ENGLISH LANGUAGE AND COMPREHENSION

1. (3)
2. (3)
3. (2)
4. (2)
5. (1)
6. (2)
7. (4)
8. (4)
9. (4)
10. (1)
11. (3)
12. (1)
13. (3)
14. (3)
15. (1)
16. (4)
17. (2)
18. (3)
19. (4)
20. (4)
21. (2)
22. (4)
23. (2)
24. (1)
25. (4)
26. (2) Replace 'yours' with 'your'. Your- Possessive adjective. Yours- Possessive pronoun
27. (2) 'Holistic' is incorrectly spelt here, means- - considered as a whole thing rather than a collection of parts.
28. (1) Article 'a' takes a singular noun.
29. (4) Remove 'more'. Two comparative degree can't come together. 'Scarcer' is the comparative degree


## DIFFICULT WORD

\begin{tabular}{|c|c|c|}
\hline WORD \& MEANING IN ENGLISH \& MEANING IN HINDI <br>
\hline Fauna \& The animals of a particular region \& फ़. वर्ग <br>
\hline Blossom \& (Used especially about trees) to produce flowers \& खिनना, पु ठिप्तहा` ना <br>
\hline Blunt \& (Used about a person, comment, etc.) very direct; saying what you think without trying to be polite \& मु हैष ट, रूपठ वा दी <br>
\hline Domicile \& The place or country of residence, which is legally or officially recognized \& अधिता स <br>
\hline Evict \& To force somebody (officially) to leave the house or land which he /she is renting \& - ¢ ${ }^{\text {¢ }}$ दख ल करना <br>
\hline Far-fetched \& Not easily or naturally deduced or introduced \& अ वा $\mathrm{I}_{17} \mathrm{f}$ विक <br>
\hline Flora \& All the plant life present in a particular region or time \& वनस पत <br>
\hline Forthright \& Saying exactly what you think in a clear and direct way \& निष्कप्ट <br>
\hline Granules \& A small particle \& एछा' टा कप <br>
\hline Implausible \& Not easy to believe \& अकल प्नी य <br>
\hline Incredible \& Impossible or very difficult to believe \& अविस्वसी य <br>
\hline Malt \& Type of Grain \& जै <br>

\hline Phylum \& A group into which animals, plants, etc. are divided, smaller than A kingdom and larger than a class \& | जतिय संघा जिसे फ़ु, |
| :--- |
| पौ ध' आ दि का वगी करण किय जाता है | <br>

\hline Roast \& To cook in an oven or over a fire \& आ ग मे ${ }^{2}{ }^{2} \mathrm{~T}_{\text {a }}$ नना य फ़्म ना <br>
\hline Strain \& Worry or pressure caused by having too much to deal with \& चिं ता य दबा व <br>
\hline Uncandid \& Not frank. \& अस पषट <br>
\hline Uninhibited \& Behaving in a free and natural way, without worrying what other people think of you \&  <br>
\hline Unpredictable \& That cannot be predicted because it changes a lot or depends on too many different things \& अप्रत य शि त <br>
\hline Vain \& Useless; failing to produce the result you want \& - यT ${ }^{\text {c }}$ <br>
\hline
\end{tabular}

## GENERAL NTELLIGENGE \& REASONING

1. (3)

2. (1) By Hit and trial method Interchanging 3 and 78
$13+9 \div 78 \times 27-16=3$
$13+9 \div 3 \times 27-16=78$
$13+81-16=78$
$78=78$
3. (2)
4. (3) $8,9,431 \Rightarrow 8^{3}-9^{2}=431$
$11,8,1267 \Rightarrow 11^{3}-8^{2}=1267$
Similarly, $7,5,318 \Rightarrow 7^{3}-5^{2}=318$
5. (2)
6. (3)Chair and table are used in pairs. In the same way, erasers and pencils are used in pair.
7. (4) $\mathrm{A} \xrightarrow{-3} \mathrm{X} \xrightarrow{-3} \mathrm{U}$
$\mathrm{S} \xrightarrow{-3} \mathrm{P} \xrightarrow{-4} \mathrm{~L}(\mathrm{Odd})$
$\mathrm{U} \xrightarrow{-3} \mathrm{R} \xrightarrow{-3} \mathrm{O}$
$\mathrm{N} \xrightarrow{-3} \mathrm{~K} \xrightarrow{-3} \mathrm{H}$
8. (2) A X U
$\xrightarrow[-3]{1} 24 \underbrace{2421}_{-3}$

