# STAFF SELECTION COMMISSION

# CONSTABLE (GD) IN CAPFS, SSF, ASSAM RIFLES & NCB

# SOLVED PAPER

(27th January 2023: Shift-3)

Time Allotted- 1 hours Max marks- 160

# **Important Instructions:-**

- This paper contains 80 questions which are divided into 4 sections. Each section contains 20 questions.
  - · General Intelligence & Reasoning
  - · General Knowledge & General Awareness
  - Elementary Mathematics
  - · English
- There will be 2 marks for each correct answer and also there will be negative marking of 0.5 marks for each wrong answer.
- Each question is compulsory to attempt and there will be no negative marking for unattempted questions.

# General Intelligence & Reasoning

- In a certain code language, 'OXFORD' is written as 'OODFRX' and 'KILLING' is written as 'IIGKLLN'. How will 'SOLUTION' be written as in that language?
  - 1. UOOITSNL
- 2. LNSTIOOU
- 3. IOOUSTLN
- 4. IOOULNST
- Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.
  - 9:27::12:48::6:?
  - 1.18
- **2.** 20
- **3.** 12
- **4.** 22
- Select the option figure in which the given figure is embedded (rotation is NOT allowed).



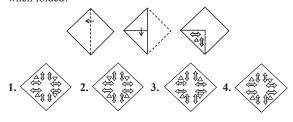




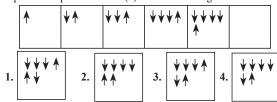


- Select the number from among the given options that can replace the question mark (?) in the following series.
  - $\frac{1}{402}, \frac{1}{335}, ?, \frac{1}{201}, \frac{1}{134}$

- Which option represents the correct order of the given words as they would appear in the English dictionary?
  - 1 Marching 2 Marble 3 Matching 4 Maker 5 Major
  - 1. 5,2,3,1,4
- **2.** 5,4,3,2,1
- **3.** 5,3,2,1,4 **4.** 5,4,2,1,3
- **6.** If '-' means 'division', '+' means 'multiplication', '×' means 'addition' and '÷' means 'subtraction', which of the following equations is correct?
  - 1.  $10 2 + 3 \div 9 \times 2 = 8$
- **2.**  $10 + 3 2 \times 9 \div 2 = 21$
- 3.  $20 + 6 4 \times 9 \div 6 = 32$
- **4.**  $20 \div 9 \times 9 4 + 6 = 33$
- 7. A paper is folded and cut as shown below. How will it appear when folded?



- Which letter cluster will replace the question mark (?) to complete the given series?
  - AEHJ, DHKM, ?, JNQS, MQTV
  - 1. GKNP 2. GJLM
- **3.** GIKM
- In a code language, 'dark colors' is coded as 'yu nu', 'days are bright' is coded as 'wu tu ku', 'nights are dark' is coded as 'ku nu pu', 'paint bright' is coded as 'wu ru'. What is the code for the word 'colors'?
  - 1. nu
- 2. ku
- **3.** tu
- **4.** yu
- Select the figure from among the given options that can replace the question mark (?) in the following series.



Select the option that is related to the third word in the same 11. way as the second word is related to the first word.

(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

- Annual: Semi-annual:: Monthly:?
- 1. Fortnightly 2. Yearly
  - **3.** Daily
- 4. Weekly
- 12. Which of the following letter-clusters will replace the question mark (?) in the given series?
  - AETO, CGRM, ?, GKNI, IMLG
  - 2. EIPK 1. EHPJ
- 3. DIOK
- 4. EJOK 13. L is the husband of O. Q is the mother-in-law of O. P is the sister of L. P is married to R. R has one son T. How is Q related to T?
  - 1. Sister

- 2. Mother
- **3.** Mother's mother
- 4. Father's mother
- 14. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.
  - AFHO: CHIP:: QDXM: SFYN:: ADGH:?
  - 1. CFHI
- 2. CFJR
- 3. CHIF
- 4. BGIP
- 15. Which two signs should be interchanged to make the below equation mathematically correct?
  - $104 \div 13 + 78 3 \times 2 = 143$
  - 1. ÷ and –
- 2.  $\times$  and -
- 3.  $\div$  and  $\times$
- 4. + and  $\times$

64				
16.	numbered I, II even if they see	and III. Assum em to be at var	ing the stat	three conclusions ements to be true, commonly known ally follow(s) from
	<b>Statements:</b>			
	All flowers are	eaves.		
	All leaves are st	ems.		
	Some stems are	roots.		
	<b>Conclusions:</b>			
	I. Some stems a	re leaves.		
	II. Some flower	s are roots.		
	III. Some leaves	are flowers.		
	1. Only conclus	ion II follows		
	2. Only conclus	ions II and III fo	ollow	
	3. Only conclus		llow	
	4. All conclusion			
17.				options that can
	replace the ques		the follows	ng series.
	53, 56, 50, ?, 4	*	2 55	4 44
	1. 48	<b>2.</b> 59	<b>3.</b> 55	<b>4.</b> 44
18.	Select the corre	ct mirror image	of the give	en figure when the

mirror is placed at MN as shown below.

J 7 9 C M S 6 5 y

N

1.79 C M S 6 5 y ...

1.79 C M S 6 5 y ...

1.79 C M S 6 5 y ...

3. y & d & M C 9 7 L 4. y & d & M C 9 7 L

19. Seven people are sitting in a movie theatre watching a movie facing North. D is sitting towards right of A but towards left of G. Y is sitting towards right of C and towards left of A. Z is sitting towards left of F and is second from the right end. Who is sitting second from the left end?

