

STAFF SELECTION COMMISSION
COMBINED HIGHER SECONDARY LEVEL (TIER-I)
SOLVED PAPER

(26th May 2022: Shift-3)

Time Allotted- 1 hour

Max marks- 200

Important Instructions:-

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

English Language

1. Select the most appropriate option that can substitute the underlined segment in the given sentence.
In order to win the competition, one has to be creative.
 1. most creative
 2. more creative
 3. creativist
 4. creativer
2. Select the option that can be used as a one-word substitute for the given group of words.
Eternal; lasting forever or indefinitely
 1. Peristyle
 2. Perpetual
 3. Perplex
 4. Permissive
3. Select the INCORRECTLY spelt word.
 1. Cavalier
 2. Elegant
 3. Charishma
 4. Dominate
4. Select the most appropriate option to substitute the underline segment in the given sentence.
The Ukrainian soldiers passed in for several weeks.
 1. hanged to
 2. get off
 3. held out
 4. hanged in
5. Select the most appropriate option to fill in the blank.
We should _____ his outfit as he has put on weight.
 1. alter
 2. altar
 3. ultra
 4. utter
6. Select the most appropriate synonym of the given word.
Sanguinity
 1. Acrimony
 2. Despondence
 3. Optimism
 4. Distrust
7. Select the correct homonym from the given options to fill in the blank.
The French perfume has a wonderful _____.
 1. sent
 2. send
 3. scent
 4. cent
8. Select the option that expresses the given sentence in active voice.
The new bride is going to be admired by everyone in the family.
 1. Everybody in the family is going to admire the new bride.
 2. Everybody in the family was admiring the new bride.
 3. Everybody in the family has been going to admire the new bride.
 4. Everybody in the family was going to admire the new bride.
9. Select the option that can be used as a one-word substitute for the underlined group of words.
Mohan frequently wastes his money on luxurious objects such as cars and digital devices.
 1. Extravagant
 2. Businessman
 3. Consumer
 4. Capitalist
10. Select the most appropriate meaning of the given idiom.
Safe pair of hands
 1. Miss an opportunity
 2. Speak rashly without thinking carefully
 3. A secret or hidden advantage
 4. A person who can be trusted to do something efficiently
11. Select the option that can be used as a one-word substitute for the given group of words.
An outlook that is influenced by people from all over the world
 1. Cosmopolitan
 2. Epitome
 3. Unrefined
 4. Cantonment
12. Select the option that expresses the given sentence in active voice.
Admittance was refused to him by the airport security.
 1. The airport security is refusing him admittance.
 2. The airport security has refused him admittance.
 3. The airport security had refused him admittance.
 4. The airport security refused him admittance.
13. Select the most appropriate option that can substitute the underlined segment in the given sentence.
I told Pooja that she could have use my car to get around while she is in my hometown.
 1. that she could have use my car to get around with
 2. that she can use my car to get around
 3. that she could have use my car to get away
 4. that she can use my car to get away with
14. Select the INCORRECTLY spelt word.
 1. Gothic
 2. Neutron
 3. Frosty
 4. Decieve
15. From among the words given in bold, select the INCORRECTLY spelt word in the following sentence.
Almost all the governors of Bengal strongly resented the special privileges enjoyed by English company as it meant a huge loss to the provincial exchequer.
 1. provinciell
 2. resented
 3. exchequer
 4. privileges
16. Select the option that expresses the given sentence in passive voice.
The government presented awards to eminent people.
 1. Eminent people were presented awards by the government.
 2. Eminent people are presented awards by the government.
 3. Eminent people are being presented awards by the government.
 4. Eminent people were being presented awards by the government.
17. Select the most appropriate option that can substitute the underlined word in the given sentence.
Due to his hard work, he established a successful career.
 1. successful
 2. sucessful
 3. sucessfful
 4. successfull

18. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

- A. Dumbledore tells McGonagall that someone named Voldemort has killed a Mr. and Mrs. Potter and tried unsuccessfully to kill their baby son, Harry.
- B. Dumbledore leaves Harry with an explanatory note in a basket in front of the Dursley home.
- C. Mr. Dursley, a well-off Englishman, notices strange happenings on his way to work one day.
- D. That night, Albus Dumbledore, the head of a wizardry academy called Hogwarts, meets Professor McGonagall, who also teaches at Hogwarts, and a giant named Hagrid outside the Dursley home.

1. BCAD 2. DCAB 3. ADBC 4. CDAB

19. Select the most appropriate synonym of the underlined word. We expended most of our savings on this tour.

1. exhausted 2. earned 3. enjoyed 4. encashed

20. Select the most appropriate meaning of the given idiom.

- Let down
 1. To hire 2. To care about
 3. To fail 4. To nurse

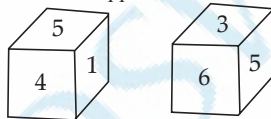
Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. Trust is (1) _____ confidence, faith and hope in someone or something. There are many ways to show trust. If you want to be trusted, just be (2) _____. Trust takes years to build, seconds to (3) _____ and forever to repair. Trust is like a mirror you can fix if (4) _____ but still see the cracks in that reflection. Whether it is a friendship or a relationship, all (5) _____ are based on trust.

- 21. Select the most appropriate option to fill in blank number 1.
 1. bonding 2. showing 3. using 4. choosing
- 22. Select the most appropriate option to fill in blank number 2.
 1. calm 2. honest
 3. extraordinary 4. heroic
- 23. Select the most appropriate option to fill in blank number 3.
 1. crack 2. change 3. break 4. burst
- 24. Select the most appropriate option to fill in blank number 4.
 1. broken 2. bent 3. changed 4. mended
- 25. Select the most appropriate option to fill in blank number 5.
 1. strategies 2. tricks 3. practices 4. bonds

General Intelligence

26. Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6. Select the number that will be on the face opposite to the one showing '2'.



1. 6 2. 4 3. 3 4. 5

27. Select the option that is related to the fifth term in the same way as the second term is related to the first term and the fourth term is related to the third term.

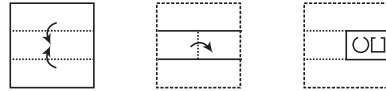
SOCCER : OSFFRE :: ROLLER : OROORE :: TOPPER : ?

1. TOERP 2. OTSSRE 3. OTPPRE 4. TOSSRE

28. If P denotes '×', Q denotes '+', R denotes '-' and S denotes '÷', then what will come in place of '?' in the equation? (40 Q 4) P 5 R (3 P 6) S (7 P 8) R 21 = ?

1. 33 2. 30 3. 40 4. 35

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



1. [Diagram] [Diagram] 2. [Diagram] [Diagram] 3. [Diagram] [Diagram] 4. [Diagram] [Diagram]
 [Diagram] [Diagram] [Diagram] [Diagram] [Diagram] [Diagram] [Diagram] [Diagram]
 [Diagram] [Diagram] [Diagram] [Diagram] [Diagram] [Diagram] [Diagram] [Diagram]

30. Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.

5 : 14 :: 12 : ? :: 17 : 86

1. 51 2. 56 3. 67 4. 63

31. In a certain code language, 'HELP' is written as '1652432' and 'SAVE' is written as '381445'. How will 'MAIL' be written in that language?

1. 261926 2. 261924 3. 261934 4. 261928

32. The second number in the given number pairs is obtained by performing certain mathematical operation(s) on the first number. The same operation(s) are followed in all the number pairs except one. Find that odd number pair.

1. 13 : 28.5 2. 15 : 32.5 3. 19 : 38.5 4. 17 : 35.5

33. R is the brother of N. R is the only son of K. S is the only daughter-in-law of K. How is N related to S?

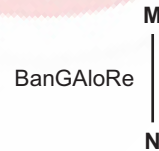
1. Sister 2. Daughter
 3. Mother 4. Husband's sister

34. Select the set in which the numbers are related in the same way as are the numbers of the following set. (56, 8, 15), (32, 16, 18)

(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 /deleting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)

1. (75, 5, 15) 2. (70, 5, 13)
 3. (66, 6, 17) 4. (68, 4, 17)

35. Select the correct mirror image of the given combination when the mirror is placed at MN as shown.



1. Я o l g n s B 2. B a n G A l O r e B
 3. e R o l s g n s B 4. B a n G A l O r e B

36. 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:

- All ants are beetles.
- No beetle is a frog.
- Some frogs are bugs.

