TCS NQT Previous Year All Papers with Solutions:

TCS NQT 19 August 2023 - Slot 1

Numerical Ability:

Questions 1: What is the sum of LCM and HCF of 5/18, 35/9 and 15/63?

1. 1475/252
2. 1475/126
3. 625/252
4. 625/126

Ans . 1475/126

Question 2: The reciprocal of a fraction is more than itself by 21/240. How much is the difference between the possible values of the fraction more than 2?

1. 1/15
2. 1/16
3. 1/240
4. 1/256

Ans: C

Question 3: A person invested ⅔ of his capital at the rate of 6% and ⅕ at the rate of 10% and the remainder at the rate of 15%. If his actual income is 3,600 the capital will be:

Option

1. Rs. 5000
2. Rs. 2500
3. Rs. 7,500
4. Rs. 4,500

Answer: 45000

note: the answer will be 45000 and the options provided in the exam we wrong.

Question 4: If 8^x+1 + 8^1-x = 20, then x = ?

1. ¼, -¼
2. ½. -½
3. ⅓, -⅓
4. ⅕, -⅕

Ans : c ⅓, -⅓

Question 5: At an academic institution the break-up of holidays in 2016 was as under.

- 52 weekends
- 30 days of summer vacation which includes 4 weekends
- Autumn and Winter Breaks of (10+10) days each inclusive of one weekend
- 14 holidays on special occasion out of which one was a Saturday and one Sunday

What was the percentage (correct up to two decimal places) of the number of holidays?

1. 45.90%
2. 42.08%
3. 42.19%
4. 43.73%

Answer: 42.08

Question 6:

In a family of 10 adults and a few minors, the average consumption of flour is 12 kg. If the average consumption per adult and minor is 15 and 7 kg respectively.What is the number of minors?(Averages)

1. 6
2. 7
3. 5
4. 8

Answer: 6

Question 7: A person lends 35% of his sum of money at 12.5% per annum, 50% at the end of 10% per annum and the rest at 18% per annum rate of interest. What would be the annual rate (in approx), if the interest is calculated on the whole sum?(SI & CI)

Options

1. 13%
2. 14.5%
3. 13.5%
4. 13.75%

Answer: 13.475% ~ 13.5%

Question 8: The average weight of 6 people increases from 24 to 31.5 kg when one of them leaves the group and a new person joins in. If the weight of the person who joined is 60 kg, find the weight of the person who left the group?**(Average)**

1. 22.5
2. 37.5
3. 15
4. 30

Answer: 15

Question 9: There are three types of alloys A, B and C. The ratio of Copper, Tin and Nickel in A, B and C is 16:3:1 ,15:3:2 and 14:5:1 respectively. If the amount of A, B, and C 10 kg, 15 kg and 50 kg are mixed together respectively. Then, the final ratio of Copper Tin and Nickel in mixture is equal to

1. 217 65 18
2. 217 65 81
3. 217 56 18
4. 127 65 18

Answer: A

Question 10: Rahul bought a watch which has Rs. 1,875 as a marked price at a 24% discount. Rahul sold the watch to Rohit earning a 28% profit. Rohit then decided to sell the watch and set the marked price at 25% higher than the cost price at which he bought the watch. Mohit bought the watch from Rohit at a 15% discount on the marked price. Mohit later marked up the price to 50% higher than the cost price at which he bought the watch and sold it to Rahul at some discount. If Rahul had to pay Rs. 28.5 extra than the initial price he paid, then at what percent discount Mohit sold the watch?**(Profit and Loss)**

Options

1. 35%
2. 50%
3. 45%
4. 40%

Question 11: If a road of 210 km can be constructed by 540 workmen in 28 days, how many workmen are required to build a road of 150 km in 18 days.(Time and Work)

1. 600
2. 300
3. 650
4. 450

Answer: 600

Question 12: Two stations P and Q are 42 km apart. Rohit and mohit start from P to Q at the speed of 6km/h and 8km/h, respectively mohit reaches Q first and return to meet rohit at R. Determine the distance between P and R in km**(Time Speed Distance)**

1. 30
2. 36
3. 33
4. 27

Answer: 36 km

Question 13: The railway platform at a certain station is 248m long. In how many seconds it is cleared by the Express train which is 127 m long and travels at a speed of 150 km/h?**(Time Speed Distance)**

1. 9
2. 12
3. 8
4. 10

Answer: 9 seconds

Question 14: Nookaraju and Bhavana have their salaries in 7:3. As Bhavana is skilled, she got an increment of 5,000. But Nookaraju' performance is not up to mark and he got a decrement of $1,000. If their present salaries are in ratio of 1:1, then Nookaraju's present salary is: **(Ratio and Proportion)**

1. 8,500
2. 9,500
3. 15,000
4. 10,500

Answer: 9500

Question 15: The perimeter of a regular hexagon with area of 21 sqrt 3 cm^2 is: **(Mensuration)**

1. 12 sqrt 3
2. 6 sqrt 14
3. 9 sqrt 3
4. 7 sqrt 15

Answer: Option B – 6 sqrt 14

Question 16: . If the first quartile Q1 = 28 and third quartile Q3 = 42 Then the coefficient of quartile deviation is: **(Elementary Statistics)**

1. 1/5
2. 1/3
3. 1/4

4. 1/2

Ans − ⅕

Question 17: A farmer purchased a Trolley and a Tractor for 8,00,000. He sold the Tractor at a profit of 30% and the Trolley at a loss of 10%, in this deal he got a profit of 3%. What is the ratio of the cost price of tractor and trolley. **(Profit and Loss)**

1. 54:31
2. 27:13
3. 13:27
4. 13:54

Answer: Option C : 13:27

Question 18: The marked price of a marker is $5\tfrac{5}{9}$ % higher than it's cost price. A discount of $5\tfrac{5}{19}$ % is given on its marked price. Find the difference between cost price and selling price. **(Profit and Loss)**

Answer: 1

Verbal Ability:

Question 1. Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error. **(Error Identification)**

A university training enables a graduate seeing things as they are, and to disentangle a plethora of thoughts

1. to disentangle a plethora of thoughts
2. a graduate seeing things as they are
3. to go right to the point
4. A university training enables

Answer − a graduate seeing things as they are

Question 2. Identify the part of the sentence that has an error − **(Error Identification)**

I like to sit at the window for hours and see children playing in the park

Options:

1. I like to sit at
2. The window for hours
3. In the park
4. And see children playing

Answer – And see children playing

Question 3: Each sentence contains four underlined phrases. Three of these phases have been correctly used, and one has been incorrectly used. Choose the phrase (from option) which best replaces the wrong phrases in the sentence. **(Sentence correction)**

Explorers embody the finest spirit in human nature which is to seek new challenges, discover new worlds and create new frontiers and one such rare achievement of the indomitable spirit is the ascending of Mount Everest by Hillary and Tenzing.

Options

1. Finer spirits
2. By the dominant
3. To have sought
4. The ascent

Answer – the ascent

Question 4: Select the most appropriate set of options to fill in the blanks.

Bill Gates dropped out from Harvard within a year, Then he formed Microsoft. "Microsoft's (A) _____ is a computer on every desk and Microsoft software on every computer." Bill is a visionary and works very hard to (B) _____ his vision. His belief in high intelligence and hard work had put him where he is today. He does not believe in mere luck or God's grace, but just hard work and (C) _____. His beliefs are so powerful that they have helped him increase his wealth and establish his (D) _____ in the industry.

(Sentence completion)

1. (A)Symbol (B) attain (C)investment (D) control
2. (A)target (B) progress(C)frankness (D) importance
3. (A)logo(B)believe (C)blessings (D) esteem
4. (A)vision (B) achieve (C)competitiveness (D) monopoly

Answer :- (A)vision (B) achieve (C)competitiveness (D) monopoly

Question 5. **Select the most appropriate set of options to fill in the blanks.**

Mexico is home to more species of oak than any country in the world, though many of them are(1) ___ . In the case of the arroyo oak, as it is known, the species now faces a particularly(2)__ problem. Though plenty of trees aged more than 100 years can be found, locals(3)__ that in recent years there had been no seedlings that have sprouted from their acorns in sight. For some reason, the trees had(4)__ stopped reproducing.

(Sentence Completion)

Blank 1 A. threaten B. threatened C. threatens D. threatening.

Blank 2 A. struggling B. troubling C. grieving D. agitating

Blank 3 A. regarded B. recognized C. noticed D. caught

Blank 4 A. commonly B. directly C. easily D. simply

1. 1-B, 2-B, 3-C, 4-D
2. 1-A, 2-B, 3-A, 4-D
3. 1-D, 2-A, 3-B, 4-C
4. 1-C, 2-D, 3-B, 4-B

Answer- 1-B (threatened), 2-B (troubling), 3-C, (noticed) 4-D (simply)

Question 6. Choose the most appropriate set of idioms that would fit in the blanks and complete the text given here. **(Idioms and phrases)**

Sadhguru, the famous mystic, made several attempts to improve the nation's rivers a few years back. The government of India (1) _____ some of his ideas he had

incorporated in the union budget. However, his solutions were not received well in (2) _____. After bearing these criticisms he decided not to provide any more solutions but to focus on the problem itself. His strongest message?. We cannot (3) _____ to the fact that soil is being rejected, whether it is concrete paving, denuding vegetation, use of chemicals etc. The soil is not being given the respect it deserves. He has now (4) _____ of the politicians, the bureaucrats and the technocrats to find and execute solutions, if the mystics of their job and things may become **missing** . Of what good is the soul without the soul.

1. 1. Reflected upon 2. certain quarters 3. Turn a blind eye 4 put the ball in the court
2. 1. Reflected upon 2. A chunk of 3. Turned the other way 4. Gave up on
3. 1. Reflected upon 2. A cross section 3. Turned the other way 4. Given up
4. 1. Thought aloud 2. Certain section 3. Turn a deaf ear 4. Taken a back seat

Answer:- 1. Reflected upon 2. certain quarters 3. Turn a blind eye 4 put the ball in the court

Question 7: Choose the sentence in which the underlined idiom has been used appropriately. **(Idioms and phrases)**

1. The way Sanya's obsessing over one doorknob when they're renovating the entire house makes one think that she can't see the wood in the trees.
2. Marcus is so focused on product details that he can't see the wood for the trees when it comes to the overall needs of the company.
3. The safety officer can't see the wood for the trees because she doesn't know which way to look.
4. Raman always argues on the silliest topics, it's like he can't see the tree for the woods.

Answer – B

Question 8. Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text here.

Instead of the big crowd we expected, people arrived in _____ at the musical night. Alpana Alam is a rising star and is usually able to _____. Even before the interval it was obvious that the event was _____. Despite all this, Alpana herself was _____. **(idioms and phrases)**

1. A dead duck
2. Bring the house down
3. Full of beans

4. dribs and drabs

1. 1234
2. 4231
3. 4213
4. 1342

Answer – 4213

Question 9. Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order which would form a meaningful, unified and coherent paragraph. **(Para Jumble)**

1. We need to listen and act upon what birds are telling us, as they disappear ever faster of about 11,000 species and spanning the globe, the populations of half of them are falling, while just 6% are increasing
2. Birds truly are the canary in the coal mine – as indicators for the health of our planet, given their sensitivity to ecosystem changes, their ubiquity around the panet, and how well studied they are.
3. Conservation efforts have been successful at rescuing individual species in specific locations from the brink, but political will and funding are needed to reverse the global decline.
4. Bird populations are affected by the damage caused by human activity, from the destruction of wild habitat , the climate crisis, the pesticides and other pollution to over-hunting and impacts of alien species and diseases.
5. Billions of birds have been lost in recent decades in North America and Europe alone, and while there are more species in the tropics, a higher proportion are at risk of extinction in the temperate and largely richer nations.

Note:- this question had no options.

Answer – BADEC

Question 10.The four sentence (S1 to S4) paragraph below, Sentences S1 and S4 are given. From the options P, Q, R and S, choose the appropriate sentences for this respectively: **(Sentence Arrangement)**

S1. Placebos are essential to the design of reliable clinical trials.

S2. _____

S3. _____

S4. Red, Yellow and orange are associated with a stimulant effect, while blue and green are related to tranquilizing effect; says Dr. A. J. de Craen.

1. Such studies have found that even the color of pills made a difference in placebo results.
2. Their once-surprising effect on participants has become the focus of many studies.
3. Another argument says that by prescribing a placebo to placate a patient, the correct diagnosis of a serious ailment might be postponed
4. At one time, placebos were only used in experiments as a control

Options

1. PS
2. PQ
3. QP
4. QS

Answer – QP

Reasoning Ability:

Question 1: Identify the letter- cluster that does not belong to the following series. **(Letter Series)**

CX, GT, EV, DW, HS, ZA, MN, UF

1. ZA
2. UF
3. HS
4. MN

Ans – HS

Question 2: Four pairs of letter-clusters have been given, out which three are alike in some manner and one is different. Select the one that is different. (Letter Analogy)

1. TMKOLFXOY : TOMKLFXOY
2. PVMSYGCXN : VSPMYCGNX
3. XDSWZOIVK : XWSDZIKOV
4. FCHVOTFGW : VHFCOFGTW

Ans – TMKOLFXOY : TOMKLFXOY

Question 3: In a certain code language.

- P&Q means P is the son of Q
- P @ Q means P is the mother of Q
- P % Q means P is the brother of Q
- P # Q means P is the Husband of Q

Based on the above, how is K related to Q if 'K % G & T # V @ S @ N % Q'? **(Blood Relations) (correct question)**

1. Father
2. Father's brother
3. Mother's brother
4. Brother

Ans- Mother's Brother

Question 4: Following are the criteria for the post of a Seniot Engineer in an electrical company

1. Be in the range of 22 to 35 years as on 8 March 2017
2. Be a graduate in Electrical Engineering with at least of 60% marks
3. Have passed the recruitment test with a minimum of 70% marks
4. Be willing to deposit an amount of Rs 45000 as part of the agreement

If a candidate fulfills all the criteria except at (b) above, but has appeared in the last semester and has secured at least 65% in the first semester (missin) to the director

If a candidate fulfills all the criteria except at (d) above, but is willing to pay at least 50% of the deposit amount, and has secured 70% marks at the graduation (missing) referred to the chairman.

Based on the above mentioned criteria and without assuming any additional information, take a decision for the following application.

Raini D'Souza is an Electrical Engineering graduate with 70 % marks. She was born on 4 march 1982 and has obtained 76% marks in the recruitment test. (missing) as depost

1. Not to be selected
2. Data is incomplete
3. To be selected
4. Case to be referred to the chairman.

Question 5: Read the given statement and courses of action carefully and decide which of the given courses of action logically follows: **(Statement and Course of action)**

Statement:

Despite the Hostel warnings, the student was caught exploding crackers secretly on the hostel campus during the birthday celebration.

Course of actions:-

1. All the crackers should be taken away from the students and they should be threatened not to do it again
2. The students should be severely punished for this wrong act.

1. Either I or II follows
2. Only II follows
3. Neither I not II follows
4. Only I follows

Ans. Either I or II

Question 6: 20 years ago Mohita was 22 years old, how old was she X years ago?

1. X – 42
2. 42
3. 42-X
4. 62-X

Ans. 42- X

Question 7: A question is given followed by two statements labelled I and II. Identify which of the statements (Statements and Conclusion)

Question:-

Let p be the total number of males and q be the total number of females in a family. What is the difference between P and Q?

Statement:-

1. Vipraja has six daughters, who have a brother, Vipraja is the wife of Shantanu
2. Shantanu is the father of six daughters. Kiran's mother Vipraja is married to Shantanu. Khan is a male

1. Statement I alone is sufficient
2. Either statement I alone or statement II alone is sufficient
3. Both statements I and II together are necessary
4. Statement II alone is sufficient

Answer – Statement I alone is sufficient

Advanced Coding:

Question 1

Ayush is working on a strange algorithm where he wants to convert a string from A to B, both the strings of equal length N

Below are the rules which can be performed to convert a string

- String A and B are of equal length
- Both of them are in lower case
- Choose a subset X from the string A, between the index 1 and N.
- Let 's' be the letter which alphabetically comes before all other letters in the subset. Let 's' be called the 'smallest element' in the subset.
- Replace all the elements of subset with the letter 's'

Find the minimum number of moves which is required to perform the conversion. If it is not possible to convert the string from A to b then return -1

Let us try to understand it with and examples

Suppose there are 2 strings

A = abcab

B = aabab

Operation 1:

Now we have chosen a subset S, let us say we have taken index 2,3,5 from A

Then the subset S becomes [bcb]

Next, we have to choose the smallest element , 6041 here, which is b here in b & c

Next, we have to replace all the other elements in subset with this element. So 'b' with replace everything in [bcb]. which becomes [bbb].

Now we will place all the respective elements back to their respective index. This will update the original string as [abbab]

Operation 2:

Original string [abbab]

Now we have chosen a subset S, let say we have taken a index 1,2,4 from A

Then the subset become [aba]

Next, we have to choose the smallest element, which is here in a & b.

Next, we have to replace the smallest with all the other elements in subset. So 'a' will replace everything in [aba]

Now we will place all the respective elements back to their respective index. This will update the original string as [aabab]

This is exactly same as String B
Hence it is possible to convert string A to B, with 2 operations. So, the answer is 2.

Example 1:

Input:

2-> Input integer, N

de-> input string, A

cd-> Input string, B

Output:

-1

Explanation:

In the above example we can clearly see that there is an alphabet in A which is completely different from B. hence it is not possible to convert A to B

So the answer is -1

Example 2:

Input:

4-> input integer, N

abab-> input string, A

abaa-> input string A

Output:

1 -> Output

Explanation:

Operation 1:

Now we have chosen a subset S, let say we have taken index 3,4 from A
Then the Subset S becomes [ab]
Next, we have to choose the smallest element, which is a here in a & b
Next, we have to replace the smallest with all the other elements in subset. So 'a' will replace everything in [abl, which becomes [aa]
Now we will place all the respective elements back to their respective index. This will update the original string as [abaa]

This is exactly same as String B

Hence it is possible to convert string A to B. with 1 operation. So, the answer is 1.

Constraints:

1. 1<=N<=1000
2. N integer
3. Only lower case letters of the English alphabet
4. Length of A,B = N

The input format for testing

1. First Input-Accept value of Integer, N.
2. Second Input-Accept value of string, A (Next Line)
3. Third Input-Accept value of string, B(Next Line)

The Output format for testing

1. The output is an integer as per above logic. (Check the output in Example 1, Example 21
2. Additional messages in output will cause the failure of test cases

Instructions:

1. System doesn't allow any kind of hard coded input value/values.
2. Written program code by the candidate will be verified against the inputs which are supplied from the system.

Python

```python
n = int(input())
a = input()
b = input()
if a == b:
  print(1)
res, res2 = "", ""
for x in range(n):
  if a[x] != b[x]:
    res += a[x]
    res2 += b[x]
ans = 0
for i in a:
  if ans != 0:
    break
  if i not in b:
    print(-1)
    break
  else:
    for x in set(res2):
```

```
    if x not in a:
        print(-1)
        ans += 1
        break
    else:
        print(len(set(res2)))
        ans += 1
        break
if ans == 1:
    break
```

Question 2:

Jack is a sports teacher at St. Patrick's School. He makes games not only to make the student fit, but So smart.

So, he lined up all the N numb class. of students in his class.

At each position he has fixed a board with the Integer number printed on it. Each of the numbers are unique and are in exactly the range of N. Let us say there are 10 students, then the boards will be printed with numbers from 1 to 10 in a random order given by the sequence A[ ]

As a rule, all students wear a jersey with their numbers printed on it. So if there are students, each will have a unique jersey number just like a football team.

Now, in the beginning, all the students will stand as per the increasing order of their jersey numbers, from left to right.

The only difference will be their respective board number which is placed at their respective location. The board location is fixed and cannot be changed. We can consider the arrangement as below. Suppose there are students, and the board is placed in the order of [2 3 1 5 4]

Board — 2, 3, 1, 5, 4
Student's Jersey — 1, 2, 3, 4, 5

Now the game begins.

- After every beat of the drum, each student will have to move to that location (index), where his board is pointing to. In the above case student with jersey #1 is standing with

board #2, so now he will have to move to location #2. Similarly, all the other students will do.

So after first beat of the drum, the alignment will be:

Board — 2, 3, 1, 5, 4

This keeps going on and on, until all the students are back the way they were at the beginning. So, after 6 beats of the drum, all the students will be aligned the same way as before.

Given N and the order of board of the respective positions, find the number of beats required to bring back the students to their original position.
So, for the above case the answer is 6

Example 1:
Input:
3 Input integer, N
{1, 2, 3}->Input integer. B[], board alignment.

Output:
1 -> Output

Explanation:
All the students will be standing as board positions;

Board — 1, 2, 3
Student's Jersey –1, 2, 3

After first beat of the drum:
Jersey #1 will move to index 1.
Jersey #2 will move to index 2.
Jersey #3 will move to index 3.

Hence, they will be back on their own position in just 1 beat.
So, the answer is 1.

Example 2:

Input:

5-> Input integer, N

{2, 3, 1, 5, 4}-> Input integer, B[ ], board alignment.

Output:

6-> Output

Explanation:

All the students will be standing as below, with the board positions:

Board — 2, 3, 1, 5, 4

Student's Jersey — 1, 2, 3, 4, 5

After Beat-1of the drum:

Jersey #1 has moved to index 2.

Jersey #2 has moved to index 3.

Jersey #3 has moved to index 1.

Jersey #4 has moved to index 5.

Jersey #5 has moved to index 4.

Board – 2, 3, 1, 5, 4

Student' s Jersey — 3, 1, 2, 5, 4

After Beat-2 of the drum:

Jersey #3 has moved to index 2.

Jersey #1 has moved to index 3.

Jersey #2 has moved to index 1.

Jersey #5 has moved to index 5.

Jersey #4 has moved to index 4.

Board — 2, 3, 1, 5, 4

Student's Jersey — 2, 3, 1, 4, 5

After Beat-3 of the drum:

Board — 2, 3, 1, 5, 4

Student's Jersey — 1, 2, 3, 5, 4

After Beat-4 of the drum:

Board — 2, 3, 1, 5, 4

Student's Jersey — 3, 1, 2, 4, 5

After Beat-5 of the drum:

Board — 2, 3, 1, 5, 4

Student's Jersey — 2, 3, 1, 5, 4

After Beat-6 of the drum:

Board — 2, 3, 1, 5, 4

Student's Jersey — 1, 2, 3, 4, 5

Hence, they will be back on their positions after 6 beats.

So, the answer is 6.

Constraints:

- $1 <= N <= 100000$
- $1 <= A[i] <= N$
- All A[i] will be distinct numbers
- N and. Only Integers.

The input format for testing:

- First Input – Accept value of In1101
- Next 'N' Lines-Elements of sequence A[]

C++

```cpp
#include <bits/stdc++.h>
#include
using namespace std;

int main()
{
    int n;
    int B[50], arr[50];
```

```cpp
        cout<<"Value of n "; cin>>n;
         for(int i=0; i<n; i++){ int a; for(int j=n-1; j>0;
i++){
                cin>>a;
                B[j]=a;
                arr[i]=i+1;
            }
        }
    int ans=0;
    while(true){
        ans = ans+1;
        int ar[n];
        for(int i=0; i<n; i++){
            ar[i] = arr[B[i]-1];
        }
        if(ar==sort(ar,ar+n)){
            break;
        }

        arr = arr;
        cout<<ans;

    }


    return 0;
}
```

Python
```python
n = int(input())
B = []
arr = []
for i in range(n):
  B.append(int(input()))
  arr.append(i+1)

ans = 0
while 1:
  ans += 1
  ar = [None]*n
  for i in range(n):
    ar[i] = arr[B[i]-1]
  if ar == sorted(ar):
    break
```

```
  arr = ar
print(ans)
```

Advanced Quantitative:

Question 1: If the equation $(1 + \lambda^2) x^2 + 2\lambda cx + (c^2 - a^2)$ has equal roots, then $a^2 (1 + \lambda^2) =$ _____

1. **c^2**
2. -2
3. a^2
4. -4

Ans:

Question 2: A five-digit number is to be written using 1, 2, 3, 4 and 5 using each exactly once such that the number is divisible by 4. How many such numbers are there?

Enter the answer in the space provided on the screen using the keyboard. Answer should be in whole number without any symbols (E.g %, kms, ms, ₹ etc.)

Answer: 6

Question 3: What is the value of x for the below equation?

$4 + 4\sqrt{x-1} = 2\sqrt{x+1}$?

Enter the answer in the space provided on the screen using the keyboard. Answer should be in whole number without any symbols (E.g %, kms, ms, ₹ etc.)

Answer: 1

Question 4: Which of the following points lie in the region of inequations $x \geq 1$, $y \geq 1$ and $x+y \leq 6$?

1. (4,2)
2. (3,2)
3. Both (2,5) & (4, 2)
4. (2,5)

Answer: Both (2,5) & (4, 2)

Question 5: The equation $(k+3)x^2 - 10(k+3)x + 15(k+9)=0$, k≠3, has equal roots, then k= _____

Enter the answer in the space provided on the screen using the keyboard. Answer should be in whole number without any symbols (E.g %, kms, ms, ₹ etc.)

Answer: k = 6

Question 6: Find the ratio of the average sale of all the branches for the years 2020 and 2021?

1. 80:81
2. 66.5 : 81
3. 88 : 76.5
4. 76.5 : 82

Answer: 76.5 : 82

Question 7: A metallic solid cube of side length 4cm is melted and made into a hallow sphere of internal radius 3cm. What is the external radius of the sphere?

1. $(24/\pi + 27)^{1/3}$
2. $(48/\pi + 27)^{1/3}$
3. $(24/\pi + 9)^{1/3}$
4. $(48/\pi + 9)^{1/3}$

Answer: $(48/\pi + 27)^{1/3}$

Advanced Logical

Question 1. The desired description of the role of an actress described by the screenplay is an average-sized lady of age range 45 to 50 years, big body frame, with a grey head, large-sized blue eyes, quite fair skin, smiling face and decently good looking According to the director and casting assistant of the film,there will be no compromise with the resemblance of the character as described in the screenplay, no matter how talented they are. The candidate who appeared for the screen test is

a highly appreciated actress who has black hair, big blue eyes, and quite a fair complexion. She is in her thirties and medium build. Will the candidate be selected or not? (Answer: Selected/Not Selected)

Enter the answer in the space provided on the screen using the keyboard. Answer should be in whole numbers without any symbols (e.g %,kms,ms ,etc)

Answer:- Not selected (not matching the physical characteristics)

Question 2. Rani gives 6 numbers to friends 1,2,3,4,5, and 6. All numbers are related to different names i.e 1 is related to Amabad, 2 are Domabad, 3 are Taimabad, 4 are chomabad, 5 pemanad, and 6 are chamabad. 1 is like to chamabad 3 and 4 like to Pemabad. 6 and 1 like to Taimabad, Pemabad, Domabad.

Which number like Pemabad and Taimabad but not Chambad?

Answer: 6

Question 3: Eight students namely 1,2,3,4,5,6,7 and 8 are seated around a circle facing the center. 5 is second to the right of 3 who is the third of the _____ of 2. 8 is third to the right of 6 who is not an immediate neighbor of 1. Who is the second to the right of 5?

Answer: _____

Question 4: In certain code language JAVA is written as JVAA. How will MAWAA be written in that language?

Answer: MWAAA

Question 5. A question is given, followed by two statements labelled I and II. Identify which of the statements is/are sufficient to answer the question.

Question: In a dance school, the teacher made her five students B, L. P. R and D stand in a row facing the north direction to distribute chocolates. Who among them stood to the immediate left of R?

Statements:

1. B stands at one of the extreme ends. L stood between B and P
2. Only one student stands between P and D. D is not to the right of L

1. Data in statement II alone is sufficient to answer.
2. Neither data in statement I nor II are sufficient to answer.
3. Data in statement I alone is sufficient to answer.
4. Data in both statements I and II are sufficient to answer.

Answer:- D

Question 6. In a certain code language, SUM is coded as NLVTTR and LATE is coded as FDUSZMK. How will ROAST be coded in that language? (Here there should be FDUSZBMK)

1. SQPMBZTRUS
2. UTBPSSRZNQ
3. USTRBZPNSQ
4. ZPNSQUSTRB

Answer: USTRBZPNSQ

Question 7. A statement is given followed by two arguments numbered I and II. Decide which of the arguments is/are strong with respect to the statement/question.

Statement:

Each and every institute in india should be linked with an incubation centre

Arguments:

- Students will be aware of start-ups and how it can benefit the society
- Having more and more start-ups will help building economy of the nation

1. Neither argument I nor II strong
2. Argument II is strong
3. Both arguments I and II are strong.
4. Argument I is strong

Answer:- Argument I is strong

Question 8. A statement is given followed by three arguments numbered I, II and III. Decide which of the arguments is/are strong with respect to the statement/question.

Statement:

Educational institutes at the school level should encourage extra-curricular activities along with academic teaching

Arguments:

- Sports is a good career option for a student
- Extra-curricular activities enhance learning abilities.
- Extra-curricular activities help build a skill

1. Argument I is strong.
2. Arguments I, II and III are strong
3. Argument III is strong
4. Argument II is strong.

Answer: D

TCS NQT 19 August 2023 - Slot 2

Numerical Ability:

Question 1: What will be the remainder when the square of the LCM of 4, 6, , 12, and 15 is divided by the square of HCF of 51, 119 and 323?

1. 130
2. 136
3. **132**
4. 134

ANSWER – 132

Question 2: The sum of the squares of two fractions is 1. It is given that one of them is 21/29. The sum and the product of the possible values of the other fractions are, respectively, s & p. What is the value of (s-p)?