**1.** C **2.** Z **3.** A **4.** Y

20. There are 8 people sitting in a circle facing the centre: A, B, C, D, E, F, G and H. A is sitting to the immediate right of G and immediate left of E. Second to the right of E is C. D is sitting to the immediate left of C. F is sitting to the immediate left of G. H is the immediate neighbour of F and B. Who is sitting to the immediate right of B?

**1.** D **2.** A **3.** C **4.** H

### General Knowledge & General Awareness

21.		Il be generated by the agricultural vs additional labourers only for harvest season?					
	1. Disguised unemployment	2. Cyclic unemployment					
	3. Seasonal unemployment	4. Structural unemployment					
22.	A is a deposit a	account opted for by many who					
	wish to save a certain part of the	heir earnings.					
	1. share	2. savings account					
	3. loan	<b>4.</b> debenture					
23.	Export of goods enhances						
	1. expenses	2. local debt					
	3. nation's loan	4. foreign exchange					
24.	Who became the Member of	of Legislative Assembly from					
	Dhamnagar constituency in Oc	disha, India in November 2022?					
	1. Naveen Patnaik	2. Bishnu Sethi					
	3. Suryabanshi Suraj	4. Chandrakant Jadhav					
25.	India's first-ever SAI Centre of	Excellence for mountain terrain					
	biking and bicycle motocross i	s is to be set up in .					
	1. Shimla	2. Srinagar					

4. Ladakh

3. Palk strait

3. Nainital

26.	Sangeet Natak Akademi Awards	(Akademi Pu	raskar) carries
	1. ₹ 1,00,000 (Rupees one lakh) a	along with a T	amrapatra and
	2. ₹ 50,000 along with a Tamrapa 3. ₹ 50,000 (Rupees Fifty thousar 4. ₹ 3,00,000 (Rupees three lakh)	nd)	astram
27.	The State Government under Corby notification, shall establish a the State.		
28.	<ol> <li>Street Consumer Disputes Red</li> <li>National Consumer Disputes Red</li> <li>District Consumer Disputes Red</li> <li>Local Consumer Disputes Red</li> <li>was set up in 196</li> </ol>	Redressal Com edressal Comr ressal Commi	mission nission ssion
	field of seed production, particul HYV seeds.	arly the found	lation stock of
29.	_	hief Economi	
	been appointed as the full time me for Transforming India (NITI) Aa 1. Sreedharan Krishnakumari Sat 2. Vijay Kumar Saraswat	iyog in Noven	
30.	<ul><li>3. Rajesh Sharma</li><li>4. Arvind Virmani</li></ul>		-
	<ol> <li>to protest against the Rowlatt A</li> <li>to support the Simon commissi</li> <li>to support the Rowlatt Act</li> <li>to protest against the Simon co</li> </ol>	Act ion	
31.			ack when they
32.	1. iodine 2. blue litmus 3 Kati Bihu, one of the three B celebrated in the month of	ihu festivals	<b>4.</b> red litmus of Assam, is
33.	1. April 2. October 3 The members of a Vidhan Parish	3. January	
	years.  1. 6  2. 4	<b>3.</b> 5	<b>4.</b> 7
34.	What are the volcanoes which have time but might erupt in future call.	ve not erupted	
	3. Dormant volcanoes 4	2. Active volc	anoes
35.	Which of the following was the ca  1. Gaya  2. Vaishali  3		Aahajanapada?  4. Pataliputra
36.	The 42 <sup>nd</sup> Constitutional Amendment the recommendation of	nent was mad , set up in	e according to 1976.
37.	1. Abhijeet Sen Committee 2. Abid Hussain Committee In a football match, the length of and 120m.	4. Swaran Sin	gh Committee
38.			<b>4.</b> 90 m associated with
39.	1. Bihar 2. Haryana 3 Sri Lanka is separated from India		<b>4.</b> Gujarat
•		2. Strait of Gi	

4. Isthmus of Panama

- **40.** Which two gases are released when lead nitrate is heated?
  - 1. Oxygen and nitrogen oxide
  - 2. Nitrogen dioxide and oxygen
  - 3. Carbon monoxide and oxygen
  - 4. Hydrogen and nitrogen dioxide

# **Elementary Mathematics**

- **41.** Rajneesh deposited ₹ 3,00,000 in a bank for three years. What will be the final amount if the rate of interest is 8% compounded annually?
  - 1. ₹ 3,77,913.60
- **2.** ₹ 3,70,000.00
- 3. ₹ 3,57,931.60
- 4. ₹ 3,50,000.00
- 42. Two trains running in opposite directions cross a man standing on the platform in 30 sec and 15 sec respectively and they cross each other in 25 sec. The ratio of their speeds is:
- **2.** 3 : 7
- **3.** 5 : 3
- **43.** Find the value of  $\frac{\frac{1}{6} \div \frac{1}{6} \times \frac{1}{6}}{\frac{1}{6} \div \frac{1}{6}} \circ f \frac{1}{6} \frac{1}{36}$ .
- **4.** 1
- 44. A melon in the shape of a sphere having the radius of 9 cm is cut into two equal hemispheres. Find the volume (in cm<sup>3</sup>,

rounded off to 2 decimal places) of each half. Taken  $\pi = \frac{22}{7}$ 

- 1. 1,527.43 cm<sup>3</sup>
- 2. 1,547.34 cm<sup>3</sup>
- 3. 1.472.53 cm<sup>3</sup>
- 4. 1,372.35 cm<sup>3</sup>
- 45. The average temperature of a certain city on different days is as follows:

Monday, Tuesday, Wednesday and Thursday = 42°

Tuesday, Wednesday, Thursday and Friday = 44°

What is the temperature on Friday if the ratio of the temperature on Monday and Friday is 3: 5?

- 1. 42°
- 2. 44°
- **3.** 20°
- 4. 15°
- **46.** Three men and two women can finish a work in  $\frac{120}{13}$  days.

