STAFF SELECTION COMMISSION

COMBINED HIGHER SECONDARY LEVEL (TIER-I)

SOLVED PAPER

(14th March 2023: Shift-1)

Time Allotted- 1 hour Max marks- 200

Important	Instructions:-
------------------	-----------------------

- ⇒ This paper contains 100 questions which are divided into 4 sections and each section contains 25 questions.
 - ✓ English Language (Basic Knowledge)
 - ✓ General Intelligence
 - ✓ Quantitative Aptitude (Basic Arithmetic Skill)
 - ✓ General Awareness
- ⇒ There will be 2 marks for each correct answer and also there will be negative marking of 0.50 marks for each wrong answer.
- ⇒ Each question is compulsory to attempt and there will be no negative marking for unattempted questions.

English Language

- 1. Choose the incorrectly spelt word.
 - 1. Cateogry 2. Circle
- 3. Greed

4. PSOR

- 2. Choose the word that means the same as the given word. Hostility
 - 1. Organize 4. Authorize 2. Anchor **3.** Enmity
- 3. Select the word that is closest in meaning (SYNONYM) to the word given below.

Oblivious

- 1. Aware
- 2. Careful
- **3.** Ignorant
- 4. Suspecting
- 4. Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

Smart phone age has lead to substantial deterioration in both duration and quality of sleep.

- 1. Smart phone age has lead
- 2. both duration and quality of sleep.
- 3. to substantial deterioration in
- 4. No error
- **5.** Rearrange the parts of the sentence in correct order. Forest planning rules
 - **P.** recognizes the growing risks to national
 - Q. forests from climate change as well as expands
 - **R.** opportunities for public input and engagement
 - S. were updated in 2012, and the new rule explicitly
 - 1. PORS 2. QRPS 3. SPQR

6. Select the correct indirect form of the given sentence.

- The professor said, "You must learn these words regularly."
- 1. The professor said that I must learn those words regularly. 2. The professor said I should learn these words regularly.
- 3. The professor said that you had to learn these words regularly.
- **4.** The professor said that I had to learn those words regularly.
- 7. Fill in the blank with the most suitable word.

In addition, it is believed they possess crude electronic devices capable of triggering bombs.

- 1. intelligible 2. insipid 3. incendiary 4. insensible
- **8.** Select the correct passive form of the given sentence. The president loved that lady.
 - 1. That lady is love by the president.
 - **2.** That lady was loved by the president.
 - **3.** That lady is loved by the president.
 - **4.** That lady was being loved by the president.

- 9. Fill in the blank with an appropriate option. I try to retrieve the note from my pocket while the tray steady on my palm.
- 1. holding 3. plotting 4. scolding 2. noting 10. Find the part of the given sentence that has an error in it. If

there is no error, choose 'No error'. The five first girls will get the discount on our merchandise.

- 1. The five first girls
 - 2. No error
- 3. will get the discount 4. on our merchandise. 11. Select the most appropriate antonym of the given word.
 - **FAMISH** 1. STARVE
- **2.** EAT
- 3. REFRAIN
- 4. ABSTAIN
- 12. In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.

Armed to the teeth

- 1. Fully armed, having many weapons
- 2. Different attacking techniques
- 3. Safeguard oneself in every possible way
- **4.** To have no weapon to fight
- 13. Select the most appropriate one-word substitution for the given group of words.

A person who has escaped from captivity or is in hiding.

- 1. Fastidious 2. Fanatic **3.** Fugitive **4.** Farce
- 14. Improve the underlined part of the sentence. Choose 'No improvement' as an answer if the sentence is grammatically

The weather on the weekend are supposed to be sunny.

- 1. were supposed
- 2. No improvement
- **3.** are supposing
- **4.** is supposed
- **15.** Choose the sentence with no spelling error.
 - 1. Motivatinal quotes will not help you.
 - 2. Motivational quotes will not helpp you.
 - 3. Motivational quotes will not help you.
- **4.** Motivational goutes will not help you. **16.** Rearrange the parts of the sentence in correct order.
 - P. contributed to the destruction of Sir Walter Raleigh's "Lost
 - **O.** a severe three-year drought in the late 16th century probably
 - R. at Roanoke Island in what is now North Carolina, and a subsequent
 - S. seven-year drought led to high mortality at the Jamestown Colony in Virginia
 - 1. QPRS
- 2. PSOR
- 3. QRSP
- 4. PRSQ

- 17. Choose the word that means the same as the given word. Saboteur
 - 1. Vandal
- 2. Sage
- 3. Mendicant
- 4. Preservationist
- 18. In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.

To sleep like a dog

- 1. To be less mindful
- 2. To be insomniac
- **3.** To sleep soundly
- 4. To make noise while sleeping
- 19. Choose the word that can substitute the given group of words. One who looks at the dark side of life
 - 1. Extrovert
- 2. Pessimist 3. Libertine 4. Anarchist
- 20. Choose the word that can substitute the given group of words. Incapable of being read
 - 1. Illegible
- 2. Comprehensive
- 3. Decipherable
- 4. Corrupt

Comprehension:

In the following passage some of the words have been deleted. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

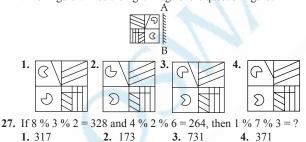
It is easy to think that the daily life of a plant is a simple (1) They seem to just stand there and sunbathe. However, plants are very busy all the time doing (2) _____ things. This activity is aimed at surviving the day and (3) for the future. They are continuously working for it.

Plants need food to survive. Being (4) in the ground means that they cannot move around to find food so they must make their own. They do this by taking water from the soil in (5) their roots and a molecule in the air carbon dioxide into their leaves.

- **21.** Select the most appropriate option to fill in blank number 1.
 - 1. one's
- **2.** one
- 3. ones
- 4. once
- **22.** Select the most appropriate option to fill in blank number 2. 2. many 3. much **4.** any
 - 1. very
- 23. Select the most appropriate option to fill in blank number 3.
- 2. caressing 3. planning 4. sensing 1. reviving 24. Select the most appropriate option to fill in blank number 4.
- 1. sullied 2. smudged 3. cluttered 4. rooted
- **25.** Select the most appropriate option to fill in blank number 5.
 - 1. by
- **2.** of
- 3. with
- 4. through

General Intelligence

26. If a mirror is placed on the line AB, then out of the option figures which figure will be the right image of the question figure?



28. Find the total number of squares in the figure.

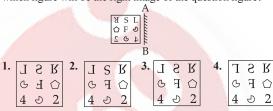


- **1.** 10
- **2.** 8
- **3.** 6
- **4.** 12
- 29. In the following question, select the odd word pair from the given alternatives.
 - 1. Karnataka Bengaluru
- 2. Patna Bihar
- 3. Dispur Assam
- 4. Gandhinagar Gujarat

- 30. By interchanging the given two signs which of the following equation will not be correct?
 - \times and +
 - I. $7-6+2 \div 1 \times 9 = 2$
 - II. $16 + 4 9 \times 1 \div 3 = 60$
 - 1. Only I
- 2. Only II
- 3. Both I and II
- 4. Neither I nor II
- 31. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series. NTR, TVZ, ZXH, FZP, ?
 - 1. LCY
- **2.** LBX
- **3.** XRT
- 4. LMQ
- **32.** In the given word pairs, the first word is related to the second word following a certain logic. Study the given pairs carefully, and from the given options, select the pair that follows the same logic.

