CHAPTER - 9
NUMBER SERIES, CODING DECODING AND
ODD MAN OUT SERIES

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                    SERIES
              ┌───────┴───────┐
          Number            Alphabet
          Series            Series
              │                 │
      Number            Alphabet series
      Series consist    consists of letters
      of the number     of the alphabet
      placed in a       placed in a specific
      specific          pattern.
      pattern.
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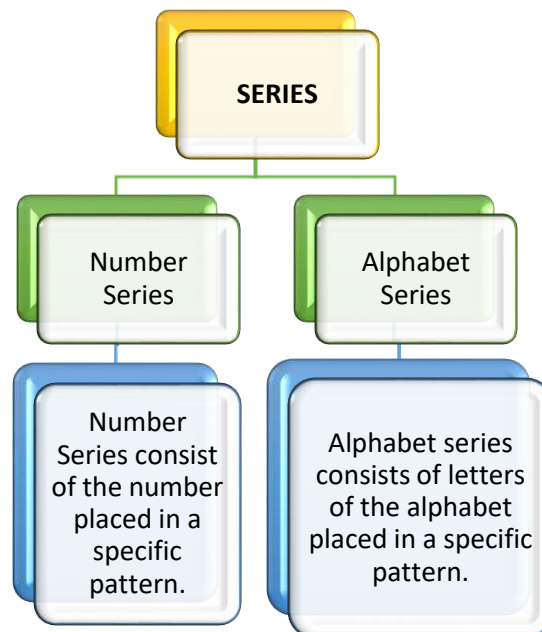
Question 1
Find the missing term of the series 2, 7, 16, __, 46, 67, 92
(a) 29   (b) 30
(c) 19   (d) 39
Answer: a
Explanation:
Here the terms of the series are +5, +9, +13, +17, +21, +25 .....
Thus 2 +5 = 6; and 7 + 9 = 16 ....
So, missing term = 16 + 13 = 29

Question 2
Find the wrong terms of the series 9, 29, 65, 126, 217, 344

(a) 30   (b) 29
(c) 28   (d) 27
Answer: b
Explanation:
$2^3 + 1$, $3^3 + 1$, $4^3 + 1$ … Here 29 is wrong term of series

Question 3
Find the missing term of the series 1, 9, 25, 49, 81, 121,
(a) 129   (b)149
(c) 169   (d) 139
Answer: c
Explanation:
The given terms of the series are consists square of consecutive odd number 1^2, 3^2, 5^2, 7^2, .So missing value = 13^2 = 169

Question 4
Find the next term of the series BKS, DJT, FIU, HHV,
(a) JGW   (b) JGV,
(C) JVG   (d) BBA, ,
Answer: a
Explanation:
This type of question usually consists of a series of small letters which follow a certain pattern. However some letters are missing from the series. The missing letters are then given in proper sequence as one of the alternatives.

Question 5
3, 5, 11, 14, 17, 21 find the odd man out
(a) 21   (b) 17
(c) 14   (d) 3
Answer: c
Explanation:
Each of the number except 14 is an odd number.
The number '14' is the only EVEN number.

Question 6
8, 27, 64, 100, 125, 216, 343 find the odd man out
(a) 27   (b) 100
(c) 125   (d) 343
Answer: b
Explanation:
Except 100 all are cube of 2, 3, 4, 5, 6, and 7

Question 7
6, 9, 15, 21, 24, 28, 30
(a) 28   (b) 21
(c) 24   (d) 30
Answer: a
Explanation:
Each of the numbers except 28 is a multiple of 3.

Question 8
582, 605, 588, 611, 634, 617, 600 Find out the wrong number in the given sequence of numbers.
(a) 634   (b) 611
(c) 605   (d) 600
Answer: a
Explanation:
Alternatively, 23 is added and 17 is subtracted from the terms so, 634 is wrong

Question 9
1, 2, 6, 15, 31, 56, 91 Find out the wrong number in the given sequence of numbers.
(a) 31   (b) 91
(c) 56   (d) 15
Answer: b
Explanation:
$1, 1 + 1^2 = 2, 2 + 2^2 = 6, 6 + 3^2 = 15, 15 + 4^2 = 31, 31 + 5^2 = 56, 56 + 6^2 = 92$
Last number of given series must be 92 not 91

Question 10
1, 8, 27, 64, 124, 216, 343 Find out the wrong number in the given sequence of numbers.
(a) 8   (b) 27
(c) 64   (d) 124
Answer: d
Explanation:
The numbers are $1^3, 2^3, 3^3, 4^3$ etc. So, 124 is wrong; it must have been 5^3 i.e., 125

Question 11
8, 13, 21, 32, 47, 63, 83. Find out the wrong number in the given sequence of numbers.
(a) 47   (b) 63
(c) 32   (d) 83
Answer: a
Explanation:
Go on adding 5, 8, 11, 14, 17, and 20.
So, the number 47 is wrong and must be replaced by 46

Question 12
Insert the missing number.
16, 33, 65, 131, 261, (....)
(a) 523   (b)521
(c) 613   (d) 721
Answer: a
Explanation:
Each number is twice the preceding one with 1 added or subtracted alternatively.
So, the next number is (2 × 261 + 1) = 523

Question 13
Insert the missing number
2, 4, 12, 48, 240, (....)

