

ENGLISH LANGUAGE AND COMPREHENSION

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

EXPLANATION:-

2. (4) Replace 'hardly picture in Rome' with 'hardly any picture in Rome'.
 9. (4) 'Treble' is incorrectly spelt here, means- the highest voice part in harmonic music
 13. (4) 'many a/an +Singular Noun' is the correct structure.
 15. (2) Replace 'there' with 'the/their'.

WORD

MEANING IN ENGLISH

MEANING IN HINDI

Appalling	Inspiring horror or dismay; shocking	भयावह
Casserole	A large dish of earthenware or glass with a lid for serving food	काँच का ढक्कनदार बड़ा बर्तन जिसमें खाना परोसा जाता है
Conjoin	To join together for a common purpose	एकत्रित होना
Demagogue	A person who appeals to the emotions and prejudices of people in order to arouse discontent and advance his or her own political purposes.	लोगों के भावनाओं पर खेलने वाला नेता
Desiccate	Remove the moisture from (something); cause to become completely dry.	सूखाना
Halcyon	A period of time in the past that was happy and peaceful	सुनहरे दिन
Heterogeneous	Not uniform in structure or composition	विजातीय
Homogeneous	Belonging to the same kind	सजातीय
Humane	Marked by sympathy or consideration for others	दयालु
Hydrate	To cause to take up or combine with water or the elements of water.	जलयोजित करना
Impostor	A person who pretends to be someone else in order to deceive	कपटी
Malodorous	Having a bad odour	बदबूदार
Narcissist	Self-admirer	आत्ममुग्ध
Paradox	A situation or statement with two or more parts that seem strange or impossible together	विरोधाभास
Paranoid	Extremely fearful	अत्यधिक भयभीत
Pestilential	Relating to or tending to cause infectious diseases.	विषैला, हानिकर
Polarize	To separate or make people separate into two groups with completely opposite opinions	फूट डालना, धरुवीकरण करना
Precarious	Not safe or certain; dangerous	असुरक्षित या अनिश्चित खतरनाक
Presumptuous	Excessively bold or forward.	अक्खड़
Primal	First in importance, basic	मौलिक
Primitive	Of or relating to the earliest age or period	प्राचीन
Rapport	A friendly, harmonious relationship	सौहार्द
Sane	Mentally sound	समझदार
Sebaceous	Of relating to fat	वसायुक्त
Senile	Behaving in a confused and strange way, and unable to remember things because of old age	भुलक्कड़ (बुढ़ापे के कारण)
Sentinel	A soldier or guard whose job is to stand and keep watch	पहरेदार
Stoical	One not easily excited or upset	तटस्थ
Venerate	To have and show a lot of respect for somebody	सम्मानित करना

GENERAL INTELLIGENCE & REASONING

1. (3)
 2. (2) The fan contains blades as its major component. Similarly, the Car contains Steering as its major component.
 3. (4) $7, 41, 211 \Rightarrow (41 - 7) = 34 \times 6 = 204 + 7 \Rightarrow 211$
 and,
 $12, 66, 336 \Rightarrow (66 - 12) = 54 \times 6 = 324 + 12 \Rightarrow 336$
 Similarly,
 $11, 61, 311 \Rightarrow 61 - 11 = 50 \times 6 = 300 + 11 = 311$
 4. (2) $34 P 17 S 9 ? 13 R 11 S 3 R 4 = -6$
 Putting the value of P, R, S
 $34 \div 17 \times 9 ? 13 - 11 \times 3 - 4 = -6$
 Or, $2 \times 9 ? 13 - 11 \times 3 - 4 = -6$
 Or, $18 ? 13 - 33 - 4 = -6$
 Or, $18 ? 13 = -6 + 33 + 4$
 Or, $18 ? 13 = 31$
 If $? \equiv +$ then both sides satisfy.
 5. (3) The letter M will be on the face opposite to face.
 6. (2) 5. Rectangular
 7. (1)
 8. (3)
- | | | | |
|-----|-----|-----|-----|
| D | E | E | R |
| +1↓ | +2↓ | +3↓ | +4↓ |
| E | G | H | V |

R O O M
 and $\begin{matrix} +1 \\ +2 \\ +3 \\ +4 \end{matrix}$
 S Q R Q

Similarly,
 S O A P
 $\begin{matrix} +1 \\ +2 \\ +3 \\ +4 \end{matrix}$
 T Q D T

9. (1) Archana
 ↑
 () + Nikhil

Mukesh ↔ Anjali
 ∴ Nikhil's wife is Archana's Daughter

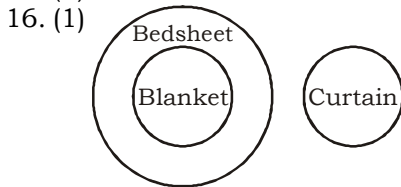
10. (1)
 11. (3) 532, 667, 802, 937, 1072

12. (4) There are 17 triangles in given figure.