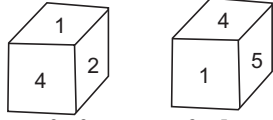
Conclusions:

- I. Some bugs are ants.
 - II. No bug is a beetle.
 - III. No frog is an ant.
1. Both conclusions I and II follow.
 2. Only conclusion III follows.
 3. Only conclusion I follows.
 4. Both conclusions I and III follow.

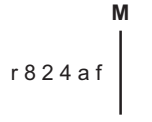
37. The second number in the given number-pairs is obtained by performing certain mathematical operation(s) on the first number. The same operation(s) are followed in all the number-pairs EXCEPT one. Find that odd number-pair.

1. 25 : 3 2. 64 : 6 3. 100 : 9 4. 81 : 7

38. Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6. When '3' is at the bottom, which number will be on the top?



1. 1 2. 3 3. 5 4. 4
39. Select the correct mirror image of the given combination when the mirror is placed at MN as shown.



1. $\int \text{g} \text{v} \text{Z} \text{8} \text{1}$ 2. $\text{f e} \text{p} \text{S} \text{8} \text{1}$
 3. $\int \text{e} \text{v} \text{Z} \text{8} \text{1}$ 4. $\int \text{S} \text{p} \text{S} \text{8} \text{1}$
40. In a certain code language, 'WAVE' is coded as '426522' and 'SOUND' is coded as '81261323'. How will 'LIGHT' be coded in that language?

1. 131820197 2. 151820197
 3. 151820166 4. 151880197
41. The birth date of Viaan is 9 March 2002. Find the day of the week of that day.
1. Saturday 2. Tuesday 3. Monday 4. Friday

42. Which letter-cluster will replace the question mark (?) to complete the given series?
 TBNF, CJUL, LRBR, UZIX, ?
1. CHPC 2. DHPC 3. CHPD 4. DHPD

43. Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
 $39 * 4 * 61 * 18 * 4 * 49 * 7 * 30$

1. +, -, =, ×, -, +, + 2. +, -, =, ×, -, ×, +
 3. ×, -, =, ×, -, ÷, + 4. =, -, +, ×, -, ÷, -

44. Study the given pattern carefully and select the number that can replace the question mark (?) in it.
 First row: 17, 26, 60
 Second row: 8, 15, 31
 Third row: 11, 19, ?

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

1. 52 2. 41 3. 48 4. 50

45. Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
 $50 * 2 * 3 * 30 * 10 * 40 * 20$

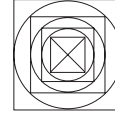
1. =, ×, ×, +, -, ÷ 2. -, ÷, ×, ×, =, ×
 3. =, ×, +, ×, -, ÷ 4. ×, =, ×, ×, -, ×

46. The second number in the given number pairs is obtained by performing certain mathematical operation(s) on the first number. The same operation(s) are followed in all the number pairs, EXCEPT one. Find that odd number pair.
1. 24 : 8 2. 16 : 4 3. 48 : 12 4. 20 : 5

47. Which of the following numbers will replace the question mark (?) in the given series?
 23, 28, 280, 295, 5900, ?
1. 5920 2. 5935 3. 5925 4. 5930

48. In a certain code language, 'DUCK' is written as 'FSEI' and 'FISH' is written as 'HGUF'.
 How will 'FROG' be written in that language?
1. HEPQ 2. HQPE 3. HPEQ 4. HPQE

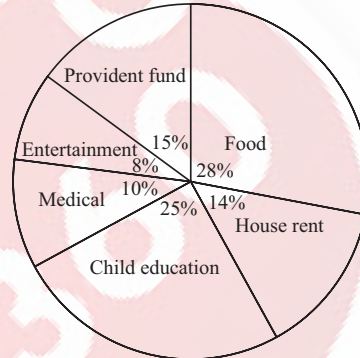
49. How many triangles are there in the given figure?



1. 10 2. 20 3. 8 4. 18
50. Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.
 _ M o N _ _ _ o M _ _ _ o M _ N o J o
1. o o J o o N J o M 2. o o J o o N J o o
 3. o M J o o N J o o 4. M o J o o N J o o

Quantitative Aptitude

51. The pie-chart given below shows the monthly expenditures made by a family under different heads as percentages of the total monthly income of the family. If the total monthly income of the family is ₹ 70,000, then what is the amount that is left with the family after only the food and medical expenditures for the month are made?



1. ₹ 43,500 2. ₹ 43,600 3. ₹ 43,400 4. ₹ 43,700
52. The speed of a boat is 12 km/h in still water. It goes 18 km downstream and comes back in a total time of $6\frac{6}{7}$ hours. Find the speed of the stream (in km/h).
1. 6 2. 7 3. 8 4. 9
53. The table below gives the numbers of three types of trees that were planted by government agencies in six consecutive years.

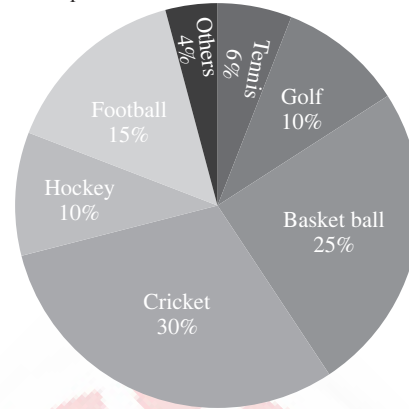
Year	Banyan	Neem	Teak
2013	30000	25000	15000
2014	35000	30000	5000
2015	35000	45000	10000
2016	40000	40000	25000
2017	45000	55000	35000
2018	55000	50000	40000

What was the percentage increase in the number of teak trees that were planted by these agencies in 2017 compared to the number of teak trees that were planted by these agencies in 2016?

1. 35% 2. 30%
 3. 44% 4. 40%
54. If $\frac{x^2}{y^2} + \frac{y^2}{x^2} = 7$, A Possible of $\frac{x^3}{y^3} + \frac{y^3}{x^3}$ is:
1. 18 2. 15 3. 16 4. 17

55. After allowing 15% discount, a dealer wishes to sell a machine for ₹ 1,22,700. At what price must the machine be marked? (Consider up to two decimals)
- ₹ 1,22,352.94
 - ₹ 1,44,352.94
 - ₹ 1,48,352.94
 - ₹ 1,36,352.94
56. If $\frac{8r}{r^2 - 8r + 1} = \frac{1}{14}$, then the value of $\left(r + \frac{1}{r}\right)$ is
- 88
 - 100
 - 120
 - 60
57. The average weight of 15 athletes and three trainers is 60 kg. When four more athletes of average weight 63 kg are included in the group, what is the average weight (in kg, rounded off to the nearest integer) of the group?
- 61
 - 62
 - 59
 - 60
58. If $\left[3\frac{6}{7} \div \frac{54}{7} - \left\{3 - \left(2\frac{3}{4} - \frac{3}{2}\right)\right\}\right] + A \div 4 = 0$, then what is the value of A?
- 9
 - 6
 - 5
 - 4
59. How many 25 cm × 11.25 cm × 6 cm bricks will be required to construct an 8 m × 6 m × 22.5 cm wall? (Ignoring other material used)
- 7020
 - 6400
 - 5800
 - 6800
60. If triangle ABC and PQR are both isosceles with AB = AC and PQ = PR, respectively. If also AB = PQ and BC = QR and angle B = 50°, then what is the measure of angle R?
- 50°
 - 80°
 - 90°
 - 60°
61. A dealer professes to sell his goods at cost price, but uses 900 gm weight for a kilogram, Find his profit per cent.
- 9%
 - $11\frac{1}{9}\%$
 - $10\frac{1}{9}\%$
 - 10%
62. The average marks scored by a student in 4 subjects is 75. But when the marks of English are added to it, the overall average became 70. How much did he score in English?
- 50
 - 60
 - 55
 - 65
63. Find the greatest among the following options.
- 0.62
 - $\frac{2}{3}$
 - 0.57
 - $\frac{4}{5}$
64. If P : Q = 10 : 11 and Q : R = 11 : 12, then P + Q : Q + R : R + P is:
- 21 : 23 : 22
 - 22 : 21 : 23
 - 11 : 12 : 10
 - 23 : 22 : 21
65. The total surface area of a solid hemisphere is 16632 cm². Its volume is: (Take $\pi = \frac{22}{7}$)
- 145232 cm³
 - 140232 cm³
 - 150032 cm³
 - 155232 cm³
66. How many two-digit numbers are divisible by 3 or 5?
- 48
 - 41
 - 42
 - 40
67. The price of an article is raised by 45% and then two successive discounts of 15% each are allowed. Ultimately the price of the article is
- decreased by 7.7625%
 - increased by 4.7625%
 - decreased by 4.7625%
 - increased by 7.7625%
68. What is the volume of the largest right circular cone that can be cut out from a cube whose edge is 10 cm?
- $\frac{250\pi}{3}$ cm³
 - $\frac{351\pi}{3}$ cm³
 - $\frac{145\pi}{3}$ cm³
 - $\frac{150\pi}{3}$ cm³
69. The difference between the compound interest and the simple interest on a given principal is ₹ 1,725 in 2 years and the rate of interest in both cases is 25% per annum, and in the case when interest is compounded, it is compounded annually. Find the principal.
- ₹ 25,600
 - ₹ 26,500

- ₹ 26,400
 - ₹ 27,600
70. If $2a + 5b = 12$ and $ab = 3$, find the value of $4a^2 + 25b^2$.
- 64
 - 44
 - 84
 - 24
71. The given circle graph shows the spending of a country on various sports during a year. Study the graph carefully and answer the question that follows.