Options

1. 441/841
2. 400/441
3. 400/841
4. 100/441

Question 3: The average age of Ram and Mohan is 2 years more than the average age of Mohan and Jitesh. The average age of Jitesh and Ram is 12 years, which is 2 years less than the average age of Mohan and Jitesh. What is the age of Jitesh?

Options

1. 12 years
2. 8 years
3. 10 years
4. **14 years**

Question 4: The present ages of four persons are in the ratio 1:2:3:4. The average of their ages seven years ago was 28 years. What will be the average age (in years) of the youngest and the oldest among them, five years from now?

1. 32
2. 36
3. 35
4. **40**

Answer – 40

Question 5: A metallic cuboid is processed by way of which its length, breadth and height increased by 10% and decreased by 8% and increased by 5% respectively. What is the percentage (Correct upto 2 decimal values) change in its volume?

Options

1. Increases by 6.26%

2. Increases by 1.20%
3. Decreases by 1.20%
4. **Decreases by 6.26%**

Answer: Decreases by 6.26%

Question 6: A shopkeeper sold his 25%, 30% and 20% of the items at a profit of 10%, 20% and 30% respectively. The rest of the items are sold at cost price. What is the percentage of profit of all his sale?

1. 14.5%
2. 12.5%
3. 15.5%
4. 13.5%

Answer: 14.5%

Question 7: What will be the compound interest earned on an amountof rs. 16800 in 1(3/4)yearsat the rate of 6.25% per annum?

1. 1050
2. 2367
3. 1887
4. 9147

Answer: 1887

Question 8: Three containers A, B and C are filled with milk part ¼ part of A is put into B. Now ⅓ part of B is put into C. Again 5/11 part of C is put into A. In the end, ¼ part of A is put into B again. Now the final amount of milk in each container is 6 litres. The initial quantity (in litres) of milk in each container, respectively is equal to:-

1. 4,5,9
2. 3,7,8
3. 3,6,9
4. 4,7,7

Answer: 3,6,9

Question 9: Shyam purchases 20% extra quantity of milk than indicated and sells 20% less than edit and he claims to sell the milk at cost price.Ram wants to earn the

same percentage of profit as Shyam without any dishonesty, so Ram sells milk at 39 per litre. What is the cost price of 1 litre of milk for Ram ?

1. 26
2. 23
3. 21
4. 28

Answer: 21

Question 10: Two persons are moving towards each other in the opposite directions at 21 km/h and 17 km/h. The total distance between them is 19km. In how long will they meet?

1. 30 min
2. 50 min
3. 60 min
4. 40 min

Answer: 30 min

Question 11: A cone and sphere has the same radius of 18cm. If the cone and the sphere have the same volume,then what is the height (in cm) of the cone ?

1. 66
2. 60
3. 54
4. 72

Answer: 72 cm

Question 12: If the quartile deviation of a series is 125,then the mean deviation of the series is: (wrong question)

1. 149
2. 151
3. 150
4. 152

Answer: Mean Deviation is the mean of all the absolute deviations of a set of data.

Quartile deviation is the difference between "first and third quartiles" in any distribution.

Mean Deviation = 4/5 × Quartile deviation = 4/5 *125 = 100

Question 13: The ratio of the numbers of boys and girls in a school is 5:9,and the total number of students is 224. If 64 girls left the school and some boys joined, the ratio becomes 6:5.Find the number of boys who joined?

1. 15
2. **16**
3. 13
4. 14

Answer: 16

Question 14 : 5 men and women can earn Rs 2862 in 9 days and 9 men and 12 women can earn Rs 6000 in 8 days. In how many days can 7 men and 9 women earn Rs 11,991?

1. 21 days
2. 19 days
3. 20 days
4. 17 days

Answer:

Question 15: Rhythm spends 16 ⅔ % of her monthly income on food, 5 5/19 % on entertainment and 8 ⅓% on travelling. She saves the leftover money, which is Rs 15,900. Find the monthly income in Rs.

No options given

Question 16: A policeman saw a thief from a distance of 100 metres.He started chasing him at a speed of 4 metres per second. On seeing the policeman,The thief

started running at a speed of 2 metres per second . Determine the distance run by the policeman to catch the thief. (In metres)

1. 100
2. **200**
3. 250
4. 150

Answer – 200 m

Question 17: A person distributed 72% of the money he had between Ram and Raj in the ratio of 5 : 7 respectively. Ram and Raj deposited the amount received in a scheme offering 8% and 10% simple interest, respectively, for 10 years. Find the amount in Rs left with the person if the sum of interests earned by Ram and Raj after 10 years is Rs 6,600.

Answer – 2800

Question 18 : Study the following table and answer the question that follows

Percentage of marks obtained by 6 students in five different subjects in a school examination.

Student

	English	Mathematics	Science	Hindi	Social Studies
	(50)	(100)	(100)	(50)	(75)
Students					
A	66	89	80	78	84
B	58	58	79	82	60
C	62	62	77	84	88
D	72	72	67	74	68
E	70	70	81	76	64
F	64	83	60	88	68

What are the total marks obtained by D in all the subjects together?

Answer:- 252

Question 19: If simple interest is offered per year on a sum of money invested for five years, the amount of money payable on maturity after the five years elapse is Rs. 2, 340. However, if the sum was invested for only two years , the amount payable on maturity would be 2016. What is the original sum invested?

1. Rs. 1750
2. Rs. 1800
3. Rs. 1600
4. Rs. 2000

Logical Section

Question 1: Identify the letter cluster that does not belong to the following series.

BC, GH, LM, EF, JK, PQ, IJ, NO, ST

1. ST
2. IJ
3. PQ
4. NO

Answer: PQ

Question 2: Select the option in which the pair of letter-clusters share the same relationship as that shared by the given pair of letter cluster. From among the given options choose the letter-cluster pair which is similar to the one given below.

PLGTOXIV : HKOSUZCF

1. BGSFXTEY : CHIKXZEG
2. EGWHUZKL : FIKOQADH
3. TGSHCZOK : ZTTQNLLI
4. TDHZNLPK : FINPSVAH

Answer:

Question 3: A question is given followed by two statements labeled as I and II. Identify which of the statements is/ are sufficient to answer the question:

Question: Data regarding the relations in a family is given in the following statements. How many male and female members are there in the entire family?

Statements:

1. Mrudula has five daughters, who have two brothers. Mrudula is the wife of Rakesh
2. Rakesh is the father of five daughters. Rajeev and Alok's mother Mrudula is the wife of Rakesh. Rajeev and Alok are males

1. **Statement I alone is sufficient while statement II alone is not sufficient.**
2. Either statement I alone is sufficient or statement II alone is sufficient.
3. Bothe statements I and statements II are not sufficient.
4. Statement II alone is sufficient, while statement I alone is not sufficient.

Answer – Statement I alone is sufficient while statement II alone is not sufficient.

Question 4:

In a certain code language,

'M & N' means 'M is the wife of N'

'M @ N' means 'M is the brother of N'

'M $ N' means 'M is the father of N'

'M # N' means 'M is the mother of N'

'M + N' means 'M is the son's son of N'

How is P's father related to K if 'P+H&Q\$N@J#K'?

1. Father's brother
2. Brother
3. Mother's brother
4. Father

Answer: C

Question 5: A question is given followed by three statements labeled as I ,II and III.

Identify which of the statements is/ are sufficient to answer the question:

Question

There are eight members in the family, four males and four females. Arunima is the wife of Charan. Charan has two sons Jay and Bidan. Taruni is the mother of Roshni. How is Roshni related to Charan?

Statements:

1. Somu is the nephew of Jay. Bidan is married to Dipti.
2. Taruni is the sister in law of Dipti. Dipti is the wife of Bidan.
3. Roshni is the niece of Bidan. Bidan is the only sibling of Jay.

1. All statement I, statement II, and statement III together are necessary.
2. **Only statement III alone is sufficient.**
3. Statement I and Statement II together are sufficient.
4. Either Statement I and Statement II together or Statement II and Statement III together are sufficient.

Answer: Only statement III alone is sufficient.

Question 6:

In a certain code language,

'A $ B' means 'A is the father of B'

'A % B' means 'B is the mother of A'

'A @ B' means 'A is the brother of B'

'A * B' means 'B is the sister of A'

'A # B' means 'A is the wife of B'

'A ÷ B' means 'B is the husband of A'

Which of the following statements is NOT true?

1. G @ H % J ÷ K means 'G is the son of K'
2. T ÷ V $W # Z means 'T is the mother-in-law of Z'
3. P $ Q * R ÷ S means 'S is the son-in-law of P'
4. C % D # E @ F means 'F is the uncle of C'

Answer: D

Question 7: Identify the letter cluster that does not belong to the following series.

HUD, JOG, LKJ, NFM, PAP

Answer: JOG

Question 8: The sales price of a drilling machine was increased by 10% and then its price was again increased by 10%. What is the total increase in the initial price of the machine?

1. 22%
2. 21%
3. 24%
4. 23%

Answer: 21%

Question 9: Each of the six students A, B, C. D, E, and F are reading two subjects, one compulsory and one optional Sociology is one the of the subjects by E and F English is F's compulsory subject, which is optional for C and E. Hind and Geography are A's subjects but just reverse to those of D in terms of compulsory and optional. Psychology is the optional subject of only one student Geography is the optional subject of D while it is compulsory for three others. What is the compulsory subject of B?

Enter the answer in the space provided on the screen using the on-screen keyboard. Answer should be in whole numbers without any symbol(%, kms, ms, etc)

Answer: Geography

Question 10: Following are the criteria for the selection of a Sociology assistant professor in the college.

The Candidate must:

1. have qualified post graduation in Sociology with at least 55% of marks from a UGC recognised University.

2. have passed graduation with Sociology honors obtaining at least 55% marks.
3. have passed both 10th and +2 examination securing at least 50% marks each.
4. have qualified UGC-NET or JRF examination in the subject of Sociology by January 2021 but not prior to December 2016.
5. be in the range of 25-40 years as on 16 March 2021
6. have scored at least 60% marks in the recruitment interview.

If a candidate meets all the aforementioned conditions, except (3) above, he/ she may be treated eligible if he/ she has passed with at least 55% marks in 10th and +2 taken together.

Rahul Mehta, born on 21 February 1989, has acquired his post-graduation degree in Sociology from a UGC recognised University in Rajasthan obtaining 65% marks. He is an Honors graduate (Sociology) with 59% marks and has secured 245/500 in 10th and 365/600 in 10+2 examination. He has qualified UGC NET in the subject of Social Work in June 2018. He received 67% marks in the interview.

Based on the given information, decide the status of the candidate in the recruitment process by selecting your answer from the following options. You should not assume anything other than the information provided for the candidate.

1. The candidate should not be selected.
2. Inadequate information.
3. The candidate should be selected.
4. The candidate should be rejected based on the class 10th criterion.

Answer: The candidate should not be selected.

Question 11: Consider the given statement and decide which of the given assumptions is/are implicit in the statement.

Statement: During a national emergency, even civilians can be deployed into the war field.

Assumptions:

1. It shows the interest of civilians to safeguard their nation.
2. Due to insufficient military resources, the government has given an opportunity to their civilians.

1. Only assumption I is implicit
2. Only assumption II is implicit
3. Neither assumption I nor II is implicit
4. Both assumptions I and II are implicit.

Answer: Only assumption II is implicit

Question 12: A statement is given followed by two courses of action numbered I and II. Assuming that everything in the statement is true, decide which of the given courses of action logically follow(s).

Statement:

Many social-media celebrities advertise about intra-day trading in their videos about how easily anyone can make money. But they don't show the negative aspect of it, i.e., about losing money.

Courses of Action:

1. The government should ban advertisement of intra-day trading.
2. The government should make certain guidelines to advertise these kinds of apps.

1. Only course of action II follows
2. Only course of action I follows
3. Both courses of action I and II follow
4. Neither course of action I nor II follows

Answer: Only course of action II follows

Question 13: Following are the criteria required to be fulfilled for getting admission in a college for MSc Bioinformatics.

1. The candidate must have scored more than 70% marks in the Intermediate Science stream
2. The candidate must possess a graduation degree with Zoology, Botany, Mathematics or Computer Science with minimum 65% mars
3. The candidate should have cleared MSc entrance exam with at least 75% marks and interview with at least 65% marks
4. The candidate should be at least 21 years and at most 28 years as on 1 July 2022.

1. In case a candidate fulfills all the aforementioned criteria, except the required percentage as mentioned in (ii), but has scored 75% and above marks in the personal interview, then the case is to be referred to the Director of the college
2. In case a candidate fulfills all the criteria, except the maximum age criteria as mentioned in (iv), but belongs to the SC.ST community the case is to be referred to the SC/ST cell for consideration.

Mr. Rakesh Ram, who belongs to the ST community, qualified his Intermediate Science examination with five-seventh of ninety eight % marks. He secured 77% marks in the written entrance exam and two-third of one 112% marks in the interview. He secured 67% marks in BSc. Zoology in 2019. He was born on 26.06.1994.

1. The case is to be referred to the Director of the college
2. The candidate is to be selected
3. The case is to be referred to the SC/ST cell for consideration
4. The candidate is to be rejected

Answer: The candidate is to be rejected

Question 14: In an institute, 90 students have opted for English, 70 students for Chemistry, 40 students for Mathematics, 30 students Economics, 10 students for both English and Chemistry, 5 students for both Economics and Mathematics, 20 students for both English and Economics. How many students have opted for English only ?

Answer:

Verbal Ability:

Question 1: Identify the error in the given sentence

I'm literally melting because it's the hottest month of June; it's 47 degrees out here

Options

1. Month of june
2. I'm literally melting
3. It's 47 degrees out here
4. Because it's the hottest

Answer – month of june

Question 2: Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

Negotiations have reached such a state as management and union leaders are apprehensive that their differences can no longer be reconciled.

1. can no longer be reconciled
2. Negotiations have reached
3. such a state as
4. that their differences

Answer – such a state as

Question 3: Each sentence in the given paragraph contains four underlined phrases. Three of these phrases have been correctly used and one has been incorrectly used, Select the phrase form among the following options that best replaces the INCORRECT phrase in the sentence.

The ability of the Sherpas to brave the vagaries of high altitudes has helped them to prosper and they have come along the way from being just porters to becoming mountaineers.

1. Come a long way
2. To be
3. Capacity
4. On higher altitudes

Answer – come a long way

Question 4: Select the most appropriate options to fill in the blanks in the given passage

The capacity of art (1)_____ a strong source of its contemporary appeal. We are conscious that, individually and collectively, we (2) _____; art can be valuable when it disrupts or astonishes us.

Options

1. (1) to shock remains for same (2) grown complacent
2. (1) to shock remains for same (2) may grow complacent
3. (1) to shock remains for some (2) may grow complacent
4. (1) to shock remains for some (2) may grown complacent

Answer – C

Question 5: In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

We lit the candles, and (A) _____ in our hands and knees. We went about two hundred yards, and then the cave opened up. Tom soon (B) _____ under a wall where there was a hole. We went along a narrow passage and got into a kind of room, all damp and sweaty and cold, and there we stopped. Tom said, "Now, we'll start this (C)_____ of robbers and call it Tom Sawyer's gang. Everybody that wants to join has got to take an oath, and write his name in blood." Everybody was (D) _____. So, Tom got out a sheet of paper he had written the oath on and read it.

1. (A) glided, (B) dropped, (C) crew (D) pleased
2. (A) crawled, (B) ducked, (C) band (D) willing
3. (A) hauled, (B) crossed, (C) herd (D) opposing
4. (A) sailed, (B) dipped, (C) pack (D) obedient

Answer – (A) crawled, (B) ducked, (C) band (D) willing

Question 6: In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Babies and Young children are sponges that soak in practically everything in their environments. It's true!! Even during story time, their minds are at work, (1) _____ all the language they hear and lessons the characters learn. (2) _____ to your child – at any age – will boost their brain development, and your bond, and so much more. And all it takes is a few books, motivation and a (3) _____ time. Reading provides a wonderful opportunity for you and your child to (4)_____. It's a nice way to spend time together and slow down during an otherwise hectic day.

Blank 1 (A) taking in, (B) taking up, (C) taking down, (D) taking off

Blank 2 (A) Speaking, (B) Reading, (C) Writing, (D) Listening

Blank 3 (A) little, (B) few, (C) bit, (D) Small

Blank 4 (A) join, (B) attach, (C) relate, (D) connect

Options

1. (1)-C, (2)-D, (3)-A, (4)-B
2. (1)-B, (2)-D, (3)-C, (4)-A
3. (1)-C, (2)-B, (3)-A, (4)-C
4. (1)-A (2)-B, (3)-A, (4)-D

Answer – (1)-A (2)-B, (3)-A, (4)-D

Question 7: Select the option in which the underlined idiom has been used appropriately.

1. Overcoming student debt rapidly may provide a psychological win. However, it is often penny-wise, pound-foolish; coming at the expense of long-term financial security.
2. I just think that it is penny-wise and pound-foolish if we invest in having a detailed analysis done
3. A growing business always requires being penny-wise and pound-foolish.
4. The plans to cut funding are penny-wise and pound-foolish and hence fruitful.

Answer – A

Question 8: Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given below

My boss was caught red-handed while engaging in fraudulent activities and it's time for him to _____ for the upcoming inquisition by the board members. In the past, he has taken credit for my presentations, and now unbeknown to him, I am going to quietly _____ in the next board meeting, there is no chance of him escaping the truth and he will have to _____ its time that he gets his_____.

1. Face the music
2. Batten down the hatches
3. Comeuppance
4. Even the score

Options

1. 2413
2. 1423
3. 1243
4. 2134

Answer – 2413

Question 9: You never saw such a commotion (1) _____ up and down in a house, in all your life as when my uncle Podger undertook to do a job. A picture would have come from the frame-maker's and (2) _____ be standing in the dining room waiting(3)_____ to be put up and Aunt Podger would ask what was to be done with it and Uncle Podger would say, "Oh you leave that to me. Don't you, any of you worry yourselves about that. I'll do that." And then he would take off his coat and begin. He would send the girl out for six-penorth of nails and then one of the boys after her to tell what size to get and from that he would gradually (4) _____ work down and start and the whole house

1. 1. Up and down 2. Be standing 3. To be put up 4. Work down
2. 1. All over the place 2. Stand up 3. Put up with 4. Work back
3. 1. All over the place 2. Stand up 3. Put up with 4. Work back
4. 1. Run helter skelter 2. Hang up 3. To be in a fix 4. Work back

Answer:- (incorrect question)

Question 10: Select the most appropriate set of idioms that would fill in the blanks and complete the given passage

According to the report released by the Global Coral Reef Monitoring Network. Global warming has killed 14% of the world's coral reefs in a decade and more will be (1)____ if oceans keep rising in temperature. " Climate change is the biggest threat to the world's reefs", says Paul Hardsity, CEO of the Australian Institute of Marine science. These are clearly (2) _____ toward coral loss and we can expect these to continue if we (3)_____ and do nothing to reverse the change. As per the report Corals in many parts of the Asia and Gulf are amongst the (4)_____

Options

1. 1. Phased out 2. Scary still 3. Wait and watch 4. The worst off
2. 1. Puffed out 2. Unsettling trends 3. Wait for godot 4. Hard-hitting
3. 1. Wiped out 2. Unsettling trends 3. Sit over the problem 4. Hardest-hit
4. 1. Be kicked out 2. Markable trends 3. Wait on the fence 4. Hard-hitting

Answer – 1. Wiped out 2. Unsettling trends 3. Sit over the problem 4. Hardest-hit

Question 11: Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. While firms have always had significant market power over their workers, what has changed recently is the weakening of collective bargaining which allows workers to challenge powerful firms in wage negotiations.
2. Some ascribe continued low industrial wages to the concentration of power in the hands of a few firms, but this is only part of the story.
3. Since the 1980's, politicians have been freeing one side of the labor market in the name of competition – by restricting the power of trade unions – but doing very little about the power of firms.
4. Wages are also affected by firms colluding tacity: an estimated one in five jobs in the US is now covered by a "non-complete" clause, which restricts workers from moving to rival firms.

1. 3,4,2,1
2. 2,3,4,1
3. 2,4,1,3
4. 3,2,1,4

Answer – 3,2,1,4

Question 12: Sentences of a paragraph are given below in jumbled order. Arrange the sentences in correct order to form a meaningful and coherent paragraph

1. In some places in China, the loss of insects is so great that armies of people have to fan out to pollinate crops by hand, in the absence of insects doing these jobs.
2. Insects populations worldwide are under threat: an estimated 40% of all the species are declining and one-third of them are endangered
3. Habitat loss often implies the destructions of rainforests, but the processes can be more mundane ; the conversion of a field of wildflowers into a mail would have the same effect for insects
4. The decline in the world's insect populations is bad news as they play critical roles in pollinating plants, breaking down waste in forest soil and forming the base of a food chain we rely upon

Options

1. 2, 4, 1, 3
2. 4, 3, 2, 1
3. 2, 3, 4, 1
4. 4, 1, 3, 2

Answer – 2,4,1,3

Question 13: For the four sentence (S1 to S4) paragraph below, sentences S1 and S4 are given, From P,Q, R and S, select the appropriate sentences for S2 and S3 respectively.

S1. Just last week, the Victorian Court of Appeal significantly reduced the sentence given to Akon Guode, a mother of three children who killed three of her children.

S2.

S3.

S4. Surveys have shown that almost half of Australian prison entrants report being affected by a mental disorder.

1. With that in mind, how are mental health issues taken into account during the criminal justice process?
2. The main reason for the 8 1/2 year sentence reduction was that the judge had not sufficiently taken Goude's major depression into account.
3. It is common for offenders to have mental health problems.
4. Each of these principles is mitigating, they point towards a more lenient sentence being given.

Options:

1. QR
2. RQ
3. PS
4. QS

Answer – QR

Question 14: Select the most appropriate meaning of the underlined idiom in the following sentence

The financial year closing has all of us snowed under.

Options

1. Busy
2. Feeling cold
3. Depressed
4. Clueless

Answer – busy

Question 15: Select the most appropriate meaning of the underlined idiom in the following sentence

Ritesh is a person who behaves like a servant by always obeying

Options

1. People pleaser
2. Yes-mam
3. Lackey
4. Submissive

Answer – Lackey

Question 16: Select the most appropriate option to fill in the blanks in the given passage.

A large number of industries (1)_____ post-independence India in the private, public, and joint sectors. Bhilai, Bokaro, Ranchi, Jamshedpur, Renukoot, etc, (2) _____ emerged as major centers during the first one and a half decades of independence

Options

1. (1) have been established in (2) emerged major as centers
2. (1) have been established in (2) emerged as major centers
3. (1) have established in (2) emerged as major centers
4. (1) have been established at (2) emerged as major centers

Answer – incorrect question.

Question 17: Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order (e.g ABCDE) which would form a meaningful unified, and coherent paragraph:

1. Extreme ghosting can be considered gaslighting-the practice of manipulating somebody psychologically so that they doubt their sanity or understanding of a situation
2. The practice of ending a relationship without explaining to the partner and avoiding any communication attempts is named ghosting. Orbiting is identical to ghosting but the disengager still visibly follows the former partner on social media.

3. It is psychologically abusive, and often undetectable within relationships and it is extremely hard to tell when it's happening to you which by design
4. The psychological and behavioral reactions to ghosting and orbiting pass-through different stages of reactions before closure happens in the form of acceptance.
5. Whether you've been gaslit, ghosted, orbited or (insert the latest damaging trend here) a therapist says having a name for the behavior you're experiencing can be beneficial for understanding what happened to you and figuring out a way to move past it.

Answer – BDACE

Question 18: For the four sentence (S1 to S4) paragraph below, sentences S1 and S4 are given, From P,Q, R and S, select the appropriate sentences for S2 and S3 respectively.

S1. One Kashmiri morning in the early spring of 1915, my grandfather hit his nose against a frost-hardened tussock of earth while attempting to pray.

S2._____

S3._____

S4. At that moment, he resolved never again to kiss earth for any god or man.

1. Three drops of blood plopped out of his left nostril, hardened instantly in the brittle air, and lay before his eyes on the prayer mat, transformed into rubies.
2. This decision, however, made a hole in him, a vacancy in a vital inner chamber, leaving him vulnerable to women and history.
3. Lurching back until he knelt with his head once more uptight, he found that the tears which had solidified too and at that moment, as he brushed diamonds contemptuously from his lashes.
4. Unaware of this at first, despite his recently completed medical training.

Answer – PR

Question 19: Read the given passage and answer the questions that follow

In his book In Our Own Image (2015), the artificial intelligence expert George Zarkadakis describes six different metaphors people have employed over the past 2,000 years to try to explain human intelligence.

In the earliest one, eventually preserved in the Bible, humans were formed from clay or dirt, which an intelligent god then infused with its spirit. That spirit explained our intelligence – grammatically, at least.

The invention of hydraulic engineering in the 3rd century BCE led to the popularity of a hydraulic model of human intelligence, the idea that the flow of different fluids in the body-the 'humours' – accounted for both our physical and mental functioning. The hydraulic metaphor persisted for more than 1,700 years, handicapping medical practice all the while.

By the 1500s, automata powered by springs and gears had been devised, eventually inspiring leading thinkers such as René Descartes to assert that humans are complex machines. In the 1600s, the British philosopher Thomas Hobbes suggested that thinking arose from small mechanical motions in the brain. By the 1700s, discoveries about electricity and chemistry led to new ones of human intelligence again largely metaphorical in nature. In the mid-1800s, inspired by recent advances in communications, the German physicist Hermann von Helmholtz compared the brain to a telegraph

Each metaphor reflected the most advanced thinking of the era that spawned it. Predictably just a few years after the dawn of computer technology in the 1940s, the brain was said to operate like a computer, with the role of physical hardware played by the brain itself and our thoughts serving as software. The landmark event that launched what is now broadly called cognitive science was the publication of Language and Communication (1951) by the psychologist George Mifer. Mier proposed that the mental world could be studied rigorously using concepts from information theory computation and linguistics.

This land of thinking was taken to its ultimate expression in the short book The Computer and the Brain (1958), in which the mathematician John von Neamenn stated tally that the function of the human nervous system is prima facie digital Though he acknowledged that little was actually known about the role the brain played in human reasoning and memory, they drew parallel after parallel between the

components of the computing machines of the day and the components of the human brain.

Propelled by subsequent advances in both computer technology and brain research, an ambitious multidisciplinary effort to understand human intelligence gradually developed, firmly rooted in the idea that humans are, like computers, Information processors. This effort now involves thousands of researchers, consumes billions of dollars in funding, and has a vast literature consisting of both technical and mainstream articles and books. Ray Kurzwell's book How to Create a Mind: The Secret of Human Thought Revealed (2013), exemplifies this perspective, speculating about the algorithms of the brain, how the brain processes data', and even how it superficially resembles integrated circuits in its structure.

The information processing (IP) metaphor of human intelligence now dominates human thinking both on the street and in the sciences. There is virtually no form of discourse about intelligent human behavior that proceeds without employing this metaphor, just as no form of discourse about intelligent human behavior could proceed in pertan eras and cultures without reference to a spirit or deity. The validity of the IP metaphor in today sold is generally assumed without question

But the IP metaphor is, after all, just another metaphor-a story we tell to make sense of something we don't actually understand, And like all the metaphors that preceded it will certainly be cast aside at some point- either replaced by another metaphor or in the end, replaced by actual knowledge.

Question 19: Is George Zaekadkis postulating that God's creation of man is an artificial intelligence experiment?

1. By including the myth of the creation of the man while explaining human intelligence, it indeed appears that author believes that this is the first conjecture of the nature of intelligence
2. On the contrary the author is devoted in his belief that God's creation is so highly evolved that any hypothesis about man's intelligence being artificial is sacrilegious.
3. The author appears to be certain that the idea of intelligence is man made. In a sense, his opening sentences are blasphemous, in that the concept of God itself is in question.
4. As an example, the creation of man appears to be included just for shock value, to bring into focus men's enduring desire to give flights of fancy some arcane meaning

Answer: A

Question 20: The concept of 'humors' was prevalent in large swathes of the globe for nearly two thousand years. What do you infer was the reason for its unprecedented popularity?

1. From ancient Egypt, Mesopotamia and India medicine was an area of interest. Dhanvantan in 2000 BC and Hiprocrates in 3BC described four basic elements making up man and solutions to ailments arising due to imbalance. These worked and served too well for 1600-1700 years!
2. Common sense and the study of mechanics of liquids gave us the 'humors'. Philosophers decoded the human body as made up of balanced hot, wet, cold and dey elements. This appealed to all as being the right deduction and hence its popularity.
3. **Periodic technological leaps to new theories about man, his health and his mind. Hydraulics gave us 'humors' and it served man well until the 1500s when machinery made man think that he too was a complex machine.**
4. Since man was naturally agrarian, and close to nature, their understanding of the self, mirrored nature as well. From birth to death, nature explained all 'humors'. This appeal and knowledge outlived other quackery as it solved many problems.

Answer: C

Question 21: Would you infer this sentence to be satirical, critical, resigned or appraising – 'Each metaphor reflected the most advanced thinking of the era that spawned it." Which option seems closest in meaning?

1. The author is seemingly resigned to the vagaries of man's leaps of faith. His essay reflects the uselessness of man's effort to bring meaning to his body and self.
2. When birth and death could not be explained by philosophers, the author appraises the mindset of philosophers, who proclaimed that they understood man's physical and mental makeup with ample doubt.
3. Advancements in industry and engineering gave man an unnatural belief that he could understand his brain and his body. This arrogance was misplaced as he latched on to any discovery outside and compared his brain to it. The author is critical of man's futile hunt.
4. The author is discreetly satirical about thinkers and philosophers down the ages, who, not having anything original to say, latched on to the newest scientific invention to bestow its values on man.

Answer – D

Question 22: Would you infer that IP is the acme of discovery about the nature of the brain?

