ENGLISH LANGUAGE AND COMPREHENSION

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

EXPLANATION:-

9. (4) Replace 'much too' with 'too much'.
'Too much +noun .....much too+ Adjective' is the correct expression.

11. (2) Replace 'quartet' with quartets'. 'Quartet means a group of four people playing music or singing together. One of' is followed by a plural noun.

19. (3) 'Neither of/either of +plural noun + singular verb' is the correct expression.

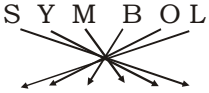
WORD	MEANING IN ENGLISH	MEANING IN HINDI
Active	Involved in activity; lively	सक्रिय
Amateur	One who engages in a pursuit, study, science, or sport as a pastime rather than as a profession	नौसिखिआ
Candid	Saying exactly what you think	स्पष्टवादी
Churchly	Relating to the christian church; ecclesiastical.	ईसाई चर्च से संबंधित
Dreary	Not at all interesting or attractive; boring	नीरस या अनाकर्षक
Ductile	Able to be drawn out into a thin wire.	तन्य
Ecclesial	Of or relating to a church	चर्च का या उससे संबंधित
Fluid	A liquid substance	तरल
Pliable	Easy to bend or shape	लचीला
Profane	Showing a lack of respect for sacred or holy things	धर्मनिंदक
Profuse	Given or produced in great quantity	अत्यधिक मात्रा में, प्रचुर
Reprimand	To tell somebody officially that he/she has done something wrong	डांटना
Rigid	Not able to or not wanting to change or be changed	किसी को बदलने में असमर्थ या परिवर्तित होने का अनिच्छुक
Sapient	Possessing or expressing great sagacity or wisdom	बुद्धिमान
Secular	Not concerned with religion	धर्मनिरपेक्ष
Superstitious	Believing in power of magic or luck.	अंधविश्वासी
Variable	Not staying the same; often changing	परिवर्तनशील

GENERAL INTELLIGENCE & REASONING

1. (3) $A \xrightarrow{+1} B \xrightarrow{+1} C$
$J \xrightarrow{+1} K \xrightarrow{+1} L$
$R \xrightarrow{+2} T \xrightarrow{+1} U$ **(Odd)**
$F \xrightarrow{+1} G \xrightarrow{+1} H$
2. (2)
3. (2)
4. (4)
5. (4) 5 1 6 2 4 $\xrightarrow{\text{Reverse}}$ 4 2 6 1 5
5 1 6 7 8 $\xrightarrow{\text{Reverse}}$ 8 7 6 1 5
4 2 6 7 5 $\xrightarrow{\text{Reverse}}$ 5 7 6 2 4
1 2 3 1 1 —— 1 1 2 3 1 (Odd)
6. (1)
7. (1) 1286 – 2578 ⇒ (1286 × 2)+ 1
= 2573 (Odd)
3294 – 6509 ⇒ (3294 × 2)+1
= 6589
1324 – 2649 ⇒ (1324 × 2)+ 1
= 2649
3184 – 6369 ⇒ (3184 × 2)+1
= 6369
8. (3)
9. (4) 4 × 3 – 6 ÷ 1 = 3
12 – 6 = 3
6 ≠ 3
10. (1) L E T T E R

R E T T E L

S Y M B O L

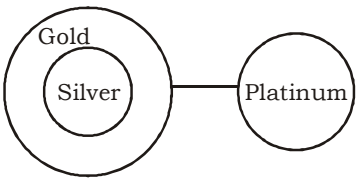


L O B M X S

R E N A I S S A N C E

E C N A S S I A N E R

11. (4)



12. (4) a b **b** a/ **a** b b a/ **a** **b** b a
13. (3)

Saloni$^-$

Manisha$^-$ — Sakshi$^-$ ⇔ Subham$^+$ — Darshan$^+$

Akash$^+$ | Rekha$^-$

14. (4) $74 + 11 \div 33 \times 42 - 16$

$\Rightarrow 74 + \frac{1}{3} \times 42 - 16$

$\Rightarrow 74 + 14 - 16 = \mathbf{72}$

15. (1) 22 : 132 (×6) 12 : 72 (×6)

24 : 144 (×6)

16. (3)

17. (2)

18. (3) Hospital is a place where treatment is done.

Similarly,

School is a place where education is provide.

