

STAFF SELECTION COMMISSION

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

SOLVED PAPER

(13th February 2023: Shift-2)

Time Allotted- 1 hours

Max marks- 160

Important Instructions:-

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

General Intelligence & Reasoning

1. Three different positions of the same dice are shown. Find the number on the face opposite the face showing '4'.

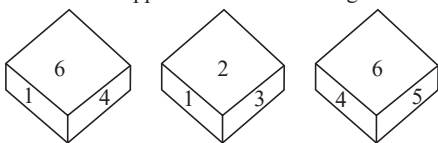
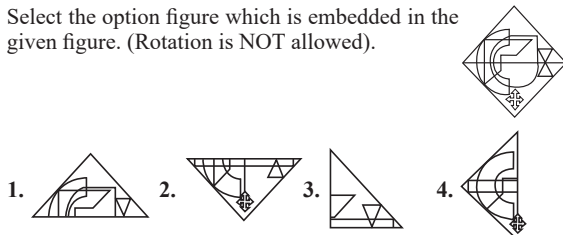


Figure 1 Figure 2 Figure 3

1. 5 2. 3 3. 6 4. 2
2. Which letter-cluster will replace the question mark (?) to complete the given series?
ZYXV, UTSQ, PONL, KJIG, ?
1. FDCB 2. FEDB 3. FEDC 4. FDAB
3. In a certain code language, GUIDE is written as 'KWMFI', and SLICE is written as 'WNMEI'. How will 'FAITH' be written in the same code language?
1. JDNVL 2. JDNWL 3. JCNVL 4. JCMVL
4. Six students P,Q,R,S,T and U are sitting around a circular table facing the centre. P is sitting second to the right of Q. S is an immediate neighbour of both Q and R. U is sitting third to the left of R. T is an immediate neighbour of both P and R. Who is the immediate neighbour of P and Q?
1. S 2. T 3. U 4. R
5. In a certain code language, 'RESULT' is written as 'LUTERS' and 'BARLEY' is written as 'ELYABR'. How will 'HEAVEN' be written in the same code language?
1. EVNEHA 2. EANVHE 3. VEENAH 4. AEVNHA
6. Select the option figure which is embedded in the given figure. (Rotation is NOT allowed).

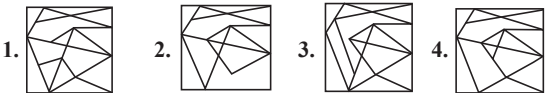


7. Select the option that is related to the third word in the same way as the second word is related to the first word.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Mango : Fruit :: Rumba : ?

1. Sea 2. Dance 3. Tall 4. Food
8. Which two signs should be interchanged to make the below equation mathematically correct?
 $81 + 3 \div 27 - 8 \times 24 = 25$
1. \div and + 2. + and - 3. \div and \times 4. \times and +
9. Which of the following numbers will replace the question mark (?) in the given series?
198, 194, 185, ?, 144, 108
1. 172 2. 175 3. 169 4. 182
10. Eight girls P, Q, R, S, U, V, T and W are sitting around a circular table, facing the centre.
V is sitting to the immediate left of Q and to the immediate right of U. W is sitting third to the left of V and second to the right of P. R is the immediate neighbour of P and Q. T is sitting fourth to the left of R. Who is sitting third to the left of U?
1. S 2. V 3. P 4. T
11. Select the number from among the given options that can replace the question mark (?) in the following series.
 $\frac{1}{248}, \frac{1}{217}, \frac{1}{186}, ?, \frac{1}{124}$
1. $\frac{1}{179}$ 2. $\frac{1}{138}$ 3. $\frac{1}{147}$ 4. $\frac{1}{155}$
12. Which two symbols, from the given options, should be interchanged to make the given equation correct?
 $(9 \div 3 + 169 \times 13) \div 5 - 10 + 16 = 206$
1. \times and - 2. \div and \times 3. + and - 4. + and \times
13. Select the set in which the numbers are related in the same way as are the numbers of the following 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)
(12, 87, 17)
(19, 117, 20)
1. (13, 75, 12) 2. (8, 96, 14) 3. (11, 121, 22) 4. (15, 69, 9)
14. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.
NEAR : PVZP :: GONE : ILMC :: TAXI : ?
1. GZCR 2. RCZK 3. VZCM 4. VZCG

15. Select the option figure in which the given figure is embedded (rotation is NOT allowed).



16. Which option represents the correct order of the given words as they would appear in the English dictionary?

1 danger 2 damage 3 daring 4 darling 5 dark

1. 2,1,3,5,4 2. 2,3,1,4,5 3. 2,1,3,4,5 4. 3,1,2,4,5

17. In this question, three statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follows/follow from the statements.

Statements:

All apples are fruits.

All fruits are vegetables.

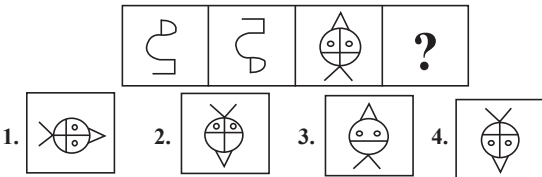
Some vegetables are fresh.

