STAFF SELECTION COMMISSION

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

SOLVED PAPER

(6th March 2019: Shift-3)

Max marks-100

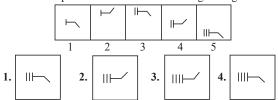
Time Allotted- 1.5 hours

Important Instructions:-

- This paper contains 100 questions which are divided into 4 sections. Each section contains 25 questions.
 - General Intelligence & Reasoning
 - · General Knowledge & General Awareness
 - Elementary Mathematics
 - English
- There will be 1 mark for each correct answer and also there will be negative marking of 0.25 marks for each wrong answer.
- Each question is compulsory to attempt and there will be no negative marking for unattempted questions.

General Intelligence & Reasoning

1. Choose the option which comes next in the given figure series.



The statements below are followed by conclusions labeled I, II 2. and III. Assuming that the information in the statements is true, even if it appears to be at variance with generally established facts, decide which conclusion(s) logically and definitely follow(s) from the information given in the statements.

Statements:

Some women are weaks.

Some weaks are female.

All female are iron.

All iron are gold.

Conclusions:

I. Some weaks are iron.

- II. Some gold are weaks.
- III. Some women are female.
- 1. All, I. II and III follow **2.** Only I and II follow

3. Only I and III follow 4. Only II and III follow

- 3. If NAMAN is written as 12321 and VINESH as 671489, how will NIMESH be written?
 - 1. 174583 **2.** 167893 **3.** 173486 4. 173489
- 4. Four words have been given out of which three are alike in some manner, while one is different. Choose the odd one. 1. Larcenv 2. Robbery **3.** Burglary **4.** Snobbery
- 5. Find the missing analogous numbers pair: 1000 : 121 :: ?
 - 1.27:64 2. 343 : 81 **3.** 125 : 36 **4.** 64 : 8
- 6. In a certain code, NAP is coded as MZO, then how is SNEEZE coded in the same way as:
 - 1. RMDDYD 2. RQDFYG 3. RNDDYD 4. RMDFYD
- 7. Four options have been given out of which three are alike in some manner, while one is different. Choose the odd one. 1.729 **2.** 125 **3.** 1331 4.75

- Select the correct combination of mathematical signs to 8. replace '*' signs and to balance the given equation: 54 * 6 * 5 * 14
- 1. ÷ + = **2.** – = × 3. $+ \div =$ $\mathbf{4} = \mathbf{x} + \mathbf{1}$ 9. Which of the following answer figure will complete the given figure?

- 10. Select the option that is related to the third term in the same way as the second term is related to the first term. GPLS: 54 :: WGSK : 3.65 4.53
 - 1.60 2. 70
- 11. Six kids are sitting in two rows facing north. Their names are Fuji, Ukain, Yam and Krish, Charlie, Mac. Fuji and Mac are sitting diagonally opposite. Ukain is in the top row and to the immediate right of Fuji. Krish is second to the left of Mac while Yam and Krish are not in the same row. Who is sitting diagonally opposite to Yam?

3. Krish

4. Ukain

1. Charlie 2. Mac

12. Eight people A, B, C, D, E, F, G and H are sitting around a circular table. A and B are facing towards the center while the other six people are facing opposite the center. A is sitting second to the right of H. B sits third to the left of A. D sits second to the right of G. G is neither immediate neighbour of B nor A. E and F are immediate neighbours and are facing outside.

What is the position of C with respect to D?

- 1. Third to the right **2.** Fourth to the left
- **3.** Third to the left **4.** Fourth to the right
- 13. Four letter clusters have been given out of which three are alike in some manner, while one is different. Choose the odd one.

1. DEGJ 2. JKNO 3. YZBE 4. ORTW

14. The statements below are followed by two conclusions labeled I and II. Assuming that the information in the statements is true, even if it appears to be at variance with generally established facts, decide which conclusion(s) logically and definitely follow(s) from the information given in the statements.

