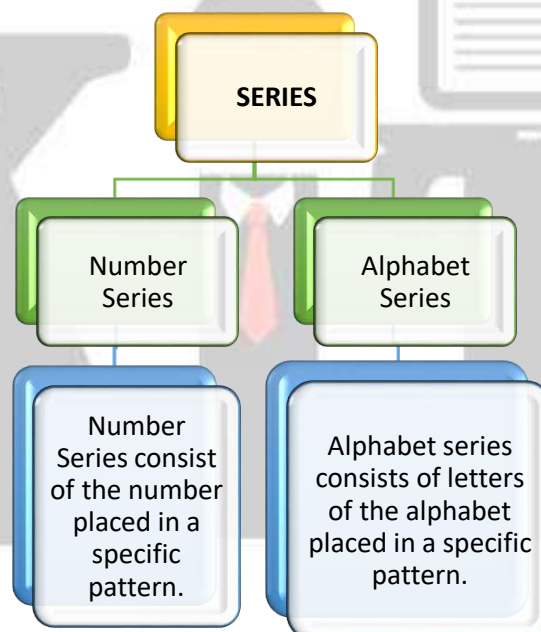


# CHAPTER - 9

## NUMBER SERIES, CODING

### DECODING AND ODD MAN OUT

#### SERIES



### 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  $2 + 5 = 7$ ; 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

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(c) 28

(d) 27

**Answer: b****Explanation:** $2^3 + 1, 3^3 + 1, 4^3 + 1 \dots$  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  $(2 \times 261 + 1) = 523$

**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  $A, A \times 1 + 1, B \times 2 + 2, C \times 3 + 3 + D \times 4 + 4, E \times 5 + 5, F \times 6 + 6$  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.

$$190-24=166$$

$$166-21=145$$

$$145-18=127 \text{ [Here, 1288 is placed instead of 127]}$$

$$127-15=112$$

$$112-12=100 \text{ ... and so on}$$

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:**

$A \times 2 + 1$ ,  $B \times 3 + 1$ ,  $C \times 2 + 1$ ,  $D \times 3 + 1$  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.

$$2^{\text{nd}} \text{ term} = (1^{\text{st}} \text{ term}) \times 2 = 6 \times 2 = 12$$

$$4^{\text{th}} \text{ term} = (3^{\text{rd}} \text{ term}) \times 2 = 48 \times 2 = 96.$$

$$6^{\text{th}} \text{ term} = (5^{\text{th}} \text{ term}) \times 2 = 384 \times 2 = 768.$$

$\therefore$  4<sup>th</sup> 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 an 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 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: d****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  $3^4 - 4, \dots$

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 1<sup>st</sup> and 2<sup>nd</sup> number is 2, 2<sup>nd</sup> and 3<sup>rd</sup> number is 3 and so on. Last letter of the 2<sup>nd</sup> number is 3 terms ahead 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?**

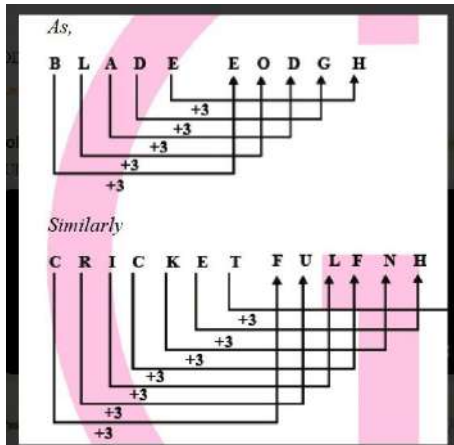
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- (a) FULFNHW
- (c) HJLFNHW

- (b) ULFNHW
- (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:**

R	I	P	P	L	E	L	I	F	E
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
6	1	3	3	8	2	8	1	9	2

Then

P	I	L	L	E	R
↓	↓	↓	↓	↓	↓
3	1	8	8	2	6

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:**

L	O	S	E	G	A	I	N	8	2	1	4	6
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1	3	5	7	2	4	6	8	N	G	L	A	I

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**

**Explanation:**

H	O	N	E	Y	Then	V	C	T	I	G	V	U
+2	+2	+2	+2	+2		-2	-2	-2	-2	-2	-2	-2
↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓	↓
J	Q	P	G	A		T	A	R	G	E	T	S