Two men and three women can finish the same in 10 days. One man and one woman start the work and after 12 days, 1 more man joins the work. After three more days, it is directed to engage more men or women to finish the work the next day. How many minimum more men or women must be engaged to complete the work as per direction?

- 1. Either 15 women or 9 men 2. 5 men and 10 women
- **3.** Either 14 women or 10 men **4.** 7 men and 7 women
- 47. A lady goes from home to office at a speed of 40 km/h, and returns back at a speed of 70 km/h. What is her average speed during the journey?
  - 1.  $45\frac{1}{11}$  km/h
- 2.  $50\frac{10}{11}$  km/h
- 3.  $40\frac{8}{11}$  km/h
- **48.** Find the third proportional to 16 and 320.
  - **1.** 6400
- **2.** 3200
- **3.** 8000
- 4.2100
- 49. The price of a commodity increases by 10% from 2020 to 2021 and it again increases by 15% from 2021 to 2022. The difference in the prices in 2020 and 2022 is ₹ 35. What is the price of the commodity (in ₹) in 2021 (rounded up to one decimal place)?
  - 1. 145.3
- **2.** 154.3
- **3.** 314.5
- 4. 134.5

- **50.** An electric geyser is sold at ₹ 7,100 after reducing ₹ 244 in addition to two successive discounts of 15% and 4% on the marked price. Find the marked price (in Rs.) of the geyser.
  - 1. 9.000 **2.** 8,800
- **3.** 8.500
- 4. 8.200
- 51. In a discount scheme, there is 50% discount on the marked price of ₹ 500, but at the end it is sold for ₹ 200. What additional discount did the customer get?
- **2.** 22%
- **3.** 20%
- **52.** An article is marked at ₹ 7,500 and available at a discount of 12%. The shopkeeper gives another off-season discount to the buyer and sell the article for ₹ 5,400. Find the off-season discount. (Correct to two decimals places.)
  - 1. 18.18%
- **2.** 19.53%
- **3.** 18.95%
- 4. 19.63%
- 53. A dishonest dealer professes to sell his goods at the cost price but uses a false weight of 950 g instead of 1 kg. What is his gain percentage?
  - 1.  $5\frac{3}{19}\%$

- 2. 5% 3.  $5\frac{1}{19}\%$  4.  $5\frac{5}{19}\%$
- **54.** The third proportional to  $a^3 + b^3$  and  $a^2 + ab + b^2$ , when a = 2and b = 3 is: (correct to 2 decimal places)
  - 1. 8.56
- **2.** 5.83
- **3.** 10
- 55. The material of a solid right circular cylinder is converted into the shape of a solid cone of equal radius. If the height of the cylinder is 8.8 cm, then the height of the cone is:
  - 1. 8.8 cm
- **2.** 35.2 cm
- **3.** 17.6 cm
- **4.** 26.4 cm
- 56. From 2011 to 2014, a town's population is increasing at the rate of 2% annually. If its population was 13,265 in 2014, then what would have been its population (Approximately) in 2011?
  - 1. 12500
- **2.** 12275
- **3.** 12250
- **4.** 12000
- 57. A stock of food is enough for 315 men for 48 days. For how many days the same stock of food is enough, if 45 more men join?
  - 1.46
- **2.** 42
- **3.** 48
- 4, 44
- If the number 40 is increased by 40%, then what will be the actual increase?
  - 1. 42
- **2.** 28
- **3.** 56
- Find the square of the sum of the digits of the smallest number divisible by both 18 and 24. **4.** 100
  - 1.64
- **2.** 121
- 3.81
- 60. A man can row upstream at 12 km/h and downstream at 20 km/h. Find the man's rowing speed in still water, and the
  - rate of current. 1. 16 km/h and 4 km/h
- 2. 32 km/h and 8 km/h
- 3. 32 km/h and 4 km/h
- 4. 16 km/h and 8 km/h

# **English**

- 61. Select the most appropriate option that can substitute the underlined segment in the given sentence.
  - The road which connected for two villages is now deserted.
  - 1. that connected for
- 2. will connect the
- 3. that connected the
- 4. which connects of
- 62. Select the most appropriate option to fill in the blank with the synonym of the underlined word.
  - The casual nature of the student destroyed his studies and his future.
  - 1. ruined **3.** rained
- 2. skyrocketed
- 4. traced
- 63. Select the most appropriate ANTONYM of the given word.
  - Succinct 1. Lengthy **2.** Empty
- 3. Hasty
- 4. Hearty
- Select the most appropriate ANTONYM of the given word. Cluster
  - 1. Consort
    - 2. Group
- 3. Individual 4. Special