The country spent the same amount of money on:

- Cricket and Football
 - Golf and Basketball
 - Hockey and Tennis
 - Hockey and Golf
72. X's salary is increased by 20% and then decreased by 20%. What is the change in salary?
- 4% decrease
 - 4% increase
 - 2% decrease
 - 2% increase
73. If Mona and Sona together can finish a typing work in 18 days and Sona alone can finish it in 24 days, find the number of days in which Mona alone can finish the work.
- 48
 - 60
 - 64
 - 72
74. The population of a town is 80,000. It decreases by 8% in the first year and increases by 5% in the second year. What will be the population of the town at the end of 2 years?
- 76150
 - 86140
 - 77280
 - 82540
75. In a $\triangle ABC$, right angled at B, if $\tan A = \frac{1}{\sqrt{3}}$, then $\sin A \cdot \cos C + \cos A \cdot \sin C = \dots\dots\dots$
- 0
 - 2
 - 1
 - 1

General Awareness

76. Who among the following is the author of the book 'Fasting, Feasting'?
- Preeti Shenoy
 - Anuja Chauhan
 - Namita Gokhale
 - Anita Desai
77. On the basis of the track width of Indian Railways, what type of gauge is Matheran Hill Railways?
- Narrow gauge
 - Medium gauge
 - Broad gauge
 - Standard gauge
78. A R Rahman, the famous musician won the 52nd Grammy Award for which of the following songs?
- Rubaroo
 - Vande Mataram
 - Jai Ho
 - Dilli 6
79. Which plateau, with an average elevation of about 600 meters (2000 feet), is bounded by three mountain ranges: the Satpura range to the north and the Eastern and Western Ghats on either side?
- Marwar Plateau
 - Meghalaya Plateau
 - Deccan Plateau
 - Chota Nagpur Plateau
80. Lack of financial discipline by the government can lead to
- (A) excess expenditure
 - (B) inflation
 - Only B
 - Only A
 - A and B
 - Neither A nor B
81. Which is a slow cooking process that begins around 320°F,

removes water from a sugar and breaks down the sugar into complex polymers with a sweet, nutty, or bitter taste and thus produces a golden-brown to dark brown colour?

1. Gelatinisation
 2. Dextrinisation
 3. Caramelisation
 4. Maillard reaction
82. When was the National Hydrogen Mission (NHM) launched?
1. 1 January 2022
 2. 2 October 2020
 3. 15 August 2021
 4. 26 January 2019
83. Pandit Bhawani Shankar is a _____ player.
1. pakhawaj
 2. tanpura
 3. dholak
 4. tabla
84. Which cricket player's autobiography is titled '281 and Beyond'?
1. Anil Kumble
 2. Javagal Srinath
 3. Virender Sehwag
 4. VVS Laxman
85. What is the name of the traditional Indian sport shown in the picture below?



1. Chaupar
 2. Gilli Danda
 3. Malkham
 4. Kho Kho
86. Which of the following is the oldest High Court?
1. Karnataka High Court
 2. Calcutta High Court
 3. Allahabad High Court
 4. Delhi High Court
87. Who arranged the elements with chemically similar properties, such as lithium, sodium, and potassium, and showed that the properties of the middle element could be predicted from the properties of the other two?
1. Johann Dobereiner
 2. Lothar Meyer
 3. John Newlands
 4. Dmitri Mendeleev
88. Maitya Ram Reang (Satyaram) was conferred with the Padma Shri for his contributions to which of the folk dances?
1. Hojagiri
 2. Gussadi
 3. Sattriya
 4. Bihu
89. Which is the first of India's traditional dance to be refashioned as a theatre art and to be exhibited widely both at home and abroad?
1. Kuchipudi
 2. Manipuri
 3. Kathakali
 4. Bharatanatyam
90. Which of the following is a meteorological instrument

consisting of a funnel-shaped collector attached to a measuring tube used to measure rainfall per unit area at a given time?

1. Anemometer
 2. Sling psychrometers
 3. Standard Rain Gauge
 4. Hygrometer
91. Identify the word that means horizontal rows in periodic table.
1. Groups
 2. Orbitals
 3. Periods
 4. Valence electrons
92. Who won the Bronze medal in badminton women's singles at Tokyo Olympics 2020?
1. An Se-Young
 2. Chen Yu Fei
 3. PV Sindhu
 4. Tai Tzu-ying
93. Which of the following is NOT a symptom of Beriberi caused due to the deficiency of Vitamin B1?
1. Slowly healing wounds
 2. Involuntary eye movement
 3. Difficulty speaking
 4. Pain in the limbs
94. 'Straight from the Heart: An Autobiography' is an autobiography of which of following sportspersons?
1. Mahendra Singh Dhoni
 2. Sunil Gavaskar
 3. Kapil Dev
 4. Anil Kumble
95. Who among the following personalities was awarded the Officer of the Legion of Honour award?
1. Asha Bhosle
 2. Shamsad Begum
 3. S Janki
 4. Lata Mangeshkar
96. As per statistics published by National Crime Records Bureau for 2020, which state registered the highest number of crimes against children [Indian Penal Code (IPC) and Special and Local Laws (SLL)]?
1. Maharashtra
 2. Uttar Pradesh
 3. Bihar
 4. Madhya Pradesh
97. Padma Bhushan awardee Uma Sharma is a _____ dancer.
1. Bharatanatyam
 2. Odissi
 3. Kathakali
 4. Kathak
98. Teejan Bai, Jhaduram Devangan, Ritu Verma, Usha Barle and Shantibai Chelak are famous for which of the following forms of folk music?
1. Pandavani
 2. Lavani
 3. Bihugeet
 4. Bhatiali
99. Which of the following is an adventure sport?
1. Snow hockey
 2. Cycling
 3. Paragliding
 4. Paralympics
100. Veteran classical dance guru from _____, Jatin Goswami was given the National Kalidas Samman for 2017.
1. Chhattisgarh
 2. Assam
 3. Odisha
 4. West Bengal

Answer Key

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

Answers with Explanations

1. Option (2) is correct.

More creative

A superlative adjective will take the definite article 'the'. Options 3 and 4 are not the right terminologies as they are not used the way they are written. We can use the comparative form 'more creative' in this context as it is a comparison that is made.

2. Option (2) is correct.

Perpetual

A peristyle is a row of columns surrounding a space within a building, such as a court or internal garden. Perpetual is something that is everlasting. Perplex is something that is a puzzle. Permissive means something that is tolerant.

3. Option (3) is correct.

Charishma

Charishma is the wrongly spelt word. The correct spelling is charisma. The meaning of the word charisma is charming.

4. Option (3) is correct.

Held out

Holding something is called hanged to. Escaping a punishment is called getting off. To held out is to continue in a situation. So, the word that substitutes 'pass in' is held out.

5. Option (1) is correct.

Alter

The sentence speaks about the outfit and increase in weight. The meaning of the word alter is change or modify.

6. Option (3) is correct.

Optimism

The synonym of acrimony is bitterness. The synonym of despondence is gloominess. The synonym of optimism is sanguinity.

7. Option (3) is correct.

Scent

The sentence is about perfume and the fragrance of the perfume. Options 1 and 2 are verbs in present and past forms that mean to make something go or be taken somewhere, especially by mail, radio, etc. A cent is a monetary unit in various countries.

8. Option (1) is correct.

Everybody in the family is going to admire the new bride.

