SAFE HANDS, AKOLA

STD. 9TH (Test for Competitive-05) ANSWER KEY Dt. 04-12-2023

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

SECTION V – G.K / Mental Ability

81. In which of the following state India's first food musium has been launched? (HBBVE)
(a) Kerala
(b) Telangana
(c) Andhrapradesh
(d) Tamilnadu

82. Choose the correct colour of hottest star from the following? (HBBVE 2022)
(a) Red
(b) Yellow
(c) Blue
(d) Green

83. In which of the following fields C-DAC institute does research work? (HBBVE 2020-21)
(a) Weather
(b) Navigation
(c) Communication
(d) Computer

84. The "Election-ink" leaves mark on skin because it contains _____. (HBBVE 2013)
(a) Ink from ink sacs of octopus
(b) Iron gall ink
(c) Silver Nitrate
(d) Charcoal powder and gum Arabica

85. Which option replaces the question mark? (UIMO 2022)
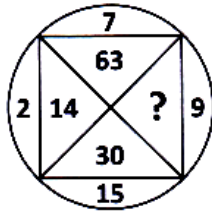
(a) 18
(b) 33
(c) 135
(d) 145

Ans : (C)
Solution:
We have
15×2 = 30, 2×7 = 14, 7×9 = 63
So, missing number = 9×15 = 135

86. Which alternative applies to the following Statement and Assumption ? (NTSE 2022)
Statement :
Go by Airplane to reach Delhi from Chennai quickly.
Assumptions :
I. Chennai and Delhi are connected by Air service.
II. There is no other means to commute from Chennai to Delhi.
III. The Air distance between Delhi and Chennai is less.

(A) Only I is implicit
(B) Only I and II are implicit
(C) Only I and III are implicit
(D) Only II is implicit
Ans : (C)
Solution: Only I and III are implicit

87. Complete the following series. (SilverZone iOM 2022)
N5V, K7T, ? , E14P, B19N
(a) H9R
(b) H10Q
(c) H10R
(d) I10R
Ans : (C)
Solution:
In the given series first letter is moved three steps backward and second letter is moved 2 steps backward to form next term
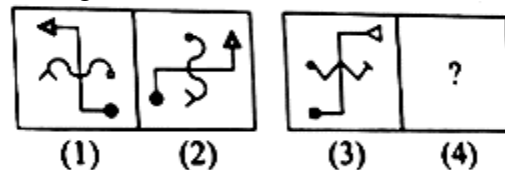In the number series number added to given no increases by one to form next number
5+2=7
7+3=10
10+4=14
14+5=19
Hence second term will be **H10R**

88. There is a certain relationship between figures (1) and (2). Establish the same relationship between figures (3) and (4) by selecting a suitable figure from the given options that would replace the (?) in fig. (4). (SoF IMO 2018-19)
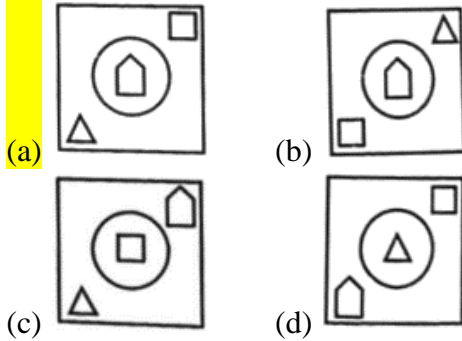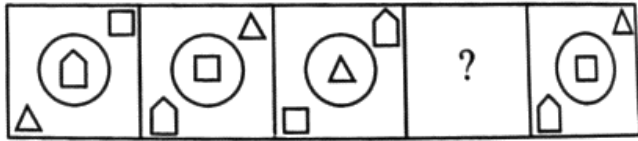

Ans : (B)
Solution:
From figure (1) and (2), whole figure rotates 90⁰ clockwise and symbols attached to curved line interchanged their positions.

89. Select a figure from the options which will continue the same series as established by the problem figures. (SoF NSO 2022-23)
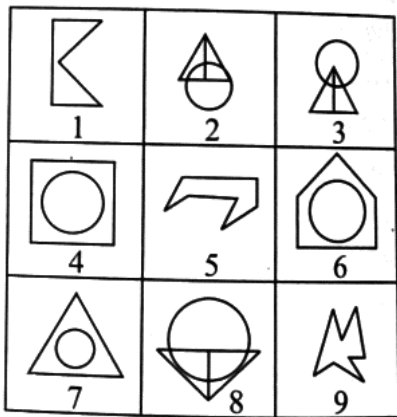
Problem figures

(a)   (b)

(c)   (d)

Ans : (A)
Solution:
In every next figure, the square, pentagon and triangle move diagonally from top to bottom.

