SAFE HANDS, AKOLA

STD. 10th (Test for Competitive-03) ANSWER KEY Dt. 09-10-2023

PHYSICS		CHEMISTRY		BIOLOGY		MATHS		G.K./Mental Ability	
[Q. NO.]	[ANS]	[Q. NO.]	[ANS]	[Q. NO.]	[ANS]	[Q. NO.]	[ANS]	[Q. NO.]	[ANS]
1	A	21	A	41	B	61	D	81	B
2	C	22	A	42	A	62	A	82	B
3	C	23	D	43	C	63	A	83	A
4	D	24	A	44	D	64	D	84	B
5	A	25	B	45	A	65	B	85	A
6	B	26	A	46	A	66	D	86	D
7	B	27	A	47	A	67	C	87	D
8	B	28	B	48	B	68	C	88	C
9	B	29	D	49	D	69	B	89	B
10	B	30	D	50	B	70	D	90	B
11	B	31	A	51	D	71	B	91	B
12	A	32	A	52	D	72	A	92	C
13	A	33	B	53	B	73	B	93	B
14	A	34	B	54	A	74	B	94	C
15	A	35	D	55	A	75	C	95	A
16	A	36	B	56	A	76	C	96	D
17	D	37	B	57	B	77	A	97	C
18	A	38	B	58	B	78	D	98	C
19	C	39	B	59	D	79	C	99	C
20	A	40	C	60	A	80	A	100	B

SECTION – V [Mental Ability & G.K.]

81. The largest wool market of Asia is ……
(NTSE 2015)
(a) Barmer   (b) Bikaner
(c) Jaisalmer   (d) Jodhpur

Ans : (b)
Solution : Bikaner is known as Asia's largest wool market. Carpet grade raw wool from all wool producing states is sold in Bikaner mandi. There are large number of carpet yarn spinning units specially in handloom and khadi sector and most of the carpet grade yarn is produced in Bikaner.

82. Which of the following is extremely necessary for men? (NTSE 2017-18)
(a) Car   (b) Health
(c) Fan   (d) Furniture

83. Identify the place which is famous for caves, has been shown in the picture. (NTSE 2019-20)

(a) Gharapuri   (b) Verul
(c) Ajanta   (d) Karla

84. Identify first nuclear reactor of India functioning on atomic energy. (NTSE 2021-21)
(a) Dhruv   (b) Apsara
(c) Tarapur   (d) Zarrina

Ans : (b)

85. ……. from the Western Rajasthan is considered as the most dry part in India. (NTSE 2020-21)
(a) Jaisalmer   (b) Ajmer
(c) Jodhpur   (d) Jaipur

86. Which style of architecture has been used to build, Chhatrapati Shivaji Maharaj Railway Terminus? (NTSE 2018-19)
(a) Muslim   (b) Nagara
(c) Dravid   (d) Indo – Gothic

Ans (d)

87. A and B are sisters. R and S are brothers. A's daughter is the sister of R, How is B related to S? (Silver Zone iOM 2019)
(a) Mother   (b) Grandmother
(c) Sister   (d) Maternal Aunt

Ans : (d)
Solution: A and B are sisters.
A's daughter is R's sister hence she is S's sister also. Then A has three children one daughter and two sons (R and S). Hence, B is the aunt of S.

88. A dealer sold six cars – M, N, O, P, Q and R– during a period of Monday to Saturday, one car on each day. **(SoF IMO 2014)**
(i) The car O was sold at least before three cars.
(ii) The car R was sold on Tuesday.
(iii) Both the cars N and Q were sold at least before one car.
(iv) The car P was sold immediately after the car O. (v) At least four cars were sold after the car Q. If Mr. Jindal is purchased a car sold on Wednesday, then the car purchased by him is …..
(a) M   (b) N   (c) O   (d) P

Ans : (c)
Solution:

Monday	Q (Step v)	N or Q (Step iii)	
Tuesday	R (Step ii)	N or Q (Step iii)	
Wednesday	O (Step iv)	N or Q (Step iii)	
Thursday	P (Step iv)	O (Step i)	N or Q (Step iii)
Friday	N	O (Step i)	N or Q (Step iii)
Saturday	M	O (Step i)	