The sentence given for conversion is: The new bride is going to be admired by everyone in the family. This sentence is given in the passive construction. The tense used in the sentence is in the present continuous form, indicating the future action.

The object of the active sentence is used as the subject in the passive sentence. When we convert the sentence into active voice, the object of passive 'everybody in the family' becomes the subject of the active construction. As 'everybody' is singular, we must use 'is' as the be verb. The verb 'going to be admired' is converted into the base form and hence, it becomes 'going to admire.' The new bride becomes the object of the active sentence.

9. Option (1) is correct.

Extravagant

One who wastes money on luxurious objects is extravagant. A businessman is an entrepreneur. A consumer is a customer of a product or a person who buys and uses various products. A capitalist is an entrepreneur.

10. Option (4) is correct.

A person who can be trusted to do something efficiently

The meaning of SAFE PAIR OF HANDS is someone who can be trusted with responsibility or a job.

11. Option (1) is correct.

Cosmopolitan

A cosmopolitan is someone who has experience of many different parts of the world. An epitome is a perfect example of something. An unrefined food or other substance is in its natural state and has not been processed. A cantonment is a military quarter.

12. Option (4) is correct.

The airport security refused him admittance.

The sentence given for conversion is: Admittance was refused to him by the airport security. This sentence is given in the passive voice. It must be converted into active voice. 'The airport security' is the object of the passive sentence.

It becomes the subject in the active voice. The verb in the sentence is used in the simple past form. When we convert the sentence, the verb must be used in the second form or the simple past form. 'Him' becomes the indirect object and admittance becomes the direct object of the active sentence.

13. Option (2) is correct.

that she can use my car to get around

The construction given in option 1 is grammatically wrong. Option 3 is also grammatically wrong, Option 4 will change the meaning of the sentence as the speaker is ready to give the car to trip around the town during her stay in the town.

14. Option (4) is correct.

Decieve

Options 1, 2, and 3 are correctly spelt. The word given in option 4 is wrongly spelt as 'decieve'. It must be 'deceive.' The meaning of the word is to cheat someone.

15. Option (1) is correct.

Provinciel

All three words in options 1, 2, and 3 are correctly spelt. Option 1 provinciel is wrongly spelt. The correct spelling is provincial.

16. Option (1) is correct.

Eminent people were presented awards by the government.

The sentence given for conversion is: The government presented awards to eminent people. This sentence is in active voice and in the simple past tense. 'The government' is the subject of the sentence and 'eminent people' is the object of the sentence. Object of the active voice must become the subject in the passive. So, 'Eminent people' becomes the subject. As the subject is plural, we need to use the plural form of the be verb, and hence we use 'were'. We must use the third form or the past participle form of the verb. We need to use the connector 'by' to show the doer of the action 'the government'.

17. Option (1) is correct.

Successful

Options 2, 3, and 4 are wrongly spelt and the right answer is option 1.

18. Option (4) is correct.

CDAB

Sentence C is the first sentence as it introduces Mr.Dursley and what he notices one night. D is the second sentence as it illustrates what happens that night. Sentence A is the third sentence as it states the reason for the strange happenings that occur outside the house of Mr.Dursley. Sentence B concludes the story, and hence that is the last sentence.

19. Option (1) is correct.

Exhausted

The synonym of earned is received. The synonym of enjoyed is relished. The synonym of encashed is exchanged or converted into money. The synonym of exhausted is expended.

20. Option (3) is correct.

To fail

The meaning of the phrase 'let down' is 'fail to support or help someone'. The words that are given in options 1, 2, and 4 are inapt to the context.

21. Option (2) is correct.

Showing

The first sentence of the passage defines and describes trust by stating what trust is. We cannot bond, use, or choose confidence, and hence showing is the right terminology.

22. Option (2) is correct.

Honest

This sentence is about the way we need to make others trust us. By being calm, extraordinary, and heroic, we cannot make someone trust us, but by being honest, we can create trust in others.

23. Option (3) is correct.

Break

The author here states that within no time, people can lose their trust in us. Trust cannot be cracked, changed, or burst, but it can be broken by our deeds.

24. Option (1) is correct.

Broken

The author states that we will be able to fix the trust of people even after they lose their trust in us, but the impact will still be there in them. Trust cannot be bent, changed, or mended; it can only be broken.

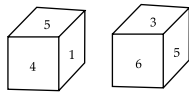
25. Option (4) is correct.

Bonds

Strategies, tricks, or practices will not connect us with people; bonding alone connects with people and for the bond, trust is required.

26. Option (4) is correct.

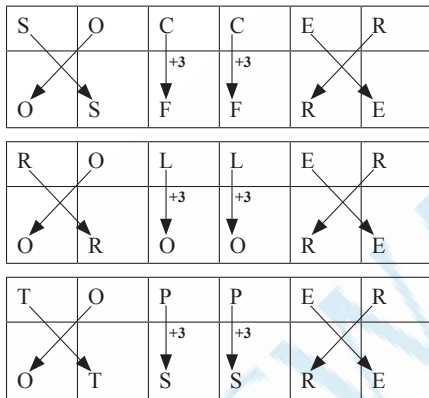
Explanation:



Adjacent faces are not opposite faces; hence, 1, 4, 6, and 5 cannot be opposite to 5 because they are adjacent to 5. Hence, 2 will be opposite to 5.

27. Option (2) is correct.

Explanation: Given that: SOCCER : OSFFRE :: ROLLER : OROORE :: TOPPER : ?



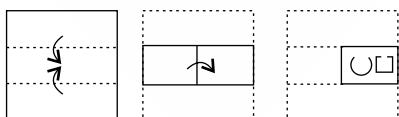
28. Option (1) is correct.

Explanation:

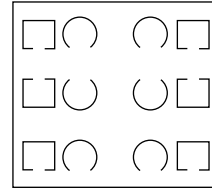
Given that: (40 Q 4) P 5 R (3 P 6) S (7 P 8) R 21 = ?
 After putting sign, $(40 \div 4) \times 5 + (3 \times 6) - (7 \times 8) + 21$
 Using BODMAS, we get
 $10 \times 5 + 18 - 56 + 21$
 $\Rightarrow 50 + 18 - 56 + 21$
 $\Rightarrow 89 - 56 = 33$

29. Option (2) is correct.

Explanation:



The logic of symmetry will be followed here.



30. Option (2) is correct.

Explanation: Given that: 5 : 14 :: 12 : ? :: 17 : 86

5:14	12: ?	17:86
↓	↓	↓
$5 \times 6 - 16 = 14$	$12 \times 6 - 16 = 56$	$17 \times 6 - 16 = 86$

31. Option (2) is correct.

Explanation: Given that: 'HELP' is written as '1652432' and The pattern followed here is that the positional values of consonents are multiplied by 2 and the values of vowels are unchanged.

H	E	L	P
8	5	12	16
↓×2	↓	↓×2	↓×2
16	5	24	32

'SAVE' is written as '381445'

S	A	V	E
19	1	22	5
↓×2	↓	↓×2	↓
38	1	44	5

'MAIL' can be written as:

M	A	I	L
13	1	9	12
↓×2	↓	↓	↓×2
26	1	9	24

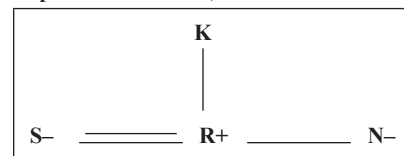
32. Option (1) is correct.

Explanation:

$(13 \times 2.5) - (13 - 10) = 29.5 \neq 28.5$
 $(15 \times 2.5) - (15 - 10) = 32.5$
 $(19 \times 2.5) - (19 - 10) = 38.5$
 $(17 \times 2.5) - (17 - 10) = 35.5$

33. Option (4) is correct.

Explanation: Male +, Female -



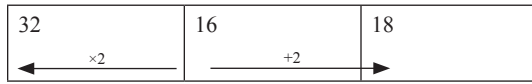
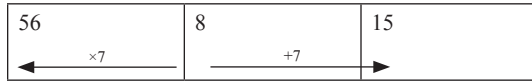
Hence, N is the Husband's sister of S.