9. (2) $19: 359 \Rightarrow 19^{2}-2=359$
$17: 287 \Rightarrow 17^{2}-2=287$
$21: 439 \Rightarrow 21^{2}-2=439$
10. (4)

11. (1)
12. (2) Telephone
13. (1)
14. (1) $14,112,6=14^{2}-14 \times 6$ $=112$
$17,204,5=17^{2}-17 \times 5$ $=204$
Similarly,
$21,189,12=21^{2}-21 \times 12$ $=189$
15. (2) $5 \underbrace{9,118}_{\times 2} \underbrace{18,34,708,21}_{\times 3} \underbrace{24,4248}_{\times 3}$
16. (1) Mouse is used with a computer. In the same way, the Remote is used with Television.
17. (1) $2,4,5,1,3$
18. (4)


Similarly,

19. (1) $32,64,256 \Rightarrow 32 \times 2=64 /$
$64 \times 4=256$
$18,36,144 \Rightarrow 18 \times 2=36 /$
$36 \times 4=144$
Similarly,
$37,74,296=37 \times 2=74 /$
$74 \times 4=296$
20. (4) Opposite
$P \Leftrightarrow R$
$\mathrm{M} \Leftrightarrow \mathrm{O}$
$\mathrm{Q} \Leftrightarrow \mathrm{N}$
21. (2)

22. (2) 94 B 47 C 63 D 14 A 5 C ? $=-2$
$94 \div 47+63-14 \times 5+?$
$=-2$
$2+63-70+?=-2$
$-5+?=-2$
$?=3$
23. (3)
24. (4)
25. (1)


Similarly,


## ANSWER KEY

1. (3) 2. (1) 3. (2) 4. (3)5. (2)
2. (3) 7. (4) 8. (2)9. (2) 10. (4)
11.(1) 12.(2)13. (1) 14.(1) 15. (2)
16.(1)17.(1) 18.(4) 19.(1) 20. (4)
21.(2) 22.(2) 23.(3) 24.(4)25. (1)

QUANTITATIVE APTITUDE

1. (2) Total investments $=20$
$P$ invests $=\left(20 \times \frac{1}{5}\right)=4$
$Q$ invests $=\left(20 \times \frac{1}{4}\right)=5$
$\therefore \mathrm{R}$ invests $=20-(4+5)$

$$
=11
$$

$\therefore$ Ratio of investments $=4$ : $5: 11$
2. (2) $(a+b+c)\left\{(a-b)^{2}+(b-c)^{2}+\right.$ $\left.(\mathrm{c}-\mathrm{a})^{2}\right\}$
$\Rightarrow 2\left[\mathrm{a}^{3}+\mathrm{b}^{3}+\mathrm{c}^{3}-3 \mathrm{abc}\right]$
$\Rightarrow 2 a^{3}+2 b^{3}+2 c^{3}-6 a b c$
3. (3) Total marks obtained by $\mathrm{A}=$ $70+180+170+110+130$ $+80=740$
Total marks obtained by $\mathrm{B}=$ $100+120+160+140+60$ $+150=730$
$\therefore \%$ of marks of A to marks
of $B=\frac{740}{730} \times 100$
= 98.64\%
4. (2) The numbers are $\rightarrow \frac{5}{11}, \frac{5}{7}$,
$\frac{3}{8}, \frac{6}{13}$
Multiple is terms with LCM of $(11,7,8,13)$
$\Rightarrow \frac{5}{11} \times 8008, \frac{5}{7} \times 8008, \frac{3}{8}$
$\times 8008, \frac{6}{13} \times 8008$
$\Rightarrow 3640,5720,3003,3696$
$\therefore$ largest $\rightarrow \frac{5}{7}$, smallest $\rightarrow \frac{3}{8}$
Difference $\rightarrow \frac{5}{7}-\frac{3}{8}$
$=\frac{40-21}{56}=\frac{19}{56}$
5. (1) Speed of boat in downstream $=(4+11) \mathrm{km} / \mathrm{hr}$
$=15 \mathrm{~km} / \mathrm{hr}$
Speed of boat in upstream =
$(11-4) \mathrm{km} / \mathrm{hr}$
$=7 \mathrm{~km} / \mathrm{hr}$
$\therefore$ Total time $=\left[\frac{21}{7}+\frac{45}{15}\right] \mathrm{hr}$
$=3+3$
$=6 \mathrm{hr}$
6. (4) $\sqrt{\frac{\operatorname{cosec} A+1}{\operatorname{cosec} A-1}}+\sqrt{\frac{\operatorname{cosec} A-1}{\operatorname{cosec} A+1}}$