Step1: The car O was sold at least before three cars. So it cannot come on Thursday, Friday or Saturday.
Step 2: R was sold on Tuesday
Step 3: Both N and Q were sold at least before one car.
Step 4: P was sold immediately after O.
Step 5: At least four cars were sold after Q.
So, a car purchased on Wednesday is car O

Read the information given below and answer the question no. 89. (NTSE 2017-18)

Madhav and Govind play Hockey and Volleyball. Hemant and Madhav play Hockey and Baseball. Ramesh and Govind play Cricket and Volleyball. Hemant, Ramesh and Anand play Football and Baseball. Then, answer the following questions.

89. Who plays Hockey, Cricket and Volleyball?

(a) Madhav   (b) Govind

(c) Hemant   (d) Anant

Ans : (b)

Solution:

See the table below to find the answer

	Hockey	Volleyball	Baseball	Cricket	Football
Madhav	✓	✓	✓		
Govind	✓	✓		✓	
Hemant	✓		✓		✓
Ramesh		✓	✓	✓	
Anant			✓		✓

90. In a certain code SIKKIM is written as THLJJL and EXPERIENCE is written as FWQDSHFMDD. How is TRAINING written in that code? (Unified Council's UIMO 2022)

(a) SQBJOHOH   (b) UQBHOHOF

(c) UQBJOHHO   (d) UQBJOHOH

Ans : (b)

Solution:

The code for SIKKIM is obtained by the following pattern:

S+1⇒T

I−1⇒H

K+1⇒L

K−1⇒J

I+1⇒J

M−1⇒L

Similarly,
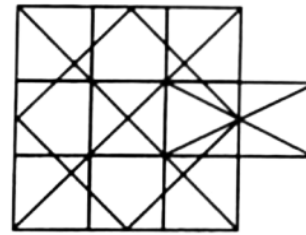
T+1⇒U

R−1⇒Q

A+1⇒B

I−1⇒H

N+1⇒O

I−1⇒H

N+1⇒O

G−1⇒F

Hence, the code for TRAINING is UQBHOHOF.

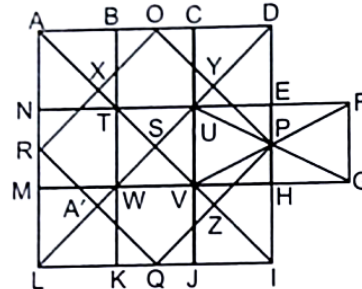**91.** Find the number of squares in the given figure. (SoF NSO 2021-22)

(a) 22   (b) 20   (c) 23   (d) 19

Ans: (b)

Solution:

Squares formed are:

ABTN, BOUT, CDEU, EFGH, HEUV, UVWT, WTNM, MLKW, KWVJ, VJIH, RXSA', XSYO, SYPZ, ZSA'Q, ACVM, BDHW, NUJL, TEIK, ROPQ, ADIL *i.e.,* 20 in number.
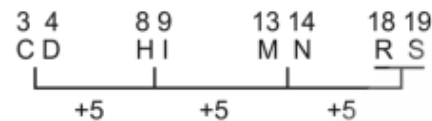
92. write which correct term in sequence replaces the question mark? (NTSE 2020-21)

CD, HI, MN,?

(a) QS   (b) OP   (c) RS   (d) PQ

Ans: (a)

Solution:

For Q. No. 93 & 94:

Directions: In the following questions word letters are given in column I and are coded in column II. But they are not arranged according to the order of word letters in column I. Find the code language and choose the correct alternative to answer the questions. **(NTSE 2020-21)**

Column I	Column II
TEAR	8623
PURN	5641
TALK	9872
NET	235

93. What is the code for the word PREAK?
(a) 13689   (b) 16389
(c) 16839   (d) 16489
Ans: (b)
Solution:
Code for each letter is obtained by comparing common letters in the words and common numbers in the corresponding codes:
Comparing TEAR and PURN : R = 6
Comparing PURN and NET: N = 5
Comparing TALK and NET: T = 2
Comparing TEAR and BET: E = 3
Comparing TEAR and TALK: A = 8
P and U could be 1 or 4.
L and K could be 7 or 9.
From the codes derived:
Since REA is 638, PREAK = 16389