13. (2) thnsorthnsorthnsor

14. (4) Dinar
 As Taka is official currency of Bangladesh, similarly Dinar is official currency of Kuwait

15. (1)



So, Both conclusion I and II follow

17. (2) $46 + 28 \times 2 - 7 \div 13 = 41$
 Interchanging \div and $-$,
 $46 + 28 \times 2 \div 7 - 13$

$$46 + 28 \times \frac{2}{7} - 13 = 46 + 8 - 13 = 41$$

18. (3) $54 : 162 \Rightarrow 54 \times 3 = 162$
 $38 : 114 \Rightarrow 38 \times 3 = 114$
 Similarly,

$$? : 216 \Rightarrow \frac{216}{3} = 72$$

19. (3) PAIN = 20 \Rightarrow PAIN $\frac{\text{Place}}{\text{Value}} \rightarrow 16$
 $+ 1 + 9 + 14 = 40 - 20 = 20$

HER = 11 \Rightarrow HER $\frac{\text{Place}}{\text{Value}} \rightarrow 8 + 5 + 18 = 31 - 20 = 11$
 Similarly,

TIER $\frac{\text{Place}}{\text{Value}} \rightarrow 20 + 9 + 5 + 18 = 52 - 20 = 32$

20. (2) N O S G H M
 $\begin{matrix} 14 & 15 & 19 \\ +1 & +4 \end{matrix}$ $\begin{matrix} 7 & 8 & 13 \\ +1 & +5 \end{matrix}$

B C G J K O
 $\begin{matrix} 2 & 3 & 7 \\ +1 & +4 \end{matrix}$ $\begin{matrix} 10 & 11 & 15 \\ +1 & +4 \end{matrix}$

21. (2) 1. Eyes
 2. Lips
 4. Neck
 3. Stomach
 5. Legs

22. (3) S H

~~S H~~
 I T
 Similarly,
 L M
~~L M~~
 N M

23. (3) 5 horses are neither clips nor bags

24. (3) $141, 13, 128 \rightarrow 141 - 13 = 128$
 $238, 164, 402 \rightarrow 402 - 164 = 238$
 Similarly,

$$48, 31, 79 \rightarrow 79 - 31 = 48$$

25. (4) $80, 72, 64 \Rightarrow 80 + 64 = \frac{144}{2} = 72$

$$64, 56, 48 \Rightarrow 64 + 48 = \frac{112}{2} = 56$$

Similarly,

$$63, 56, 49 \Rightarrow 63 + 49 = \frac{112}{2} = 56$$

ANSWER KEY

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QUANTITATIVE APTITUDE

1. (4) $\sin \theta + \cos \theta = \sqrt{2}$
 Let $\theta = 45^\circ$
 Both sides of equation satisfy
 Now,
 $\operatorname{cosec} \theta + \cot \theta$

$$= \sqrt{2} + 1$$

2. (3) From the given sides of the triangle, it is clear the triangle is a right-angle triangle.

$$\begin{aligned} \therefore \text{Area of triangle} &= \frac{1}{2} \times \text{base} \times \text{height unit}^2 \\ &= \frac{1}{2} \times 16 \times 12 \text{ cm}^2 \\ &= 96 \text{ cm}^2 \end{aligned}$$

