SET – 21	ANSWERS WI	TH EXPLAN	ATION	Exam he	ld on : 16/	03/2	023 09:00 AM		
ENGLISH LANGUAGI	E AND COMPREHENSIO	11							
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4. (3) 13. (4) 22. (4)	5. (4) 14. (4) 23. (4)	6. (2) 15. (4) 24. (4)	7. (3) 16. (4) 25. (2)	8. (2 17. (2) 9. (1) 1) 18. (1)		
EXPLANATION:	(-)	(')	()	(.)					
3. (3) 'Slide' 7. (3) Plural 9. (1) Replace 17. (1) Replace	is incorrectly spel subject efforts tak ce 'thing' with 'thin ce 'that' with 'who'.	t here, means e a plural verb gs' 'one of + pl 'Who' is the c	- to move s o (have) and orral noun+ orrect Relat	moothly alon 'have + v ₃ ' is singular ver ive Pronoun	ng a surface. Is the correct s Ib' is the correct here.	structur ect stru	re. Icture.		
18. (1) We ne	ed a Noun (service) here.					MEANING IN HINDI		
WORD Arsonist Acrophobia Agnostic Agoraphobia Anarchist	A person who del Fear of heights A person who is r Fear of public and A person who reb or ruling power		MEANING IN HINDI आगजनी करनेवाला ऊंचाई से डर लगना संशयवादी, अज्ञेयवादी भीड़ से डर लगना अराजकतावादी						
Apostate	Person who renou	unces a religiou	us or politic	al belief or p	rinciple.		स्वधर्मत्यागी		
Arcane Brinjal	Known to very few A type of vegetabl	गुप्त बेंगन नं नाम के ना नाम							
Claustrophobia	To feel embarrass	बद जगह स डर लगन। द्येंप जाना							
Homophobia	Irrational fear of, aversion to, or discrimination against homosexuality or gay people						समलैंगिकता या समलैंगिक लोगों के प्रति अतार्किक भय घष्टणा या भेदभाव		
Incisiveness	Impressively dire	ct and decisive	e (as in man	ner or presei	ntation)		कुशाग्रता		
Obliquity	uity Deviation from moral rectitude or sound thinking.						कपट		
Opaque	e Through which one can't see.						अपारदशा		
Petrify Philanderer	To confound with fear, amazement, or awe A man who has many sexual relationships without intending to be emotionally involved. Casanova						भय या विस्मय स भर दना व्यभिचारी; इश्कबाज		
Philanthropist	One who loves ma	ankind					परोपकारी		
Philistine	A person who doe art, literature, mu	es not like, und 1sic, etc.	lerstand or	enjoy the bea	auty of		कला, साहित्य, संगीत आदि के सौंदर्य को न समझनेवाला		
Philologist	A person who spe written records	भाषाविद्							
Profundity	Great depth of in	sight or knowle	edge				गहनता, गंभीर्ता		
Quail	To lose courage : shrink in fear, A type of bird डर जाना, बटेर								
Startle	Io surprise somebody in a way that slightly shocks or frightens him डराना, चीका द								
Translucent Unadulterated	(Especially of food	सपूर्ण पारदशा नहा मिलावटरहित							

6. (3) J J G F F C 🕨 GENERAL INTELLIGENCE & REASONING 🛚 $= \frac{7}{3} \times 9 + 4 - 5$ 10_10 7 $6 \frac{3}{1}$ 1. (3) 6 (4) Wrestling is played on Arena. Similarly, cricket is played on 2. 0 -3 = 21 + 4 - 5 = 20P P M ХХТ 9. (4) Other than bulb, all are same/ pitch. 24 24 20 (Odd) 16 16 13 related to computer. 3. (3) Avni⁻ 10. (2) 7 @ 3 = 343 -4 7. (3) $(7)^3 = 343$ Bharti — Chavi → Dhruv + 225–5733→√225↔(15)³=3375⇔5733 and 9 @ 3 = 729 169–7912→√169↔(13)³=2197⇔7912 $(9)^{\overline{3}} = 729$ Esha 289–3194→√289↔(17)³=4913⇔3194 So, Avni is maternal grandmother Similarly, But of Esha. 6 @ 3 $361-9786 \rightarrow \sqrt{361} \iff (19)^3 = 6859 \iff 9586 \neq 9786$ 8. (3) 9 ÷ 3 + 7 × 4 - 5 = 20 4. (1) $= (6)^3$ (2) 18 wrapers are not pens. 5. = 216 Interchange + and \times , 9 and 7 $= 7 \div 3 \times 9 + 4 - 5$