24. Select the correct option that will fill in the blank and complete **Statements:** the series. Some teaspoons are glasses All teddies are teaspoons FKP, GMQ, HOR, ? **Conclusions:** 1. IRT **2.** IOS **3.** JYI **4.** JNK I. Some teddies are glasses. 25. Select the correct option that will fill in the blank and complete II. Some glasses are teddies. the series. 1. Either I or II follows 21, 43, 85, 171, 341, 2. Only conclusion II follows 1.680 2. 683 **3.** 675 4.684 3. Only conclusion I follows 4. Neither I nor II follows General Knowledge & General Awareness 15. Select the correct option that will fill in the blank and complete the series. 26. Most classical dances of India combine three main facets $\frac{3}{2}, \frac{5}{2}, \frac{7}{2}, \frac{9}{2}, \frac{11}{2}, ?$ namely, 'Bhava', 'Raga' and ' 2. Tala 1. Svasara 3. Mala 4. Sopana 3. $\frac{10}{2}$ How many members were there in the Constituent Assembly 27. **2.** $\frac{17}{2}$ that wrote the Indian Constitution? 1.198 2. 199 3. 299 4.298 16. In a class of 35 children, Ameya's rank is sixth from the top. 28. The major economic attribute for comparing countries is their: Annie is seven ranks below Ameya. What is Annie's rank from the bottom? **1.** mortality rate 2. income **2.** 22 **3.** 23 **3.** human development index 1.20 4.19 4. population 17. Select the related word pair from the given alternatives. On which river is the Bhakra Nangal Dam situated? 29. Month : Year :: 2. Sutlej 1. Jhelum 3. Ravi 4. Chenab 1. Time : Distance 2. Litre : Liquid 30. Which of the following reasons for why construction of huge 3. Speed : Vehicle 4. Minute : Hour dams is opposed? 18. Select the related word pair from the given alternatives. 1. Large scale displacement of peasants and tribals Afghanistan : Kabul :: ___ 2. No support in producing hydroelectricity 1. Nepal : Monaco 2. Pakistan : Islam Nagar 3. Lack of manual labour **3.** Iran : Dublin 4. China : Beijing 4. They are not cost effective 19. Choose the option figure in which the problem 31. Which Indian cultural site is NOT included in the World figure is hidden/embedded. Heritage List? **1.** Red Fort Complex 2. Humayun's Tomb 3. Jama masjid 4. Qutub Minar 32. Which of the following High Courts has the largest number of 3 seats? 1. Mumbai High Court 2. Guwahati High Court 20. Select the Venn diagram that best illustrates the relationship 3. Allahabad High Court 4. Kolkota High Court between the three given classes. 33. Who is the fastest Asian to traverse the globe riding a bicycle? Clothes, T-shirt, Trousers 1. E Chaoba Devi 2. Mayuri Lute 3. Vedangi Kulkarni 4. Rameshwori Devi 1. 2. 34. Who has been Honoured with Ashoka Chakra at the 69th Republic Day 2018? 21. A piece of paper is folded 1. Mohan Goswami 2. Mukund Varadarajan and cut as shown below in 3. Jyoti Prakash Nirala 4. Hangpan Dada the question figures. From **35.** Twinkling of stars is due to: the given answer figures, 1. atmospheric reflection 2. atmospheric refraction how will it appear when 3. scattering of light 4. internal reflection opened? Which Indian state has made solar plants mandatory for 36. housing societies, industries and other specified categories of 3. 1. 2. 4. buildings? 1. Himachal Pradesh 2. Nagaland $\wedge \wedge \wedge \wedge$ **3.** Haryana 4. Manipur 22. Choose the option that most closely resembles 37. Mushrooms and other micro organisms feed on dead plant and the mirror image of the given figure when animal tissues and convert them into mirror is placed at left side. **2.** Clod 1. Humus **3.** Sod 4. Peat 38. National Youth Day is celebrated on the birthday of: 1. Swami Vivekananda 2. Swami Ashokananda 23. Find the missing number from the below options. 3. Swami Rajesgwaranand Maharaj 4. Swami Abhedananda **39.** Dhop is a seasonal game played in: 1. Maharashtra 2. Nagaland 3. Meghalaya 4. Assam 40. Which gas is flushed in a bag of chips to prevent the chips from getting oxidized? 1.80 2. 70 3. 140 4.77 1. Oxygen **2.** Helium 3. Hydrogen 4. Nitrogen

41. Detention of political prisoners without trial for two years was a feature of: 1. East India Stock Dividend Redemption Act 2. British India Regulating Act 3. Rowlatt Act 4. Government of India Act 42. Which hormone is secreted by the pituitary gland? 1. Insulin 2. Thyroxin 3. Adrenaline 4. Growth hormone 43. Which of the following Indian artists has been awarded the Lifetime Achievement Grammy Award? 1. Ravi Shankar 2. Lata Mangeshkar 3. A.R Rahman 4. Zakir Hussain 44. Who was the founder chairperson of Central Social Welfare Board? 1. G. Durgabai Deshmukh 2. Aruna Asaf Ali **3.** Sarojini Naidu 4. Annie Besant 45. In which year was the Prime Minister Rozgar Yojana (PMRY) scheme launched? 1. 1993 **2.** 1992 **3.** 1995 **4.** 1994 46. Which of the following sea ports declined after the emergence of East India Company? 1. Vishakapatnam 2. Surat

- 3. Bombay 4. Calcutta 47. Who set up the first iron and steel works in India in 1912 at Jamshedpur?
- 1. R. J. Tata 2. D. J. Tata 3. J. N. Tata 4. R. D. Tata 48. The festival associated with the worship of the sun, rivers and ponds is:
 - 1. Chhath
 - 3. Diwali 4. Makar Sankranti
- 49. Which type of farming is practiced in areas of high population pressure on land?

2. Teej

- 1. Commercial farming
- 2. Intensive subsistence farming
- 3. Extensive subsistence farming
- 4. Primitive subsistence farming
- 50. Which of the following policy falls under right to work?
 - 1. Ayushman Bharat
 - 2. Pradhan Mantri Ujjwal Yojna
 - 3. Mahatma Gandhi National Rural Employment Guarantee Act
 - 4. Saubhagya Scheme

Elementary Mathematics

51. If the curved surface area of a sphere increased by 44%, then by what percentage would its volume increase?

1. 44%	2. Cannot be determined
3. 20%	4. 72.8%

- 52. Had been one men less, then the number of days required to do a piece of work would have been one more. If the number of Man. Days required to complete the work is 56, how many workers were there?
- 1.9 **3.** 14 4.6 **2.** 8 53. What should come in place of question mark (?) in the following questions?

$$? = (45 \times 11) \div 3$$

A customer is given a discount of
$$2\frac{1}{2}$$
% on the marked price of

235

55. A dealer buys goods at 10% discount on its list price and sells 10% above the list price. His profit percent is:

1. 10% **2.** 20% **3.**
$$22\frac{2}{9}\%$$
 4. $11\frac{11}{9}\%$

- 56. The average temperature on Friday, Saturday and Sunday was 26° and on Saturday, Sunday and Monday it was 24°. If on Monday it was exactly 25°. Then what was the temperature on Friday. **1.** 31° **2.** 33° **3.** 32° 4. 30°
- 57. What should come in place of question mark (?) in the following questions? $1072 + [\{8240 + (-9213)\} - \{(2863 - (4329 - 2143)\}] = ?$ 1. -578 **2.** –576 **3.** 578 4. 576
- 58. Rekha sells a DVD player to Liza at a profit of 15% and Liza sells it Megha at a profit of 25%. If Megha pays ₹2875 for it, then what was the cost price for Rekha. 1.₹2000 **2.** ₹1900 **3.** ₹1500 **4.** ₹1800
- 59. A Train of 300 m length passes a pole in 15 second. What is the speed of the Train?
 - 1. 72 km/hr 2. 75 km/hr 3. 60 km/hr 4. 65 km/hr
- 60. If ten men can do a job in ten days, what fraction of the job can be done by one man in one day?

$$\frac{1}{10}$$
 2. $\frac{1}{20}$ 3. $\frac{1}{100}$ 4. $\frac{1}{2}$

61. If x: y = 2: 3 then the value of $\frac{3x+2y}{9x+5y}$ will be:

1.

