SET – 16	ANSWERS WITH EXPL	ANATION	Exam hele	1 on : 14/0	03/20	23 05:15 PM						
🕪 ENGLISH LANGUAGE AND COMPREHENSION 🐗												
1. (2) 2 10. (1) 1 19. (4) 2	(3) 3. (3) 4. (4) 1. (2) 12. (4) 13. (1) 0. (2) 21. (2) 22. (4)) 5. (1)) 14. (1)) 23. (2)	6. (4) 15. (1) 24. (1)	7. (1) 16. (3) 25. (2)	8. (4 17. (1) 9. (2)) 18. (2)						
1. (2) The co	rrect word could be 'mined/n	ninted/minced e	etc.'									
4. (4) 'Main's a spec	street at' is the correct expression. Main - most important, chief, primary. And It is used to mention cific time.											
8. (4) Except	- not including somebody/so	mething; apart	from the fact	that (को छोड़व	कर; इसके	सिवा).						
Accept 14. (1) Replac 18. (2) Replac WORD	- to agree to take something e 'are' with 'is'. 'The Indian p e 'represent' with 'represents MEANING IN ENGLISH	that somebody c opulation' is use '. Singular Subje	offers you (स्वी ed as a single ect(fiscal def	कार या ग्रहन कर unit. icit) takes a s	ना). singula	r verb (represents) MEANING IN HINDI						
Abandon	Give up					छोड़ देना						
Algaecide		शैवाल को मारने के लिए एक पदार्थ										
Allegory	A story, play, picture, etc. I	in which each c	haracter or	event is a		रूपक, प्रतीककथा,						
	symbol representing an ide	a of a quality, s	such as thut	,								
Almonoo	A publication containing of	such symbols	mataaralaria	alinformatic		ui_uiu						
Annanac	To unite to join	stronomical of I	neteorologic	ai mormane	011	पंचाग जोटना						
Conscription	Compulsory enlistment for	military service				आङ्ग धर्ती (मेन में)						
Constraint	The state of being checked	, restricted, or	compelled to	avoid or pe	rform	ৰাধা						
	some action											
Egghead	A person with intellectual i	nterests or pret	ensions			बहुत साचन वाला व्याक्त						
Fetter	A chain used to restrain a ankles.	prisoner, typica	illy placed a	round the		बड़ा						
Fungicide	Pesticides that kill or prev	ent the growth	of fungi and	their spores		फफूंदनाशी						
Genial	Pleasant and friendly, conv	ivial				मिलनसार						
Incongruous	Strange and out of place; n	ot suitable in a	particular s	ituation		बेमेल						
Jar	To have a harshly disagree	able or disconce	erting effect			निराशाजनक प्रभाव होना						
Laconic	Using only a few words to s	say something				संक्षिप्त						
Lacuna	A blank space or a missing	part				कमी						
Philistine	A person who does not like	, understand or	enjoy the b	eauty of art,		अशिक्षित, कला, साहित्य,						
	literature, music, etc.					संगीत आदि के सौंदर्य को न समझनेवाला						
Prepuce	Foreskin.					त्वचा						
Profuse	Given or produced in great	quantity				अत्यधिक मात्रा में, प्रचुर						
Protract	To extend forward or outwa	ard				निकलना (आगे से)						
Recklessness	Carelessness, casualness					लापरवाही						
Ruthenium	A chemical element					एक रासायनिक तत्व						
Sage	A mature or venerable pers	on of sound juc	lgment			समझदार						
Spontaneity	Voluntary or undetermined	l action or move	ement			स्वच्छंदता						

