

STAFF SELECTION COMMISSION

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

SOLVED PAPER

(10th January 2023: Shift-2)

Time Allotted- 1 hours

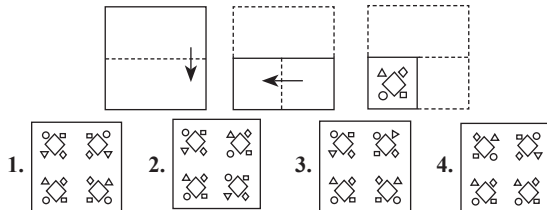
Max marks- 160

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. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown below. Select the figure which would most closely resemble the unfolded form of the paper.



2. Six girls D, K, M, P, R and S are sitting around a circular table, facing the centre. S is sitting third to the left of R. P is sitting to the immediate right of R and to the immediate left of D. M is sitting to the immediate left of R. K is sitting to the immediate right of S and to the immediate left of M. Who is the immediate neighbour of K and D?
 1. R 2. P 3. M 4. S
3. Which two signs should be interchanged to make the below equation mathematically correct?
 $42 + 12 \div 24 \times 84 - 14 = 91$
 1. + and \times 2. \div and - 3. - and + 4. \times and \div
4. 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/consonants/vowels in the word).
 Pediatrician : Children :: Dermatologist : ?
 1. Feet 2. Bones 3. Plant 4. Skin
5. Which option represents the correct order of the given words as they would appear in the English dictionary?
 1. lonely 2. longitude 3. lovely 4. lounge
 5. locker
 1. 5,1,2,3,4 2. 5,2,1,3,4 3. 5,1,2,4,3 4. 5,4,3,1,2
6. Which letter-cluster will replace the question mark (?) to complete the given series?
 UERB, RHOE, ?, LNIK, IQFN
 1. OKMH 2. OKNI 3. OKLH 4. OLMI
7. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

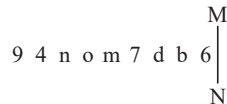
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. e.g., 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and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

- (20, 90, 10)
 (25, 135, 10)
 1. (18, 72, 10) 2. (19, 80, 15)
 3. (22, 150, 7) 4. (30, 169, 12)
8. Which of the following interchange of numbers (not digits) would make the given equation correct?
 $8 \times 15 \div 3 + 14 - 4 = 26$
 1. 15, 26 2. 4, 8 3. 14, 15 4. 3, 4
9. A @ B means 'A is the husband of B'.
 A & B means 'A is the mother of B'.
 A # B means 'A is the daughter of B'.
 A % B means 'A is the sister of B'.
 If G % V @ K & P and G # S % M, then how is S related to P?
 1. Father's mother 2. Mother-in-law
 3. Son's son 4. Father-in-law
10. Which of the following numbers will replace the question mark (?) in the given series?
 7, 50, 351, 2458, ?
 1. 17207 2. 18000 3. 13582 4. 15265
11. Which of the following terms will replace the question mark (?) in the given series?
 DBA, JHG, PNM, ?
 1. VTU 2. VTQ 3. VTS 4. KMV
12. Three statements are given followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.
Statements:
 Some cabbages are rocks.
 All rocks are wheels.
 No wheel is a scissor.
Conclusions:
 I. All cabbages are wheels.
 II. Some rocks are wheels.
 III. Some wheels are not scissiors.

1. Both conclusions I and II follow.
 2. Both conclusions I and III follow.
 3. Both conclusions II and III follow.
 4. All conclusions follow.
13. Eight people are sitting in two parallel rows with 4 people each in such a way that there is equal distance between adjacent persons and they are facing each other.
 In row I – L, M, N and O are seated and all of them are facing south.
 In row II – P, Q, R and S are seated and all of them are facing north.
 N sits next to the person at the extreme right end of their row and is facing R. S sits at the extreme left end of their row. Q sits to the immediate right of R and is facing L. O sits at the extreme left end of their row.
 Who sits at the extreme right end of the row of people facing South?

1. N 2. M 3. L 4. O

14. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



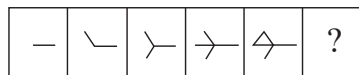
1. $\delta d b \nabla n o m \ddagger e$ 2. $\delta d b \nabla m o n \ddagger e$
 3. $e d b \nabla m o n \ddagger \delta$ 4. $\delta b d \nabla m o n \ddagger e$

15. In a certain code language, 'MONTH' is written as '141213719' and 'YEAR' is written as '222269'. How will 'WEEK' be written in that language?
 1. 1444424 2. 2444416 3. 4222261 4. 4222216
16. In a certain code language, 'BUYER' is written as 'CSZCS' and 'CHILD' is written as 'DFJJE'. How will 'DEATH' be written in that language?
 1. GFCRJ 2. EBCUJ 3. FFBUI 4. ECBRI
17. Select the option figure which is embedded in the given figure. (Rotation is NOT allowed)



1. 2. 3. 4.

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



1. 2. 3. 4.

19. 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.