11.(1)

YEAH $\frac{\text{Place value}}{\text{of oppo Letter}}$ 2+22+26+19=69 Now, 69×3=207 BULK dif oppo Letter 25+6+15+11=62 Now, 62×3=186 Similarly, CORD Place value of oppo Letter Now, 68×3=204 12. (3) 13.(1)14. (3) 3. Maternal 1. Maternity 5. Mother 4. Motor 2. Mundane 15. (1) (R So, only conclusion I follows 16. (3) S $\begin{array}{cccc} \mathbf{R} & \mathbf{E}^{-} & \mathbf{W} & \mathbf{O}^{-} \mathbf{H} & \mathbf{S} \\ \mathbf{\downarrow}^{+1} & \mathbf{\downarrow}^{+0} & \mathbf{\downarrow}^{+1} & \mathbf{\downarrow}^{+0} & \mathbf{\downarrow}^{+1} & \mathbf{\downarrow}^{+1} \end{array}$ Similarly, 17.(3)18. (4) There are 14 triangles in the given figure. 19. (4) 6666 - 3333 $\Rightarrow \frac{6666}{2} = 3333$ $8888 - 4444 \Rightarrow \frac{8888}{2} = 4444$ $4444 - 2222 \Rightarrow \frac{4444}{2} = 2222$ But, $3333 - 1111 \Rightarrow \frac{3333}{2} \neq 1111$ 20. (1) 120 110 101 93 86**80** 21. (1) 7 : $512 \Rightarrow 7+1=(8)^3 = 512$ $11:1728 \Rightarrow 11+1=(12)^3=1728$ Similarly, $10:? \Rightarrow 10+1 \Rightarrow (11)^3 = 1331$ 22. (3) 23.(2)24. (2) P <u>+4</u> T <u>+4</u> X <u>+4</u> B <u>+4</u> **F** H <u>-8</u> Z <u>-8</u> R <u>-8</u> J <u>-8</u> B D <u>-9</u> U <u>-9</u> L<u>-9</u> C<u>-9</u> **T**

25. (3) 28,53,78
$$\Rightarrow$$
 28+78= $\frac{106}{2}$ =53
34,49,64 \Rightarrow 34+64= $\frac{98}{2}$ =49
Similarly,
38,40,42 \Rightarrow 38+42=80 \Rightarrow $\frac{80}{2}$ =40
ANSWER KEY
1. (3) 2. (4) 3. (3) 4. (1) 5. (2)
6. (3) 7. (3) 8. (3) 9. (4) 10. (2)
11. (1) 12.(3) 13. (1) 14.(3) 15. (1)
16. (3) 17.(3) 18. (4) 19.(4) 20. (1)
21. (1) 22.(3) 23. (2) 24.(2) 25. (3)
QUANTITATIVE APTITUDE
1. (1) As the chord OP makes an
angle 90° on the circumference
of the circle, So the chord is

1

2.