34. Option (3) is correct.

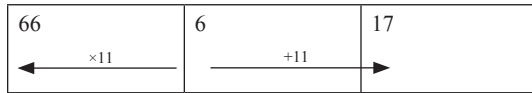
Explanation:

Given that: (56, 8, 15)
 (32, 16, 18)

Logic:



Similarly, upon checking option 3, we get



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

Explanation:

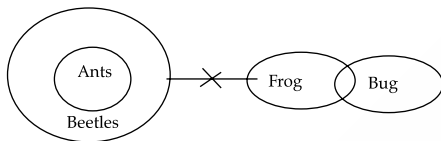


Logic: In the mirror image, left becomes right, and right becomes left. Hence,

R e v o l u t i o n

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

Explanation:



- (I) From the diagram, we cannot say definitely that some bugs are ants.
- (II) From the diagram, we cannot say definitely that no bug is a beetle.
- (III) Since all ants are beetles and no beetles are frog. So, no frog is an ant.

Hence, only conclusion III follows

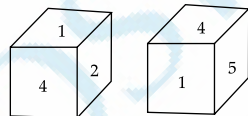
37. **Option (3) is correct.**

Explanation:

$3 + 2 = 5$ and $5 \times 5 = 25$
 $6 + 2 = 8$ and $8 \times 8 = 64$
 $9 + 2 = 11$ and $11 \times 11 = 121 \neq 100$
 $7 + 2 = 9$ and $9 \times 9 = 81$

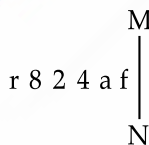
38. **Option (4) is correct.**

Explanation: In the given position, 1, 2, 5 are adjacent to 4. Hence, either 3 or 6 will be opposite to 4. So, when 3 is at the bottom, 4 will be on top.



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

Explanation:



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

f a 4 2 8 r

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

Explanation:

Logic: Here, alphabets are assigned reversed positional values.

‘WAVE’ is coded as ‘426522’

W	A	V	E
4	26	5	22

and ‘SOUND’ is coded as ‘81261323’.

S	O	U	N	D
8	12	6	13	23

Similarly, ‘LIGHT’ can be coded as:

L	I	G	H	T
15	18	20	19	7

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

Explanation: $2017 = 2000 + 17$

In 17 years, there will be 4 leap years.

Number of odd days in century = 0

Total odd days = $17 + 4 + 10 = 21$

Number of odd days in January 2002 = 3

Number of odd days in Feb 2002 = 1

Number of odd days from 1 to 9 March 2002 = 2

Total odd days = $21 + 6 = 27 \div 7 = 6$ remainder

Hence, 9th March 2009 will be a Saturday.

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

Explanation: Given that: TBNF, CJUL, LRBR, UZIX, ?

T	B	N	F
↓+9	↓+8	↓+7	↓+6
C	J	U	L
↓+9	↓+8	↓+7	↓+6
L	R	B	R
↓+9	↓+8	↓+7	↓+6
U	Z	I	X
↓+9	↓+8	↓+7	↓+6
D	H	P	D

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

Explanation: Given that: $39 * 4 * 61 * 18 * 4 * 49 * 7 * 30$

$\times, =, \times, -, \div, +$

Upon checking option 3 and after putting sign, $39 \times 4 - 61 = 18 \times 4 - 49 \div 7 + 30$

Using BODMAS, we get

$\Rightarrow 156 - 61 = 18 \times 4 - 7 + 30$

$\Rightarrow 95 = 72 - 7 + 30$

$\Rightarrow 95 = 102 - 7$

$\Rightarrow 95 = 95$

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

Explanation:

First row: 17, 26, 60

Second row: 8, 15, 31

Third row: 11, 19, ?

Logic is as follows:

$(17 + 26) \times 2 - 26 = 60$

$(8 + 15) \times 2 - 15 = 31$

$(11 + 19) \times 2 - 19 = 41$

45. Option (4) is correct.

Explanation:

Given that: $50 * 2 * 3 * 30 * 10 * 40 * 20$

Upon checking option 4 and After putting sign,

$$50 \times 2 = 3 \times 30 \times 10 - 40 \times 20$$

Using BODMAS, we get

$$100 = 900 - 800$$

$$100 = 100$$

46. Option (1) is correct.

Explanation: $24 : 8 \Rightarrow 24 \div 3 = 8$

$$16 : 4 \Rightarrow 16 \div 4 = 4$$

$$48 : 12 \Rightarrow 48 \div 4 = 12$$

$$20 : 5 \Rightarrow 20 \div 4 = 5$$

47. Option (3) is correct.

Explanation: Given that: 23, 28, 280, 295, 5900, ?

23	28	280	295	5900	5925
	5	15		25	
	+10			+10	

48. Option (4) is correct.

Explanation: Given that: 'DUCK' is written as 'FSEI'

D	U	C	K
+2	-2	+2	-2
F	S	E	I

'FISH' is written as 'HGUF'.

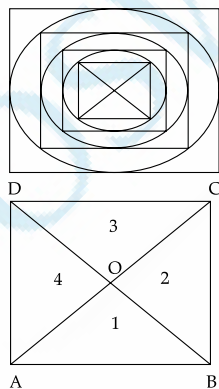
F	I	S	H
+2	-2	+2	-2
H	G	U	F

'FROG' can be written as

F	R	O	G
+2	-2	+2	-2
H	P	Q	E

49. Option (3) is correct.

Explanation:



$$\text{Number of triangles} = 4 + \Delta ABC + \Delta ADC + \Delta BDC + \Delta BAD = 8$$

50. Option (2) is correct.

Explanation:

Given that: M o N ___ o M ___ o ___ o M _ N o J o

Upon inserting alphabets sequentially from option 2, we get

o M o N o J o / o M o N o J o / o M o N o J o

51. Option (3) is correct.

Given that total family income = ₹ 70000

And amount spent on food and medical = (28% + 10%) of 70000 = ₹ 26600

So, the remaining amount with family after food and medical expenditure = 70000 - 26600 = ₹ 43400

52. Option (4) is correct.

Given, Speed of boat in still water = 12 km/h

Let speed of stream = x km/h

So, downstream speed = (12 + x) km/h

And upstream speed = (12 - x) km/h

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

$$\Rightarrow \frac{18}{12+x} + \frac{18}{12-x} = 6 \frac{6}{7}$$

$$\Rightarrow \frac{18 \times 24}{144 - x^2} = \frac{48}{7}$$

$$\Rightarrow 144 - x^2 = 63$$

$$\Rightarrow x^2 = 81$$

$$\Rightarrow x = 9$$

So, the speed of stream = 9 km/h

53. Option (4) is correct.

Given:

Number of teak trees planted in year 2017 = 35000

And number of teak trees planted in year 2016 = 25000

So, the required percentage increase

$$= \frac{35000 - 25000}{25000} \times 100 = 40\%$$

54. Option (1) is correct.

Given expression: $\frac{x^2}{y^2} + \frac{y^2}{x^2} = 7$

$$\Rightarrow \frac{x^2}{y^2} + \frac{y^2}{x^2} + 2 = 7 + 2$$

$$\Rightarrow \left(\frac{x}{y} + \frac{y}{x} \right)^2 = 9$$

$$\Rightarrow \frac{x}{y} + \frac{y}{x} = 3$$

Cubing both sides,

$$\Rightarrow \frac{x^3}{y^3} + \frac{y^3}{x^3} + 3 \times \frac{x}{y} \times \frac{y}{x} \left(\frac{x}{y} + \frac{y}{x} \right) = 27$$

$$\Rightarrow \frac{x^3}{y^3} + \frac{y^3}{x^3} + 3(3) = 27$$

$$\Rightarrow \frac{x^3}{y^3} + \frac{y^3}{x^3} = 18$$

55. Option (2) is correct.

Given:

Selling price of machine = ₹ 122700

And discount percentage = 15%

Let the marked price of machine = ₹ x

According to the question,

$$\Rightarrow x \times \frac{100 - 15}{100} = 122700$$

$$\Rightarrow x = 122700 \times \frac{100}{85}$$

$$\Rightarrow x = 144352.94$$

So, the marked price of machine = ₹ 144352.94

56. Option (3) is correct.

Given expression: $\frac{8r}{r^2 - 8r + 1} = \frac{1}{14}$

$$\Rightarrow 112r = r^2 - 8r + 1$$

Dividing both side by r,

$$\Rightarrow 112 = r - 8 + \frac{1}{r}$$

$$\Rightarrow r + \frac{1}{r} = 120$$

57. Option (1) is correct.

Average weight of 15 athletes and three trainers = 60 kg

So, total weight = $18 \times 60 = 1080$ kg

Total weight of other four athletes = $63 \times 4 = 252$ kg

So, average weight of the group = $\frac{1080 + 252}{22} = 61$ kg

58. Option (3) is correct.

Value of expression

$$\left[3\frac{6}{7} \div \frac{54}{7} - \left\{ 3 - \left(2\frac{3}{4} - \frac{3}{2} \right) \right\} \right] + A \div 4 = 0$$

$$\Rightarrow \left[\frac{27}{7} \div \frac{54}{7} - \left\{ 3 - \left(\frac{5}{4} \right) \right\} \right] + A \div 4 = 0$$

$$\Rightarrow \left[\frac{27}{7} \div \frac{54}{7} - \frac{7}{4} \right] + A \div 4 = 0$$

$$\Rightarrow \left[\frac{1}{2} - \frac{7}{4} \right] + A \div 4 = 0$$

$$\Rightarrow \left[\frac{-5}{4} \right] + A \div 4 = 0$$

$$\Rightarrow A \div 4 = \frac{5}{4}$$

$$\Rightarrow A = 5$$

59. Option (2) is correct.

Using, volume of cuboid = lbh

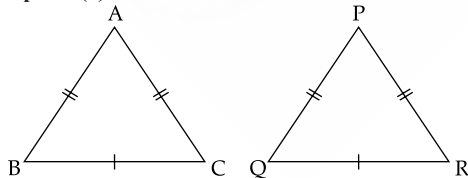
Volume of each brick = $25 \times 11.25 \times 6 = 1687.5$ cm³

And volume of wall

$$= (8 \times 100) \times (6 \times 100) \times (22.5) = 1080 \times 10^4$$
 cm³

$$\text{Required number of bricks} = \frac{1080 \times 10^4}{1687.5} = 6400$$

60. Option (1) is correct.



Given, $AB = AC$... (1)

and $PQ = PR$... (2)

and $BC = QR$... (3)

and $AB = PQ$... (4)

By eq. (1), (2) and (3), $AB = AC = PQ = PR$

∴ Using SSS,

$$\Delta ABC \cong \Delta PQR$$

$$\therefore \angle B = \angle C = \angle R$$

$$\therefore \angle R = 50^\circ$$

61. Option (2) is correct.

Given that, dealer using 900 gm weight instead of 1 kg.

$$\text{So, profit percentage} = \frac{1000 - 900}{900} \times 100 = 11\frac{1}{9}\%$$

62. Option (1) is correct.

Average marks of four subject = 75

So, total marks = $75 \times 4 = 300$

After adding english, the average = 70

So, total marks of all five subjects = $70 \times 5 = 350$

So, english marks = $350 - 300 = 50$ marks

63. Option (4) is correct.

Value of $2/3 = 0.6666$

And value of $4/5 = 0.8$

So, $4/5$ is greatest among the given options.

64. Option (1) is correct.

Given, $P : Q = 10 : 11$

And $Q : R = 11 : 12$

So, $P : Q : R = 10 : 11 : 12$

So, $P+Q : Q+R : R+P = (10+11) : (11+12) : (12+10)$

$$\Rightarrow P+Q : Q+R : R+P = 21 : 23 : 22$$

65. Option (4) is correct.

Total surface area of hemisphere = 16632 cm²

$$\Rightarrow 3\pi r^2 = 16632$$

$$\Rightarrow r = 42$$

$$\text{So, volume of hemisphere} = \frac{2}{3}\pi r^3$$

$$= \frac{2}{3} \times \frac{22}{7} \times 42 \times 42 \times 42$$

$$= 155232$$
 cm³

66. Option (3) is correct.

Total two digit numbers divisible by 3

$$= \frac{99}{3} - 3 = 33 - 3 = 30$$

[as 3, 6 and 9 are not two digit no.]

$$\text{Total two digit numbers divisible by 5} = \frac{95}{5} - 1 = 18$$

[as 5 is not two digit number]

$$\text{Total numbers divisible by 3 and 5 both} = \frac{90}{15} = 6$$

$$\text{Total numbers divisible by 3 or 5} = 30 + 18 - 6 = 42$$

67. Option (2) is correct.

Let the price of article = ₹ 100

After increasing price by increasing 45%, new price = ₹ 145

$$\text{Total discount percentage} = 15 + 15 - \frac{15 \times 15}{100} = 27.75\%$$

$$\text{So, new price of article} = 145 \times \frac{100 - 27.75}{100} = \text{Rs. } 104.7625$$

Required percentage increase = $104.7625 - 100 = 4.7625\%$

68. Option (1) is correct.

According to the question,

The diameter of base of cone = edge of cube = 10 cm

And height of cone = height of cube = 10 cm

So, Required volume

$$= \frac{1}{3}\pi r^2 h = \frac{1}{3} \times \pi \times 5 \times 5 \times 10 = \frac{250}{3}\pi$$

69. Option (4) is correct.

Given:

Difference between compound and simple interest for two years = ₹ 1725

Rate of interest = 25%

Let principal amount = ₹ P

Using, difference = $P\left(\frac{r}{100}\right)^2$

$$\Rightarrow 1725 = P\left(\frac{25}{100} \times \frac{25}{100}\right)$$

$$\Rightarrow P = 27600$$

So, principal amount = ₹ 27600

70. Option (3) is correct.

Given: $ab = 3$

$$2a + 5b = 12$$

Squaring both side,

$$\Rightarrow (2a + 5b)^2 = 144$$

$$\Rightarrow 4a^2 + 25b^2 + 20ab = 144$$

$$\Rightarrow 4a^2 + 25b^2 + 20 \times 3 = 144$$

$$\Rightarrow 4a^2 + 25b^2 = 84$$

71. Option (4) is correct.

As shown in pie chart, the country spent the same amount of money of 10% on both hockey and golf.

72. Option (1) is correct.

Given:

Percentage increase in salary = 20%

Percentage decrease in salary = 20%

Using successive percentage change

$$= 20 - 20 - \frac{20 \times 20}{100} = -4\%$$

So, total 4% decrease in salary.

73. Option (4) is correct.

Given:

Mona and Sona together can finish the work in = 18 days

And Sona alone can finish the work in = 24 days

Let total work = LCM (18, 24) = 72 units

So, Mona and Sona's per day work

$$= \frac{72}{18} = 4 \text{ unit/day}$$

$$\text{And Sona per day work} = \frac{72}{24} = 3 \text{ unit/day}$$

So, Mona's per day work = $4 - 3 = 1$ unit/day

Hence, time taken by Mona alone to finish the work

$$= \frac{72}{1} = 72 \text{ days}$$

74. Option (3) is correct.

Given:

Total population of the town = 80000

First year percentage decrease = 8%

And second year percentage increase = 5%

So, population after 2 years

$$= 80000 \times \frac{92}{100} \times \frac{105}{100} = 77280$$

75. Option (4) is correct.

Given: In right angle triangle, $\tan A = \frac{1}{\sqrt{3}}$

By pythagoras triplet 1, $\sqrt{3}$, 2,

$$P = 1, B = \sqrt{3}, H = 2$$

$$\text{So, } \sin A = \frac{1}{2}$$

$$\cos A = \frac{\sqrt{3}}{2}$$

$$\sin C = \frac{\sqrt{3}}{2}$$

$$\cos C = \frac{1}{2}$$

$$\text{so, } \sin A \cdot \cos C + \cos A \cdot \sin C = \frac{1}{2} \times \frac{1}{2} + \frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{2} = \frac{1}{4} + \frac{3}{4} = 1$$

76. Option (4) is correct.

Anita Desai is the author of the book 'Fasting, Feasting'. Anita Desai is an Indian novelist. Some of her notable works include Fire on the Mountain, The village by the sea, The Peacock, Voices in the City, Fire on the Mountain and Games at Twilight.

Preeti Shenoy is an Indian author. Some of her notable works are 34 Bubblegums and Candies, Life Is What You Make It, Tea for Two and a Piece of Cake, The Secret Wish List, and The One You Cannot Have.

Anuja Chauhan is an Indian screenwriter, author, and advertiser. Some of her famous works are The Zoya factor, Battle For Bittora, The House That BJ Built, and Club You To Death.

Namita Gokhale is an Indian writer and editor. Some of her famous works are Paro: Dreams of Passion. She is the co-founder of Jaipur Literature Festival.

77. Option (1) is correct.

The Matheran Hill Railways has a narrow gauge railways track. The Matheran Hill Railway (MHR) is operated by the Central railways and is a heritage railway in Maharashtra, India. It is a 21km long railway line that connects Neral to Matheran in the Western Ghats. It is on the tentative list of UNESCO World heritage site.

