## STD. 10th (Test for Competitive-05) ANSWER KEY Dt. 04-12-2023

| PHYSICS |  |
| :---: | :---: |
| [Q. NO.] | [ANS] |
| 1 | C |
| 2 | A |
| 3 | A |
| 4 | D |
| 5 | A |
| 6 | D |
| 7 | B |
| 8 | C |
| 9 | BONUS |
| 10 | C |
| 11 | A |
| 12 | D |
| 13 | C |
| 14 | C |
| 15 | A |
| 16 | D |
| 17 | A |
| 18 | B |
| 19 | C |
| 20 | B |
|  |  |
| 13 |  |


| CHEMISTRY |  |
| :---: | :---: |
| [Q. NO.] | [ANS] |
| 21 | C |
| 22 | C |
| 23 | B |
| 24 | C |
| 25 | B |
| 26 | B |
| 27 | B |
| 28 | B |
| 29 | C |
| 30 | A |
| 31 | A |
| 32 | B |
| 33 | A |
| 34 | D |
| 35 | C |
| 36 | D |
| 37 | B |
| 38 | A |
| 39 | A |
| 40 | C |
|  |  |
|  |  |
| 23 |  |


| BIOLOGY |  |
| :---: | :---: |
| [Q. NO.] | [ANS] |
| 41 | B |
| 42 | A |
| 43 | A |
| 44 | C |
| 45 | A |
| 46 | C |
| 47 | D |
| 48 | B |
| 49 | C |
| 50 | A |
| 51 | B |
| 52 | C |
| 53 | C |
| 54 | B |
| 55 | B |
| 56 | D |
| 57 | C |
| 58 | A |
| 59 | BD |
| 60 | B |
|  |  |


| MATHS |  |
| :---: | :---: |
| [Q. NO.] | [ANS] |
| 61 | A |
| 62 | C |
| 63 | D |
| 64 | B |
| 65 | D |
| 66 | B |
| 67 | D |
| 68 | C |
| 69 | C |
| 70 | D |
| 71 | C |
| 72 | C |
| 73 | D |
| 74 | B |
| 75 | B |
| 76 | D |
| 77 | B |
| 78 | C |
| 79 | C |
| 80 | D |
|  |  |
| 77 |  |


| G.K./Mental Ability |  |
| :---: | :---: |
| [Q. NO.] | [ANS] |
| 81 | C |
| 82 | A |
| 83 | C |
| 84 | D |
| 85 | D |
| 86 | D |
| 87 | D |
| 88 | B |
| 89 | C |
| 90 | C |
| 91 | B |
| 92 | D |
| 93 | D |
| 94 | C |
| 95 | B |
| 96 | D |
| 97 | D |
| 98 | C |
| 99 | B |
| 100 | C |

Page 1

## SECTION - V [Mental Ability \& G.K.]

81. In which district of Meghalaya - the highest rainfall place Mawsynram is situated?
(NTSE 2018-19)
(a) Garo
(b) Jaitiya
(c) Khasi
(d) Dispur
82. Choose the number of percentage which has been raised to increase representation of women in politics. (NTSE 2020-21)
(a) $33 \%$
(b) $50 \%$
(c) $60 \%$
(d) $58 \%$
83. The "Election-ink" leaves mark on skin because it contains $\qquad$ . (Homi Bhabha 2013)
(a) ink from ink sacs of octopus
(b) iron gall ink
(c) silver Nitrate
(d) charcoal powder and gum Arabica
84. In which of the following state India's first food musium has been launched? (Homi Bhabha)
(a) Kerala
(b) Telangana
(c) Andhrapradesh
(d) Tamilnadu
85. Which state in the country is at forefront in controlling the cyber-crimes and has been proved to be a first state to start a separate cyber-crime unit? (NTSE 2019-20)
(a) Gujarat
(b) Karnataka
(c) Madhya Pradesh
(d) Maharashtra
86. If 'PMQE' is coded as '51', then how will 'NRSZ' be coded? (Silver Zone iOS 2016-17)
(a) 105
(b) 85
(c) 98
(d) 77

Ans: (d)

## Solution:

Observe the below table to find the pattern.

| Alphabets | A | B | C | D | E | F | G | H | I | J | K | L | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Positional value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Positional value | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |
| Alphabets | Z | Y | X | W | V | U | T | S | R | Q | P | O | N |

$\mathrm{P} \rightarrow 16$
$\mathrm{M} \rightarrow 13$
$\mathrm{Q} \rightarrow 17$
$\mathrm{E} \rightarrow 5$
SUM of $\mathrm{PMQE}=16+13+17+5=51$
$\mathrm{N} \rightarrow 14$
$\mathrm{R} \rightarrow 18$
$\mathrm{S} \rightarrow 19$
$Z \rightarrow 26$
SUM of NRSZ $=14+18+19+26=77$
So correct option is (D) 77 .
87. Five persons are standing in a line. The lawyer is to the right of the student. The editor is to the left of the shopkeeper. At one end is a lecturer and at the other end is a shopkeeper. The student is between the lecturer and the lawyer. Counting from the left, the editor is at which position? (UIMO 2021-22)
(a) 1 st
(b) 2 nd
(c) 3 rd
(d) $4^{\text {th }}$