(a) 960   (b) 1440
(c) 1080   (d) 1920
Answer: b
Explanation:
Go on multiplying the given number by 2, 3, 4, 5, 6.
So, the correct next number is 1440

Question 14
Insert the missing number 8, 7, 11, 12, 14, 17, 17, 22, (...)
(a) 27   (b) 20
(c) 22   (d) 24
Answer: b
Explanation:
There are two series (8, 11, 14, 17,) and (7, 12, 17, 22) increasing by 3 and 5 respectively.

Question 15
Find out the wrong number in the series.
7, 8, 18, 57, 228, 1165, 6996
(a) 8   (b) 18
(c) 57   (d) 228
Answer: d
Explanation:
Let the given numbers of A, B, C, D, E, F, G.
Then A, A × 1 +1, B × 2 +2 , C × 3 + 3 + D × 4 + 4, E × 5 + 5, F × 6 + 6 are the required numbers.
Clearly, 228 is wrong

Question 16
Find out the wrong number in the series 1, 2, 6, 24, 96, 720
(a) 720   (b) 96
(c) 24   (d) 6
Answer: b
Explanation:
Go on multiplying with 1, 2, 3, 4, 5, 6 to get next numbers.
So, 96 is wrong

Question 17
Find out the wrong number in the series 196, 169, 144, 121, 100, 80, 64
(a) 169   (b) 144
(c) 121   (d) 80
Answer: d
Explanation:
Number's must be $(14)^2$, $(13)^2$, $(12)^2$, $(11)^2$, $(10)^2$, $(9)^2$, $(8)^2$.
So, 80 is wrong

Question 18
Find out of the wrong number in series 445, 221, 109, 46, 25, 11, 4
(a) 221   (b) 109
(c) 46   (d) 80
Answer: c

Explanation:
Go on subtracting 3 and dividing the result by 2 to obtain then next number.
Clearly, 46 is wrong

Question 19
Find out the wrong number in the series 190, 166, 145, 128, 112, 100, 91
(a) 100   (b) 166
(c) 145   (d) 128
Answer: d
Explanation:
Go on subtracting 24, 21, 18, 15, 12, 9 from the next number.
190-24=166
166-21 =145
145-18=127 [Here, 1288 is placed instead of 127
127-15=112
112-12 =100 … and so on
Therefore, 128 is wrong

Question 20
In a certain code DELHI is written as CDKGH. How much is SUSPECT written in code?
(a) RTRODBS.   (b) QTRODBS
(c) RTIODBS   (d) RTROIBS.
Answer: a
Explanation:
Clearly, we can see that each letter of the word DELHI is moved one step backward to obtain the code.
Similarly, SUSPECT will be coded as RTRODBS.

Question 21
In a certain code COURAGE is written as UOCREGA. How will JOURNAL be written in the code?
(a) UOJRLAN   (b) UOMRLAN
(c) UPJRLAN   (d) ULOJRLAN
Answer: a
Explanation:
Clearly, when COURAGE is coded, some letters are interchange with respect to their positions, i.e. odd positions are interchanged.
Position of 1 changes to 3 and 3 to 1. Position of 5 changes to 7 and 7 to 5.
Can be coded as UOJRLAN

Question 22
Find out the wrong number in the series.
19, 26, 33, 46, 59, 74, 91
(a) 26   (b) 33
(c) 46   (d) 59
Answer: b
Explanation:
Go on adding 7, 9, 11, 13, 15, 17 respectively to obtain the next number,
So, 33 is wrong it must be 35

Question 23
Find out the wrong number in the series 1, 3, 10, 21, 64, 129, 356, 777
(a) 10   (b) 21
(c) 64   (d) 356
Answer: d
Explanation:
A × 2 + 1, B × 3 + 1, C × 2 + 1, D × 3 + 1 and so on.
So, 356 is wrong

Question 24
Find out the wrong number in the series 6, 12, 48, 100, 3884, 768, 3072
(a) 768   (b) 384
(c) 100   (d) 48
Answer: c
Explanation:
Each even term of the series is obtained by multiplying the previous term by 2.
2nd term = (1st term) × 2 = 6 × 2 = 12
4th term = (3rd term) × 2 = 48 × 2 = 96.
6th term = (5th term) × 2 = 384 × 2 = 768.
∴ 4th term should be 96 instead of 100

Question 25
Insert the missing number. 7, 26, 63, 124, 215, 342, (…)
(a) 391   (b) 421
(c) 481   (d) 511
Answer: d
Explanation:
Numbers are $(2^3 – 1), (3^3 – 1), (4^3 – 1), (5^3 – 1), (6^3 – 1), (7^3 -1)$ etc.
So, the next number is $(8^3 – 1) = (512 – 1) = 511$.