65.	65. Select the most appropriate synonym of the given word.  Despise  Wear rubber gloves while chopping chillies (as it could irritate the skin).																		
1. Elevate 2. Hate 3. Eradicate 4. Revere								1. as these could irritate the skin											
66.	66. Select the correct idiom that can substitute the italicised group							2. as they can irritate the skin 3. as it would irritate the skin											
	of words in the given sentence. Will humanity overcome the greed of leaders all around the											the sk							
	Will hun world? T									73.	Select					on that	t can	substiti	ite the
	1. burn th			-					Juay.	,				in the g				54654144	
	3. burn a					ourn on								you ha				nction.	
<b>67.</b>	Select the										1. He i	is very	pleased	d	2.		-	-	
	The cons	struction								74				:		He ha			
<b>60</b>	1. cite Select th	a conto	2. sig			site		cyte	from	/4.	Parts of the following sentence have been underlined a given as options. Select the option that contains an error.								
00.	the given			at com	ams u	ie iviis	SFELI	word	HOIH		We <u>must acknowledge</u> the fact that we <u>had been vis</u>								
	1. Both			best fi	riends,	now th	ney are	at dag	ggers		many t								
	drawn	١.					-				1. mus					had be			
	<b>2.</b> As if								varm	75	3. acki			omminto		visited		anlinad	word
thoughts, I picked up the book and started browsing.  3. Without the slightest warning, something new breaks into									75.	Select He was						ne una	erimed	word.	
		ife that							iiito		He was <u>curious</u> to know his result.  1. Ingenious 2. Inquisitive				sitive				
	<b>4.</b> The g	ist of tl	ne quo	te was					ldopt		3. Indi	fferent			4.	. Indisc	rimina	ite	
<b>60</b>		elves to				111			41			rehens							
69.	Select the substitute										In the following passage, some words have been deleted. Read								
	sentence		Поор						51.011	the passage carefully and select the most appropriate opti fill in each blank.					tion to				
	He aquie									I think that perhaps the sky is a (1) sea of						sea o	f fresh		
	1. acquie								ed		water a	and we,	(2)		walk	king und	der it, v	walk on	top of
70.	Select the					g of the	given	idiom.			it; perhaps we see everything (3) down and the								
	The pot of 1. Prepar	_				water					earth is a (4) of sky, so that when we die, we fall ar (5) into the sky.						all and		
	2. People						lentify	in othe	ers	76.	<b>6.</b> Select the most appropriate option to fill in blank number 1.						er 1.		
	3. Speak					neeting	ŗ				1. minty 2. vigilant 3. huge 4. allotted							ed	
71	4. Makin					C 1		1 . 4 .	. 41	77.	Select								
/1.	Select the		appr	opriate	set of	word	s to c	ompiete	e tne	70		narily		stubbori					
sentence.  I will not spend a single on a bottle of perfume until I  The spend a single on a bo																			
	know that I love its 79. Select the most appropriate option to fill in blank number 4.																		
	1. cent; s										1. sele			artition		. kind			
72.	Select the bracketed									80.	Select			-	•				er 5.
	meaning		segme	iii coiiv	cerry an	ila com	preces	ine sem	ciicc		1. swir	ng	2. 0	climb	3.	. draw	2	. sink	
								A	nsw	er K	ev								
	1 (4)		(2)		(4)	4	(2)	_	(4)		(1)		(2)	0	(1)		(4)	10	(4)
1	1. (4) 1. (1)	2. 12.	(3)	3. 13.	(4)	4. 14.	(2)	5. 15.	(4)	6. 16.	(1)	7. 17.	(2)	8. 18.	(1) (1)	9. 19.	(4)	10. 20.	(4)
2		22.	(2)	23.	(4)	24.	(3)	25.	(1)	26.	(1)	27.	(3)	28.	(2)	29.	(4)	30.	(1)
3		32.	(2)	33.	(1)	34.	(3)	35.	(2)	36.	(4)	37.	(4)	38.	(3)	39.	(3)	40.	(2)
4		42.	(1)	43.	(2)	44.	(1)	45.	(3)	46.	(3)	47.	(2)	48.	(1)	49.	(1)	50.	(1)
	1. (3)	52.	(1)	53.	(4)	54.	(4)	55.	(4)	56.	(1)	57.	(2)	58.	(4)	59.	(3)	60.	(1)
6		62.	(1)	63.	(1)	64.	(3)	65.	(2)	66.	(2)	67.	(3)	68.	(4)	69.	(1)	70.	(2)
7		72.	(2)	73.	(1)	74.	(2)	75.	(2)	76.	(3)	77.	(3)	78.	(2)	79.	(3)	80.	(4)
						An	SWE	ers w	vith	Ex	nlan	atio	ns						

#### Answers with Explanati

1. Option (4) is correct.

Given that: OXFORD is written as OODFRX

The pattern followed here is:

First, vowels are written in alphabetical order then, consonants are written in alphabetical order.

So, in the word OXFORD

Vowels = OO

Constants = DFRX

And, in the word KILLING

Vowels = II

Consonants = GKLLN

Similarly, in the word SOLUTION

Vowels = IOOU

Constants = LNST

Hence, IOOULNST is the correct answer.

Given that: 9:27::12:48::6:?

The patter followed here is:

 $(1^{st} \text{ term} \div 3) \times (1^{st} \text{ term}) = 2^{nd} \text{ term}$ 

So,

$$(9 \div 3) \times (9)$$

$$\Rightarrow$$
 3 × 9 = 27

And,

$$(12 \div 3) \times (12)$$

$$\Rightarrow$$
 4 × 12 = 48

Similarly,

$$(6 \div 3) \times (6)$$

$$\Rightarrow 2 \times 6 = 12$$

Hence, 12 is the correct answer.

### 3. Option (4) is correct.

The given figure is embedded in option (4) as follows:



# 4. Option (2) is correct.

Given series: 
$$\frac{1}{402}$$
,  $\frac{1}{335}$ , ?,  $\frac{1}{201}$ ,  $\frac{1}{134}$ 

Here, denominators are decreasing by 67.

So.

$$402 - 67 = 335$$

$$335 - 67 = 268$$

$$268 - 67 = 201$$

$$201 - 67 = 134$$

Hence, 268 is the correct answer.

### 5. Option (4) is correct.

The correct order of the given words are as follows:

5. Major	4. Maker	2. Marble	1. Marching	3. Matching

Hence, 5, 4, 2, 1, 3 is the correct answer.

## 6. Option (1) is correct.

Upon checking option 1 and putting signs as per question, we get:

$$10 \div 2 \times 3 - 9 + 2 = 8$$

$$\Rightarrow$$
 5 × 3 – 9 + 2 = 8

$$\Rightarrow 15 - 9 + 2 = 8$$

$$\Rightarrow 17 - 9 = 8$$

$$\Rightarrow 8 = 8$$

$$LHS = RHS$$

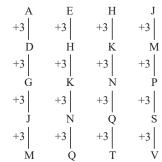
## 7. Option (2) is correct.