$$
\begin{aligned}
& =\frac{(\operatorname{cosec} A+1)+(\operatorname{cosec} A-1)}{\sqrt{\operatorname{cosec}^{2} A-1}} \\
& =\frac{2 \operatorname{cosec} A}{\cot A} \\
& =2 \sec A
\end{aligned}
$$

7. (2) Let 10 consecutive integers are $\rightarrow \mathrm{x}, \mathrm{x}+1, \mathrm{x}+2, \mathrm{x}+3, \mathrm{x}$ $+4, x+5, x+6, x+7, x+8$, $x+9$
$\therefore$ Sum of 10 numbers $=10$ $x+45$
ATQ,
$\frac{10 x+45}{10} \equiv \frac{33}{2}$
Or, $x=\frac{165-45}{10}$
Or, $x=\frac{120}{10}$
Or, $x=12$
$I^{\text {st }} 3$ consecutive integers are $=12,13,14$
$\therefore$ Average $=\frac{12+13+14}{3}$
$=13$
8. (4)


From figure, We have
$4 \theta=180^{\circ}$
$\theta=45^{\circ}$
$\therefore \angle \mathrm{TSU}=2 \times 45^{\circ}$
$=90^{\circ}$
9. (3) We know, for equilateral triangle -
Median $=$ height $=\frac{\sqrt{3}}{2} \times$ side
Or, $15 \sqrt{3}=\frac{\sqrt{3}}{2} \times$ side
Or, side $=30 \mathrm{~cm}$
10. (3) For simple interest

$$
\begin{aligned}
& \mathrm{SI}=\frac{\text { Principal } \times \text { Rate } \times \text { time }}{100} \\
& \text { Or, } \frac{1200 \times 100}{8 \times 3}=\text { Principal }
\end{aligned}
$$

Or, Principal = 5000
For compound interest,
Rate of interest $=10 \%$
$=\frac{10}{100}=\frac{1}{10}$
Time $=2$ year
5000
$\downarrow \times \frac{1}{10}$
$500 \times 2=1000$
$\downarrow \times \frac{1}{10} \times 2=50$
$50 \times 1 \quad$
$\therefore 2$ times the compound interest $=(1050 \times 2)$
$=2100$
11. (4)


We know centroid divides the median in $2: 1$
ATQ,
$2=14$
$1=7$
$3=21$
$\therefore$ length of $\mathrm{AD}=21$
12. (2)

$\tan \mathrm{A}=3$
Now,
$3 \sin \mathrm{~A} \cos \mathrm{~A}$
$=3 \times \frac{3}{\sqrt{10}} \times \frac{1}{\sqrt{10}}$
$=\frac{9}{10}$
13. (1)
$\begin{array}{ll}\text { Previous } & \text { Present } \\ \text { Ratio of price } \rightarrow 100 \quad: & 75\end{array}$ Ratio of consumption $\rightarrow \underbrace{4: 3}_{1 \equiv 20}$
$\therefore$ Earlier consumption
$=(3 \times 20) \mathrm{kg}$
$=60 \mathrm{~kg}$
14. (4) $\left(a^{2}+b^{2}+4 c^{2}-a b-2 b c-\right.$