94. 542687 code is for which word?
(a) NATURE   (b) NATEUR
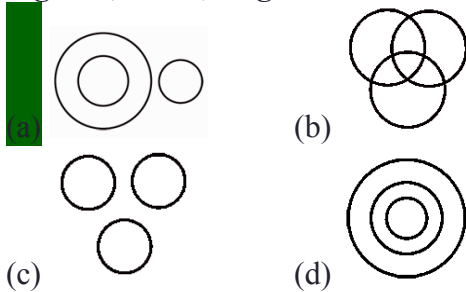(c) NUTRAL   (d) NURTAL
Ans: (c)
Solution:
From the codes derived:
Since 268 is TRA, 542687 = NUTRAL

95. Select from four alternative diagrams, the one that best illustrates the relationship among the three classes: (Silver Zone iOS 2022)
Pigeons, Birds, Dogs:

(a)   (b)

(c)   (d)

Ans (a)
Solution: All pigeons are birds and all dogs are animals. Birds and animals have nothing in common. Hence, option A is correct.

96. Select the figure from the options, which when placed in the blank space of Fig. (X) would complete the pattern. (**(SoF IMO 2015)**
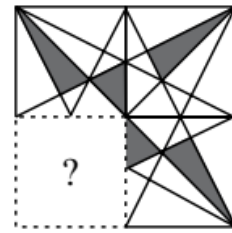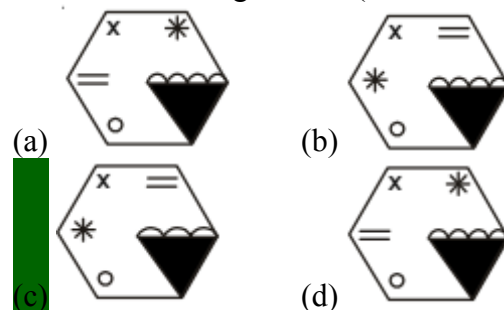
Fig. (X)

(a)   (b)

(c)   (d)
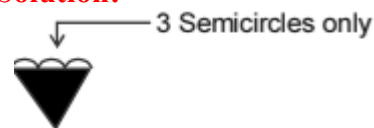
Ans : (d)
Solution: By observation

97. Find the ODD figure out. (NTSE 2017-18)

(a)   (b)

(c)   (d)

Ans : (c)
Solution:

3 Semicircles only

98. Which word logically is the odd one out?
(UIMO 2023)
Dosage (P); Before (Q); Volume (R); Simple (S); Curate (T)
(a) T   (b) R   (c) S   (d) Q
Ans : (c)
Solution:
The rest have alternate consonant/vowel arrangement except (c).

99. If $\times$ stands for 'addition', $\div$ stands for 'subtraction', $+$ stands for 'multiplication' and $-$ stands for 'division', then

$20 \times 8 \div 8 - 4 + 2 = ?$ (UIMO)

(a) 80   (b) 25   (c) 24   (d) 5

Ans : (c)

Solution:

After substituting the symbols with their meanings, we obtain:

$= 20 + 8 - 8 \div 4 \times 2$ Now apply the BODMAS rule

$= 20 + 8 - 2 \times 2$

$= 20 + 8 - 4$

$= 28 - 4$

$= 24$

100. Which one of the given responses would be a meaningful order of the following words in ascending order? (Silver Zone iOM 2016)

1. Atomic Age   2. Metallic Age

3. Stone Age   4. Alloy Age

(a) 1, 3, 4, 2   (b) 3, 2, 4, 1

(c) 2, 3, 1, 4   (d) 4, 3, 2, 1

Ans : (c)

Solution:

Different ages in the evolution of Mankind have been given.

They must be arranged in chronological order.

Stone Age, Metallic age, Alloy Age, Atomic age.

order: 3,2,4,1

option C