Question 26
Find the odd man out? 396, 462, 572, 427, 671, 264
(a) 671   (b) 462
(c) 427   (d) 264
Answer: c
Explanation:
Here the given series is 396, 462, 572, 427, 671, and 264.
In all the terms, the middle digit is the sum of first and third digit except 427.
So the odd number in the given series is 427.

Question 27
Insert the missing number. 2, 4, 12, 48, 240, (…)
(a) 960   (b) 1440
(c) 1080   (d) 1920
Answer: b
Explanation:
Go on multiplying the given number by 2, 3, 4, 5, 6.
So, the correct next number is 1440.

Question 28
Find the odd man out 41, 43, 47, 53, 61, 71, 73, 81
(a) 41   (b) 61
(c) 71   (d) 81
Answer: d
Explanation:
Each of the number except 81 is a prime number.

Question 29
Find out the wrong number in the given sequence of numbers 582, 605, 588, 611, 634, 617, 600
(a) 634   (b) 611
(c) 605   (d) 600
Answer: a
Explanation:
Alternatively, 23 are added and 17 is subtracted from the terms. So, 634 is wrong.

Question 30
Find out the wrong number in the given sequence of numbers 1, 2, 6, 15, 31, 56, 91
(a) 31   (b) 91
(c) 101   (d) 15
Answer: b
Explanation:
$1, 1 + 1^2 = 2, 2 + 2^2 = 6, 6 + 3^2 = 15, 15 + 4^2 = 31, 31 + 5^2 = 56, 56 + 6^2 = 92$
Last number of given series must be 92 not 91

Question 31
Find odd number: 324, 244, 136, 352, 514
(a) 324   (b) 244
(c) 136   (d) 352
Answer: a
Explanation:
Sum of the digits in each other number is 10.
324 = 9

Question 32
Find odd Number: 43, 53, 63, 73, 83
(a) 43   (b) 53
(c) 63   (d) 73
Answer: c
Explanation:
Each of the numbers except 63 is a prime number.

Question 33
Find odd number: 10, 26, 24, 21, 18
(a) 10   (b) 26
(c) 24   (d) 21
Answer: d

Explanation:
Each of the numbers except 21 is n even number.

Question 34
Find odd number: 51, 144, 64, 121, 256
(a) 51   (b) 144
(c) 64   (d) 121
Answer: a
Explanation:
Each of the number except 51 is a perfect square.

Question 35
Find odd number 15, 21, 24, 28, 30
(a) 15   (b) 21
(c) 24   (d) 28
Answer: d
Explanation:
Each of the numbers of except 28, is divisible by 3.

Question 36
Find odd number: 2384, 1592, 3756, 4298, and 3629
(a)2384   (b) 1592
(c) 3629   (d) 3756
Answer: c
Explanation:
In all other numbers, the last digit is two times the first, all are even but 3629 is ODD.

Question 37
Choose odd number: 7359, 1593, 9175, 3781,9317
(a) 7359   (b) 1593
(c) 3756   (d) 3781
Answer: d
Explanation:
All other numbers consist of odd digits only. Sum of all digits is prime in D.

Question 38
Find odd number: 8314, 2709, 1315, 2518, 3249
(a) 8314   (b) 2709
(c) 1315   (d) 2518
Answer: a
Explanation:
In all number except 8314, the sum of first three digits is equal to the unit's digit. Hence, the answer is (a).

Question 39
Find odd number: 48, 12, 36, 24, and 59
(a) 48   (b) 12
(c) 36   (d) 59
Answer: d

Explanation:
In all numbers except 59, the unit's digit is twice the ten's digit. Hence the answer is (d). And all are multiples of 12 too except 59

Question 40
Find odd number: 2345, 3456, 5467, and 5678
(a) 2345   (b) 3456
(c) 5467   (d) 567
Answer: c
Explanation:
All other numbers contain four consecutive digits in order.

Question 41
Find the odd man out.
(a) ZW   (b) TQ
(c) SP   (d) NL
Answer: d
Explanation:
Z^{-3}W, T^{-2}Q, S^{-3}P, N^{-2}L, P^{-3}M
So the answer will be NL, which is choice (d).