2ca) $(a+b+2 c)$
$=a^{3}+b^{3}+(2 c)^{3}-3 \times a \times b \times$
2c
$=a^{3}+b^{3}+8 c^{3}-6 a b c$
15. (4) Length of direct common tangent $=\sqrt{(17)^{2}-(11-3)^{2}}$
$=\sqrt{289-64} \mathrm{~cm}$
$=15 \mathrm{~cm}$
16. (2) Total sales of company $C$, in year $Y_{1}, Y_{2}, Y_{3}$
$=200+400+600$
$=1200$
$\therefore$ Average sales $=\frac{1200}{3}$
$\left(\mathrm{J}_{1}\right)=400$
Total sales of company $\mathrm{C}_{1}=$
$200+400+600+500+300$
$=200$
Total sales of company $\mathrm{C}_{2}=$
$1000+7000+800+200+$ $100=2800$
$\therefore$ Difference between sales of company $\mathrm{C}_{1}$ and $\mathrm{C}_{2}$
$J_{2}=2800-200$
$\mathrm{J}_{2}=800$
$\therefore$ The value of $\frac{\mathrm{J}_{1}}{\mathrm{~J}_{2}}=\frac{800}{400}=2$
17. (1) $\frac{1+\sin A}{\cos ^{2} A}$
$=\frac{1+\sin A}{1-\sin ^{2} A}$
$=\frac{1+\sin A}{(1+\sin A)(1-\sin A)}$
$=\frac{1}{1-\sin A}$
18. (4) Total salary of all companies $=200+650+350+250+$ $450+300=2200$
19. (2) $525+1235 \div 247-29 \times 10$
$=525+5-29 \times 10$
$=525+5-290$
$=240$
20. (4) $x+\frac{1}{x}=-2$
$\therefore x=-1$
Now,
$x^{7}+x^{-7}+x^{2}+x^{-2}$
$=(-1)^{7}+(-1)^{-7}+(-1)^{2}+(-1)-2$
$=-2+2$
$=0$
21.(3) Ratio of time of men and women = $2: 3$
$\therefore$ Ratio of efficiency of men and women $=3: 2$
$\therefore$ Total work $=24 \times(3+2)$

$$
\begin{aligned}
& =24 \times 5 \\
& =120
\end{aligned}
$$

$\therefore$ To complete the work by a

$$
\text { woman }=\frac{120}{2} \text { days }
$$

$$
=60 \text { days }
$$

22.(1)As selling price of two machines is same
The dealer incurred loss.
$\therefore$ loss $\%=(40-20) \%$
= $20 \%$
23. (2) ATQ,
$100 \% \equiv 300000$
$50 \% \equiv 150000$
$50 \% \equiv 10 \%+15 \%+25 \%$
$\rightarrow$ Only possible case
$\therefore$ Items are $\rightarrow$ Education, Others, transport
24. (1) As small hemispherical are made from big hemisphere, so volume of smaller hemisphere is equivalent to big hemisphere.
ATQ,
$\frac{2}{3} \pi(12)^{3}=\mathrm{n} \times \frac{2}{3} \pi(6)^{3}$
Or, $1728=216 n$
Or, $\mathrm{n}=8$
25. (3) We know,

Ratio of cost price and marked price
(100 - Discount\%) : (100 loss\%)
$\Rightarrow(100-20):(100-5)$
$\Rightarrow 80: 95$
Profit $=(95-80)$
$=15$
$\therefore$ Y profit $=\frac{15}{80} \times 100$
= 18.75\%