1.
$$\frac{4}{11}$$
 2. $\frac{11}{2}$ **3.** $\frac{5}{14}$ **4.**

62. In a colony 5 families have 1 child, 7 families have 2 children, 8 families have 3 children and 3 families have 4 children, What is the mode of the number of children.

 $\overline{2}$

5

Branches 64. The area of an equilateral triangle is $16\sqrt{3}$ sq cm. What is its perimeter?

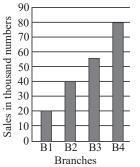
1. 24 cm 2. 16 cm 4.12 cm **3.** 32 cm 65. A Solution of milk and water contains milk and water in the ratio of 3 : 2. Another solution of milk and water contains milk and water in the ratio of 2 : 1. Forty litres of the first solution is mixed with 30 litre of the second solution. The ratio of milk and water in the resultant solution is:

66. A cylinder of height 4 cm and base radius 3 cm is melted to form a sphere. The radius of sphere is:

67. The L.C.M. of two different numbers are 30. Which of the following cannot be their H.C.F.? 1.12 4.10

68. On a certain sum, rate of interest per annum for the first two years is 4%, The rate of interest for next four years is 6% and for the next three years is 8%. If total simple interest earned at the end of 9 years is ₹1120, then the sum is:

1. ₹1800 **2.** ₹2240 **3.** ₹2000 4. ₹1600 69. Sales of books from four shops (B1, B2, B3, B4) in thousands are given as below. Study the graph and answer the following questions. If each shop can increases the sales of books by 10%, then the total number of books (in thousands) sold by all the shop are: 1.214.5 2. 215.5 3. 228.0 4. 240.0



70. Smith travels along four sides of a square at speeds of 10, 12, 15 and 20 km/hr. The average speed of the Smith is:

1. $13\frac{1}{3}$ km/hr	2. $12\frac{1}{2}$ km/hr
3. $14\frac{1}{4}$ km/hr	4. 10 km/hr

- 71. The income of A and B are in the ratio 5 : 3. The expenses of A, B and C are in the ratio of 8 : 5 : 2. If C spends 2000 and B saves ₹700, then A saves:
- 1. ₹1500 2. ₹1000 3. ₹250 4.₹500 72. What will be the cost of fencing a circular garden of radius 35 m at the rate of ₹ 16 per meter? (Take $\pi = \frac{22}{7}$

- 73. Sales of books from four shops (B1, B2, B3, B4) in thousands are given as below. Study the graph and answer the following questions. The number of shop in which sales of books are below the average level is: 1.3 **2.** 1 **3.** 2 4.4
- **3.** ₹3240 4. ₹2850 90 numbers 80 70 60 Sales in thousand 50 40 30 20 10 0 **B**1 B2 **B**3 **B**4 Branches
- 74. A certain sum becomes ₹ 650 at the end of one year and ₹ 676 at the end of second year. The at compound interest sum is: **2.** ₹540 3. ₹560 1. ₹625 4. ₹600
- 75. The average age of 3 persons is 30 years. If their ages are in the ratio of 3:5:7 respectively, then the age of the eldest person is:
 - 1. 21 years 2. 25 years **3.** 28 years **4.** 42 years

English

- 76. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No substitution required. As the tree comes crashing down, monkeys woke from its sleep and run from branch to branch. 1. woke in their sleep 2. wakes from it sleep **3.** No substitution required 4. wake from their sleep 77. Select the meaning of the given idiom. Play it safe 1. play for pleasure 2. play indoors 3. play a game peacefully 4. avoid risks 78. Select the wrongly spelt word.
 - 1. Perspiration 2. Perseverance 3. Paralysis 4. Plateform
- Select the most appropriate option to substitute the underlined 79. segment in the given sentence. If there is no need to substitute it, select No substitution required. Whenever there is raining, desert flowers bloom and the sight can be rewarding. 1. No substitution required 2. When raining **3.** When its rains 4. Whenever it rains 80. Select the antonym of the given word. DESPAIR 1. Desperation 2. Distress 3. Hopelessness 4. Hope 81. Select the synonym of the given word. VAIN 1. Useful **2.** Useless 3. Beneficial 4. Nutritious 82. Select the most appropriate word to fill in the blank. Last year the performance of this production unit was 1. below **2.** tall 3. fantastic 4. staggered 83. Select the antonym of the given word. ARID 1. Parched 2. Drv 3. Scorched 4. Wet 84. Identify the segment in the sentence which contains the grammatical error from the given options. An ant uses it's feelers or antennae to 'talk' to other ants by passing messages through them. 1. to other ants 2. An ant 3. Through them 4. its feelers 85. Select the wrongly spelt word. 2. Disappear 3. Disaster 4. Dilemma 1. Develope 86. Identify the segment in the sentence which contains the grammatical error from the given options. We used to keep large plates of fruit on a table nearer a window in the dining-room. 1. nearer a window 2. large plates of 3. We used to 4. on a table 87. Select the most appropriate word to fill in the blank. We went to see the butterfly farm _____ was very close to our hotel. 1. Us **2.** Them 3. They 4. It 88. Select the most appropriate word to fill in the blank. He offered us food items for lunch and we were happy. 1. lucrative 2. delicious **3.** big 4. pungent **89.** Select the word which means the same as the group of words given. A false or assumed identity 1. Alien 2. Alias 3. Annals 4. Archive **Comprehension:** In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each number. The National Aeronautics and Space Administration's (NASA) Viking Mission to Mars was (1) of two spacecraft. Viking 1 and Viking 2. (2) consisting of an orbiter and lander. The primary objectives (4) (3) to obtain images and samples (5) the Martian surface and soil. 90. Select the most appropriate option that will fill in the blank number 1. 1. including 2. making 4. composed 3. consist 91. Select the most appropriate option that will fill in the blank number 2. 1. both of 2. equally 3. one of 4. each 92. Select the most appropriate option that will fill in the blank number 3.

