SET - 09 || ANSWERS WITH EXPLANATION || Exam held on : 13/03/2023 || 09:00 AM

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)		

4. (2) Replace 'yours' with 'your'. Your- Possessive adjective. Yours- Possessive pronoun

7. (2) 'Holistic' is incorrectly spelt here, means- - considered as a whole thing rather than a collection of parts.

15. (1) Article 'a' takes a singular noun.

19. (4) Remove 'more'. Two comparative degree can't come together. 'Scarcer' is the comparative degree

of Scarce, means- not existing in large quantities; hard to find- विरल (अधिक मात्रा में उपलब्ध नहीं); दुर्लभ

DIFFICULT WORD

WORD	MEANING IN ENGLISH	MEANING IN HINDI
Fauna	The animals of a particular region	पशुवर्ग
Blossom	(Used especially about trees) to produce flowers	खिलना, पुष्पित होना
Blunt	(Used about a person, comment, etc.) very direct; saying what you	मुँहफट, स्पष्टवादी
	think without trying to be polite	
Domicile	The place or country of residence, which is legally or officially	अधिवास
	recognized	
Evict	To force somebody (officially) to leave the house or land which he	बेदखल करना
	/she is renting	
Far-fetched	Not easily or naturally deduced or introduced	अस्वाभाविक
Flora	All the plant life present in a particular region or time	वनस्पति
Forthright	Saying exactly what you think in a clear and direct way	निष्कपट
Granules	A small particle	एक छोटा कण
Implausible	Not easy to believe	अकल्पनीय
Incredible	Impossible or very difficult to believe	अविश्वसनीय
Malt	Type of Grain	जौ
Phylum	A group into which animals, plants, etc. are divided, smaller than	जाति या संघ जिसमें पशु,
	A kingdom and larger than a class	पौधों आदि का वर्गीकरण
		किया जाता है
Roast	To cook in an oven or over a fire	आग में भूनना या पकाना
Strain	Worry or pressure caused by having too much to deal with	चिंता या दबाव
Uncandid	Not frank.	अस्पष्ट
Uninhibited	Behaving in a free and natural way, without worrying what other people think of you	स्वच्छंद, उन्मुक्त
Unpredictable	That cannot be predicted because it changes a lot or depends on too many different things	अप्रत्याशित
Vain	Useless; failing to produce the result you want	व्यर्थ

Beneral INTELLIGENCE & REASONING (2. 1. (3) Red Black & White	(1) By Hit and trial method Interchanging 3 and 78 13 + 9 ÷ 78 × 27 - 16 = 3 13 + 9 ÷ 3 × 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)
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6. (3) Chair and table are used in 19. (1) 32, 64, $256 \Rightarrow 32 \times 2 = 64/$ pairs. In the same way, erasers and pencils are used in pair. 19. (1) 32, 64, $256 \Rightarrow 32 \times 2 = 64/$ $64 \times 4 = 256$ 18, 36, $144 \Rightarrow 18 \times 2 = 36/$

7. (4) $A^{-3}X^{-3}U$ $S^{-3}P^{-4}L$ (Odd) $U^{-3}R^{-3}O$ $N^{-3}K^{-3}H$

8. (2) A X U 1 24 21 -3КН Ν 19_{-3} 16 12 U R O 21 18 15-3 -3 N K H 14 11 189. (2) 19 : $359 \Rightarrow 19^2 - 2 = 359$ $17:287 \Rightarrow 17^2 - 2 = 287$ $21: 439 \Rightarrow 21^2 - 2 = 439$ 10. (4) $p^+ \iff T^-$ 11.(1)12. (2) Telephone 13.(1)14. (1) 14, 112, $6 = 14^2 - 14 \times 6$ = 112 17, 204, 5 = $17^2 - 17 \times 5$ = 204Similarly, 21, 189, 12 = $21^2 - 21 \times 12$ = 18915. (2) 59, 118, 354, 708, 2124, 4248 $\overrightarrow{\times 2}$ $\overrightarrow{\times 3}$ $\overrightarrow{\times 2}$ $\overrightarrow{\times 3}$ $\times 2$ 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) A J N +3 +3 +3 D M Q Similarly, ΤW Р +3 +3 +3