Ans: (D)

## Solution:

As per conditions given, following is the position of 5 persons in a line


From left, editor is at the $4^{\text {th }}$ place in the line
88. If in a certain language, EXECUTIVE is coded as VCVXFGREV, how is ZERO coded in that language? (Silver Zone iOS 2016-17)
(a) VIAL
(b) AVIL
(c) LIAV
(d) ALIV

Ans: (A)
Solution:
Observe the below table to find the answer

| A | B | C | D | E | F | G | H | I | J | K | L | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Z | Y | X | W | V | U | T | S | R | Q | P | O | N |

89. Find odd one out. (Silver Zone iOS 2018)
(a) Delhi -Yamuna
(b) Haridwar- Ganga
(c) Paris -Hudson
(d) Baghdad-Tigris

Ans: (C)

## Solution:

## Paris is situated on the banks of river Seine.

90. Choose the correct alterative to replace the question mark. (NTSE 2018-19)

(a) 210
(b) 266
(c) 288
(d) 318

Ans: (C)

## Solution:

$$
16 \times 9=144
$$

$$
6 \times 33=198
$$

$$
16 \times 18=288
$$

91. In which of the following figures, the given figure is exactly embedded as one of its parts? (SoF NSO 2019-20)
(a)

(b)

(c)

(d)


Ans: (B)

## Solution:


92. Read the statement and argument, then choose the correct option. (Unified Council's NSTSE 2022)

## Statement :

Are nuclear families better than joint families?
Arguments :
(I) No, joint families ensure greater security.
(II) Yes, nuclear families ensure greater freedom.
(a) Only argument I is strong
(b) Only argument II is strong
(c) Either I or II is strong
(d) Both I and II are strong

Ans: (D)

## Solution:

There is more security in joint family as there are other members to help. Also in nuclear families, there are lesser persons, so lesser responsibilities and more freedom. Hence, both arguments are strong.

Directions: In the following question (Q. No. 93) in every row the numbers outside the bracket and inside the bracket are related to each other in a specific manner. From the given alternative choose the correct alternative that will replace the question mark. (NTSE 2019-20)
93.

| 17 | $(68)$ | 28 |
| :--- | :--- | :--- |
| 11 | $(22)$ | 14 |
| 49 | $(?)$ | 9 |

(a) 56
(b) 105
(c) 147
(d) 63

Ans: (D)
Solution:

| 17 | $(68)$ | 28 |
| :---: | :--- | :--- |
| 11 | $(22)$ | 14 |
| 49 | $(?)$ | 9 |

$\frac{17 \times 28}{68}=7$
$\frac{11 \times 14}{22}=7$

$$
\frac{49 \times 9}{7}=63
$$

94. Which of the following Venn diagram best represents the relationship amongst, 'Gas, Water and Helium'? (SoF IMO 2015-16)
(a)

(b)

(d)

95. Three positions of a dice are shown below. Find the number on the face opposite to the face showing number 5. (SoF iMO 2018-19)

(a) 4
(b) 1
(c) 3
(d) 6

Ans: (B)
Solution:
The numbers on opposite faces are $(1,5),(2,4)$, $(3,6)$.
96. Which number is in the square, ellipse and triangle?
(Silver Zone iOM 2017)

(a) 1
(b) 5
(c) 6
(d) 7
97. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? (Silver Zone iOM 2017)
(a) Gold
(b) Silver
(c) Platinum
(d) Mercury

Ans: (D)
Solution:
All the rest are solid metals.
98. If Yellow is called Blue, Blue is called Red, Red is called Pink, Pink is called Black and Black is called Orange then what is the color of human blood? (NSTSE)
(a) Red
(b) Orange
(c) Pink
(d) Yellow

Ans: (C)
Solution:
The color of human blood is Red and Red is called as Pink, So correct option is (C)
99. Pointing to a boy, Divya said, "He is the son of my father's only brother". How is Divya related to that boy? (UIMO)
(a) Sister
(b) Cousin Sister
(c) Daughter
(d) None of these

Ans: (B)
Solution:

$\therefore$ Divya is the cousin sister of that boy.
100. Group the given figures into three classes on the basis of their identical properties using each figure only once. (SoF NSO 2021-22)

(a) $1,4,9 ; 2,3,8 ; 5,6,7$
(b) $1,5,8 ; 2,3,7 ; 4,6,9$
(c) $1,5,9 ; 2,3,8 ; 4,6,7$
(d) $1,6,7 ; 2,3,8 ; 4,5,9$

Ans: (C)
Solution:
1,5,9; All are polygons.
$2,3,8$; A circle is attached to the triangle which is divided into two equal parts.
$4,6,7$; A circle is inside the polygon