KD PUBLICATION

ATION SSC CHSL TIER - I 2022

190 14 MARCH. 2023, 5:15 PM

GENERAL INTELLIGENCE & REASONING (16. (2) 1. (1) 32, 35, 39, 42, 46, 49, 53 +3 +4 +3 +4 +32. (2) Lizard 3. (3) 4. (4) From equation (i), if interchange 4 and 6, We have, $8 - 6 \times 3 + 4 \div 2$ = 8 - 18 + 2= -8 From equation (ii), if Interchange 4 and 6, We have $6 + 3 \times 4 - 8 \div 2$ = 6 + 12 - 4 = 14 ∴ – 8 and 14 5. (3)11 6. (3) 7. (4) 101, 10201, 10302 \Rightarrow 10302 -101 = 10201 $95, 9025, 9120 \Rightarrow 9120 - 95$ = 9025 Similarly, 102, 10404, 10506 ⇒10506 -102 = 104048. (1) FONT= $(6 + 15) \times (14 + 20) = 714$ GLUE=(7+12)×(21+5)=494 Similarly, JOKE=(10+15)×(11+5)=400 9. (3)As Ranchi is Capital of Jharkhand, Similarly Dispur is capital of Assam. 10. (1) The face opposite to the face showing A will have the letter Β. 11.(3) A L W A Y S +0 +1 +2 +0 -1 +2 A K Y A X U Similarly, BEYONS +0 +1 +2 +0 -1 +2 B D A O M F 12. (3) 1. Thigh 2. Stomach 3. Lips 4. Nose 5. Skull 13. (1)jtm<u>P</u>rs|jt<u>m</u>Prs|jtmp rs|jtmprs 14. (4) 15. (3) 5 # 2 = 25 \Rightarrow (5)² = 25 $8 # 2 = 64 \implies (8)^2 = 64$ Similarly, $11 # 2 \Rightarrow (11)^2 = 121$



$$P_{25} \xrightarrow{Q} Q_{20} \xrightarrow{25} R_{20}$$

$$\frac{PX}{XR} = \left(\frac{PQ}{QR}\right)^2$$

(191)

Or, PX : XR =
$$\left(\frac{15}{20}\right)^2$$

Or, PX : XR = 9 : 16 2. (1) As AB = AC and $\angle AZB = 90^{\circ}$ From angle bisector theorem,



$$AF = FB = \frac{48}{2} = 24$$

As perpendicular from centre divides chord equally]

: OA = OB =
$$\sqrt{(24)^2 + (7)^2}$$

14 MARCH. 2023, 5:15 PM

SET-16

= 25 : Half of chord CD $=\sqrt{(25)^2+(15)^2}=20$ cm \therefore Length of chord = 40 cm 7. (4) Let cost price of an article = 100 units : Selling price of an article = 120 units After reducing Rs. 20 of each cost price and selling price New cost price = 100 units - 20New selling price = 120 units – 20 \therefore Profit = 20 units Profit percentage 20 $=\frac{10}{100 \text{ units} - 20} \times 100$ ATQ, 20 $\frac{100 \text{ units} - 20}{100 \text{ units} - 20} \times 100 = 40$ 1 units = .40 \therefore Initial cost price = 100 × .40 = 40(4) Ratio of efficiency of A and 8. B = 3 : 1Total efficiency = (3 + 1) = 4 \therefore Total work = (4 × 32) units = 128 units \therefore B alone complete = $\frac{128}{1}$ days = 128 days 9. (2) Total GDP of country $P(L_1)$ = 225 + 250 + 200 + 125 + 100 = 900 Total GDP of country $(L_2) = 335$ + 350 + 175 + 135 + 2145 =1140 ∴ Difference = 1140 – 900 = 24015500 10. (2) 6% 10% Let, Amount invested in 4% = xAmount invested in 6% = yAmount invested in 10% = zATQ, 4% x = 6% y = 10% z2x = 3y = 5z $\therefore x : y : z = \frac{1}{2} : \frac{1}{3} : \frac{1}{5}$ = 15 : 10 : 6 = 31 ATQ, $31 \equiv 15500$ $1 \equiv 500$ $\therefore 10 \equiv 5000$. Amount invested in 6% is 5000. 11. (3) We know, Savings = Income – Exp.