1. Scientists may say that the function of the human nervous system is 'prima facie digital', but to justify research funding, they draw parallels between brains and computers. Yet, they admit in private that they are flummoxed how the brain reasons or retains memories.

2. The allegory that the human brain is a super computer is popular currency, and is rightly so. Trillion of neurons fire away in the brain, directing thousands of disparate activities, and above all thinking – ideas, plans and discoveries ! The brain is an incredible digital processor.

3. **The 21st century discovery of digital computing convinced scientists to propose that the human who can create such a machine has a far superior machine inside his head! The author is skeptical however, and opines that history is sadly repeating. We just don't know better!**

4. No for nothing have governments poured billions of dollars to understand the brain. It is the most complex machine known in history, It is a grey mass of fat, yet can remember facts of 100 years ago and plan to create memories out for 100 years hence.

Answer – C

Question 23: She sent him kites. They came in a trim balsa wood box-light as paper but large. At Canning's harbor, postmen admired the alien markings on its wrapper. 'From where?' asked a new recruit. The experienced ones smiled. Like a giant street sign, it rode on a cycle rickshaw, the hooting puller struggling to clear its delicate edges from the start of the dock. Then, it sat on the ferry, all tidy and proper held by a proud mailman. It crossed the Matla without spilling a drop on its canvas-brown cover neatly tied with black cord. Chattering kids formed a circle around it peasants gawked over their drooping shoulders, even the bearded sadhu abandoned contemplation of waves for a quick glance. It was a safe passage barring a few jabs from little grimy fingers checking the box for what was inside. At Shonal the landing was tricky-the swollen river had drowned the island's meager jetty. Men formed a human chain on the slippery bank and the box passed from one pair of outstretched arms to another, pausing briefly at each transfer. When it reached the dry shore, an eager crowd cleared its way to yet another rickshaw. From there it moved smoothly through village paths lined with the swaying tamarind and neem, ignored by sleeping dogs, treated by more children, creaking slightly at uneven bends.

His aunt received the box like a returning bride. Waiting with neighbors in front of their yellow-and-white home, the only one in cement and brick, she let the younger women welcome it indoors-to his room. There, it sat all afternoon in the cone of a shadow listening to the purr of mating cats, in the company of an unmade bed and a dresser full of knick-knacks, facing a painting of a rising sun over a flaming volcano.

Entering the room, Snehamoy closed the door behind him, feeling faint from the heat and the day's excitement. Fellow teachers arriving late had informed him of a certain box that bore his name -in English, along with markings in an alien alphabet-making its way over the Matla. Finishing his lecture, he had announced a snap test in arithmetic, giving him time to think. Exactly at four, after the bell had rung announcing the end of the school day, he had mounted his cycle and made his way back through the rustling trees. Once inside, he stood facing the box propped up by his bed like a timid visitor, then started unwrapping the canvas-brown cover just as impatiently as he had opened his wife's first letter from Japan, twenty years ago, similarly marked with two alphabets.

1. According to the passage, which of the following options is true?
2. Snehamoy's gift was secured safely in a paper box, crossed the Malta river in a ferry and traveled a long distance before ultimately reaching its ultimate destination.
3. Snehamoy had already gotten to know about the gift from Japan even before he reached home and had grown impatient to go back home.
4. Shehamoy's gift had been opened first by his aunt along with their neighbors who had gathered to see the strange object from an alien land.
5. After crossing the Matla river, a great human chain was formed till Snehamoy;s house to transport the huge gift which otherwise would have been impossible to be delivered.

Answer – A

Question 24: Which of the following statements does NOT hold good as per the passage?

1. Few of Snehamoy's colleagues were the first one to inform him about the arrival of the gift even before he could actually go home and see it.
2. There are instances in the narrative when Sheamoy's gift has been personified and has been given a human touch as it is not a material thing but actually his wife.
3. Even though two decades have passed from the first time that Snehamoy had received any communication from the alien land, he was still excited in the similar manner.
4. There was no one in the locality who was aware of the place from where Snehamoy;s gift had arrived and therefore everyone was curious.

Answer – D

Question 25: On the basis of the information given in the passage, what may be deduced as the most correct option?

1. Snehamoy lived in a remote place far away from the bustles of urban life and his immediate environment was still untouched by the so-called refinement of modern living.

2. Snehamoy's gift crossed various hurdles on the long way from Japan to his small village. Shoani, on the shores of the river Malta and miraculously teached the yellow and white thatched house, its ultimate destination.
3. Even though Snehamoy received giant kites from his wife in Japan regularly, people all around his locality were curious because such kites were not available at their palace.
4. Snehamoy's gift crossed the post office, was transported to the ferry on a cycle rickshaw, crossed the river, was taken down by a lot of people, was transported again by another rickshaw and in the process was jabbed by curious people and ultimately reached its destination in shambles.

Answer − A

Advanced Quantitative:

Question 1: The following data shows the marks obtained by students in a class.

39	30	5	65	5
21	5	65	89	30
91	30	64	64	91
15	89	48	30	64
85	30	69	51	32
85	48	91	30	28
68	48	65	30	65
35	65	48	48	15
91	30	91	48	71
15	65	48	71	38

Find the mode of the class marks of the students.

1. 31
2. 65
3. 48
4. 30

Answer: 48

Question 2: The median of the class mark is (For image- refer Q.1):

1. 51
2. 50
3. 48
4. 49

Answer: 51

Question 3: Find the arithmetic mean of the marks of the students (For image-refer Q.1):

1. 52.5
2. 49.26
3. 50.3
4. 52.3

Answer: 50.3

Question 4: Eight people A, B, C, D, E, F, G and H sit around a round table, each facing the centre of the table. If A does not sit adjacent to B, then in how many ways they can sit around the table?

Enter the answer in the space provided on the screen using the on-screen keyboard. Answer should be in whole numbers without any symbols (e.g., %,kms, ms, ₹ etc.

Answer: 480

Question 5: If x,y,z are positive integers such that $x^8 = y^6$ and $x^3 = z^5$ and $y^{27} = z^m$, then what is m?

Enter the answer in the space provided on the screen using the on-screen keyboard. Answer should be in whole numbers without any symbols (e.g., %,kms, ms, ₹ etc.

Answer:

Question 6: If the roots of the quadratic equation $x^2 + ax + b = 0$ are tan15 degree and tan30 degree, respectively, then the value of 2+b-a is:

1. 12
2. 1
3. 0
4. 3

Answer:3

Question 7: Consider a right circular cylinder $(x-1)^2 + (x-2)^2= 16$. What is the volume of the portion of the cylinder bounded by the plane y=0 and x+y+z=10?

1. 108 pi units
2. 96 pi units
3. 116 pi units
4. 112 pi units

Answer:

Question 8: Let A and B be two independent events. If the probability that both A and B happen is 1/30 and the probability that neither A nor B happens is 2/3, then the values of P(A) and P(B), respectively, are:

1. 3/10 and 1/9
2. 1/5 and 1/6
3. 2/5 and 1/12
4. 1/15 and 1/2

Answer:

Advanced Reasoning:

Question 1: 1, 12, 3, 4, 15, 21 and 6, are names of people sitting in a row and all are facing towards north. 15 is in the center, and 1 and 12th at the ends 3 is Sitting on the left of 15. 21 is sitting right of the one 6 change position with 12 and 12 sitting before 6. Then who is Sitting on the night of 15?(**Might be error of 12 typed 2 times**)

Answer: 6

Question 2: If B = 4 and F = 12 Then PUT =

Answer: P = 16*2 = 32

U = 21 * 2 = 42

T = 20 * 2 = 40

Hence PUT = 114

Question 3: A statement is given followed by two courses of action numbered I and II. Assuming that everything in the statement in true,decide which of the given courses of action logically follows:

Statement:

In the COVID-19 pandemic, it was seen that very few doctors were there for a huge mass of people

Courses of Action:

1. The government should open more medical institutes.

2. The government should encourage private firms to invest in the medical sector

1. Only course of action II follows
2. Only course of action I follows
3. Both courses of action I and Action II follows
4. Neither Courses of action I nor action II follows

Answer: Only course of action I follows

Question 4: Following are the criteria to get a job in a drug firm

The applicant must:

1. have passed graduation with a Science subject with at least 60% of marks.
2. have completed 21 years (male) and 20 years (females) of age as on or before July 2016
3. iii. pay deposit as follows

Marks at graduation	If son/daughter of staff	If not son/daughter of staff
75% and above	10,000	12,000
61% to 74%	12,000	15,000
60% and below	15,000	20,000

However,

1. If the candidate has secured more than 90% marks at graduation, his/her case should be referred to the Managing Director for consideration for further concession on the deposit.
2. In case of SC/ST candidates, the deposit payable is 25% less in each of the cases given in the above table
3. If the candidate remits the amount of deposit immediately on the date of the first call, the candidate can be selected provided he/she fulfills conditions (i) and (i)

4. If on the date of the first call, the amount of deposit brought by the candidate eligible as per (i) and (ii) is less than the total amount required but more than three-fourth, the candidate can be provisionally selected provided he deposits his balance amount within the next ten days.
5. if on the date of first call, the amount of deposit brought is less than three-fourth but more than half, the candidate though eligible as per (i) and (ii) can be referred to the Managing Director.
6. If on the date of the first call the amount of deposit brought is less than half, the candidate though eligible as per (i) and (ii),cannot be selected

On the basis of the aforementioned criteria, decide which of the following options is correct for the given candidate.

Prateek is a graduate in Science with 79% marks. He is a general category candidate and his father is a class one officer. His date of birth is 18 November 1994. He has brought a deposit of 8,000/-

1. The candidate cannot be selected.
2. The candidate can be selected.
3. The candidate can be provisionally selected.
4. The candidate's case should be referred to the Managing Director.

Answer: The candidate can be provisionally selected.

Question 5: A statement is given followed by two courses of action I and II. Assuming that everything is true, decide which of the given courses of action logically follow(s).

Statement:

Every year, many engineers graduate in India, but they are not getting jobs

Courses of Action:

1. The government should change the engineering curriculum to primarily focus on skill building instead of just bookish knowledge
2. Students, while pursuing engineering, should make an extra effort to build skills
3. Only course of action I follows
4. Both courses of action I and II follow
5. Only course of action II follows

6. Neither course of action I nor II follows

Answer: Only course of action II follows

Question 6: In a certain code language, Words in capital letters in column I are written in small letters in column II but the letters in column II are jumbled up.

Column 1	Column 2
TONE	fbcz
FACTOR	sbkdzm
RAP	tmd
HEAT	mzpc

Decode the language and select the correct code (coded letters in the proper order) for the word PARENT

1. dcmzft
2. tmsfcz
3. tmdcfz
4. kmdcfz

Answer:

Question 7: City police received a complaint from one of the foreign residents that he was bullied and manhandled by some people at a public place in the evening. During the investigation, one eye witness was located, who narrated about the incident and reported that he saw four people surrounding the foreigner and out of these four, one was holding the foreigner by his hair and the rest were all laughing at him. Should the police arrest the four persons identified by the eye witness and the victim foreigner?

Answer: Yes

Enter the answer in the space provided on the screen using the on-screen keyboard. Answer should be in whole numbers without any symbols (e.g.%, kms, ms, ₹ etc.)

Question 8: In a cafeteria, eight girls, Keerthi, Swetcha, Uma, Vani, Pari, Deepa, Esha and Harini, are sitting around a circular table facing the center. Keerthi is sitting second to the left of Uma and third to the right of Swetcha. Deepa and Pari are the immediate neighbours of each other and one of them is an immediate neighbour of Keerthi. Vani is sitting second to the right of Esha. Harini is sitting second to the left of Deepa.

Which of the following girls is sitting to the immediate right of Vani?

Answer: Uma

Enter the answer in the space provided on the screen using the on-screen keyboard. Answer should be in whole numbers without any symbols (e.g.,%, kms, ms, ₹ etc.)

Question 9: A question is given, followed by two statements labelled I and II. identity which of the statements is/are sufficient to answer the question.

Question:

Five persons, Prakruthi, Qubal, Xavier, Yamuna and Zeol, are sitting around a circular table, with all of them facing towards the centre. Who sits to the immediate left of Qubal?

Statements:

1. Prakruthi sits third to the right of Qubal. Xavier sits third to the right of Prakruthi.
2. Qubal sits to the immediate left of Xavier, who sits second to the left of Prakruthi. Yamuna does not sit adjacent to Qubal.

1. Data in statement I alone is sufficient to answer the question, while data in statement II alone is not sufficient to answer the question.
2. Data in both statements I and II together are not sufficient to answer the question
3. Data either in statements I and II together are not sufficient to answer the question
4. Data in statement II alone is sufficient to answer the question, while data in statement I alone is not sufficient to answer the question.

Answer:

Question 10: Yukti, Sonal, Rashi, Mahak, Anjali and Kuhu are girls living in the same society. No two girls are of the same age, but all have birthdays on the same date. The youngest is seven years old and the oldest is Anjali is twelve years old. Kuhu is somewhere between Sonal and Mahak in age. Yukti is older than Sonal. Rashi is older than Mahak.

Which of the following is NOT possible?

1. Kuhu is 8 years old.
2. Kuhu is 10years old
3. Mahak is 10years old
4. Kuhu is 9 years old.

Answer: Kuhu is 10years old

Advanced Coding:

Question 1: Alice and her friends are playing a game of verbal Kho-Kho. Alice is acting as a mediator, and the rest of the N friends are seated on N chairs, one each.

Alice starts by providing a paper with a single digit number to the friend present at number 1. Let's denote friends by F, where F will be of size N.

F[1]…F[N] represents friends seated respectively.

After receiving the paper with a digit, F[1] will enact and try to tell F[2] without speaking.

Similarly, F[2] will communicate to the next person i.e., F[3].

This continues until the last person F[N] understands the digit.

Finally, the last person will write the digit on a separate paper and will give it to Alice

Alice will compare both the papers. If the digits are similar then, Alice will give a T-shirt to each friend.

However, if the digits do not match then Alice will ask digits from each friend, and she will offer the T-shirts to only the ones who understood the digits correctly.

Given N number of friends and digit array D, denoting the digit understood by each friend F. find out how many of Alice's friends have not enacted well OR did not understand the enactment by the previous friend correctly.

Example 1:

3 -> N, number of friends

4 4 4 – array D. denoting digit understanding by N friends

Output:

0

Explanation:

All of them have understood digits correctly.

Example 2:

5

1 2 3 2 2

Output:

4

Explanation:

1st, 2nd, 3rd and 4th friends could not enact OR understand the enactment.

Constraints:

- 1<=N<10000
- 0<=D[i]<=9

The input format for testing:

- First-line Contains a Positive Integer denoting N
- Next line: Contains N elements of the array space separated denoting array D.

The Output format for testing:

Output the single integer denoting how many have not enacted well OR have not understood the enactment.

Python

```python
n = int(input())

arr = list(map(int, input().split()))

print(n-arr.count(arr[0]))
```

C

```c
#include<stdio.h>
```

```c
int main()
{
    int n,z=0;
    scanf("%d", &n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
        scanf("%d", &arr[i]);
    }
    for(int i=1;i<n;i++)
    {
        if(arr[0]==arr[i])
            z++;
    }
    printf("%d", n-z-1);


    return 0;
}
```

C++

```cpp
#include<iostream>

using namespace std;
```

```cpp
int main()

{

    int n,z=0;

    cin>>n;

    int arr[n];

    for(int i=0;i<n;i++)

    {

        cin>>arr[i];

    }

    for(int i=1;i<n;i++)

    {

        if(arr[0]==arr[i])

            z++;

    }

    cout<<n-z-1;


    return 0;

}
```

Java

```java
import java.util.*;
import java.util.Scanner;
public class Main

{
```

```java
public static void main(String[] args)
{
    Scanner sc = new Scanner(System.in);

    int n = sc.nextInt();

    int[] arr = new int[n];

    int i;

    for (i = 0; i < n; i++)

    {

        arr[i] = sc.nextInt();

    }

    int count = 0;

    for (i = 0; i < n; i++)

    {
            if (arr[i] == arr[0])
{
                count++;
            }
    }
    System.out.println(n-count);
}
}
```

TCS NQT 20 August 2023 - Slot 1

Numerical Ability

Question 1. A wall is of 10m 73cm in length and 6 m 67cm in height, Find the least number of square boxes of equal size required to paint the entire wall completely.

1. 851

2. 861
3. 855
4. 865

Answer: Option A – 851

Question 2. What is the maximum number of times that 8/9 can be subtracted from 8, so that the remainder is not less than 3.

1. 7
2. 5
3. 4
4. 6

Answer: Option B – 5

Question 3. Out of three numbers, the second is five times the first, and it is also twice the third. If the third number is raised by 8,then the average of three works out to be 31.what is the smallest number?

1. 15
2. 16
3. 10
4. 12

Answer: Option D – 10

Question 4. Aslam drives to his office, if he increases his average speed by 12%, then by what percentage (correct to two decimal places) will his time of travel decrease?

1. 10.34
2. 11.02
3. 10.71
4. 12.00

Answer: Option C – 10.71

Question 5. A dealer purchase 15 kg rice at Rs 22 per kg, 12 kg rice at 25 per kg, 18 kg rice at 35 per kg and 8 kg rice at 45 per kg, He mixed al the four types and sold 28 kg at a price of Rs 28 per kg, At what rate he muse sell the remaining rice to earn a profit of 15%

1. 35.15 per kg
2. 38.65 per kg
3. 43.16 per kg
4. 40.35 per kg

Answer: Option C – 43.16 per kg

Question 6. The average age of Raghu and Bagha is 60 years which is 15 years more than the average age of Bagha and Tanmay. The average age of raghu and tanmay is 65 years. Daya is 12.5% older than Bagha. What is the age of Daya?

Options

1. 45
2. 35
3. 30
4. 40

Answer: Option A – 45

Question 7. The university gives 30% of relaxation in fees for those students who secured marks greater than 90%, relaxation of 20% in fees for those who secured 81 to 90% and relaxation of 10% to those who secured 70-80% marks in class. A total of 80 students are in the class. 5% students got 95% marks. 10% students got 90% marks and 20% got 80% marks. The rest of the students got less than 65% marks. If the total fees is Rs.1 lakh per annum, then what is the percentage of relaxation in fees?

Options

1. 14.6%
2. 15.7%
3. 13.5%
4. 16.8%

Answer: Option B – 15.71%

Question 8. A sum of money, invested for 4years @ 5% simple interests amounted to ₹150 on maturity. What was the sum invested

1. ₹120

2. ₹180
3. ₹176
4. ₹125

Answer: Option D – Rs. 125

Question 9. Sangeetha can complete a work in 16days working 10hours per day. Sahithya can complete the same work in 18days working 8 hours per day. If both of them work together working 9 hours per day, in how many days can they complete the work?

1. 180/19days
2. 150/19days
3. 160/19days
4. 170/19days

Answer: Option C – 160/19

Question 10. In a class, the ratio of boys and girls is 9:16. If the number of girls is 64% of the class, then the number of boys in the class is:

Options

1. 10
2. 9
3. 16
4. 11

Answer: 9

Question 11. If 1x+1x=417, and 1y+1y=310 then x+1xy+1y=?

1. 4
2. 3
3. 5
4. 10

Answer:

Question 12. A person invested certain money at the rate of 12.5% per annum compounded annually. If the compound interest of the 3rd year is Rs 10850. For what money was invested each year.

Options

1. Rs. 26, 600
2. Rs. 25,500
3. Rs. 25,000
4. Rs. 25, 600

Answer: Option D – 25600

Question 13. A borrowed Rs. 12, 000 from a company at the rate of 12% per annum for 15 years. After a certain period of time the company introduced a scheme which induced the interest rate by 10% . At the end of 15 years, A paid Rs. 18,000 in total then after how much time (in years) did the company introduce the scheme?

Answer:_____

Question 14. One year ago the ratio of income between A and B was 3:5. The ratios of income for the previous year and the current year are 2:3 and 5:7. The sum of the income for the both is Rs. 12, 900. Then the current income of each is equal to

Options

1. Rs. 7,200 ; Rs. 5,700
2. Rs. 3,600 ; Rs. 9,300
3. Rs. 8,100 ; Rs. 4,800
4. Rs. 5,400 ; Rs. 7,500

Question 15. A person completes a journey in 12 hours. He travels the first half of the journey at the rate of 19km/h and the second half at the rate of 21 km/h. What is the total journey in km?

Options

1. 217.8

2. 208.4
3. 239.4
4. 226.2

Answer: Option C – 239.4

Question 16. A closed box measures externally 90 cm long, 60 cm wide and 45 cm high and it's made of wood 2.5 cm thick. What is the cost of lining it on the inside with metal at Rs.3 per dm3?

Options

1. Rs. 572.50
2. Rs. 642. 50
3. Rs. 594.50
4. Rs. 616. 50

Answer: Option D – 616.50

Question 17. Mohan and Sohan start from P and Q, respectively. Mohan covers a distance from P to Q in 4 hours and Sohan covers a distance from Q to P in 6 hours. Determine the ratio of speed of Mohan and Sohan?

Options

1. 3:2
2. 3:5
3. 2:3
4. 5:3

Answer: Option A – 3:2

Question 18.If the mean deviation is 48:12, the standard deviation of the distribution is empirical relation between mean deviation and standard deviation.

1. 61.15
2. 58.15
3. 60.15
4. 59.15

Answer:

Question 19. Study the following table and answer the questions:

College	Number of teachers	Ratio of male to female teachers	Ratio of Teachers to students	% of non-teaching staff of total strength
M	480	15:17	_:_	15%
N	450	_:_	1:6	10%
O	–	3:2	1:8	–
P	510	8:7	3:10	–
Q	–	2:7	2:5	20%
R	255	_:_	2:7	15%

Note that the total strength of the college is the sum of teaching staff, non-teaching staff and students.

If the total number of students at college P and Q are the same,then teachers at college P are what percentage less than the students of college Q?

Answer: (70%)

Verbal Ability

Q1. Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has an error.

The reason for his prolonged absence from work was because his father had had a heart attack and was hospitalized.

1. and was hospitalized
2. from work was because
3. The reason for his prolonged absence
4. His father had had a heart attack.

Answer: His father had had a heart attack.

Q2. Identify the error in the sentence.

Could you please borrow me that non-fiction book you were talking about yesterday?

1. Could you please borrow
2. Non-fiction book you
3. were talking about yesterday?

4. me that informative.

Answer: Could you please borrow

Q3. Each sentence contains four underlined phrases. Three of these phrases have been correctly used and one has been incorrectly used. Choose the phrase from the options which best replaces the wrong phrase in the sentence.

We went to see him as many times as we could since he was put in very close to our house.

1. Was putting up
2. So many times
3. Close from
4. We should have

Answer: was putting up

Q4. Choose the appropriate idioms to complete the given sentence/s.

I was _____ while choosing a gift for my parent's 50th wedding anniversary. Finally, I was _____ when I saw just the thing for them.

1. In the doldrums; on cloud nine.
2. In the doldrums' under a cloud
3. At sea; on cloud nine
4. At sea; under a cloud

Answer: C – At sea; on cloud nine

Q5. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful passage.

1. Most unsettled sea boundaries go unnoticed unlike land-border conflicts, but the former can provide an opportunity for politicians to win favor from voters
2. But the recent scramble for offshore resources has expanded fishing and drilling zones, and formalized countries' rights to claims based on the country's shores.
3. Countries calculate their maritime claims according to a simplified outline of their territory.
4. For example, during the Brexit negotiations, the British cast fishing rights as essential for national sovereignty, even though its maritime borders with its neighbors were not in doubt.

1. 3,2,1,4
2. 3,4,2,1
3. 1,3,4,2
4. 1,4,3,2

Answer – 3214

Q6. Select the most appropriate set of options to fill the blanks.

The Metal Man stands in a dark, dusty corner of the Tyburn College Museum. The visitor who gives it a closer view (A) _____ at the silent tragedy in the set, determined expression and at the (B) _____ mark upon the chest. It is a six-sided blot, of a deep crimson hue, with strange pink lines (C) _____ from it. Of course it is generally (D) _____ that the Metal Man was once Professor Thomas Kelvin of the Geology Department.

1. (A) amazed (B) strange (C) spreading (D) planned.
2. (A) marvels (B) peculiar (C) radiating (D) known.
3. (A) wonders (B) familiar (C) developing (D) received.
4. (A) surprise (B) hideous (C) following (D) accepted.

Answer: (A) marvels (B) peculiar (C) radiating (D) known.

Question 7 :Choose the most appropriate set of idioms that would fill in the blanks and complete the text given here.

The road to success is paved with a lot of challenges. There is no point 1. _____ imagining we can move the world as we wish and that our journey to success is going to be 2. _____. It's time we called 3. _____ and accepted the harsh reality that there will be 4. _____ all along our career path – from unemployment to high cost of higher education and not forgetting the red tape we have to deal with.

1. 1. Living in a bird paradise 2. A thorny bed 3. A spade a spade 4. Stumbling stones
2. 1. Living in a fool's kingdom 2. A bed of roses 3. A hammer a hammer 4. Crumbling blocks
3. 1. Living in a fool's paradise 2. A cake walk 3. A spade a spade 4. Building blocks
4. 1. Living in a fool's paradise 2. A bed of roses 3. A spade a spade 4. Stumbling blocks

Answer – 1. Living in a fool's paradise 2. A bed of roses 3. A spade a spade 4. Stumbling blocks

Q8. Four idioms are given below. Choose their sequence that would fill in the blanks and the complete the text given below.

When you start a new job, although you _____ but it takes some time before you feel confident and familiar with the work, the place, and the people. Ideally, an employer recognizes this and allows you to _____ before taking on anything too difficult. But life isn't always ideal, so you may be _____, and then you _____.

1. Find your feet
2. Sink or swim
3. Thrown in at the deep end
4. Bounce off the walls

1. 1234
2. 4132
3. 2413
4. 4123

Answer: 1234

Q9. Choose the most appropriate question to complete the following sentences?

Antibiotic-resistant _____ and were first documented just four years after penicillin became widely available. Over the last 20 years, antibiotic resistance _____ problems

1. Bacteria rapidly evolved ,has become an increasingly serious
2. Bacteria rapidly evolved, has became an increasingly serious
3. Rapidly evolved bacteria, has become an increasingly serious
4. Rapidly bacteria evolved, has become an increasingly serious

Answer – Bacteria rapidly evolved,has become an increasingly serious

Q10. Substitute one word for the underlined part of the sentence

Riddhima talks a lot, when it is inappropriate

Options

1. Tacitum
2. Loud
3. Reticent

4. Loquacious

Answer – Loquacious

Q11. Choose the correct meaning for the underlined idiom in the sentence

His final argument hit the nail on the head

Options

1. Nasty
2. Cause Headache
3. Exactly to the point
4. Reckless

Answer – Exactly to the point

Q12. Choose the most appropriate option to complete the following sentence.

Learned behaviors contrast with innate behaviors, _____ and can be performed without any prior experience or training. Of course, some behaviors have _____ elements.

1. Which genetically are hardwired; learned and innate both
2. Which are genetically hardwired; both learned and innate
3. Which genetically is hardwired; learned and innate both
4. Genetically which are hardwired; both learned and innate

Answer: Which are genetically hardwired; both learned and innate

Q13. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph

1. Space agencies and private companies have proposed various methods to clean the skies of space junk, but this is no easy task.
2. Even when ownership is known, it is not clear who would be responsible if such bodies were accidentally nudged in the wrong direction, only to blow up prematures.
3. Our skies are becoming increasingly cluttered with large pieces of fast-moving space junk, which pose a threat to working satellites.
4. Handling space debris belonging to other countries is a violation of international laws, and so far only a fraction of the pieces of orbital junk have a known launching scale.

Options

1. 3, 1, 4, 2
2. 3, 4, 1, 2
3. 1, 4, 2, 3
4. 1, 4, 3, 2

Answer – 3142

Q14. For the four sentence (S1 to S4) paragraph below, sentences S1 and S4 are given. From the options P, Q, R, and S. Choose the appropriate sentences for S2 and S3, respectively.

S1. A large number of industries have been established in post- independence India in private, public and joint sectors.

S2. _____

S3. _____

S4. Whether large scale or small scale, both private and public sectors have grown side by side since independence.

1. They debated titles in favor of the private sector.
2. 'Contractualism' is the new slogan today.
3. Bhilai, Bokaro, Rourkela, Ranchi, Jamshedpur, Renukoot, etc emerged as major centres during the first one and a half decades of independence.
4. However, later on, industrialisation at medium and small scale was taken up in all the states.

1. PR
2. RS
3. QP
4. PS

Answer: RS

Q15. For the four sentence (S1 to S4) paragraph below, sentences S1 and S4 are given. From the options P, Q, R, and Schoose the appropriate sentences for S2 and S3, respectively.

S1: In the Rig Veda, it is said that Yama and Yami the twins were extremely fond of each other and lived an idyllic life on Earth where the day never ended.

S2:_____

S3:_____

S4: Not wanting to disturb him, she waited for him to wake up

P: When he did not wake up for a long time while, she woke him up.

Q: One day when Yami returned home, she found Yama laying under a tree appearing to be asleep

R: Yami started to weep with such great sorrow that her tears threatened to flood the world as she missed him tremendously.

S: They went where they pleased and did what they wanted

Answer: _____

Answer – SQ

Q16 Among V S Naipaul's fictional works, The Enigma of Arrival (1987) has emerged as one of his finest books. Its 1. _____ is indistinguishable from the author describing Naipaul's 2. _____ of studying in London, living in Wiltshire, his neighbors and the landscape around Salisbury. It _____ how he freed himself from the memory of Trinidad and came to find his true self by 4. _____ with English culture. It is an examination of the narrator's cultural roots, while also being a story of change and death.