19. (4) $I \xrightarrow{+2} K$

$M \xrightarrow{+2} O$

$Q \xrightarrow{+2} S$

Similarly,

$X \xrightarrow{+2} Z$

$B \xrightarrow{+2} D$

$F \xrightarrow{+2} H$

20. (2)

21. (1) namo te jek — 6 2 9

dump to te — 9 4 3 ...(i)

to fir take — 7 4 8

to → 4 te → 9

In equation (i)

dump → 3

22. (1) $(66, 13, 20) \rightarrow \left(\frac{66}{2} - 13\right) \Rightarrow 20$

(last number)

$(298, 80, 69) \rightarrow \left(\frac{298}{2} - 80\right)$

$\Rightarrow 69$ (last number)

$(356, 111, 67) \rightarrow \left(\frac{356}{2} - 111\right)$

$\Rightarrow 67$ (last number)

23. (2)

24. (1) Ottawa is the capital of Canada. Similarly, Nairobi is the capital of Kenya

25. (1) 623, 626, 635, 662, 743, **986**

$+(3)^1$ $+(3)^2$ $+(3)^3$ $+(3)^4$ $+(3)^5$

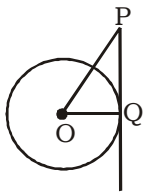
ANSWER KEY

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

QUANTITATIVE APTITUDE

1. (4) Sum of sales of 5 months
$= 5 \times 9000 = 45000$
$\therefore$ Sum of sales of 4 months
$= 10000 + 7500 + 8000 + 10500 = 36000$
$\therefore$ Sales in 5 months $= 45000 - 36000 = 9000$

2. (4)



$\angle POQ = 75°$
$\angle OQP = 90°$
$\therefore \angle OPQ = 180° - (90° + 75°)$
$= 180° - 165° = 15°$

3. (2) There are 200 numbers between 201 and 401.
There are 1 number which is divisible by 5 in every 5 numbers.
Similarly,
There are 3 numbers in every 4 numbers which are not divisible.
$\therefore$ Total numbers which are divisible by 5 not by 4.

$= 200 \times \frac{1}{5} \times \frac{3}{4} = 30$

4. (1) Statement -1
Production of bike by company M = 350
Production of truck by company M = 200
$\therefore$ Ratio of production of bike and truck = 350 : 200
= 7 : 4
$\therefore$ Statement is correct.
Statement -II
Total production of bikes = 600 + 350 + 400 + 150 + 200
= 1700
Total production of truck = 400 + 200 + 100 + 500 + 550
= 1750
Average of production of bikes
$= \frac{1700}{5} = 340$
$\therefore$ Average of production of truck = 350
$\therefore$ Difference = 350 – 340
= 10

5. (3) $x + \frac{1}{x} = 2k$

Squaring of both sides

$x^2 + \frac{1}{x^2} = 4k^2 - 2$

Squaring both sides.

$x^4 + \frac{1}{x^4} = \left(4k^2 - 2\right)^2 - 2$

$x^4 + \frac{1}{x^4} = 16k^4 - 16k^2 + 2$

6. (2) We know,
$M_1 \times D_1 = M_2 \times D_2$
M_1, M_2 = Number of men.
D_1, D_2 = Number of days.
$8 \times 24 = 6 \times D_2$

$D_2 = \frac{8 \times 24}{6} \Rightarrow D_2 = 32$ days

$\therefore$ 32 days will be needed to complete remaining work.

7. (3) Sales of bikes in February = 65500
Sales of bikes in March = 54000
$\therefore$ Decrees = 65500 – 54000
= 11500

$\therefore$ Decrease % $= \frac{115}{655} \times 100$

$= 17.55\%$

$\therefore$ Sales in July $= \frac{740}{100} \times 82.45$

$= 61000$

8. (3) CP : SP

For 1st spectacle $\rightarrow$ 10 : 13

For 2nd spectacle $\rightarrow$ 10 : 9

For 3rd spectacle $\rightarrow$ 10 : 9

30 : 31

Profit = 31 – 30 = 1

$\therefore$ Percentage of profit $= \frac{1}{30} \times 100$

$= 3.33\%$

9. (4) $(x + 11)(x - 11)$

$(x)^2 - (11)^2$ [As $(a+b)(a-b) = a^2 - b^2$]

$= x^2 - 121$

10. (3) Equivalent discount = 10%

$+ 20\% - \frac{20\% \times 10\%}{100}$

$= 30\% - 2\% \Rightarrow 28\%$

$\therefore$ Selling price $= \frac{1650}{100} \times 72$

$= 1188$

11. (4) Savings in year A = Income – Expenditure

350 – 150 = 200

Savings in year B = Income – Expenditure.