- UCE : FEX :: PGS : TIS :: HKR : ?
 1. SNK 2. SMJ 3. SMK 4. RKH

20. Which of the following numbers will replace the question mark (?) in the given series?
 7, 17, ?, 137, 407, 1217
 1. 57 2. 34 3. 51 4. 47

General Knowledge & General Awareness

21. Sadanam P.V Balakrishnan won the Sangeet Natak Akademi Award in which dance form?
 1. Lavani 2. Kathakali
 3. Bharatnatyam 4. Kuchipudi
22. Who among the following was the first Indian to be recruited in Indian Civil Service in British India?
 1. Satyendranath Tagore 2. Rahimtulla M Sayani
 3. Rabindranath Tagore 4. Surendra Nath Banerjee
23. In badminton each game consist of how many points?
 1. 15 2. 21 3. 11 4. 20
24. Who was the first flag bearer for India in the Olympics?
 1. Purma Banerjee 2. Dhyan Chand
 3. Lal Shah Bokhari 4. Zafar Iqbal
25. Rs. 50 banknote of Mahatma Gandhi (New) series has base colour of _____.
 1. chocolate brown 2. stone grey
 3. fluorescent blue 4. lavender
26. Which of the following is a classical dance form from Andhra Pradesh?
 1. Bharatanatyam 2. Mohiniyattam
 3. Kuchipudi 4. Manipuri
27. Identify a redox reaction.
 1. $2Pb(NO_3)_2(s) \rightarrow \text{Heat } 2PbO(s) + 4NO_2(g) + O_2(g)$
 2. $CaCO_3(s) \rightarrow \text{Heat } CaO(s) + CO_2(g)$
 3. $MnO_2 + 4HCl \rightarrow MnCl_2 + 2H_2O + Cl_2$
 4. $Pb(s) + CuCl_2(aq) \rightarrow PbCl_2(aq) + Cu(s)$
28. Maha Shivratri is celebrated in the honour of the Hindu deity, Lord Shiva in the Hindu month of _____.
 1. Kartika 2. Chaitra 3. Phalgun 4. Vaishakha
29. The plan between fifth five year plan and sixth five year plan is known as _____.
 1. Forward 2. Equality 3. Rolling 4. Integrated
30. According to Xuan Zang, the _____ of Nalanda Buddhist monastery asks new entrants difficult questions which were very difficult to answer
 1. chief of monastery 2. gatekeeper
 3. youngest monk 4. oldest monk
31. As on October 2022, who is the General Secretary of the Communist Party of India ?
 1. Sitaram Yechury 2. D. Raja
 3. Indrajit Gupta 4. Binoy Viswam
32. Skill India Mission's Governing Council is chaired by the _____.
 1. Chief Minister 2. President
 3. Prime Minister 4. Home Minister
33. The contribution made by each sector of the economy into GDP is called _____.
 1. structural composition 2. nominal composition
 3. real GDP 4. real composition
34. In Nomadic herding, herdsman move from place to place with their animals for _____ and _____ along defined routes.
 1. money and water 2. shelter and money
 3. fodder and water 4. shelter and fodder
35. Who among the following was elected as Member of Rajya Sabha from Tripura, India in September 2022?
 1. Arun Singh 2. Miriam Rengma
 3. Radha Mohan Das 4. Biplab Kumar Deb
36. Which article of the Indian Constitution deals with the 'protection of life and personal liberty'?
 1. Article 19 2. Article 21 3. Article 20 4. Article 22
37. Which of the following case is NOT a criminal law case?
 1. Murder 2. Harassment for dowry
 3. Theft 4. Divorce case

38. Name the state which has the highest female literacy rate in India as per census 2011.
1. Mizoram 2. Kerala
3. Karnataka 4. Maharashtra
39. In human body, the food passes through a continuous canal which begins at _____ and ends at anus.
1. stomach 2. buccal cavity
3. food pipe 4. rectum
40. Tamil Nadu coast gets a large portion of its rain during _____ and _____.
1. April and May 2. October and November
3. May and June 4. August and September

