money become more than four times of itself at the rate of 50 percent per annum on simple interest?
Ans
$\times 1.9$ years
2.7 years
3.6 years
$\times 4.5$ years
Q. 25 The length of the side of a cube is 1.4 cm . What is the volume of the largest sphere that can be taken out of the cube?
Ans

1. $1.44 \mathrm{~cm}^{3}$

X 2. $3.26 \mathrm{~cm}^{3}$
$\times 3.2 .66 \mathrm{~cm}^{3}$
$4.5 .64 \mathrm{~cm}^{3}$

## Section : English Comprehension

Q. 1 Select the most appropriate meaning of the underlined idiom in the given sentence.

After several years of cheating on his PhD work, the candidate finally had to face the music and lose the opportunity.
Ans
$X$ 1. Accept ignorance
2. To accept unpleasant consequences
3. Choose another alternative that is uninteresting

X 4. Be exposed
Q. 2 Select the most appropriate option to fill in the blank.

Sunil cannot $\qquad$ a trip to the US now because he has already spent a lot for the completion of his house.
Ans
X 1. visit
2. afford
3. spend
4. earn

## Q. 3 Select the most appropriate option that can substitute the underlined segment in the

 given sentence.He was not able to adopt himself to the new environment of the hostel.
Ans
$X$ 1. able to adept himself to
2. able for adopt himself to

X 3. able to adopt himself with
4. able to adapt himself to
Q. 4 Rearrange the parts of the sentence in correct order.

NFTs are
P. digital collectables that exist on
Q. and are better known for recently
R. taking the art world by storm
S. online ledgers known as blockchains

Ans

1. PSQR
$\times 2$ RPQS
X 3.RQPS
2. SPRQ
Q. 5 Choose the incorrectly spelt word.

Ans
$X 1$. Flawless
$X 2$. Rudimentary
$\times$ 3. Primitive
4. Impracticle
Q. 6 A part of the given sentence which has been underlined may contain a spelling error. Select the option that correctly rectifies the spelling error. If there is no error, select 'No error'.

The police came to the accident spot after receiving an annonymous phone call.
Ans
$X 1$. Anonnymous
( 2. No error
3. Anonymous
$X 4$. Anonymaus

## Q. 7 Parts of the following sentence have been underlined and given as options. Select the

 option that contains an error.I told Rahu on wait for two hours at the bus stop.
Ans
X 1. at
2. for
3. told
4. on
Q. 8 Select the most appropriate synonym of the underlined word in the given sentence.

The director is at the apex of the managing committee.
Ans
$X$ 1. Core
$\times 2$. Bottom3. Corner
4. Pinnacle
Q. 9 Select the correct indirect form of the given sentence.
"Meena, will you assist me to pack our belongings?" Asked her mother.
Ans

1. Meena's mother asked her whether she will assist her to pack their belongings.
2. Meena's mother asked her whether if she would assist her to pack their belongings.
3. Meena's mother asked her whether she would assist her to pack their belongings.
4. Meena's mother asked her whether she can assist her to pack their belongings.
Q. 10 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.

Huda lived in / the southern part / off Germany.
Ans

1. off Germany
$X$ 2. the southern part
2. No error
3. Huda lived in

## Q. 11 Select the most appropriate ANTONYM of the given word.

## Everlasting

Ans

1. Eternal
2. Transient
$X$ 3. Fatuous
X 4. Misled
Q. 12 Select the correct active form of the given sentence. Our machine is shipped to ten different countries.

Ans

1. We shipped our machine to ten different countries.
2. We are shipping our machine to ten different countries.3. Someone ship our machine on ten different countries
3. We ship our machine to ten different countries.
Q. 13 Select the correct passive form of the given sentence.

The citizens have chosen that man as their leader.
Ans
$X$ 1. That man had been chosen by the citizens as their leader.
2. That man has been chosen by the citizens as their leader.
$X$ 3. That man is chosen by the citizens as their leader.
4. That man was chosen by the citizens as their leader.
Q. 14 Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully.

Neither the teachers (or the principal likes the new budget) cuts.
Ans
$X$ 1. either the principal likes the new budget
$\times 2$. or the principal like the new budget
$X 3$. nor the principal like the new budget
4. nor the principal likes the new budget
Q. 15 Select the most appropriate ANTONYM of the word 'ACQUISITION' from the given sentence.

The head coach got surprised with the level of enthusiasm shown by the players as they all were demoralised after the first loss.
Ans
X 1. Enthusiasm
2. Demoralised
3. Surprised
4. Loss
Q. 16 Select the most appropriate synonym of the underlined word.