= 250 – 100 = 150

Savings in year C = Income – Expenditure.

200 – 150 = 50

Savings in year D = Income – Expenditure.

400 – 100 = 300

Savings in year E = Income – Expenditure.

150 – 75 = 75

Total savings = 200 + 150 + 50 + 300 + 75 = 975

$\therefore$ Average savings $= \frac{975}{5} = 155$

12. (1) Let, Total watermelons are 100%.

After selling 45% of watermelons.

Remaining watermelon = 100% – 45% = 55%

ATQ,

$55\% \equiv 495$

$100\% \equiv 900$

13. (3) $\cot 2A = \tan(A - 48°)$

$\cot 2A = \cot[90 - (A - 48°)]$

$2A = 90 - A + 48°$

$A = \frac{138}{3} \Rightarrow A = 46°$

14. (1) Circumference of circle = 2π × radius unit

$= 2 \times \frac{22}{7} \times 10.5$ cm

$= 66$ cm

15. (1) Sum of temperatures recorded in all days.

$= 10° + 35° + 20° + 40° + 15° + 45° + 50° = 215°$

16. (4) $\tan(x+y) = 1$

$\tan(x+y) = \tan 45°$

$x + y = 45°$ .....(i)

$\cos(x-y) = \frac{\sqrt{3}}{2}$

$\cos(x - y) = \cos 30°$

$x - y = 30°$ .....(ii)

Add eq. (i) and (ii)

$2x = 75$

$x = 37.5$

(i) – (ii)

$2y = 15$

$y = 7.5$

$\therefore x = 37.5, y = 7.5$

17. (1) We know for two similar triangles ratio of sides is equal to the ratio of perimeter.

ATQ,

$\frac{\text{Perimeter of } \Delta RST}{\text{Perimeter of } \Delta IJK} = \frac{RS}{IJ}$

$RS = \frac{64}{56} \times 16 = \frac{56 \times 16}{64}$

$RS = 14$

$\therefore$ Length of RS is 14 cm.

18. (1) $\frac{3}{2} \times \frac{7}{3} \div \frac{7}{6} + \frac{1}{4} = \frac{1}{x}$

Or, $\frac{3}{2} \times \frac{7}{3} \times \frac{6}{7} + \frac{1}{4} = \frac{1}{x}$

$3 + \frac{1}{4} = \frac{1}{x} \Rightarrow \frac{13}{4} = \frac{1}{x}$

$x = \frac{4}{13}$

19. (1) Value of $\cot 60° = \frac{1}{\sqrt{3}}$

20. (1) Speed of kapila $= \frac{\text{Distance}}{\text{Time}}$

$= \frac{1.2}{\frac{10}{60}}$ km/h

$= 1.2 \times 6$ km/h

$= 7.2$ km/h

21. (3) Ratio of Ridhaan and Vihaar = 2 : 3 = 5

ATQ,

$5 \equiv 1248$

$3 \equiv \frac{1248}{5} \times 3$

$= 748.80$

$\therefore$ Share of Vihaan is 748.80

22. (3) $a^2 + 4b^2 + 9c^2 - 4ab + 12bc - 6ca$

$= a^2 + (2b)^2 + (3c)^2 - 2 \times a \times (2b) + 2 \times (2b) \times (3C) - 2 \times (3C) \times a$

$= (a - 2b - 3c)^2$

23. (3) For Compound Interest.

$\text{Amount} = \text{Principal}\left(1 + \frac{\text{Rate}}{100}\right)^{\text{Time}}$

$1.96P = P\left(1 + \frac{\text{Rate}}{100}\right)^2$

[Let, principal = p]

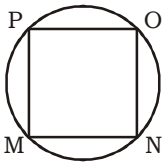
$\sqrt{1.96} = \left(1 + \frac{\text{Rate}}{100}\right)$

$= 1.4 - 1 = \frac{\text{Rate}}{100}$

Rate = 40

$\therefore$ Rate of interest is 40%.