 $64 \times 4 = 256$ 18, 36, $144 \Rightarrow 18 \times 2 = 36/$ $36 \times 4 = 144$ Similarly. 37, 74, 296 = 37 × 2 = 74/ $74 \times 4 = 296$ 20. (4) Opposite $P \Leftrightarrow R$ $M \Leftrightarrow O$ $Q \Leftrightarrow N$ 21.(2) A N M +6 +9 +13 +6 +9 +13 MFM +6 +9 +13 Ò XM 22. (2) 94 B 47 C 63 D 14 A 5 C ? = -294 ÷ 47 + 63 – 14 × 5 + ? = -22 + 63 - 70 + ? = -2-5 + ? = -2? = 323. (3) 24. (4) 25.(1) 6 Opp. Place Value X Value Value Flace
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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 R invests = 20 - (4 + 5) = 11 \therefore Ratio of investments = 4 : 5:112. (2) $(a + b + c) \{(a-b)^2 + (b - c)^2 + (c - c)^2$ $(c-a)^{2}$ $\Rightarrow 2[a^3 + b^3 + c^3 - 3abc]$ $\Rightarrow 2a^3 + 2b^3 + 2c^3 - 6abc$ 3. (3) Total marks obtained by A = 70 + 180 + 170 + 110 + 130 +80 = 740Total marks obtained by 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 $\rightarrow \frac{5}{7} - \frac{3}{2}$ $=\frac{40-21}{56}=\frac{19}{56}$ 5. (1) Speed of boat in downstream = (4 + 11) km/hr= 15 km/hr Speed of boat in upstream = $(\bar{11} - 4) \text{ km/hr}$ = 7 km/hr

 $\therefore \text{ Total time} = \left[\frac{21}{7} + \frac{45}{15}\right] \text{hr}$ = 3 + 3= 6 hr

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6. (4) $\sqrt{\frac{\operatorname{cosec} A + 1}{\operatorname{cosec} A - 1}} + \sqrt{\frac{\operatorname{cosec} A - 1}{\operatorname{cosec} A + 1}}$ $\frac{\left(\operatorname{cosec} A+1\right)+\left(\operatorname{cosec} A-1\right)}{\sqrt{\operatorname{cosec}^2 A-1}}$ $=\frac{10}{100}=\frac{1}{10}$ Time = 2 year $2 \operatorname{cosec} A$ 5000 $\cot A$ $\downarrow \times \frac{1}{10}$ $= 2 \sec A$ 7. (2) Let 10 consecutive integers are \rightarrow x, x + 1, x + 2, x + 3, x $\downarrow \times \frac{10}{10}$ +4, x+5, x+6, x+7, x+8,x + 9 \therefore Sum of 10 numbers = 10 x + 45ATQ, = 2100 $\frac{10x+45}{10} \equiv \frac{33}{2}$ 11. (4) Or, $x = \frac{165 - 45}{10}$ Or, $x = \frac{120}{10}$ Or, x = 12median in 2:1 Ist 3 consecutive integers are ATQ, = 12, 13, 14 2 = 14 $\therefore \text{ Average} = \frac{12+13+14}{3}$ 1 = 73 = 21= 13 12.(2)8. (4) tanA = 3Now, 3sinA cosA From figure, We have $= 3 \times \frac{3}{\sqrt{10}} \times \frac{1}{\sqrt{10}}$ $4\theta = 180^{\circ}$ $\theta = 45^{\circ}$ $\therefore \angle TSU = 2 \times 45^{\circ}$ $=\frac{9}{10}$ $= 90^{\circ}$ 9. (3) We know, for equilateral triangle -13.(1)Median = height = $\frac{\sqrt{3}}{2}$ × side Or, $15\sqrt{3} = \frac{\sqrt{3}}{2} \times \text{side}$ $= (3 \times 20) \text{ kg}$ = 60 kg Or, side = 30 cm10. (3) For simple interest 2ca) (a + b + 2c) $SI = \frac{Principal \times Rate \times time}{100}$ Or, $\frac{1200 \times 100}{8 \times 3}$ = Principal