3. (3) $\frac{9x^2 + 12xy + 4y^2}{36}$

$$= \frac{(3x)^2 + 2 \times 3x \times 2y + (2y)^2}{(6)^2}$$

$$= \left(\frac{3x + 2y}{6} \right)^2$$

$$= \left(\frac{x}{2} + \frac{y}{3} \right)^3$$

4. (1) Ratio of cost price and marked price = 100 : 130

ATQ,
 130 units - 40 = 200
 130 units = 240

$$100 \text{ units} = \frac{2400}{13}$$

$$\therefore \text{Profit} = 200 - \frac{2400}{13}$$

$$= \frac{200}{13}$$

$$\therefore \% \text{ Profit} = \frac{200}{\frac{2400}{13}} \times 100 = \frac{13}{2400} \times 100$$

$$= \frac{200}{2400} \times 100 = 8.34\%$$

5. (1) Total expenditure = 300 + 600 + 500 + 400 + 1200 = 3000

Total income = 3000 + (500 + 1000 + 800 + 500 + 600) = 6400

∴ % of income to expenditure of companies

$$= \frac{6400}{3000} \times 100 = 213.33\%$$

6. (4) Let total runs = 100%

ATQ,
 100% = 700
 1% = 7

29% = 203

13% = 91

12% = 84

$$\therefore \text{Total runs} = 203 + 91 + 84 = 378$$

7. (3) $25 \div 10 - \left(\frac{7}{4} \times \frac{1}{3} \right)$ of $\frac{6}{5} + \frac{14}{3}$

$$\times \frac{9}{10} + \left(\frac{1}{5} \div \frac{1}{25} \right)$$

$$= \frac{5}{2} - \frac{7}{12} \times \frac{6}{5} + \frac{21}{5} + 5$$

$$= \frac{5}{2} - \frac{42}{60} + \frac{21}{5} + 5$$

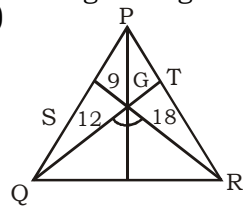
$$= \frac{150 - 42 + 252 + 300}{60}$$

$$= 11$$

8. (4) Ratio of angles = 20 : 11 : 5

ATQ,
 $5 \equiv 25^\circ$
 $1 \equiv 5^\circ$
 $20^\circ = 100^\circ$
 \therefore Largest angle is 100°

9. (2)



We know centroid divides the median in 2 : 1

ATQ, for QT

$3 \text{ units} \equiv 18$

$1 \text{ unit} = 6$

$2 \text{ units} \equiv 12$

For RS

$3 \text{ units} \equiv 27$

$1 \text{ unit} \equiv 9$

$2 \text{ units} \equiv 18$

From right angle ΔSQG , QS is hypotenuse

QS = 13 cm [From triplet]

Length of QS = 13 cm

10. (3) $\cot(P + Q) = 0$,

Or, $\cot(P + Q) = \cot 90^\circ$

Or, $P + Q = 90^\circ$

$\tan(P - Q) = \frac{1}{\sqrt{3}}$

Or, $\tan(P - Q) = \tan 30^\circ$

Or, $P - Q = 30^\circ$

$\therefore P = 60^\circ, Q = 30^\circ$

11. (1) Let salary of tialk at first 100%

$100\% \xrightarrow{+15\%} 115 \xrightarrow{-20\%} 92 \xrightarrow{+25\%} 115$

ATQ,
 $115\% \equiv 23000$

$1\% \equiv 200$

$100\% \equiv 20000$

\therefore Tilak's salary at starting 20000

12. (1) $\frac{1 - \tan^2 45^\circ}{1 + \cos^2 90^\circ}$

$= \frac{1 - (1)^2}{1 + (0)^2}$

$= 0$

13. (4) Ratio of capital of Nikhil and Neha = 5 : 4

Let,

Nikhil invested for t yr

\therefore Neha invested for (t + 1) yr

\therefore Ratio of profit = 5t : 4(t + 1)

ATQ,

$\frac{5t}{4t + 4} = \frac{6}{5}$

Or, $25t = 24t + 24 = 24t + 2y$

Or, $t = 24$

\therefore Neha invested money for 25y

14. (2) $(P + 2q)^2 - (P - 2q)^2$
 $= p^2 + 4pq + 4q^2 - p^2 + 4pq - 4q^2$
 $= 8pq$