Elementary Mathematics

41. A and B can complete a work separately in 10 days and 15 days, respectively. B alone work for 3 days and then he left the work. In how many days will A finish the remaining work?
1. 6 2. 9 3. 8 4. 7
42. Find the product of the numbers whose HCF and LCM are 8 and 40 respectively.
1. 240 2. 300 3. 320 4. 360
43. The difference between compound interest and simple interest is ₹ 228 for a certain sum of money at 8% per annum for $1\frac{1}{2}$ years, when compound interest is compounded half-yearly and simple interest is computed yearly. What is the sum?
1. ₹ 46,900 2. ₹ 46,531 3. ₹ 47,000 4. ₹ 46,875
44. John borrowed some amount of money from a bank at the rate of 10% per annum on compound interest for which interest is compounded annually. If he repaid his loan by paying ₹21,961.50 at the end of 4 years, what is the amount he borrowed?
1. ₹17,000 2. ₹15,000 3. ₹16,000 4. ₹14,000
45. A bus travels from station P to station Q at a speed of 70 km/h, and from station Q to station P at a speed of 90 km/h. What is the average speed of the bus during the entire journey?
1. 75.78 km/h 2. 78.75 km/h
3. 80.25 km/h 4. 82.35 km/h
46. Sonal and Arjun together can finish a piece of work in 57 days, Arjun and Rohan in 38 days, and Rohan and Sonal in 38 days, then Sonal, Arjun, and Rohan together can finish the same work in how many days?
1. 31.5 days 2. 28.5 days 3. 26.5 days 4. 24.5 days
47. On selling a table fan at ₹ 2,827.06, the value of gain is 14% more than the value of loss incurred on selling it at ₹ 2,230. In order to gain 14%, the selling price will be:
1. ₹ 3,045 2. ₹ 2,890 3. ₹ 2,860.26 4. ₹ 2,844.50
48. The ratio between the fourth proportional of 7, 5 and 3 to the third proportional of 7 and 13 is:
1. 75 : 448 2. 15 : 169 3. 21 : 25 4. 25 : 21
49. A cylindrical tank has a capacity of 5632 m^3 . If the diameter of its base is 16 m, find its depth.
1. 28 m 2. 32 m 3. 30 m 4. 34 m
50. A shopkeeper sells goods at a profit of 12% and uses a weight which is 15% less than the original weight. Find his total percentage gain. (Correct to 2 decimal places)
1. 31.76% 2. 30.24% 3. 28.75% 4. 25.80%
51. If $A : B = 5 : 6$ and $B : C = 6 : 7$, then $(A + B) : (B + C) : (C + A)$ is:
1. 12 : 13 : 11 2. 11 : 13 : 12 3. 11 : 12 : 13 4. 13 : 11 : 12
52. The LCM of two numbers is 15 times their HCF. The sum of the LCM and the HCF is 112. If one of the numbers is 49, then the other number is:
1. 18 2. 21 3. 24 4. 15
53. In a circular race of 400 m in length, A and B start at speeds of 10 m/s and 16 m/s, respectively, at the same time from the same point. After how much time will they meet for the first time at the starting point when running in the same direction?
1. 180 s 2. 200 s 3. 240 s 4. 220 s
54. What is the length of the longest pole that can be placed in a room of dimensions $10 \text{ m} \times 10 \text{ m} \times 5 \text{ m}$?
1. 20 m 2. 25 m 3. 15 m 4. 10 m
55. A clothing store announced a discount of 30 percent on shirts. Rivaan wanted to save ₹ 810 in discount. How many shirts should he buy to do so, if marked price of each shirt is ₹ 540?
1. 6 2. 5 3. 4 4. 8
56. A train 120 m long passes a bridge in 18 seconds moving at a speed of 60 km/h. Find out the length of the bridge.
1. 150 m 2. 160 m 3. 170 m 4. 180 m
57. A dealer marks his goods 15% above the cost price. Then he allows 20% discount on it. What will be his loss percentage?
1. 7% 2. 8% 3. 5% 4. 6%
58. Number 350 is increased by 20% and then decreased by 25%. Find the new number.
1. 320 2. 3244 3. 340 4. 315
59. The average cost of 10 items is ₹ 89. If one item costs ₹ 35, then find the average cost of remaining 9 items (in ₹).
1. 90 2. 95 3. 85 4. 80
60. Due to illness the weight of a person has reduced from 80 kg to 64 kg in a month. The percent decrease in the weight of the person is:
1. 16 percent 2. 14 percent 3. 24 percent 4. 20 percent

English

61. Select the most appropriate meaning of the given idiom.
Bed of roses
1. As one wishes
2. Be bound to obey
3. A pleasant condition of life
4. With all of one's belonging
62. Select the most appropriate meaning of the given idiom.
Bag and baggage
1. Lots of bags 2. To make a beginning
3. Close friends 4. With all belongings
63. Select the most appropriate option to fill in the blank.
Alas! The forest turned into a _____ land.
1. bare 2. beer 3. bear 4. buyer
64. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution'.
The turtle can live in water as well as land.
1. No substitution 2. and also land
3. also on land 4. as well as on land.
65. Select the most appropriate option that can substitute the underlined segment in the given sentence.
Baldness is quite very usual among youngsters these days.
1. happening very surely 2. having very certain
3. getting very common 4. hitting very severely
66. Select the most appropriate synonym of the given word.
Conceal
1. Manifest 2. Disclose 3. Confess 4. Hide
67. Select the most appropriate ANTONYM to substitute the underlined word in the given sentence.
Her lively demeanour makes her the ideal choice for this job.
1. dreamy 2. slimy 3. grainy 4. gloomy

68. Select the most appropriate ANTONYM of the given word.
Cruel
1. Trunk 2. Brutal 3. Kind 4. Savage
69. Select the INCORRECTLY spelt word.
1. Dribbling 2. Slice 3. Temperament 4. Solvant
70. Select the most appropriate ANTONYM of the given word.
Steadfast
1. Dishonest 2. Unwavering 3. Immobile 4. Dependable
71. Select the most appropriate option to fill in the blanks and make the sentence meaningful.
They were not _____ to eat during the _____.
1. allowed; brake 2. aloud; break
3. allowed; break 4. aloud; brake
72. Select the option that can be used as a one-word substitute for the given group of words.
The possible results of an action
1. Implementation 2. Decision
3. Ramification 4. Causation
73. Select the most appropriate synonym of the given word.
Bankrupt
1. Well-off 2. Invert 3. Insolvent 4. Careless
74. Select the INCORRECTLY spelt word.
1. Ignorance 2. Misspell 3. Harass 4. Occasion
75. The following sentence has been split into four segments. Identify the segment that contains an error.
Nandu will/leave for the airport/as soon as/a taxi arrive.