1. No article required	2. the
3. an	4. a

93. Select the most appropriate option that will fill in the blank 98. Select the word which means the same as the group of words number 4. given. 1. is 2. were **3.** has been 4 was One who loves books 94. Select the most appropriate option that will fill in the blank **1.** Bibliophile **2.** Veteran 3. Orator 4. Librarian number 5. 1. at **2.** of 3. on **4.** for 99. Select the most appropriate option to substitute the underlined 95. Select the synonym of the given word. segment in the given sentence. If there is no need to substitute SUBSTANTIAL it, select No substitution required. 1. Considerable 2. Slight 3. Negligible 4. Worthless The most pleasant way was to going and having a good dinner 96. Identify the segment in the sentence which contains the grammatical error from the given options. at some fine restaurant. The chameleon's tongue is too long that it keeps it folded in 1. No substitution required 2. was to go and have the mouth. **3.** was going to have 4. is to have gone and eat 1. The chameleon's 2. in the mouth 100. Select the most appropriate word to fill in the blank. **3.** it keeps 4. too long that 97. Select the meaning of the given idiom. The man insisted on buying the doves he was fond of Draw a Blank birds. 1. Unable to remember 2. Lose money 1. though **2.** as if **3.** because 4. due to 3. Be an artist 4. Display skills

Answer Key

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

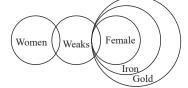
Answers with Explanations

Option (2) is correct. 1.

According to the pattern followed and the symmetry, following image will complete the series:

Option (2) is correct. 2.

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



Conclusion-I) Some weaks are iron - True. Conclusion-II) Some golds are weaks - True. Conclusion-III) Some women are females - False. Hence, only conclusion I and II follows.

Option (4) is correct. 3.

Given that: NAMAN is written as 12321 and VINESH is written as 671489.

So, the codes for the respective alphabets are as follows:-

- N 1
- A-2
- M 3
- V 6
- I 7
- E-4

S-8

H-9

Hence, NIMESH will be written as 173489.

4. **Option (4) is correct.**

In the given options, robbery refers to stealing a valuable thing Larceny means theft of personal property. Burglary means entering into a premise in order to steal something.

All of these are related to crimes whereas Snobbery is a behaviour or attitude in which people think that they are inherently better than others.

Hence, snobbery is the odd one out.

Option (3) is correct. 5.

Given that: 1000 : 121 The pattern followed here is: (Cube root of 1^{st} term + 1)² = 2^{nd} term. So, $\sqrt[3]{1000} = 10$: $(10+1)^2$ $(11)^2 = 121$ Similarly, Upon checking option (3), we get: $\sqrt[3]{125} = 5$: $(5+1)^2 = (6)^2 = 36$ Hence, 125 : 36 is the correct answer.

6. **Option** (1) is correct.

> Given that : NAP is coded as MZO The pattern followed here is:

- $\parallel \mid \mid$

$$\begin{vmatrix} N & A & P \\ -1 & -1 & -1 \end{vmatrix}$$

Similarly, for SNEEZE

Hence, RMDDYD is the correct answer.

7. Option (4) is correct.

In the given options, three of them are perfect cube roots where as, one of them is not a perfect cube root.

So, $\sqrt[3]{729} = 9$

 $\sqrt[3]{125} = 5$

v125 – 3

 $\sqrt[3]{1331} = 1$

But, $\sqrt[3]{75} = 4.217$

Hence, 75 is odd one out.

8. Option (1) is correct.

Given expression 54 * 6 * 5 * 14Upon checking option (1), we get: $54 \div 6 + 5 = 14$ $\Rightarrow 9 + 5 = 14$ $\Rightarrow 14 = 14$ LHS = RHS

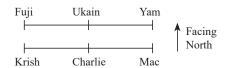
9. Option (2) is correct.

As per the pattern followed and symmetry, the required answer figure is:

10. Option (1) is correct.

Given that: GPLS : 54 The pattern followed here is: Sum of place value of alphabets of the given letters cluster. G + P + L + S $\Rightarrow 7 + 16 + 12 + 19$ $\Rightarrow 54$ Similarly, W + G + S + K $\Rightarrow 23 + 7 + 19 + 11$ $\Rightarrow 60$ 11. Option (3) is correct.

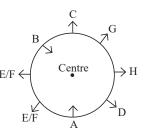
According to the question, following sitting arrangement can be made:



A and B are facing centre while others are facing opposite the centre. Hence, krish is sitting diagonally opposite to yam.

12. Option (3) is correct.

According to the statements given, following sitting arrangement can be done: A and B are facing centre while others are facing opposite the centre. Hence, C sits this to the left of D.