**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 from given five numbers that are 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  $7 \times 1$

Prime factorization of 13 is  $13 \times 1$

Prime factorization of 17 is  $17 \times 1$

Prime factorization of 19 is  $19 \times 1$

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.  $CEHL$     b.  $KMPT$     c.  $NPSV$   
    35812    11131620    14161923

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**

**Find the next number in the series**

**7, 23, 47, 119, 167 .....**

- |         |         |
|---------|---------|
| (a) 211 | (b) 223 |
| (c) 287 | (d) 319 |

**Answer: c**

**Explanation:**

Consider the provided series.

7, 23, 47, 119, 167, 287

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**

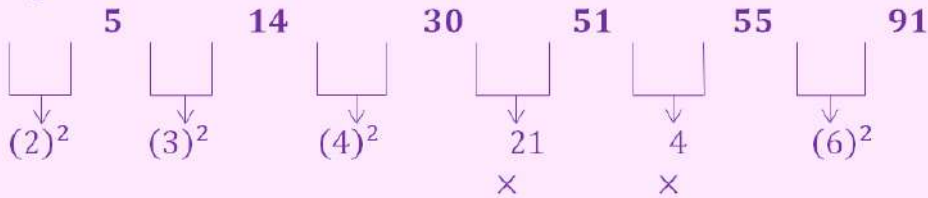
**Find the odd man out,**

**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 2

**In time series seasonal variations can occur within a period of:**

- (a) One year (b) Three Years  
(c) Nine Years (d) Five Years

**Answer: a**

**Explanation:**

In time series seasonal variations can occur within a period of 1 year

### Question 4

**\_\_\_\_\_ Variations are usually longer than one year**

- (a) Seasonal (b) Cyclical  
(c) Trend (d) None

**Answer: b**

**Explanation:**

The term “cyclical variation” refers to the recurrent variation in a time series that usually lasts for two or more years and are regular neither in amplitude nor in length.

### Question 5

**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 6**

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

(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 7**

**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 8**

**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 9**

**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  $\times 2+1, \times 2+2, \times 2+3, \times 2+4$ .

So, 10 is wrong and must be replaced by  $(4 \times 2+1)$  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 X170**



**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.

### Question 6

**A man is facing west. He turns  $45^\circ$  in the clockwise direction and then another  $180^\circ$  in the same directions and then  $270$  degrees in the anti-clockwise direction. Which is the facing now?**

- (a) south-West (b) North-West  
(c) West (d) South

**Answer: a**

**Explanation:**

Given

Initially man is facing west

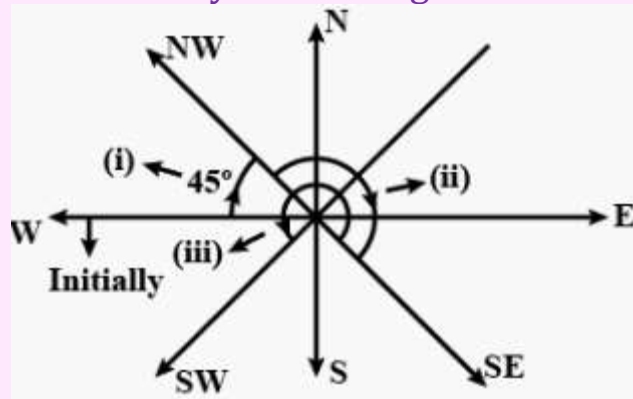
Then he turns  $45^\circ$  in clockwise .....(i)

Then  $180^\circ$  in same direction ..... (ii)

and again  $270$  in anticlockwise direction ..... (iii)

Strictly according to instruction about the movement of the man, draw the diagram.

Hence finally he is facing South West.