1. a taxi arrive 2. leave for the airport
3. Nandu will 4. as soon as

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

A natural gas barrier in the upper atmosphere called the ozone layer (1.) _____ people and other living things from the sun's harmful ultraviolet (UV) radiation. Ozone exists in tiny concentrations (2.) _____ the atmosphere, but the majority (about 90%) is found in the stratosphere, a layer that is 10 to 50 kilometres (3.) _____ the surface of Earth. The ozone layer is essential to life on Earth because it (4.) _____ out the majority of the sun's harmful UV rays. In the 1970s, researchers (5.) _____ that the ozone layer was thinning.

76. Select the most appropriate option to fill in blank number 1.
1. attracts 2. flourishes 3. discovers 4. shields
77. Select the most appropriate option to fill in blank number 2.
1. below 2. in 3. throughout 4. under
78. Select the most appropriate option to fill in blank number 3.
1. into 2. onto 3. above 4. at
79. Select the most appropriate option to fill in blank number 4.
1. blames 2. builds 3. brims 4. blocks
80. Select the most appropriate option to fill in blank number 5.
1. learning 2. learns 3. learnt 4. learn

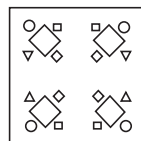
Answer Key

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

Answers with Explanations

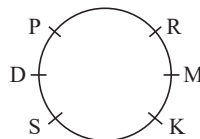
1. **Option (1) is correct.**

After unfolding the paper, it will appear as follows:



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

According to the statement, final sitting arrangement will be as follows: Hence, S is the immediate neighbour of K and D.



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

Given equation: $42 + 12 \div 24 \times 84 - 14 = 91$
Upon checking option (1) and interchanging + and \times , we get:
 $42 \times 12 \div 24 + 84 - 14 = 91$
 $\Rightarrow 42 \times \frac{1}{2} \times 84 - 14 = 91$
 $\Rightarrow 21 + 84 - 14 = 91$
 $\Rightarrow 91 = 91$
LHS = RHS

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

In the given analogy, Pediatrician is the doctor specialist for children, similarly, dermatologist is the doctor specialist for skin.

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

The correct order of the given words is:

5. Locker	1. Lonely	2. Longitude	4. Lounge	3. Lovely
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Hence, 5, 1, 2, 4, 3 is the correct answer.

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

Given series: UERB, RHOE, ?, LNIK, IQFN
The pattern followed here is:

U	E	R	B
-3	+3	-3	+3
R	H	O	E
-3	+3	-3	+3
O	K	L	H
-3	+3	-3	+3
L	N	I	K
-3	+3	-3	+3
I	Q	F	N

Hence, OKLH is the correct answer.

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

Given sets:

(20, 90, 10)

(25, 135, 10)

The pattern followed here is:

$$(1^{\text{st}} \text{ term} - 3^{\text{rd}} \text{ term}) \times 9 = 2^{\text{nd}} \text{ term}$$

So,

$$(20 - 10) \times 9$$

$$\Rightarrow 10 \times 9 = 90$$

And,

$$(25 - 10) \times 9$$

$$\Rightarrow 15 \times 9 = 135$$

Similarly, upon checking option (1), we get:

$$(18 - 10) \times 9$$

$$\Rightarrow 8 \times 9 = 72$$

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

Given equation: $8 \times 15 \div 3 + 14 - 4 = 26$

Upon checking option (2), and interchanging 4 and 8 we get:

$$4 \times 15 \div 3 + 14 - 8 = 26$$

$$\Rightarrow 4 \times 5 + 14 - 8 = 26$$

$$\Rightarrow 20 + 14 - 8 = 26$$

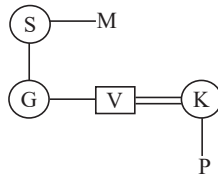
$$\Rightarrow 26 = 26$$

LHS = RHS

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

Given expression: $G \% V @ K \& P$ and $G \# S \% M$

The following family tree can be made:



Hence, S is father's mother of P.

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

Given series: 7, 50, 351, 2458, ?

The pattern followed here is:

$$7 \times 7 + 1 = 50$$

$$50 \times 7 + 1 = 351$$

$$351 \times 7 + 1 = 2458$$

$$2458 \times 7 + 1 = 17207$$

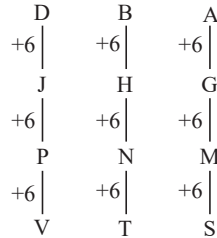
Hence, 17207 is the correct answer.

