

SAFE HANDS, AKOLA

STD. 10th (Test for Competitive-04) ANSWER KEY Dt. 06-11-2023

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

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

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

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

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

SECTION – V [Mental Ability & G.K.]

81. Which of the following regions is described as "Cold Desert"? (NTSE 2016-17)
 (a) Sikkim Himalaya (b) Karakoram Ranges
 (c) Ladakh Range (d) Kailas Rang

82. Which industry is known as 'Sunrise Sector' of India? (NTSE 2018)
 (a) Jute Industry
 (b) Automobile industry
 (c) Cement Industry
 (d) Khadi and village Industry

83. Consumption of tobacco products lead to which disease in human beings? (NTSE 2020-21)
 (a) tuberculosis (b) AIDS
 (c) cancer of the lungs (d) leprosy

84. Asia's biggest Agricultural University is at _____. (NTSE 2017-18)
 (a) Hissar (b) Ambala
 (c) Ludhiana (d) Amritsar

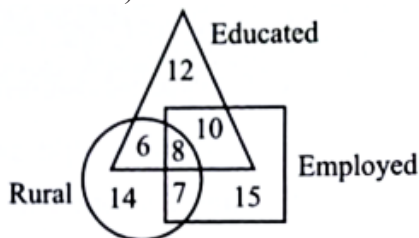
Ans: (A)

Solution:

Chaudhary Charan Singh Haryana Agricultural University popularly known as HAU, is one of Asia's biggest agricultural universities, located at Hisar in the Indian state of Haryana.

85. Which on is not the mean of Communication? (NTSE 2018-19)
 (a) Computer (b) Mobiles
 (c) Internet (d) Encyclopaedia

86. In the given Venn diagram, how many educated rural employed people are there? (SOF NSO 2020-21)



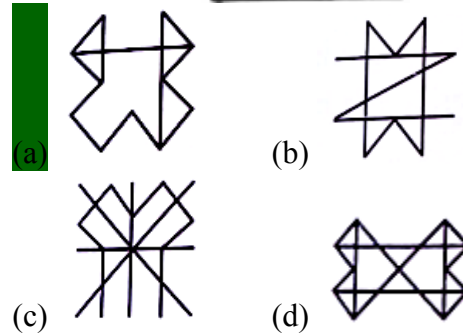
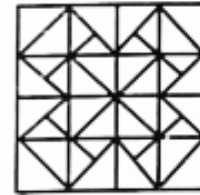
(a) 8 (b) 7 (c) 14 (d) 10

Ans: (A)

Solution:

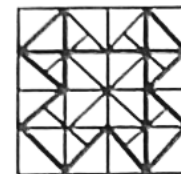
Only the region 8 is common to circle, square and triangle.

87. Which of the following figures is exactly embedded in the given figure as one of its parts?



Ans : (a)

Solution:

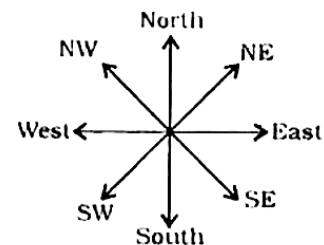
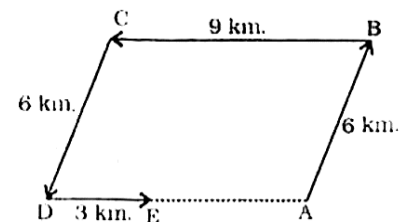


88. Sunita travels 6 km towards north-east. Then travels 9 km towards west. From there, she goes 6 km southwest and finally, goes 3 km towards east. How far is she from her initial position? (Silver Zone iOS 2022)

(A) 3 km (B) 6 km (C) 9 km (D) 12 km

Ans: (B)