13. Option (2) is correct.

The pattern followed here is: Option 1) D $\stackrel{+1}{\longrightarrow}$ E $\stackrel{+2}{\longrightarrow}$ G $\stackrel{+3}{\longrightarrow}$ J Option 2) J $\stackrel{+1}{\longrightarrow}$ K $\stackrel{+2}{\longrightarrow}$ N $\stackrel{+3}{\longrightarrow}$ Q Option 3) Y $\stackrel{+1}{\longrightarrow}$ Z $\stackrel{+2}{\longrightarrow}$ B $\stackrel{+3}{\longrightarrow}$ E Option 4) Q $\stackrel{+1}{\longrightarrow}$ R $\stackrel{+2}{\longrightarrow}$ T $\stackrel{+3}{\longrightarrow}$ W Hence, JKNQ is the odd one out.

14. Option (4) is correct.

According to the statements, following Venn diagram can be made: Conclusion-I) Some teddies are



Conclusion-II) Some glasses are teddies - False. Hence, neither conclusion I nor II follows.

15. Option (1) is correct.

glasses - False.

Given series: $\frac{3}{2}, \frac{5}{2}, \frac{7}{2}, \frac{9}{2}, \frac{11}{2}, ?$

In the given series, the numerator is increasing by 2 in each step and the denominator remains the same. So, 11 + 2 = 13

So, 11 + 2 = 1

Hence, $\frac{13}{2}$ is the correct answer.

16. Option (3) is correct.

According to the given statement.

17. Option (4) is correct.

In the given analogy, Month is a smaller unit of year. Similarly, Minute is a smaller unit of an hour. Hence, Minute : hour is the correct answer.

18. Option (4) is correct.

In the given analogy, Kabul is the capital of Afghanistan Similarly, Beijing is the capital of China. Hence, China : Beijing is the correct answer.

19. Option (1) is correct.

The given figure is embedded in option (1) as highlighted below:

20. Option (3) is correct.

Given classes : Clothes, T-shirt, Trousers The Venn diagram that best illustrates the relationship between the given classes is:

21. Option (4) is correct.

After unfolding the paper, it will appear as:

22. Option (3) is correct.

In the mirror image, left becomes right and right becomes left. Hence, the required mirror image is:

23. Option (1) is correct.

The numbers inside the given square are multiplies of there adjacent numbers given in the circle.



σb

Trouser

Clothes

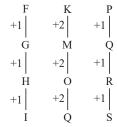
$$7 \times 2 = 14$$

 $2 \times 10 = 20$
 $8 \times 7 = 56$
 $10 \times 8 = 80$

Hence, 80 is the correct answer.

24. Option (2) is correct.

Given series: FKP, GMQ, HOR, ? The pattern followed here is:



Hence, IQS is the correct answer.

25. Option (2) is correct.

Given series : 21, 43, 85, 171, 341, _ The pattern followed here is: $(21 \times 2) + 1 = 43$ $(43 \times 2) - 1 = 85$ $(85 \times 2) + 1 = 172$ $(171 \times 2) - 1 = 341$ $(341 \times 2) + 1 = 683$ Hence, 683 is the correct answer.

26. Option (2) is correct.

Most classical dances of India combine three main facets, namely, 'Bhava' (expression), 'Raga' (melody), and 'Tala' (rhythm). These elements are fundamental to the aesthetics and structure of Indian classical dance forms.

27. Option (3) is correct.

There were initially 389 members in the Constituent Assembly, as per the Cabinet Mission Plan. Following the partition of India in 1947, members from the regions that became part of Pakistan withdrew, leading to a reduction in the total membership to 299.

28. Option (2) is correct.

While factors like mortality rate, human development index, and population are essential indicators for evaluating a country's overall well-being, the major economic attribute for comparing countries specifically in economic terms is their income. Income is often measured by metrics such as Gross Domestic Product (GDP) per capita, providing insights into a nation's economic prosperity and the standard of living of its citizens.

29. Option (2) is correct.

The Bhakra Nangal Dam is situated on the Sutlej river. This structure holds significant importance in the northern region of India, contributing to water storage, irrigation, and the generation of hydroelectric power.

30. Option (1) is correct.

The primary reason for opposing the construction of huge dams is the large-scale displacement of peasants and tribals.

31. Option (3) is correct.

The cultural site NOT included in the World Heritage List is Jama Masjid.

32. Option (2) is correct.

Guwahati High Court has the largest number of seats. The Guwahati High Court, established on March 1, 1948, is located in Guwahati, Assam. Its principal seat is in the city. The court has three outlying benches: Kohima Bench for Nagaland, Aizawl Bench for Mizoram, and Itanagar Bench for Arunachal Pradesh.

33. Option (3) is correct.

Vedangi Kulkarni holds the record for the fastest Asian cyclist to travel the world.

34. Option (3) is correct.

The Ashoka Chakra was posthumously awarded to Corporal Jyoti Prakash Nirala during the 69th Republic Day in 2018. As a Garud commando in the Indian Air Force, he lost his life in action on 17 November 2017, courageously battling terrorists in the Bandipora district of Jammu and Kashmir.

35. Option (2) is correct.

The twinkling of stars is primarily due to atmospheric refraction. As starlight passes through the Earth's atmosphere, it encounters variations in air density and temperature, causing the light to refract or bend.

36. Option (3) is correct.

Haryana state has made solar plants mandatory for housing societies, industries and other specified categories of buildings.

37. Option (1) is correct.

Mushrooms and various microorganisms consume deceased plant and animal tissues, transforming them into humus. This dark, organic substance emerges through the decomposition of organic matter and plays a crucial role in soil by enhancing its fertility and structure.

38. Option (1) is correct.

National Youth Day is commemorated on the birth anniversary of Swami Vivekananda, who played a crucial role in introducing the Indian philosophies of Vedanta and Yoga to the Western world. Swami Vivekananda was born on January 12, 1863.

39. Option (4) is correct.

Dhopkhel, also known as Dhop, is a traditional ball game specifically associated with the state of Assam in India.

40. Option (4) is correct.

Nitrogen is flushed into a bag of chips to prevent the chips from getting oxidized.