Or, Principal = 5000 15. (4) Length of direct common For compound interest, tangent = $\sqrt{(17)^2 - (11 - 3)^2}$ Rate of interest = 10% $=\sqrt{289-64}$ cm = 15 cm 16. (2) Total sales of company C, in year Y_1, Y_2, Y_3 = 200 + 400 + 600 = 1200 $500 \times 2 = 1000$ \therefore Average sales = $\frac{1200}{3}$ ×1 = 50 $(J_1) = 400$ 1050 Total sales of company $C_1 =$ \therefore 2 times the compound 200 + 400 + 600 + 500 + 300 interest = (1050×2) = 200 Total sales of company C_{2} = 1000 + 7000 + 800 + 200 + 100 = 2800: Difference between sales of company C_1 and C_2 $J_2 = 2800 - 200$ $J_{2}^{2} = 800$:. The value of $\frac{J_1}{J_2} = \frac{800}{400} = 2$ We know centroid divides the 17. (1) $\frac{1+\sin A}{\cos^2 A}$ $= \frac{1 + \sin A}{1 - \sin^2 A}$ \therefore length of AD = 21 $\sqrt{(3)^2 + (1)^2} = \sqrt{10}$ $1 + \sin A$ $=\overline{(1+\sin A)(1-\sin A)}$ $1 - \sin A$ 18. (4) Total salary of all companies = 200 + 650 + 350 + 250 + 450 + 300 = 220019. (2) $525 + 1235 \div 247 - 29 \times 10$ $= 525 + 5 - 29 \times 10$ = 525 + 5 - 290= 24020. (4) $x + \frac{1}{x} = -2$ **Previous** Present Ratio of price $\rightarrow 100$: 75 4 : 3 $\therefore x = -1$ Ratio of consumption $\rightarrow 3$: 4 Now, $x^{7} + x^{-7} + x^{2} + x^{-2}$ $= (-1)^{7} + (-1)^{-7} + (-1)^{2} + (-1)^{-2}$ = -2 + 2 $1 \equiv 20$: Earlier consumption = 0 21. (3) Ratio of time of men and women = 2:3: Ratio of efficiency of men $= a^{3} + b^{3} + (2c)^{3} - 3 \times a \times b \times b^{3}$ and women = 3:2 \therefore Total work = 24 × (3 + 2) $= a^3 + b^3 + 8c^3 - 6abc$ = 24 × 5 = 120

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... To complete the work by a woman = $\frac{120}{2}$ days = 60 days22. (1) As selling price of two machines is same The dealer incurred loss. $\therefore 10ss \% = (40 - 20)\%$ = 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, $\frac{2}{3}\pi(12)^3 = n \times \frac{2}{3}\pi (6)^3$ Or, 1728 = 216n Or, n = 8 25. (3) We know, Ratio of cost price and 9.(3)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 (2) 2. (2) 3. (3) 4. (2) 5. 1. (1)(4) 7. (2) 8. (4) 9. (3) 10. (3) 6. 11. (4) 12.(2) 13. (1) 14.(4) 15. (4)

21. (3) 22.(1) 23. (2) 24.(1) 25.(3) **GENERAL AWARENESS**

16. (2) 17.(1) 18. (4) 19.(2) 20. (4)

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.

5.(1)

- 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.
 - Atomic number of Sodium is 11. Atomic mass of Carbon is12. 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.
- Bega Begum was known as Zan-13.(2) i-Kalan being the first wife of Humayun and was also known

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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'.

Mumtaz was the leading goal-16.(1)scorer 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
- Tamil Nadu Madras Presidency 21.(4)Kerala - Travancore
- Palk Strait Tamil Naduand the 22.(1) 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.

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24.(2)
25.(4)
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ANSWER KEY						
1. (3) 2. (2)	3. (3)	4. (3) 5.	(1)			
6. (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)			

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