After unfolding the paper, following image will appear:



### 8. Option (1) is correct.

Given series: AEHJ, DHKM, ?, JNQS, MQTV The pattern followed here is:



Hence, GKNP is the correct answer.

## 9. Option (4) is correct.

Given that:



Hence, 'colors' will be coded as 'yu'.

### 10. Option (4) is correct.

In the given pattern, one arrow is increasing and the last arrow faces upwards while the other arrows faces downwards.



So, the required answer figure is:

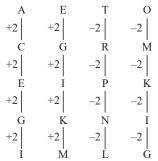
## 11. Option (1) is correct.

In the given analogy, Semi-Annual is half of Annual. Similarly, fortnightly refers to two weeks i.e., half of a month.

### 12. Option (2) is correct.

Given series: AETO, CGRM, ?, GKNI, IMLG

The pattern followed here is:

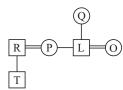


Hence, EIPK is the correct answer.

#### 13. Option (3) is correct.

According to the question, following family tree can be made:

Hence, Q is mother's mother of T.



### 14. Option (1) is correct.

Given that:

AFHO is related to CHIP

$$\begin{array}{c|cccc} A & F & H & O \\ +2 & +2 & +1 & +1 & +1 \\ C & H & I & P \end{array}$$

And, ODXM is related to SFYN

$$\begin{array}{cccc} Q & D & X & M \\ +2 & +2 & +1 & +1 & +1 \\ S & F & V & N \end{array}$$

Similarly, for ADGH:

$$\begin{array}{ccccc}
A & D & G & H \\
+2 & +2 & +1 & +1 & +1
\end{array}$$

Hence, CFHI is the correct answer.

### 15. Option (1) is correct.

Given equation:  $104 \div 13 + 78 - 3 \times 2 = 143$ 

Upon checking option (1) and interchanging ÷ and –, we get:

$$104 - 13 + 78 \div 3 \times 2 = 143$$

$$\Rightarrow 104 - 13 + 26 \times 2 = 143$$

$$\Rightarrow$$
 104 – 13 + 52 = 143

$$\Rightarrow 156 - 13 = 143$$

$$\Rightarrow 143 = 143$$

LHS = RHS

According to the given statements, following Venn diagram can be made:

Conclusion I- Some stems are leaves - True.

Conclusion II- Some flowers are roots - False.

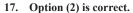
Conclusion III- Some leaves are flowers - True. Hence, only conclusion I and III follows.

Stems

Leaves

Flowers

Roots



Given series: 53, 56, 50, ?, 47, 62

The pattern followed here is:

 $53 + (3 \times 1) = 56$ 

 $56 - (3 \times 2) = 50$ 

 $50 + (3 \times 3) = 59$ 

 $59 - (3 \times 4) = 47$ 

 $47 + (3 \times 5) = 62$ 

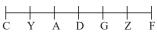
Hence, 59 is the correct answer.

### 18. Option (1) is correct.

In the mirror image, left becomes right and right becomes left. So, the required mirror image is as follows:

#### 19. Option (4) is correct.

According to the question, following sitting arrangement can be made:



Hence, Y is sitting second from the left end.

### 20. Option (4) is correct.

According to the question, following sitting arrangement can be made:

Hence, H is sitting to the immediate H right of B.



#### 21. Option (3) is correct.

Seasonal unemployment happens when some industries or jobs need more workers at certain times of the year, like during harvest season in farming. In this situation, workers are hired only for that specific period. When the busy season is over, these workers might not have jobs until the next busy time comes around.

#### 22. Option (2) is correct.

A savings account is a deposit account specifically designed for accumulating and safely storing money while earning interest. It is the most common type of account used for saving regular income.

### 23. Option (4) is correct.

The export of goods contributes to the generation of foreign exchange for a country. This foreign money is important because it can be used to buy things from other countries, pay off debts to other nations, and make the country's economy stronger in the world.

### 24. Option (3) is correct.

Suryabanshi Suraj became the Member of Legislative Assembly from the Dhamnagar constituency in Odisha, India in November 2022. He is the son of Bishnu Sethi and won the November 2022 by-election for the Dhamnagar constituency, representing the Bharatiya Janata Party (BJP).

### 25. Option (1) is correct.

India's first-ever SAI Centre of Excellence for mountain terrain biking and bicycle motocross is to be set up in Shimla.

# 26. Option (1) is correct.

The Sangeet Natak Akademi Awards (Akademi Puraskar) currently carries 1,00,000 (Rupees one lakh) along with a Tamrapatra and Angavastram.

### 27. Option (3) is correct.

Under the Consumer Protection Act 2019, the State Government, through notification, is responsible for establishing a District Consumer Disputes Redressal Commission in each district of the state. This commission serves as a forum for consumers to seek redressal for their grievances and resolve disputes.

#### 28. Option (2) is correct.

The National Seeds Corporation (NSC) was set up in 1963, and it is responsible for activities related to seed production, including the production of foundation stock for High Yielding Variety (HYV) seeds. The NSC plays a crucial role in ensuring the availability of quality seeds for farmers in India.

### 29. Option (4) is correct.

The former Chief Economic Advisor appointed as a full-time member of NITI Aayog in November 2022 is Arvind Virmani. He served as the Chief Economic Advisor from 2007 to 2009 and was appointed as a full-time member of NITI Aayog on November 16, 2022.

### 30. Option (1) is correct.

Mohammed Ali Jinnah, Madan Mohan Malaviya, and Mazhar Ul Haq resigned from the Imperial Legislative Council in 1919 to protest against the Rowlatt Act.