Colour: Black

- 1. Lily: Flower
- 2. Eraser: Marker
- 3. Fruit: Onion 4. Furniture: Table
- 33. If a mirror is placed on the line AB, then out of the option figures which figure will be the right image of the question figure?



34. In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:

- I. All truck are car.
- II. Some car are bike.

Conclusion:

- I. No bike is truck.
- II. Some truck are car.
- III. Some bike are car.
- 1. Both conclusions I and II follows
- 2. All conclusion follows
- 3. Both conclusions I and III follows
- 4. Both conclusions II and III follows
- 35. In the following question, select the missing number from the given series.

68, 82, 110, 124, 152, ?, 194

- **1.** 166
- **2.** 170
- **3.** 168
- **4.** 162
- 36. Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.

E.g. 13 - Operations on 13 such as adding/subtracting/ multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(18, 66, 48)

- (52, 144, 92)
- **1.** (46, 122, 66)
- 2. (82, 178, 94)
- **3.** (24, 56, 32)
- 4. (34, 106, 82)
- 37. Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given set. (NOTE: Operations should be performed on the

whole numbers, without breaking down the numbers into its constituent digits. E.g.13 - Operations on 13 such as adding/ subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(3, 2, 162)

(6, 3, 3888)

1. (4, 3, 786)

3. (5, 2, 1350)

2. (9, 3, 19783)

4. (7, 2, 4802)

- 38. In the following question, select the odd letter/letters from the given alternatives.
 - 1. EAW

2. HDZ

3. YUO

39. In the following question, four number pairs are given. In each pair the number on left side of (-) is related to the number of the right side of (-) with some Logic/Rule/Relation. Three pairs are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding/subtracting/ multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

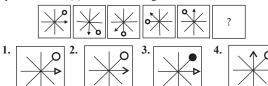
1. 278 – 1122

2. 588 – 2352

3. 378 – 1512

4. 648 – 2592

40. Select the figure from the given options that can replace the question mark (?) in the following series.



41. In a certain code language, 'GARMENTS' is coded as '2019132214719', 'HYDROGEN' is coded '192523181272214'. What is the code for 'INVASIVE' in that code language?

1. 1814518955

2. 1814519855

3. 1418518954

- **4.** 1814158955
- 42. Select the Venn diagram that best represents the relationship between the following classes.

Pens, Pencils and Eraser







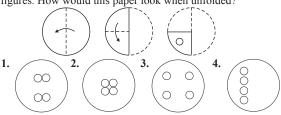


- 43. M is the brother of N. L is the father of M. N is the sister of O. O is the daughter of P. How is P related to N?
 - 1. Paternal Grandmother
- 2. Sister
- 3. Maternal Aunt
- 4. Mother
- 44. In a certain code language, 'SCREEN' is coded as 'LCCPAQ'. What is the code for 'SKILLS' in that code language?
 - 1. OJJJGO
- 2. QJJGIQ
- 3. QJJHIR 4. OJJGIQ
- **45.** Words given on the left side of (::) are related with each other by some Logic/Rule/Relation. Select the missing word/word pair on the right side of (::) from the given alternatives based on the same Logic/Rule/Relation.

Ohm: Electric Resistance:: Newton:?

- 1. Area
- 2. Pressure
- 3. Temperature
- 4. Force

46. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



47. In the following question, select the related letters from the given alternatives.

AMG: WIC:: NZT:?

1. JVP

- 2. JVS
- **3.** MOP
- 4. JKR
- **48.** After arranging the given words according to dictionary order, which word will come at 'Second' position?
 - 1. Dietetic 5. Diestock

1. Diestock

- 2. Diestrus
- 3. Diestrum 4. Dieldrin
- 3. Diestrus 2. Dietetic 4. Dieldrin
- 49. 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 fourth number is related to third number.

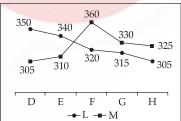
6:12::15:75::18:?

- 1. 90
- 2. 138
- **3.** 108
- 50. Three different positions of the same dice are shown. Select the symbol that will be on the face opposite to the one having



Quantitative Aptitude

51. The line chart given below shows the number of calculators sold by two shopkeepers L and M in 5 months.



- J_1 = The value of average number of calculators sold by L in all the months.
- J_2 = The difference between the total number of calculators sold by L and M.

What is the value of (J_2/J_1) ?

- 1. 1
 - **2.** 326
- **3.** 125
- **4.** 0
- 52. On selling of 18 pens at Rs. 360, there is a loss equal to the cost of 3 pens. What is the cost price of a pen?
 - 1. Rs. 10
- **2.** Rs. 12
- 3. Rs. 24 4. Rs. 20
- 53. Two circles of radius of 21 cm each intersect each other such that each passes through the centre of the other. What is the length of the common chord?
 - 1. $18\sqrt{3}$ cm
- **2.** 42 cm
- 3. 27 cm
- 4. $21\sqrt{3}$ cm
- 54. Speed of a train is 30 percent more than the speed of a car. Both start from point P at the same time and reach point Q at the same time. P and Q are 130 km apart from each other. On the way train stops for 30 minutes at a station. What is the speed of the train?

1. 78 km/hr

2. 72 km/hr

3. 60 km/hr

- 4. 70 km/hr
- **55.** If 5x + y = 17 and xy = 6, then what is the value of $125x^3 + y^3$?
- **3.** 3183 **4.** 4913

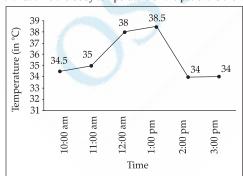
- 1. 3383
- **2.** 1530
- **56.** What is the value of $(\sec A \tan A + 1)(\sec A \tan A 1)$?
 - 1. $(1 + \tan A)$
- 2. $2 \tan A (\tan A \sec A)$
- **3.** 2 tan A **57.** What is the value of $a^2 + b^2 + c^2 - 2ab - 2bc + 2ca$?
 - **4.** 2 sec A
 - 1. $(a-b-c)^2$
- 2. $(a+b-c)^2$
- 3. $(a+b+c)^2$
- **4.** $(a-b+c)^2$

3. 15

- **58.** How many composite numbers are there between 23 and 43? 1. 7
 - **2.** 14
- **4.** 18
- 59. P invested Rs. 4000 for one year. Q joined him with an investment of Rs. 6000 after few months. If at the end of one year the ratio of profits of P and Q is 4: 3. then Q joined after how many months?
 - 1. 4 months
- **2.** 3 months **3.** 8 months **4.** 6 months
- 60. A person lent Rs. 12,000 to B for 3 years and Rs. 10,000 to C for 4 years on simple interest at the same rate of interest and received Rs. 6,080 in all from both of them as interest. What is the annual rate of interest?
 - 1. 15 percent
- **2.** 8 percent **3.** 11 percent **4.** 5 percent
- 61. 10 women do half of the total work in 20 days. How many more women will be required to complete the remaining work in 10 days?
 - 1. 30
- **2.** 40
- **3.** 20
- **4.** 10
- 62. Average of the marks of 132 students of a college is 50. If the average of the marks of the passed students is 55 and the average of the marks of the failed students is 35, then what will be the respective ratio of the total marks of passed students and the total marks of failed students?
 - **1.** 1:3
- **2.** 11:7
- **3.** 33:7
- **4.** 21:8
- **63.** \triangle PQR is a right angled triangle. \angle Q = 90 degree, PQ = 9 cm and QR = 11 cm. What is the value of cot P?