15. (1) Let there are 10 articles

Total loss incurred = $6 \times 20\%$
 $= 120\%$

Total profit gained = $4 \times 5\%$
 $= 20\%$

\therefore Overall loss percentage

$= \frac{-120\% + 20\%}{10} = -10\%$

\therefore loss incurred 10%

16. (4) $224 \text{ of } 4 \div 7 - 250 \times 3$

$= (224 \times 4) \div 7 - 750$

$= 128 - 750$

$= -622$

17. (2) Area of trapezium plate

$= \frac{1}{2} \times (15 + 9) \times 6 \text{ cm}$
 $= 72 \text{ cm}^2$

\therefore Cost of copper plating

$= (72 \times 3)$

$= 216$

18. (1) Let speed of Farhan = F_s

Speed of Aman = A_s

Time taken by Farhan = x hr

\therefore Time taken by Aman

$= \left(x + \frac{8}{60}\right) \text{ hr}$

ATQ,

$F_s + A_s = 60$

$F_s - A_s = 40$

$F_s = 50$

$A_s = 10$

Distance covered by Aman =

Distance covered by Farhan

Or, $10 \left(x + \frac{8}{60}\right) = 50x$

Or, $10x + \frac{8}{6} = 50x$

Or, $x = \frac{1}{30}$

\therefore Distance covered by them

$= \frac{50}{30} \text{ km}$

$= \frac{5}{3} \text{ km}$

19. (2) Let total runs is 100%

ATQ,

$100\% \equiv 500$

$1\% = 5$

$32\% = (32 \times 5)$

$= 160$

\therefore Runs scored by R is 160

20. (2) Time taken by A to complete

$= \left(36 \times \frac{8}{3}\right) \text{ days} = 96 \text{ days}$

Time taken by B to complete

$= (27 \times 2) \text{ days}$

$= 54 \text{ days}$

I. Ratio of time of A and B

$= 96 : 54$

$= 32 : 18$

$= 16 : 9$

Ratio of efficiency of A, B

$= 9 : 16$

\therefore Statement is correct

II. A and B complete the

work = $\frac{864}{25} \text{ days}$

$\frac{11^{\text{th}}}{15}$ part of total work

$= \frac{9504}{125}$

\therefore Time required to finish

$\frac{11^{\text{th}}}{15}$ part = $\frac{9405}{15625}$

Statement is incorrect.

21. (2) Total salary of employees C, D, E = $300 + 200 + 400 = 900$

\therefore Average salary = $\frac{900}{3}$

$= 300$

22. (2) As, $x + y + z = 0$

So, $x^3 + y^3 + z^3 = 3xyz$

Or, $\frac{x^3 + y^3 + z^3}{(xyz)^2} = \frac{3xyz}{(xyz)^2}$

Or, $\frac{x}{(yz)^2} + \frac{y}{(zx)^2} + \frac{z}{(xy)^2}$

$= \frac{3}{xyz}$

23. (4) Let, Principal is P

Time required to become 3 times

$(3P - P)$

$t = P \times \frac{10}{100}$

Or, $t = 20y$

I. For becoming 5 times -

Amount = 5P

Principal = P

\therefore Interest = $(5P - P) = 4P$

$\frac{4P}{100}$
Time = $P \times \frac{20}{100}$

$= 20 \text{ y}$

Statement is correct

II. For becoming 7 times-

Principal = P

Amount = 7P

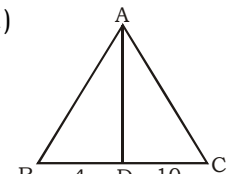
Interest = $(7P - P) = 6P$

\therefore Time = $\frac{6P}{P \times \frac{30}{100}}$

$= 20 \text{ y}$

Statement is correct

24. (1)