Conclusions:

I. All apples are fresh.

II. Some fruits are fresh.

1. Only conclusion I follows.
2. Only conclusion II follows.
3. Neither conclusion I nor II follows.
4. Both conclusions I and II follow.
18. Find the options which is related to the third figure in the same manner as second figure is related with the first figure. (First figure is the leftmost figure.)



19. In a family, there are 7 members. X and Y are a married couple. X is the father of L. M is the wife of L. C is the brother of L. C has one son O. P is the sister of O. How is C related to P?

1. Father 2. Son 3. Father's father 4. Father's brother

20. Which of the following letter-clusters will replace the question mark (?) in the given series?

DHMO, EILN, FJKM, ?, HLIK

1. GLKL 2. GLJL 3. GKJL 4. HKJK

General Knowledge & General Awareness

21. 'Paika' is a folk dance performed by members of the society in _____.

1. Maharashtra 2. Tamil Nadu 3. Haryana 4. Jharkhand

22. The _____ (ABDM) aims to develop the backbone necessary to support the integrated digital health infrastructure of the country.

1. Ajay Bharat Digital Mission
2. Ayushman Bharat Digital Management
3. Ayushman Bharat Digital Mission
4. Ayushman Bharat Digital Map

23. Which one of them is NOT a fundamental duty?

1. Cherishing the ideas of national freedom struggle
2. Respecting the national anthem
3. Respecting the national flag
4. Duty to cast your vote

24. Ziyauddin Barani wrote his chronicle's first version in _____ year.

1. 1356 2. 1288 3. 1358 4. 1402

25. Dhananjaya Yashwant Chandrachud has been appointed as the _____ Chief Justice of India in October 2022.

1. 30th 2. 20th 3. 40th 4. 50th

26. Who has been selected as the new Chief Executive Officer of National Intelligence Grid (NATGRID) in August 2022 by the Central Government?

1. Piyush Goyal 2. Ashish Gupta
3. Satya Lolla 4. Raghu Raman

27. The festival of Ram Navami is celebrated in the Hindu month of _____.

1. Kartik 2. Phalgun 3. Chaitra 4. Ashvin

28. Battle of Plassey was fought in _____.

1. 1764 2. 1755 3. 1760 4. 1757

29. Which among the following articles of the Indian Constitution relates to the Attorney General of India?

1. Article 76 2. Article 279A
3. Article 243ZE 4. Article 243I

30. Husk of a coconut is made of _____ tissue.

1. Sclerenchyma 2. Collenchyma
3. Xylem 4. Parenchyma

31. _____ is a trade policy that doesn't restrict imports or exports.

1. Fair trade 2. Free trade 3. Local trade 4. Swiss trade

32. Who was the first transgender to be honoured with Padma Shri?

1. Karthik Chandra Rath 2. Shanti Devi
3. Narthaki Nataraj 4. Rama Murthy

33. Who was the host of the Asian Games 2018?

1. Singapore 2. India 3. Indonesia 4. China

34. As a Banker to Banks, the _____ also acts as the 'lender of the last resort'.

1. Nationalised bank of India 2. State bank of India
3. Reserve bank of India 4. Union bank of India

35. India won its last ODI Cricket world cup in which year as of 2022?

1. 2011 2. 2003 3. 2007 4. 1983

36. The chemical reaction which involves addition of _____ or removal of _____ is called reduction.

1. carbon dioxide, hydrogen 2. carbon dioxide, oxygen
3. hydrogen, oxygen 4. oxygen, hydrogen

37. Match the following types of industries to their examples:

(a) Agro based industry (i) Hotels and Restaurants
(b) Public sector industry (ii) Iron and steel industry
(c) Private sector industry (iii) Silk textile
(d) Mineral based industry (iv) BHEL and SAIL

1. a-iv, b-iii, c-ii, d-i 2. a-i, b-ii, c-iii, d-iv
3. a-iv, b-ii, c-i, d-iii 4. a-iii, b-iv, c-i, d-ii