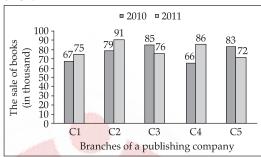
- **64.** If the radius of a sphere is thrice than the radius of a hemisphere, then what will be the respective ratio of their volumes?
 - **1.** 27:1
- **2.** 16:1
- **3.** 54:1
- 4. 18:1
- 65. Angle subtended by a chord on the major arc of a circle is 65 degree. What is the angle subtended by the same chord on the centre of this circle?
 - 1. 130 degree
- 2. 125 degree
- **3.** 90 degree
- 4. 65 degree
- **66.** If $\tan \theta + \cot \theta = 8$, then what is the value of $\tan^2 \theta + \cot^2 \theta$? **2.** 64 **3.** 62 4. 16
- 67. The following line graph shows the body temperature of a patient every hour in a hospital.

At what time the body temperature of the patient is the highest?



- **1.** 12 noon
- **2.** 1 pm
- **3.** 10 am
- 68. A cycle listed at Rs. 20,000 is sold to a retailer at Rs. 14,000 after a discount. What is the percent discount given to retailer?

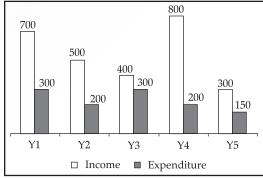
- 1. 30 percent **3.** 40 percent
- 2. 20 percent
- 4. 10 percent
- **69.** Radius of the incircle of an equilateral triangle is $9\sqrt{3}$. What will be the perimeter of this equilateral triangle?
 - 1. 81 cm
- **2.** 162 cm **3.** 108 cm
- 70. The bar graph below shows the sale of books (in thousand) has been given in two consecutive years of 2010 and 2011 of five branches of a publishing company. Find the ratio of total sales in the two years of branch C2 to the total sales in both years of branch C4?



- 1. 169:153
 - 2. 85:76
- **3.** 153:169 **4.** 76:85
- 71. If $a^3 = b^3 + 988$ and a b = 4, then what is the value of $2a^2 + b^3 = 2a^3 + 988$ $2ab + 2b^2$?
 - 1. 516
- 2. 494
- 4. 247
- 3. 500 72. What is the sum of the largest and the smallest of the given fractions?

$$\frac{6}{5}$$
, $\frac{11}{15}$, $\frac{4}{7}$, $\frac{5}{13}$

- 103
- 73. AB is the chord of a circle and O is the center of a circle. \angle AOB = 130 degree. What is the angle subtended by the same chord in the major segment of the circle?
- 2. 55 degree 3. 65 degree 4. 60 degree 1. 80 degree 74. Rajiv scored 20 percent marks in an exam and failed by 25 marks. If he scores 50 percent marks, then he gets 20 marks more than passing marks. What is the passing marks for the exam?
- **2.** 35 **3.** 55 75. The bar graph given below shows the income and expenditure of a company in five years.



Saving = Income - Expenditure

In which of the year savings are minimum?

1. Y5

- **2.** Y4
- **3.** Y3
- **4.** Y2

General Awareness

- **76.** Which of the following pairs of 'disease duration' is correct?
 - I. Acute long duration
 - II. Chronic short time
 - 1. Only II
- 2. Neither I nor II
- 3. Only I
- 4. Both I and II

	Which velock so	lar pow	vered vi	illage in Waghai	India 3.	in Octo Khavd	ober 20				agg 2. Wh	regate s ere ex a	upply nte agg	nggregat gregate o	demai	nd is ze	ro		
	 Betw Betw Betw 	een Ma	harash	tra and I		-	Bengal				agg 4. Wh	regate s ere ex regate s	upply ante a upply	ggregate	e dem	nand is	more	than e	x ante
79.	4. Betw Which Olympic	of the es 2020	followi	ing spor n 2021?	ts wa	s NOT	playe	ed at T	okyo	90.	Indian countr	constitutions:		rocedure s borrow	ved fr	om wh			
	 Crick Swin 				 Sł St 	nooting arfing					 Brit Japa 					France United	States	of Ame	rica
80.	all data			entry a	nd ex	it poin				91.		s the the		`"Digita n India	l Indi	a Week	2022"	?	
	through				ng pat	hs.			_		2. Indi	a's Dig	ital Sta	ırt ups					
01	1. Gate			Bridge				. Route	er			m Glob		cal ndia's Te	aahad	0			
01.	Which i 1. Horn 3. Bihu		_		2. Lu	i of Ass umbini 100l De	Festiva	al		92.				ntroduce			n Rail	ways i	s a/an
82.	By whi			lowing	proce	ss can	we se	eparate	two					for pass					
	miscible 1. Cryst				2. St	ıblimat	ion							e the sper Protection			IIIS		
	3. Disti	llation			4. Cl	hromate	ograph				4. Aut	omatic	crossin	ig syster	n				
83.	Who is				esent	India ii	n fenci	ng at T	okyo	93.				the book					
	Olympic 1. Bhay			1 2021?	2 D	V. Sind	hu					nkle Kl ı Bhatt	iaiiiia			Kareen			Talla
	3. PT U		V 1			diti Asl				94.			ollowi	ng pair o					land is
84.	Mita pe		"Ghoo	mar" at				al func	ction.		correct								
	Which s					-		ъ.				Argentii Brazil –							
95	1. Guja: Law of			Punjab		Odish		. Rajas				ther I no			2.	Only II			
03.	between			s mai, i	ilicic i	is a ne	gative	iciatioi	isinp		3. Onl					Both I a			
	1. dema			nodity a	nd its	supply				95.				Humayu		_			<u> </u>
	2. suppl	-		-	-	ice				96	1. 154			1555 nd in the		3. 1535 hmanuti		4. 153	
	3. tax o									70.				of India?		шарии	ia Kiv	21 111 VV 1	iicii oi
86	4. dema Which I						tia?				1. Aru	nachal				Sikkim			
00.	1. Arch				10 14 11	or mer				07	3. Mai		C 11			Assam			,
	2. News	on's Fi	rst law	of motion	on					97.				owing sta dhawali					
	3. News			aw of m	otion							ak Sing		ana wan		Satguru			
87	4. Kepl			ndian C	onetiti	ition is	rolate	ed with	the	98.				ing fact		f soil fo	ormatio	on deter	mines
07.	Fundam				OHSTILL	ation is	s ician	cu witi	i the				ion of 1	the soil?		Flora			
	1. II		2. I		3.	III	4	. I			 Fau Rel 					Fiora Parent i	ock		
88.	In Sept							nternat	ional	99.			otal nu	ımber o				India in	2020
	tourism			st destin	ation 2. Ke		ture"?					Olympi						4 7	
	 West Guja 	_				ttar Pra	desh			100	1. 6 Which	of the		10 ing shor		8. 8 ev is ne	sed ado	4. 7	hlank
89.	If ex and		gate de	emand a				e suppl	y are	100.				resentati					
	plotted				l diag	ram, th	nen at	which 1	point		1. Ctrl					Ctrl + A			
	equilibr	ium wil	I be rea	ached?							3. Ctrl	+ M			4.	Ctrl + A	Alt + N		
										T 7									
								A	nsw	er K	ey								
1	l. (1)	2.	(3)	3.	(3)	4.	(1)	5.	(3)	6.	(4)	7.	(3)	8.	(2)	9.	(1)	10.	(1)
11	. (2)	12.	(1)	13.	(3)	14.	(4)	15.	(3)	16.	(1)	17.	(1)	18.	(3)	19.	(2)	20.	(1)