Question 42
Find the odd among the following.
(a) 1011   (b) 1101
(c) 1111   (d) 10001
Answer: c
Explanation:
These numbers follow the binary coding. Let's convert them into decimal.
$1011 = 1 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$
$= 8 + 0 + 2 + 1$
$= 11$
$1101 = 1 \times 2^3 + 1 \times 2^2 + 0 \times 2^1 + 1 \times 2^0$
$= 8 + 4 + 0 + 1$
$= 13$
$1111 = 1 \times 2^3 + 1 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$
$= 8 + 4 + 2 + 1$
$= 15$
$10001 = 1 \times 2^4 + 0 \times 2^3 + 0 \times 2^2 + 0 \times 2^1 + 1 \times 2^0$
$= 16 + 0 + 0 + 0 + 1$
$= 17$

Here, choice (c) will be the answer because 15 is not a prime number but all others are prime numbers.

Question 43
Which of the following is wrong in the following series?
2, 7, 25, 77, 238, 723,
(a) 7   (b) 238
(c) 77   (d) 25

Answer: d
Explanation:
-1, 3^2, -2, 3^3, -3, and $3^4 – 4$,....
The number in place of 25 should be 24 = $3^3 – 3$.
Hence (d) is the correct answer.

Question 44
Choose the term which will continue the following series –
E3C, G5F, I8I, K12L,?
(a) L170   (b) M19M
(c) N180   (d) M160
Answer: d
Explanation:
The first letters of the terms are alternate. The difference between the 1st and 2nd number is 2, 2nd and 3rd number is 3 and so on. Last letter of the 2nd number is 3 terms a head of the last term of previous one. Thus the next term would be M160. Hence the answer is d.
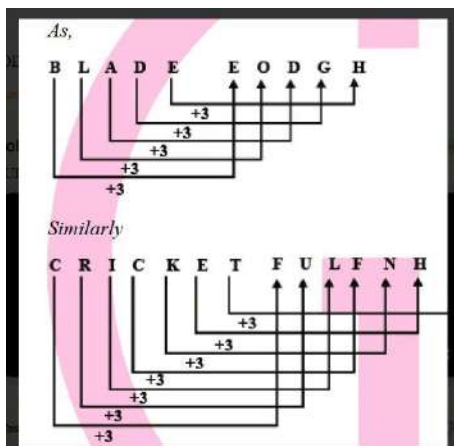
Question 45
If EOGH is the code for BLADE, what is the code for CRICKET?
(a) FULFNHW   (b) ULFNHW
(c) HJLFNHW   (d) ULFHJ
Answer: a
Explanation:
FULFNHW

Question 46
If EARTH is coded as 41590 and PALE as 2134, what is the code for PEARL?
(a) P=2, E=4, A=0, R=5, and L=3   (b) P=2, E=4, A=1, R=5, and L=3
(c) P=2, E=4, A=1, R=5, and L=8   (d) P=8, E=, A=1, R=5 and L=3
Answer: b
Explanation:
24153 codes for letters are: P=2, E=4, A=1, R=5, and L=3

Question 47

In a certain language, 'put tir fin' means 'delicious juicy fruit'; 'tie dip sig' means 'beautiful white lily', and 'sig lon fin' means ' lily and fruit '. What is the code for 'and'?

(a) lon   (b) Oin
(c) Sag   (d) None

Answer: a

Explanation:

'lon'

Common code from first and third statement for 'fin' is 'fruit'. From Second and third statement, 'sig' is 'lily'. So 'lon' means 'and 'in third statement.

Question 48
The word RUN is coded as SVO. What should be the code letters of LAY?

(a) MBZ   (b) MBL
(c) BKL   (d) MBA

Answer: a

Explanation:

∴ LAY should be MBZ.

PAST EXAMINATION QUESTIONS:

MAY 2018

Question 1
In a certain code, RIPPLE is written as 613382 and LIFE is written 8162. How is PILLER written in that code?

(a) 318826   (b) 318286
(c)618826   (d) 33881

Answer: a

Explanation:

PILLER is return that code is 318826

Question 2
In a certain code '256' means 'you are good', '637' means 'we are bad' and '358' means 'good and bad'. Which of the following represents 'and' in that code?

(a) 2   (b) 5
(c) 8   (d) 3

Answer: c

Explanation:

256 means 'you are good'

637 means 'we are bad'

358 means 'Good and Bad'

Here code of 'are' is 3

Code of good is 5
Code of and is 8

Question 3
If LOSE is coded as 1357 and GAIN is code as 2468, what do figure 82146 for?
 (a) NGLAI   (b) NGLIA
 (c) GNLIA   (d) GNLA
Answer: a
Explanation:
82146 is stands for NGLAI

NOV 2018

Question 1
If PLAY is coded as 8123 and RHYME is coded as 49367. What will be code of MALE?
 (a) 6217   (b) 6198
 (c) 6395   (d) 6285
Answer: a
Play = 8123, RHYME = 49367 then
because M = 6, A = 2, I = 1, E = 7

Question 2
Find out the next number in the following series 7, 11, 13, 17, 19, 23, and 25)
 (a) 30   (b) 29
 (c) 32   (d) 33
Answer: b
Explanation:
Given series
7, 11, 13, 17, 19, 23, 25, 29.
A prime number series, next prime number is 29

Question 3
If HONEY is coded as JQPGA, which word is code as VCTIGVV?
 (a) CARPETS   (b) TRAPETS
 (c) TARGETS   (d) UMBRELU
Answer: c

Question 4
Find odd man out of the following series 15,, 21, 63, 81, 69.
 (a) 15   (b) 21

(c) 63   (d) 81
Answer: d
Explanation:
15, 21, 63, 81, 69
Only 81 is a perfect square.