38. Which instrument is used to measure the vibrations during an earthquake?

1. Mercalli scale 2. Seismograph
3. Hygrometer 4. Richter Scale

39. What was the slogan of the 2011 Census of India?

1. Our Census - Our Pride
2. Our Census - Secured Future
3. India's Census - India's Pride
4. Our Census - Our Future

40. The Fourth Five Year Plan had began in the year _____.

1. 1969 2. 1966 3. 1962 4. 1973

Elementary Mathematics

41. The average weight of eight persons is 40 kg. If one person is removed, then the average weight becomes 38 kg. The weight of the removed person is:
1. 38 kg 2. 54 kg 3. 33.25 kg 4. 78 kg
42. The cost price of an article is 64% of the marked price. Calculate the gain percentage after allowing a discount of 20%.
1. 35% 2. 25% 3. 30% 4. 20%
43. Atul alone can complete a work in 114 days. How many persons were required with the same efficiency as Atul to complete the same work in 19 days?
1. 7 2. 6 3. 5 4. 8
44. There is a cone with diameter 14 cm and height 12 cm. It is being filled with water at a rate of 4 cm³ in every 10 s. How long will it take to fill the cone? $\left(\text{Use } \pi = \frac{22}{7} \right)$
1. 616 s 2. 1540 s 3. 3080 s 4. 6160 s
45. The fourth proportional to 2 hours 40 minutes, 1 hours 20 minutes and 10 hours is:
1. 4 hours 2. 6 hours 3. 5 hours 4. 2 hours
46. The average weight of 34 persons is increased by 3 kg when one person weighing 90 kg is replaced by a new person. Weight of the new person is:
1. 196 kg 2. 202 kg 3. 190 kg 4. 192 kg
47. Find the difference between the digits of the greatest number that can exactly divide 144 and 216?
1. 2 2. 4 3. 3 4. 5
48. Two persons P and Q working together can do a piece of work in 36 days. Q alone can do it in 45 days. Q alone start the work and left the work after 5 days. How many days will P take to complete the remaining work?
1. 180 2. 120 3. 140 4. 160
49. Divide ₹ 5,309 between A and B, so that the amount of A after 4 years is equal to the amount B after 6 years, the interest being compounded at 6% per annum, compounding annually.
1. ₹ 2,809, ₹ 2,500 2. ₹ 2,759, ₹ 2550
3. ₹ 2,659, ₹ 2,650 4. ₹ 2,709, ₹ 2,600
50. If the third proportion to 3 and 27 is 'x', then what would be the HCF of 'x' and 27?
1. 9 2. 27 3. 3 4. 15
51. If $\frac{5}{8}$ of $184 \times 15 \div 5 + k = 513 \div 9 + 435$, then the value of k is:
1. 192 2. 147 3. 239 4. 136
52. In an election between two candidates, 80% of the voters cast their votes out of which 5% of votes were declared invalid. A candidate got 285000 votes which was 75% of the total valid votes. The total number of voters enrolled for that election was:
1. 500000 2. 450000 3. 400000 4. 550000
53. A solid hemisphere has a volume of $1,152\pi$ cm³. Find the curved surface area of the hemisphere.
1. 344 cm² 2. 288π cm² 3. 302π cm² 4. 294 cm²
54. The population of a city in the beginning of 2019 was 82,000. Its population is increasing at a rate of 2% annually. What is its population (rounded off to the nearest integer) in the beginning of 2022?
1. 85000 2. 86789 3. 88000 4. 87019
55. Shlok drives the first 140 km in 3 hrs and the next 180 km in 5 hrs. What is his average speed (in km/h) for the entire trip?
1. 50 2. 45 3. 30 4. 40
56. A man sells rice at 10% profit and uses a weight that is 20% less than the actual measure. His gain percentage is:
1. $37\frac{2}{3}\%$ 2. $37\frac{1}{2}\%$ 3. $37\frac{1}{5}\%$ 4. $37\frac{1}{3}\%$
57. The selling price of a product is such that the seller earns a profit of 20% on the cost price. Determine the ratio of selling price to cost price.
1. $\frac{3}{4}$ 2. $\frac{5}{6}$ 3. $\frac{6}{5}$ 4. $\frac{4}{3}$
58. Marked price of an article is ₹ 1600 but Rohan gets a discount of 20 percent. He sells the article for ₹ 1600. Rohan's gain percent is:
1. 18% 2. 22% 3. 25% 4. 20%
59. A fruit merchant makes a profit of 25% by selling mangoes at a certain price. If he charges ₹ 3 more on each mango, he will gain 40%. Find the cost price of one mango
1. ₹ 30 2. ₹ 25
3. ₹ 20 4. ₹ 15
60. A boat is moving in still water at a speed of 15 km/h. The speed of the stream is 3 km/h. How much time will the boat take to cover 6 km upstream?
1. 30 minutes 2. 15 minutes 3. 20 minutes 4. 45 minutes

English

61. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in the blanks.
Blood transfusion is a procedure that starts with the doctor (1) _____ the patients' blood type. In case of a wrong transfusion in the immune (2) _____ of an individual, it leads to an infection.
1. diagnosing; structure 2. treating; process
3. determining; system 4. settling; order
62. Select the most appropriate synonym of the underlined word. Since the last few hours his pulse rate is constant.
1. Steady 2. Fickle 3. Pitiful 4. Reflective
63. Select the most appropriate option to substitute the underlined segment in the given sentence to make it a meaningful sentence. If no substitution is required, select 'No substitution'.
There are hundred of superstitions that survive in various parts of the country, and the study of them is rather amusing.
1. There are hundred of superstition that survive in various parts of the country, and the study of them is rather amusing.
2. There are hundred of superstition that survived in various parts of the country, and the study of them is rather amusing.
3. No substitution
4. There are hundreds of superstitions that survive in various parts of the country, and the study of them is rather amusing.
64. Select the most appropriate meaning of the given idiom. Wear your heart on your sleeve
1. Imagining unreal things about others
2. Wearing untidy clothes intentionally
3. Spreading scandals mercilessly
4. Expressing emotions very openly
65. Select the most appropriate ANTONYM of the given word. Lucid
1. Dark 2. Bloat 3. Jolt 4. Stark