1. (1)	2. (3	3.	(3)	4.	(1)	5.	(3)	6.	(4)	7.	(3)	8.	(2)	9.	(1)	10.	(1)
11. (2)	12. (1	13.	(3)	14.	(4)	15.	(3)	16.	(1)	17.	(1)	18.	(3)	19.	(2)	20.	(1)
21. (2)	22. (2	23.	(3)	24.	(4)	25.	(4)	26.	(3)	27.	(3)	28.	(1)	29.	(1)	30.	(3)
31. (2)	32. (4	33.	(3)	34.	(4)	35.	(1)	36.	(3)	37.	(4)	38.	(4)	39.	(1)	40.	(2)
41. (1)	42. (3	43.	(4)	44.	(2)	45.	(4)	46.	(3)	47.	(1)	48.	(1)	49.	(3)	50.	(1)
51. (4)	52. (3	53.	(4)	54.	(1)	55.	(1)	56.	(2)	57.	(4)	58.	(3)	59.	(4)	60.	(2)
61. (4)	62. (3	63.	(1)	64.	(3)	65.	(1)	66.	(3)	67.	(2)	68.	(1)	69.	(2)	70.	(2)
71. (2)	72. (4	73.	(3)	74.	(3)	75.	(3)	76.	(2)	77.	(4)	78.	(1)	79.	(1)	80.	(1)
81. (3)	82. (3	83.	(1)	84.	(4)	85.	(4)	86.	(2)	87.	(3)	88.	(1)	89.	(1)	90.	(3)
91. (4)	92. (3	93.	(2)	94.	(3)	95.	(1)	96.	(4)	97.	(4)	98.	(3)	99.	(4)	100.	(3)

Answers with Explanations

1. Option (1) is correct.

'Category' has been incorrectly spelled as 'cateogry' in option (1).

2. Option (3) is correct.

'Hostility' implies 'unfriendliness or opposition'. So 'enmity' rightfully captures the meaning of opposition'.

3. Option (3) is correct.

'Oblivious' means 'not aware of or concerned about what is happening around one'. 'Ignorant' is a synonym. While 'aware' is the opposite.

4. Option (1) is correct.

The part 'Smart phone age has lead' is incorrect. 'Lead' is the present tense version of the verb which implies to cause (a person or animal) to go with one by holding them by the hand. "Lead" means to spearhead, guide, or take the first position, while "led" is the passive, infinitive, and past tense version of the verb. Since perfect tense is used, the verb will take the past participle of the verb. So 'led' is chosen over 'lead'. The correct sentence is: Smart phone age has led to substantial deterioration in both duration and quality of sleep.

5. Option (3) is correct.

The correct sequence is SPQR. The starting phrase: 'Forest planning rule', so it is to be followed by a verb were updated in 2012. This new rule explicitly recognizes the growing risks. So, SP is the logical pair. The word 'national' will be used before a noun, so 'forests' are perfect. The word 'expands' best clubs with 'opportunities for public input'. Therefore, the correct paragraph is: Forest planning rules were updated in 2012, and the new rule explicitly recognizes the growing risks to national forests from climate change as well as expands opportunities for public input and engagement.

6. Option (4) is correct.

In the sentence "The professor said, "You must learn these words regularly", the changes will include: 'You' changes to first or second person.

'Must' changes to 'had to'.

'These' changes to 'those'.

Therefore, the correct sentence is: The professor said that I had tolearn those words regularly.

7. Option (3) is correct.

The word 'incendiary' means 'designed to cause fires'. The sentence states that a thing is believed to possess crude electronic devices prone to trigger explosive bombs.

8. Option (2) is correct.

The sentence in active form is: The president loved that lady. The changes to be incorporated in passive voice are: That lady becomes the subject, the president becomes the object; the verb in simple tense changes to was/were + participle. Adhering to these changes is: That lady was loved by the president.

9. Option (1) is correct.

The act of clinging on to the tray steady on my palm justifies the verb 'holding' as appropriate. Other options hardly make sense.

10. Option (1) is correct.

The part 'The five first girls' has the error. This is incorrect for the erroneous positioning of adjectives. Here the word 'five' incorrectly modifies 'first', five is not meant to refer to the first girls, but to the girls. The correct sentence is: The first five girls will get the discount on our merchandise.

11. Option (2) is correct.

Famish means to starve. So, the antonym has to be 'to eat'. Refrain and abstain connote the same thing- keep away from something.

12. Option (1) is correct.

"Armed to teeth" is an idiomatic expression meaning wellequipped and prepared. Example: Before going to the battlefield, both sides of oppositions were armed to the teeth. Thus, armed to the teeth implies fully armed, having many weapons.

13. Option (3) is correct.

A person who has escaped from captivity or is in hiding is known as a fugitive. Fastidious means extremely picky and fussy. Fanatic is a person who is extremely enthusiastic about some interest or activity.

14. Option (4) is correct.

The part 'are supposed' shows the error of subject-verb concord. Since the subject is in singular (weather), the verb will also be in singular 'is'. The correct sentence is: The weather on the weekend is supposed to be sunny.

15. Option (3) is correct.

Option (1) has 'Motivatinal/instead of 'Motivational'; option (2) has 'help' instead of 'help'; option (4) has 'qoutes' instead of 'quotes'.

16. Option (1) is correct.

For rearranging parts of the sentence in correct order, it is to be noted that clues are generally prevalent in the last part of the sentences. Those left out words need to be joined to make complete sense. As in Q, it ends with 'probably', so this severe three-year drought probably contributed to the destruction. This pairing up makes sense. The next logical link is 'and a subsequent' 'seven-year drought led to high mortality...' Therefore, the pair QP and RS are logically appropriate. These pairs are only apparent in option (1). The correct sequence is QPRS.

17. Option (1) is correct.

'Saboteur' refers to a person who deliberately destroys or obstructs something. So the synonym to this word is 'vandal' (a person who deliberately destroys or damages property belonging to others). Sage is a wise person. Mendicant refers to a beggar. Preservationist is an antonym, meaning an advocate of the preservation of something, especially of historic buildings and artefacts.

18. Option (3) is correct.

To sleep like a dog means sleep very soundly. Example: After undergoing the rigorous training with the cadets, Punit slept like a dog in his tent.