The fraudsters hoodwinked us and took away all our valuables.
Ans
$\times 1$. Coerced
$\times$ 2. Threatened
X 3. Misguided4. Deceived
Q. 17 Select the option that can be used as a one-word substitute for the given group of words.

One who loves humanity or believes in universal brotherhood
Ans
$X$ 1. Humane
2. Magnanimous
3. Philanthropist
4. Misanthropist
Q. 18 The question below consists of a set of labeled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.
P. I had my own crib in the bedroom next to our parent's room.
Q. Annie awoke hungry at 2:30 a.m. each morning.
R. When Annie would cry out, I would climb out of my crib and come running into our parent's room to check on her.
S . For the first few months, Annie slept in a crib by our parents' bed.
Ans
X 1. PRSQ

- 2.RPQS

X 3. QRSP
4. SPQR

## Q. 19 A sentence has been given with a blank to be filled with an appropriate word. Choose

 the correct alternative.Writing down instructions, steps and remembering them can make you look really efficient and $\qquad$ -.
Ans

1. diligent
2. dormant
3. operable
4. sluggish
Q. 20 Select the most appropriate meaning of the given idiom.

Lose your marbles
Ans 1. To go insane
2. To handle stress
3. To lower down anger
4. To be patient


## 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.

Mob lynching is the act of a group of people murdering a person without due process of law

> for an (1)
$\qquad$ infraction. In recent years, mob lynching has become one of the hate
(2) that targets persons of a certain identity, members of a minority population, or strangers on the basis of a mere (3) $\qquad$ Without obeying any principles of law, the mob takes the law into their own hands to punish the supposed (4) $\qquad$ in the name of justice. Mob lynching is a breach of human dignity and a (5) $\qquad$ violation of the Universal Declaration of Human Rights, according to Article 21 of the Indian Constitution.

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

Ans 1.alleged
$\times$ 2. advantaged
X 3. applied
4. encouraged

## 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.

Mob lynching is the act of a group of people murdering a person without due process of law for an (1) $\qquad$ infraction. In recent years, mob lynching has become one of the hate
(2) that targets persons of a certain identity, members of a minority population, or strangers on the basis of a mere (3) $\qquad$ Without obeying any principles of law, the
mob takes the law into their own hands to punish the supposed (4) $\qquad$ in the name
of justice. Mob lynching is a breach of human dignity and a (5) $\qquad$ violation of the Universal Declaration of Human Rights, according to Article 21 of the Indian Constitution.

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

Ans 1.crimes
$\times 2$. gossips
$\times 3$. goals
$\times$ 4. desires

## 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.

Mob lynching is the act of a group of people murdering a person without due process of law for an (1) $\qquad$ infraction. In recent years, mob lynching has become one of the hate
(2) $\qquad$ that targets persons of a certain identity, members of a minority population, or strangers on the basis of a mere (3)_. Without obeying any principles of law, the mob takes the law into their own hands to punish the supposed (4) $\qquad$ in the name of justice. Mob lynching is a breach of human dignity and a (5) violation of the Universal Declaration of Human Rights, according to Article 21 of the Indian Constitution.

SubQuestion No : 23
Q. 23 Select the most appropriate answer to fill in blank 3.

Ans

1. suspicion
$X$ 2. trust
$\times$ 3. evidence
$\times 4$. logic

## 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.

Mob lynching is the act of a group of people murdering a person without due process of law for an (1) $\qquad$ infraction. In recent years, mob lynching has become one of the hate
(2) that targets persons of a certain identity, members of a minority population, or strangers on the basis of a mere (3) $\qquad$ Without obeying any principles of law, the
mob takes the law into their own hands to punish the supposed (4) $\qquad$ in the name
of justice. Mob lynching is a breach of human dignity and a (5) $\qquad$ violation of the Universal Declaration of Human Rights, according to Article 21 of the Indian Constitution.

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

Ans
$X$ 1. innocent
X 2. lawman
$\times$ 3. faultless
4. accused

## 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.

Mob lynching is the act of a group of people murdering a person without due process of law for an (1) $\qquad$ infraction. In recent years, mob lynching has become one of the hate
(2) $\qquad$ that targets persons of a certain identity, members of a minority population, or strangers on the basis of a mere (3)_. Without obeying any principles of law, the mob takes the law into their own hands to punish the supposed (4) $\qquad$ in the name of justice. Mob lynching is a breach of human dignity and a (5) violation of the Universal Declaration of Human Rights, according to Article 21 of the Indian Constitution.

SubQuestion No : 25
Q. 25 Select the most appropriate answer to fill in blank 5.

Ans
X 1. prevalent
人 2. convenient
$X$ 3. covert
4. flagrant