66. Select the most appropriate synonym of the given word.
Valid
1. Illicit 2. Evil 3. Logical 4. Fake
67. Select the most appropriate ANTONYM of the given word.
Verbose
1. Talkative 2. Brief 3. Polished 4. Wordy
68. The given sentence is divided into three segments. Select the option that has the segment with a grammatical error. If there is no error, select 'no error' as your answer.
Ameya won't / eat / any junk food at all.
1. Ameya won't 2. No error
3. eat 4. any junk food at all
69. Select the INCORRECTLY spelt word.
1. Brandish 2. Covardice 3. Treachery 4. Statutory
70. Select the most appropriate option to fill in the blank.
My uncle's legal _____ is his son.
1. heir 2. hair 3. here 4. hare
71. Select the most appropriate spelling that can correctly substitute the misspelt underlined segment in the given sentence.
The thick dirt on the building was the acretion of ages.
1. accration 2. accretion 3. acration 4. acretion
72. Select the most appropriate option to fill in the blank.
I have made the basket for going to the picnic and I've packed some sandwiches _____.
1. two 2. too 3. to 4. toot
73. Select the most appropriate homonym to fill in the blank.
The authorities _____ the unregistered companies.
1. sees 2. seize 3. seas 4. cease
74. Select the most appropriate meaning of the given idiom.
To add fuel to fire.
1. To make a bad situation worse
2. To speak against someone
3. To fight over trivial thing
4. To start the conversation
75. Substitute the underlined words with the option that is closest in meaning to it.
Rahul likes to keep his house spic and span.
1. shabby and dirty 2. neat and clean
3. bright and glory 4. rich and famous

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.

Ayurveda views a person more than bones and muscle. According to it, you are a spirit that represents the *vata*, pitta, and *kapha* elements. Ayurveda (1) _____ impacts your health by bringing an (2) _____ in your body, mind, and soul. By consuming healthy food according to the body's constitution, and performing yoga stretches, and meditation, you will start to see (3) _____ results. Ayurveda impacts the body at the deepest cellular levels. It helps in healing, and (4) _____ of cells, to protect it from a wide range of ailments naturally. According to Ayurveda, when a person eats wrong food, then "ama" or toxin gets deposited in the body. If this waste-product is not eliminated from the body soon, then it starts to spread in different areas of the body. This is the major reason behind experiencing an (5) _____ in the body.

76. Select the most appropriate option to fill in blank 1.
1. casually 2. positively 3. negatively 4. probably
77. Select the most appropriate option to fill in blank 2.
1. foundation 2. equilibrium 3. basis 4. substance
78. Select the most appropriate option to fill in blank 3.
1. invisible 2. gentle 3. sluggish 4. visible
79. Select the most appropriate option to fill in blank 4.
1. regeneration 2. benefit 3. degeneration 4. loss
80. Select the most appropriate option to fill in blank 5.
1. weakness 2. potential 3. energy 4. imbalance

Answer Key

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

Answers with Explanations

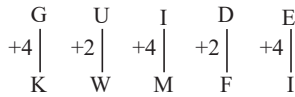
1. **Option (2) is correct.**
From given dice 1 and 2, as common number 1.
So, In clockwise direction the arrangement of both dices are as follows,
1 - 6 - 4
1 - 2 - 3
So, 6 is opposite to 2 and 4 is opposite to 3.
Hence, 3 will face opposite to 4.
2. **Option (2) is correct.**
Given series: ZYXV, UTSQ, PONL, KJIG, ?
The pattern followed here is:

Z	Y	X	V
-5	-5	-5	-5
U	T	S	Q
-5	-5	-5	-5
P	O	N	L
-5	-5	-5	-5
K	J	I	G
-5	-5	-5	-5
F	E	D	B

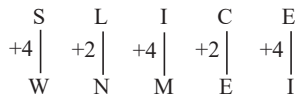
Hence, FEDB is the correct answer.

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

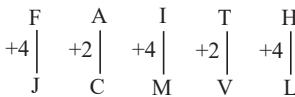
Given that: GUIDE is written as KWMFI
Then pattern followed here is:



And, SLICE is written as WNMEI



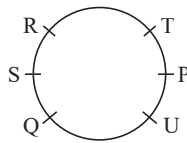
Similarly, FAITH will be written as:



Hence, JCMVL is the correct answer.

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

According to the question, following sitting arrangement can be made:
Hence, U is an immediate neighbour of both P and Q.

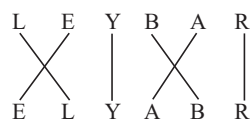


5. **Option (1) is correct.**

Given that: RESULT is written as LUTERS
Here, 1st three letters are swapped with last three letters and then the following formation is done:
RESULT → LUTERS



And, BARLEY → ELYABR



Similarly, for HEAVEN → VENHEA



Hence, EVNEHA is the correct answer.

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

Given image:



The following answer figure is embedded:



7. **Option (2) is correct.**

As, Mango is a type of fruit, similarly, Rumba is a type of dance.