#### 31. Option (1) is correct.

When foods have starch in them and you put iodine on them, they will change colour to blue-black. This colour change is a common way to check if there is starch in different things.

# 32. Option (2) is correct.

Kati Bihu, often observed in October, is also called Kangali Bihu or the Festival of the Poor. During this time, when granaries are empty, people light lamps and conduct rituals to safeguard their crops from pests and insects.

# 33. Option (1) is correct.

The members of a Vidhan Parishad are elected for a term of 6 years. The Vidhan Parishad, also known as the Legislative Council, is the upper house of the bicameral legislature in some Indian states.

### 34. Option (3) is correct.

Dormant volcanoes are those that have not erupted for a very long time but have the potential to erupt again in the future. They are in a state of temporary inactivity.

# 35. Option (2) is correct.

Vaishali used to be the main city of an ancient place called Vajji Mahajanapada in India. This area was known for its democratic way of governing, and they called it the Vajjian Confederacy.

### 36. Option (4) is correct.

The 42nd Constitutional Amendment was made according to the recommendation of the Swaran Singh Committee, set up in 1976. This committee played a significant role in suggesting amendments to the Indian Constitution.

### 37. Option (4) is correct.

In a football match, the pitch's length should fall within a range of 90m to 120m. The official regulations, set by the

International Football Association Board (IFAB), outline specific dimensions for the pitch:

- The touchlines, which are the long sides of the pitch, must be between 90 meters (98.4 yards) and 120 meters (131.2 yards) in length.
- The goal lines, representing the shorter sides of the pitch, should be within a length range of 45 meters (49.2 yards) to 90 meters (98.4 yards).

# 38. Option (3) is correct.

The Ghodemodini dance is a folk dance form associated with Goa. This dance is performed during various traditional festivals and celebrations in the state, reflecting the cultural richness of Goa.

#### 39. Option (3) is correct.

Sri Lanka is separated from India by the Palk Strait. This waterway is like a channel between the Jaffna Peninsula in northern Sri Lanka and Tamil Nadu, a state in India. It's about 80 kilometres long and 40 to 80 kilometres wide. Lots of different sea animals live there, like fish, shrimp, and crabs. People use the strait for shipping, and there are regular ferry services that travel between Sri Lanka and India.

### 40. Option (2) is correct.

When lead nitrate is heated, it decomposes to form lead oxide, nitrogen dioxide, and oxygen. Therefore, the gases released are nitrogen dioxide and oxygen.

### 41. Option (1) is correct.

Given:

Principal(P) = 3,00,000

Time(t) = 3 year

Rate of interest(r), compounded annually = 8%

Amount = 
$$P\left(1 + \frac{r}{100}\right)^t$$
  
= 3,00,000  $\left(1 + \frac{8}{100}\right)^3$   
= 3,00,000  $\left(\frac{108}{100} \times \frac{108}{100} \times \frac{108}{100}\right)$   
= 3,77,913.60

# 42. Option (1) is correct.

Let the speeds of the two trains be x m/sec and y m/sec respectively.

Using Length = Speed  $\times$  Time

Then, length of the first train = 30x metres,

and length of the second train = 15y metres.

According to question, 
$$\frac{30x+15y}{x+y} = 25$$
 seconds

$$3x + 15y = 25x + 25y$$

$$5x = 10y$$

$$\frac{x}{y} = \frac{2}{1}$$

$$\Rightarrow x : y = 2 : 1$$

### 43. Option (2) is correct.

Value of, 
$$\frac{\frac{1}{6} \div \frac{1}{6} \times \frac{1}{6}}{\frac{1}{6} \div \frac{1}{6} \text{ of } \frac{1}{6}} - \frac{1}{36},$$

$$= \frac{1 \times \frac{1}{6}}{\frac{1}{6} \div \frac{1}{36}} - \frac{1}{36}$$
$$= \frac{\frac{1}{6} - \frac{1}{36}}{6 - \frac{1}{36}}$$
$$= \frac{1}{36} - \frac{1}{36} = 0$$

### 44. Option (1) is correct.

Given:

Radius(r) = 9 cm

Using, volume of hemisphere = 
$$\frac{2}{3} \pi r^3$$
  
=  $\frac{2}{3} \times \frac{22}{7} \times 9 \times 9 \times 9$   
= 1,527.43 cm<sup>3</sup>

#### 45. Option (3) is correct.

Given:

The average temperature of Monday, Tuesday, Wednesday and Thursday =  $42^{\circ}$ 

Total Temperature of 4 days  $(t_1) = 42 \times 4 = 168$ 

and Tuesday, Wednesday, Thursday and Friday = 44°

Total Temperature of 4 days  $(t_2) = 44 \times 4 = 176$ 

According to question  $(t_2 - t_1)$ , the Temperature of Friday-Monday = 176 - 168 = 8

Given that, Ratio of Temperature of Monday and Friday is = 3:5

Let Temperature of Friday = 5x

Let Temperature of Monday = 3x

According to question, 5x - 3x = 2x = 8

$$x =$$

Temperature of Friday =  $5x = 5 \times 4 = 20^{\circ}$ 

### 46. Option (3) is correct.

Let efficiency of one man and one woman are M and W respectively.

Using, total work =  $M_1D_1 = M_2D_2$ 

According to the question,

$$\Rightarrow (3M + 2W) \times \frac{120}{13} = (2M + 3W) \times 10$$

$$\Rightarrow (360M + 240W = (260M + 390W)$$

$$\Rightarrow 100M = 150W$$

$$\Rightarrow \frac{M}{W} = \frac{3}{2}$$

Now, total work =  $(2M + 3W) \times 10 = (2 \times 3 + 3 \times 2) \times 10 = 120$  unit

According to the question,

Work completed in 15 days =  $(1 \times 3 + 1 \times 2) \times 12 + (2 \times 3 + 1 \times 2) \times 3 = 84$  unit

Remaining work = 120 - 84 = 36 unit

Next day, work done by 2 men and 1 woman =  $(2 \times 3 + 1 \times 2)$ = 8 unit

So, work for which extra man power needed = 36 - 8 = 28 unit Hence, either 14 women or 10 men required to join the group to complete the task on end day.