90. Group the given figures into three classes on the basis of their identical properties using each figure only once. (SoF NSO 2021-22)
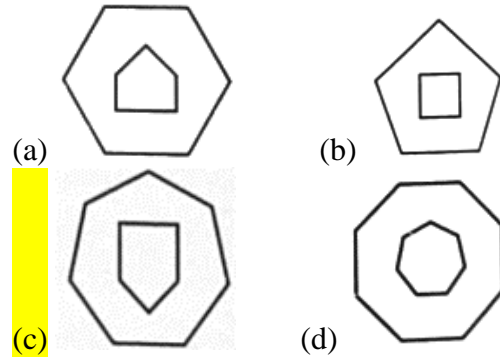

(a) 1, 4, 9; 2, 3, 8; 5, 6, 7
(b) 1, 5, 8; 2, 3, 7; 4, 6, 9
(c) 1, 5, 9; 2, 3, 8; 4, 6, 7
(d) 1, 6, 7; 2, 3, 8; 4, 5, 9

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

91. Select the odd one out. (SoF NSO 2019-20)

(a)   (b)

(c)   (d)

Ans : (C)
Solution:
Except in option (C), the number of sides of the inner figure is 1 less than the number of sides of outer figure.

92. Choose the essential part of the word "LANGUAGE". (UIMO)
   (a) Tongue   (b) Slang   (c) Writing   (d) Words
Ans : (D)
Solution:
Words are necessary part of language. Slang is not necessary to language (choice b). Not all languages are written (choice c). Not all languages are spoken (choice a).

93. Which of the two signs in the equation given below can be interchanged to make a balanced equation? (Silver Zone iOS 2019)
   $$51 \div 3 + 17 \times 2 - 12 = 10$$
   (a) + and ×   (b) + and ÷
   (c) – and ×   (d) ÷ and ×
Ans : (C)
Solution:
$51 \div 3 + 17 \times 2 - 12 = 10$
To make the above equation correct, we need to change two sign, i.e. – and ×
The correct equation will be-
$51 \div 3 + 17 - 2 \times 12 = 10$
$10 = 10$
So, Answer is – and ×

In the following question 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)

94.

17	(68)	28
11	(22)	14
49	(?)	9

(a) 56　　　(b) 105　　(c) 147　　(d) 63

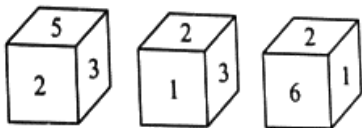**Ans : (D)**

Solution:

17 (68) 28
11 (22) 14
49 (?) 9

$$\frac{17 \times 28}{68} = 7$$

$$\frac{11 \times 14}{22} = 7$$

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

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. If 'A' is written as '+', 'B' is written as '−', C is written as '×' and 'D' is written as '÷' then what is the value of 15A30D6C20B18? (SoF IMO 2022-23)
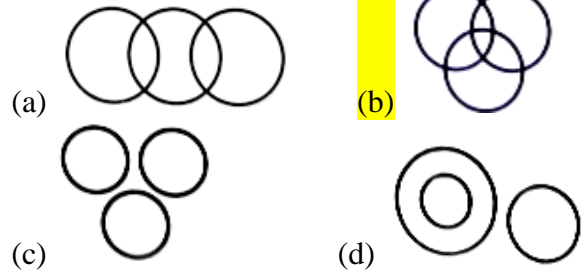
(a) 99　　(b) 115　　(c) 104　　(d) 97
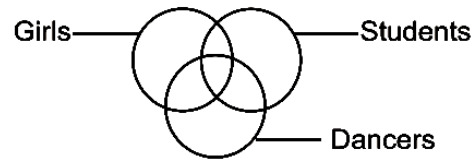
Ans : (D)

Solution:

The given equation becomes

$15 + 30 \div 6 \times 20 - 18$
$= 15 + 5 \times 20 - 18$
$= 15 + 100 - 18 = 97$

97. Which of the following Venn diagrams best represents the relationship amongst, "Girls, Students and Dancers"? (SoF iMO 2022-23)s

(a)　　　　　　　　　(b)

(c)　　　　　　　　　(d)

Ans : (B)

Solution:

Girls — Students — Dancers

98. M is son of N and is husband of P. S and P are sisters. S is married to H. Then how H is related to M? (SoF NSO 2021-22)

(a) Brother　　　　　(b) Cousin
(c) Brother-in-law　　(d) Son-in-law

Ans : (C)

Solution:

M is the husband of P and H is the husband of S. Since, P and S are sisters, so H is the brother-in-law of M.
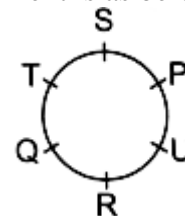
99. Six members of a family P, Q, R, S, T and U are sitting around a circular table facing the centre. P sits second to the right of R. T sits between Q and S. Q is immediate neighbour of R but not immediate neighbour of P. Then, which of the following members are immediate neighbour of P? (SoF NSO 2021-22)

(a) S and U　　(b) Q and U
(c) S and Q　　(d) Q and T

Ans : (A)

Solution:

The sitting arrangement is as below

So, S and U are immediate neighbours of P

100. 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