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

Given equation: $81 + 3 \div 27 - 8 \times 24 = 25$
Upon checking option (4) and interchanging \times and \div , we get:
 $81 \times 3 \div 27 - 8 + 24 = 25$

$$\Rightarrow 81 \times \frac{1}{9} - 8 + 24 = 25$$

$$\Rightarrow 9 - 8 + 24 = 25$$

$$\Rightarrow 25 = 25$$

$$\text{LHS} = \text{RHS}$$

9. **Option (3) is correct.**

Given series: 198, 194, 185, ?, 144, 108

The pattern followed here is:

$$198 - (2)^2 = 194$$

$$194 - (3)^2 = 185$$

$$185 - (4)^2 = 169$$

$$169 - (5)^2 = 144$$

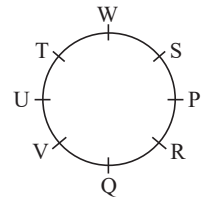
$$144 - (6)^2 = 108$$

Hence, 169 is the correct answer.

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

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

Hence, S is sitting third to the left of U.



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

Given series: $\frac{1}{248}, \frac{1}{217}, \frac{1}{186}, ?, \frac{1}{124}$

Here, the denominator is decreasing by 31.

So,

$$248 - 31 = 217$$

$$217 - 31 = 186$$

$$186 - 31 = 155$$

$$155 - 31 = 124$$

Hence, $\frac{1}{155}$ is the correct answer.

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

Given equation: $(9 \div 3 + 169 \times 13) \div 5 - 10 + 16 = 206$

Upon checking option (2), we get:

$$(9 \times 3 + 169 \div 13) \times 5 - 10 + 16$$

$$\Rightarrow (27 + 13) \times 5 - 10 + 16$$

$$\Rightarrow 40 \times 5 - 10 + 16$$

$$\Rightarrow 200 - 10 + 16$$

$$\Rightarrow 206$$

$$\text{LHS} = \text{RHS}$$

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

Given sets:

(12, 87, 17)

(19, 117, 20)

The pattern followed here is:

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

So, for (12, 87, 17)

$$(12 + 17) \times 3$$

$$\Rightarrow 29 \times 3 = 87$$

And, for (19, 117, 20)

$$(19 + 20) \times 3$$

$$\Rightarrow 39 \times 3 = 117$$

Similarly, upon checking option (1), we get

$$(13, 75, 12)$$

$$(13 + 12) \times 3$$

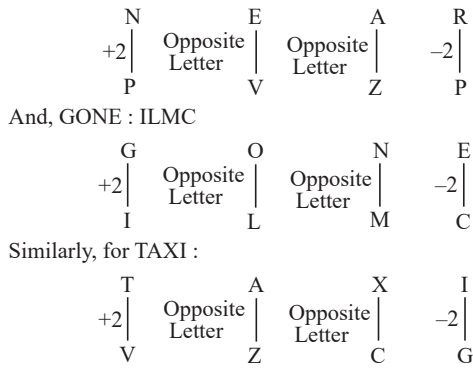
$$\Rightarrow 25 \times 3 = 75$$

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

Given that:

NEAR : PVZP

The pattern followed here is:



Hence, VZCG is the correct answer.

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

Given figure:



The above figure is embedded in option (4) as highlighted below:



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

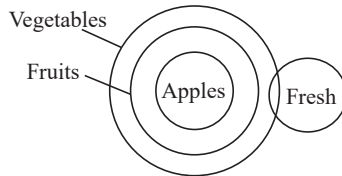
The correct order of the given words is as follows:

2. Damage	1. Danger	3. Daring	5. Dark	4. Darling
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Hence, 2, 1, 3, 5, 4 is the correct answer.

17. **Option (3) is correct.**

As per the given statements, following Venn diagram can be made:



Conclusion I- All apples are fresh - false.

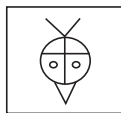
Conclusion II- Some fruits are fresh - false.

Hence, neither conclusion I nor II follows.

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

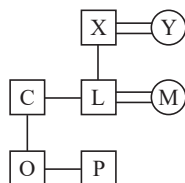
The second image is a flipped version of first image.

So, if we flip the third image, we will get the following figure:



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

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

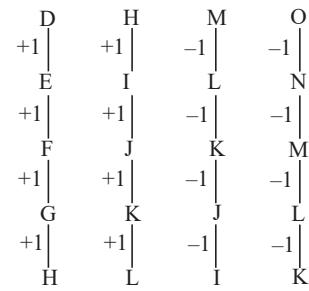


Hence, C is the father of P.

20. **Option (3) is correct.**

Given series: DHMO, EILN, FJKM, ?, HLIK

The pattern followed here is:



Hence, GKJL is the correct answer.

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

Paika is a traditional folk dance originating from Jharkhand, integral to the cultural heritage of the region. It is frequently performed during festive occasions and celebrations.

22. **Option (3) is correct.**

The Ayushman Bharat Digital Mission (ABDM) seeks to build the essential infrastructure for a unified digital health system in the country.