Question 5
Find odd man out of the following series 7, 9, 13, 17, 19
(a) 7   (b) 9
(c) 19   (d) 13
Answer: b
Explanation:
7, 9, 13, 17, 19
9 is the odd man out
Need to find odd number form given five numbers that are 9, 9, 13, 17, 19
A prime number is a whole number greater than 1 whose only factors are 1 and itself.
Let's do prime factorization of each number
Prime factorization of 7 is 7×1
Prime factorization of 13 is 13×1
Prime factorization of 17 is 17×1
Prime factorization of 19 is 19×1
But 9 is not a prime number. Since its factors are 3 and 1 and 9.
So the odd man out is 9.

MAY 2019

Question 1
If in a certain language, MADRAS is code as NBESBT, how is BOMBAY coded in that language?
(a) CPNCBX   (b) CPNCBZ
(c) CPOCBZ   (d) CQOCBZ
Answer: b
Explanation:
Clearly every letter is increased by 1 as
        M+1 N
        A+1 B
        D+1 E
        R+1 S
        A+1 B
        S+1 T
So after increasing every character in work BOMBAY by 1, we get

Question 2
Which of the following is odd one?
 (a) CEHL   (b) KMPT
 (c) OQTX   (d) NPSV
Answer: d
Explanation:

a. $\begin{array}{cccc} C & E & H & L \\ 3 & 5 & 8 & 12 \end{array}$ b. $\begin{array}{cccc} K & M & P & T \\ 11 & 13 & 16 & 20 \end{array}$ c. $\begin{array}{cccc} N & P & S & V \\ 14 & 16 & 19 & 23 \end{array}$

Last no. of all option is even except option d i.e., odd

Question 3
Which of the following is odd one 4, 12, 44, 176, 890………?
 (a) 4   (b) 12
 (c) 44   (d) 176
Answer: c
Explanation:
$4 \div 4 = 1$
$12 \div 4 = 3$
$44 \div 4 = 11$
$176 \div 4 = 44$
$890 \div 4 = 222.4$
Clearly, 890 is only number that is not completely by 4.
So, this is the odd one.

Question 4
Complete the series.
7, 23, 47, 119, 167 ………
 (a) 211   (b) 223
 (c) 49   (d) 120
Answer: c
Explanation:
Consider the provided series.
7, 23, 47, 119, 16, _____
In order to find the next term of the series observe the pattern as shown below:
$7 = 9 - 2 = 3^2 - 2$
$23 = 25 - 2 = 5^2 - 2$
$47 = 49 - 2 = 7^2 - 2$
$119 = 121 - 2 = 11^2 - 2$
$167 = 169 - 2 = 13^2 - 2$
Square the next prime number and subtract 2 from it.
$17^2 - 2 = 289 - 2 = 287$

Hence, the next number of the series is 287

NOV 2019

Question 1
Complete the series.
4, 16, 36, 64, 100

(a) 144   (b) 121
(c) 49   (d) 120

Answer: A

Explanation:
(a) Given series
4, 16, 36, 64, 100,
$2^2 = 4$, $4^2 = 16$, $6^2 = 36$, $8^2 = 64$, $10^2 = 100$
The series is of squares of even no.' s so after 100 it will be
$12^2 = 144$

Question 2
Find the odd man out,
1, 5, 14, 30, 51, 55, 91

(a) 5   (b) 55
(c) 51   (d) 91

Answer: c

Explanation:
As the series is having the sum of all squares of natural number therefore 51 is the odd number.

Question 3
Find the odd man out 5, 10, 17, 27, 37;

(a) 5   (b) 17
(c) 27   (d) 10

Answer: c

Explanation:
(c) $(2 \times 2) + 1 = 5$
    $(3 \times 3) + 1 = 10$
    $(4 \times 4) + 1 = 17$
    But $(5 \times 5) + 1 = 26$
    $(6 \times 6) + 1 = 37$
So 27 is odd man out.

Question 4
Complete the series

4, 16 _____ 256, 1024

  (a) 32   (b) 48
  (c) 64   (d) 46

Answer: c

Explanation:

(c) $4^1 = 4$

$4^2 = 4 \times 4 = 16$

$4^3 = 4 \times 4 \times 4 = 64$

$4^4 = 4 \times 4 \times 4 \times 4 = 256$

$4^5 = 4 \times 4 \times 4 \times 4 \times 4 = 1024$

So the third form of the series is 64.