Blank 1. A. narrator B. storyteller C. reporter D. speaker

Blank 2. A. knowledge B. experience C. skill D. adventure

Blank 3. A. announces B. informs C. reveals D. confesses

Blank 4. A. identify B. identifying C. identified D. identifies

Options:

1. (1)-A, (2)-B, (3)-C, (4)-B
2. (1)-B, (2)-D, (3)-C, (4)-A
3. (1)-C, (2)-B, (3)-A, (4)-B
4. (1)-D, (2)-A, (3)-B, (4)-C

Answer − (1)-A, (2)-B, (3)-C, (4)-B

Q17. My friend is only 25 but he 1. _____ perfectly. He's single, confident, passionate and ambitious. He's willing to start 2. _____ and, is not afraid 3. _____ to the grindstone for those 80 hour weeks. He has 4. _____ to start his own business now.

Options:

1. 1. Fits the bill 2, from a scratch 3. To put his nose to the grindstone 4. Made up his mind
2. 1. Customized to size 2. From a scratch 3. To nose around everything 4. Made up for
3. 1. Fetch the bill 2. After scratching his back 3. To his stakes into one basket 4. Made up his heart
4. Fits the bill 2. Cut corners 3. To put his head into the grindstone 4. Made up his mind

Answer − 1. Fits the bill 2, from a scratch 3. To put his nose to the grindstone 4. Made up his mind

Q18 Read the given passage and answer the questions that follow:

The people of the village, numbering some fifty men, women and children were in the abject terror, and though the sun was still up when I arrived, I found the entire population inside their homes behind locked doors, and it was not until my men had made fire in the country and I was sitting down to a cup of tea that door here and there cautiously opened, and frightened inmates emerged.

I was informed that for five days, no one has gone beyond their own doorsteps- the insanitary condition of the courtyard to the truth of this statement− that food was running short, and that the people would starve if the tiger was not killed or driven away.

That the tiger was still in the vicinity was apparent. For three nights it had been heard calling on the road, distant a hundred yards from the houses, and that very day it had been seen on the cultivated land at the lower end of the village.

The headman of the village willingly placed a room at my disposal, but as there were right to us share it, and the only door it possessed opened on to the insanitary courtyard. I refused to spend the night in the open.

After a scratch meal which had to do duty for dinner, I saw my men safely shut into the room and myself took up a position on the side of the road, with my back to a tree. The villagers said the tiger was in the habit of perambulating along this road, and as the moon was at full I thought there was a chance of my getting a shot provided I saw it first.

I had spent many nights in the jungle looking for game, but this was the first time I had ever spent a night looking for a man-eater. The length of road immediately in front of me was brilliantly lit by the moon, but to right and left the overhanging trees cast dark shadows, and when the night wind agitated the branches and the shadows moved, I saw a dozen tigers advancing on me, and bitterly regretted the impulse that had induced me to place myself at the man-eater's mercy. I lacked the courage to return to the village and admit I was too frightened to carry out my self-imposed task, and with teeth chattering, as much from fear as from cold, I sat out the long night. As the grey dawn was lighting up the snowy range which I was facing, I rested my head on my drawn-up knees, and it was in this position my men an hour later found me fast asleep; of the tiger I had neither heard nor seen anything.

Which of the following statements does NOT hold good as per the passage?

Options

1. The tiger's incessant calling and close proximity to its visibility nearby on the very day of the arrival of the narrator was proof enough that it is still in the vicinity of the village.
2. The narrator had an elaborated dinner at his headman's house and set off to spend the night in the open as he was not ready to share the same room with eight more men
3. The narrator was aware of the danger that he was in when he decided to spend the night out in the open on the very road where the tiger was often seen.
4. The people of the small village were terrified because of the man-eater which lurked in their vicinity and were not ready to come out even for basic necessities.

Answer – B

Q19. "I saw a dozen tigers advancing on me…" What caused this to happen and what was the narrator's reaction?

1. The shadows created by the branches of the trees gave an impression that there were numerous dangerous beasts lurking around. The narrator regretted his impulsive decision to spend the night out in the open at the mercy of the man-eater.
2. The village that the narrator had gone to was infested with tigers which had made life difficult for the villagers. On seeing so many tigers so close to him, the narrator was terrified and regretted his decision to come cut in the open.
3. The villagers had given a wrong report to the narrator about the existence of a single tiger, when in reality there were about a dozen of them in the vicinity. The narrator repented about his foolish decision to spend the night out in the open.
4. The narrator was terrified at the possibility of spending the night in close proximity to the man-eater and dreamt of several tigers advancing upon him and he lay on the tree. On getting up from his sleep, the narrator regretted his foolish decision of not getting any of his armed men along with him.

Answer – A

Reasoning Ability

Question 1.Identify the letter cluster that does not belong to the given series:-

DE19, FH30, IL45, MQ64, RX63, XD62

1. RX63
2. IL45
3. XD62
4. MQ64

Ans. RX63

Question 2. Identify the letter cluster that does not belong to the given series:-

PZLP, QWMN, RTNJ, SQOG, TNPD

Ans. QWMN

Enter the answer in the space provided on the screen. Answer should be in whole numbers without any symbol (XY, %, etc)

Question 3. Four letter – cluster pairs have been given, out of which there are alike in some manner and one is different. Select the one that is different.

1. SUYEMW : CAYWQI
2. QSWAGN : AWTXDH
3. CEIOWG : ASMKIG
4. DFJPXH : BTNLJH

Answer: QSWAGN : AWTXDH

Question 4. A statement is given followed by two courses of action numbered I and IL Assuming that everything in the statement is true, decide wc of the logically follow(s).

Statement:

From last few years people are investing much in cryptocurrency and losing a lot of money. People invest after seeing advertisements of celebrities and in the hope of getting rich quickly.

Courses of Action:

1. The government should organise awareness campaign.
2. People should make themselves more aware by researching about the cryptocurrency and its fluctuation in market.

1. Only course of action follows
2. Only course of action follows
3. Both courses of action I and II follow
4. Neither course of action I nor II follows

Answer: C

Question 5. Study the given information carefully and answer the question that follows

In M.A. Social Work final year there are five papers of 100 marks each. Following are the passing criteria in each paper and the course.

A student must :-

1. a) secure at least 40 marks in each paper except paper V, where passing marks are 50
2. b) pass paper V and at least any 2 other papers to appear (re-appear) again in subsequent examination, else he/she will be declared fail
3. c) Up to 2 grace marks each may be given in any of the two papers or maximum 4 marks in any one paper for passing the course
4. d) Grace marks equivalent of 2% of the total final year course marks may be given to a student to enable him acquire 1st division(60%) or distinction (70%)

Based on the criteria given above and without assuming any additional information, take a decision about the result of the following candidates.

Geetansh appeared for the M.A. Social Work final year examination in June 2021 and obtained 56, 37.52, 43, and 46 marks in paper I, II, III, IV and V respectively.

1. He must be declared fail in the course
2. He must be declared pass in the course.
3. He must be asked to re-appear for paper I.
4. He must be asked to re-appear for paper II and V.

Answer : He must be declared fail in the course

Question 6.

- If A + B means A is the father of B
- IF A * B means A is the son-in-law of B
- If A / B means B is the brother of A
- If A $ B means B is the sister of A
- If A # B means B is the mother of AWhich two signs should replace the Question mark (?) in the following expression in proper sequence to establish that E is the brother-in-law of J?

D * E + F ? G # H ? J

1. $ and /
2. $ and #
3. # and /
4. / and #

Answer – $ and /

Question 7: Two cars started from the same point and at the same time. The first one is going in the east direction at 10 KMPH and the second one is going towards

the north direction at a speed of 24 KMPH. How far will the two cars will be from each other after 3 hrs

1. 68 kms
2. 72 kms
3. 78 kms
4. 98 km

Answer : 78 kms

Question 8: Statement:

"We need to recruit more skilled and qualified math facilitators for grade XI and XII in our school". The director inform the school staff during staff meeting

Assumptions:

1. Candidates are available for expected post.
2. The math facilitators who are teaching to grade XI and XII at present are not skilled.

Options

1. Both assumptions I and II are implicit.
2. Neither assumptions I nor II is implicit.
3. Only Assumption I is implicit
4. Only assumption II is implicit
5. Only assumption II is implicit

Answer : Only assumption II is implicit

Question 9:

1. If A + B means A is the WIFE of B
2. IF A − B means A is the mother of B
3. If A * B means A is the son of B
4. If A / B means A is the BROTHER of B

Based on the above how is N related to Q, if M -Q-L/J *T *K + N?

1. Brother
2. Father in law
3. Brother in law
4. Father

Answer : Father in law is the

Question 10 : Following are the criteria required to be fullfiled for getting admission to a college for MSC Bio Informatics.

1. The candidate must have scored more than 70% marks in the intermediate science stream
2. The candidate must possess a graduation degree in Zoology, Botany, Mathematics or Computer Science with minimum of 65% marks.
3. The candidate should have cleared the MSc entrance exam with at least 75% marks and interview with atleast 65% marks.
4. The candidate should be at least 21 years and at most 28 years as of 1 July 2022. In case a candidate fullfills all criteria except the required percentage as mentioned in the criteria but has scored 75% and above marks in the personal interview then the case is to be referred to the Director of the college.

In case a candidate fulfils all criteria except the maximum age criteria as mentioned in IV but belongs to SC/ST community, the case is to be referred to the SC/ST cell for consideration. Refer to the details of a candidate provided below and the four options that follow. Select the appropriate option that applies to the person's candidature.

Romesh Kharwar passed his B.Sc. computer science on in 2018 when he was 19 years of age. At the age of 16 years, he topped his state board for the Intermediate science examination and secured more than 90% marks. He has obtained one-sixth of the five hundred fifty marks, one-tenth of seven hundred sixty five and 5/6th of ninety-one in his B.Sc, entrance exam and interview respectively. He belongs to an ST community.

1. The case is to be referred to the Director of the college
2. The case is to be referred to the SC/ST cell for consideration
3. The candidate is to be selected
4. The candidate is to be rejected

Answer : The candidate is to be selected

Advanced Coding

Question 1

This vacation you went to visit the golden house. There are N rooms in this golden house and its owner needs someone to take care of the management of this house. As you have been unemployed for a long time, you are interested in this job. Owner of this house wanted an intelligent manager for this role, so he created one puzzle within that golden house. The person who will be able to solve that puzzle will be the manager of the golden house.

Owner of the house kept some numbers of golden coins in each room. You have to choose two rooms, one from where you will enter and other one from where you will exit. From any room either you can exit, or you can move to the next room. While visiting any room you will collect all the gold coins, and if you enter any room then you can't skip collecting gold coins from that room, you have to take those coins. Owner wants to have exactly K coins, when you exit the room, he guarantees that there will be at least one possible solution for this puzzle.

Given number of rooms (N), and number of gold coins in N rooms. You have to find room numbers from where you will start and from where you will exit. If there are more than one solution possible, then you have to provide a solution with a smaller starting room number.
You can assume that room numbers will start from 1 and end at N.

Hint: Find a continuous subsequence whose sum will be exactly equal to K.

Example 1:

- **Input:**
  10 15 -> N =10, K = 15
  5 3 7 14 18 1 18 4 8 3 -> Number of gold coins in each room.
- **Output:**
  1 3

Explanation: There are ten rooms in the house. You want to have the Total sum of gold coins in continuous sequence of room to be 15 There are two solutions from this i.e. [1, 3] and [8, 10] then the solution with a smaller starting room number will be printed hence [1, 3] is output.

Python

```
def fun(arr, n):
  ans = []
  t = 1
  if arr[0] > 0:
    t = 0
  i = 0
  while i < n:
    if t == 0:
      j = i
      while j < n:
        if arr[j] > 0:
          j += 1
        else:
          break
      ans.append(max(arr[i:j]))
      i = j
      t = 1
    else:
      j = i
      while j < n:
        if arr[j] < 0:
          j += 1
        else:
          break
      ans.append(max(arr[i:j]))
      i = j
      t = 0
  return sum(ans)


n = int(input())
ar = list(map(int, input().split()))
print(fun(ar, n))
```

Question 2

Bob is going to bet today on horse riding. There are N horses listed in a sequence of 1 to N.

The probability of winning of each horse is different so the prices for making a bet on the horses are not the same. There is no limit on the number of horses on which he can bet, but he thinks that if he bets on a continuous sequence of horses then he has a better chance to win. Bob will get K units of money if any horse on which he bets will win. But as the award is only K units so he wants to put money less than K. Bob wants to bet on as many horses as he can. As you are his best friend, he reached out to you for help, can you please find the length of the maximum continuous sequence of horses on which Bob can make a bet, and remember he will

invest money less than K units. If there are more than one possible combinations, Bob will bet randomly on any one of them.

Given the number of horses(N), reward money(K), and price of betting on N horses in order.

Hint: For each starting index of a horse, its end index in sequences will be equal to or greater than the end index of the previous starting index.

Example 1:

- **Input:**
  90 100 -> N = 10, K=100
  30 40 50 20 20 10 90 10 10 10 -> Price to make bet on each horse in order
- **Output:**
  3
- **Explanation:**
  There are 10 horses, and the reward money is 100. So, Bob will put money less than 100. There are two possible o sequences of length three whose total money for betting is less than 100, i.e. [50 20 20] (sum is 90) and [10 10 10] (sum is 30). Bob will choose randomly one sequence from these two. As none of the other sequences with length greater than 3 will have a price less than 100 so the answer will be 3.

Example 2:

- **Input:**
  10 100 -> N = 10, K=100
  10 90 80 20 90 60 40 60 70 75 -> Price to make bet on each horse in order

- **Output:**
  1

- **Explanation:**
  There are no two consecutive horses for which the sum of price is less than 100. So, Bob will choose randomly any one horse. And the max length of the sequence will be 1.

Constraints:

- 2<=N<=105
- 1<= K<=109
- 1<=A1, A3... AN<=109

The Input format for testing:

The candidate has to write the code to accept 2 inputs.

- **First Input:** It will contain two integer N (number of horses) and K (reward money)
- **Second Input:** It will contain N integers, each separated

Python

```python
def fun(n, k, arr):
  ans = 0
  if min(arr) < k:
    ans = 1
  for i in range(n - 1):
    for j in range(i + 1, n):
      if sum(arr[i:j]) < k:
        ans = max(ans, j - i)
      else:
        break
  return ans


n, k = map(int, input().split())
arr = list(map(int, input().split()))
print(fun(n, k, arr))
```

Advanced Quantitative

Question 1: The sum of two numbers x and y is 30 and the sum of their reciprocals $1/x$ and $1/y$ is $10/63$. The numbers are:

1. 9, 21
2. 14, 16
3. 18, 12
4. 17, 13

Answer: 9, 21

Question 2. There are three violet, four yellow and five orange cards. In how many ways these cards can be arranged such that no two violet cards are adjacent to each other?

Answer: 1960; 132

Question 3: Let the expressions be 4 < h < 9, 7 < g < 13. If the possible values of g, h lies between a and b, then values a and b satisfies:

1. a + b = 83
2. 3a + b = 230

3. b − a = 89
4. 5a + 4b = 327

Answer: a + b = 83

Question 4 : Study the following table and answer the following questions:

Days	Distance Upstream	Speed of the boat	Speed of the stream	Total Time Taken
Sunday	480	–	6	–
Monday	–	–	–	60
Tuesday	500	–	–	–
Wednesday	–	–	5	–
Thursday	250	10	5	–
Friday	–	14	7	–
Saturday	100	–	–	50

The total time taken by boat on thursday to travel upstream and downstream is:

1. 51.45
2. 66.67
3. 49.85
4. 50.02

Answer: 66.67

Question 5: In reference to above table, on sunday if the difference between the time taken by the boat to go upstream and downstream is 12 hours, then the total time taken by the boat to go upstream and downstream together is: (round to one decimal)

1. 52.3
2. 50.3
3. 45.4
4. 52.5

Answer: 52.5

Question 6: In reference to above table , On saturday, if the ratio of the speed of the stream, to the speed of boat is 2:3 then the difference between the time taken by the boat to go upstream to that of downstream is: (round to one decimal)

1. 6.5 hrs
2. 7.5 hrs
3. 6 hrs
4. 4 hrs '

Answer: 6.5 hrs

Question 7: Suppose **A** and **B** are the roots of the polynomial $2x^2 + 21x - 3 = 0$. Find the value of **1/A + 1/B**

Answer: 7

Question 8: Find the ratio of the area of a rectangular hexagon (a 6-gon with equal sides and equal internal angles) and the area of the circle passing through the vertices of the hexagon.

1. $2\sqrt{3}/\pi$
2. $3\sqrt{3}/\pi$
3. $\sqrt{3}/\pi$
4. $3\sqrt{3}/2\pi$

Answer : 3√3/2π

Question 9: If **x,y** and **z** are the roots of $3x^3 + 2x^2 - 4x - 1$, then find the value of **(1/x + 1/y + 1/z)(x + y + z)**

Answer : 8

Question 10. A pair of dice is rolled together till a sum of either 6 or 7 is obtained. If x denotes the probability that 7 comes before 6, then the value of x is (correct up to four decimal places)

1. 0.7692
2. 0.8571
3. 0.8333
4. 0.5454

Answer: 0.8333

Advanced Reasoning

Question 1. In a certain code language, 'BOARD' is written as '114263'. How will 'DARE' be written in that language?

Enter the answer in the space provided on the screen. Answer should be in whole numbers without any symbols (Eg, %, kms, ms etc)

Answer:

Question 2. Statement is given followed by two courses of action numbered I and II. Assuming that everything in the statement is true…..logically follows.

Statement: The standard of education at most of the government primary schools is pathetic.

Course of Action:

1. The Government should make it mandatory for political leaders to enroll their child in government primary school.
2. Government should improve the student-teacher ratio.

Options

1. Neither course of action I nor II follows
2. Only course of action I follows
3. Both courses of action I and II follow
4. Only course of action II follows

Answer : Only course of action II follows

Question 3. Statement is given followed by two course of action numbered I and II. Assuming that everything in the statement is true…..logically follows.

Statement:- It is observed in some of the government primary schools that the teachers are not very well educated to teach the children.

Course of Action:-

1. The government should remove caste based reservation.

2. The government should conduct training program for the teachers at regular interval of time.

Options

1. Both courses of action I and II follow.
2. Only course of action I follows
3. Only course of action II follows
4. Neither course of action I nor II follows

Answer: Only course of action II follows

Question 4. A questions is given, followed by two statements labelled I and II.

Identify which of the statements is/are sufficient to answer the question.

Questions: In a tutorial, there are six students- Phani, Kiran, Jwalith, Ram, Shyam and Tony of different ages. Who is the oldest among them?

Statements:

1. Ram is older than Phani and Jwalith. Ram is younger than Kiran. Shyam is older than only Tony.
2. Shyam is older than Jwalith but younger than Phani. Tony is older than only Ram. Phani is not the oldest.

Options

1. Data either in statement I alone or in statement II alone is sufficient to answer the question.
2. Data in both statements I and II together are not sufficient to answer the question
3. Data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
4. Data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

Answer: Data either in statement I alone or in statement II alone is sufficient to answer the question.

Question 5. In a certain code language, "FONDLE" is coded as "122610303214". How will DERAIL be coded in this language?

1. 28225401210
2. 129118512
3. 141132075

4. 26204381210

Answer:

Question 6. There is an acute need of an architect for the firm of Teena, who is a successful architect practitioner and running a very big architect firm. The candidates should be well-qualified, skilled, highly experienced and reliable. A placement agency has recommended a candidate named Preeti who has recently graduated in architecture from one of the best schools of architecture as the topper of the institute. She is a gold medalist. She has successfully completed her internship for one year and registered with the government. Decide whether the candidate is suitable for teena or no.

Answer : No. (Not experienced)

Question 7. In a corona ration queue, 8 people are standing. Jaffar is standing to the left of Raquib but to the right of Pushpa. Omkar is standing to the right of Naresh and the left of Prithvi.. Sanju is standing to the right of Raquib and to the left of Tanu. Pushpa is first and Prithivi is last in the queue. Who is standing to the left of Naresh?

Answer : Raquib

Question 8. In a theatre, nine person – K, L, M, N, O , P, Q , R, S and T are sitting in a straight row facing the screen (north) but not necessarily in the same orfer . M is fourth to the left of Q. P is fourth to the right of K and second to the left of S, who is fifth to the right of N. L is not an immediate neighbor of either S or M. There are only three persons between O and N. Q is second to the right of K. Who among the following sits to the right of R?

Answer : K

TCS NQT 20 August 2023 - Slot 2

Numerical Ability

Question 1 : Four runners begin a race on a rectangular track of 500m length and 400m breath. The speed of the four runners is respective;y 9m/s, 6m/s, 5m/s and 4m/s. If they begin the race at the same time from the same point , then after how much time will they meet again at the starting point?

1. 1800s
2. 2800s
3. 2400s
4. 2000s

Answer: 1800

Question 2 : In a class, the average weight of urban students is 68 kg. Whereas the same for rural students is 54 kgs. The average weight of the entire class is 62.4 kg. What is the percentage of rural students in the class?

1. 40%
2. 36%
3. 35%
4. 32%

Answer: Option A – 40%

Question 3 : The first number is twice of the second number and one third of the third. If the average of all the numbers is 72, then find the average of the second and third number?

Options

1. 60
2. 84
3. 96
4. 72

Answer: 84

Question 4 : $116 \div 114 \, of \, 252 + 312134234 \div 534 \, of \, 112 - 134312_{243 \div 543 \, of \, 121 - 321143161 \div 141}$

$of_{225+143321}$

1. $-411243375_{-337541124}$
2. $-68502115_{-21156850}$
3. $-68542110_{-21106854}$

4. −411243375−₃₃₇₅₄₁₁₂₄

Answer: −411243375−₃₃₇₅₄₁₁₂₄

Question 9 : Study the given given table and answer the question that follow:

Note: The total strength of the college is the sum of teaching staff, non teaching staff and students.

If the strength of the colleges N and Q are the same, then find the number of non-teaching staff at college Q

Answer: Wrong Question

Question 10 : A sum of money invested at simple interest amounts to ₹1,770 in 3 years and to ₹2,130 in 7 years. How much is the sum invested?

1. ₹1,600
2. ₹1,480
3. ₹1,740
4. ₹1.500

Answer: 1500

Question 11 : The ages of a father and a daughter are in the ratio 5:2. After 8 years the ratio becomes 7:4. Find the age of the daughter after 8 years?

Options

5. 16 years
6. 18 years
7. 24 years
8. 20 years

Answer: 16 years

Question 12 : 12 women and 5 men together can complete a work in 9 days. It takes 81 days for 1 man alone to complete the same work. In how many days can 1 woman alone complete the same work?

9.   324 days
10. 243 days
11. 234 days
12. 223 days

Answer: 243

Question 13 : Ramesh took a loan at simple interest of 6% with an increase of 0.5% in each subsequent year. If he paid an interest of Rs 4375 after 5 years, how much loan did he take?

13. Rs 13500
14. Rs 13000
15. Rs 12000
16. Rs 12500

Answer: 12500

Question 14 : Akshay mixes three varieties of groundnuts with cost price at the rate of Rs. 55 per kg, Rs. 27 per kg, Rs. 34 per kg in the ratio of 2:4:3 by weight. Further in 27 kg of the above mixture, he mixes some kilograms of groundnuts with cost price at Rs. 39 per kg. If he sells the new mixture for a total of Rs 2,163 and earns 40% profit, then what is the amount of groundnut priced at Rs. 39 per kg in the new mixture?

Options

17. 10kg
18. 8kg
19. 6 kg
20. 15 kg

Answer: 10kg

Question 15 : Rohan started from home for his office 20 minutes late. But he maintains his speed at one and a half times more than usual and reaches his office on time. Determine his usual time (in minutes).

21. 50
22. 60
23. 40
24. 45

Answer: 50

Question 16 : Two metallic right circular cones with heights of 4.9 cm and 4.7 cm and radii of their bases 2.4 cm each, have been melted together and recast into a sphere. What is the diameter of the sphere?

25. 5.6 cm
26. 5.2 cm
27. 4.8 cm
28. 6.2 cm

Answer: Option C – 4.8 cm

Question 17 : The speed of the bus increases by 3 kmph every one hour. If the distance travelled in first one hour is 42 km, then what was the total distance travelled in 12 hours?

29. 684
30. 682
31. 736
32. 702

Answer – 702

Question 18 : Find the range of the set of the values 215, 312, 227, 206, 209, 318, 321, 408

Options

33. 202
34. 204
35. 205
36. 203

Answer − 202

Question 19 : The ratio of the number of girls to that of boys in the class is 9:11. If 11(1/9)% of the girls and 9 (1/11)% of the boys do not like mathematics, then find the percentage of students who like mathematics.

Enter the answer in the space given below provided on the screen. The answer should be in whale numbers and does not include symbols.

Answer: 90%

Question 20 : An amount of Rs. 1,800 with a simple rate of interest becomes Rs. 2, 340 in 6 years. If the rate of interest is increased by 2% then the amount becomes P then the value of P is?

Answer − 2556

Verbal Ability

Question 1 : Identify the error in the sentence.

I have known him for about three years but met his mother only since last night.

1. For about three years
2. Only since last night
3. I have known him
4. But met his mother

Answer: only since last night

Question 2 : In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The Chipko movement started in the early 1970s in Garhwal with growing resentment towards rapid (A) _____. The landmark event in this struggle took place on 26th March 1974 when a group of peasant women in Reni village,

Uttarakhand, acted to prevent the cutting of trees and (B) _____ their traditional forest rights that were threatened by the contractor system of the state Forest Department. Their actions (C) _____ hundreds of such actions throughout the region. By the 1980s the movement led to the (D) _____ of people-sensitive forest policies, which put a stop to the cutting of trees in regions as far reaching as the Vindhyas and the Western Ghats.

1. (A)plantations (B)recovered (C)excited (D)production
2. (A)reforestation (B)demanded (C)threatened (D)imagination
3. (A)agriculture (B)affirmed (C)provoked (D)recognition
4. (A)deforestation (B)reclaimed (C)inspired (D)formulation

Answer: (A)deforestation (B)reclaimed (C)inspired (D)formulation

Question 3 : Each sentence in the given paragraph contains four underlined phrases. Three of these phrases have been correct phrases from among the following options that best replaces the INCORRECT phrase in the sentence

He made tall claims of his wrestling skills but as soon as he see his strong opponent than he ran away in fear

Options

1. By fear
2. No sooner did
3. High claiming
4. That he

Answer – No sooner did

Question 4 : Select the most appropriate idiom to fill in the blanks and complete the given passage:

1. _____ my father used to eat sweets every day and no one could believe that he would stop eating them! To everyone's surprise he went (2)_____ when the doctors told him that he has diabetes.

Options

1. (1) come rain or shine (2) down for the count
2. (1) come rain or shine (2) cold turkey

3. (1) As right as rain (2) down for the count
4. (1) As right as rain (2) cold turkey

Answer – (1) come rain or shine (2) cold turkey

Question 5 : In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The idea of pluralism is entrenched in the Indian constitution. The value is (1) _____ in many of its provisions and parts. However, the changed, (2) _____ of political discourse and narrative has put it on the blackburner. A monolithic cultural account has been (3)_____ to catch people's immigration in order (4)_____ objections.

Blank (1) A. stated (B). expressed (C)uttered (D). Spoken

Blank (2) A. milieu (B). setting (C)surroundings (D). background

Blank (3) A. discovered (B). concocted (C)arranged (D). devised

Blank (4) A. win(B). won (C)winning (D). to win

Options

1. (1)-B, (2)-A, (3)-D, (4)-D
2. (1)-C, (2)-C, (3)-A, (4)-A
3. (1)-D, (2)-A, (3)-B, (4)-C
4. (1)-A, (2)-B, (3)-C, (4)-B

Answer – (1)-A, (2)-B, (3)-C, (4)-B

Question 6 : Select the most appropriate meaning of the underlined idiom in the following sentence:

Finding an amicable solution to the long-standing dispute was nothing but flogging a dead horse.

1. Waste energy on an impossible task
2. Work enthusiastically
3. Find a miraculous situation

4. Work perfunctorily

Answer – Waste energy on an impossible task

Question 7 : Four idioms are given below.choose their sequence that could fill in the blank and complete the text given here.

The Patels sat sipping tea quietly, no one wanting to bring up _____ about Jeenal's expulsion from the college. Jeena; himself had faint memories of the incident as he was _____ at that time. To ease the tension, his mother started the topic of the Alibag mansion, which was now becoming a _____ but Jeenal could not concentrate as he was already disconcerted yet _____.

1. the elephant's trunk
2. The elephant in the room
3. Seeing red
4. A white elephant

Option:

1. 1243
2. 3241
3. 2143
4. 4321

Answer – 2143

Question 8 : Select the option that can be used as a one word substitute for the underlined part of the sentence

Avneet is extremely passionate about the science of coins or metals

Options

1. Numismatics
2. Neologism
3. Misologyist
4. Mycology

Answer – numismatics

Question 9 : For the four sentences (S1 to S4) paragraph below, sentences S1 and S4 are given. From P, Q, R and S, select the appropriate sentences for S2 and S3 respectively.

S1. For decades, Western culture has been reluctant to assign an inherent value or a purpose to art— even as it continues to hold art in high esteem.

S2. _____

S3. _____

S4. In what way might art be good for us? The answer, I believe, is that art is a therapeutic instrument.

1. Though we no longer seem comfortable saying so, our reverence for art must be founded on a timeless premise; that art is good for us.
2. If we don't believe this, then our commitment——in money, time, and study—makes little sense.
3. Hence the irony (to put it gently) of scholarly resistance to the idea of art's therapeutic benefit.
4. When Sebastian Errazuriz created dollar signs out of ordinary street markings in Manhattan, his idea was to jolt passersby.