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

Fundamental duties are enshrined in the Indian Constitution under Part IV-A (Article 51A). These duties outline broad principles expected from citizens, but do not entail legal enforcement. Casting your vote is a right, not a duty. The right to vote is guaranteed under Article 326 of the Constitution, granting citizens the freedom to participate in the electoral process.

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

Ziyauddin Barani wrote his chronicle's first version in 1356. He later revised it in 1358.

25. **Option (4) is Correct**

Justice Dhananjaya Yashwant Chandrachud took office as the 50th Chief Justice of India on October 9, 2022, and officially began his duties on November 9, 2022.

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

Piyush Goyal has been selected as the new Chief Executive Officer of National Intelligence Grid (NATGRID) in August 2022 by the Central Government

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

Ram Navami is celebrated in the Hindu month of Chaitra, marking the birth anniversary of Lord Rama, a significant deity in Hinduism. On this auspicious occasion, devotees engage in various rituals and prayers to honour Lord Rama.

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

On June 23, 1757, the Battle of Plassey unfolded near the town of Plassey in Bengal, signifying a crucial moment in Indian history during the era of British colonization.

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

The role and powers of the Attorney General of India are specified in Article 76 of the Indian Constitution. Article 76 of the Indian Constitution is dedicated to the appointment, duties, and powers of the Attorney General of India. This article defines the crucial role of the Attorney General as the principal legal advisor to the Government of India. It encompasses responsibilities such as representing the government in courts and fulfilling other legal functions assigned to this office.

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

The husk of a coconut is primarily composed of Sclerenchyma tissue. Sclerenchyma is a type of simple permanent plant tissue known for its thick and lignified cell walls, providing strength and rigidity. This structural characteristic makes it

well-suited for the husk of a coconut, offering protection to the hard shell and inner fruit against potential damage and harsh environmental conditions.

31. Option (2) is correct.

Free trade is a trade strategy that avoids limiting imports or exports. It promotes open and unrestricted commerce between countries, facilitating the free flow of goods and services across borders. This approach seeks to stimulate economic growth, improve efficiency, and promote international collaboration in trade activities

32. Option (3) is correct.

Narthaki Nataraj, the first transgender Padma Shri awardee, received recognition for her outstanding contributions to classical dance and activism. The Padma Shri is a prestigious Indian civilian honour.

33. Option (3) is correct.

Indonesia was the host country for the Asian Games 2018. Jakarta and Palembang were the co-host cities for this multi-sport event, which took place from August 18 to September 2, 2018.

34. Option (3) is correct.

The Reserve Bank of India (RBI), serving as the “lender of the last resort” for banks, plays a vital role by offering financial support during crises, thereby contributing to the financial system’s stability.

35. Option (1) is correct.

India won its last ODI Cricket World Cup in the year 2011. The memorable victory occurred on April 2, 2011, when India triumphed over Sri Lanka in the final at Wankhede Stadium in Mumbai.

36. Option (3) is correct.

Reduction is a chemical reaction where substances gain electrons by adding hydrogen or removing oxygen. This process commonly occurs concurrently with oxidation reactions, leading to the formation of redox reactions.

37. Option (4) is correct.

- (a) Agro based industry - Silk textile
- (b) Public sector industry - BHEL and SAIL
- (c) Private sector industry - Hotels and Restaurants
- (d) Mineral based industry - Iron and steel industry

38. Option (2) is correct.

A seismograph is a device employed to measure and document ground vibrations and movements occurring during an earthquake. It captures and records the seismic waves produced by the shifting movements of the Earth's crust.

39. Option (4) is correct.

The 2011 Census of India adopted the slogan “Our Census - Our Future” to emphasize its significance in:

- Gaining insights into the population dynamics of India.
- Developing policies and planning for the future requirements of the country.
- Encouraging citizens to actively contribute to shaping a better future for themselves and the nation.

40. Option (1) is correct.

The Fourth Five-Year Plan in India started in 1969 and concluded in 1974. It's crucial to note that India's Five-Year Plans are consecutive, overlapping strategies for economic development implemented by the central government.

41. Option (2) is correct.

Given that,

The average weight of 8 persons = 40 kg

So, total weight of 8 persons = $40 \times 8 = 320$ kg

After removing one person, the average weight of 7 persons = 38 kg

So, total weight of 7 persons = $38 \times 7 = 266$ kg

Hence, the weight of removed person = $320 - 266 = 54$ kg

42. Option (2) is correct.

Let the MRP of the article = ₹100

So, the cost price = ₹64

And selling price = ₹80

According to the question,

$$\text{Gain percentage} = \frac{80 - 64}{64} \times 100 = 25\%$$

43. Option (2) is correct.

Let x persons were required with the same efficiency as Atul to complete the same work in 19 days.