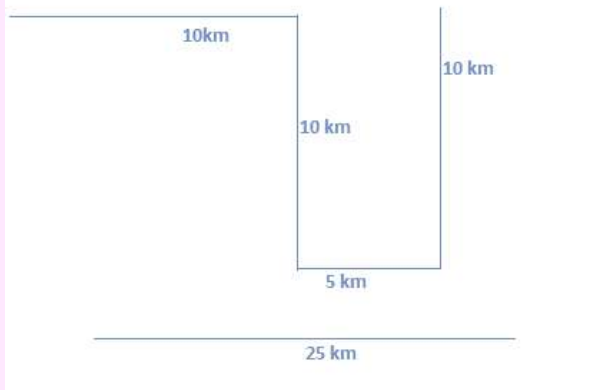
### Question 7

**One day, Ram left home and bi-cycled 10km southwards, turned right and travelled 5 km and turned right and went 10 km he turned left and went 10km. how many kilometers has to cycle to reach his home straight?**

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

**Answer: b**

**Explanation:**



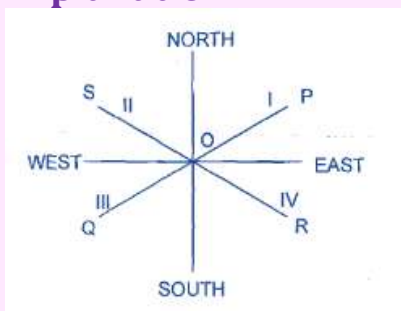
**Question 8**

**Mr. N walks 19 km toward North. From there she walks 6 km towards East. How far and in which direction is she with reference to her starting point?**

- (a) 4km West
- (b) 6km West
- (c) 3km East
- (d) 3km North/east

**Answer: d**

**Explanation:**



**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:**

1, 1, 8, 4, 27,  , 64, 16

Here the two mixed series

1<sup>st</sup> series → 1, 8, 27, 64.....

2<sup>nd</sup> series → 1, 4,  ,16

So, '9' is correct answer:

**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.

$$15 \times 15 = 225$$

$$14 \times 14 = 196$$

$$13 \times 13 = 169$$

$$11 \times 11 = 121$$

$$10 \times 10 = 100$$

$$9 \times 9 = 81 \text{ but the number given in the series is } 77$$

So 77 is the wrong term from the series.

Option b is the correct Answer

### 3. Coding and Decoding

**Question 3**

If DELHI is coded as EFMIJ then Jaipur is coded as\_

- (a) JQVSBK (b) QVSKBJ  
(c) BJQVSK (d) KBJQVS

**Answer: Options (d)**

**Explanation:**

DELHI

↓ ↓ ↓ ↓ ↓

EFMIJ

JAIPUR

↓ ↓ ↓ ↓ ↓ ↓

KBJQVS

**Question 4**

If FRAME is coded as 0618011305 then Arise is coded as\_\_

- (a) 0118091905 (b) 0119091805  
(c) 0118190905 (d) 0118091805

**Answer: Options (a)**

**Explanation:**

F R A M E  
 ↓ ↓ ↓ ↓ ↓  
 06 18 01 13 05

A R I S E  
 ↓ ↓ ↓ ↓ ↓  
 K B Q V S

**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)

**Question 6**

The mean deviation of the numbers 3, 10, 6, 11, 14, 17, 9, 8, 12 about the mean is (correct to one decimal place).

- (a) 8.7 (b) 4.2  
 (c) 9.8 (d) 3.1

**Answer:** Option (c)

**Explanation:**

3, 6, 8, 9, 10, 11, 12, 14, 17

$$\text{Mean } (\bar{x}) = \frac{\sum x}{N} = \frac{3+6+8+9+10+11+12+14+17}{9}$$

$$= \frac{90}{9} = 10$$

X	$\bar{x}$	$ 01  =  X - \bar{x} $
3	10	$ 3 - 10 $
6	10	$ 3 - 10 $
8	10	$ 3 - 10 $
9	10	$ 3 - 10 $
10	10	$ 3 - 10 $
11	10	$ 3 - 10 $
12	10	$ 3 - 10 $
14	10	$ 3 - 10 $
17	10	$ 3 - 10 $
N = 9		$\sum  d $ 28

$$\text{M.D} = \frac{\sum |d|}{N} = \frac{28}{9} = 3.1$$

**Question7**

The consumer price index goes up from 120 to 180 when salary goes up from 240 to 540, what is the increase in real terms?

(a) 80

(b) 150

(c) 240

(d) 360

**Answer: Option (c)****Explanation:**

C.P.I    Salary

120    240

180    X

$$\frac{120}{180} = \frac{240}{X}$$

$$X = \frac{240 \times 180}{120}$$

$$X = 360$$

# KITest

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