Income of families A, C, E = (25 + 18 + 10) lakh = 53 lakh Exp. of families A, C, E = (12 + 10 + 9) lakh = 31 lakh :. Savings = (53 – 31) lakh = 22 lakh $\frac{\sin\theta{+}\cos\theta}{\sin\theta{-}\cos\theta} + \frac{\sin\theta{-}\cos\theta}{\sin\theta{+}\cos\theta}$ 12. (3) $= \frac{(\sin\theta + \cos\theta)^2 + (\sin\theta - \cos\theta)^2}{(\sin\theta - \cos\theta)^2}$ $\sin^2\theta - \cos^2\theta$ $=\frac{2(\sin^2\theta+\cos^2\theta)}{2}= \sin^2\theta - \cos^2\theta$ $\sin^2\theta - \cos^2\theta$ 13. (1) Total female teacher in all schools = 240 + 210 + 90 + 60 +30 = 630: Average of female teachers $(A_1) = \frac{630}{5} = 126$ Total male teacher in all schools = 180+240+210+150 + 90 = 870 \therefore Average of male teachers (A₂) $=\frac{870}{5} = 174$ $\therefore A_2 + A_1 = 174 + 126 = 300$ 14. (2) As angle subtended by a ΜN chord on the circumference of a circle is 90°. So, the chord is diameter. \therefore Length of chord is (12 ×2) cm = 24 cm(4) $\cot 3A = \tan (A - 36^{\circ})$ 15. $\cot 3A = \cot [90^{\circ} - A + 36^{\circ}]$ 3A = 126 – A $A = 31.5^{\circ}$ 16. (3) Six consecutive even numbers are 2n, 2n+2, 2n+4, 2n+6, 2n+8, 2n+10 ATQ, 2n + 2n + 2 + 2n + 4 + 2n + 6 + $2n + 8 + 2n + 10 = 35 \times 6$ Or, 12n + 30 = 120Or, 12n = 180 Or, 2n = 30 Smaller number = 30 Bigger number = 40 \therefore Sum = 30 + 40 = 70 17. (1) Half of perimeter of rectangular = 30 cm :. Perimeter of rectangular = 60 cm Breadth = x cm \therefore Length = x + 6 cm ATQ, 2(x+6+x) = 60Or, 2x + 6 = 30Or, x = 12Breadth = 12 cm \therefore Length = 18 cm \therefore Area = 12 × 18 cm² $= 216 \text{ cm}^2$

(192)

18. (3) $\frac{7 \times 4 \div 8}{5 \times 25 \div 125} + \frac{5 \times 4 \div 8}{8 \times 4 \div 16} 7 \times 4 \div 2$ $8 \times 7 \div 4$ $=\frac{7\times\frac{1}{2}}{5\times\frac{1}{5}}+\frac{5\times\frac{1}{2}}{8\times\frac{1}{4}}\div\frac{7\times2}{8\times\frac{7}{4}}$ $= \frac{7}{2} + \frac{5}{4} - 1 \Longrightarrow \frac{14 + 5 - 4}{4} \Longrightarrow \frac{15}{4}$ 19. (4) Total sales of A (J_1)= 150 + 350+550+450+250 = 1750 Total sales of B (J₂) = 950 + 650 + 750 + 150 + 50 = 2750:. Difference = $J_2 - J_1$ = 2550 - 1750 = 800 (3) Let distance of each trip = x20. Total distance = 4xTotal time = $\frac{x}{720} + \frac{x}{360} + \frac{x}{180} + \frac{x}{90}$ $= \frac{x+2x+4x+8x}{720} = \frac{15x}{720}$ \therefore Average speed= $\frac{\text{Distance}}{\text{time}}$ km/h $=\frac{4x}{\frac{15x}{700}} \text{ km/h} \Rightarrow \frac{4}{15} \times 720 \text{ km/h}$ = 192 km/h.21. (4) 9a + 9b + 9c = 81a + b + c = 814ab + 4bc + 4ca = 160ab + bc + ca = 40Now, $6a^2 + 6b^2 + 6c^2$ = $6 (a^2+b^2+c^2)$ = $6 [(a+b+c)^2 - 2 (ab + bc + ca)]$ $= 6 [81 - 80] \Rightarrow 6$ 22. (3) $a + \frac{1}{a} = 8$ Squaring both sides $a^2 + \frac{1}{a^2} = 62$ Again squaring on both sides. $a^4 + \frac{1}{a^4} = 3844 - 2$ Or, $a^4 + \frac{1}{a^4} = 3842$ 23. (4) $\sin p = \frac{15}{22}$ $\therefore \cos p = \sqrt{1 - \sin^2 p} \Rightarrow \frac{\sqrt{259}}{22}$ $\therefore \tan p = \frac{\sin p}{\cos p} = \frac{15/22}{\sqrt{259}/22}$ 15 $=\overline{\sqrt{259}}$

24. (1) a:b:c=2:3:55b - a + 2c = 115Let, a = 2k, b = 3k, c = 5k $[(5 \times 3) - 2 + (2 \times 5)]$ k = 115 (15 - 2 + 10) k = 115 k = 5 \therefore B = 3 × 5 = 15 25. (2) Total weight of 100 students = (100×34) kg = 3400 kg Total weight of first 49 students = (49×34) = 1666 kg \therefore Weight of 50th student = [3400 – (1600+1666)] kg = 134 kg ANSWER KEY 1. (4) 2. (1) 3. (1) 4. (5) 5. (3)6. (1) 7. (4) 8. (4) 9. (2) 10. (2) 11. (3) 12.(3) 13. (1) 14.(2) 15. (4) 16. (3) 17.(1) 18. (3) 19.(4) 20. (3) 21. (4) 22. (3) 23. (4) 24. (1) 25. (2)