Using, $M_1D_1 = M_2D_2$

$$\Rightarrow 1 \times 114 = x \times 19$$

$$\Rightarrow x = 6$$

44. Option (2) is correct.

Given that,

Diameter of cone = 14 cm

And height = 12 cm

$$\text{So, volume} = \frac{1}{3} \pi r^2 h = \frac{1}{3} \times \frac{22}{7} \times 7 \times 7 \times 12 = 616 \text{ cm}^3$$

$$\text{So, required time to fill the cone} = \frac{616}{4} \times 10 = 1540 \text{ s}$$

45. Option (3) is correct.

Let the fourth proportional to 2 hours 40 minutes, 1 hours 20 minutes and 10 hours is x .

$$\text{Then, } \frac{3}{4} = \frac{10}{x}$$

$$\Rightarrow x = 5 \text{ hr}$$

46. Option (4) is correct.

Total number of persons = 34

Let the total weight of 34 persons = x kg

And weight of new person = y kg

After replacement, total weight of 34 persons = $x - 90 + y$

Also, total weight of 34 persons after replacement = $x + 3 \times 34 = x + 102$

$$\text{So, } x + 102 = x - 90 + y$$

$$\Rightarrow y = 102 + 90 = 192 \text{ kg}$$

47. Option (4) is correct.

The greatest number that can exactly divide 144 and 216 = HCF (144, 216) = 72

So, required difference = $7 - 2 = 5$

48. Option (4) is correct.

Given that,

Persons P and Q working together can do a piece of work in = 36 days

Q alone can do it in = 45 days

Let total work = LCM (36, 45) = 180 unit

$$\text{So, efficiency of P and Q together} = \frac{180}{36} = 5 \text{ unit per day}$$

$$\text{And efficiency of Q alone} = \frac{180}{45} = 4 \text{ unit per day}$$

So, efficiency of P alone = $5 - 4 = 1$ unit per day

According to the question,

Remaining work after 5 days = $180 - (5 \times 4) = 160$ unit.

So, time taken by P alone to finish the remaining work = $\frac{160}{1}$
= 160 days

49. Option (1) is correct.

Given that,

Total amount = ₹5309

Let ₹ x given to A and ₹(5309 - x) given to B.

According to the question,

Using successive percentage,

$$\Rightarrow x \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100}$$

$$= (5309 - x) \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100} \times \frac{106}{100}$$

$$\Rightarrow 10000x = 5309 \times 106 \times 106 - 11236x$$

$$\Rightarrow 21236x = 5309 \times 106 \times 106$$

$$\Rightarrow x = 2809$$

So, amount given to A = ₹2809

Amount given to B = 5309 - 2809 = ₹2500

50. Option (2) is correct.

Using proportion, $\frac{3}{27} = \frac{27}{x}$

$$\Rightarrow x = 243$$

Now, HCF of 243 and 27 = 27

51. Option (2) is correct.

According to the question,

$$\Rightarrow \frac{5}{8} \text{ of } 184 \times 15 \div 5 + K = 513 \div 9 + 435$$

$$\Rightarrow 115 \times 15 \div 5 + K = 57 + 435$$

$$\Rightarrow 115 \times 15 \div 5 + K = 57 + 435$$

$$\Rightarrow 345 + K = 492$$

$$\Rightarrow K = 147$$

52. Option (1) is correct.

Given that, Candidate got 285000 votes which was 75% of the total valid votes.

Let total number of voters enrolled = x

According to the question,

$$\Rightarrow x \times \frac{80}{100} \times \frac{95}{100} \times \frac{75}{100} = 285000$$

$$\Rightarrow x = 500000$$

53. Option (2) is correct.

Given that,

Volume of hemisphere = $1152\pi \text{ cm}^3$

Using, Volume of hemisphere = $\frac{2}{3}\pi r^3 = 1152\pi$

$$r = 12 \text{ cm}$$

So, Curved surface area of hemisphere = $2\pi r^2 = 2 \times \pi \times 12 \times 12$
= $288\pi \text{ cm}^2$

54. Option (4) is correct.

Given that,

The population of the city in 2019 = 82000

According to the question,

$$\text{Population in the beginning of 2022} = 82000 \times \frac{102}{100} \times \frac{102}{100} \times \frac{102}{100}$$

$$= 87019$$

55. Option (4) is correct.

Using, Average speed = $\frac{\text{Total Distance}}{\text{Total time}}$

According to the question,

$$\text{Average speed} = \frac{140 + 180}{3 + 5} = \frac{320}{8} = 40 \text{ km/h}$$

56. Option (2) is correct.

Let the cost price of the article = ₹100

So, selling price = ₹110

But the man is using a weight which is 20% less than actual.

So, actual cost price for the man = ₹80,

$$\text{Profit percentage} = \frac{110 - 80}{80} \times 100 = 37\frac{1}{2}\%$$

57. Option (3) is correct.

Let the cost price = ₹100

So, the selling price = ₹120

$$\text{Hence, required ratio} = \frac{120}{100} = \frac{6}{5}$$

58. Option (2) is correct.

Given that,

Marked price = ₹1600

According to the question,

$$\text{Cost price for Rohan} = 1600 \times \frac{80}{100} = ₹1280$$

So, profit percentage after selling it at ₹1600

$$= \frac{1600 - 1280}{1280} \times 100 = 25\%$$

59. Option (3) is correct.

Given that,

Let the cost price of mango = Rs. x

So, selling price = Rs. $1.25x$

New selling price = $1.25x + 3$

According to the question,

$$\Rightarrow \frac{1.25x + 3 - x}{x} \times 100 = 40$$

$$\Rightarrow 2.5x + 30 = 4x$$

$$\Rightarrow x = 20$$

60. Option (1) is correct.

Given that,

Speed of boat = 15 km/h

Speed of stream = 3 km/h

So, upstream speed = $15 - 3 = 12 \text{ km/h}$

$$\text{Required time} = \frac{6}{12} = \frac{1}{2} \text{ hr} = 30 \text{ min}$$