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

Given series: DBA, JHG, PNM, ?

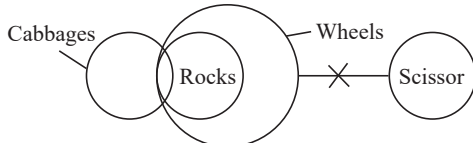
The pattern followed here is:

Hence, VTS is the correct answer.



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

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



Conclusion I- All cabbages are wheels - False

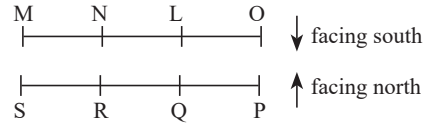
Conclusion II- Some rocks are wheels - True

Conclusion III- Some wheels are not scissors - True

Hence, both conclusion II and III follows.

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

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



Hence, M sits at the extreme right end of the row of people facing south.

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

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

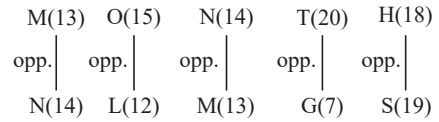
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Hence, the required mirror image is:

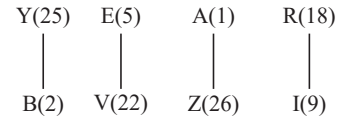
15. **Option (4) is correct.**

Given that: MONTH is written as 141213719

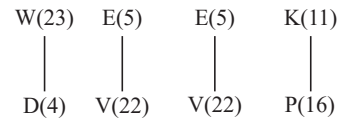
Here, each alphabet is assigned their reverse positional values. So,



And, YEAR is written as 222269



Similarly, for WEEK

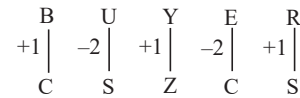


Hence, 4222216 is the correct answer.

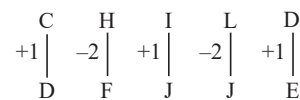
16. **Option (4) is correct.**

Given that: BUYER is written as CSZCS

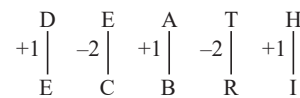
The pattern followed here is:



And, CHILD is written as DFJJE



Similarly, DEATH will be written as:



Hence, ECBRI is the correct answer.

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

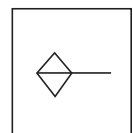
In the given figure, option (3) image is embedded as highlighted below:



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

In the given figure series, 1 line is increasing in every next image.

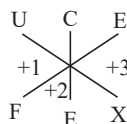
Here, the required answer figure is:



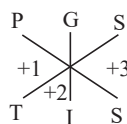
19. **Option (3) is correct.**

Given that: UCE : FEX :: TIS :: HKR : ?

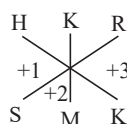
The pattern followed here is:



And,



Similarly,



Hence, SMK is the correct answer.

20. Option (4) is correct.

Given series: 7, 17, ?, 137, 407, 1217

The pattern followed here is:

$$(7 \times 3) - 4 = 17$$

$$(17 \times 3) - 4 = 47$$

$$(47 \times 3) - 4 = 137$$

$$(137 \times 3) - 4 = 407$$

$$(407 \times 3) - 4 = 1217$$

Hence, 47 is the correct answer.

21. Option (2) is correct.

Sadanam P.V Balakrishnan is a renowned exponent of Kathakali, a classical dance form from Kerala, India. He received the Sangeet Natak Akademi Award in 2003 for his contributions to this specific dance form. Kathakali, a traditional dance-drama form rooted in Kerala, India, showcases intricate costumes, elaborate makeup, and stylized movements, serving as a rich medium for portraying diverse characters and narratives.

22. Option (1) is correct.

Satyendranath Tagore was the first Indian to be recruited into the Indian Civil Service in British India in 1863. His younger brother, Rabindranath Tagore, was a renowned poet and Nobel Prize laureate, but not the first to join the ICS.

23. Option (2) is correct.

In badminton, each game consists of 21 points. Players or pairs score points by successfully hitting the shuttlecock over the net and into the opponent's side of the court. The first side to reach 21 points wins the game, provided there is a margin of at least two points.

24. Option (1) is correct.

Purma Banerjee carried the Indian flag at the opening ceremony of the 1920 Olympics in Antwerp, Belgium.

25. Option (3) is correct.

The base colour of the ₹ 50 banknote of the Mahatma Gandhi (New) series is fluorescent blue. It was introduced in 2016 with additional security features compared to the earlier series.

26. Option (3) is correct.

The classical dance form from Andhra Pradesh is Kuchipudi. This dance style originated in the village of Kuchipudi in Andhra Pradesh and is known for its vibrant footwork, graceful movements, and expressive storytelling.

