ENGLISH LANGUAGE AND COMPREHENSION

1. (4)	2. (4)	3. (3)	4. (1)	5. (4)	6. (1)	7. (2)	8. (1)	9. (1)
10. (3)	11. (4)	12. (2)	13. (2)	14. (1)	15. (1)	16. (3)	17. (2)	18. (3)
19. (1)	20. (3)	21. (2)	22. (1)	23. (1)	24. (1)	25. (4)		

EXPLANATION:-

4. (1) 'Waste' is incorrectly spelt here.

17. (2) Replace 'fail' with 'failed'. The action is of past.

18. (3) Replace 'been' with 'be'.
'Modal verb +$V_{b.f}$' is correct structure.

20. (3) (Pseudonym- **a fictitious name**). The correct spelling of other words are- Temporary, Camouflage, Taboo

WORD	MEANING IN ENGLISH	MEANING IN HINDI
Abduct	To carry (a person) off by force	अपहरण
Apostate	A person who renounces a religious or political belief or principle.	स्वधर्मत्यागी
Barge	To push people out of the way in order to get past them	जबरदस्ती घुसना
Camouflage	The hiding or disguising of something by covering it up or changing the way it looks	छलावरण
Crusade	A religions war	धर्मयुद्ध
Doleful	Sad or unhappy	उदास
Erudite	Educated	विद्वान, पढ़ा-लिखा
Extravagant	Spending or costing too much money	फिजूलखर्ची
Faddish	Intensely fashionable for a short time	थोड़े समय के लिए सुर्खियों में रहना
Intestate	A person who has died without having made a will.	बिना वसीयतनामा लिखे मरना
Introvert	One who does not express oneself freely	अंतर्मुखी
Minaret	A tall thin tower, usually forming part of a building where muslims meet and pray (a mosque)	मस्जिद की मीनार
Misanthrope	A person who hates or avoids other people	मानवद्वेषी
Pessimist	A person who always thinks that bad things will happen or that something will be not be successful	निराशावादी
Phony	Not real; false	जाली
Polyglot	A person who can speak multiple languages.	बहुभाषी
Prudent	Sensible and careful while making decisions, wise	विवेकी, समझदार
Skeptic	A person slow to believe or ready to question; doubter	संदेहवादी
Spire	A tall pointed tower on the top of a church	शिखर
Sturdy	Strong and healthy; that will not break easily	तगड़ा, मजबूत, दृढ़
Taboo	An action that is avoided for religious or social reasons:	निषेध
Thrifty	Showing a careful use of money, especially by avoiding waste and saving money for the future, miserly	मितव्ययी, कंजूस
Versatile	Able to do many different things	बहुमुखी

GENERAL INTELLIGENCE & REASONING

1. (4) Except Darjeeling which is a hill station. All are particular states.

2. (1) A Car is a type of Vehicle. In the same way, a Table is a type of Furniture.

3. (4)

4. (2)
N^+
|
$M^+ — O^- \Leftrightarrow P^+$
(N is Mother-in-law of P)
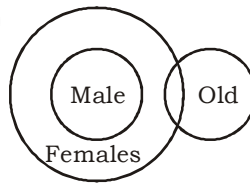
5. (2)

6. (2)

7. (1)

8. (2) Curd is made out of Milk. In the same way, furniture is made out of Wood.

9. (1) $432 : 111 :: \mathbf{641} : 320 :: 549 : 228$
$-321 \qquad -321 \qquad -321$

10. (4) 12, 28, 8 → $\left(\dfrac{28-12}{2}\right) \Rightarrow \dfrac{16}{2}$

$\Rightarrow 8$ (last number)

72, 48, 12 → $\left(\dfrac{72-48}{2}\right)$

$\Rightarrow \dfrac{24}{2} \Rightarrow 12$ (last number)

Similarly,

108, 58, 25 → $\left(\dfrac{108-58}{2}\right) \Rightarrow$

$\dfrac{50}{2} \Rightarrow 25$ (last number)