Question 5

SYSTEM is coded as 131625 then TERMS will be coded as?

  (a) 62251   (b) 62451
  (c) 64251   (d) 62415

Answer: (b)

Since in

            SYSTEM
            131625

(Given)

            TERMS
            62451

∴ As R cannot be 2 as E has already been assigned the value as 2

R's value left will be 4 as per given option.

DEC 2020

Question 1

Find the missing value in the series 0, 2, 3, 6, 10, 17, 28, ? 75.

  (a) 58   (b) 46
  (c) 48   (d) 54

Answer: b

Explanation;

2+3 +1=6

3+6 +1=10

6+10 +1=17

You go on like this and the next number will be 17 + 28 + 1 = 46

Question 2

$$\frac{3}{8}, \frac{8}{19}, \frac{18}{41}, ?, \frac{78}{173}$$

(a) $\frac{38}{85}$ (b) $\frac{83}{38}$

(c) $\frac{81}{38}$ (d) None

Answer: a

Explanation:

3+5 = 8

8+10 = 18

18 + 20 = 38

38 + 40 = 78

= 38/85

Question 3

Find Odd man out of the following 6, 9, 12, 18, 21, 26, and 30

(a) 24   (b) 30

(c) 26   (d) 9

Answer: c

Explanation:

Each of the numbers except 26, is a multiple of 3.

Question 4

If in a certain language HEALTH is coded as IFBMUI then what is the code for NORTH

(a) OPSUI   (b) OPUSI

(c) OUSPI   (d) OIPSU

Answer: a

Explanation:

Given

HEALTH is coded as IFBMUI

To find code for North

In HEALTH each letter is coded as:

Each letter of HEALTH is moved one step forward and coded as IFBMUI

Similarly for NORTH we have to move one step forward in each letter so North will be coded as OPSUI.

Question 5

Find the Wrong Term in:

G4T, J10R , M20P , P43N , S90L

(a) M20P   (b)P43N

(c) J10R   (d) G4T

Answer: c

Explanation:

The first letter of each term is moved three steps forward and
the last letter is moved two steps backward to obtain the corresponding letters of the
next term.
The numbers follow the sequence ×2+1,×2+2,×2+3,×2+4.
So, 10 is wrong and must be replaced by (4×2+1) i.e. 9.

JAN 2021

Question 1

$\frac{1}{2}, \frac{3}{4}, \frac{5}{8}, \frac{7}{16} = ?$

(a) $\frac{9}{32}$

(b) $\frac{10}{17}$

(c) $\frac{11}{34}$

(d) $\frac{12}{35}$

Answer: a

Explanation:

9/32 because the numerators are the consecutive odd numbers and the denominators
are consecutively being multiplied by 2.

Question 2

Find the missing term:

P3C, R5F, T8I, V12L, ...?

(a) Y170   (b) X17M
(c) X170   (d) X 160

Answer: c

Explanation:

Option C is the correct answer

In the following series first letter is moved two steps forward, second number is moved
2,3,4,5 step forward, and third letter is moved and third letter is moved three steps
forward to form the next term of the series

Following the series the next term will be X17O

Question 3

Find out the odd man in the sequence 8, 27, 64, 125, 196, 216.

(a) 27   (b) 196
(c) 125   (d) 216

Answer: b

Explanation:

The given numbers are : 8, 27, 64, 125, 196, 216, .

Among these , __196__ is the odd one out .

It is because all the other numbers are perfect cubes whereas 196 is a perfect square

Question 4
In a certain code language, BEAT is written as YVZG, and then what will be the code for MILD?

(a) ONRW   (b) NOWR
(c) ONWR   (d) NROW

Answer: d

Explanation:
Given, BEAT is written as YVZG.
We know that B, E, A, T are respectively the 2nd, 5th, 1st and 20th letters from the beginning of the English alphabet. The letters of the code Y, V, Z, G are respectively the 2nd, 5th, 1st and 20th letters from the end of the English alphabet. Similarly, M, I, L, D are respectively the 13th, 9th, 12th and 4th letters from the beginning of the English alphabet. Now, the 13th, 9th, 12th and 4th letters from the end of the English alphabet are N, R, O, W respectively. So, MILD is coded as NROW.
Hence, option (D) is the correct answer.

Question 5
In a certain code RIPPLE is written as 613382, and LIFE is written as 8192. How will PILLER be written in that code?

(a) 618892   (b) 689912
(c) 318826   (d) 629981

Answer: c

Explanation:
The alphabets are coded as shown :
R   I   P   L   E   F
6   1   3   8   2   9
So, in PILLER, P is coded as 3,
I as 1,
L as 8,
E as 2   and
R as 6.
Thus, the code for PILLER is 318826.