41. Option (3) is correct.

The Rowlatt Act, also recognized as the Anarchical and Revolutionary Crimes Act of 1919, introduced the provision of detaining political prisoners without trial for two years. Enforced by the British colonial administration in India, this act granted authorities the power to detain individuals without a formal trial, sparking extensive protests and resistance across the country.

42. Option (4) is correct.

The hormone secreted by the pituitary gland is Growth hormone. The pituitary gland secretes growth hormone, which plays a crucial role in regulating growth, development, and metabolism.

43. Option (1) is correct.

The prestigious Lifetime Achievement Grammy Award has been bestowed upon Ravi Shankar, the celebrated Indian sitar virtuoso and composer. This honour recognizes his outstanding contributions to the world of music, particularly in popularizing Indian classical music on a global scale.

44. Option (1) is correct.

The founder chairperson of the Central Social Welfare Board was G. Durgabai Deshmukh. G. Durgabai Deshmukh was a prominent social activist and politician who played a significant role in various social welfare initiatives in India.

45. Option (1) is correct.

The Prime Minister Rozgar Yojana (PMRY) scheme was initiated in 1993 to encourage self-employment among

educated unemployed youth and various segments of society. It aimed to support the creation of small enterprises and businesses, providing financial assistance to foster sustainable employment opportunities.

46. Option (2) is correct.

After the emergence of the East India Company, the port of Surat declined. The East India Company's growing influence and the strategic shift in trade routes contributed to the decline of Surat as a prominent seaport during that period.

47. Option (3) is correct.

The first iron and steel works in India were established at Jamshedpur by J. N. Tata. Tata Iron and Steel Company (TISCO) was founded by Jamsetji Nusserwanji Tata and was established by Dorabji Tata on 26 August 1907. The first steel ingot was manufactured on 16 February 1912.

48. Option (1) is correct.

Chhath is a special Hindu festival where people worship the sun, rivers, and ponds. During Chhath, they show their gratitude to the Sun God, Surya, and his consort Chhathi Maiya.

49. Option (2) is correct.

The type of farming practised in areas of high population pressure on land is intensive subsistence farming. This involves maximizing yields on a small plot of land using intensive labour practices. This is suitable for high population density areas where land is scarce.

50. Option (3) is correct.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a policy aligned with the right to work. It seeks to offer employment opportunities and job security to rural households, ensuring the right to work for individuals in rural areas.

51. Option (4) is correct.

Curved surface area of sphere = $4\pi r^2$ Let the radius increased by x%.

Using total percentage change = $x + x + \frac{x^2}{100} = 44$

 \Rightarrow *x* = 20 is satisfying the above equation.

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

Means percentage change in the volume will be equivalent to three successive changes of 20%.

For first two successive changes, equivalent % change = $20 + 20 + \frac{20 \times 20}{20} = 44\%$

$$20 + 20 + \frac{100}{100} = 44\%$$

Now total percentage change = $44 + 20 + \frac{44 \times 20}{100} = 72.8\%$

52. Option (2) is correct.

Let the number of men = mAnd the number of days = dSo, $m \times d = 56$ According to the question, $\Rightarrow md = (m-1)(d+1)$ $\Rightarrow m - d = 1$ Putting $d = \frac{56}{m}$ $\Rightarrow m - \frac{56}{m} = 1$ $\Rightarrow m^2 - m - 56 = 0$ $\Rightarrow (m-8)(m+7) = 0$

So, *m* = 8

Given, $? = (45 \times 11) \div 3$ $? = \frac{495}{3}$

? = 165

- 54. Option (2) is correct. Let the MRP = xAccording to the question, $x \times \frac{97.5}{100} = 39$ $\Rightarrow x = ₹ 40$
- 55. Option (3) is correct. Let the MRP = ₹ 100 According to the question,

Cost price of article = $100 \times \frac{90}{100} = ₹ 90$ And selling price = $100 \times \frac{110}{100} = ₹ 110$

So, profit percentage =
$$\frac{110 - 90}{90} \times 100 = 22\frac{2}{9}\%$$

56. Option (1) is correct.

Given that,

The average temperature on Friday, Saturday and Sunday = 26° So, total temperature on Friday, Saturday and Sunday $= 26 \times 3 = 78^{\circ}$...(1) The average temperature on Saturday, Sunday and Monday = 24° So, total temperature on Saturday, Sunday and Monday = $24 \times 3 = 72^{\circ}$...(2) Temperature on Monday = 25° ...(3) By Eq. (1) - (2), Friday - Monday = 78 - 72 = 6...(4) By Eq. (3) + (4), $Friday = 25 + 6 = 31^{\circ}$

57. Option (1) is correct.

Value of $1072 + [\{8240 + (-9213)\} - \{(2863 - (4329 - 2143))\}]$

$$\Rightarrow 1072 + [\{8240 + (-9213)\} - \{2863 - 2186\}] = ?$$

$$\Rightarrow 1072 + [\{-973\} - \{677\}] = ?$$

$$\Rightarrow 1072 + [(-9)]$$
$$\Rightarrow ? = -578$$

58. Option (1) is correct.

Let the cost price for Megha = $\overline{\mathbf{x}} x$ According to the question,

$$\Rightarrow r \times \frac{115}{125} \times \frac{125}{125} = 2875$$

$$\Rightarrow x \times \frac{100}{100} \times \frac{100}{100} = 28/$$

 $\Rightarrow x = 2000$

So, the cost price for Megha = ₹ 2000

59. **Option (1) is correct.**

Given that the length of train = 300 m

And time = 15 s

So, speed =
$$\frac{300}{15}$$
 = 20 m/s or $20 \times \frac{18}{5}$ = 72 km/h

60. Option (3) is correct.

According to the question, 10 men can complete the task in = 10 days So, 1 man can complete the task in = $10 \times 10 = 100$ days Hence, fraction of the job can be done by one man in one day 1 = 100

61. Option (1) is correct.

Given that,
$$\frac{x}{y} = \frac{2}{3}$$

So,
$$\frac{3x+2y}{9x+5y} = \frac{3 \times 2 + 2 \times 3}{9 \times 2 + 5 \times 3}$$

= $\frac{12}{33} = \frac{4}{11}$

62. Option (4) is correct.

5 families have 1 child = $5 \times 1 = 5$ 7 families have 2 children = $7 \times 2 = 14$ 8 families have 3 children = $8 \times 3 = 24$ 3 families have 4 children = $3 \times 4 = 12$ As, frequency of 3 is more, so mode is 3.