11. (1) 46, 93, 187, 375, **751**
$\underbrace{}_{\times 2+1} \; \underbrace{}_{\times 2+1} \; \underbrace{}_{\times 2+1} \; \underbrace{}_{\times 2+1}$

12. (4)

13. (4) Triangle → (3 sides)
Square → (4 sides)
Pentagon → (5 sides)
Hexagon → (6 sides)
Heptagon → (7 sides)

14. (1) 12 @ 2 $\Rightarrow 12^2 + 1 \Rightarrow 144 + 1$
= 145
15 @ 2 $\Rightarrow 15^2 + 1 \Rightarrow 225 + 1$
= 256
Similarly,
24 @ 2 $\Rightarrow 24^2 + 1 \Rightarrow 576 + 1$
= 577

15. (3) A $\xrightarrow{+2}$ C
G $\xrightarrow{+2}$ I
H $\xrightarrow{+2}$ J
L $\xrightarrow{+2}$ N
Similarly,
D $\xrightarrow{+2}$ F
Q $\xrightarrow{+2}$ S
M $\xrightarrow{+2}$ O
Z $\xrightarrow{+2}$ B

16. (1) **x x** y x **z** / x x y **x** z

17. (3) LANDS $\Rightarrow$
$\dfrac{12+1+14+4+19}{5} \Rightarrow \dfrac{50}{5}$
= 10
TRAM $\Rightarrow$
$\dfrac{20+18+1+13}{4} = \dfrac{52}{4}$
= 13
Similarly,
TASTE $\Rightarrow \dfrac{20+1+19+20+5}{5}$
$\Rightarrow \dfrac{65}{5} \Rightarrow 13$

18. (4)

19. (1) Total number of wickets 16 + 8 + 13 + 4 $\Rightarrow$ 41 wickets

20. (1) Excepts (option 1)
All numbers are written in a sequence of (last to first)

21. (2) Except for option 2, numbers are in sequence of their square

22. (4) Except for option 4, all pairs of the alphabet are opposite to each other.

23. (1) I. 9 ÷ 3 × 4 − 6 + 5
Interchanging 6 and 9
6 ÷ 3 × 4 − 9 + 5
2 × 4 − 4
$\Rightarrow$ 4
II. 9 + 3 ÷ 2 × 4 − 6
Interchanging 6 and 9
6 + 3 ÷ 2 × 4 − 9
6 + 6 − 9 $\Rightarrow$ 3

24. (3) L O V I N G
+1 +1 +1 +1 +1 +1
H O J W P H
T R U T H F U L
+1 +1 +1 +1 +1 +1 +1 +1
M V G I U V S U
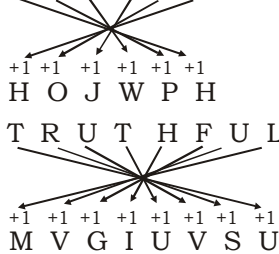
25. (3)

ANSWER KEY

1. (4) 2. (1) 3. (4) 4. (2) 5. (2)
6. (2) 7. (1) 8. (2) 9. (1) 10. (4)
11. (1) 12. (4) 13. (4) 14. (1) 15. (3)
16. (1) 17. (3) 18. (4) 19. (1) 20. (1)
21. (2) 22. (4) 23. (1) 24. (3) 25. (3)

QUANTITATIVE APTITUDE

1. (1) The total production of z in 2017 and 2018 = 50579 + 44456 = 95035
The total production of x in 2020 and 2021 = 175123 + 157279 = 332402
∴ % of total production of Z in 2017 & 2018 to total production of X in 2020 & 2021 $= \dfrac{95035}{332402} \times 100$
= 28.59%

2. (3) $\dfrac{a+b+c}{2} = 16$
2a + 2b + 2c = 64   …(i)
ab + bc + ca = 60   …(ii)
2a + 2b + 2c = 64
Squaring both sides
$(2a + 2b + 2c)^2 = (64)^2$
$4a^2 + 4b^2 + 4c^2 + 8(ab + bc + ca) = 4096$
$4a^2 + 4b^2 + 4c^2 = 4096 - (8 \times 60)$
= 3616