JULY 2021

Question 1
Chose the missing term in the series...... 1,1, 8, 4, 27,____64,16

(a) 27   (b) 11
(c) 9   (d) 125

Answer: Options (c)
Explanation:
Correct option is c = 9

The series consists of squares and cubes of squares and cubes of consecutive natural numbers i.e.

$1^2, 1^3, 2^3, 2^2, 3^3, 4^3, 4^2, \ldots\ldots$

So missing term = $3^2 = 9$

Question 2

The wrong term in the series ……. 225, 196, 169, 121, 100, 77, 64, is ___
  (a) 121   (b) 77
  (c) 100   (d) 169

Answer: Options (b)

Explanation:

Correct option is b = 77

By taking a close look at all the numbers in the sequence it is clear that all the given numbers are perfect squares of numbers.

15 × 15 = 225

14 × 14 = 196

13 × 13 = 169

11 × 11 = 121

10 × 10 = 100

9 × 9 = 81 but the number given in the series is 77

So 77 is the wrong term from the series.

Option b is the correct Answer

Question 3

If Delhi is coded as EFMIJ then Jaipur is coded as_
  (a) JQVSBK   (b) QVSKBJ
  (c) BJQVSK   (d) KBJQVS

Answer: Options (d)

Question 4

If frame is coded as 0618011305 then Arise is coded as_
  (a) 0118091905   (b) 0119091805
  (c) 0118190905   (d) 0118091805

Answer: Options (a)

Question 5

If Clock is coded as 34235 and Time as 8679, then Motel is coded as
  (a) 27894   (b) 72964
  (c) 72894   (d) 77684

Answer: Options (c)

DEC 2021

Question 1

If MOUSE, is coded as 34651 and KEY is coded as 217, then how will YES be coded?

(a) 715   (b) 517
(c) 175   (d) 571

Answer: a

Explanation:

M	O	U	S	E
3	4	6	5	1

K	E	Y
2	1	7

Y	E	S
7	1	5

Question 2

What comes at the last place in R, U, X, A, D ....?

(a) E   (b) F
(c) G   (d) H

Answer: c

Explanation:

We have R + 3 = U
U+ 3 = X
X + 3 = A
A + 3 = D
D + 3 = G

Question 3

The missing term of the series 4, 13, ...49, 76 is

(a) 26   (b) 30
(c) 28   (d) 32

Answer: b

Question 4

Find the odd one from the following

(a) Zebra   (b) Horse
(c) Giraffe   (d) Tiger

Answer:

Explanation:

Here, Zebra, Giraffe, Horse are herbivorous animal Except 'Tiger'.

Question 5

In certain code, MENTION is written as LNEITNO. How is PRESENT written in that code?

(a) NTSEREO   (b) OERESTN

(c) ERESTNO   (d) ROESTNE

Answer: b

Explanation:

In the certain code. It is proved that the correct answer is b

Question 6

If in a certain code "THANKS" is written as "SKNTHA" then how us "STUPID" written?

(a) DIPUTS   (b) DISPUT
(c) DIPUST   (d) DIPSTU

Answer: d

Explanation:

The code of THANKS is made as follows

The last three letters are reversed, and then the first three letters are written as it is. Similarly, the code of STUPID would be DIPSTU.

JUNE 2022

Question 1

7, 26, 63, 124, 215, 342 _____?

(a) 511   (b) 672
(c) 508   (d) 556

Answer: Options (a)

Explanation:

7, 26, 63, 124, 215, 342

Here, $2^3 - 1 = 7$, $6^3 = 216 - 1 = 215$

   $3^3 - 1 = 26$, $7^3 = 343 - 1 = 342$

   $4^3 - 1 = 63$, $8^3 = 512 - 1 = 511$

   $5^3 - 1 = 124$

Question 2

LOUTS is coded as 14682 and STRANGE is codes as 2690753. How will you code GESTURE

(a) 5236893   (b) 5326793
(c) 5346893   (d) 5326893

Answer: Options (d)

Explanation:

L O U T S	S T R A N G E	G E S T U R E
↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓ ↓ ↓
1 4 6 8 2	2 6 9 0 7 5 3	5 3 2 6 8 9 3

Question 3
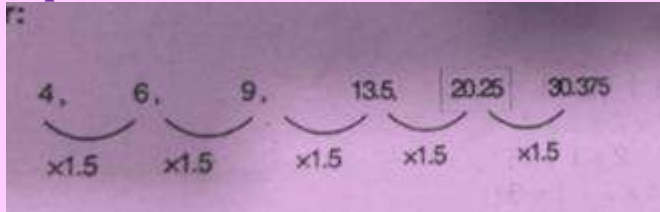**4, 6, 9, 13, 5 _____, 30.375**
 (a) 40.50   (b) 20.25
 (c) 40.75   (d) 60.25
Answer: Options (b)
Explanation:

