## STD. 10th (Test for Competitive-01) ANSWER KEY Dt. 04-09-2023

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


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


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


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


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

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

81. Where did the Government of India establish 'The Film and Television Institute' of India in 1960? (NTSE 2019-20)
(a) Delhi
(b) Mumbai
(c) Chennai
(d) Pune
82. $\qquad$ is the birthdate of Major Dhyan Chand is celebrated as the 'National Sports Day' in India. (NTSE 2018-19)
(a) 28 October
(b) 29 August
(c) 10 December
(d) 14 April
83. Who appoints the Election Commissioner in India? (NTSE 2018-19)
(a) President
(b) Prime Minister
(c) Speaker of Loksabha
(d) Vice President
84. Who was the painter of this famous immortal picture? (NTSE 2016-17)

(a) Michelangelo
(b) Leonardo-da-Vinci
(c) Raphael
(d) Donato
85. Identify the well-known play of Shakespeare on which Marathi play 'Natsamarat' was styled?
(NTSE 2020-21)
(a) Hamlet
(b) King Lear
(c) Julius Ceaser
(d) Romeo - Juliet
86. Three positions of a dice are shown below. Find the number on the face opposite to the face having number '4'. (SOF 2021-22)

(a) 6
(b) 5
(c) 2
(d) 3

## Solution:

The numbers on opposite faces are:
$(1,2),(3,6)$ and $(4,5)$. Correct option is (b)
87. Select the correct mirror image of Fig. (X) along the mirror $P Q$. (SOF IMO 2016)


Fig. (X)
(a)

(c)

(b)

(d)


## Solution:

By observation
88. A rhythmic arrangement of letters is given. The missing letters appear in the same order in one of the alternative answers. Find the correct
alternative. (NTSE 2020-21)
p-rsqr - - rs - q - ppr
(a) qrspq
(b) qrppr
(c) qspps
(d) $q s p q r$

## Solution:



Pattern is
pqrs, qrsp, rspq, spqr
89. If the animals which can walk are called 'swimmers', animals who crawl are called 'flying', those living in water are called 'snakes' and those which fly in the sky are called 'hunters', then what will a lizard be called? (SOF NSO 2011)
(a) Swimmers
(b) Snakes
(c) Flying
(d) Hunters

## Solution:

We all know that lizard can crawl and it is given that animals that crawl are called "flying", so the answer is (C)
90. A school boy was having Deepavali vacation from 11 October to 28 October 2012. It was Monday on the 10th Day before the start of the vacation. After the vacation, the school excursion was arranged on the 7th day from the reopening of the school. On which Day was the school excursion arranged? (NTSE 2017-18)
(a) Sunday
(b) Friday
(c) Thursday
(d) Tuesday

Solution:

| October, 2012 |  |  |  |  |  |  |
| ---: | :---: | ---: | ---: | ---: | ---: | ---: |
| Su | Mo | Tu | We | Th | Fr | Sa |
| 30 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Refer the above calendar to find the answer. School is opening on $29^{\text {th }}$ October 2012 and the school excursion was arranged on the 7th day from the reopening of the school.
So, $4^{\text {th }}$ November will be Sunday
91. A is 25 th from the right end and B is 25 th from the left end of a row. If they interchange their position then A becomes 25th from the left end. How many persons are sitting in the row? (Unified Council's NSTSE)
(a) 51
(b) 50
(c) 49
(D) Cannot be determined

## Solution:

Since we doesn't get the position of any of the person from both the ends before or after interchanging then it is not possible to answer how many persons are there in the row.
92. How many meaningful words can be made from the letters $\mathbf{N}, \mathbf{R}, \mathbf{E}$ and $\mathbf{A}$, using each letter only once? (Unified Council's NSO 2018-19)
(a) None
(b) One
(c) Two
(d) Three

Solution:
The meaningful words formed are NEAR \& EARN. So correct option is C.
93. Select the related number from the given alternatives. (Silver Zone iOS 2022-23)
6: 222 : 7 : ?
(a) 350
(b) 343
(c) 336
(d) 210

Solution:
$(6)^{3}+6=222$.
Similarly,
$(7)^{3}+7=350$
94. Find the odd figure. (NTSE 2019-20)
(a)

(b)

(c)

(d)


Solution:
Look at the symbol $\sim$ in option (C) to find the answer.
95. Find out the group of letters from the options that matches the given group. (NTSE 2019-20)
AUEFG EOVWX IAPQR
(a) OQRST
(b) UEJKL
(c) OKEFG
(d) UGHIJ

Solution:
Correct option is (b)
AUEFG first 2 letters are vowels and remaining 3 letters are in sequence.
EOVWX first 2 letters are vowels and remaining 3 letters are in sequence.
IAPQR first 2 letters are vowels and remaining 3 letters are in sequence.
Similarly
UEJKL first 2 letters are vowels and remaining 3 letters are in sequence.
96. Three friends Ram, Harsha and Prithvi arrived at the movie theatre at different timings. Prithvi reached at 1:30 pm. Harsha reached an hour and a half before Prithvi. Ram reached 15 mins after Harsha. At what time did Ram reach? (Unified Council's UIMO 2023)
(a) $12: 00 \mathrm{pm}$
(b) $1: 15 \mathrm{pm}$
(c) $11: 45 \mathrm{am}$
(d) $12: 15 \mathrm{pm}$

## Solution:

Prithvi reached 1:30
Harsha reached hour and a half before Prithvi, means $=1: 30-1: 30=12: 00$
Ram reached 15 minutes after Harsha means 12:15 pm
97. In the given question, three words are given and forms a group. Identify the correct alternative belongs to the group? (MTSE 2001)
Potter, Plumber, Shoemaker, ?
(a) Carpenter
(b) Student
(c) Graduate
(d) Teacher

Solution:
Potter, Plumber, Shoemaker are the occupations in the same way Carpenter is occupation, so correct option is (a)
98. In a certain code language, if 'ta ka re ma' means 'birds fly very high', 'si ma do ka' means 'birds are very beautiful' and 'ne ja re ba' means 'the parrots could fly', then which letter code stands for high? (SOF IMO 2017-18)
(a) $t a$
(b) $r e$
(c) $k a$
(d) $m a$

## Solution:



## Code is as below:

$k a \rightarrow$ Birds, re $\rightarrow$ fly $m a \rightarrow$ very
In the first sentence only $t a$ is remaining so it's clear from the above that code for high is $t a$, option (A) is correct answer.
99. In the following questions the numbers outside the bracket are related to number inside the bracket in a specific manner. From the given manner find the right number which matches and will replace the question mark. (NTSE 2020-21)
78 (20) 82
37 (12) 59
45 (?) 91
(a) 13
(b) 17
(c) 19
(d) 23

Solution:
78 (20) 82
37 (12) 59
45 (1) 91
$\frac{78+82}{8}=20$
$\Rightarrow \frac{45+91}{8}=\frac{136}{8}=17(2)$
100. Direction: Select the correct alternatives which can complete the figures. (NTSE 2020-21)

Question figure

(a) 1
(b) 2
(c) 3
(d) 4

Solution:
By Observation