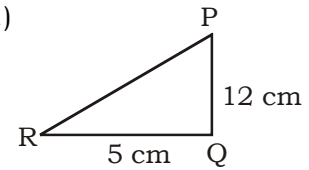3. (2) Let, cost price = 100%
According to the question
(40 − 10)% = 120
1% = 4

100% = 400
To earn a profit of 10%
$= 400 \times \dfrac{110}{100} = 440$

4. (1)

R, Q, P right triangle with RQ = 5 cm, PQ = 12 cm

Triplet 5, 12, 13
Then PR = 13 cm
Now,
cosecP + secR
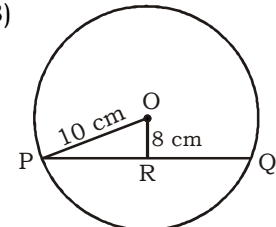$\dfrac{13}{5} + \dfrac{13}{5} = \dfrac{26}{5}$

5. (1) $\left(2 + \dfrac{1}{P}\right)^2$
$[(a + b)^2 = a^2 + b^2 + 2ab]$
$\Rightarrow 4 + \dfrac{1}{P^2} + 2 \times 2 \times \dfrac{1}{P}$
$\Rightarrow 4 + \dfrac{4}{P} + \dfrac{1}{P^2}$

6. (3)

Circle with center O, OP = 10 cm, OR = 8 cm, diameter PQ, R on PQ

From Pythagorean theorem,
$PR^2 = OP^2 - OR^2$
$PR^2 = 100 - 64$
PR = 6
Then PQ = 2PR
= 2 × 6 = 12 cm

7. (3) ATQ,
100% = 360°
12% = 43.2°
Central angle for Rajasthan = 43.2°

8. (4) a − b = 8, 4ab = 84
Or ab = 21
a − b = 8
Cubing both sides
$(a - b)^3 = 8^3$
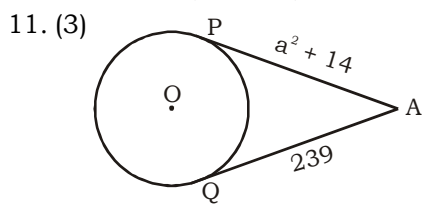$a^3 - b^3 - 3ab(a - b) = 512$
$a^3 - b^3 - 63 \times 8 = 512$
$a^3 - b^3 = 512 + 504$
$a^3 - b^3 = 1016$
$3a^3 - 3b^3 = 3048$

9. (4) Let total number of persons in the beginning = x
ATQ,
$x \times 90 = (x - 10) \times 100$
$9x = 10x - 100$
$x = 100$

10. (4) The ratio of two numbers = 3 : 8
ATQ,
$(3 + 8)$ units = 88
1 unit = 8
3 units (smaller) = $8 \times 3 = 24$

11. (3)

From figure
AP = AQ
Then,
$a^2 + 14 = 239$
$a^2 = 225$
$a = 15$

12. (2) The sum of three digits numbers which are divisible by 20
100, 120, 140 980
$T_n = a + (n - 1)d$
a = first term
d = difference
n = no. of terms
n^{th} term = $t_n = a + (n - 1)d$
Or, $980 = 100 + (n - 1)20$
Or, n = 45
Now,
Sum of n terms,
$S_n = \frac{n}{2}(a + l)$
$S_n = \frac{45}{2} \times 1080$
= 24300

13. (4) The volume of cube = (side)^3
= 6^3 = 216 m^3

14. (3) ATQ,
$1600 \times \frac{90}{100} \times \frac{100 - x}{100} = 1368$
x = 5%

15. (3) Selling price = marked price – Discount
Selling Price $\Rightarrow$ A = 1000 – 400 = 600
B = 600 – 100 = 500
C = 800 – 400 = 400
D = 500 – 300 = 200

E = 300 – 200 = 100
F = 400 – 100 = 300
G = 900 – 100 = 800
G > A > B > C > F > D > E

16. (1) $\frac{1}{4}$ of $\frac{4}{5}$ + $\frac{9}{2}$ of $\frac{17}{3}$ – $\frac{3}{10}$ = P
$\Rightarrow \frac{1}{5} + \frac{51}{2} - \frac{3}{10}$ = P
$\Rightarrow$ P = $\frac{127}{5}$