19. Option (2) is correct.

Extrovert is an outgoing person, who is energized by being around other people. Pessimistis a person who tends to see the worst aspect of things or believe that the worst will happen. Libertine refers to one, especially a man, who freely indulges in sensual pleasures without regard to moral principles. Anarchist is a person who advocates or promotes anarchism (a society without a government). Thus 'pessimist' is actually a person who looks at the dark side of life.

20. Option (1) is correct.

Illegible means not clear enough to be read. Comprehensive means covering completely or broadly. Decipherable implies making out the meaning, despite of indistinctness or obscurity. Therefore, incapable of being read means illegible.

21. Option (2) is correct.

'A simple one' is correct. 'Once/one's/ones' do not validate the context.

22. Option (2) is correct.

The correct sentence is : 'plants are very busy all the time doing many things'. 'Many' is preferred over 'much' and 'any' because 'many' is used to denote number and is used for countable nouns.

23. Option (3) is correct.

It apparently seems that plants stand and sunbathe, but is actually untrue. The reality is they do many things and this activity is aimed at surviving the day and arranging for the future. So 'planning' is the perfect choice. Reviving (refreshing)/caressing (cuddling) for future are incongruous.

24. Option (4) is correct.

The idea of being held firmly to the in the ground means that they cannot move around to find food so they must make their own. This notion is captured in the word 'rooted'. The word 'sullied' implies being tainted, 'smudged' implies 'getting dirty'. Therefore, these options are ruled out.

25. Option (4) is correct.

Plants make their own foods by taking water from the soil in 'through' their roots and a molecule in the air carbon dioxide into their leaves. 'Through' is mostly used to represent from one end or side of something to the other. Whereas 'with' signifies 'in the same place as'.

26. Option (3) is correct.

Explanation:

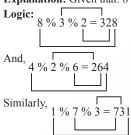


Logic: In the mirror image, left becomes right and right becomes left.



27. Option (3) is correct.

Explanation: Given that: 8 % 3 % 2 = 328



28. Option (1) is correct.

Explanation:







Total number of squares = 5 + 5 = 10

29. Option (1) is correct.

Explanation: In options 2, 3, and 4 pattern of Capital city - State is followed, while in option 1, the pattern of State -Capital city is followed.

30. Option (3) is correct.

Explanation:

Interchanged,
$$\times$$
 and $+$
 $7-6+2 \div 1 \times 9=2$
Interchanged, \times and $+$
 $7-6\times 2 \div 1+9=2$
Using BODMAS, we get
LHS = $7-6\times 2+9$
 $7-12+9=16-12=4 \ne 2$
II. $16+4-9\times 1 \div 3=60$
Interchanged, \times and $+$
 $16\times 4-9+1\div 3=60$

Using BODMAS, we get

31. Option (2) is correct.

LHS =
$$16 \times 4 - 9 + (1/3) = (192 - 27 + 1)/3 = 166/3 \neq 60$$

Hence, both equations are incorrect.

Explanation: Given series: NTR, TVZ, ZXH, FZP, ?

	,	, , ,
N	Т	R
14	20	18
▼ +6	▼ +2	▼+8
Т	V	Z
20	22	26
▼ +6	▼ +2	▼ +8
Z	X	Н
26	24	8
V +6	▼ +2	V +8
F	Z	P
6	26	16
▼ +6	▼ +2	V +8
L	В	X
12	2	24

Hence, LBX is the correct answer.

32. Option (4) is correct.

Explanation: Given that: Colour: Black

Logic: Black is a type of colour; similarly, table is a type of furniture.

33. Option (3) is correct.

Explanation:

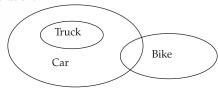


Logic: In the mirror image, left becomes right and right becomes left.

> I S R OF O **ව** 2

34. Option (4) is correct.

Explanation:



From the venn diagram, both conclusions II and III follow.

35. Option (1) is correct.

Explanation: Given series: 68, 82, 110, 124, 152,?, 194 Logic:

$$68 + 14 = 82$$

$$82 + 28 = 110$$

$$110 + 14 = 124$$

$$124 + 28 = 152$$

 $152 + 14 = 166$

$$166 + 28 = 194$$

36. Option (3) is correct.

Explanation:

 $(18, 66, 48) \Rightarrow 18 + 48 = 66$

 $(52, 144, 92) \Rightarrow 52 + 92 = 144$

 $(24, 56, 32) \Rightarrow 24 + 32 = 56$

37. Option (4) is correct.

Explanation:

Given sets: (3, 2, 162)

(6, 3, 3888)

Logic:

 $(3, 2, 162) = 3^4 \times 2 = 162$

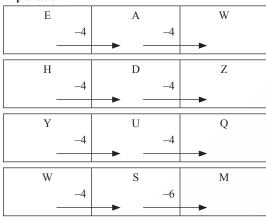
 $(6, 3, 3888) = 6^4 \times 3 = 3888$

Hence,

 $(7, 2, 4802) = 7^4 \times 2 = 4802$

38. Option (4) is correct.

Explanation:



Hence, WSM is the odd one out.

39. Option (1) is correct.

Explanation:

 $588 \times 4 = 2352$

 $378 \times 4 = 1512$

 $648 \times 4 = 2592$

But, $78 \times 4 = 1112 \neq 1122$

40. Option (2) is correct.

Explanation:



Logic: Line with arrow and circle are moving clockwise in the following manner i.e., 2 step ,1 step alternatively. Hence,



41. Option (1) is correct.

Explanation:

Logic: Code for letters at odd places is the place value of letters from the end of alphabetical series and code for the letters at even places is the place value of the letters from the starting of alphabetical series.

'GARMENTS' is coded as '2019132214719',

G	A	R	M	Е	N	Т	S
20	1	9	13	22	14	7	19

Similarly,

'HYDROGEN' is coded as '192523181272214'.

Then,

'INVASIVE' can be coded as:

I	N	V	A	S	I	V	Е
18	14	5	1	8	9	5	5

Hence, 1814518955 is the correct answer.

42. Option (3) is correct.

Explanation:

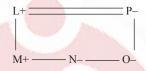


Logic: There is no relation between pen, pencils, and erasers. Only venn diagram 3 is possible.

43. Option (4) is correct.

Explanation: M is the brother of N. L is the father of M. N is the sister of O. O is the daughter of P.

Logic: Male+, Female -



Hence, P is the mother of N.

44. Option (2) is correct.

Explanation:

Given that: 'SCREEN' is coded as 'LCCPAQ'

S	C	R	Е	Е	N
19	3	18	5 /	5	14_
-2	-2	-2/	2		-2
-2 L	-2 C A	C C	P P	-2 A*	-2 Q

Similarly,

'SKILLS' can be written as:

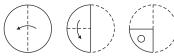
S	K	I	L	L	S
19 _	11 🔍	9	12/	12	19
-2	-2	<u>-2</u> /	-2		-2
-2 Q •	-2 J	J -2 /	G^{-2}		-2 Q

45. Option (4) is correct.

Explanation: Ohm is the SI unit of Electric resistance. Similarly, Newton is SI unit of force.