1. RP
2. QP
3. PQ
4. PS

Answer: PQ

Question 10 : Read the passage and answer the questions that follow:

The world was called Montefiore, as far as she knew, and from her aerie on every side all the world descended.

Like any child, she looked out and across rather than in. She was more familiar with the vistas, the promising valleys with their hidden hamlets, the scope of the future arranged in terms of hills and light.

Once a small dragon had become trapped in the bird-snaring nets slung in the "uccellare". Bianca watched as the cook's adolescent grandson tried to cut it down

and release it. Her eyes were fixed on the creature, the stray impossibility of it, not on the spinny in which it was caught. How it twitched, its webbed claws a pearly chalcedony, its eyes frantic and unblinking. Despite the boy's efforts, it died and his grandmother flayed it for skin with which to patch the kitchen bellows.

Bianca regarded visitors to Montefiore with fierce attention: emissaries of the world. But the bones of her home– the house itself– remain as familiar and unregarded as her own fingernails.

Montefiore was larger than a farmer's villa but not as imposing as a castle. Too far from anywhere important to serve as a castle– a country house– it crowned an upthrust shoulder of land so its fortifications were natural. On all sides the steepness of the slope was a deterrent to invaders, and anyway. Montefiore wasn't large enough to interest the condottien who led their small armies along the riverbank on one campaign or another.

Had Bianca an adult eye, she might have guessed from its mismatched roof and inconsistent architectural details that many owners had lived here before her family arrived, shaping the space with disregard for symmetry or loveliness. When its masters had money, they'd made attempts to drill a little grandeur into the old stone hull, like crisp starched lace tied under wet chins of the drooling 'nonna'. A recently completed courtyard handsomely done with columns and vaults in their received archaic style, provided relief from the roaring breeze.

Which of the following options does not hold GOOD as per the passage?

Options

1. Bianca was more interested in the outside world rather than the interiors of her own home.
2. The cook's grandmother killed the dragon so that she could use its skin to patch the kitchen bellows
3. The most recent addition to Montefiore was the interior courtyard which was done the fashion of old days.
4. The cook's grandson tried to save the small dragon, which had been caught inside the bird-snarling net.

Answer – B

Question 11 : Read the passage and answer the questions that follow:

The world was called Montefiore, as far as she knew, and from her aerie on every side all the world descended.

Like any child, she looked out and across rather than in. She was more familiar with the vistas, the promising valleys with their hidden hamlets, the scope of the future arranged in terms of hills and light.

Once a small dragon had become trapped in the bird-snaring nets slung in the "uccellare". Bianca watched as the cook's adolescent grandson tried to cut it down and release it. Her eyes were fixed on the creature, the stray impossibility of it, not on the spinny in which it was caught. How it twitched, its webbed claws a pearly chalcedony, its eyes frantic and unblinking. Despite the boy's efforts, it died and his grandmother flayed it for skin with which to patch the kitchen bellows.

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Had Bianca an adult eye, she might have guessed from its mismatched roof and inconsistent architectural details that many owners had lived here before her family arrived, shaping the space with disregard for symmetry or loveliness. When its masters had money, they'd made attempts to drill a little grandeur into the old stone hull, like crisp starched lace tied under wet chins of the drooling 'nonna'. A recently

completed courtyard handsomely done with columns and vaults in their received archaic style, provided relief from the roaring breeze.

As per the information provided in the passage, what may be deduced as the most correct option with respect to Montefiore?

Options

1. Montefiore could not be easily invaded as it was situated on top of a hill and was secured by a defensive wall
2. Montefiore was owned by masters who were forever healthy and old not hesitate to live a lavish life
3. Montefiore was a small house which only looked big from a far away distance and therefore, no invaders approached it with their arrows
4. The owners of this mansion had been continuously making several architectural renovations to keep up the royal look at the palace.

Answer – C

Question 12 : Read the passage and answer the questions that follow:

The world was called Montefiore, as far as she knew, and from her aerie on every side all the world descended.

Like any child, she looked out and across rather than in. She was more familiar with the vistas, the promising valleys with their hidden hamlets, the scope of the future arranged in terms of hills and light.

Once a small dragon had become trapped in the bird-snaring nets slung in the "uccellare". Bianca watched as the cook's adolescent grandson tried to cut it down and release it. Her eyes were fixed on the creature, the stray impossibility of it, not on the spinny in which it was caught. How it twitched, its webbed claws a pearly chalcedony, its eyes frantic and unblinking. Despite the boy's efforts, it died and his grandmother flayed it for skin with which to patch the kitchen bellows.

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Had Bianca an adult eye, she might have guessed from its mismatched roof and inconsistent architectural details that many owners had lived here before her family arrived, shaping the space with disregard for symmetry or loveliness. When its masters had money, they'd made attempts to drill a little grandeur into the old stone hull, like crisp starched lace tied under wet chins of the drooling 'nonna'. A recently completed courtyard handsomely done with columns and vaults in their received archaic style, provided relief from the roaring breeze.

"Like any child, she looked out and across rather than in" . Which of the following options is the best proof of this statement?

Options

1. Bianca was familiar with the old chapel next to her house, and loved to watch its roof beam and struts, the old cladding and tiles
2. Bianca was familiar with the panoramic view outside her immediate environment and also the valleys with villages.
3. Bianca was more interested to see captivated dragons inside the house and how they were caught by the cook's grandson.
4. Bianca was familiar with the recently constructed interior courtyard handsomely done with columns and vaults.

Answer – B

Question 13 : Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order (e.g. ABCDE) which would form a meaningful, unified and coherent paragraph.

1. Whether the issue is religion, race, or region, both France and the US are trying to set the rules by which diverse groups exist and function within a unified whole – it is not an academic exercise.

2. In the United States, the concept of E *pluribus unum* – "Out of many, one" – is a foundational ideal and at least in theory, unity can accommodate difference; but in France, difference is seen as tantamount to fracture.
3. The first article of the French constitution explicitly states that the republic shall be "indivisible, laïque, democratic and social."
4. Laïque refers to French creed of laïcité, a form of secularism that is central to country's history and identity, but much misunderstood elsewhere.
5. Liberal democratic states will not survive if they cannot strike a balance between alternatives that are lying in wait; chaotic fragmentation in one direction, and "blood and soil" nationalism in the order.

Answer: EABCD

Question 14 : Select the most appropriate idioms to fill in the blanks and complete the passage:

The Hamdasti (Persian for partnership) group of art practitioners from Kolkata are _____(1). How do you remind people of tradition and heritage when the practices they follow seem (2) _____ in comparison to the present day demands for the (3) _____? And how after having reminded people in one little locality through events, rejuvenation, unorthodox use of said practices (4) _____ to people living and working in a completely different environment and context? These artists are earnestly hoping to resolve these issues through a display of sorts which includes some of the lost arts and crafts traditions at the Mumbai.

1. 1. Faced with a dilemma 2. Out of place and clunky 3. Slick and quick 4. Reach out
2. 1. Facing knotty issue 2. Out of order 3. Slick and action packed 4. Far reaching
3. 1. Face the problem squarely in its face 2. Out of fashion 3. Slick and quick 4. Reached out
4. Faced the storm 2. Out of place and clunky 3. Slick and quick 4. To reach out

Answer – 1. Faced with a dilemma 2. Out of place and clunky 3. Slick and quick 4. Reach out

Reasoning Ability

Question 1: Identify the letter cluster that does not belong to the following series:

FSN, HOP, JLR, LGT, NCV

FUB(Fill up the blanks)

Answer: JLR

Question 2: A question is given, followed by two statements labelled I and II. Identify which of statements is/are sufficient to answer the question.

Question: what is code for 'pretty' in the code language

Statements:

- 'ma ka ki' means 'They are pretty'.
- 'ka ku pa pu' means 'We are not happy'.

1. Statement II alone is sufficient, while statement I alone is not sufficient.
2. Both statements I and II together are not sufficient to answer the question
3. Statement I alone is sufficient, while statement II alone is not sufficient
4. Either statement I alone or statement II alone is sufficient,

Answer:-Both statements I and II together are not sufficient to answer the question

Question 3 : Identify the letter cluster that does not belong to the following series:

BDF, HKN, QSU, WZC, FHJ, LOR, TVX

1. FHJ
2. LOR
3. WZC
4. TVX

Answer:- TVX

Question 4 : Identify the letter cluster that does not belong to the following series:

1. PFDNYXJMP: NDFPYXPMJ
2. BNGKSTEUS: KGNBSUTSE
3. YKDZPDXGN: ZDKYPXNDG
4. QONXIWPNM: XNQOIWPNM
5. MEIFUPTWE: FIEMUTWPE

1. b, d, and e
2. a, b, and d
3. b, c, and e
4. a, b, and c

Answer:- a,b and d

Question 5 : In a certain code language,

'A+ B' means 'A is the father of B',

'A* B' means 'B is the brother of A',

'A % B' means 'B is the mother of A',

'A $ B' means 'B is the sister of A',

'A # B' means 'B is the husband of A

Which of the signs would sequentially replace * in the following expression to establish that 'P' is the brother in law of S'? P*Q*R*S

1. +,%,$
2. *,$,#
3. #,+,$
4. +,$,#

Answer: +, %, $

Question 6 : A question is followed by 3 statements. Find how many statements is/are sufficient/necessary to answer the question.

Question: A businessman divided an amount of 229 among his three sons Anand, Barun, and Charan, What is the difference between the shares of Anand and Barun.

Statements

1. The share of Charan is 40% less than the sum of the shares of Anand and Barun
2. The difference between Barun's share and Charan's share is Rs 4.
3. The share of Charan is greater than the share of Barun
4. Either statements I and II together or statements II and III together are sufficient
5. Only statements and II together are sufficient
6. Only statement I is sufficient.
7. All statements I, II and III together are necessary

Answer: All statements I, II and III together are necessary

Question 7 : Statement : 10 minutes of Surya Namaskar daily is highly beneficial for the body and mind.

Conclusions:

1. Moderate level of physical activity is recommended for leading a healthy life.

Ii. All persons involved in sedentary jobs shall definitely suffer from medical issues.

1. Both conclusions I and II follow
2. Only conclusion I follows
3. Neither conclusion I nor II follows
4. Only conclusion Il follows

Answer: Only conclusion I follows

Question 8 : A medico-legal team consisting six members has to be formed by selecting expert members from among six law experts A, B, C, D, E, F and five medical experts G, H, J, K and L.

The team must meet the following criteria:-

1. There must be at least three medical experts in the team.
2. If B is selcted, J must also be selected

III. If F and K are selected in the team. C or D cannot be selected and vice-versa.

1. E and L have to be selected together.
2. D and J cannot come together in the team,
3. A can be selected only if K is also selected and vice-versa.

Which of the following options can form the medico-legal team?

1. FGJBDH
2. LAJKBE
3. BEAKFJ
4. DOJEHL

Answer: LAJKBE

Advanced Coding

Question 1-

You are given an array A of size N. Your friend gave an amazing task for you.

Your friend likes one type of Sequence. So, he called that type of sequence a fair sequence.

You should select a fair sequence of maximum length from an array.

Here a fair sequence is nothing but you have to select elements in a pattern like positive element, negative element, positive element… (negative element, positive element, negative element, to form sequence

Your task is to print the maximum sum of elements possible by selecting a fair subsequence with maximum length.

Ex: If art A = [-1, 18, 13, 18, 2, 16-1, -213, 11]. Here your minimum length can be which subsequences -7 -2, 7,-1, 11. Sum is 27,-1, is the maximums Your friend also kept a timer of 15 min. If you solve

Your task is to print the maximum sum of elements possible by selecting a fair subsequence with maximum length.

Ex: If array A = [-1, 18, 13, 18, 2, 16-1, -213, 11]. Here your minimum length can be 6. The fair subsequence is -1, -18,-7, -2, 7,-1, 11. The Sum is 32 which is the maximum possible.

Your friend also kept a timer of 15 min. You will win, will you be able to do it?

NOTE: You should select the elements in a fair sequence only.

Example – 1:

- Input:
  5 – N (Number of elements in an array)
  21 12 13 -21 -2 – Array A consists of N elements
- Output:
  19
- Explanation:
  Here you can select 21, -2 subsequences of maximum length 2. The sum is 19 which is the maximum possible for a fair subsequence of length 2.

Example – 2:

- Input:
  -153 -689
- Output:
  -153

Explanation:

Here you can select 21, -2 subsequences of maximum length 2. The sum is 19 which is the maximum possible for a fair subsequence of length 2.

Python

```python
def fun(arr, n):
  ans = []
  t = 1
  if arr[0] > 0:
    t = 0
  i = 0
  while i < n:
    if t == 0:
      j = i
      while j < n:
        if arr[j] > 0:
          j += 1
        else:
          break
      ans.append(max(arr[i:j]))
      i = j
      t = 1
    else:
      j = i
      while j < n:
        if arr[j] < 0:
          j += 1
        else:
          break
      ans.append(max(arr[i:j]))
      i = j
      t = 0
  return sum(ans)


n = int(input())
ar = list(map(int, input().split()))
print(fun(ar, n))
```

Question 2

Vijay, an industrialist, recently opened a fuel industry. There are N numbers of different categories of fuel and each fuel is stored in a fixed site of container. Size of

the container can vary from fuel to fuel. Hari, a fuel merchant, visited Vijay's aldustry and he wanted to purchase fuels for his shop. Hari has a limited amount of money (K) and wants to buy fuel. Hari will not buy more than one container of any fuel category. Hari wants to maximize the overall volume i.e., sum of volume of fuels he buys. Your task is to get the maximum overall volume of fuels which Hari can purchase.

Given the number of categories of fuels (N), money units (K) price of container of each category of fuel and volume contained in container for each category.

NOTE: Quantity (volume) of container will be given in the same order as volume of price.

Hint: Break problems into parts and get the overall volume for smaller N and smaller K.

Example 1:

- **Input:**
  5, 105 -> N = 5, K=105
  10 10 40 50 90 -> price of container of each fuel category.
  10 20 20 50 150 -> volume of container of each fuel Category.
- **Output:**
  170
- **Explanation:**
  There are 5 fuel categories and Hani has 105 units of $ money. To have maximum fuel volume Hari can buy oil at 2nd and 5th position. Total cost= 10 + 90 = 100 and it is less than 105(money which Hari has). Total volume = 20 + 150 = 170. It's the max volume Hari can get; no other combination can get more volume than this.

Example 2:

- **Input:**
  5 100 -> N = 5, K=100
  10 20 30 40 100 -> price of container of each fuel category.
  10 20 30 40 100 -> volume of container of each fuel
- **Output:**
  100

Explanation:

Hari can buy either 1st four categories or only 5th category of fuel. In either case the

total amount will be 100 and volume will be 100 (which is the maximum volume possible).

Python

```python
def getMaxVol(money, price, volume, n):
    K = []
    for i in range(n + 1):
        temp = []
        for j in range(money + 1):
            temp.append(0)
        K.append(temp)
    for i in range(n + 1):
        for m in range(money + 1):
            if i == 0 or m == 0:
                K[i][m] = 0
            elif price[i - 1] <= m:
                K[i][m] = max(volume[i - 1] + K[i - 1][m - price[i - 1]], K[i - 1][m])
            else:
                K[i][m] = K[i - 1][m]
    return K[n][money]


N, money = map(int, input().split())
price = list(map(int, input().split()))
volume = list(map(int, input().split()))
print(getMaxVol(money, price, volume, len(volume)))
```

Advanced Quantitative

Question 1: Three persons Pardhu, Qureshi and Rajesh independently try to hit a target. If the probabilities of them hitting the target are 1/4, 2/3 and 5/12, respectively, then the probability that the target is hit by Qureshi or Rajesh but Not by Pardhu is:

1. $^{7}/_{48}$
2. $^{29}/_{48}$
3. $^{5}/_{48}$
4. $^{5}/_{24}$

Answer: $^{29}/_{48}$

Question 2: Three plane mirrors of size 10cm x 3cm are used to construct a kaleidoscope by attaching each pair of mirrors along their lengths. What is the total volume occupied by the kaleidoscope?

1. $45\sqrt{2}/_{3}$cm³
2. $45\sqrt{3}/_{2}$cm³
3. $45/_{2}$cm³
4. $45\sqrt{3}$cm³

Answer: $45\sqrt{3}/_{2}$

Question 3: If α and β are the roots of the quadratic equation $x2+x+2=0$, and if α + β = 1, then which of the following pairs represents the roots (α, β)?

- ±1, ±1
- ±3, ±3
- ±4, ±2
- ±2, ±2

Answer: ±3, ±3

Question 4: There are 10 men and 11 women in an office. In how many ways can a team of 5 men and 5 women be selected?

Answer: 1,16,424

Question 5: The sum of two numbers is 27 and the product is 182. The large number is

Answer: 14

Question 6: Number of employees working in various departments of ABC company limited over 6 years?

Departments (Number of employees)

Years	Production	Marketing	Corporate	Accounts	Research
2011	180	35	45	40	80
2012	215	36	40	60	71
2013	420	62	25	85	70
2014	460	70	35	95	75
2015	525	75	36	125	78
2016	510	70	38	120	80

In which department did the number of employees (approximately) remain the same?

Options

1. Production
2. Accounts
3. Research
4. Marketing

Answer – Research

Question 7: Number of employees working in various departments of ABC company limited over 6 years?

Departments (Number of employees)

Years	Production	Marketing	Corporate	Accounts	Research
2011	180	35	45	40	80
2012	215	36	40	60	71
2013	420	62	25	85	70
2014	460	70	35	95	75
2015	525	75	36	125	78
2016	510	70	38	120	80

In which year the total number of employees reached approximately twice the total number of employees than the company had in the year 2011?

Options

1. 2014
2. 2012
3. 2016
4. 2013

Answer: 2014

Question 8: If the inequality $|x-3|-2|x-3|-3\leq0$, then the range of x is

1. (0,1] U [5,6)
2. (0,1] U [4,5)
3. (-1,1) U (2,3)

4. [0,1] U [5,6]

Answer: [0,1] U [5,6]

Question 9: If the α and β are the roots of a monic quadratic polynomial such that $\alpha\beta + \beta\alpha = 2$ and $\alpha^3 + \alpha^2\beta + \alpha\beta^2 - \beta^3 = 54$.

Then what is the constant term of the equation

Answer: $\alpha = \beta = 3$

Question 10: Number of employees working in various departments of ABC company limited over 6 years?

Departments (Nmber of employees)

Years	Production	Marketing	Corporate	Accounts	Research
2011	180	35	45	40	80
2012	215	36	40	60	71
2013	420	62	25	85	70
2014	460	70	35	95	75
2015	525	75	36	125	78
2016	510	70	38	120	80

Which department has less than 9% employees through all the 6 years?

Options

1. Production
2. Marketing
3. Research
4. Accounts

Answer: Marketing

Advanced Reasoning

Question 1 : Mohan and three of his friends were talking with their teacher on an audio conference phone call. During the conversation the Teacher shared a phone number but none of the friends could note it down. On completion of the call all the four friends tried to recall the mobile number. All the friends agree that the first four digits are 9951. Three of them agree that the fifth and sixth digits are 92, and three agree that the seventh and eighth digits are 27, whereas the last set of the digits are 72 the mobile number 9951922727 correct? (Answer in YES NO)

Answer – NO

Question 2 : A question is given, followed by two statements labelled I and II. Identify which of the statements is/are sufficient necessary to answer the question.

Question:

In a food court, a certain number of persons were sitting in a row facing north, to have their lunch. How many persons are there in the row?

Statements:

1. Manini is 11th from the left end of the row and 7th to the left of Divya.
2. Prerana is 15th from the right end of the row and 9th to the right of Divya.

1. Neither data in statement I nor II is sufficient
2. Data in statement II alone is sufficient
3. Data in statement I alone is sufficient
4. Data in both statements I and II together are necessary

Answer – Data in both statements I and II together are necessary

Question 3 : In a certain code language, MEHAK is written as 45812 How ARTIT be written in that lang rage?

Enter the answer in the space provided on the screen. Ansiver should be in whole numbers without any symbols (E g. %, kms, etc).

Answer – 19292.

Question 4 : Study the given information and answer the question that fos

1. Kavish, Raman and Harsh are creative.
2. ii Kavish, Preet and Joy are humble
3. iii. Preet, Harsh and Joy are independent
4. Kavish, Raman and Joy are courageous.

Which of the following persons is neither humble nor courageous?

1. Raman
2. Harsh
3. Kavish
4. Preet

Answer – Harsh is neither humble nor courageous.

Question 5 : Eight friends namely-H, I, J, K, L, M, N and O-are sitting in a straight line equidistant from each other (but not necessarily in the same order) Some of them are facing north, while some are facing south. M sits third to the right of H. M sits at one of the extreme ends. L sits third to the left of H. Both the immediate neighbours of J face north. N is not an immediate neighbour of H. The persons sitting at the extreme ends face the same direction. Both the immediate neighbours of H face the direction opposite to that of M. Both the immediate neighbours of O face opposite directions. K is one of the immediate neighbors of L and is facing north, I sits exactly between J and M. Not more than four persons are facing north L sits to the immediate right of K. How many persons are sitting between I and O?

Answer

Question 6 : Animals are sitting in a row for food, Ship is sitting next to the puma but not the tiger,Kishu is sitting next to rabbit, who is sitting to the extreme left and the tiger is not sitting next to kishu.

Who is sitting next to tiger?

Answer: Puma is sitting next to tiger.

Question 7 : Select the option that is true regarding the following two statements labeled Assertion (A) and Reason (R)

Assertion(A): It has been observed that teachers in government primary school teach very carefully.

Reason (R): The government provides good salary to the government primary school teachers.

1. Both (A) and (R) are true and (R) is the correct explanation of (A).
2. A is true but R is false.
3. A is false but R is true.
4. Both (A) and (R) are true but (R) is not the correct explanation of (A).

Answer – Both (A) and (R) are true and (R) is the correct explanation of (A).

Question 8 : In a certain code language, REFULGENT is coded as GFSHMVUOF and STORMY is coded as PUTZNS. What will PATRIOTIC will be coded as?

1. UBPJDJQU
2. BQUSJPDUJ
3. DJUPJSUBQ
4. UBQPJSDJU

Answer: UBQPJSDJU

TCS NQT 21 August 2023 - Slot 1

Numerical Ability

Question 1 : What is the value of the reciprocal of $(123+ 13-103/64)^{1/6}$?

1. 1/3
2. 3/2
3. 2/3
4. 3

Answer: 2/3

Question 2 : An environmentalist began planting Khejri and Babul trees in the desert areas of Rajasthan. The HCF and LCM of the numbers of Khejri trees planted and the number of Babul Trees planted are 7 and 245, respectively. What is the difference between the number of Khejri and the number of Babul Trees if the number of Khejri trees planted is 49?

1. 14
2. 25
3. 18
4. 35

Answer: 14

Question 3 : If $x/y = (a^2 + b^2)/(a^2 - b^2)$, consider a is the first number and b is the second number, AM = Arithmetic Mean, GM = Geometric Mean, HM = Harmonic Mean, then $(x^2 + y^2)/(x^2 - y^2)$=?

1. 1/HM
2. 1/AM
3. HM/GM
4. GM/AM

Answer: 1/HM

Question 4 : Two successive discounts are given on an article. The marked price of an article is ₹550 which is available at ₹451 if the first discount is 10%. What is the second discount?

1. 9.09%
2. 8.09%
3. 10.1%
4. 11.09%

Answer: 8.09%

Question 5 : A person lent a personal loan at 8.5% per annum simple interest in 20 years, the interest amount to Rs. 6,300 more than the loan lent. What was the sum lent?

1. Rs 8,500
2. Rs 10,000
3. Rs 12,000
4. Rs 9,000

Answer: Rs 9000

Question 6 : There are three taps A, B and C in the tank. These taps can fill the tank in 10 hours, 20 hours and 25 hours respectively. At first, all three taps are opened simultaneously. After 2 hours, tap C is closed and A and B keep running. After 4 hours, tap B is also closed. The remaining tank is filled by Tap A alone. Find the percentage of the work done by Tap A itself.

1. 32%
2. 75%
3. 52%
4. 72%

Answer: 72%

Question 7 : The length of a rectangle is increased by $33\frac{1}{3}$%. By what percent must the breadth be decreased so as to maintain its area the same?

1. 20%
2. 30%
3. 25%
4. 24%

Answer: 25%

Question 8 : If x = 4, y = 3 and it is given that x and y are more than their reciprocals by X and Y percent, respectively, then by how much percent (correct up to two decimal places) is X more or less than Y?

1. More by 5.18%
2. Less by 5.47%
3. More by 5.47%
4. Less by 5.18%

Answer: More by 5.47%

Question 9 : Find the approximate value of the variance of the following frequency distribution:-

C.I.	2-4	4-6	6-8	8-10
Frequency	3	7	2	1

1. 2.78
2. 2.65
3. 2.83
4. 2.56

Answer: 2.83

Question 10 : In How many years will a sum of ₹1,600 amount to ₹2,116 at 15% compound interest?

1. 4
2. 1
3. 3
4. 2

Answer: 2 years

Question 11 : The ratio of milk and water in 60 litres of a mixture is 7:5. To increase the quality of milk, how much milk is to be added to make their ratio 7:2?

1. $52\frac{1}{2}$litres
2. $52\frac{1}{3}$litres
3. $50\frac{1}{2}$liters
4. $50\frac{1}{3}$liters

Answer: 52.5 liters

Question 12 : For a group of eight students, the average marks secured in Mathematics by seven of them was 82, while the eighth had scored 14 less than the overall average marks. What was the total marks scored by eight students?

1. 616
2. 600
3. 640
4. 656

Answer: 640

Question 13 : A and B run at a speed of 8km/h and 12km/h. If they run a circular track of length 6 km, determine the number of rounds after which B meets A.

1. 4
2. 3
3. 5
4. 2

Answer: 3

Question 14 : A boy walking at a rate of 9km/h crosses a bridge in 32 minutes. What is the length of bridge in meters?

1. 4160

2. 4800
  3. 4000
  4. 4480

Answer: 4800

Question 15 : The monthly income of Adit and Kavya is the same. Adit saved 6623% of his monthly income and Kavya spends 37.5% of her monthly income. The expenditure of Adit is approximately how much percent less than the savings of Kavya?

Answer – 46.67%

Question 16 : The average physics marks of two sections I and II is 64. The average marks of section I is 61 and section II is _____. Find the ratio of the number of students in section II to section I.

  1. 3 : 4
  2. 3 : 5
  3. 1 : 4
  4. 3 : 2

Question 17 : Three containers have a capacity of ratio of 7:5:1. All three have a ratio of water and milk 5:3, 4:3 and 7:4 respectively. We take 1/3 part of the first container, 1/2 of the second and 1/7 of the third container and mixed them into a new container. The percentage (approximately) of water in the new container is equal to:

  1. 30%
  2. 59%
  3. 28%
  4. 32%

Answer: 32%

Question 18 : Roohi sells her radio at Rs 1952 and bears a loss of 39%. She sold her phone for Rs 8, 777 and gained a profit of 31%. She further sold her TV for Rs. 13,104 and bears a loss of 22%. Now she wanted to sell her LCD which has a cost price of Rs. 45, 872 so that she could attain overall no profit and no loss situation, then what percentage of profit does she needs to make by selling the LCD.

1. 5.25%
2. 4.25%
3. 3.25%
4. 6.25%

Answer: 6.25%

Question 19 : Study the following table and answer the questions.

The table gives the number of students who joined and left the school at the beginning of year for six years from 2016 to 2022.

Year	Number of Students Joined	Number of students left
2016	350	250
2017	400	200
2018	350	150
2019	350	250
2020	450	340
2021	300	400
2022	350	250

If the average students for the next academic year 2023 is 410 and the average students who left the school is 290. Find the number of newly joined students:-

Answer –

Verbal Ability

Question 1 : Each sentence contains four underlined phrases. Three of these phrases have been correctly used, and one has been correctly used, and one has

been incorrectly used. Choose the phrase (from options A-D) which best replaces the wrong phrase in the sentence.

Of all the members of the Elwel family, Aunt Mathilda was certainly the most insignificant, living like an old maid who was expected to taking up herself tedious and uninteresting household chores.

1. To take upon
2. Tedious but uninteresting
3. Among all the member
4. Much insignificant

Answer – to take upon

Question 2 : Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given here.

My sister was _____ after work, she tried _____ by going for a walk. After the walk, she felt fresh as a daisy. Once she was from her walk, she felt famished and started _____. She used to eat fast food for dinner, but then has been successful in _____ and preferred to fix something herself.

1. Eating like a horse
2. Taking a breather
3. Kicking that habit
4. Down for the count

1. 4213
2. 2134
3. 1243
4. 2143

Answer – 4213

Question 3 : Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. It has begun moving below ground, by shifting its district cooling system, a water reclamation system, and ammunition for its armed forces.
2. Singapore has reformed its land laws so that homeowners own only the underground space up to their basement.
3. Singapore has long been reclaiming land from the sea but that's proving increasingly unsustainable with global climate change and sea level rise.
4. This allows the government to use the deeper land without facing private property issues.

1. 3, 2, 1, 4
2. 2, 1, 3, 4
3. 2, 3, 4, 1
4. 3, 1, 2, 4

Answer – 3214

Question 4 : Choose the correct meaning for the underlined idiom in the sentence.

Everyone appreciated the fact that the teacher cut the offending student some slack

1. Be sharp
2. Punish appropriately
3. Not judge too harshly
4. Not allow leniency

Answer – C

Question 5 : Sadhguru, the famous mystic, made several attempts to improve the nation's rivers a few years back. The government of India (1) _____ some of his ideas he had incorporated in the union budget. However, his solutions were not received well in (2) _____. After bearing these criticisms he decided not to provide any more solutions but to focus on the problem itself. His strongest message?. We cannot (3) _____ to the fact that soil is being rejected, whether it is concrete paving, denuding vegetation, use of chemicals etc. The soil is not being given the respect it deserves. He has now (4) _____ of the politicians, the

bureaucrats and the technocrats to find and execute solutions, if the mystics of their job and things may become **missing .** Of what good is the soul without the soul.