17. (1) $\sec\theta + \tan\theta = 3$
[$\sec\theta + \tan\theta = x$, then $\sec\theta - \tan\theta = 1/x$]
Now,
$\sec\theta - \tan\theta = \frac{1}{3}$

18. (3) Number of girls in school D = 39
Number of girls in school I = 10
∴ % of number of girls in School D to number of girls in School I = $\frac{39}{10} \times 100$
= 390%

19. (4) 18% = $\frac{3}{20}$, 20% = $\frac{1}{5}$
Ratio method,

Initial   Final
20 : 23
5 : 4
100 : 92
–8

Required % = $\frac{8}{100} \times 100$
= 8%

20. (4) Actual speed of First Car = $\frac{200}{4}$ = 50 km/h
$S_1 : S_2$ = 5 : 7
↓ ×10
50
∴ Speed of second car = (7 × 10) km/hr
= 70 km/hr

21. (1) R + P + K = 40 × 3 = 120 kg
P + K = 45 × 2 = 90 kg
R + K = 35 × = 70 kg
Total weight (R + P + K + K) = 160 kg
Now,

R + P + K = 120
R + P + 2K = 160
k = 40 kg

22. (4) $\cos3A = \sin(A - 18°)$
[$\cos A = \sin B$, then A = 90 – B]
ATQ,
3A = 90 – A + 18°
A = 27°

23. (1) Area of two similar triangles = 36 : 121
Then,
Corresponding sides = $\sqrt{\frac{36}{121}}$
= $\frac{6}{11}$

24. (2) The length of circumference
= $2\pi r$
= 2 × 4.9 × π
= 9.8 π

25. (1) For Simple Interest,
SI = $\frac{P \times R \times T}{100}$
ATQ,
$SI_1 \sim SI_2$
= $\frac{2000 \times 7 \times 3}{100} \sim \frac{3200 \times 6 \times 2}{100}$
$\Rightarrow 420 \sim 384$
$\Rightarrow$ ₹36

ANSWER KEY

1. (1) 2. (3) 3. (2) 4. (1) 5. (1)
6. (3) 7. (3) 8. (4) 9. (4) 10. (4)
11. (3) 12.(2) 13. (4) 14.(3) 15. (3)
16. (1) 17.(1) 18. (3) 19.(4) 20. (4)
21. (1) 22.(4) 23. (1) 24.(2) 25. (1)

GENERAL AWARENESS

1. (3)
2. (3) Tipu Sulatan became (1750 - 1799) the ruler of Mysore after death of his father Hyder Ali in 1782. Manglore is known as the Port City of India.
3. (4) Vitamins A, D, E, and K are fat-soluble.
Vitamins B and C are water solubles.
4. (3) Article 371B - Special provision with respect to the State of Assam
Article 371C - Special provision with respect to the State of Manipur
Article 371F - Special provisions with respect to the State of Sikkim

5.(2) Input device - Keyboard, Mouse, Joy Stick, Light Pen, Microphone, Scanner, Barcode Reader,

Output device - monitors, printers, speakers, headphones, projectors, GPS devices, optical mark readers, and braille readers.

6.(3) Stratosphere is considered ideal for flying off aircraft, Ozone layer is found in it, some clounds formation is founded.

Satellites are found in Thermosphere.

7.(4) Best Picture - CODA

Best Director - Jane Campion

Best Actor - Will Smith

Best Actress - Jessica Chastain

Best Supporting Actor -Troy Kotsur

Best Supporting Actress - Ariana DeBose

8.(4) Mallakhamb is the martial art from Madhya Pradesh.

Kalaripayattu is a martial art from Kerala.

9.(1) **Nitin Gokhle** - R.N. Kao: Gentleman Spymaster, Manohar Parrikar: Brilliant Mind, Simple Life, Securing India The Modi Way: Pathankot, Surgical Strikes and More, Securing India the Modi Way: Balakot, Anti Satellite Missile Test and More, Turning the Tide

Anindya Dutta - Wizards: The Story of Indian Spin Bowling, Advantage India: The Story of Indian Tennis, The 22 yards collection

10.(2) Kathakali is a "story play" genre of art, but one distinguished by the elaborately colourful make-up and costumes of the traditional male actor-dancers.