24. (4) From cyclic quadrilaterals

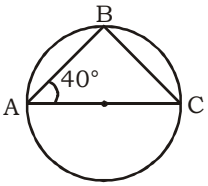


$\angle M + \angle O = 180°$

$\angle M + \frac{3}{2}\angle M = 180°$

$\angle M = 180° \times \frac{2}{5} \Rightarrow \angle M = 72°$

25. (2) From properties of cyclic triangle,



$\angle ABC = 90°$

$\angle BCA = 180° - (90° + 40°) = 50°$

ANSWER KEY

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

GENERAL AWARENESS

1.(1)

Devprayag–Alaknanda and Bhagirathi

Rudraprayag–Alaknanda & Mandakini

Karnaprayag – Alaknanda and Pindar

Nandaprayag–Alaknanda & Nandakini

Vishnuprayag-Alaknanda & Dhauliganga

2.(4) The Indian Standard Time (IST) is calculated from 82°30'E meridian passing through Mirzapur. Therefore, IST is plus 5 hours 30 minutes from the GMT ((82°30' x 4) (60 minutes=5 hours 30 minutes).

3. (2) Vikram Sampath - Bravehearts of Bharat, Splendours of Royal Mysore, Women of the Records, Indian Classical Music and the Gramophone,Savarkar

Kabir Bedi - Stories I Must Tell: The Emotional Life of an Actor

Meghan Markale - The Bench

4.(1)

5.(1) **Smooth muscle** consists of thick and thin filaments that are not arranged into sarcomeres giving it a non-striated pattern.

Cardiac muscle (or myocardium) makes up the thick middle layer of the heart.

Skeletal muscle is one of the three significant muscle tissues in the human body.

6.(4)

7.(3) Mahajanpadas were 16 kingdoms that exited in acient india from 600 BCE to 345 BCE.Pali, Sanskrit and Prakrits were their common language.

Asmaka - Godavari

Avanti - Narmada

8.(1)

9.(4) Chain printer are one of the fastest impact printers that can produce up to 400 to 2500 characters per second.

A laser printer is a popular type of computer printer that uses a non-impact photocopier technology where there are no keys striking the paper.

A dot matrix printer is an impact printer that prints using a fixed number of pins or wires.

10. (3)

11. (1) A **credit crunch** generally involves a reduction in the availability of credit independent of a rise in official interest rates.

Amortisation is the process of repayment of debt through periodic installments over a period of time.

Bancassurance refers to the agreement between a bank and an insurance company through which the bank sells the insurance product of the concerned insurance company to its customers.

12. (4)

13. (1) Anna Chandi, was the first female judge.

M. Fathima Beevi became the first female judge to be a part of the Supreme Court of India.

Kiran Mazumdar is the founder & chairperson of Biocon

14.(2)

15.(3)

16.(2) The Special Marriage Act (SMA), 1954 is an Indian law that provides a legal framework for the marriage of people belonging to different religions or castes. It governs a civil marriage where the state sanctions the marriage rather than the religion

17.(4)

18.(2)

19.(1) Sanket Sargar Won Silver in weightlifting.

20. (4)

21. (3)

22. (3) Karam is a harvest festival celebrated in Indian states of Jharkhand, West Bengal, Bihar, Madhya Pradesh, Chhattisgarh, Assam, Odisha and Bangladesh. It is dedicated to the worship of Karam-Devta (Karam-Lord/God), the god of power, youth and youthfulness

23. (1) Penalty kick - Football

Greco-Roman - wrestling

24. (1) Vitamin A - Xerophthalmia

Vitamin C - Scurvy

Vitamin K deficiency can contribute to significant bleeding, poor bone development, osteoporosis, and increased risk of cardiovascular disease.

25. (4) Operation Devi Shakti - to evacuate Indian citizens and foreign nationals from Afghanistan after the collapse of the Islamic Republic of Afghanistan.

Operation Maitri (Operation Amity) was a rescue and relief operation in Nepal by the government of India and Indian armed forces in the aftermath of the April 2015 Nepal earthquake.

The Indian nationals stranded overseas due to the global coronavirus lockdown are expected to return under the Vande Bharat Mission.

ANSWER KEY

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