1. 1. Reflected upon 2. certain quarters 3. Turn a blind eye 4 put the ball in the court
2. 1. Reflected upon 2. A chunk of 3. Turned the other way 4. Gave up on
3. 1. Reflected upon 2. A cross section 3. Turned the other way 4. Given up
4. 1. Thought aloud 2. Certain section 3. Turn a deaf ear 4. Taken a back seat

Answer:- 1. Reflected upon 2. certain quarters 3. Turn a blind eye 4 put the ball in the court

Question 6 : Sentences of paragraph 1, 2, 3 and 4 are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. The different types of employees are unevenly distributed across different industries, but teams are likelier to perform well if they blend types of employees.
2. The idea of a purposeful employee conjures up images of someone who looks for a meaningful job but this is not the only way to think about purpose-driven employees.
3. Some are fired by the prospect of learning new skills or of deepening their expertise or working at jobs that with specific responsibilities, such as the well being of people.
4. Only 9% of employees claim that their purpose was fulfilled by their job.

1. 2, 4, 3, 1
2. 4, 3, 1, 2
3. 2, 1, 3, 4
4. 4, 1, 2, 3

Answer – 2431

Question 7 : Sentences of paragraph 1, 2, 3 and 4 are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. Folk etymology has nothing on folk entomology to the public, bug is synonymous with insect, to an entomologist, a bug is more specifically a member of the insect order Hemiptera ("half-winged"), which includes bed bugs
2. The Mark II "bug." on the other wing, was a moth, part of the insect order Lepidoptera ('scale-winged").

3. When a team of engineers working on Harvard University's Mark II computer found a bug gumming up the works, the word "bug" became a standard part of the programmer's lexicon – or, did it?
4. The bug is that "bug" in this sense goes back to the late nineteenth century, an expression for solving a difficulty, and implying that some imaginary insect had secreted itself inside and is causing all the trouble
5. Etymological folklore is remarkably persistent and fanciful word-stories can overcome lack of documentation, lack of plausibility, and even outright disproof, to become popular legend.

ANSWER – CDEAB

Question 8 : For the four-sentence ($1 to $4) paragraph below, sentences $1 and $4 are given. From the options P, Q, R, and S choose the appropriate sentences 2 and 3, respectively.

$1. If you own a dog or have a friend who owns a dog-you probably know that dogs can be trained to do things like sit, beg, rollover, and play dead.

$2.

$3.

S4. In general, learned behavior is one that an organism develops as a result of experience.

1. Specifically, a bell was rung at the same time the dog received food
2. In fact, the capability of dogs is much more and a lot of their behavior can be learned.
3. And, these are just some examples of learned behaviors, and dogs can be capable of significant learning.
4. However, habituation is a simple form of learning.

1. P and S
2. R and S
3. S and Q
4. R and Q

Answer – R and Q

Question 9 : Choose the appropriate idioms to complete the given sentences

Dew tried to _____Yesterday at a Japanese place but she was stopped by the waiters, guess she was _____ yesterday.

1. Whet her appetite , up a creek without a paddle
2. whet her appetite , snowed under
3. dine and dash, snowed under
4. dine and dash , up a creek without a paddle

Answer – D

Question 10 : Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option has an error

Dear Richa Ma'am: I am still waiting for your reply to my mail.

1. I am still waiting
2. To my mail
3. For your reply
4. Dear Richa Ma'am:

Answer – D

Question 11 : Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option has an error

Some four million Ukrainians had fled the country since the Russia invasion began in February.

1. In February
2. Since the Russian invasion began
3. Had fled the country
4. Some four million Ukrainians

Answer – had fled the country

Question 12 : Read the following passage and fill in the blanks by selecting the most appropriate option.

In the 19 century, a country needed youth to operate its factories, consume (1)_____ they churned out and constitute a fighting (2)_____ in times of war. That became less true over the 20th century, and in the 21st it bears very little (3)_____ to reality. More and more of the jobs that require stamina and strength including fighting-are done by machines, while a nation's (4)_____ are consumed globally.

Blank 1. (A) that (B) because (C) what (D) so that

Blank 2. (A) patrol (B) guard (C) power (D) force

Blank 3. (A) relation (B) connection (C) affinity (D) kinship

Blank 4. (A) stocks (B) products (C) outputs (D) commodities

1. (1)-C (2)-B, (3)-D. (4)-D
2. (1)-D, (2)-A, (3)-B, (4)-C
3. (1)-B. (2)-D. (3)-C, (4)-A
4. (1)-C, (2)-D. (3)-A, (4)-B

Answer – (1)-C, (2)-D. (3)-A, (4)-B

Question 13 : Rakesh is a person who tries to do the impossible, usually to help others , while putting oneself in danger.

1. Plebeian
2. Quixotic
3. Pragmatist
4. Raconteur

Answer – none of the words match the meaning.

Reasoning Ability

Question 1.Identify the letter cluster that does not belong to the given series:-

DE19, FH30, IL45, MQ64, RX63, XD62

1. RX63
2. IL45
3. XD62
4. MQ64

Ans. RX63

Question 2. Identify the letter cluster that does not belong to the given series:-

PZLP, QWMN, RTNJ, SQOG, TNPD

Ans. QWMN

Enter the answer in the space provided on the screen. Answer should be in whole numbers without any symbol (XY, %, etc)

Question 3. Four letter – cluster pairs have been given, out of which there are alike in some manner and one is different. Select the one that is different.

1. SUYEMW : CAYWQI
2. QSWAGN : AWTXDH
3. CEIOWG : ASMKIG
4. DFJPXH : BTNLJH

Answer: QSWAGN : AWTXDH

Question 4. A statement is given followed by two courses of action numbered I and IL Assuming that everything in the statement is true, decide wc of the logically follow(s).

Statement:

From last few years people are investing much in cryptocurrency and losing a lot of money. People invest after seeing advertisements of celebrities and in the hope of getting rich quickly.

Courses of Action:

1. The government should organise awareness campaign.

2. People should make themselves more aware by researching about the cryptocurrency and its fluctuation in market.

1. Only course of action follows
2. Only course of action follows
3. Both courses of action I and II follow
4. Neither course of action I nor II follows

Answer: C

Question 5. Study the given information carefully and answer the question that follows

In M.A. Social Work final year there are five papers of 100 marks each. Following are the passing criteria in each paper and the course.

A student must :-

1. a) secure at least 40 marks in each paper except paper V, where passing marks are 50
2. b) pass paper V and at least any 2 other papers to appear (re-appear) again in subsequent examination, else he/she will be declared fail
3. c) Up to 2 grace marks each may be given in any of the two papers or maximum 4 marks in any one paper for passing the course
4. d) Grace marks equivalent of 2% of the total final year course marks may be given to a student to enable him acquire 1st division(60%) or distinction (70%)

Based on the criteria given above and without assuming any additional information, take a decision about the result of the following candidates.

Geetansh appeared for the M.A. Social Work final year examination in June 2021 and obtained 56, 37.52, 43, and 46 marks in paper I, II, III, IV and V respectively.

1. He must be declared fail in the course
2. He must be declared pass in the course.
3. He must be asked to re-appear for paper I.
4. He must be asked to re-appear for paper II and V.

Answer : He must be declared fail in the course

Question 6.

- If A + B means A is the father of B
- IF A * B means A is the son-in-law of B
- If A / B means B is the brother of A
- If A $ B means B is the sister of A
- If A # B means B is the mother of AWhich two signs should replace the Question mark (?) in the following expression in proper sequence to establish that E is the brother-in-law of J?

D * E + F ? G # H ? J

1. $ and /
2. $ and #
3. # and /
4. / and #

Answer – $ and /

Question 7: Two cars started from the same point and at the same time. The first one is going in the east direction at 10 KMPH and the second one is going towards the north direction at a speed of 24 KMPH. How far will the two cars will be from each other after 3 hrs

1. 68 kms
2. 72 kms
3. 78 kms
4. 98 km

Answer : 78 kms

Question 8: Statement:

"We need to recruit more skilled and qualified math facilitators for grade XI and XII in our school". The director inform the school staff during staff meeting

Assumptions:

1. Candidates are available for expected post.
2. The math facilitators who are teaching to grade XI and XII at present are not skilled.

Options

1. Both assumptions I and II are implicit.
2. Neither assumptions I nor II is implicit.
3. Only Assumption I is implicit
4. Only assumption II is implicit

5. Only assumption II is implicit

Answer : Only assumption II is implicit

Question 9:

1. If A + B means A is the WIFE of B
2. IF A − B means A is the mother of B
3. If A * B means A is the son of B
4. If A / B means A is the BROTHER of B

Based on the above how is N related to Q, if M -Q-L/J *T *K + N?

1. Brother
2. Father in law
3. Brother in law
4. Father

Answer : Father in law is the

Question 10 : Following are the criteria required to be fullfiled for getting admission to a college for MSC Bio Informatics.

1. The candidate must have scored more than 70% marks in the intermediate science stream
2. The candidate must possess a graduation degree in Zoology, Botany, Mathematics or Computer Science with minimum of 65% marks.
3. The candidate should have cleared the MSc entrance exam with at least 75% marks and interview with atleast 65% marks.
4. The candidate should be at least 21 years and at most 28 years as of 1 July 2022. In case a candidate fullfills all criteria except the required percentage as mentioned in the criteria but has scored 75% and above marks in the personal interview then the case is to be referred to the Director of the college.

In case a candidate fulfils all criteria except the maximum age criteria as mentioned in IV but belongs to SC/ST community, the case is to be referred to the SC/ST cell for consideration. Refer to the details of a candidate provided below and the four options that follow. Select the appropriate option that applies to the person's candidature.

Romesh Kharwar passed his B.Sc. computer science on in 2018 when he was 19 years of age. At the age of 16 years, he topped his state board for the Intermediate science examination and secured more than 90% marks. He has obtained one-sixth

of the five hundred fifty marks, one-tenth of seven hundred sixty five and 5/6th of ninety-one in his B.Sc, entrance exam and interview respectively. He belongs to an ST community.

1. The case is to be referred to the Director of the college
2. The case is to be referred to the SC/ST cell for consideration
3. The candidate is to be selected
4. The candidate is to be rejected

Answer : The candidate is to be selected

Advanced Coding

Question 1

This vacation you went to visit the golden house. There are N rooms in this golden house and its owner needs someone to take care of the management of this house. As you have been unemployed for a long time, you are interested in this job. Owner of this house wanted an intelligent manager for this role, so he created one puzzle within that golden house. The person who will be able to solve that puzzle will be the manager of the golden house.

Owner of the house kept some numbers of golden coins in each room. You have to choose two rooms, one from where you will enter and other one from where you will exit. From any room either you can exit, or you can move to the next room. While visiting any room you will collect all the gold coins, and if you enter any room then you can't skip collecting gold coins from that room, you have to take those coins. Owner wants to have exactly K coins, when you exit the room, he guarantees that there will be at least one possible solution for this puzzle.

Given number of rooms (N), and number of gold coins in N rooms. You have to find room numbers from where you will start and from where you will exit. If there are more than one solution possible, then you have to provide a solution with a smaller starting room number.
You can assume that room numbers will start from 1 and end at N.

Hint: Find a continuous subsequence whose sum will be exactly equal to K.

Example 1:

- **Input:**
  10 15 -> N =10, K = 15
  5 3 7 14 18 1 18 4 8 3 -> Number of gold coins in each room.
- **Output:**
  1 3

Explanation: There are ten rooms in the house. You want to have the Total sum of gold coins in continuous sequence of room to be 15 There are two solutions from this i.e. [1, 3] and [8, 10] then the solution with a smaller starting room number will be printed hence [1, 3] is output.

Python

```python
def fun(arr, n):
  ans = []
  t = 1
  if arr[0] > 0:
    t = 0
  i = 0
  while i < n:
    if t == 0:
      j = i
      while j < n:
        if arr[j] > 0:
          j += 1
        else:
          break
      ans.append(max(arr[i:j]))
      i = j
      t = 1
    else:
      j = i
      while j < n:
        if arr[j] < 0:
          j += 1
        else:
          break
      ans.append(max(arr[i:j]))
      i = j
      t = 0
  return sum(ans)


n = int(input())
ar = list(map(int, input().split()))
print(fun(ar, n))
```

Telegram: @PLACEMENTLELO

Question 2

Bob is going to bet today on horse riding. There are N horses listed in a sequence of 1 to N.

The probability of winning of each horse is different so the prices for making a bet on the horses are not the same. There is no limit on the number of horses on which he can bet, but he thinks that if he bets on a continuous sequence of horses then he has a better chance to win. Bob will get K units of money if any horse on which he bets will win. But as the award is only K units so he wants to put money less than K. Bob wants to bet on as many horses as he can. As you are his best friend, he reached out to you for help, can you please find the length of the maximum continuous sequence of horses on which Bob can make a bet, and remember he will invest money less than K units. If there are more than one possible combinations, Bob will bet randomly on any one of them.

Given the number of horses(N), reward money(K), and price of betting on N horses in order.

Hint: For each starting index of a horse, its end index in sequences will be equal to or greater than the end index of the previous starting index.

Example 1:

- **Input:**
  90 100 -> N = 10, K=100
  30 40 50 20 20 10 90 10 10 10 -> Price to make bet on each horse in order
- **Output:**
  3
- **Explanation:**
  There are 10 horses, and the reward money is 100. So, Bob will put money less than 100. There are two possible o sequences of length three whose total money for betting is less than 100, i.e. [50 20 20] (sum is 90) and [10 10 10] (sum is 30). Bob will choose randomly one sequence from these two. As none of the other sequences with length greater than 3 will have a price less than 100 so the answer will be 3.

Example 2:

- **Input:**
  10 100 -> N = 10, K=100
  10 90 80 20 90 60 40 60 70 75 -> Price to make bet on each horse in order

- **Output:**
  1

- **Explanation:**
  There are no two consecutive horses for which the sum of price is less than 100. So, Bob will choose randomly any one horse. And the max length of the sequence will be 1.

Constraints:

- 2<=N<=105
- 1<= K<=109
- 1<=A1, A3... AN<=109

The Input format for testing:

The candidate has to write the code to accept 2 inputs.

- **First Input:** It will contain two integer N (number of horses) and K (reward money)
- **Second Input:** It will contain N integers, each separated

Python

```python
def fun(n, k, arr):
  ans = 0
  if min(arr) < k:
    ans = 1
  for i in range(n - 1):
    for j in range(i + 1, n):
      if sum(arr[i:j]) < k:
        ans = max(ans, j - i)
      else:
        break
  return ans


n, k = map(int, input().split())
arr = list(map(int, input().split()))
print(fun(n, k, arr))
```

Advanced Quantitative

Question 1: The sum of two numbers x and y is 30 and the sum of their reciprocals

1/x and 1/y is 10/63. The numbers are:

1. 9, 21

2. 14, 16
3. 18, 12
4. 17, 13

Answer: 9, 21

Question 2. There are three violet, four yellow and five orange cards. In how many ways these cards can be arranged such that no two violet cards are adjacent to each other?

Answer: 1960; 132

Question 3: Let the expressions be $4 < h < 9$, $7 < g < 13$. If the possible values of g, h lies between a and b, then values a and b satisfies:

1. $a + b = 83$
2. $3a + b = 230$
3. $b - a = 89$
4. $5a + 4b = 327$

Answer: a + b = 83

Question 4 : Study the following table and answer the following questions:

Days	Distance Upstream	Speed of the boat	Speed of the stream	Total Time Taken
Sunday	480	–	6	–
Monday	–	–	–	60
Tuesday	500	–	–	–
Wednesday	–	–	5	–
Thursday	250	10	5	–
Friday	–	14	7	–
Saturday	100	–	–	50

The total time taken by boat on thursday to travel upstream and downstream is:

1. 51.45
2. 66.67
3. 49.85
4. 50.02

Answer: 66.67

Question 5: In reference to above table, on sunday if the difference between the time taken by the boat to go upstream and downstream is 12 hours, then the total time taken by the boat to go upstream and downstream together is: (round to one decimal)

1. 52.3
2. 50.3
3. 45.4
4. 52.5

Answer: 52.5

Question 6: In reference to above table , On saturday, if the ratio of the speed of the stream, to the speed of boat is 2:3 then the difference between the time taken by the boat to go upstream to that of downstream is: (round to one decimal)

1. 6.5 hrs
2. 7.5 hrs
3. 6 hrs
4. 4 hrs '

Answer: 6.5 hrs

Question 7: Suppose **A** and **B** are the roots of the polynomial $2x^2 + 21x - 3 = 0$. Find the value of **1/A + 1/B**

Answer: 7

Question 8: Find the ratio of the area of a rectangular hexagon (a 6-gon with equal sides and equal internal angles) and the area of the circle passing through the vertices of the hexagon.

1. $2\sqrt{3}/\pi$
2. $3\sqrt{3}/\pi$
3. $\sqrt{3}/\pi$
4. $3\sqrt{3}/2\pi$

Answer : 3√3/2π

Question 9: If **x,y** and **z** are the roots of $3x^3 + 2x_2 - 4x - 1$, then find the value of **(1/x + 1/y + 1/z)(x + y + z)**

Answer : 8

Question 10. A pair of dice is rolled together till a sum of either 6 or 7 is obtained. If x denotes the probability that 7 comes before 6, then the value of x is (correct up to four decimal places)

1. 0.7692
2. 0.8571
3. 0.8333
4. 0.5454

Answer: 0.8333

Advanced Reasoning

Question 1. In a certain code language, 'BOARD' is written as '114263'. How will 'DARE' be written in that language?
Enter the answer in the space provided on the screen. Answer should be in whole numbers without any symbols (Eg, %, kms, ms etc)

Answer:

Question 2. Statement is given followed by two courses of action numbered I and II. Assuming that everything in the statement is true…..logically follows.

Statement: The standard of education at most of the government primary schools is pathetic.

Course of Action:

1. The Government should make it mandatory for political leaders to enroll their child in government primary school.
2. Government should improve the student-teacher ratio.

Options

1. Neither course of action I nor II follows
2. Only course of action I follows
3. Both courses of action I and II follow
4. Only course of action II follows

Answer : Only course of action II follows

Question 3. Statement is given followed by two course of action numbered I and II. Assuming that everything in the statement is true.....logically follows.

Statement:- It is observed in some of the government primary schools that the teachers are not very well educated to teach the children.

Course of Action:-

1. The government should remove caste based reservation.
2. The government should conduct training program for the teachers at regular interval of time.

Options

1. Both courses of action I and II follow.
2. Only course of action I follows
3. Only course of action II follows
4. Neither course of action I nor II follows

Answer: Only course of action II follows

Question 4. A questions is given, followed by two statements labelled I and II. Identify which of the statements is/are sufficient to answer the question.

Questions: In a tutorial, there are six students- Phani, Kiran, Jwalith, Ram, Shyam and Tony of different ages. Who is the oldest among them?

Statements:

1. Ram is older than Phani and Jwalith. Ram is younger than Kiran. Shyam is older than only Tony.
2. Shyam is older than Jwalith but younger than Phani. Tony is older than only Ram. Phani is not the oldest.

Options

1. Data either in statement I alone or in statement II alone is sufficient to answer the question.
2. Data in both statements I and II together are not sufficient to answer the question
3. Data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
4. Data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

Answer: Data either in statement I alone or in statement II alone is sufficient to answer the question.

Question 5. In a certain code language, "FONDLE" is coded as "122610303214". How will DERAIL be coded in this language?

1. 28225401210
2. 129118512
3. 141132075
4. 26204381210

Answer:

Question 6. There is an acute need of an architect for the firm of Teena, who is a successful architect practitioner and running a very big architect firm. The candidates should be well-qualified, skilled, highly experienced and reliable. A placement agency has recommended a candidate named Preeti who has recently graduated in architecture from one of the best schools of architecture as the topper of the institute. She is a gold medalist. She has successfully completed her internship for one year and registered with the government. Decide whether the candidate is suitable for teena or no.

Answer : No. (Not experienced)

Question 7. In a corona ration queue, 8 people are standing. Jaffar is standing to the left of Raquib but to the right of Pushpa. Omkar is standing to the right of Naresh and the left of Prithvi.. Sanju is standing to the right of Raquib and to the left of Tanu. Pushpa is first and Prithivi is last in the queue. Who is standing to the left of Naresh?

Answer : Raquib

Question 8. In a theatre, nine person – K, L, M, N, O , P, Q , R, S and T are sitting in a straight row facing the screen (north) but not necessarily in the same orfer . M is fourth to the left of Q. P is fourth to the right of K and second to the left of S, who is fifth to the right of N. L is not an immediate neighbor of either S or M. There are only three persons between O and N. Q is second to the right of K. Who among the following sits to the right of R?

Answer : K

TCS NQT 21 August 2023 - Slot 2

Numerical Ability

Question 1. Prerna was trying to find the number between 6000 and 8000 that are exactly divisible by 40,48,60 and 72 . How many maximum numbers can she find ?

1. 2
2. 3
3. 5
4. 4

Answer: 3

Question 2. The average of a number and its reciprocal is 1. What is the value of the average of the fifth power and the reciprocal of the fifth power of the number?

1. 1
2. 1.5
3. 2.5
4. 2

Answer: 2

Question 3. A passenger travels by car from Delhi to Chandigarh at the speed of 120 km/h, and returns to Delhi on the same route at the speed of 80 km/h. Another passenger travels by train from Chandigarh to Kalka at the speed of 60 km/h in time

t, and from Kalka to Solan at the speed of 40 kmh in time t. What is the average speed of the car and the train, respectively?

1. 96 km/h and 48 km/h
2. 100 km/h and 48 km/h
3. 100 km/h and 50 km/h
4. 96 km/h and 50 km/h

Answer: Option A – 96 kmph and 48 kmph

Question 4. What is the simplified value of $127 + 1216 - 18 + 32 + 42300_{271+2161-81} + 3003_{2+42}$?

1. 1288_{2881}
2. 0
3. 136_{361}
4. 1144_{1441}

Answer: Option B – 0

Question 5. The average value of eleven numbers is what percentage of half the sum of the said numbers?

1. 55%
2. 18.18%
3. 182.82%
4. 550%

Answer: Option B – 18.18%

Question 6. Out of nine persons, eight spent Rs. 30 on their meals, and the ninth spent Rs 30 more than the average of all nine. Find the total money spent on meals.

1. Rs 283.75
2. Rs. 303.75
3. Rs. 273.75
4. Rs. 293.75

Answer: Rs. 303.75

Question 7. The rate of interest on a sum of money is 4.5% per annum for the first two years, 6.25% per annum for the next four years and 8% per annum for the period

beyond 6 years. If the simple interest accrued by the sum for a total period of 9 years is 5394, what is the sum?

1. 9000
2. 9900
3. 9500
4. 9300

Answer – 9300

Question 8. Consider A, B, C, D and E are the integers and given that A = 4B = 16C and 2B = 8D = 20E. Which of the following is NOT an integer?

1. (BD/4, C/2)
2. (C/2, D/5)
3. (A/16, BC/5)
4. (A/20, B/E)

Question 9. Raju and Ramesh working separately can complete a piece of work in 12 days and 16 days, respectively. If they work for a day alternately, with Raju starting, in how many days will the work be completed?

1. 13(2/3) days
2. 14(2/3) days
3. 11(2/9) days
4. 12(5/9) days

Answer: Option – A : 13 ⅔ days

Question 10. The population of a town increased by 5% annually and it's present population is 6,40,000. What will be the population in 2 years time?

1. 7,05,600
2. 7,04,600
3. 7,45,800
4. 7,44,800

Answer – 7,05,600

Question 11. A car starts at a speed of 30km/h. It increases its speed at the rate of 10km/h. The time taken by the car to cover a distance of 375km is:

1. 6 hours
2. 5hours
3. 6.5hours
4. 5.5 hours

Answer – 6.5 hours

Question 12. Four cows are tethered at four corners of a square plot of side 28 meters such that the adjacent cows can just reach one another, this is a small circular pond of area 40m^2 at the center, which is the area that is left ungrazed.

1. 154m^2
2. 128m^2
3. 136m^2
4. 142m^2

Answer: 128 m^2

Question 13. Two persons A and B are walking towards each other on a walking path that is 18km long. A is walking at the rate of 3.0 km/h and B at 4.2 km/h. After how much time will they meet each other?

1. 2 hours 30 minutes
2. 1 hours 50 minutes
3. 2 hours 50 minutes
4. 1 hour 30 minutes.

Answer: Option A – 2hrs 30mins

Question 14. A man invests in three separate schemes for 8 years, 12 years, 14 years at the rates of 8%, 10%, 12%, respectively, at simple interest. He got equal simple interest from each scheme. If the proportion in the principal amounts invested in the different schemes is x : y : z then x + y + z is equal to

Answer: x + y + z = 201

Question 15. Aarna's present age is 559 % more than Ravleen's present age. The age of Ravleen thirteen years ago was 1623 % of the age of Aarna is eleven years hence. Find the present age of Aarna.

Answer: Aarna Age = 144 years.

Reasoning Ability

Question 1. In a certain code language,

'A+B' means 'A is the wife of B.

'A-B' means 'A is the mother of B,

A * B' means 'A is the son of B,

'A/B' means 'A is the father of B,

'A & B' means 'A is the brother of B.

How is N related to P if N & T*G+Q/L-V & P?

1. Maternal uncle
2. Father-in-law
3. Paternal uncle
4. Brother-in-law

Answer a. Maternal Uncle

Question 2. Consider the given statement and decide which of the given assumptions is/are implicit in the statement

Statement:

The National Water Mission was launched in the year 2009. Its main aim is to conserve water and minimize wastage of water traditional water conservation methods

Assumptions:

1. Shortage of water is one of the major problems in India from the past
2. People in rural India are unaware about the methods used for water conservation.

Only assumption is implicit

Both assumptions and II are implicit

Ans.

Question 3.

Identify the letter-cluster that does NOT belong to the following series.

MACKINTOSH, HSOTNIKM, MKNTOSH, SOTNM, NTOS, TS

1. TS
2. MKNTOSH
3. SOTNM
4. NTOS

Ans.

Question 4. In a certain code language,

'A * B' means 'A is the father of B',

'A ÷ B' means 'A is the son of B',

A $ B' means 'B is the mother of A',

A+ B' means 'B is the sister of A'.

A# B' means 'B is the brother of A',

A % B' means 'B is the husband of A

Which of the following statements is true?

1. J÷ K% L#M' means J is the nephew of M.
2. G $ H%V ÷ W means W is the grandfather of G.

3. C# D * E+ F means C is the uncle of F
4. P+Q$R#S' means P is the niece of S

Ans. C# D * E+ F means C is the uncle of F

Question 5: Identify the letter-cluster that does NOT belong to the following series

CRU, GPQ, KNN, OLI, SJE

Answer – KNN

Question 6. Four letter-cluster pairs have been given out oh which three are alike in some manner and one is different. Select the letter-cluster pair that is different.

1. BYDVGTIR : XFADIVKT
2. JOLNVEIR : PNSLGXTK
3. CXPKUFHS : MRZEWHJU
4. YBQJWDOL : LSDAYFQN

Ans. B. JOLNVEIR : PNSLGXTK

Verbal Ability

Question 1. Identify the error in the sentence.

As soon as I reach home, I will check my email and revert back to you.

1. Check my email and
2. As soon as
3. Reach home, I will
4. Revert back to you.

Answer: Reach home, I will

Question 2. Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

The Russian attack on the Ukraine has sparked the largest migration of Europeans from the end of Second World War.

1. The Russian attack on Ukraine
2. The largest migration of Europeans
3. Has sparked
4. From the end of the Second World War

Answer:- From the end of the Second World War

Question 3. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Despite the remarkable progress made by women in politics, there is still a recurring 1. _____ of gender bias in the domain. Society still cannot 2. _____ women in the ruling positions. There is a 3. _____ of men at both party and government levels. Adding to problem is the fact that women still don't 4. _____ pursue politics as a serious career option.

Blank 1. A matter B. subject, C chapter D issue

Blank 2, A accept B, expect C get D welcome

Blank 3, A authority B dominance C prominence D rule

Blank 4, A cordially B promptly C actively D gradually

1. (1)-C, (2)-B, (3)-A, (4)-D
2. (1)-C, (2)-D, (3)-A, (4)-B
3. (1)-D, (2)-A, (3)-B, (4)-C
4. (1)-B, (2)-D, (3)-C, (4)-A

Answer:-(1)-D, (2)-A, (3)-B, (4)-C

Question 4. Select the most appropriate option to fill in the blanks in the given passage.

Love is one of the most profound emotions (1) _____. There are many kinds of love, but many people seek its expression (2) _____ with a compatible partner (or partners).

1. (1) known as human beings (2) for a romantic relationship
2. (1) known in human beings (2) as a romantic relationship
3. (1) known to human beings (2) in a romantic relationship
4. (1) knowed by human beings (2) in a romantic relationship

Answer:- (1) known to human beings (2) in a romantic relationship

Question 5. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank:

There's a part of India where the tiger may still have a fighting chance, the Western Ghats. The big cat (A) _____ free here and in good numbers. Eight tiger reserves in Karnataka, Tamil Nadu and Kerala have been rated 'good' to 'satisfactory' by the Centre's 2009 preliminary status report on the tiger. Experts say this is because of good (B) _____ constant surveillance and monitoring, pro-active local tribes, a (C)_____ scientific community, habitat quality and a excellent (D) _____ base, which means plentiful supplies of

1. (A) moves (B) direction (C) jealous (D) animal
2. (A) roams (B) governance (C) zealous (D)prey
3. (A) hides (B) influence (C) devoted (D) pray
4. (A) hunts (B) command (C) fanatical (D) victim

Answer:- (A) roams (B) governance (C) zealous (D)prey

Question 6. Select the option that can be used as a one-word substitute for underlined part of the sentence.