46. Option (3) is correct.

Explanation:



Logic: Logic of symmetry will be followed. Hence,



47. Option (1) is correct.

Explanation: Given that: AMG: WIC:: NZT:?

A	M	G		
1	13	7		
▼-4	▼-4	▼-4		
W	I	С		

Similarly,

N	Z	Т
14	26	20
▼ 4	▼-4	▼ –4
▼ 4	▼-4 V	▼-4

48. Option (1) is correct.

Explanation:

ieldrin iestock iestrum iestrum iestrus					
	Dieldrin	Diestock	Diestrum	Diestrus	Dietetic

49. Option (3) is correct.

Explanation:

Given that: 6: 12 :: 15 : 75 :: 18 : ?

Logic:

$$6 \times 6 \div 3 = 12$$

$$15 \times 15 \div 3 = 75$$

$$18 \times 18 \div 3 = 108$$

50. Option (1) is correct.

Explanation:



Logic: &, #, \mathbb{O} , % all are adjacent to @. Hence, O is opposite to @.

51. Option (4) is correct.

According to the question,

$$J_1 = \frac{350 + 340 + 320 + 315 + 305}{5} = 326$$

$$J_2 = (350 + 340 + 320 + 315 + 305) - (305 + 310 + 360 + 330 + 325)$$

= 1630 - 1630 = 0

So,
$$\frac{J_2}{J_1} = \frac{0}{326} = 0$$

52. Option (3) is correct.

Given that Selling price 18 pens = ₹ 360

According to the question,

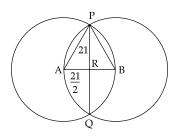
$$18 \times SP = 18 \times CP - 3 \times CP$$

$$\Rightarrow$$
 360 = 15 × CP

$$\Rightarrow$$
 CP = 24

So, the cost price of a pen = ₹ 24

53. Option (4) is correct.



As shown in diagram,

 Δ APR is right angled triangle.

Using Pythagoras theorem,

$$PR^2 = AP^2 - AR^2 = 21^2 - \left(\frac{21}{2}\right)^2$$

$$PR = \sqrt{441 - \frac{441}{4}} = \frac{21}{2}\sqrt{3}$$

So, length of chord PQ = $2 \times \frac{21}{2} \sqrt{3} = 21\sqrt{3}$ cm

54. Option (1) is correct.

Given that the distance between P and Q = 130 km

Let the speed of car = x km/h

Then speed of train = 1.3x km/h

Using, Time =
$$\frac{\text{Distance}}{\text{Speed}}$$

$$\Rightarrow \frac{130}{x} - \frac{130}{1.3x} = \frac{1}{2}$$

$$\Rightarrow x = 60$$

So, the speed of train = $1.3 \times 60 = 78$ km/h

55. Option (1) is correct.

Given that 5x + y = 17 and xy = 6

We have, $(a + b)^3 = a^3 + b^3 + 3ab (a + b)$

So, $(5x + y)^3 = 17^3$

$$\Rightarrow 125x^3 + y^3 + 3 \times 5x \times y (5x + y) = 4913$$

$$\Rightarrow 125x^3 + y^3 + 15 \times 6 \times 17 = 4913$$

$$\Rightarrow 125x^3 + y^3 + 1530 = 4913$$

$$\Rightarrow 125x^3 + y^3 = 3383$$

56. Option (2) is correct.

Value of $(\sec A - \tan A + 1) (\sec A - \tan A - 1)$,

$$= (\sec A - \tan A)^2 - 1^2$$

(using
$$a^2 - b^2 = (a + b)(a - b)$$
)

$$= \sec^2 A + \tan^2 A - 2 \sec A \cdot \tan A - (\sec^2 A - \tan^2 A)$$

(using
$$\sec^2 A - \tan^2 A = 1$$
)

$$= 2 \tan^2 A - 2 \sec A \cdot \tan A$$

$$= 2 \tan A (\tan A - \sec A)$$

57. Option (4) is correct.

We have,
$$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$$

So, value of $a^2 + b^2 + c^2 - 2ab - 2bc + 2ca = (a - b + c)^2$

58. Option (3) is correct.

Composite Number: A number that have more than two factors

So, composite numbers between 23 and 43 = 24, 25, 26, 27, 28, 30, 32, 33, 34, 35, 36, 38, 39, 40, 42.

Total 15 composite numbers are there in between 23 to 43.

59. Option (4) is correct.

Given,

P invested ₹ 4000 for one year.

Let Q invested ₹ 6000 for x months.

According to the question,

$$\Rightarrow \frac{4000 \times 12}{6000 \times x} = \frac{4}{3}$$

$$\Rightarrow x = 6$$

So, Q joined the business for 6 months.

60. Option (2) is correct.

Given,

$$P_1 = 712000$$

$$T_1 = 3 \text{ years}$$

$$P_2 = ₹ 10000$$

$$T_2 = 4$$
 years

Let the rate of interest = R% per annum

We have,
$$SI = \frac{P \times R \times T}{100}$$
,

According to the question,

$$\Rightarrow \frac{P_1 \times R_1 \times T_1}{100} + \frac{P_2 \times R_2 \times T_2}{100} = 6080$$

$$\Rightarrow \frac{12000 \times R \times 3}{100} + \frac{10000 \times R \times 4}{100} = 6080$$

$$\Rightarrow 360R + 400R = 6080$$

$$\Rightarrow$$
 R = 8%

So, the rate of interest = 8% per annum

61. Option (4) is correct.

Given that 10 women can complete half of the work in 20 days. Let *x* more women required to complete the remaining work in 10 days only.

According to the work formula,

$$\Rightarrow 10 \times 20 = (10 + x) \times 10$$

$$\Rightarrow 20 = (10 + x)$$

$$\Rightarrow x = 10$$

So, 10 more women are required to complete the remaining work in 10 days only.

62. Option (3) is correct.

Total marks of 132 students = $132 \times 50 = 6600$

Let number of passed students = x

And number of failed students = 132 - x

Total marks of passed students = 55x

Total marks of failed students = (132 - x)35

According to the question,

$$\Rightarrow$$
 55x + (132 - x)35= 6600

$$\Rightarrow$$
 20x + 4620 = 6600

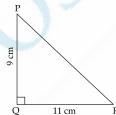
$$x = 99$$

number of passed students = x = 99

and number of failed students = 132 - x = 132 - 99 = 33

required ratio = (55×99) : $(33 \times 35) = 33$: 7

63. Option (1) is correct.



We have,
$$\cot P = \frac{Base}{Perpendicular}$$

So, cot P =
$$\frac{9}{11}$$

64. Option (3) is correct.

Given that the radius of sphere is thrice than the radius of hemisphere.

Let the radius of hemisphere = x

Then the radius of sphere = 3x

We have, volume of sphere = $\frac{4}{3}\pi r^3$

So, volume of the given sphere $=\frac{4}{3}\pi(3x)^3 = 36\pi x^3$

we have, volume of hemisphere = $\frac{2}{3}\pi r^3$

So, volume of the given hemisphere = $\frac{2}{3}\pi x^3$

Required ratio =
$$\frac{36\pi x^3}{\frac{2}{3}\pi x^3} = \frac{54}{1}$$

65. Option (1) is correct.

Given that the angle subtended by a chord on a major arc on circle = 65°

By circle property, the angle subtended by a chord on centre will be double than that on arc.