Gauge is the distance between the inner sides of the two tracks of railway line. There are four types of gauges in India- Broad gauge, Metre Gauge, Narrow gauge, and Standard gauge.

Broad gauge is also known as wide gauge. The distance between two tracks in these railway gauges is 1676 mm.

Standard Gauge is the one in which the distance between the two tracks is 1435 mm.

In metre gauge the distance between two tracks is 1000 m.

Narrow gauge is a railway track gauge in which the width of narrow gauge is between 600 mm and 1067 mm.

78. Option (3) is correct.

A.R Rahman, the famous musician won the 52nd Grammy Award for Jai Ho. AR Rahman is an Indian music composer, record producer, song writer, and singer. He works predominantly in Tamil and Hindi cinema. He has been honoured with six national awards, two academy awards, Padma Bhushan, Filmfare, Golden Globe, and BAFTA award. The GRAMMY

awards are presented by the Recording Academy of the United States to recognize “outstanding” achievements in the music industry. Its trophy is a gilded gramophone.

79. Option (3) is correct.

Deccan Plateau with an average elevation of about 600 meters (2000 feet), is bounded by three mountain ranges: the Satpura range to the north and the Eastern and Western Ghats on either side. The Deccan Plateau is a triangular landmass that lies to the south of the river Narmada. It is spread over eight Indian states namely Telangana, Maharashtra, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu.

Marwar Plateau lies to the east of Aravali hills and is a part of Eastern Rajasthan. It is mainly composed of sandstone, shales and limestones of the Vindhayan period. These have an elevation of 250-500 m.

Meghalaya Plateau is an extension of Peninsular plateau towards east beyond the Rajmahal hills to form Meghalaya or the Shillong plateau. The western, central and the eastern parts of the plateau are known as the Garo Hills (900 m), the Khasi-Jaintia Hills (1,500 m) and the Mikir Hills (700 m). Shillong (1,961 m) is the highest point of the plateau.

Chota Nagpur Plateau is the north east projection and lies mostly in Jharkhand, northern part of Chhattisgarh and Purulia district of West Bengal. It is at an elevation of 700 m above sea level and is composed mainly of Gondwana rocks.

80. Option (3) is correct.

Lack of financial discipline by the government can lead to excess expenditure and inflation. Basically, financial discipline is planning and setting the goals for in terms of measurable quantities. In case, there is lack of financial discipline it will lead to more spending because there is no enough check on the spending. Also, if there is no check on the money in circulation and the reserve bank prints a large number of currencies its unit value diminishes. This may ultimately lead to inflation. Inflation is the increase in general price of goods and services in the country.

81. Option (3) is correct.

Caramelisation is a slow cooking process that begins around 320°F, removes water from a sugar and breaks down the sugar into complex polymers with a sweet, nutty, or bitter taste and thus produces a golden-brown to dark brown colour.

Gelatinisation is a process that breaks down the intermolecular bond of starch in presence of water and heat. In this process, starch granule is irreversibly dissolved in water. Basically, there is a disruption of molecular orderliness in starch granules and the solid starch turns into a gelatin.

Dextrinisation is a process in which starch is changed into dextrin in the presence of dry heat on the surface of food. Dextrins are brown coloured sugars and with the process of dextrinization the taste and aroma of food also changes.

Maillard reaction is also known as non-enzymatic browning. It is a chemical reaction that takes place between reducing sugars and amino acid. This reaction is responsible for the browning of food such as cookies, bread, toast, biscuits etc. The reaction is named after French chemist Louis Camille Maillard.

82. Option (3) is correct.

The National Hydrogen Mission (NHM) was launched on 15th August 2021. NHM aims to use Hydrogen as an energy source for a cleaner alternative fuel option. The mission aims to generate hydrogen from green power resources. It will help in meeting the target of production of 5 million tonnes of Green hydrogen by 2030 and the related development of renewable

energy capacity. The mission aims to provide clean fuel to the common people of the country. It also aims to reduce dependence on fossil fuel and also reduce crude oil imports. The objective of the mission is to make the country an export Hub for Green Hydrogen and Green Ammonia.

83. Option (1) is correct.

Pandit Bhawani Shankar is a pakhavajdrum player. He is the son of a renowned Kathak dancer, Babulalji

The Pakhavaj is a barrel shaped musical instrument. It is a two-headed drum and percussion instrument used in the dhrupad style of Indian classical music.

Tanpura is a long necked plucked stringed instrument. It originated in India and is referred to as tambura and tanpuri.

Dholak is a two headed folk percussion drum. It is widely used in kirtan, bhanga, qawwali, and lavani. It has two drumheads and is about 45 cm in length and 27 cm in breadth.

Tabla consists of a pair of twin hand drums and is the principal percussion instrument in Hindustani classical music. It can be played solo and accompanied with other instruments and vocals. It is an important part of the devotional traditions of Hindus and Sikhs.

84. Option (4) is correct.

VVS Laxman's autobiography is titled '281 and Beyond'. VVS Laxman is a former International batsman and cricket commentator. He is currently the head of Cricket at the National Cricket Academy (NCA), and the head coach of the India Under-19.

Wide Angle is an autobiography of Anil Kumble. He is a former Indian cricketer, coach, and commentator. He was a test player and One Day International (ODI) and had an international career of 18 years. He is considered as one of the best leg spin bowlers in test cricket. He is fondly called as 'Apple' and 'Jumbo.'

Javagal Srinath is a former Indian cricketer. He is currently an ICC match referee. He was the first bowler to take more than 300 wickets in One Day International.

The Virender Sehwag is a former Indian test and One Day International cricketer. He was the first Indian player to be honoured as the Wisden Leading Cricketer in the World. He was also the former captain of Delhi Daredevils and Delhi Ranji Trophy.

85. Option (3) is correct.

The picture is of Mallakhambam. Mallakhamba or Malkham is a traditional Indian sport in which gymnasts perform aerial yoga or gymnastic postures, and wrestling grips in concerts with a vertical stationary or hanging rope or pole. It was declared as the state game by Madhya Pradesh in 2013.

Chaupar is a cross and circle board game. The board is made of cloth or wool. The game is played with wooden pawns and seven cowry shells.

Kho Kho is a traditional Indian game played in a rectangular court. There are two teams with 12 players each. Nine players from the chasing or attacking team sit in the centre of pitch and each player is facing opposite to the adjacent player. Three players from the opposite team enter the pitch.

Gilli Danda is also known as Viti Dandu or Kitti-Pul. It is an ancient sport which is played with a danda and small oval shaped piece of wood known as gilli. The gilli is balanced on the stone and panda is used to flip it. Once in the air the player is required to run and touch a pre-agreed point. If the gilli is caught by the opposing team, the player is considered out.

86. Option (2) is correct.

Calcutta High court is the oldest high court. It is one of the three high courts established at the Presidency Towns by Letters patent granted by Queen Victoria. It was established as the High Court of Judicature at Fort William on July 1, 1862 under the High Court's Act, 1861. The seat of the Calcutta High Court is at Kolkata, capital of West Bengal. It has jurisdiction over the State of West Bengal and the Union Territory of the Andaman and Nicobar Islands. Barnes Peacock was the first Chief Justice of the High Court. The court has sanctioned judge strength of 72.

The high court has a Neo gothic design and it was constructed in the year 1872. It was designed by the then government architect Walter Granville.

87. Option (1) is correct.

Johann Dobereiner arranged the elements with chemically similar properties, such as lithium, sodium, and potassium, and showed that the properties of the middle element could be predicted from the properties of the other two. He is known for Doberener triads and lamp.

Lothar Meyer was a German chemist and is credited with earliest versions of the periodic table of the chemical elements.

John Newlands was a British chemist known for his Law of Octaves for the Periodic table. The law stated that any given element will exhibit analogous behaviour to the eighth element following it in the table. He had arranged elements from Hydrogen ending with Thorium.

Dmitri Mendeleev was a Russian chemist known for creating Periodic law. He formulated the Periodic table for the first time in 1871.

88. Option (1) is correct.

Maitya Ram Reang (Satyaram) was conferred with the Padma Shri for his contributions to Hojagiri. Hojagiri is an Indian folk dance performed by the people from of Bru Reang clan, Tripura.

'Gusadi' is a part of the Dandari dance form and it consists of two to five members. This starts on the full moon day and goes on till the fourteenth day of the dark fortnight of Deepavali. It is the biggest festival for the Raj Gonds of Adilabad district in Telangana.