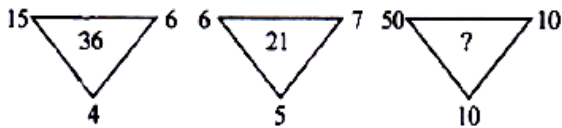
Solution:



$$AE = AD - DE$$

$$= (9 - 3) \text{ km} = 6\text{km}$$

89. In the following figure numbers are written with a specific rule. Find the rule and decide which alternative will be in place of question mark. (NTSE 2020-21)



- (a) 140 (b) 220 (c) 320 (d) 500

Ans: (D)

Solution:

$$\frac{15 \times 6 \times 4}{10} = 36$$

$$\frac{6 \times 7 \times 5}{10} = 21$$

$$\frac{50 \times 10 \times 10}{10} = 500$$

90. There are deer and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there? (SoF IMO 2013)

- (a) 20 (b) 30 (c) 50 (d) 60

Ans : (D)

Solution:

Let there are x deer and y peacocks.

Total heads are 80

So, $x + y = 80$ (Equation 1)

Total legs are 200. Deer has 4 legs and peacock has 2.

So, $4x + 2y = 200$ (Equation 2)

Multiplying equation 1 by 4 and subtracting with equation 2, we get $y = 60$

Putting this value of y in equation 1 we get $x = 20$

So, total peacocks are $y = 60$.

Hence the correct answer is (d) 60.

91. Unscramble the following letters to frame a meaningful word (Use all the given letters). Then find out the correct numerical position of the letters. (UIMO 2021-22)

O	C	T	E	H	R	I	U	I	T	U	L
1	2	3	4	5	6	7	8	9	10	11	12

- (a) 6 1 4 3 2 5 12 8 7 11 10 9
 (b) 5 1 6 4 9 2 11 12 10 8 6 3
 (c) 3 5 7 1 12 6 8 9 11 4 2 10
 (d) 5 1 6 3 7 2 8 12 10 11 6 4

Ans: (D)

Solution:

Meaningful word and correct numerical positions of letters are

H	O	R	T	I	C	U	L	T	U	R	E
5	1	6	10	9	2	8	12	10	8	6	5

Option (A) : ROETCHLUIUTI

Option (B) : HORTECULTURI

Option (C) : THIOLRUIUECT

Option (D) : HORTICULTURE

92. In a certain code language, '125' means 'water is life', '146' means 'give me water', '785' means 'life must healthy' and '8541' means 'water give healthy life'. What is the code for 'me' in that language? (SoF IMO 2019-20)

- (a) 6 (b) 2 (c) 4 (d) 1

Ans: (A)

Solution:

(i) '125' means 'water is life'

(ii) '146' means 'give me water'

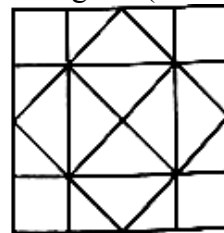
(iii) '785' means 'life must healthy'

(iv) '8541' means 'water give healthy life'

From (ii) and (iv) '14' means 'give water'

So, from (ii) code for me is 6

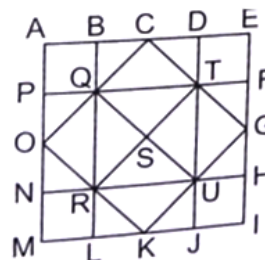
93. Find the number of squares formed in the given figure. (SoF IMO 2018-19)



- (a) 15 (b) 11
 (c) 12 (d) None of these

Ans: (A)

Solution:



Squares formed are:

ABQP, DTFE, UHIJ, NRLM, OQSR, SRKU, SUGT, STCQ, ADUN, BRHE, PTJM, QLIF, QTUR, OCGK, AEIM. i.e. 15 in number

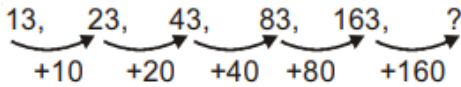
94. Write which term in the sequence replaces the question mark. (NTSE 2018-19)

11, 13, 23, 43, 83, 163?