63. Option (3) is correct.

According to given the graph, The average sales of book from shop B1, B2 and B4 = $\frac{20000 + 40000 + 80000}{3} = \frac{140000}{3} = 46666$ 3

64. Option (1) is correct.

The area of equilateral triangle = $16\sqrt{3}$ cm²

Using, area of equilateral triangle = $\frac{\sqrt{3}}{4} \times \text{side}^2$

$$\Rightarrow \frac{\sqrt{3}}{4} \times \text{side}^2 = 16\sqrt{3}$$
$$\Rightarrow \text{side} = 8 \text{ cm}$$

So, perimeter = $3 \times 8 = 24$ cm

65. Option (2) is correct.

Milk and water ratio in first mixture = 3: 2 = 9: 6And milk and water ratio in second mixture = 2: 1 = 10: 5According to the question, both the mixtures are mixed in the ratio of 40 : 30 or 4 : 3. So, Mixture1 \Rightarrow [9:6] \times 4 \Rightarrow 36:24 ...(1) Mixture 1 \Rightarrow [10 : 5] \times 3 \Rightarrow 30 : 15 ...(2) By adding (1) and (2), Milk and water ratio in final mixture = 66: 39 = 22: 13

66. Option (2) is correct.

Given that, Height of cylinder = 4 cmBase radius = 3 cmSo, volume of cylinder = πr^2 h = 36π Let the radius of sphere = r cmAccording to the question, Volume of sphere = 36π

$$\Rightarrow \frac{4}{3} \pi r^3 = 36\pi$$
$$\Rightarrow r = 3 \text{ cm}$$

67. Option (1) is correct.

Given that, the LCM of two different number = 30The HCF of two numbers is the largest number that divides both of them. Therefore, the HCF must be a factor of the LCM.

The factors of 30 are: 1, 2, 3, 5, 6, 10, 15, 30. From the given options, only 12 cannot be their HCF.

68. Option (3) is correct.

Given SI = ₹ 1120 Duration = 9 years And percentage interest earned during these 9 years = $2 \times 4 +$ $4 \times 6 + 3 \times 8 = 56\%$ Let the principal amount = $\mathbf{R} \mathbf{P}$ $SI = \frac{P \times 56}{100}$

$$\Rightarrow 1120 = (P \times 56)$$

⇒ P = ₹ 2000

69. Option (1) is correct.

According to the given graph,

Total number of books sold = $(20 + 40 + 55 + 80) \times \frac{110}{100} = 214.5$

70. Option (1) is correct.

Given that Smith travels along four sides of a square at speeds of 10, 12, 15 and 20 km/hr.

Let the side of square = xAverage speed = $\frac{\text{total distance}}{}$

$$= \frac{x + x + x + x}{\frac{x}{10} + \frac{x}{12} + \frac{x}{15} + \frac{x}{20}} = \frac{4}{\frac{6+5+4+3}{60}} = \frac{4 \times 60}{18} = 13\frac{1}{3}$$
 km/h

71. Option (1) is correct. Given that ratio of their expenses = 8:5:2According to the question, 2x = 2000So, x = 1000Hence, expenses of A = ₹ 8000 And expenses of B = ₹ 5000 So, B's income = 5000 + 700 = ₹ 5700 Also given that the ratio of A's and B's income = 5:3Hence, A's income = $\frac{5700}{5} \times 5 = ₹9500$

Now, A's savings = 9500 - 8000 = ₹ 1500

72. Option (1) is correct.

Radius of garden = 35 m So, circumference = $2\pi r = 2 \times \frac{22}{\pi} \times 35 = 220$ m

Hence, required
$$\cos t = 220 \times 16 = ₹ 3520$$

73. Option (3) is correct. Average sale of all shops = $\frac{20 + 40 + 55 + 80}{4} = 48.75$

So, B1 and B2 shops having sales less than average sales.

74. Option (1) is correct.

Given that a certain sum becomes ₹ 650 at the end of one year and $\overline{\mathbf{x}}$ 676 at the end of second year.

So, rate of interest =
$$\frac{676 - 650}{650} \times 100 = 4\%$$

Let the principal amount = $\gtrless P$ Using $\dot{A} = P(1)$

Using,
$$A = P(1 + r/100)^2$$

$$\Rightarrow 676 = P\left(1 + \frac{4}{100}\right)$$

⇒ P = ₹ 625

76.

The average age of 3 persons = 30 years So, their total age = 30×3 = 90 years Let their ages are 3x, 5x and 7x respectively.

So, age of eldest person =
$$90 \times \frac{/x}{3x+5x+7x} = 42$$
 years
Option (4) is correct.

In the sentence, 'As the tree comes crashing down, monkeys woke from its sleep and run from branch to branch', the phrase 'woke from their sleep' is replaced by 'wake from their sleep'. This is because the sentence is in present tense, so the verb that will align with the context is 'wake' (the base form of the verb, not 'woke' (past tense of 'wake'). Additionally, the noun 'monkeys' is plural, so the associated pronoun will be plural (their, not its).