# 47. Option (2) is correct.

Given:

Forward speed(x) = 40 km/h

Backward speed(y) = 70 km/h

Using, Average speed = 
$$\frac{2xy}{x+y}$$
  
Average Speed =  $\frac{2 \times 40 \times 70}{40 + 70}$ 

$$= \frac{560}{11}$$

$$= 50\frac{10}{11}$$

$$= 50\frac{10}{11}$$
km/h

Let third proportional is *x* 

$$16:320=320:x$$

$$x = \frac{320 \times 320}{16} = 6400$$

#### 49. Option (1) is correct.

Let the price of the commodity in 2020 as P.

The price increases by 10% from 2020 to 2021, so the price in  $2021 = 1.10 \times P$ 

Then, it increases by 15% from 2021 to 2022, so the price in  $2022 = 1.15 \times (1.10 \times P)$ 

Given: The difference in prices between 2020 and 2022 = ₹35:

$$1.15 \times (1.10 \times P) - P = 35$$

$$1.15 \times 1.1 \times P - P = 35$$

$$0.265 P - P = 35$$

$$1.265 P = 35$$

$$P=\,\frac{35}{0.265}$$

Price in 2021 = 
$$1.10 \times P$$
  
=  $1.1 \times \frac{35}{0.265}$   
= 145.28% (approx.)

# 50. Option (1) is correct.

Let the marked price of the electric geyser = MP

As given, the first discount is 15%, so the price after the first discount is = 0.85 MP

The second discount is 4%, so the price after the second discount is =  $0.96 \times 0.85$  MP

In addition to these discounts, there is a reduction of 244, Therefore, the final selling price will =  $0.96 \times 0.85 \text{ MP} - 244$ According to the question, this final selling price (SP) is = ₹7,100

So that,  $0.96 \times 0.85 \text{ MP} - 244 = 7100$ 

$$0.816 \text{ MP} = 7344$$

On solving, MP = 9000(approx.)

### 51. Option (3) is correct.

Given: The marked price = ₹500

As given in the question, there is a 50% discount on the marked price, so the price after the first discount is =  $0.5 \times$ 500 = 250

As given, the final selling price is = 200

So, additional discounts = 250 - 200 = 50

Percentage additional discounts =  $\frac{50}{250} \times 100 = 20 \%$ 

### 52. Option (1) is correct.

Given: The marked price = ₹7500

As given, there is a 12% discount on the marked price, so the price after the discount is =  $0.88 \times 7500 = 6600$ 

As given, the final selling price is = 5400

So, additional discounts = 6600 - 5400 = 1200

Percentage off season discounts = 
$$\frac{1200}{6600} \times 100$$
  
= 18.18 % (approx.)

### 53. Option (4) is correct.

Let the CP and SP = ₹100/kg

$$Gain(G) = SP - CP = ₹5$$

Percentage gain = 
$$\frac{G}{CP} \times 100$$
  
=  $\frac{5}{95} \times 100$   
=  $5\frac{5}{19}$ 

## 54. Option (4) is correct.

$$a^3 + b^3 = 2^3 + 3^3 = 35$$

$$a^2 + ab + b^2 = 2^2 + 2 \times 3 + 3^2 = 19$$

Let the third proportional of 35 and 19 is x

$$35:19=19:x$$

$$x = \frac{19 \times 19}{35} = 10.31$$

### 55. Option (4) is correct.

Using, Volume of a solid right circular cylinder =  $\pi R^2 H$ 

Using, Volume of a solid cone =  $\frac{1}{3} \pi r^2 h$ 

As given in the question r = R

And H(height of cylinder) = 8.8 cm

According to the question,  $\pi R^2 H = \frac{1}{2} \pi r^2 h$ 

$$H = \frac{1}{3}h$$

$$h = 3H$$

$$= 3 \times 8.8$$

$$= 26.4 \text{ cm}$$

### 56. Option (1) is correct.

Let the population in 2011 = P

As given in the question, town's population is increasing at the rate of 2% annually.

So, the population in 2012 = 1.02 P

So, the population in 2013 = 1.02(1.02 P)

So, the population in  $2014 = 1.02(1.02 \times 1.02 \text{ P})$ 

According to question population in 2014 = 13,265

So that,  $1.02(1.02 \times 1.02 \text{ P}) = 13,265$ 

$$1.0612 P = 13,265$$

$$P = 12,500$$

# 57. Option (2) is correct.

As given, 315 men can consume the food = 48 days So that, 1 man can consume the food =  $48 \times 315$  days

Number of men after joining 45 men = 315 + 45 = 360

So that, 360 men can consume the food =  $\frac{48 \times 315}{360}$  days

# =42 days

# 58. Option (4) is correct.

As given the number = 40

As given, the number is increased by 40%, so increment in number =  $\frac{40}{100} \times 40 = 16$ 

number = 
$$\frac{40}{100} \times 40 = 1$$

As we know that, the smallest number which is divisible by x and y is the LCM of (x, y).

So that, the smallest number which is divisible by both 18 and 24 is the LCM of (18, 24)

LCM of (18, 24) = 36

Sum of the digits of 36 = 3 + 6 = 9

Square of the sum of the digits =  $9 \times 9 = 81$ 

### 60. Option (1) is correct.

Given: Upstream = 12 km/h

Downstream = 20 km/h.