Sattriya is a classical dance form of Assam. It was introduced by Sankaradeva as a medium for propagation of the Vaishnava faith. It is governed by strictly laid down principles in respect of hastamudras, footworks, aharyas, and music.

Bihu is an important festival of Assam and is celebrated in three categories- Bohag Bihu (Farmers start sowing), Kaati Bihu (farmers start cutting and binding of grains), and Magh Bihu (harvesting of grains).

89. Option (4) is correct.

Bharatnatyam is the first of India's traditional dance to be refashioned as a theatre art and to be exhibited widely both at home and abroad. Bharatnatyam is one of the eight major Indian classical dances and has its origin in Tamil Nadu. It expresses South Indian religious themes and spiritual ideas especially related to Shaivism in Hinduism.

Kuchipudi is one of the eight major Indian classical dances and originates from Kuchipudi village in Andhra Pradesh. The roots of this dance form are in Natya Shastra. It is believed that Tirtha Narayana Yati and his disciple Siddhendra Yogi founded the systemised and modern version of Kuchipudi in the 17th century.

Kathakali is an Indian classical dance native to Kerala. It is basically a 'story play' and involves colourful costumes and

make-up by traditional people.

Manipuri Dance is also referred to as Manipuri Raas Leela and is one of the eight major forms of Indian classical dance.

90. Option (3) is correct.

Standard Rain Gauge is a meteorological instrument consisting of a funnel-shaped collector attached to a measuring tube used to measure rainfall per unit area at a given time. It is a circular funnel with a diameter of 203 mm which collects the rain into a graduated and calibrated cylinder.

Anemometer is used to measure the speed of wind and pressure. They are important tools used by meteorologists.

Sling psychrometers are instruments used to determine the humidity of surroundings. Basically, it is a battery free hygrometer. It consists of a dry and wet bulb thermometer.

Hygrometer is an instrument used to measure the humidity or amount of water vapour in air.

91. Option (3) is correct.

Periods are horizontal rows in periodic table. Periodic table is an arrangement of the known chemical elements in vertical columns and horizontal rows. Dimitri Mendeleev is known as the father of the periodic table. There are 18 vertical columns or groups and 7 horizontal rows or periods in the modern periodic table.

Valence electrons are the electrons present in the outermost shell or orbit of electron. These electrons participate in the formation of a chemical bond if the outer shell is not closed.

Orbitals are basically three dimensional description of an electron around the atom.

92. Option (3) is correct.

PV Sindhu won the Bronze medal in badminton women's singles at Tokyo Olympics 2020. The 2020 Tokyo Olympics was known as officially the Games of the XXXII Olympiad. It was originally supposed to take place in 2020. However, it was postponed to 2021 due to covid.

PV Sindhu is an Indian international badminton player who is the first and only Indian to become the badminton world champion and only the second individual athlete from India to win two consecutive medals at the Olympic Games.

93. Option (1) is correct.

Slowly healing wounds is NOT a symptom of Beriberi caused due to the deficiency of Vitamin B1. Beri beri CANNOT be prevented by vaccination. Beri Beri is a deficiency disease caused due to deficiency of Vitamin B1 or Thiamine. It can be either dry or wet beri beri. The dry disease affects the nervous system and the wet has an impact on the cardiovascular system. These may ultimately lead to muscle paralysis or heart failure.

94. Option (3) is correct.

'Straight from the Heart: An Autobiography' is an autobiography of Kapil Dev. Kapil Dev is a former Indian cricketer. He was a fast-medium bowler and a middle-order batsman. He was the captain of Indian team that won the 1983 world cup. He has been honoured with Padma Shri and Bhushan by the Government of India.

Captain Cool is the biography of MS Dhoni. It is written by Ezekiel Gulu. MS Dhoni is a former Indian batsman and wicket keeper. He was the captain of Indian team that won the 2011 world cup. He is the current captain of Chennai Super Kings. He has been honoured with Padma Shri, Padma Bhushan, and the Major Dhyanchand Khel Ratna Award. He is the only cricket captain in the world to win all three of the Cricket World Cup, ICC Men's T20 World Cup and ICC

Champions Trophy.

Sunny Days: An Autobiography is the autobiography of Sunil Gavaskar. He is former Indian cricketer and cricket commentator. He was awarded with Arjuna award, Padma Bhushan for his contributions.

Wide Angle is an autobiography of Anil Kumble. He is a former Indian cricketer, coach, and commentator. He was a test player and One Day International (ODI) and had an international career of 18 years. He is considered as one of the best leg spin bowlers in test cricket. He is fondly called as 'Apple' and 'Jumbo.'

95. Option (4) is correct.

Lata Mangeshkar was awarded the Officer of the Legion of Honour award. Officer of the Legion of Honour awards the highest distinction that can be conferred by the French Republic on a French citizen as well as on a foreigner. Earlier, Satyajit Ray and megastar Amitabh Bachchan were also conferred with the same.

Lata Mangeshkar was an Indian playback singer. She has recorded songs in 36 Indian languages. She has been honoured with titles such as "Queen of Melody", "Nightingale of India", and "Voice of the Millennium". She has been honoured with Dada Saheb Phalke award, Bharat Ratna, Padma Bhushan, Padma Vibhushan, Maharashtra Bhushan and Officer of the National Order of the Legion of Honour.

96. Option (4) is correct.

As per statistics published by National Crime Records Bureau for 2020, Madhya Pradesh registered the highest number of crimes against children [Indian Penal Code (IPC) and Special and Local Laws (SLL).

NCRB is a Government of India's agency responsible for collecting and analysing crime data. It is headquartered in New Delhi and was established in the year 1986.

NCRB functions under the Ministry of Home Affairs, Government of India. Vivek Gogia is the current chairman of NCRB.

97. Option (4) is correct.

Padma Bhushan awardee Uma Sharma is a Kathak dancer. She is a choreographer and runs the Bharatiya Sangeet Sadan. She is credited for reviving the old classical dance form of Natwari Nritya or the Raslila of Brindavan. This later evolved into the Kathak. She was honoured with Padma Shri, Sangeet Natak Akademi Award and Sahitya Kala Parishad Award. Kathak is one of the eight major forms of Indian classical dance and belongs to Uttar Pradesh. In this dance, stories are told using hand movement and extensive footwork.

Kathakali is an Indian classical dance native to Kerala. It is

basically a 'story play' and involves colourful costumes and make-up by traditional people.

The Odissi dance form is a traditional dance-drama genre of performance art that originated in temples of Odisha. In this dance form, artists and musicians enact and dance on a story, a spiritual message or devotional poem from the Hindu texts, using body movements, mudras, abhinaya and symbolic costumes.

Bharatnatyam is one of the eight major Indian classical dances and has its origin in Tamil Nadu. It expresses South Indian religious themes and spiritual ideas especially related to Shaivism in Hinduism.

98. Option (1) is correct.

Teejan Bai, Jhaduram Devangan, Ritu Verma, Usha Barle and Shantibai Chelak are famous for Pandavani. Pandavani is a folk singing style in which stories of Pandavas from the Mahabharata are narrated. It involves a musical accompaniment. It is famous in Chhattisgarh, Madhya Pradesh, Odisha, and Andhra Pradesh.

Lavani is a popular dance form of Maharashtra which is a combination of traditional song and dance performed to the beats of a Dholki. It has a powerful rhythm and is performed by female dancers wearing a nine yard long saree.

Bihugeet are an integral component of Assamese folk music. These are basically Bihu folk songs.

Bhatiali is a folk music form of West Bengal and Bangladesh. It is generally a river song sung by boatmen while going down streams of the river. It traditionally consist of metaphorical and emotional verses about the waters and the situation of boatmen and fishermen.

99. Option (3) is correct.

Paragliding is an adventure sport. Paragliding is a recreational and adventure sport in which there is a lightweight paraglider with no rigid primary structure. The pilot sits in a harness or lies supine in a cocoon-like 'pod' suspended below a fabric wing. The wing shape is maintained by the aerodynamic forces, suspension lines and the pressure of air entering the front of wings.

100. Option (2) is correct.

Veteran classical dance guru from Assam, Jatin Goswami was given the National Kalidas Samman for 2017. Jatin Goswami is an Indian choreographer and dancer. He is known for classical dance form of Sattriya. Sattriya is a classical dance form of Assam. It was introduced by Sankaradeva as a medium for propagation of the Vaishnava faith. It is governed by strictly laid down principles in respect of hastamudras, footworks, aharyas, and music.