- (a) 326 (b) 323 (c) 321 (d) 318

Ans: (B)

Solution:



$$10 \times 2 = 20$$

$$20 \times 2 = 40$$

$$40 \times 2 = 80$$

$$80 \times 2 = 160$$

$$163 + 160 = 323$$

95. Find the missing number, if a certain rule is followed row-wise or column-wise. (SoF IMO 2015)

28	20	7
84	35	12
45	?	9

- (a) 15 (b) 18 (c) 20 (d) 25

Ans: (D)

Solution:

The logic followed in the first row:

$$\frac{28}{7} \times 5 = 4 \times 5 = 20$$

The logic followed in the second row:

$$\frac{84}{12} \times 5 = 7 \times 5 = 35$$

∴ The logic followed in the third row:

$$\frac{45}{9} \times 5 = 5 \times 5 = 25$$

Hence, the missing number is 25.

Answer:- (D) 25

96. If the first and second digits of each of the following numbers are interchanged and then numbers are arranged in ascending order, then which of the following is the middle digit of the middle number in the new arrangement formed? (SOF IMO 2028)

518 645 251 273 723

- (a) 2 (b) 6 (c) 1 (d) 3

Ans: (B)

Solution:

(i) Given numbers are:

518 645 251 273 723

(ii) Interchange the first and second digits of each of the given numbers, new numbers will be

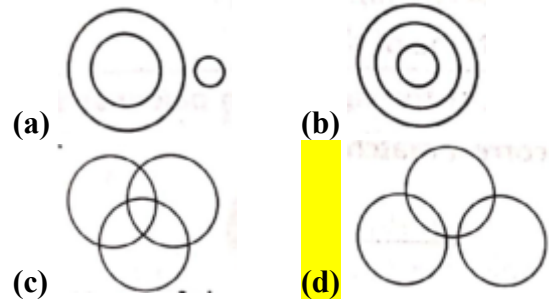
158 465 521 723 273

(iii) After arranging it in ascending order

158 273 465 521 723

Middle digit of the middle number is 6, hence ans (b) is correct.

97. Which of the following diagrams represents the relationship among teacher, men, women? (Silver Zone iOS 2016)



98. Select the related letters from the given alternatives. (Silver Zone iOS 2022)

Computer : fqprxvht :: Language : ?

- (a) oxpidxdig (b) ocqicyig
(c) ocqixcjcjg (d) ocqixcig

Ans : (C)

Solution:

C $\xrightarrow{+3}$ f	L $\xrightarrow{+3}$ o
O $\xrightarrow{+2}$ q	A $\xrightarrow{+2}$ c
M $\xrightarrow{+3}$ p	N $\xrightarrow{+3}$ q
P $\xrightarrow{+2}$ r	G $\xrightarrow{+2}$ i
U $\xrightarrow{+3}$ x	U $\xrightarrow{+3}$ x
T $\xrightarrow{+2}$ v	A $\xrightarrow{+2}$ c
E $\xrightarrow{+3}$ h	G $\xrightarrow{+3}$ j
R $\xrightarrow{+2}$ t	E $\xrightarrow{+2}$ g

99. Three positions of a dice are given. Which of the following numbers will be on the face opposite to the face having number 6? (SoF NSO 2020-21)



- (a) 4 (b) 5 (c) 3 (d) 1

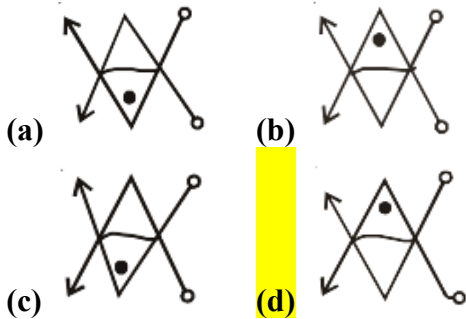
Ans : (C)

Solution:

Numbers of the opposite faces are:

(1, 5); (2, 4) and (3, 6)

100. Find the odd figure out. (NTSE 2017-18)



Ans : (D)

Solution:

Look at the lower right corner to find the difference.