Using, rowing speed in still water = 
$$\frac{\text{Downstream} + \text{Upstream}}{2}$$
$$= \frac{20+12}{2}$$
$$= 16 \text{ km/h}$$

Using, rate of current = 
$$\frac{\text{Downstream} - \text{Upsteam}}{2}$$
$$= \frac{20-12}{2}$$
$$= 4 \text{ km/hr}$$

#### 61. Option (3) is correct.

'That' is used to indicate a specific object, item, person, condition, etc., while 'which' is used to add information to objects, items, people, situations, etc. Since the sentence talks about a specific road, the appropriate word to refer to the road is 'that.'

### 62. Option (1) is correct.

The question tests a student's knowledge of vocabulary. The word destroyed means to damage something so badly that it cannot be used. Example: During war, most of the old part of the city was destroyed by bombs. The synonym for 'destroyed' is ruined. Skyrocketed means to rise extremely quickly or make extremely quick progress towards success. Example: Housing prices have skyrocketed in recent months.

# 63. Option (1) is correct.

The question tests a student's knowledge of vocabulary. Succinct, meaning "short and to the point." Example: Bits had gotten their nickname solely because of their succinct way of speaking. Hence, the antonym of 'succinct' is 'lengthy'. Hasty means done with excessive speed or urgency; hurried.

### 64. Option (3) is correct.

The question tests a student's knowledge of vocabulary. Cluster means a group of similar things or people positioned or occurring closely together. Example: "Clusters of creamywhite flowers attracted many people." The antonym of 'cluster' is 'individual'. Consort means to spend a lot of time in the company of a particular group of people, especially people whose character is not approved of.

# 65. Option (2) is correct.

The question tests a student's knowledge of vocabulary. Despise means to feel contempt or a deep repugnance for. Example: "He despised Dhruv for his selfish nature". Hence, the synonym of 'despise' is hate. Eradicate means to destroy completely. "Revered means respected."

# 66. Option (2) is correct.

The question tests a student's knowledge of vocabulary, idioms and phrases. "Most important issue to be discussed" can be represented by "burning issue." "Burn the candle at both ends" means to work or do other things from early in the morning until late at night and so get very little rest. "Burn a hole in the pocket" is used to refer to someone who can't resist the urge to spend money as soon as they earn it. "Burn one's fingers" means to suffer an unpleasant or ruinous consequence (especially the loss of money) for some action, often such that

one becomes unwilling or reluctant to do it again.

#### 67. Option (3) is correct.

A homonym is a word that sounds the same or is spelled the same as another word but has a different meaning. Cite means to refer to (a passage, book, or author) as evidence for or justification of an argument or statement, especially in a scholarly work. Example: "Authors who are highly regarded by their peers tend to be cited." "He does not cite any source for this assertion." Sight means the faculty or power of seeing. Example: "Joseph lost his sight as a baby." A site is a place where something is, was, or will be built, or where something happened, is happening, or will happen. Cyte means denoting a mature cell. Example: "lymphocyte." The given sentence talks about construction, so the apt word in the blank is "site."

### 68. Option (4) is correct.

The misspelled word is "addopt". The correct word is "adopt," which means to accept or start to use something new.

### 69. Option (1) is correct.

The correct spelling of "aquiesced" is "acquiesced." Acquiesced means accepting something reluctantly but without protest. Example: "Sara acquiesced to her husband's decision to relocate to a remote area."

### 70. Option (2) is correct.

The pot calling the kettle black is a proverbial idiom. It refers to a situation in which one person criticizes another for a fault the first person also has: Sean called me a liar – that's the pot calling the kettle black!

### 71. Option (1) is correct.

The first blank refers to spending some money. So, the correct word is 'cent'. The second blank mentions the speaker's liking for some fragrance. Hence, the apt word in the blank is "scent."

### 72. Option (2) is correct.

The correct pronoun to refer to "chillies" is "they." So, the correct replacement of the given phrase is "they can irritate the skin." The correct auxiliary here is 'can' not 'could', as the sentence is in present tense; moreover, it is not a possibility but a quality of the chillies.

# 73. Option (1) is correct.

The replacement of the underlined part is "he is very pleased." Since, the subject (he) of the sentence is without a 'verb', a verb 'is' is added in the correction to make complete sense. The auxiliary verb 'is' always takes the verb in the third form (pleased).

# 74. Option (2) is correct.

The past perfect is a tense that shows something that started in the past and continued up to a given time or happened several times before a point in the past. The sentence refers to an action in the present because it mentions "we must acknowledge," thus the later part of the sentence should be in the present perfect tense (have visited). The present perfect tense is employed in a sentence to represent an action that just happened in the recent past and still has its effect in the present or an action that represents an indefinite time in the past.

# 75. Option (2) is correct.

The question tests a student's knowledge of vocabulary. Curious means eager to know or learn something. "I began to be curious about the whereabouts of the bride and groom." The synonym for 'curious' is 'inquisitive'. Ingenious means naïve. Indiscriminate means done at random or without careful judgement.

## 76. Option (3) is correct.

The sentence describes the sky and compares it with the sea. The best word to describe it is 'huge'. It cannot be vigilant and allotted.

Since the latter part of the sentence draws contrast, the word that should fill the blank should be a conjunction used to express that contrast. Hence, the best word is "instead of."

### 78. Option (2) is correct.

The word next to the blank is 'down,' so the best word in the blank is 'upside.' The sentence is: We see the earth upside down.

### 79. Option (3) is correct.

The best fit word in the blank is 'kind,' because the paragraph draws similarity between the earth and the sky.

# 80. Option (4) is correct.

The sentence mentions that when we die, we fall and sink into the sky. The blank needs a word that is in sink with 'fall', so best word is 'sink' in the context.