GENERAL AWARENESS

- 1.(4) India is the world's largest producer of milk, pulses and Jute. India ranks as the second-largest producer of rice, wheat, sugarcane, groundnut, vegetables, fruit and cotton.
- 2.(4)
- 39^{th} Belgaum 1924 M.K. Gandhi
- Karachi 1931 Vallabbhai J. 45^{th} Patel
- Haripura 1938 Subhash 51st Chandra Bose 52^{nd} Tripura 1939 Subhash
- Chandra Bose
- 3.(1)
- 4.(1) Anshu Malik is an Indian freestyle wrestler. She won the silver medal in the women's 57 kg event at the 2021 World Wrestling Championships held in Oslo, Norway.
- 5.(1)
- 6.(2)
- 7.(4) The Union Minister of Agriculture and Farmers Welfare, Narendra Singh Tomar inaugurated the National Seed Congress in 2022 in Gwalior. The State Academy of Agricultural and Allied Sciences (SAAS) was launched.
- 8.(3)

9.(1) Champions – Germany Runner-up - Belgium

Top scorer- Jeremy Hayward

Best player - Germany Niklas Wellen

Best young player - Mustapha -Cassiem

The 2026 Men's FIH Hockey World Cup will be held in Wavre, Belgium and Amstelveen, Netherlands.

14.(2)

- 11.(1) Avogadro's number is 6.023 × 10^{23.}
- 12.(4) 'Got to be There' was Michael Jackson's first album.

Elizabeth Taylor called Michael first time.

Climb every mountain" was the first song Michael sang in public.

13.(1) Provisions related to Tribal areas in states of Assam, Meghalaya, Tripura, Mizoram - 6th Schedule Forms of oaths and Affirmations of offices for elected officials including judges - **3rd Schedule** Provisions related to Languages - 8th Schedule

C.E.O

Microsoft - Satya Nadella

Adobe Inc – Shantanu Narayen

Flipkart - Kalyan Krishnamurthy

15.(1) 1st July - Doctor's Day

29th Aug – National Sport's Day

16.(4) Jawaharlal Nehru Port(Nhava Sheva Port) is the second largest container port in India after Mundra Port. It is located on the eastern shores of Arabian Sea in Navi Mumbai. It was opened 26 May 1989.

> Mundra Port is located on the northern shores of the Gulf of Kutch.

Paradeep Port was opened on 12 24.(2) An object of mass m moving with March 1966.

- 17.(2) Seventh part was repealed by the Constitution (Seventh Amend- 25.(1) ment) Act, 1956.
- 19.(1) Rauf is related to Jammu and Kashmir. Bhavageete, Jaanapada Geethe

are the folk songs of Karnatka.

20.(2) Radha Sridhar received the

Sangeet Natak Akademi Award for the year 2018 for her contribution to which Bharatnatyam dance.

21.(4) Sokhta Koh is a Harappan site on the Makran coast, near the city of Pasni, in the Balochistan province of Pakistan. It was first surveyed by American archaeologist George F. Dales in 1960.

> Chanhu-daro is located 130 kilometers (81 mi) south of Mohenjodaro, in Sindh, Pakistan.

> Surkotada is located in Rapar Taluka of Kutch. It is a smaller fortified IVC site with 1.4 hectares (3.5 acres) in area.

Jackson the "King of Pop" for the 22.(3) The 2022 Vivo Pro Kabaddi League was the ninth season of Pro Kabaddi League. The tournament was played across Bengaluru, Pune and Hyderabad while the playoffs were played in Mumbai. Jaipur Pink Panthers defeated Puneri Paltan in the final match to win their second title.

> Most raid points - Arjun Deshwal Most successful raid - Arjun Deshwal

Most tackle points - Ankush

Most successful tackle - Ankush

23.(3) The **retina** is the innermost, light-sensitive layer of tissue of the eye of most vertebrates and some molluscs.

> The **pupil** is a black hole located in the center of the iris of the eye that allows light to strike the retina.

> The **lens** of the eye, also called the crystalline lens, is an important part of the eye's anatomy that allows the eye to focus on objects at varying distances.

velocity v has a kinetic energy of 1/2(mv²).

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

KD PUBLICATION SSC CHSL TIER - I 2022 (193)

^{10.(2)}