77. Option (4) is correct.

The idiom 'Play it safe' implies 'take precautions; avoid risks'. Example: I think it is better to play safe with your investments. Never invest your assets in just one scheme.

78. Option (4) is correct.

It is 'Platform', meaning 'a raised level surface on which people or things can stand'. Example: The child, who was singing in a choir, was made to stand on a platform to match the height of his choir.

79. Option (4) is correct.

In the sentence, 'Whenever there is raining, desert flowers bloom and the sight can be rewarding', the part 'Whenever there is raining' contains an error of tense. The statement presents a fact- a persistent occurrence. So, the correct replacement to the underlined phrase must be in simple present tense "Whenever it rains'. Moreover, 'it' is used to refer to an activity related to date or time.

80. Option (4) is correct.

The word 'despair' means a state of hopelessness. Example: It was despair that made him take such an extreme step. Thus, the correct antonym is 'hope'. All of (1), (2) and (3) are synonym of the given word.

81. Option (2) is correct.

'Vain' means 'unsuccessful; of no value'. Example: Radha had burned the midnight oil to clear the entrance, but all in vain. She did not get through. (1) is an antonym. While 'useless' is a synonym.

82. Option (3) is correct.

The blank needs an adjective. Thus, the correct statement is : Last year the performance of this production unit was fantastic. But (1) is a preposition and (4) is a verb. While 'tall' cannot describe a performance; so it is most appropriately 'fantastic'.

83. Option (4) is correct.

The word 'arid' means 'Parched / Dry / Scorched'. Evidently, the antonym is 'wet'.

84. Option (4) is correct.

In the sentence, An ant uses it's feelers or antennae to 'talk' to other ants by passing messages through them, the incorrect part is 'it's feelers'. This is so because 'it's' is a contraction and should be used instead of 'it is' or 'it has'. While 'its' is the possessive word for neuter gender. Therefore, 'it's feelers' will be replaced by 'its feelers' as feelers or antennae belong to the ant (possessive pronoun).

85. Option (1) is correct.

'Develope' is the incorrectly spelt word. It is 'Develop', meaning 'to (cause something to) grow or change into a more advanced, larger, or stronger form'. Example: The infant gradually developed the sense of sight and sound.

86. Option (1) is correct.

In the sentence, 'We used to keep large plates of fruit on a table nearer a window in the dining-room', 'nearer a window' is the erroneous part. This is so because 'nearer' is the comparative degree of adverb, but there is no comparison being made in the statement. So, the positive degree 'near' is appropriate, meaning 'not far away'. Thus, the correct sentence is: We used to keep large plates of fruit on a table near a window in the dining-room.

87. Option (4) is correct.

The blank mandates a pronoun in the subjective case. While, 'us' and 'them' categorize under the objective case. While 'they' is a plural pronoun, so it is eliminated because the antecedent is 'the butterfly farm' (a singular noun). Thus, the correct sentence is: We went to see the butterfly farm. It was very close to our hotel.

88. Option (2) is correct.

The blank deems fit a positive adjective that is the reason for the happiness. In that case the lunch must have been tasty. Thus, the correct sentence is: He offered us delicious food items for lunch and we were happy. While , lucrative is profitable; thus, inappropriate.

89. Option (2) is correct.

Alien means a being that comes from or lives in another world. Annals mean a record of events year by year. Archive is a collection of historical records relating to a place, organization, or family. While, 'alias' means 'a false or assumed identity'. Example: Eric Blair, alias George Orwel had written the famous satire 'Animal Farm'.

90. Option (4) is correct.

The National Aeronautics and Space Administration's (NASA) Viking Mission to Mars was composed of two spacecraft. The auxiliary verb 'was' always takes the participle form of verb, so 'composed' is correct. moreover, composed is followed by 'of'.

91. Option (4) is correct.

Viking 1 and Viking 2 each consisting of ... The mention of both Vikings warrant them to be treated them individually, so 'each' is the correct pronoun.

92. Option (4) is correct.

Viking 1 and Viking 2 each consisting of an orbiter and a lander. The article 'a' deems fit before the noun 'lander' due to its consonant sound.

93. Option (2) is correct.

The primary objectives were to obtain images and samples. This is an error of subject verb agreement. The subject is in plural 'objectives', so the verb will be a plural too, so 'were' is the correct choice.

94. Option (4) is correct.

The primary objectives were to obtain images and samples for the Martian surface and soil. 'For' is used to talk about a purpose or a reason for something.

95. Option (1) is correct.

'Substantial' means 'large in size, value or importance'. Thus, 'considerable is correct.

96. Option (4) is correct.

In the sentence, 'The chameleon's tongue is too long that it keeps it folded in the mouth', the part 'too long that' is incorrect and hence it needs to be replaced by 'so long that' because the co-relative conjunction 'so...that' is used to introduce reason / purpose. Here, the reason behind the chameleon keeping the tongue folded in the mouth is its length. The correct sentence is: The chameleon's tongue is so long that it keeps it folded in the mouth'.

97. Option (1) is correct.

The idiom 'Draw a Blank' means 'to fail to get an answer or a result'. Example: The interviewer asked questions from mythology, but the Simmy drew a blank. Thus, the correct meaning is : unable to remember.

98. Option (1) is correct.

One who loves books is a Bibliophile; Veteran is a person who has had a lot of experience of a particular activity. Orator is a public speaker, especially one who is eloquent or skilled. Librarian is a person in charge of or assisting in a library.

99. Option (2) is correct.

In, 'the most pleasant way was to going and having a good dinner at some fine restaurant'; the part 'was to going and having' is incorrect, and will be replaced by 'was to go and have'. The gerund is to be replaced by an infinitive because 'to' form always takes the base form of the verb after it.

100. Option (3) is correct.

The man insisted on buying the doves because he was fond of birds. 'Because' is a conjunction of reason- the reason for the man buying the doves was his love for birds.