From angle bisector theorem,

$$\frac{AB}{AC} = \frac{BD}{BC}$$

$$AB : AC = 4 : 10$$

$$2 : 5$$

25. (2) Ratio of Ist and IInd number 2 : 1

Ist and IIIrd number = 2 : 3

Ratio of Ist, IInd and IIIrd ⇒

IInd : Ist : IIIrd

1 : 2 : 2

2 : 2 : 3

2 : 4 : 6

ATQ,

$$12x + 120 = 300$$

$$\text{Or, } x = \frac{180}{12}$$

$$\text{Or, } x = 15$$

IIIrd number is = 6 × 15

$$= 90$$

ANSWER KEY

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GENERAL AWARENESS

1. (2) Vignesh N R become the 77th and Sayantan Das become the 78th Grandmaster from India.
2. (2) Saina Nehwal won the Bronze medal at the London 2012 Games.
 P.V Sindhu won Silver in 2016 Rio de Janeiro Olympics and Bronze in 2020 Tokyo Olympics.
3. (2) Covid - 19 - Virus
 Tuberculosis (TB) is caused by a bacterium called Mycobacterium tuberculosis.
 Cholera is an acute, diarrheal illness caused by infection of the intestine with the bacterium Vibrio cholerae.
4. (1) Akbar - Fort of Agra, Jama Masjid, Jodhabai Mahal, Panch Mahal, Diwan-e-aam, Diwan-e-khas, Jyotish Mahal, the tomb of Saikh Salim Chisti, and Buland Darwaza.
 Aurangzeb - Badshahi Mosque, Bibi Ka Maqbara, and Moti Masjid
 Shah Jahan - Delhi Fort, Jama Masjid, the Shalimar Gardens
 Jahangir make - Shalimar Bagh, the Begum Shahi Mosque, and the Bachcha Taj
5. (4)
6. (3) Literacy rate among the males is 82.14% and among females is 65.46%.
 Kerala - 93.91%(most)
 Bihar - 61.80%(least)
7. (2) Param-Kamrupa will be able to

conduct advanced research in various scientific fields. President also inaugurated a high-power active and passive component laboratory called SAMEER at the institute.

IIT Guwahati was established in 1994.

IIT Kharagpur was established in 1951.

8. (2)

9. (1) English Mortgage: A type of mortgage where the property is mortgaged to the lender as security for the loan, and the borrower is required to pay back the loan in fixed installments over a set period of time.

Income-Sensitive Payment: A loan repayment plan where the borrower's monthly payment is based on their income, with the goal of making the loan more affordable.

Payday Loan: A short-term loan that is typically due on the borrower's next payday. These loans often come with high interest rates and fees, and can lead to a cycle of debt if not paid back on time.

10. (4) The Faraday constant represents the amount of electric charge carried by one mole, or Avogadro's number, of electrons. Planck's constant defines the quantum nature of energy and relates the energy of a photon to its frequency. In the International System of Units (SI), the constant value is 6.62607015 × 10⁻³⁴ joule-hertz⁻¹.

11. (2) Popular Front of India (PFI) was banned by the Indian Ministry of Home Affairs under Unlawful Activities (Prevention) Act (UAPA) on 28 September 2022 for a period of five years.

12. (1) Double Asteroid Redirection Test (DART) was a NASA space mission aimed at testing a method of planetary defense against near-Earth objects (NEOs).

Russia space agency - Roscosmos (State Corporation for Space Activities Roscosmos)

13. (2) In 1927, Ambedkar started a temple entry movement, in which his Mahar caste followers participated. Brahmin priests were outraged when the Dalits used water from the temple tank. Ambedkar led three such movements for temple entry between 1927 and 1935.

14. (1)

15. (2)

16. (2) The areas where the warm and cold currents meet provide the best fishing grounds.

The meThe Labrador Current is a cold current in the North Atlantic Ocean.

Cold-water ocean currents occur when the cold water at the poles sinks and slowly moves towards the equator.

17. (3) Microsoft PowerPoint is a powerful slide show presentation program.

Microsoft Word - Word Processing Software.

WordPad is the basic word processor.

18. (2)

19. (2) Article 138 of the Constitution deals with the power of the Parliament for granting extra jurisdiction to the Supreme Court by making law.

Articles 124(2) and 217 of the Constitution deal with the appointment of judges to the Supreme Court and High Courts.

Article 139A empowers the Supreme Court to withdraw cases pending before High Court(s) and try such cases by itself.

20. (3) Article 163 - The Governor appoints Chief Minister and other Ministers.

Article 156 - The Governor of a State shall be appointed by the President

Article 74 - There shall be a Council of Ministers with the Prime Minister at the head to aid and advise the President

21. (3) The Indigo revolt was a peasant movement and subsequent uprising of indigo farmers against the indigo planters, that arose in Bengal in 1859, and continued for over a year.

22. (2)

23. (3) Torrid zone is between Tropic of Cancer and Tropic of Capricorn. The North Temperate Zone is situated between the Arctic Circle and the Tropic of Cancer. The South Temperate Zone is situated between the Antarctic Circle and the Tropic of Capricorn.

24. (3)

25. (2)

ANSWER KEY

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