## ANSWER KEY

1. (2) 2. (2) 3. (3) 4. (2) 5. (1)
2. (4) 7. (2) 8. (4) 9. (3) 10. (3)
11.(4) 12.(2) 13.(1) 14.(4) 15. (4)
3. (2) 17.(1) 18. (4) 19.(2) 20. (4)
21.(3) 22.(1) 23. (2) 24.(1) 25.(3)

## GENERAL AWARENESS

1.(3)
2.(2) 6 recognised national parties are Aam Aadmi Party, Bahujan Samaj Party, Bharatiya Janata Party, Communist Party of India, Indian National Congress, National People's Party.
3.(3) Disguised unemployment is unemployment that does not affect aggregate economic out-
put. It occurs when productivity is low and too many workers are filling too few jobs.
Classical unemployment, also known as real-wage unemployment, occurs when real wages, or the cost of employing a worker, are too high.
4.(3) Language translators allow computer programmers to write sets of instructions in specific programming languages.
6.(4) The subtropical zones or subtropics are geographical and climate zones to the north and south of the tropics. The horse latitudes lie within this range.
7.(4) Stargazing: The Players in My Life is the autobiography of Ravi Shastri.
Playing It My Way is the autobiography of Sachin Tendulkar written with Boria Majumdar.
8.(2) Norway leads the CRII followed by Germany and Australia out of 161 countries.
9.(3)

Atomic number of Sodium is 11 . Atomic mass of Carbon is 12.
Atomic mass of Sulfur is 32.06. Atomic mass of Calcium is 40.08.
10.(4) Nagar Haveli is a C shaped enclave located between the states of Gujarat and Maharashtra . The Lakshadweep islands lie to the Southwest of the Indian mainland, in the Arabian Sea.
11.(2) Ctrl+F - Display the Navigation task pane, to search within the document content.
Alt + F - open the File menu
12.(1) The Very Short Range Air Defence System, or VSHORADS is a Man Portable Air Defence System (MANPAD) or man portable surface-to-air missile developed by Defence Research and Development Organisation's Research Centre Imarat (RCI), located at Hyderabad. It is designed for anti-aircraft warfare and neutralizing low altitude aerial threats at short ranges.
13.(2) Bega Begum was known as Zan-i-Kalan being the first wife of Humayun and was also known
as Haji Begum after she performed the Hajj pilgrimage.
Gulbadan Begam was the daughter of Mughal emperor Babur She was the author of the book Humayunnamah.
14.(3) Living organism can only survive in a narrow range of pH change.
When pH of rain water is less than 5.6 , it is called acid rain. ooth decay starts when the pH of the mouth is lower than 5.5 .
15.(3) 2026 Commonwealth Games will be held in Victoria, Australia
Motto will be 'A Games like no other, in a place like no other'.
16.(1) Mumtaz was the leading goalscorer at the FIH Women's Hockey 2022.
Pirmin Blaak is a Dutch field hockey player.
Arthur Thieffry(France) was Nomineeted for FIH Goalkeeper of the Year.
17.(2)
18.(2) On 28 December 1885, the Indian National Congress was founded at Gokuldas Tejpal Sanskrit College in Bombay, with 72 delegates in attendance. The founder of the INC was Allan Octavian Hume. It was founded in Mumbai.
19.(4)
20.(1) Liver fluke - Platyhelminthes
21.(4) Tamil Nadu - Madras Presidency Kerala - Travancore
22.(1) Palk Strait - Tamil Naduand the Jaffna District Sri Lanka.
Hudson Bay - Baffin Island and Quebec(Canada)
Bosphorus - Black Sea and the Sea of Marmara.
23.(4) JALDOOT App e-brochure to capture the Ground water level in a better way.
24.(2)
25.(4)

## ANSWER KEY

1. (3) 2. (2) 3 . (3) 4. (3) 5. (1)
2. (4) 7. (4) 8. (2) 9. (3) 10. (4)
11.(2) 12.(1) 13.(2) 14.(3) 15. (3)
16.(1) 17.(2) 18. (2) 19.(4) 20. (1)
21.(4) 22.(1) 23. (4) 24.(2) 25. (4)