61. Option (3) is correct.

The sentence mentions the first step of a blood transfusion. The word that fits in the first blank is "determine," because before starting a blood transfusion, the doctor needs to know the blood group of the patient. So, it can't be: treating, diagnosing, or settling. "System" is the best word for the second blank. Because the latter part talks about the immune system's response in case of any mistake during a blood transfusion.

62. Option (1) is correct.

This question tests a student's knowledge of vocabulary and understanding of words in the context of a text. "Constant" means staying the same, or not getting less or more. Example: The constant noise drove me crazy. The synonym for "constant" is "steady."

63. Option (4) is correct.

The sentence requires a plural subject, because the given verb "are" is plural. Also the sentence wants to convey that a lot of myths and beliefs still exist among people in the country. So, the word "hundred" should be changed to "hundreds."

64. Option (4) is correct.

This question tests a student's knowledge of vocabulary. The idiom "wear your heart on your sleeve" means to make one's

feelings apparent. Example: She was not the kind who would wear her heart on her sleeve, so she never divulged about her past to her husband.

65. Option (1) is correct.

This question tests a student's knowledge of vocabulary. Lucid means clearly expressed and easy to understand, or (of a person) thinking or speaking clearly. Example: She gave a clear and lucid account of her plans for the company's future. So, the antonym of "lucid" is dark.

66. Option (3) is correct.

This question tests a student's knowledge of vocabulary. Valid means (of an argument or point) having a sound basis in logic or fact; reasonable or cogent. Example: The judge passed his verdict on the basis of the valid arguments established by the defence lawyer. So, the synonym for valid is logical.

67. Option (2) is correct.

This question tests a student's knowledge of vocabulary. Verbose means using or expressing in more words than are needed. Wordy and talkative are synonyms of verbose. Example: "Much academic language is obscure and verbose." The antonym of verbose is brief.

68. Option (2) is correct.

The given sentence is grammatically correct.

69. Option (2) is correct.

This question tests a student's knowledge of vocabulary. Brandish means to wave or flourish (something, especially a weapon) as a threat or in anger or excitement. Covardice is incorrectly spelled, it should be cowardice, which means lack of bravery. Treachery means betrayal of trust. Statutory means required, permitted, or enacted by a statute.

70. Option (1) is correct.

The blank requires a word that suggests an inheritor. The word "heir" means successor or inheritor. Hare means an animal.

71. Option (2) is correct.

The correct spelling is accretion. Accretion means growth or increase by the gradual accumulation of additional layers or matter. Example: "The accretion of sediments in coastal mangroves".

72. Option (2) is correct.

The blank requires a word that is a synonym of also or in addition to. Since the sentence conveys that in addition to packaging a bag for a picnic, the person has also packed some sandwiches, thus, the correct word in the blank is "too".

73. Option (2) is correct.

A homonym is a word that sounds the same or is spelled the same as another word but has a different meaning. To see means to be conscious of what is around you by using your eyes. Seize means if the police or other officials seize something, they take possession of it with legal authority, to take something quickly and keep or hold it. Sea means a large water body. Cease means to come or bring to an end. In the given sentence the context is the holding of some unregistered companies by the authorities. Thus, the apt word is "seize".

74. Option (1) is correct.

This question tests a student's knowledge of vocabulary. The meaning of the given idiom is to make a bad situation worse. Example: The discovery that the government was aware of the cover-up has really added fuel to the fire.

75. Option (2) is correct.

This question tests a student's knowledge of vocabulary. "Spic and span" means neat, clean, and well looked after. Example: "My little house is spick and span."

76. Option (2) is correct.

The passage is on Ayurveda as a method of treatment, and the passage is about the benefits of it- in the form of good changes in the body and removal of impurities from the body. So, the first blank can be filled with the word "positively."

77. Option (2) is correct.

The second blank talks about the balance and stability Ayurveda creates on mind, body, and soul. Moreover, the blank is preceded by 'an', so the blank must have a word with a vowel sound. Thus, 'equilibrium' is the only correct answer.

78. Option (4) is correct.

The sentence mentions that by having balanced diet one can see apparent positive changes in the body. Hence, the apt word is "visible".

79. Option (1) is correct.

The blank requires a positive word because it shows how ayurveda positively impacts our body. Hence, the word "regenerates" fits in the blank.

80. Option (4) is correct.

The sentence mentions the impact of impurities left in the body. So, there has to be a negative word in the blank. Also, the paragraph tells that ayurveda creates a balance of mind, body and soul. Thus, to show negative impact "imbalance" is the apt word in the blank.