3.

n diameter of circle. The length of chord = length of diameter = 44 cm (3) $\cos\theta + \sin\theta = \sqrt{2}$ Squaring both sides $\cos^2\theta + \sin^2\theta + 2\sin\theta\cos\theta = 2$ $1 + 2\sin\theta\cos\theta = 2$ $2 \sin\theta \cos\theta = 1$ $2 = \frac{1}{\sin\theta\cos\theta}$ $\sec\theta \csc\theta = 2$ (3) Let, marked price of trouser = 100 Marked price of jacket = 300 After giving discount of 20% Selling price of trouser = 80Again overall selling price = $400 \times \frac{70}{100} = 280$... Selling price of jacket = 280 -80 = 200∴ Discount = (300 – 200) = 100 $\therefore \text{ Discount } \% = \frac{100}{300} \times 100$ = 33.33% (2) Total GDP of countries L and M in $Y_1 = 205 + 315 = 520$

 $\therefore \text{ Average GDP } (J_1) = \frac{520}{2} = 260$

Total GDP of countries L and

=110

M in Y1 = 115 + 105 = 220

 \therefore Average GDP (J₂) = $\frac{220}{2}$

:. Value of $\frac{J_1}{J_2} = \frac{260}{110} = 2.36$

5. (2) OE is perpendiculars drawn from centre to straight line ABCD.



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$$\Rightarrow \frac{392 - 30}{245}$$

$$=\frac{362}{245}$$

12. (4) To divisible any number by 10 units digit of number must be 0. The number having unit digit

0 between 501 and 701 → 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620 630, 640, 650, 660 670, 680, 690, 700.

 \therefore So there are 13 numbers which are divisible by 10 but not by 3.

- 13. (3) Total sum of invested time on teaching and reading.
 = 8 + 6 = 14 hrs. Total sum of invested time on sleep and play = 7 + 1 = 8 hrs. ∴ Ratio of time between them
 = 14 : 8 = 7 : 4
- 14. (2) Income of A = 100 + 300 = 400
 Income of B = 400 + 800 = 1200
 Income of C = 600 + 300 = 900
 Income of D = 300 + 200 = 500
 Income of E = 1000 + 400 = 1400
 ∴ Correct sequence of income of A, B, C, D, E
 ⇒ E > B > C > D > A
- 15. (4) For rhombus, We know, Sum of square of diagonal = $4 \times side^2$ $= 10^2 + 24^2 = 4 \times (side)^2$ $= \frac{676}{4} (side)^2$ $= 169 = (side)^2$
- Side = 13 $\therefore \text{ Perimeter} = (4 \times 13) \text{ cm}$ = 52 cm16. (2) For 1st TV \Rightarrow CD : SD 5 : 4 $\downarrow \times 11: \downarrow \times 11$ 55 : 44 For 2nd TV \Rightarrow 10 : 11 $\downarrow \times 4 : \downarrow \times 4$ 40 : 44 Adding 1st and 2nd ratio of TV 55 : 44 40: 4495: 88

Ratio of CP \Rightarrow 55 : 40 11 : 8 ATO, = 19 = 2280

$$Q_{0} = 19 \equiv 2280$$

 $1 \equiv 120$

 $11 \equiv 120 \times 11 = 1320$ \therefore Cost price of TV which was sold at loss is 1320. 17. (1) $a^2 + b^2 + c^2 = 62$ a + b + c = 12Now, $(a+b+c) = a^2 + b^2 + c^2 + 2$ (ab+bc+ca) 144 - 62 = 2 (ab+bc+ca) 82 = 2 (ab+bc+ca) 164 = 4 (ab+bc+ca) ∴ 4ab + 4bc + 4ca = 164 18. (3) Sum of 15 numbers = 53 $\times 15 = 795$ Sum of 14 numbers = 14×55 = 770:. Value of removed number = 795 - 770 = 25 19. (1) $x + \frac{1}{x} = \frac{k}{2}$ Squaring both sides $\chi^2 + \frac{1}{\chi^2} = \frac{k^2}{4} - 2$ Again squaring both sides. $\chi^4 + \frac{1}{\chi^4} = \left(\frac{k^2}{4} - 2\right)^2 - 2$ $x^4 + \frac{1}{x^4} = \frac{k^4}{16} - k^2 + 4 - 2$ $\chi^4 + \frac{1}{\chi^4} = \frac{k^4}{16} - k^2 + 2$ $\chi^4 + \frac{1}{\chi^4} = \frac{k^4 - k^2 + 32}{16}$ 20. (2) Let, efficiency of men is M Efficiency of women is W. ATQ, $(4M + 7W) \times 8 = (7M+4W) \times 5$ = 32 M + 56 W = 35 M + 20W = 3M = 36 W= M = 12 W