27. Option (3) is correct.

A redox (reduction-oxidation) reaction is a type of chemical reaction that involves the transfer of electrons between

species. It consists of two simultaneous processes: reduction and oxidation. Example of redox reaction - $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$

28. Option (3) is correct.

Maha Shivratri is celebrated in the Hindu month of Phalguna, which corresponds to February or March in the Gregorian calendar. The festival is celebrated on the 14th day of the dark half of the lunar month of Phalguna or Magha.

29. Option (3) is correct.

The plan that happened between the fifth and sixth five-year plans is called the "Rolling Plan." This type of plan is more flexible because, unlike the fixed five-year plans, it allows for changes every year. This flexibility helps adjust the plan according to the current economic conditions and priorities, making the economic planning more dynamic and responsive.

30. Option (2) is correct.

According to Xuan Zang, the gatekeeper of Nalanda Buddhist Monastery asks new entrants difficult questions that are very challenging to answer. The gatekeeper played a significant role in testing the intellectual capabilities of those seeking admission to Nalanda, an ancient Buddhist learning centre in India.

31. Option (2) is correct.

As of October 2022, D. Raja was the General Secretary of the Communist Party of India (CPI). He was unanimously re-elected to the position in July 2019, succeeding Sudhakar Reddy who stepped down due to ill health.

32. Option (3) is correct.

The Skill India Mission's Governing Council is chaired by the Prime Minister of India. The Skill India Mission is an initiative launched by the Government of India to enhance the skills of the country's workforce and promote employment opportunities. The Governing Council is a crucial part of this mission, overseeing its planning, implementation, and evaluation.

33. Option (1) is correct.

The contribution made by each sector of the economy to the Gross Domestic Product (GDP) is called "structural composition."

34. Option (3) is correct.

In nomadic herding, herdsman move from place to place with their animals for fodder and water, along defined routes. Nomadic herding is also known as nomadic pastoralism. It's a type of farming practised in semi-arid and arid regions, such as the Sahara, Central Asia, and parts of India.

35. Option (4) is correct.

Biplab Kumar Deb was elected as a Member of the Rajya Sabha from Tripura, India in September 2022. He secured 43 votes compared to 15 votes for Bhanu Lal Saha of the CPI(M).

36. Option (2) is correct.

The 'protection of life and personal liberty' in the Indian Constitution is guaranteed under Article 21. This article is fundamental to ensuring the right to life and personal liberty for all citizens, and it has been interpreted broadly by the judiciary to encompass various aspects related to an individual's well-being and dignity.

37. Option (4) is correct.

In India, divorce is not considered a criminal case, as it falls under civil law. Criminal cases involve offences that threaten public welfare and safety, such as assault, robbery, and cybercrime. Civil law, on the other hand, safeguards individual rights and provides legal remedies for disputes. Divorce cases typically involve the legal dissolution of a

marriage, addressing issues like property division, child custody, and alimony.

38. Option (2) is correct.

According to the 2011 Census of India, Kerala holds the highest female literacy rate among all states in the country. The state has consistently shown a commitment to high literacy levels, emphasizing education and social development.

39. Option (2) is correct.

In the human body, the continuous canal through which food passes begins at the buccal cavity (mouth) and ends at the anus. The sequence is as follows: buccal cavity (mouth), esophagus (food pipe), stomach, small intestine, large intestine, and finally, the rectum and anus.

40. Option (2) is correct.

Tamil Nadu's coastline receives a substantial amount of rainfall in October and November. This aligns with the northeast monsoon season, alternatively termed as the post-monsoon or retreating monsoon period. During these months, Tamil Nadu encounters a significant portion of its yearly rainfall.

41. Option (3) is correct.

Given that,

A can finish the work in = 10 days

B can finish the work in = 15 days

Let total work = LCM(10, 15) = 30 unit

So, efficiency of A = $\frac{30}{10} = 3$ unit per day

And efficiency of B = $\frac{30}{15} = 2$ unit per day

According to the question,

Remaining work after 3 days = $30 - 2 \times 3 = 24$ units

So, required time to complete the remaining work by A alone

= $\frac{24}{3} = 8$ days

42. Option (3) is correct.

Given that,

HCF = 8

LCM = 40

So, multiplication of the numbers = $40 \times 8 = 320$

43. Option (4) is correct.

Let the sum of amount = P

Using, SI = $\frac{PRT}{100} = \frac{P \times 8 \times 3}{100 \times 2} = \frac{3P}{25}$

And CI = $P \left(1 + \frac{4}{100}\right)^3 - P = P \left(\frac{26}{25}\right)^3 - P$

According to the question,

$\Rightarrow P \left(\frac{26}{25}\right)^3 - P - \frac{3P}{25} = 228$

$\Rightarrow P \left(\frac{17576}{15625} - \frac{28}{25}\right) = 228$

$\Rightarrow 76P = 228 \times 15625$

$\Rightarrow P = 46875$

So, principal amount = ₹ 46875

44. Option (2) is correct.

Let the amount borrowed = P

Using, total amount = $P \left(1 + \frac{r}{100}\right)^n$

$$\Rightarrow 21961.50 = P \left(1 + \frac{10}{100}\right)^4$$

$$\Rightarrow 21961.50 = P \left(\frac{11}{10}\right)^4$$

$$\Rightarrow P = 15000$$

So, the amount borrowed = ₹ 15000

45. Option (2) is correct.

Given that,

Speed of train when going from P to Q = 70 km/h

Speed of train when going from Q to P = 90 km/h

Using, average speed = $\frac{2xy}{x+y} = \frac{2 \times 70 \times 90}{70+90} = 78.75$ km/h