The Manipuri Dance is a jagoi dance forms. The dance form is imbued with the devotional themes of Madhura Raas of Radha-Krishna and characterised by gentle eyes and soft peaceful body movements. The facial expressions are peaceful mostly expressing Bhakti Rasa or the emotion of devotion, no matter if a dancer is Hindu or not. The dance form is based on Hindu scriptures of Vaishnavism and

is exclusively attached to the worship of Radha and Krishna. It is a portrayal of the dance of divine love of Lord Krishna with goddess Radha and the cowherd damsels of Vrindavan, famously known as the Raas Leela.

11.(3) Vijayanagara Empire (also called the Karnata Kingdom) was established in 1336 by the brothers Harihara I and Bukka Raya I of the Sangama dynasty(1336 - 1485 CE). Vijayanagara Empire is constituted of 4 dynasties.

Magadha was ruled by Brihadratha dynasty, Pradyota dynasty (682–544 BCE), Haryanka dynasty (544–413 BCE), the Shaishunaga dynasty (413–345 BCE) and the Mauryan dynasty by the end of it.

Kancheepuram was capital of the Pallava kingdom.

12. (2) Article 108 - The joint sitting of the Parliament

Article 120 - Language to be used in Parliament

Article 121 - Restriction on discussion in Parliament

Article 123 - Powers to the President of India to promulgate an ordinance in India

13. (3) The Satpura Range rises in eastern Gujarat running east through the border of Maharashtra and Madhya Pradesh and ends in Chhattisgarh. The range parallels the Vindhya Range to the north, and these two east-west ranges divide Indian Subcontinent into the Indo-Gangetic plain of northern India and the Deccan Plateau of the south. The Narmada River originates from north-eastern end of Satpura in Amarkantak, and runs in the depression between the Satpura and Vindhya ranges and drains into Arbian Sea.

14. (1)

15. (2) Rapti is the tributry of Ghaghara.

16. (1)

Country		Currency
Brazil	-	Real
England	-	Pound sterling
France	-	Euro

17. (4) Upper Course – This part is closest to the source of the river.

Meander is the feature of Middle Course.

18. (3) The Gram Seva Program was launched under the Corporate Social Responsibility of the bank.

Till now, the program has adopted 100 villages across 16 states in 3 phases.

The program's outreach will expand to a total of 130 villages, of which 75 villages are from Aspirational Districts.

SBI was founded in 1955 in Mumbai.

ICICI was founded in 1994 in Vadodara.

HDFC was founded in 1994 in Mumbai.

19. (3)

20. (4) Flat bones are made up of a layer of spongy bone between two thin layers of compact bone. They have a flat shape, not rounded. Ex- the skull and rib bones.

The pelvis is made up of the following bones: Sacrum; Tail bone; Hip Bones. Pubis; Ilium; Ischium.

Ankle joint — the fibula, the tibia and the talus.

Wrist is made up of eight small bones called the carpal bones, or the carpus.

21.(2)

22.(1) Priyanshu Rajawat won Orléans Masters(France) 2023.

Satwiksairaj Rankireddy and Chirag Shetty won Swiss Open 2023.

23.(3) India and Australia - AUSTRA HIND(Army) and AUSINDEX(Navy)

India and Japan - DHARMA GUARDIAN(Army) and JIMEX(Navy)

Exercise Pitch Black is excercise between 17 countries.

24.(4)

25.(1)

ANSWER KEY				
1. (3)	2. (3)	3. (4)	4. (3)	5. (2)
6. (3)	7. (4)	8. (4)	9. (1)	10. (2)
11. (3)	12.(2)	13. (3)	14.(1)	15. (2)
16. (1)	17.(4)	18. (3)	19.(3)	20. (4)
21. (2)	22.(1)	23. (3)	24.(4)	25. (1)