- = M = 12 w = M : W = 12 : 1 Total work = $[(4 \times 12) + (7 \times 1)] \times 8$ = (48 + 7) × 8 = 440 \therefore Days required by women = $\frac{440}{8 \times 1}$ = 55 days
- 21. (4) Ratio of mobile in 2015 to tablets in 2018.
 = 23 : 23
 = 1 : 1
 22. (1) sinc = 9/10
 ∴ cos²c = 1-sin²C

 $= 1 - \frac{81}{100} \Rightarrow \frac{19}{100}$

23. (3) Let, total distance of journey = 12 km

Time taken for $\frac{1}{3^{rd}} = \frac{4}{10}$ hrs.

Time taken for $\frac{1}{4^{4h}} = \frac{3}{15}$ hrs. Time taken for rest journey

$$=\frac{5}{20}$$

 $\therefore \text{ Average speed} = \frac{\text{Distance}}{\text{Time}}$ $= \frac{12}{\frac{4}{10} + \frac{3}{15} + \frac{5}{20}} \text{ km/h}$ $= \frac{12 \times 60}{24 + 12 + 15} \text{ km/h}$ $= \frac{240}{17} \text{ km/h}$ 24. (3) Price of 2 table = 2400 $\therefore \text{ Price of 8 table = 9600}$ $\therefore \text{ Price of 15 chairs = 9600 \times \frac{6}{5}}$

$$= 11520$$
25. (2) $\frac{1+\tan A}{\csc A} + \frac{1+\cot A}{\sec A}$

$$= \frac{1+\frac{\sin A}{\cos A}}{\frac{1}{\sin A}} + \frac{1+\frac{\cos A}{\sin A}}{\frac{1}{\cos A}}$$

 $= \frac{\sin A(\cos A + \sin A)}{\cos A} + \frac{(\sin A + \cos A)\cos A}{\sin A}$ $(\sin A + \cos A) \left[\frac{(\sin^2 A + \cos A)\cos A}{\sin A} \right]$ $= \sec A + \csc A$ **ANSWER KEY**1. (1) 2. (3) 3. (3) 4. (2) 5. (2) 6. (2) 7. (2) 8. (2) 9. (1) 10. (3) 11. (1) 12. (4) 13. (3) 14. (2) 15. (4) 16. (2) 17. (1) 18. (3) 19. (1) 20. (2) 21. (4) 22. (1) 23. (3) 24. (3) 25. (2) **GENERAL AWABENESS**

 1.(4) Pannji is situated on the Bank of river Mandvi. The Banas is a river which lies entirely within the state of Rajasthan. It is a tributary of the Chambal River, itself a tributary of the Yamuna. The river originates in the Veron ka Math situated in Khamnor Hills of the Aravalli Range. The Luni is the largest river in the Thar Desert. It originates in

the Pushkar valley of the Aravalli

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Range.

- 2.(4) The velocity of sound waves in air is 330 m/s. The velocity of sound waves in Aluminium is 6420 m/s. The velocity of sound waves in Nickel 2,960 m/s. The velocity of sound waves in steel is 5920 m/s. The velocity of sound waves in a vacuum is zero. The velocity of sound waves in water is 1480 m/s.
- 3.(1)
- 4.(4)
- 5.(2) The 2022 Durand Cup, also known as IndianOil Durand Cup due to sponsorship ties with Indian Oil Corporation, was the 131st edition of Durand Cup, the oldest football tournament in Asia, and also the first edition since it was recognised by the Asian Football Confederation. This year for the first time the tournament was played in more than one venue, Kolkata, Guwahati and Imphal.
 Champions Bengaluru

Best player - Greg Stewart Best goalkeeper- Antonio Dylan

6.(2) Dhupgarh is the highest peak of the Satpura range in Madhya Pradesh.