So, the required angle = $65 \times 2 = 130^{\circ}$

66. Option (3) is correct.

Given that, $\tan \theta + \cot \theta = 8$

Squaring both sides,

 $\tan^2\theta + \cot^2\theta + 2 \tan \theta \cdot \cot \theta = 64$

$$\tan^2\theta + \cot^2\theta + 2 = 64$$
 (using, $\tan \theta \cdot \cot \theta = 1$)

 $\tan^2\theta + \cot^2\theta = 62$

67. Option (2) is correct.

As shown in the line graph, the body temperature is maximum (38.5°) at 1:00 pm.

68. Option (1) is correct.

Given, the listed price of cycle = ₹ 20000

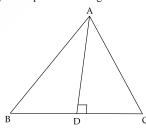
The selling price of cycle = ₹ 14000

So, discount percentage =
$$\frac{20000 - 14000}{20000} \times 100 = 30\%$$

69. Option (2) is correct.

Given that the radius of incircle of equilateral triangle = $9\sqrt{3}$

We have, height of equilateral triangle = $3 \times \text{radius} = 27\sqrt{3}$



In right angle triangle ABD,

$$AB^2 = BD^2 + AD^2$$
$$a^2 = \frac{a^2}{4} + \left(27\sqrt{3}\right)^2$$

$$\Rightarrow \frac{3a^2}{4} = 729 \times 3$$

$$\Rightarrow$$
 $a = 54$

So, the perimeter of triangle = 3a = 162 cm

70. Option (2) is correct.

According to the given graph,

Total sales of branch $C_2 = 79000 + 91000 = 170000$

Total sales of branch $C_4 = 66000 + 86000 = 152000$

Required ratio =
$$\frac{170000}{152000} = \frac{85}{76}$$

71. Option (2) is correct.

Given,

$$a^{3} - b^{3} = 988$$

$$a - b = 4$$
we have,
$$a^{3} - b^{3} = (a - b)(a^{2} + b^{2} + ab)$$

$$\Rightarrow 988 = 2(2a^{2} + 2b^{2} + 2ab)$$

$$\Rightarrow 2a^{2} + 2b^{2} + 2ab = 494$$

72. Option (4) is correct.

We have

$$\frac{6}{5} = 1.2$$
, $\frac{11}{15} = 0.7333$, $\frac{4}{7} = 0.571$, $\frac{5}{13} = 0.384$

So, sum of largest and smallest fraction

$$=\frac{6}{5}+\frac{5}{13}=\frac{103}{65}$$

73. Option (3) is correct.

Given that the angle subtended by chord on centre of circle = 130°

By circle property, the angle subtended by a chord on centre will be double than that on arc.

So, required angle =
$$\frac{130}{2}$$
 = 65°

74. Option (3) is correct.

Let the total marks = x

According to the question,

$$\Rightarrow \frac{20}{100}x + 25 = \frac{50}{100}x - 20$$

$$\Rightarrow \frac{1}{5}x + 45 = \frac{1}{2}x \Rightarrow \frac{3}{10}x = 45$$

$$\Rightarrow x = 150$$

So, the passing marks =
$$\frac{20}{100} \times 150 + 25 = 55$$

75. Option (3) is correct.

According to the graph,

Saving in year,

Y1 = 700 - 300 = 400

Y2 = 500 - 200 = 300

Y3 = 400 - 300 = 100

Y4 = 800 - 200 = 600

Y5 = 300 - 150 = 150

So, in year Y3 saving is minimum.

76. Option (2) is correct.

The statements in options I and II are both incorrect. Acute diseases have a short duration, usually lasting a few days to a few weeks. Chronic diseases, on the other hand, have a long duration, lasting for months to years, and may even be lifelong.

77. Option (4) is correct.

On October 9, 2022, Modhera, a village in Gujarat's Mehsana district, was designated as India's first round-the-clock solar-powered village. Modhera is a small village located in the Mehsana district of the Indian state of Gujarat. It is famous for the Sun Temple, an ancient Hindu temple dedicated to the solar deity Surya. The temple was built in the 11th century

during the reign of the Solanki dynasty, and is known for its impressive architecture and intricate carvings. The temple is designed in such a way that the first rays of the morning sun illuminate the image of the deity in the sanctum sanctorum. The temple attracts a large number of tourists and pilgrims from all over the world. In addition to the Sun Temple, Modhera is also known for its beautiful stepwell called the Rani ki Vay, which is a UNESCO World Heritage Site.

78. Option (1) is correct.

East Coast of India lies between the Eastern Ghats and the Bay of Bengal. It stretches from Tamil Nadu in the south to West Bengal in the north, passing through the states of Andhra Pradesh and Odisha. The coast is wider and flatter than the western coast, and is characterized by long stretches of sandy beaches, deltas, and lagoons. The region is also known for its rich cultural heritage, temples, and historical sites, including the famous Konark Sun Temple in Odisha and the Brihadeeswarar Temple in Tamil Nadu.

79. Option (1) is correct.

The Olympic Games occur once every four years, and the Summer and Winter Games alternate every two years within that period. The upcoming Summer Olympics, also referred to as Tokyo 2020, will be held in Tokyo, Japan. The Summer Games feature sports such as hockey, badminton, and archery, and new sports added for the 2020 event include karate, roller sports, climbing, surfing, baseball, and softball. In 2022, Beijing will host the Winter Olympics, marking the first time that a city has hosted both the Summer and Winter Games. Cricket is not currently played at the Olympics because it has not been included in the Olympic program since 1900.

80. Option (1) is correct.

A server can act as the entry and exit point of a network, serving as a gateway for all the devices connected to it. It is responsible for managing network traffic and routing data packets to the appropriate destination. When a device wants to send data outside the network, it sends it to the server, which then forwards it to the appropriate destination using routing protocols. Similarly, when data is coming from outside the network, it first arrives at the server, which then forwards it to the appropriate device within the network.

81. Option (3) is correct.

Bihu is Assam's most well-known festival, held three times a year in three different forms: Bohag Bihu, Magh Bihu, and Kati Bihu. This is a harvest festival in which people express their appreciation to the God Brai Shibrai. The Assamese community believes that this celebration brings peace and prosperity. Assam's Bihu festival is celebrated whole heartedly. People dress in traditional Assamese clothing and congregate in one location for the feast. It is referred to as Assam's national festival since people from all across the country come to see the festivities. Beautiful rangoli, traditional melodies, and buffalo fights are all features of the Bihu festival.

82. Option (3) is correct.

Distillation can be used to separate two miscible liquids. Distillation is utilised for liquids having a boiling point difference of 20°-30°C. The liquid is heated in a distillation flask throughout this operation. The liquid with the lower boiling point will boil first, and its vapours will be transferred to the condenser, where they will be converted to liquid. In the

distillation flask, the liquid with the higher boiling point is left behind

83. Option (1) is correct.

Anandha Sundhararaman Chadalavada Bhavani Devi, also known as Bhavani Devi, is an Indian sabre fencer who was born on August 27, 1993. After qualifying for the 2020 Summer Olympics, she became the first Indian fencer to ever do so. The Rahul Dravid Athlete Mentorship Programme at GoSports Foundation is helping her. Bhavani Devi is the first Indian fencer to have qualified for the Olympics. The eight-time national champion has failed to qualify for the Rio Olympics.