Ali can <u>endure pain or hardship without complaining</u>. This is a great quality to have in oneself.

1. Sinophile
2. Septuagenarian
3. Sinecure
4. Stoic

Answer: Stoic

Question 7. Select the most appropriate meaning of the underlined idiom in the following sentences:

The scary but exciting sports makes me want to give it a whirl

1. Give it a try
2. Give it a miss
3. Give publicity
4. Avoid

Answer: Give it a try

Question 8. MF Hussain's later work stirred controversy showed he believed in (1) ____. This particular painting made by him before he died was his (2) _____.

1. (1) the noble art (2) swan song
2. (1)art for art's sake (2) siren song
3. (1) the noble art (2) siren song
4. (1)art for art's sake (2) swan song

Answer: (1)art for art's sake (2) siren song

Advanced Quantitative

Question 1. A number is chosen at random from the first 80 natural numbers. What is the probability that the number chosen is the multiple of 3, or 5, or 7.

1. 0.5375
2. 0.7025
3. 0.6845
4. 0.6125

Answer: 0.5375

Question 2. None of the given options

1. None of the above
2. $(61)^{62} > (62)^{61}$
3. $(x + 5)(x + 9)(x + 3)^2 < 0$, then the values of x satisfying the given equation are [-9, -5)
4. $|x - |x - 2|| = 6$, then the number of solutions of the given equation is 2

Answer: $|x - |x - 2|| = 6$, then the number of solutions of the given equation is 2

Question 3. A solid glass cube of side length 2m is placed inside a spherical globe such that each corner of the cube touches the surface of the globe. What is the volume (in cu m) of the region inside the globe but outside the cube?

1. $4(3\pi - 2)$
2. $(3\pi - 2)2^{2(3\pi - 2)}$
3. $(3\pi - 2)$
4. $2(3\pi - 2)$

Answer: $4(3\pi - 2)$

Question 4. If $x + \frac{1}{x} = 3$ then the value of $\sum_{i=1}^{4} \left(x^i + \frac{1}{x^i} \right)$?

Answer: 75

Question 5. Suppose m and n are the number of solution of the equation $x = x^x$ and $x^3 - 3x^2 + 3x - 1 = 0$ Find the value of m and n.

Answer: m = 2, n = 1

Question 6. A password of a length of five digits is to be created using digits out of 1,3,5 and 7 and exactly one digit is to be repeated exactly two times in consecutive

positions only, no other digit repeated. What number of such passwords are possible?

Fill up the blanks

Answer: 24

Question 7. Industry wise deployment of bank credit (in crores)

As on	Total Industry	Dyes	Petro Chemicals
30 march 2018	125647	16425	1864
31 march 2019	153620	19240	2656
29 march 2020	165888	20368	4652
28 march 2021	216522	22450	6258

In which of the following years was the value of * deployment of bank credit for dyes as a percentage of the total deployment greater than 10% ?

1. Only 2019, 2020
2. Only 2018, 2019
3. 2018, 2019, 2020, 2021
4. Only 2020, 2021*

Answer: 2018, 2019, 2020, 2021

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30 march 2018	125647	16425	1864
31 march 2019	153620	19240	2656
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The ratio of the deployment of bank credit to petrochemicals as a percentage of the total bank credit as on 30 March 2018, to the same percentage value as on 28 March 2021 is

1. 1.65: 2.36
2. 1.52: 2.36
3. 1.48: 2.89
4. 1.5: 2.8

Answer: 1.48: 2.89

Advanced Reasoning

Question 1. Question is given followed by two statements labelled I and II. Identify which of the statements is/are sufficient to answer the question.

Questions:_In a refreshment stall six friends – V, W, X, Y , Z and T – were sitting around a circular table facing towards the centre. Who was sitting to the immediate right of T?

Statements:-

1. Z was sitting second to the right of V, who was sitting to the immediate left of X. W was sitting second to the left of X.
2. Y was sitting to the immediate right of Z, who was sitting second to the right of V. W was sitting second to the left of X who is to the immediate left of Z.

1. Data either in statement I or in statement II alone is sufficient to answer the question
2. Data in both statements I and II together are not sufficient to answer the question
3. Data in statement I alone is sufficient to answer the question, while data in statement II alone is not sufficient to answer the question
4. Data in statement II alone is sufficient to answer the question, while data in statement I alone is not sufficient to answer the question.

Answer:- Data in statement II alone is sufficient to answer the question, while data in statement I alone is not sufficient to answer the question

Question 2. In a certain code language NPDH is written as 7824, how will FHLV be written in that language?

Answer: 38611

Question 3.

Statement

Should a huge amount of money be spent on promoting the IPL Cricket series on digital platforms?

Arguments:

Yes, It plays a vital role in attracting more viewers

No, It only leads to wastage of all resources

1. Only Argument I is strong.
2. Only Argument I is strong.
3. Neither argument I nor II is strong
4. Either Argument I or II is strong.

Answer:- Only Argument I is strong.

Question 4. Twelve cousins G, H, I, J, K, L, P, Q, R, S, T and O are sitting in two parallel rows. G, H , I, J, K and L are sitting in a row-1 facing the south direction and P,Q, R,S,T and O are sitting in row-1 facing the north direction in such a way that each person sitting in row-1 faces the person sitting in row-2. Only one person sits between P and R who is sitting at the extreme left end of the row. H is sitting at the extreme left end sits second to the left of G. I faces the one who is an immediate neighbour of P, Q faces J. K who sits at one of the extreme ends of the row, sits third to to the right of the one who faces O. S faces the one who sits second to the left G. Who among the following faces I?

Answer:- T

Question 5: In a hotel, there are seven tourists, A, B, C, D, E, F and G. There are only three cars available in the hotel I, II and III. There are at least two tourists in each car and tourists of both sexes. There are two Architects, two lawyers, and three professors among them. C is a lady lawyer and does not travel with the pair of sisters A and F. B, a male architect, travels with only G, a professor, by car. D is a male lawyer, Two persons belonging to the same profession do not travel in the same car. A is not an architect and travels in car II.

Which of the following represents the three professor?

1. AEG
2. EFG
3. Data inadequate
4. AEG or EFG

Answer: AEG

Question 6. In a certain code language HISTAMINE is coded as HRSNZGVMR. How will PITIUITARY be coded in the same code?

1. GRKGRFBIZ
2. GKRGFRIBZ
3. RGKRFGIZB
4. RKFGGRIZB

Answer: GRKGRFBIZ

Question 7: Five friends named 1,2,3,4 and 6 are talking about their ages. 2 is twice as old as 1 but twice younger than 6. 3 is half the age of 1 but twice the age of 4. What is the descending order of their ages?

Answer:– 62134

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Numerical Ability

Question 1 – Determine the smallest number 300 and 400 which when divided by 2, 3, 4, 5, 6 leaves the remainder 1, 2, 3, 4, 5 respectively?

1. 349
2. 329
3. 339
4. 359

Answer: 359

Question 2 – What is the average (nearest to integer) of all semi-primes between 20 and 40?

1. 30
2. 32
3. 31
4. 28

Answer: 30

Question 3 – In a class, the ratio of the number of boys to girls is 8:7 and the average weight of the boys is 20% less than the average weight of the girls. If the total weight of the class is 3417kg, then find the difference between the weight of all the girls and all the boys.

1. 143
2. 173
3. 163
4. 153

Answer: Option D – 153

Question 4 – The sum of money is loaned at compound interest for 2 years at 20% per annum. It would fetch Rs. 482 more, if the interest was payable half-yearly than if it were payable yearly, then the sum is:

1. 30000
2. 20000
3. 40000
4. 15000

Answer: 20000

Question 5 – Find the compound interest on Rs. 3200 in 1.5 years at 5% per annum if interest is calculated half-yearly.

1. Rs. 344.05
2. Rs. 3446.05
3. Rs. 346.05
4. Rs. 246.05

Answer: 246.05

Question 6 – On an article x% commission is given on the retail price, cost price is Rs. 60. After selling, the shopkeeper gets 12% profit. If commission is reduced by y% then profit percentage is 68%. What is the value of x and y?

1. 40%, 30%
2. 30%, 40%
3. 40%, 20%
4. 20%, 40%

Answer: 30%, 40%

Question 7 – A man has Rs. 13, 600. He lends some parts of his money at the rate of 10% simple interest and some part at 7.5% yearly. After 3.5 years he earned Rs. 3808. Find the money given at 10% rate.

1. Rs. 2,420
2. Rs. 2,780
3. Rs. 2,720
4. Rs. 5,600

Answer – Rs. 2,720

Question 8 – Nitya divided an amount of Rs. 15750 among her four daughters Priya, Pooja, Ritu and Rina in ratio 9 : 3 : 4 : 5 respectively for investing. At the end of the year the percentage profit of Priya was equal to the percentage loss of Pooja and the percentage loss of Ritu was equal to the percentage loss of Rina. Calculate the overall profit or loss for Nitya at the end of the year if the percentage loss suffered by Pooja was 12% and percentage loss suffered by Ritu was 6%.

1. Profit of Rs. 165

2. Loss of Rs. 165
3. Loss of Rs. 135
4. Profit of Rs. 135

Answer – Profit of Rs. 135

Question 9 – What is the simplified value

of $(0.111 * 1.3 - 1.5)0.571428 \bar{\ } (11 * 1.3 - 1.50.1)0.571428$

1. 0.03125
2. 0.015625
3. 0.08
4. 0.0625

Answer: 0.0625

Question 10 – The salary of Ram and Sujatha are in the ratio of 4 : 3. The salary of Ram and Sujatha is increased by Rs. 3000 and the ratio changes to 9 : 8. Ram's salary after increase will be:

1. Rs. 4500
2. Rs. 8300
3. Rs. 5400
4. Rs. 3800

Answer: Rs. 5400

Question 11 – If a is the rate per cent corresponding to the fraction 24/25, and if 30 km is b% of 40 km, then what percentage (correct upto two decimal places) is b of a2 ?

1. 0.81
2. 78.13
3. 7.81
4. 8.13

Answer: 0.81

Question 12 – A car covers its half journey at a speed of 40 km per hour. Remaining half at a speed of 60 km per hour. Total journey of 12 hrs Find the distance traveled by the car in Km.

1. 432
2. 144
3. 576
4. 288

Answer: 576

Question 13 – A person travels the first part of his journey at 120 kmph and the second part at 180 kmph and covers the total distance of 2160 km to his destination in 15 hours. How long did the first part of his journey last?

1. 8 hours
2. 9 hours
3. 7 hours
4. 10 hours

Answer: 9 hours

Question 14 – A car has tyre has two punctures. The first puncture alone would have made the tyre flat in 7 min and the second alone would have done it in 4 min. If air leaks out at a constant rate , how long does it take both the punctures together to make it flat.

1. 41114_{111}
2. 26112_{116}
3. 31113_{111}
4. 16111_{116}

Answer – 26112_{116}

Question 15 – If the cost of an article is $717\% \, 771\%$ less than its selling price which is 12.5% less than its marked price, the discount offered is what percent of the profit gained.

Answer: _____

Question 16 – The mean of 11 observations is 40. A new observation is added then finds the mean of 12 observations.

1. 38.4
2. 39.4
3. 37.4
4. 36.4

Answer: Wrong question

Question 17 – A man deposit Rs. 600 for 3 years, 750 for 4 years at r% p.a. rate of simple interest (S.I.) and Rs. 1200 for 6 years at s% p.a. He got S.S. Rs. 1200 total from all deposits. Find the r + s if difference between r and s is equal to 5.

Answer – r+s =13

Question 18 – The curved surface area of a right circular cylinder is 1320 cm^2. If the total surface area is 130% of the covered surface area, then find its approximate radius (in cm) (use $\pi = \frac{22}{7}$).

Options

1. 8.28
2. 9.04
3. 7.94
4. 7.62

Answer: 7.94

Question 19 – Study the given table answer the question that follow:

The table shows the number of people (in hundreds) participating in an annual fair from six different towns over the year.

What percentage of people are less than that of the total number of people participating in the fair from town D in the year 2016 and 2017 together with the number of people participating in the fair from town C in the same years?

Answer: 20%

Question 20 – If 0< a<1, b> 2 and C<0, and $x = \frac{ab - cd \times c}{2a}$, then which of the following is correct?

Options

1. X < 1 always
2. X < 0
3. X> 1 always
4. X> 0

Answer: x < 1 always

Verbal Ability

Question 1 – Parts of the sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

Developing the ability to understand and use nonverbal communication can help you connect with others, express what you really mean, navigate challenging situations, and build much more better relationships at home and work.

1. Developing the ability to understand and use non verbal.
2. Build much more better relationships at home and work
3. Really mean, navigate challenging situations and
4. Communication can help you connect with others, express what you.

Answer – Build much more better relationships at home and work

Question 2 – Select the sentence in which the underlined idiom has been used appropriately.

1. The minister's popularity among elderly voters gives him an ace on his sleeve for the coming election in his native city.
2. The Indian cricket had an ace upon their sleeve in the form of Keerti Shankar, the budding new all-rounder.
3. Sugandha kept quiet at the board meeting, who knew she had an ace hidden up her sleeve all this while.
4. The politician's rival had a sleeve up to his ace in the form of a scandalous secret that he revealed in a completely public gathering.

Answer – Sugandha kept quiet at the board meeting, who knew she had an ace hidden up her sleeve all this while.

Question 3 – Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

The UK economy had been one of the strongest economy in terms of inflation, interest rates and unemployment which remained low until the recession.

- in terms of inflation
- one of the strongest economy
- which remained low until the recession.
- The UK economy had been

Answer:- one of the strongest economy

Question 4 – The pandemic has given unprecedented rise to the 1. _____ for working from home. ANd people are allured by the opportunity which 2. _____ any chance of commuting in heavy traffic. However, this 3. _____ is not devoid of challenges and difficulties. In a recently conducted survey, 41% of 4. _____ working from home reported burned out.

Blank 1. A. requirement B. claim C. interest D. demand

Blank 2. Prevents B. hinders C. stops D. presents

Blank 3. A. schedule B. arrangement C. package D. deal

Blank 4. A. employers B. women C. employees D. students

Question 5 – The sentence contains four underlined phrases. Three of these phrases correctly used and one has been incorrectly used. Select the phrase which best replaces the incorrect phrase in the sentence.

Secularism is the need for the hour for uplifting the nation from the abyss of religious myths and beliefs, waging a united war against the poison of communalism and other social evils.

1. Need of the hour
2. An abyss in
3. Across the
4. Also to wage

Answer – Need of the hour

Question 6 – In the following passage, some idioms have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

How to live a reasonably happy and comfortable life is 1._____ One can live a happy and satisfied life despite 2._____ at us at times. The first and foremost thing to do is to find people that you like and who won't make you feel 3._____ because that is a terrible feeling. Its also a good idea to find people who aren't going to 4._____ too much. Friends do kid around but good friends hit a happy medium between joking and respecting each other.

1. 1. no great rocket science 2. the ups and down of life 3. let down 4. push the buttons
2. 1. no great adventure 2. the lines that life throws 3. grapple with 4. put up with
3. 1. no great rocket science 2. the curves that life throws 3. put down 4. press your buttons
4. 1. is no uphill task 2. the twists and turns that life throws 3. put off 4. try your patience

Answer – 1. no great rocket science 2. the curves that life throws 3. put down 4. press your buttons

Question 7 – In the following passage, some idioms have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

We all love buying the latest, and the most sophisticated products such as smart and stylish clothing. But, we must remember that 1._____. It pays to think with a cool mind when shopping. Instead of 2._____, of using your credit card on an impulse it would be better to postpone the shopping for a day or two. Try doing this the next time your 3._____ because some beautiful object is beckoning to you from the shop window. Once you've got this technique 4_____, you'd be surprised how much you will save.

1. 1. all that glitters is not gold 2. falling into the trap 3. heart skips a beat 4. under your belt
2. 1. all that glitter and glitterati 2. falling into the quicksand 3. heart misses a beat 4. under your pants
3. 1. all that glitters is not gold 2. falling into the rat race 3. heartbeat goes up 4. under your nose
4. 1. all that glistens is not gold 2. falling the quagmire 3. heart misses beat 4. under your charge

Answer – 1. all that glitters is not gold 2. falling into the trap 3. heart skips a beat 4. under your belt

Question 8 – Sentences of a paragraph are given below in jumbled order. Arrange the sentences in correct order to form a coherent and meaningful passage.

1. Like elephants, a manatee's molars wear down and move forward and fall out, and are replaced by new teeth coming in at the back of the mouth.
2. While most mammals— from giraffes to cats—– have seven neck vertebrae, only tree sloths and manatees defy that rule.
3. A manatee has only six vertebrae in its neck.
4. They diverged from common land mammal over 50 million years ago
5. The closest living relatives to the manatee are the elephant and the hyrax.

Options.

1. ADEBC
2. EADBC
3. ABCDE
4. AEBCD

Answer – AEBCD

Question 9 – In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

While there is no denying that the world loves a winner, it is important that you A._____ the signs of stress in your behavior and be healthy enough to enjoy your B. _____. Stress can strike anytime, in a fashion that may leave you unaware of its C._____ in your life. While a certain amount of pressure is necessary for D. _____, it is important to be able to recognize your individual limit. There are some individuals who accept competition in a healthy fashion. There are others who collapse under pressure.

1. (A) notice (B) knowledge (C) company (D) conduct
2. (A) verify (B) progress (C) absence (D) appearance
3. (A) remember (B) benefit (C) attendance (D) completion
4. (A) recognize (B) success (C) presence (D) performance

Answer – (A) recognize (B) success (C) presence (D) performance

Question 10 – Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given here.

Along with the traditional golden watch and _____ the retirement dinner speeches were the highlights of Mr. Rathi's party. The company had been seeing a lot of employees either being fired or quitting, so it was a nice change to see everyone in a

good mood. In the previous week, his younger brother was ejected from the same company but not without _____. Another employee was retained from offering him _____ , which he took as _____.

1. A golden opportunity
2. A golden handshake
3. A golden parachute
4. Golden handcuffs

Options

1. 3124
2. 3421
3. 2143
4. 2341

Answer – 2341

Question 11 – Many mental health conditions can be effectively treated _____, yet the gap between people needing care and those with access to care remains substantial. Effective treatment _____ low.

1. at a relative low cost; coverage remains extreme
2. at a relatively a low cost, coverage remains extremely
3. At a relatively low cost; coverage remains extremely
4. at relatively a low cost; coverage extremely remains

Answer – At a relatively low cost; coverage remains extremely

Question 12 – Select the most appropriate option that can substitute the underlined words in the given sentence.

A large group of college students were gathered around the voting booth.

1. Congregation

2. Herd
3. Flock
4. Horde

Answer – horde

Question 13 – Sentences of a paragraph are given below in jumbled order. Arrange the order in correct order to form a coherent and meaningful passage.

1. Women tend to have less severe OSA than males, with a lower apnea-hypopnea index (HI) and shorter apneas and hypopneas.
2. However, the importance of ISA in women is increasingly being recognized, along with a number of significant gender-related differences in the symptoms, diagnosis, consequences, and treatment of OSA.
3. Obstructive sleep apnea (OSA) has traditionally been seen as a male disease.
4. Episodes of upper airway resistance that do not meet the criteria for apneas are more common in women. Prevalence rates are lower in women, and proportionally fewer women receive a correct diagnosis.
5. Research has also documented sex differences in the upper airway, fat distribution, and respiratory stability in OSA.

1. CBADE
2. ADCEB
3. BCADE
4. ABCDE

Answer – CBADE

Question 14 – Select the most appropriate option to fill in the blanks

We all want to be successful, but we _____ one another about what this means or how we should achieve it. Office politics _____ personality and opinion become difficult to manage.

Options

1. Don't always agrees with; arises when the differences of
2. Don't always agree to; arise when those differences in
3. Don't always agree with; arise when these differences of
4. Doesn't always agree with; arises when these differences of

Answer – Don't always agree with; arise when these differences of

Question 15 – For the four-sentence (S1 to S4) in the paragraph below, sentences S1 and S4 are given. From the options P, Q, R, and S choose the appropriate sentences for S2 and S3, respectively.

S1. The Constitution of India guarantees the protection of life and personal liberty to one and all.

S2. _____

S3. _____

S4. One can also get information about the Supreme Court, High Courts, Subordinate Courts, Legal Aid, Profession, Alternative Dispute Resolution, etc.

1. There was a great opportunity to gain inside access to the grand interiors of the Parliament House building.
2. It provides adequate safeguards to fundamental rights against arbitrary decisions.
3. Citizens also have the right to detailed information about various legislations, rules, regulations, etc.
4. The District Courts of India are the courts established by the state governments in India for every district.

1. PQ
2. SQ
3. RQ
4. RP

Answer: RQ

Question 16 – For the four- sentence paragraph below, sentences S1 and S4 are given. From P, Q, R and S, select the appropriate sentences that can fit S2 and S3, respectively.

S1: Charlie Chaplin was one of the greatest and widely loved silent movie stars.

S2: _____

S3: _____

S4: The little tramp, a well-meaning man in a raggedy suit with cane, always found himself wobbling into awkward situations and miraculously wobbling away.

P: From "Easy street" (1971) to "Modern Times" (1936), he made many of the funniest and most popular films of his time.

Q: He was best known for his character, the naive and lovable Little Tramp.

R: More than any other figure, it is this character played by Charlie Chaplin that we associate with the time before the talkies.

S: The same year he made thirty-four short films.

Answer: QR

Question 17 – Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order (e.g. ABCDE) which would form a meaningful, unified and coherent paragraph

1. Connected citizens will find themselves empowered to some extent in novel ways, but this empowerment will come with serious downsides – for example in the erosion – perhaps elimination – of privacy.
2. A digital caste system will endure well into the future, and the extent to which people will benefit from the technology will be critically dependent on their positions in that system
3. Cyberspace will not "overtake or overhaul" the existing world order, but it will make everything much more complicated.

4. States will find that they will need domestic policies to deal with both the physical and virtual worlds, and also two foreign policies – one for "normal" international relations, and one for cyberspace– the policies will be different in each case.
5. Poor people will be the biggest beneficiaries simply because of where they live, but they will also face the worst drawbacks of the digital age.

Answer – BECDA

Question 18 – Read the given passage and answer the questions that follow.

In contrast to traditional analyses of minority business, the sociology analysis contends that minority business ownership is a group-level phenomenon, in that it is largely dependent upon social-group resources for its development. Specifically, the analysis indicates that support networks play a critical role in starting and maintaining minority business enterprises by providing owners with a range of assistance, from the informal encouragement of family members and friends to dependable sources of labor and clientele from the owner's ethinic group. Such self-help networks, which encourage and support ethnic minority entrepreneurs, consist of 'primary' institutions, those closest to the individual in shaping his or her behavior and beliefs. They are characterized by the face-to-face association and cooperation of persons united by ties of mutual concern. They form an intermediate social level between the individual and larger 'secondary' institutions based on impersonal relationships. Primary institutions comprising the support network include kinship, peer and neighborhood or community subgroups.

A major function of self-help networks is financial support. Most scholars agree that minority business owners have depended primarily on family funds and ethnic community resources for investment capital. Personal savings have been accumulated, often through frugal living habits that require sacrifices from the entire family and thus as a product of long term family financial behavior. Additional loans and gifts from relatives, forthcoming because of group obligation rather than narrow investment calculation, have supplemented personal savings. Individual entrepreneurs do not necessarily rely on their kin because they cannot obtain

financial backing from commercial resources. They may actually avoid banks because they assume commercial institutions either cannot comprehend the special needs of minority enterprises or charge unreasonably high interest rates.

Within the larger ethnic community, rotating credit associations have been used to raise capital. These associations are informal clubs of friends and other trusted members of the ethnic group who make regular contributions to a fund that is given to each contributor in rotation. One author estimates that 40 percent of New York Chinatown firms established during 1900-1950 utilized such associations as their initial source of capital. However, recent immigrants and third or fourth generations of older groups now employ rotating credit associations only occasionally to raise investment funds. Some groups, like Black Americans, found other means of financial support for their entrepreneurial efforts. The first Black-operated banks were created in the late nineteenth century as depositories for dues collected from fraternal or lodge groups, which themselves had sprung from Black churches. Black banks made limited investments in other Black enterprises. Irish immigrants in American cities organized many building and loan associations to provide capital for home construction and purchase. They, in turn, provided work for many Irish home-building contractor firms. Other ethnic and minority groups followed similar practices in founding ethnic-directed financial institutions.

Why do the traditional analysis not contend as opposed to the sociological analysis?

Options

1. Minority run businesses have access to banking finance.
2. Special government funding is also available to minority run businesses, as per the traditional school
3. Kinship communities lend to minorities' businesses only
4. Institutional finance is keen on lending to minority run businesses

Answer – Minority run businesses have access to banking finance.

Question 19 – Read the given passage and answer the questions that follow.

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3. It has its roots in ethnic bias
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Answer – It refers to a class action movement to fund one's own.

Question 20 – Read the given passage and answer the questions that follow.

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Answer – C

Question 21 – Read the given passage and answer the questions that follow

A small pole about thirty centimeters long stuck up from a square box on the lab table. There was a ring, only a few centimeters across, encircling the base of the pole. The strange item would have looked a bit like a carnival ring-toss game were it not for the cord snaking out of the side of the box and the single toggle switch on top.

"What the heck's this?" Kusanagi muttered, bending down to stare at the device.

"I wouldn't touch that if I were you," warned Kishitani beside him.

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this." Kusanagi flicked the switch. The moment he did so, the ring around the pole began to float

upward.

Kusanagi gaped. The ring was hovering in mid-air, wobbling slightly.

"Try pushing the ring down," came a voice from behind him.

Kusanagi looked around as Yukawa walked into the room, a file folder cradled in his arms

"Welcome back. Class?" Kusanagi asked as he turned back to the floating ring. Reaching out

gingerly, he tried to push it down with his fingertips. A second later he yanked back his hand.

"Yowch! That thing's hot!"

"It's true, I'm not in the habit of leaving dangerous objects lying around. I do, however, assume a

basic knowledge of physics." Yukawa strolled over to the table and flicked off the switch. "This

device is only high school-level physics, as a matter of fact."

"Well, I didn't take physics in high school," Kusanagi said, blowing on his fingertips. Kishitani

laughed immoderately.

"Who's your friend?" Yukawa asked with a raised eyebrow.

The smile vanished from Kishitani's face and he bowed curtly. "Kishitani. I work with Detective

Kusanagi. I've heard a lot about you, Professor. You've helped us out with a lot of cases, haven't

you? They call you Detective Galileo down at the station."

Yukawa frowned and waved his hand. "Don't call me that. I don't help out because I enjoy it, you

know. I just couldn't bear listening to Detective Kusanagi's faulty attempts at reasoning on a certain occasion, and I made the mistake of correcting him. I'd be wary of spending too much time with him, if I were you. You might catch whatever he has that's hardened his brain into a rock."

Which option gives an erroneous description of the object that Kusanagi and Kishitani found in Yukawa's lab?

1. The device or the experiment worked only when the single toggle switch on top would be turned on.
2. The device, based on experimentation related to concepts of Physics, had a pole and a box attached to it.
3. The square box on top of the thirty centimeters long pole had a cord attached to one side of it.
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Question 22 – On the basis of the narrative style and tone of the passage, what may be deduced as the most correct option?

1. The detectives had high regard and admiration for Yukawa's knowledge and even though he was not a part of the official police force, they did not hesitate to take his advice on cases from time to time.
2. Other than Kusanagi and Kishitani, no one else in the police force knew about Yukawa's involvement in official cases and so, the two wanted to keep it a secret from others.
3. Professor Yukawa was a scientist who had high regard for detective work and therefore, whenever he was approached by the official police force to help them in any case, he obliged
4. Professor Yukawa encourages Kishitani to follow the principles of detective work of Kusanagi who had become a hardened detective as a result of his experience of several years of work

Answer: Professor Yukawa was a scientist who had high regard for detective work and therefore, whenever he was approached by the official police force to help them in any case, he obliged

Verbal Ability

Question 1 – Parts of the sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

Developing the ability to understand and use nonverbal communication can help you connect with others, express what you really mean, navigate challenging situations, and build much more better relationships at home and work.

1. Developing the ability to understand and use non verbal.
2. Build much more better relationships at home and work
3. Really mean, navigate challenging situations and
4. Communication can help you connect with others, express what you.

Answer – Build much more better relationships at home and work

Question 2 – Select the sentence in which the underlined idiom has been used appropriately.

1. The minister's popularity among elderly voters gives him an ace on his sleeve for the coming election in his native city.
2. The Indian cricket had an ace upon their sleeve in the form of Keerti Shankar, the budding new all-rounder.
3. Sugandha kept quiet at the board meeting, who knew she had an ace hidden up her sleeve all this while.
4. The politician's rival had a sleeve up to his ace in the form of a scandalous secret that he revealed in a completely public gathering.

Answer – Sugandha kept quiet at the board meeting, who knew she had an ace hidden up her sleeve all this while.

Question 3 – Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

The UK economy had been one of the strongest economy in terms of inflation, interest rates and unemployment which remained low until the recession.

- in terms of inflation

- one of the strongest economy
- which remained low until the recession.
- The UK economy had been

Answer:- one of the strongest economy

Question 4 – The pandemic has given unprecedented rise to the 1. _____ for working from home. ANd people are allured by the opportunity which 2. _____ any chance of commuting in heavy traffic. However, this 3. _____ is not devoid of challenges and difficulties. In a recently conducted survey, 41% of 4. _____ working from home reported burned out.