> **Arma Konda** (Sitamma Konda), is the highest mountain peak of Andhra Pradesh. It is a part of the Eastern Ghats range and located in the Godavari river basin.

Reo Purgyil is the highest mountain peak in the state of Himachal Pradesh

- 7.(2) There are 28 states and 8 Union territories in the country.
- 8.(2) Best Film Shershaah Best Director – Vishnuvardhan Best Actor –Ranveer Singh Best Actress – Kriti Sanon Best Playback Singer – B Praak (Male) Best Playback Singer – Asees

Best Playback Singer – Asees Kaur (female)

9.(3) The first registered vaccine against COVID-19 made by Russia.

Covishield was made by Oxford-AstraZeneca with Serum Institute of India.

COVAXINE is made by Bharat

Biotech.

10.(2) In computing, a hyperlink, is a digital reference to data that the user can follow or be guided to by clicking or tapping. The World Wide Web (WWW), commonly known as the Web, is an information system enabling documents and other web resources to be accessed over the Internet.

A joystick, is an input device consisting of a stick that pivots on a base and reports its angle or direction to the device it is controlling.

- 11.(4) Chiktan Fort Ladakh Rajgad Fort – Maharastra
- 12.(3) Article 19 Protection of 6 rights concerning the freedom of: Speech and expression Assembly, Association, Movement, Residence, Profession Article 20 – Protection with respect to conviction for offences

Article 21 – Right to life and personal liberty

Article 21A – Right to elementary education

Article 22 – Protection against arrest and detention in certain cases.

- 13.(3) Theme for Ozone Layer 2022 is 'Global Cooperation Protecting Life on Earth.
- 14.(1) Kabir was born in 1398 in Kashi(Varanasi).His writings influenced Hinduism's Bhakti movement, and his verses are found in Sikhism's scripture Guru Granth Sahib, the Satguru Granth Sahib of Saint Garib Das, and Kabir Sagar.
- 15.(3) Venus is called Earth's twin because Venus and Earth are almost the same size, have about the same mass (they weigh about the same), and have a very similar composition (are made of the same material).

In order of distance from the sun - Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

In order of size - Jupiter, Saturn, Uranus, Neptune, Earth, Venus, Mars and Mercury

16.(1) On 12 August 1765, the Mughal emperor appointed the East In-

dia Company as the Diwan of Bengal.

- 17.(2) In the 2022 Commonwealth Games, she was part of the Indian Women's fours team, along with (Pinki Singh, Nayanmoni Saikia and Rupa Rani Tirkey) which won Gold beating South Africa in the final, 17-10.
- 18.(2) Article 31A Saving of laws providing for acquisition of estates, etc.
 - **Article 31B** None of the acts placed in the 9th Schedule shall become void on the ground that they violate rights under Part III and no judicial review is possible. **Article 31D** - Saving of laws in respect of anti-national activities.
- 19.(1) The memorial having three rhino sculptures was named "Abode of the Unicorns".

It has one male rhino, a female rhino and a calf.

National Parks in Assam -Kaziranga National Park, Manas National Park, Dibru - Saikhowa National Park, Nameri National Park, Orang National Park and Tiger Reserve, Dehing Patkai National Park, Raimona National Park

- 21.(2) **Bhagat Singh** 'Inquilab Zindabad'
 - **Mahatma Gandhi** Do and Die, Hey Ram, Quit India
- 22.(1) F1: Opens the Help system for the active window.

F2 – Allows you to rename a selected file or folder.

F10 – Activates the menu bar of an open application.

23.(3)

- 24.(4) Godaan 1936, Nirmala 1927 Gaban –1928, Mansarovar – 1936, Rangbhoomi–1924, Premashram–1922, Pratigya– 1927, Lottery–1933, The world of Premchand–1969
- 25.(3)

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

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^{20.(1)}