84. Option (4) is correct.

Ghoomar, also spelt ghumar, is a Rajasthani folk dance. It was performed by the Bhil tribe to honour Goddess Saraswati, and it was eventually adopted by other Rajasthani clans. The dance is usually performed by veiled ladies who wear flowing garments called ghaghara.

85. Option (4) is correct.

The law of demand argues that if all other circumstances remain constant, the price of a good will rise, but people's demand for that good will fall. In other words, as the price rises, so does the quantity demanded. Buyers purchase less of a good at a greater price because as the price of good rises, so does the opportunity cost of purchasing that good. As a result, consumers will naturally avoid purchasing a product that requires them to forego the consumption of something else they value more. The law of demand is an economic idea that explains the inverse relationship between a good's or service's price and demand. If all other conditions stay constant, increasing the price of a good or service reduces the quantity of demand and vice versa. Price and demand for products and services have an inverse relationship, or negative correlation when all other factors are constant.

86. Option (2) is correct.

Newton's first law of motion states that unless an external force is applied to a body, it will remain at rest or in uniform motion in a straight line. It is known as the law of inertia because it states that every material body has a quality that allows it to resist changes in its state of rest or motion. This feature is known as inertia.

87. Option (3) is correct.

Fundamental Rights (FR's) are the foundation of the Indian constitution and are specified in Part III. They prohibit the state's undue intervention and prevent its executive and legislature from becoming dictatorial, hence limiting state power. The performance of fundamental tasks is required in order to have one's FR's reinstated in the event of a breach. FR's are not absolute rights, but rather conditional ones. It is subject to various constraints imposed by the state on the basis of national security, public interest, and general welfare. However, whether or not limits are reasonable is determined by SCs and HCs.

88. Option (1) is correct.

West Bengal Wins Prestigious International Tourism Award for Best Cultural Destination. Adjudged as the 'Best Destination for Culture' by a global body of travel writers Pacific Area Travel Writers Association (PATWA).

89. Option (1) is correct.

If ex ante aggregate demand and ex ante aggregate supply are plotted together in a graphical diagram, then at which point equilibrium will be reached Where ex ante aggregate demand is equal to ex ante aggregate supply. If ex ante aggregate demand and ex ante aggregate supply are plotted together on a graphical diagram, the point where the two curves

intersect is the equilibrium point. This intersection point is also known as the macroeconomic equilibrium point or the general equilibrium point. At this point, the quantity of goods and services that buyers are willing to purchase (aggregate demand) is equal to the quantity of goods and services that producers are willing to supply (aggregate supply). This means that there are no shortages or surpluses in the market, and the economy is operating at a stable level.

90. Option (3) is correct.

The phrase "Procedure established by Law" comes from the Japanese Constitution. The phrase "Procedure Established by Law" signifies that a law that has been lawfully adopted by the legislature or the relevant body is only valid if the proper procedure has been followed to the letter. The Constitution gave the legislature the last word in determining the law by using the words "procedure established by law."

91. Option (4) is correct.

The Digital India Week 2022, themed 'Catalyzing New India's Techade,' began on July 4th in Gandhinagar, Gujarat. The weeklong celebration, which ran from July 4th to July 9th, celebrated the groundbreaking journey of Prime Minister Narendra Modi's flagship initiative of the Digital India Programme.

92. Option (3) is correct.

Kavach is an Automatic Train Protection (ATP) technology developed indigenously to prevent collisions between trains and achieve zero accidents in the Indian Railways. It uses advanced sensors and algorithms to detect potential collisions and apply brakes automatically. Kavach is an affordable system, costing approximately 50 lakh rupees per km to operate, compared to up to 2 crore rupees per km for similar systems globally. Kavach has been successfully tested on a trial basis, and plans are underway to roll it out across the railway network to improve safety, efficiency, and save on operational costs.

93. Option (2) is correct.

Tahira Kashyap Khurrana, a filmmaker and writer, has announced her upcoming book titled "The 7 Sins of Being A Mother" which is about motherhood. This will be her fifth book, and she wrote it during the pandemic. The book follows her previous work "12 Commandments of Being A Woman," which she finished writing during the lockdown last year. Tahira has also written books like "Cracking The Code: My Journey in Bollywood" and "Souled Out." The book is expected to provide a candid and honest perspective on the challenges of motherhood and will be eagerly awaited by her fans and readers.

94. Option (3) is correct.

Argentina is correctly paired with Pampas, which is a vast grassland that covers much of central Argentina, extending from the Atlantic Ocean to the Andes Mountains.

However, Brazil is not generally associated with Steppe grassland, which is typically found in regions with dry climates and is characterized by short grasses. Instead, the Brazilian savanna is called the Cerrado, which is a vast tropical savanna ecoregion of Brazil. Therefore, the correct pairing of country and grassland is: I. Argentina - Pampas II. Brazil - Cerrado

95. Option (1) is correct.

Sher Shah defeated Humayun in the Battle of Kanauj. In May 1540, the battle of Kanauj took place. Humayun fell at the hands of Sher Khan. Mughal artillery played little role in the conflict. Sher Khan seized control of Agra and Delhi following the fight.

96. Option (4) is correct.

Majuli is a big river island in Assam located in the middle of the Brahmaputra River. Majuli is portrayed as the world's largest river island. This island formed through time as a result of the change in direction and area of the Brahmaputra River and its tributaries, particularly the Lohit River. Majuli is also known as the "cultural capital of Assam." Majuli is located in the Jorhat district and is separated from the mainland by the Brahmaputra River.

97. Option (4) is correct.

In Punjab, there existed a religious-political movement known as Kuka. Kukas were not Sikhs who practised mainstream Sikhism. They demanded the removal of caste, the legalisation of intermarriage, widow-remarriage, and the prohibition of desi liquor, meat, and drugs. Satguru Ram Singh Ji founded the Kuka Movement to bring people together. The 12th of April 1872 is commonly regarded as the official birth date of the movement, while the movement's foundations were laid down by Satguru Ram Singh Ji a few years before.

98. Option (3) is correct.

The factor of soil formation that determines the accumulation of the soil is "Relief". Relief refers to the physical shape and characteristics of the land surface, including its slope, aspect, elevation, and drainage patterns. Relief plays a significant role in determining the accumulation of soil because it influences the amount of water and organic matter that is retained in the soil, as well as the movement of nutrients and minerals through the soil.

99. Option (4) is correct.

In the Tokyo Olympics 2020, Indian sportsmen have shown incredible tenacity and dedication. The nation has received a total of seven medals, including one gold, two silver, and four bronze medals, as a result of their outstanding efforts. India has had its finest Olympic showing ever, winning seven medals.

100. Option (3) is correct.

The shortcut key used to add a new blank slide to an existing presentation in MS-PowerPoint 365 is "Ctrl+M". To add a new blank slide, press and hold the "Ctrl" key and then press the "M" key. This will insert a new blank slide after the currently selected slide in the presentation.