46. Option (2) is correct.

Given that,

Sonal and Arjun together can finish a piece of work in = 57 days

Rohan and Arjun together can finish a piece of work in = 38 days

Sonal and Rohan together can finish a piece of work in = 38 days

Let total work = LCM(57, 38) = 114 unit

So, efficiency of Sonal and Arjun = $\frac{114}{57} = 2$ unit/day

And efficiency of Rohan and Arjun = $\frac{114}{38} = 3$ unit/day

And efficiency of Rohan and Sonal = $\frac{114}{38} = 3$ unit/day

Efficiency of Rohan, Sonal and Arjun = $\frac{2+3+3}{2} = 4$ unit/day

So, required time = $\frac{114}{4} = \frac{57}{2} = 28.5$ days

47. Option (3) is correct.

Let the cost price = ₹ x

According to the question,

$$\Rightarrow (2827.06 - x) = (x - 2230) \times \frac{114}{100}$$

$$\Rightarrow 282706 - 100x = 114x - 254220$$

$$\Rightarrow 214x = 536926$$

$$\Rightarrow x = 2509$$

Required selling price = $2509 \times \frac{140}{100} = ₹ 2860.26$

48. Option (2) is correct.

Let the fourth proportion of 7, 5 and 3 is x.

$$\text{So, } \frac{7}{5} = \frac{3}{x}$$

$$\Rightarrow x = \frac{15}{7}$$

Let the third proportion of 7 and 13 is y.

$$\text{So, } \frac{7}{13} = \frac{13}{y}$$

$$\Rightarrow y = \frac{169}{7}$$

$$\text{So, } x : y = \frac{\frac{15}{7}}{\frac{169}{7}} = \frac{15}{169}$$

49. Option (1) is correct.

Given that,

Cylinder volume = 5632 m³

Diameter of base = 16m

Using, volume = $\pi r^2 h$

$$\Rightarrow 5632 = \pi r^2 h$$

$$\Rightarrow 5632 = \frac{22}{7} \times 8 \times 8 \times h$$

$$\Rightarrow h = 28 \text{ m}$$

So, the depth of cylinder = 28 m

50. Option (1) is correct.

Given that,

Let the cost price = 100

So, selling price = 112

Actual cost price due to using wrong weight = 100 - 15 = 85

$$\text{So, total profit percentage} = \frac{112 - 85}{85} \times 100 = 31.76\%$$

51. Option (2) is correct.

Given that,

$$A : B = 5 : 6$$

$$B : C = 6 : 7$$

$$\text{So, } A : B : C = 5 : 6 : 7$$

$$\text{Hence, } (A + B) : (B + C) : (C + A) = (5 + 6) : (6 + 7) : (5 + 7) = 11 : 13 : 12$$

52. Option (4) is correct.

Given that,

One number = 49

Let the HCF = x

So, LCM = $15x$

According to the question,

$$15x + x = 112$$

$$\Rightarrow x = 7$$

Using, LCM \times HCF = $49 \times 2^{\text{nd}}$ number

$$\Rightarrow 2^{\text{nd}} \text{ number} = \frac{15 \times 7 \times 7}{49} = 15 = 15$$

53. Option (2) is correct.

Given that,

The distance of the path = 400 m

Speeds of A and B are 10 m/s and 16 m/s, respectively.

$$\text{Time taken by A for one cycle} = \frac{400}{10} = 400 \text{ sec}$$

$$\text{Time taken by B for one cycle} = \frac{400}{16} = 25 \text{ sec}$$

Hence, Required time = LCM (25,40) = 200 sec

54. Option (3) is correct.

Given dimensions of the room are 10m \times 10m \times 5m.

So, length of longest pole that can be placed = diagonal of the room

$$= \sqrt{10^2 + 10^2 + 5^2} = 15 \text{ m}$$

55. Option (2) is correct.

Given that the marked price of the shirt = ₹ 540

$$\text{So, discount amount on each shirt} = 540 \times \frac{30}{100} = ₹ 162$$

$$\text{So, required number of shirts} = \frac{810}{162} = 5 = 5$$

56. Option (4) is correct.

Given that,

Length of train = 120m

Time = 18 sec

$$\text{Speed} = 60 \text{ km/h or } 60 \times \frac{5}{18} = \frac{50}{3} \text{ m/s}$$