Question 4
Code for Word EARTH is 16235 and VENUS 91784 what is code for SATRUN?
 (a) 423827   (b) 463827
 (c) 463877   (d) 413827
Answer: Options (b)
Explanation:

```
E A R T H        V E N U S        S A T U R N
↓ ↓ ↓ ↓ ↓        ↓ ↓ ↓ ↓ ↓        ↓ ↓ ↓ ↓ ↓↓
1 6 2 3 5        9 1 7 8 4        4 6 3 8 2 7
```

Question 5
Find out the next term –
7, 11, 27, 63, 127, ___
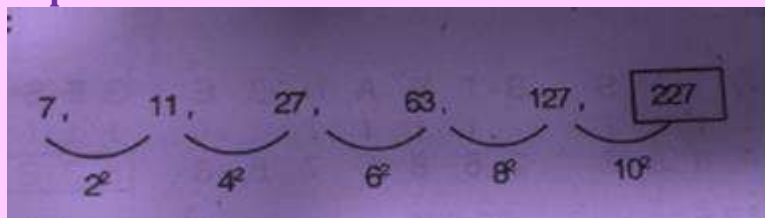 (a) 511   (b) 227
 (c) 5100   (d) 255
Answer: Options (b)
Explanation:

Question 6
Find the next terms –
3, , 15, 31, ?, 127
 (a) 62   (b) 63
 (c) 64   (d) 65
Answer: Options (b)

Explanation:
3, 7, 15, 31, 63, 127
$3 \times 2 + 1 = 7$
$7 \times 2 + 1 = 15$
$15 \times 2 + 1 = 31$
$31 \times 2 + 1 = 63$
$63 \times 2 + 1 = 127$

Question 7
Find out the next term-
6, 13, 28, 59, ?

(a) 122   (b) 114
(c) 113   (d) 112

Answer: Options (b)
Explanation:
6, 13, 28, 59, 122
$6 \times 2 + 1 = 13$
$13 \times 2 + 2 = 28$
$28 \times 2 + 3 = 59$
$59 \times 2 + 4 = 122$

DEC 2022

Question 1
If ROSE is coded as 6821, CHAIR is coded as 73456 and PREACH is coded as 961473, what will be the code for SEARCH?

a) 246173   b) 214673
c) 216473   d) 214763

Answer: Options (b)
Explanation:
As per the codes given
ROSE=682
CHAIR=73456
PREACH=961473
Code for SEARCH will be=214673
answer is Option (b)

Question 2
In certain code language, if TOUR is written as 1234, CLEAR is written 5678 and SPARE is written as 90847, find the code for CARE?

a) 1247   b) 4847
c) 5247   d) 5847

Answer: Options (d)
Explanation:
The code for TOUR is:

T	O	U	R
1	2	3	4

The code for CLEAR is:

C	L	E	A	R
5	6	7	8	4

The code for SPARE is:

S	P	A	R	E
9	0	8	4	7

Similarly,
The code for CARE is:

C	A	R	E
5	8	4	7

Hence, '5847' is the correct answer.

Question 3
How many 3 digit odd numbers can be formed using the digits 5, 6, 7, 8, 9, if the digits can be repeated?
   a) 55   b) 75
   c) 65   d) 85
Answer: Options (b)
Explanation:
Let us take the 3digit number as H T U (Hundreds, tens, unit digit) respectively
To make 3 digit number as odd
5, 7, 9 are only possibly be used in the unit digit place
In hundreds and tens place all 5 digits are possible
Number of ways for unit digit = 3 Number of ways for tens digit = 5 Number of ways for hundreds digit = 5

Number of 3 digits odd number = 3 x 5 x 5 = 75

∴. 75 Three-digit odd numbers can be formed from the digits 5, 6, 7, 8, 9 if the digits can be repeated

Question 4
Find the odd man out:
34, 105, 424, 2123, 12756

    a) 12756   b) 2123

    c) 424   d) 34

Answer: Options (b)

Explanation:

3rd term = (2nd term) x 2 + 2 = 16 x 2 + 2 = 34.

4th term = (3th term) x 3 + 3 = 34 x 3 + 3 = 105.

5th term = (4th term) x 4 + 4 = 105 x 4 + 4 = 424

6th term = (5th term) x 5 + 5 = 424 x 5 + 5 = 2125

∴ 6th term should 2125 instead of 2123.

Question 5
If 'FORZEN' is decoded as 'OFAPSG'. Tick the right option that depicts ''MOLTEN'' written in this way?

    a) OFPOMN   b) OFSMPN

    c) OFUMPN   d) OFUNPN

Answer: Options (c)

Explanation:

Reverse the word and move each letter +1 . Reverse of MOLTEN is NETLOM add 1 to each letter of NETLOM. So code of MOLTEN become OFUMPN.