Let the length of bridge = x m

$$\text{Using, distance} = \frac{\text{speed}}{\text{time}}$$

$$120 + x =$$

$$\Rightarrow x = 300 - 120 = 180 \text{ m}$$

57. Option (2) is correct.

Let the cost price = 100

So, MRP = 115

Selling price of the article after allowing a discount of 20% =

$$115 \times \frac{80}{100} = 92$$

$$\text{So, loss percentage} = \frac{100 - 92}{100} \times 100 = 8\%$$

58. Option (4) is correct.

Given number = 350

$$\text{New number after increasing it by 20\%} = 350 \times \frac{120}{100} = 420$$

$$\text{Required number after decreasing it by 25\%} = 420 \times \frac{75}{100} = 315$$

59. Option (2) is correct.

Given that the average cost of 10 items = ₹ 89

So, total cost = $89 \times 10 = ₹ 890$

According to the question,

Total cost of 9 books = $890 - 35 = 855$

$$\text{So, average cost of 9 books} = \frac{855}{9} = ₹ 95$$

60. Option (4) is correct.

Given that, the weight of a person has reduced from 80 kg to 64 kg.

$$\text{So, percentage decrease} = \frac{80 - 64}{80} \times 100 = 20\% = 20\%$$

61. Option (3) is correct

The idiom 'Bed of roses' refers to a comfortable or luxurious situation. Example: The last leg of the trip was an absolute bed of roses compared to the first 1500 miles, during which we encountered torrential downpours and at least four traffic delays.

62. Option (4) is correct.

'Bag and baggage' refers to all of one's possessions or everything associated with a situation. Example: You need to be out of your dorm room, with bag and baggage, by Monday morning.

63. Option (1) is correct.

A bear is an animal. Bare means without any clothes or not covered by anything. Beer is an alcoholic beverage made from water, malt, hops, and yeast. The given sentence mentions the forest. So, the forest can't turn into any animals or alcoholic beverages. The blank needs an adjective to describe the land, so the best word in the context is 'bare'.

64. Option (4) is correct.

The given underlined part is grammatically incorrect. It should be "as well as on the land" to maintain parallel construction. For water, we use the preposition 'in,' and for land, we use the preposition 'on'.

65. Option (3) is correct.

The underlined part can be replaced by option (3), because the underlined part and option (3) both convey similar meanings.

66. Option (4) is correct.

Conceal means to hide something/somebody; to prevent something/somebody from being seen or discovered.

Example: She tried to conceal her anger from her friend. The synonym for conceal is hide, rest of the words are antonyms of conceal.

67. Option (4) is correct.

Lively means full of energy, interest, and excitement. Example: Her eyes were bright and lively. The antonym of lively is gloomy, which means sad.

68. Option (3) is correct.

Cruel means causing physical or mental pain or suffering to somebody/something. Example: I think it's cruel to keep animals in cages. Brutal means very cruel. A trunk means a large, strong case or box. Savage means lacking the restraints normal to civilized human beings. The antonym of cruel is kind.

69. Option (4) is correct.

Dribbling means the skill of moving a ball along the ground with repeated small kicks or hits, or (in basketball) of moving a ball by repeatedly hitting it so it bounces off the floor. Slice means a thin, broad piece of food, such as bread, meat, or cake, cut from a larger portion. Temperament means the tendency to behave angrily or emotionally. The incorrectly spelled word is "solvant." It should be solvent, which means having enough money to pay all the money that is owed to other people.

70. Option (1) is correct.

Steadfast means resolutely or dutifully firm and unwavering. Example: The group remained steadfast in its support for the new system, even when it was criticized in the newspapers. The antonym of steadfast is dishonest.

71. Option (3) is correct.

Brake means a device for slowing or stopping a moving vehicle. A break means a brief rest from work. The sentence talks about permission to eat during rest time. So, the best words to fill in the blanks are respectively 'allowed' and 'break'.

72. Option (3) is correct.

One word substitution for 'the possible results of an action' is 'ramification'.

73. Option (3) is correct.

Bankrupt means (a person or organization) declared in law as unable to pay their debts or lacking in particular quality. Example: "His father went bankrupt, and the family had to sell their home." The synonym for bankrupt is insolvent, which means unable to pay debts owed.

74. Option (4) is correct.

The wrongly spelled word is 'ocassion'. It should be 'occasion', which means reason; cause. Example: "It's the first time that I've had an occasion to complain."

75. Option (1) is correct.

The sentence is grammatically incorrect. The error is in part 'a taxi arrive.' The subject 'taxi' is a singular noun, so it should be followed by a singular verb 'arrives'. Thus, it should be 'a taxi arrives'.

76. Option (4) is correct.

The sentence talks about the layer of earth that works as a barrier against harmful rays. Thus, the best word in the blank is 'shields'.

77. Option (2) is correct.

The apt preposition to express the relation between ozone and the atmosphere is 'in'.

78. Option (3) is correct

The blank requires a preposition that tells the position of the stratosphere with respect to the earth. The preposition 'above' conveys this aptly.

79. Option (4) is correct.

The best word in the blank is 'blocks', because the paragraph says that the ozone layer saves living beings from the harm.

80. Option (3) is correct.

Since the sentence talks about the first discovery of the thinning of the ozone layer, the sentence will be in simple past tense. Thus, the best word to fill in the blank is 'learnt'.