Blank 1. A. requirement B. claim C. interest D. demand

Blank 2. Prevents B. hinders C. stops D. presents

Blank 3. A. schedule B. arrangement C. package D. deal

Blank 4. A. employers B. women C. employees D. students

Question 5 – The sentence contains four underlined phrases. Three of these phrases correctly used and one has been incorrectly used. Select the phrase which best replaces the incorrect phrase in the sentence.

Secularism is the need for the hour for uplifting the nation from the abyss of religious myths and beliefs, waging a united war against the poison of communalism and other social evils.

1. Need of the hour
2. An abyss in
3. Across the
4. Also to wage

Answer – Need of the hour

Question 6 – In the following passage, some idioms have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

How to live a reasonably happy and comfortable life is 1._____ One can live a happy and satisfied life despite 2._____ at us at times. The first and foremost thing to do is to find people that you like and who won't make you feel 3._____ because that is a terrible feeling. Its also a good idea to find people who aren't going to 4._____ too much. Friends do kid around but good friends hit a happy medium between joking and respecting each other.

1. 1. no great rocket science 2. the ups and down of life 3. let down 4. push the buttons
2. 1. no great adventure 2. the lines that life throws 3. grapple with 4. put up with
3. 1. no great rocket science 2. the curves that life throws 3. put down 4. press your buttons
4. 1. is no uphill task 2. the twists and turns that life throws 3. put off 4. try your patience

Answer – 1. no great rocket science 2. the curves that life throws 3. put down 4. press your buttons

Question 7 – In the following passage, some idioms have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

We all love buying the latest, and the most sophisticated products such as smart and stylish clothing. But, we must remember that 1._____. It pays to think with a cool mind when shopping. Instead of 2._____, of using your credit card on an impulse it would be better to postpone the shopping for a day or two. Try doing this the next time your 3._____ because some beautiful object is beckoning to you from the shop window. Once you've got this technique 4_____, you'd be surprised how much you will save.

1. 1. all that glitters is not gold 2. falling into the trap 3. heart skips a beat 4. under your belt
2. 1. all that glitter and glitterati 2. falling into the quicksand 3. heart misses a beat 4. under your pants
3. 1. all that glitters is not gold 2. falling into the rat race 3. heartbeat goes up 4. under your nose
4. 1. all that glistens is not gold 2. falling the quagmire 3. heart misses beat 4. under your charge

Answer – 1. all that glitters is not gold 2. falling into the trap 3. heart skips a beat 4. under your belt

Telegram: @PLACEMENTLELO

Question 8 – Sentences of a paragraph are given below in jumbled order. Arrange the sentences in correct order to form a coherent and meaningful passage.

1. Like elephants, a manatee's molars wear down and move forward and fall out, and are replaced by new teeth coming in at the back of the mouth.
2. While most mammals— from giraffes to cats—– have seven neck vertebrae, only tree sloths and manatees defy that rule.
3. A manatee has only six vertebrae in its neck.
4. They diverged from common land mammal over 50 million years ago
5. The closest living relatives to the manatee are the elephant and the hyrax.

Options.

1. ADEBC
2. EADBC
3. ABCDE
4. AEBCD

Answer – AEBCD

Question 9 – In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

While there is no denying that the world loves a winner, it is important that you A._____ the signs of stress in your behavior and be healthy enough to enjoy your B. _____. Stress can strike anytime, in a fashion that may leave you unaware of its C._____ in your life. While a certain amount of pressure is necessary for D. _____, it is important to be able to recognize your individual limit. There are some individuals who accept competition in a healthy fashion. There are others who collapse under pressure.

1. (A) notice (B) knowledge (C) company (D) conduct
2. (A) verify (B) progress (C) absence (D) appearance
3. (A) remember (B) benefit (C) attendance (D) completion
4. (A) recognize (B) success (C) presence (D) performance

Answer – (A) recognize (B) success (C) presence (D) performance

Question 10 – Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given here.

Along with the traditional golden watch and _____ the retirement dinner speeches were the highlights of Mr. Rathi's party. The company had been seeing a lot of employees either being fired or quitting, so it was a nice change to see everyone in a good mood. In the previous week, his younger brother was ejected from the same company but not without _____. Another employee was retained from offering him _____ , which he took as _____.

1. A golden opportunity
2. A golden handshake
3. A golden parachute
4. Golden handcuffs

Options

1. 3124
2. 3421
3. 2143
4. 2341

Answer – 2341

Question 11 – Many mental health conditions can be effectively treated _____, yet the gap between people needing care and those with access to care remains substantial. Effective treatment _____ low.

1. at a relative low cost; coverage remains extreme
2. at a relatively a low cost, coverage remains extremely
3. At a relatively low cost; coverage remains extremely
4. at relatively a low cost; coverage extremely remains

Answer – At a relatively low cost; coverage remains extremely

Question 12 – Select the most appropriate option that can substitute the underlined words in the given sentence.

A large group of college students were gathered around the voting booth.

1. Congregation
2. Herd
3. Flock
4. Horde

Answer – horde

Question 13 – Sentences of a paragraph are given below in jumbled order. Arrange the order in correct order to form a coherent and meaningful passage.

1. Women tend to have less severe OSA than males, with a lower apnea-hypopnea index (HI) and shorter apneas and hypopneas.
2. However, the importance of ISA in women is increasingly being recognized, along with a number of significant gender-related differences in the symptoms, diagnosis, consequences, and treatment of OSA.
3. Obstructive sleep apnea (OSA) has traditionally been seen as a male disease.
4. Episodes of upper airway resistance that do not meet the criteria for apneas are more common in women. Prevalence rates are lower in women, and proportionally fewer women receive a correct diagnosis.
5. Research has also documented sex differences in the upper airway, fat distribution, and respiratory stability in OSA.

1. CBADE
2. ADCEB
3. BCADE
4. ABCDE

Answer – CBADE

Question 14 – Select the most appropriate option to fill in the blanks

We all want to be successful, but we _____ one another about what this means or how we should achieve it. Office politics _____ personality and opinion become difficult to manage.

Options

1. Don't always agrees with; arises when the differences of
2. Don't always agree to; arise when those differences in
3. Don't always agree with; arise when these differences of
4. Doesn't always agree with; arises when these differences of

Answer – Don't always agree with; arise when these differences of

Question 15 – For the four-sentence (S1 to S4) in the paragraph below, sentences S1 and S4 are given. From the options P, Q, R, and S choose the appropriate sentences for S2 and S3, respectively.

S1. The Constitution of India guarantees the protection of life and personal liberty to one and all.

S2. _____

S3. _____

S4. One can also get information about the Supreme Court, High Courts, Subordinate Courts, Legal Aid, Profession, Alternative Dispute Resolution, etc.

1. There was a great opportunity to gain inside access to the grand interiors of the Parliament House building.
2. It provides adequate safeguards to fundamental rights against arbitrary decisions.
3. Citizens also have the right to detailed information about various legislations, rules, regulations, etc.
4. The District Courts of India are the courts established by the state governments in India for every district.

1. PQ
2. SQ
3. RQ
4. RP

Answer: RQ

Question 16 – For the four- sentence paragraph below, sentences S1 and S4 are given. From P, Q, R and S, select the appropriate sentences that can fit S2 and S3, respectively.

S1: Charlie Chaplin was one of the greatest and widely loved silent movie stars.

S2: _____

S3: _____

S4: The little tramp, a well-meaning man in a raggedy suit with cane, always found himself wobbling into awkward situations and miraculously wobbling away.

P: From "Easy street" (1971) to "Modern Times" (1936), he made many of the funniest and most popular films of his time.

Q: He was best known for his character, the naive and lovable Little Tramp.

R: More than any other figure, it is this character played by Charlie Chaplin that we associate with the time before the talkies.

S: The same year he made thirty-four short films.

Answer: QR

Question 17 – Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order (e.g. ABCDE) which would form a meaningful, unified and coherent paragraph

1. Connected citizens will find themselves empowered to some extent in novel ways, but this empowerment will come with serious downsides – for example in the erosion – perhaps elimination – of privacy.
2. A digital caste system will endure well into the future, and the extent to which people will benefit from the technology will be critically dependent on their positions in that system
3. Cyberspace will not "overtake or overhaul" the existing world order, but it will make everything much more complicated.
4. States will find that they will need domestic policies to deal with both the physical and virtual worlds, and also two foreign policies – one for "normal" international relations, and one for cyberspace– the policies will be different in each case.
5. Poor people will be the biggest beneficiaries simply because of where they live, but they will also face the worst drawbacks of the digital age.

Answer – BECDA

Question 18 – Read the given passage and answer the questions that follow.

In contrast to traditional analyses of minority business, the sociology analysis contends that minority business ownership is a group-level phenomenon, in that it is largely dependent upon social-group resources for its development. Specifically, the analysis indicates that support networks play a critical role in starting and maintaining minority business enterprises by providing owners with a range of assistance, from the informal encouragement of family members and friends to dependable sources of labor and clientele from the owner's ethinic group. Such self-help networks, which encourage and support ethnic minority entrepreneurs, consist

of 'primary' institutions, those closest to the individual in shaping his or her behavior and beliefs. They are characterized by the face-to-face association and cooperation of persons united by ties of mutual concern. They form an intermediate social level between the individual and larger 'secondary' institutions based on impersonal relationships. Primary institutions comprising the support network include kinship, peer and neighborhood or community subgroups.

A major function of self-help networks is financial support. Most scholars agree that minority business owners have depended primarily on family funds and ethnic community resources for investment capital. Personal savings have been accumulated, often through frugal living habits that require sacrifices from the entire family and thus as a product of long term family financial behavior. Additional loans and gifts from relatives, forthcoming because of group obligation rather than narrow investment calculation, have supplemented personal savings. Individual entrepreneurs do not necessarily rely on their kin because they cannot obtain financial backing from commercial resources. They may actually avoid banks because they assume commercial institutions either cannot comprehend the special needs of minority enterprises or charge unreasonably high interest rates.

Within the larger ethnic community, rotating credit associations have been used to raise capital. These associations are informal clubs of friends and other trusted members of the ethnic group who make regular contributions to a fund that is given to each contributor in rotation. One author estimates that 40 percent of New York Chinatown firms established during 1900-1950 utilized such associations as their initial source of capital. However, recent immigrants and third or fourth generations of older groups now employ rotating credit associations only occasionally to raise investment funds. Some groups, like Black Americans, found other means of financial support for their entrepreneurial efforts. The first Black-operated banks were created in the late nineteenth century as depositories for dues collected from fraternal or lodge groups, which themselves had sprung from Black churches. Black banks made limited investments in other Black enterprises. Irish immigrants in American cities organized many building and loan associations to provide capital for home construction and purchase. They, in turn, provided work for many Irish home-

building contractor firms. Other ethnic and minority groups followed similar practices in founding ethnic-directed financial institutions.

Why do the traditional analysis not contend as opposed to the sociological analysis?

Options

1. Minority run businesses have access to banking finance.
2. Special government funding is also available to minority run businesses, as per the traditional school
3. Kinship communities lend to minorities' businesses only
4. Institutional finance is keen on lending to minority run businesses

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2. Other than Kusanagi and Kishitani, no one else in the police force knew about Yukawa's involvement in official cases and so, the two wanted to keep it a secret from others.
3. Professor Yukawa was a scientist who had high regard for detective work and therefore, whenever he was approached by the official police force to help them in any case, he obliged

4. Professor Yukawa encourages Kishitani to follow the principles of detective work of Kusanagi who had become a hardened detective as a result of his experience of several years of work

Answer: Professor Yukawa was a scientist who had high regard for detective work and therefore, whenever he was approached by the official police force to help them in any case, he obliged

Reasoning Ability

Question 1 – Which is the wrong term in the following letter cluster ?

GK, HJ, OS, MO, WB, RT, EI, WY

1. RT
2. WB
3. EI
4. WY

Ans. WB

Question 2 – Three pair of letter cluster out of four pair of letter cluster are having same relation, find the on having different relation:

1. ROQCTMP : HURTXPS
2. XDNYPGL : DAGQSJO
3. GCMRPVT : WJFPSYW
4. TMIKJUB : PWPLLWE

Ans.

Question 3 – In a certain code language,

A + B means 'A is the mother-in-law of B'

A – B means 'A is the mother of B'

A x B means 'A is the son of B'

A ÷ B means 'A is the father of B'

Based on the above, how is P related to G if 'F + P − Q x T X K − G'?

1. Mother
2. Brother's wife
3. Sister
4. Wife

Ans. b Brother's wife

Question 4 – In a certain code

P%Q means 'P is the daughter of Q'

P@Q means 'P is the son-in-law of Q'

PxQ means 'Q is the mother of P'

P#Q means 'Q is the sister of P'

P$Q means 'Q is the son of P' and

P*Q means 'Q is the wife of P'

Question 5 – An apple seller is selling apples by packing them in a physical multi-layered box. There are 4 rows and 6 columns in the first layer of the box and each ………(missing) layers is 1 more than in both the dimensions of the previous layer.

What will be the number of apples in the fourth layer from the first?

1. 63
2. 24

3. 48
4. 35

Question 6 – Given below is a question followed by two statements, I and II each containing some information. Decide which of the statements is/are sufficient/ necessary to answer the question.

Question:

What is the code for 'functioning' in a certain language?

Statements:

1. In a certain code language, "Our Laptop not functioning" is coded as "tz jz ez sz" and " Laptop consists Camera and Touchpad" is coded as "rz fz mz jz uz"
2. In a certain language, "Smooth preparation is good" is coded as "Iz dz pz gz" and "Smooth functioning is good" is coded as "pz gz dz sz"

1. Statement I alone is sufficient while II alone is insufficient
2. Either statement I alone or statement II alone is sufficient
3. Statement II alone is sufficient while I alone is sufficient
4. Both the statements I and II together is necessary.

Ans. D Both the statements I and II together is necessary.

Advanced Coding

Question 1

John is mathematics teacher in one of the classes of Dale's school. The class has N students.

Today is their yearly exam. And John is very strict on the answers.

As per John, no one is allowed to cheat. He will find it out from the final marks of two adjacent students.

The marks of **N** students are mentioned in **M[ ]**, with index 1 to N.

All of the students are seated one behind the other based on their roll numbers, which is from 1 to N.

If any two adjacent (**one behind the other**) students have same marks, then it will be considered as cheating, and the latter student will be removed from the merit list. **The student sitting behind is considered as cheater**.

At the next level is the process of re-evaluation, which is performed by another department. The re-evaluation can impact marks of **K** students. The re-evaluation will update their marks and then again, the 3 final merit list will be declared.

The re-evaluation will be in the format of X Y. Here 'X' is the index of the student whose marks needs to be changed from the original value to Y. Each re-evaluation is independent, and the merit list is updated after each re-evaluation.

After each re-evaluation the merit list is updated, where the cheater is filtered out if there is any.

Your task is to find the maximum number of students that were part of the merit list after each re-evaluation.

Only the final merit list is visible to all students.

Let us try to understand it with an example.

Consider there are total N = 5 student with the respective marks M = [1,1,2,5,2].
So, N = 5 and M = [1, 1, 2, 5, 2].
After re-evaluation there were 2 (K = 2) students whose marks are updated.
X[1] = 3 (Y)
X[4] = 2 (Y)

Hence in our scenario, input will look something like
5 2
1 1 2 5 2

1 3

4 2

Now as per teacher's rule, no two students should have same marks, otherwise they will all be removed from the merit list.

Let's consider the *first re-evaluation*: the marks of M[1] which is currently 1, will now be updated to 3. So, the marks will look something like = [3 1 2 5 2]. Clearly no two adjacent students have same marks, hence all the students who participated will be in the merit list. So, the answer is 5.
So, the answer is 5 for this re-evaluation.

In the *second re-evaluation*: the marks of M[4] which is currently 5, will now be updated to 2.
So, the marks will look something like = [3 1 2 2 2]. Clearly M[3], M[4] and M[5] have all the same marks. But only the students sitting behind will be considered as a cheater. So, M[4] and M[5] will be taken out from the merit list. So, now the merit list consists of only 3 students M[1], M[2] and M[3].
So, the answer is 3 for this re-evaluation.

Python
```python
def fun(x, y, n):
  arr[x - 1] = y
  ans = 1
  for i in range(1, n):
    if arr[i] != arr[i - 1]:
      ans += 1
  return ans


n = int(input())
k = int(input())
arr = []
for i in range(n):
  arr.append(int(input()))
for i in range(k):
  x = int(input())
  y = int(input())
  print(fun(x, y, n), end="")
```

Question 2

Bob is going to bet today on horse riding. There are N horses listed in a sequence of 1 to N.

The probability of winning of each horse is different so the prices for making a bet on the horses are not the same. There is no limit on the number of horses on which he can bet, but he thinks that if he bets on a continuous sequence of horses then he has a better chance to win. Bob will get K units of money if any horse on which he bets will win. But as the award is only K units so he wants to put money less than K. Bob wants to bet on as many horses as he can. As you are his best friend, he reached out to you for help, can you please find the length of the maximum continuous sequence of horses on which Bob can make a bet, and remember he will invest money less than K units. If there are more than one possible combinations, Bob will bet randomly on any one of them.

Given the number of horses(N), reward money(K), and price of betting on N horses in order.

Hint: For each starting index of a horse, its end index in sequences will be equal to or greater than the end index of the previous starting index.

Example 1:

- **Input:**
  90 100 -> N = 10, K=100
  30 40 50 20 20 10 90 10 10 10 -> Price to make bet on each horse in order
- **Output:**
  3
- **Explanation:**
  There are 10 horses, and the reward money is 100. So, Bob will put money less than 100. There are two possible o sequences of length three whose total money for betting is less than 100, i.e. [50 20 20] (sum is 90) and [10 10 10] (sum is 30). Bob will choose randomly one sequence from these two. As none of the other sequences with length greater than 3 will have a price less than 100 so the answer will be 3.

Example 2:

- **Input:**
  10 100 -> N = 10, K=100
  10 90 80 20 90 60 40 60 70 75 -> Price to make bet on each horse in order

- **Output:**
  1

- **Explanation:**
  There are no two consecutive horses for which the sum of price is less than 100. So, Bob will choose randomly any one horse. And the max length of the sequence will be 1.

Constraints:

- 2<=N<=105
- 1<= K<=109
- 1<=A1, A3... AN<=109

The Input format for testing:

The candidate has to write the code to accept 2 inputs.

- **First Input:** It will contain two integer N (number of horses) and K (reward money)
- **Second Input:** It will contain N integers, each separated

C++
```cpp
#include <bits/stdc++.h>
using namespace std;

int main() {
int n,m;
cin>>n>>m;
int a[n][m];
int count=0;
for(int i=0; i< n;i++){
  for(int j=0; j< m; j++){
    cin>>a[i][j];

  }
}

for(int i=0; i< n;i++){
  for(int j=0; j< m; j++){
    if(a[i][j]==a[i+1][j])
    continue;
    else{
    if(a[i+1][j]==1 && (a[i+2][j]==1))
    count++;
    }

  }
}
cout<< count<<"\n";

  return 0;
```

}

```python
n, m = map(int, input().split())
a = []
for i in range(n):
  a.append(list(map(int, input().split())))
ans = 0
for i in range(n-2):
  for j in range(m):
    if a[i][j] == a[i + 1][j]:
      continue
    elif a[i + 1][j] == 1 and a[i + 2][j] == 1:
      ans += 1
print(ans)
```

Advanced Quantitative

Question 1 – Three quantities x, y, z are respectively in the proportion 3:5:7 . What is the value of $\frac{2x-3y+4z}{2x-3y+4z}$ $\frac{-x-2y+2z}{-x-2y+2z}$?

Answer: 19

Question 2 – A number y is drawn arbitrarily from the set {1, 2, 3, ..., 120}. The probability that $\left(y+\frac{120}{y}\right)>23$ is:

1. 0.78
2. 0.85
3. 0.93
4. 0.91

Answer: 0.93

Question 3 – Find the length of the chord defined by y = 1 + 2x on the circle $x^2+y^2=5$

1. $\frac{4\sqrt{30}}{30}$
2. $\frac{4\sqrt{30}}{30}$
3. $\frac{6\sqrt{30}}{30}$

4. 23303230

Answer: 45305430

Question 4 – If x, y and z are positive integers such that $x^8 = y^6$ and $x^3 = z^5$ and $y^{27} = z^m$, then what is the value of m?

Answer: 60

Question 5 – If α and β are the roots of quadratic equation $px^2 + qx + r = 0$ then $(\alpha^5 \beta^8 + \alpha^8 \beta^5)$ is equal to__

Options

1. $\dfrac{qr^5}{p^8}(3pr - q^2)$
2. $\dfrac{qr^5}{p^6}(3pr - q^3)$
3. $\dfrac{qr^5}{p^7}(3pr - q^3)$
4. $\dfrac{qr^4}{p^8}(3pr - q^2)$

Answer: $\dfrac{qr^5}{p^8}(3pr - q^2)$

Question 6 – The value of k satisfies the inequation $|k - 12| \geq k^2 - 9k + 12$ are in the range [a, b]. Then find the values of a and b.

1. a = 1, b = 7
2. a = 0, b = 8
3. a = 1, b = 8
4. a = 0, b = 7

Answer: a = 0, b = 8

Question 7 – A five-letter password is to be formed using letters from the alphabet exactly once. If the first letter is not Z and the last is not A and the letter in the 4th place is alphabetically next to the letter in the first place of the password, then how many possible such passwords are there?

Answer – 3,03,600

Advanced Reasoning

Question 1 – Read the given information carefully and answer the question that follows

The Government has started a new scheme under which thousands of houses have been constructed for the families of different income levels. More than 12000 houses are vacant at various places in the state. A lot of people in the state are homeless but the applications received for the government scheme house allotment are less than 2000. The Government wants to allot houses to the needy people and for that a study has been conducted which reveals that there are certain discrepancies in the scheme. To address the challenges, the Government has decided to take over the vacant flats and allot them to Government servants only. Is the Government's decision right?

Enter the answer in the space provided on the screen. Answer should be in whole numbers without any symbols (e.g. 9%, kms, ms, etc.)

Answer:- No

Question 2 – A Queen sent Sevens servant name P,Q,R,S,T,U and W to market, buying some vegetables, U bought vegetables before P but not S. R is the last one to bought vegetable. T bought immediately after P and is subsequently followed by W. Among the servants, who bought vegetable before U?

Answer:- S

Question 3 – In a certain code DEAF is written as 3567 and FILE is written as 7465. How is LIED written in that code?

Answer:- 6453

Question 4 – In a random exhibition, seven weavers displayed seven different varieties namely Chanderi, Banaras, Kanchivaram, Uppada, Pochampally, Chettinad and Kuppadam in each store, which are in a row facing north. Chanderi store was immediate right of Kuppadam store. Kuppadam store was fourth to the right of Kanchivaram. Uppada store was between Banaras store and Chetinad store. Kanchivaram store, which was third to the left of Banaras store, was at one of the ends. Which stores are on the immediate either sides of Chanderi?

Answer:- Kuppadam and Pochampally

Question 5 – A question is given, followed by two statements labelled I and II. Identify which of the statements is/are sufficient to answer the question.

Question:-

Four sisters – A, B, C and D attended a family get together wearing different variety sarees namely – Kaanchevaram, Dharmavaram, Chendheri, and Pochampally but not necessarily in the same order. A wore Kaancehvaram saree and D wore neither Pochampally nor Dharmavaram saree. Who among them wore Pochampally saree?

Statement:-

1. B does not wear Pochampally saree
2. C neither wore Chendheri nor Dharmavaram saree

1. Data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
2. Data in both statements I and II together are not sufficient to answer the question.
3. Data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
4. Data either in statement I alone or in statement iI alone is sufficient to answer the question.

Answer:- Data either in statement I alone or in statement iI alone is sufficient to answer the question.

Question 6 – Read the following information carefully and answer the question given below.

A company has following Gratuity (G) and Provident Found (PF) rules:

1. An employee must have completed one year service to be eligible for either G or PF.
2. An employee resigning or retiring or retrenched after ten years' service gets both G or PF.
3. An employee retrenched or retiring after 5 years but before 10years' of service gets both G and PF, but that resigning during this period gets either G or PF.
4. An employee retrenched or retiring before 5 years' service gets PF but not G, but that resigning during this period gets neither G or PF
5. In case an employee dies after 2years of service, his family gets both G and PF.
6. In case of employee was on leave without pay, such period is deducted from his total years of service and then the above rules are applied.
7. In the case of a lady employee, if she has completed two years' service, two years are added to her actual service before applying the above rules, as a special consideration.

Apply the above rules to the case given below and decide whether the employee is eligible for G and/ or OF. Radhika served for two and half years was retrenched.

1. If only G can be given
2. If neither G nor PF can be given
3. If only PF can be given
4. If either G or PF can be given

Answer:- If only PF can be given

Question 7 – Read the statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

1. Some jeans are skirt
2. Some skirts are saree
3. All saree are jacket
4. All skirt are t-shirt.

Conclusions:-

1. Some t-shirts are saree
2. Some jeans are jacket
3. Some jackets are skirt
4. All saree are jeans

1. Neither conclusion I nor II follows
2. Only conclusion I follows
3. Both conclusion I and III follows
4. Only conclusion III and IV follows

Answer:- Both conclusion I and III follows

Question 8 – In a code language, 'SHORTHAND' is coded as "LSHSGIWMZ". How would PUBLISHED be coded in that language?

1. WVSYFKHRO
2. KYFOHRSWV
3. SVWORHKFY
4. YFKHROWVS

Answer:- YFKHROWVS

Question 9 – Read the following information carefully and answer the question given below:-

Chetan, Edwin, Manish, Bishsesh and Amar are friends studying in IIT Delhi. Their hometowns are Ernakulum, Mangalore, Ahmedabad, Bilaspur and Chandigarh but

not in that order. They are doing their graduation in five different disciplines, computer science, agriculture engineering, mechanical engineering, biotechnology and electrical engineering, again not in the order of their names stated above.

1. Their names, hometowns and disciplines do not start with same letter
2. Neither Edwin nor Manish is in agriculture engineering and they do not belong to either Bilaspur or Chandigarh.
3. Chetan is neither in mechanical engineering nor in biotechnology
4. Ernakulum is not Bishesh's hometown.
5. The student who is from Bilaspur is in the discipline of mechanical engineering.
6. The student studying agriculture engineering, hometown is Ernakulum, while the student studying biotechnology does not hail from Mangalore.

Who is in the electrical engineering discipline?

1. Edwin
2. Amar
3. Chetan
4. Bishesh

Answer:- Bishesh

Question 10 – Read the statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion logically follow(s) from the statements.

Statements:

1. Some bees are flies
2. All flies are rhythm
3. Some ants are dragonflies
4. All fleas are dragonflies

Conclusions:-

1. Some dragonflies are bees
2. Some bees are ants
3. Some flies are dragonflies

1. Both conclusions I and II follow

2. Only conclusion I follows
3. Neither conclusion I nor II nor III follows
4. Only conclusion II follows

Answer:- Neither conclusion I nor II nor III follows

TCS NQT 23 August 2023 - Slot 2

Numerical Ability

Question 1 – Six students were given the task of ringing bells at the intervals of 10 seconds, 15 seconds, 30 seconds, 50 seconds, 1 minute and 1.25 minutes, respectively. If they ring bells together at 10 a.m., then how many times will they ring the bell together in the next 3 hours (including the bell rang at 10 a.m.)?

1. 37 times
2. 31 times
3. 35 times
4. 33 times

Answer: 37 times

Question 2 – (0.125)th part of a number exceeds (0.1)th part of it by 13.75. What is the number?

1. 495
2. 275
3. 110
4. 550

Answer: 550

Question 3 – The average age of the employees in company P is 20 years, and the average of those in both companies P and Q is 23 years. If the ratio of number of employees in company P and Q is 4 : 7, respectively, then what is the average age (years) of the employees in company Q?

1. 15
2. 17
3. 19
4. 21

Answer: Option D – 21

Question 4 – 2000 candidates (male [M] and female [F]) appeared for a selection test which had two components, written test (WT) and interview (IV) and one had to qualify at the WT to go for IV. 20% and 30% respectively, of M and F had qualified at the WT. Thereafter, 10% and 12% respectively, of M and F qualified. What was the percentage of the females out of the total number of males that had finally qualified if the initial number of male and female candidates were equal?

1. 55.56%
2. 180%
3. 66.67%
4. 18%

Answer: Option D – 18%

Question 5 – A man deposited some amount in a bank on compound interest for 4 years at the rate of 20% per annum. The difference between the amount accumulated after 4 years and the amount accumulated after 2 years is Rs. 12672. If the same principle amount is deposited at simple interest at rate of interest r% per annum for 4 years, then find the value of 'r', if the simple interest obtained by man is Rs. 4000.

FUB – Answer r = 5

Question 6 – Some amount out of Rs. 7000 was lent at 6% p.a, and the remaining at 4% p.a. If the total simple interest received on the amount of Rs. 7000 in 5 years was Rs. 1600, then find the amount that was lent at 6% p.a.

1. Rs. 5000
2. Rs. 3000
3. Rs. 2000
4. Rs. 4000

Answer: 2000

Question 7 – A sum of the money gives Rs. 300 as simple interest at a rate of 10% for 3 years. If the same sum is invested at 8% for 3 years, the compound interest will be:

1. Rs. 289.6
2. Rs. 1460. 3
3. Rs. 259.71
4. Rs. 312.5

Answer: Rs 259.71

Question 8 – The average weight of a class was 60kg, and it became 60.2kg when one new student having weight of 65kg joined. What was the original number of students in the class?

1. 20
2. 24
3. 25
4. 22

Answer: 24

Question 9 – A student walking at ¾ of its usual speed is late by 12 mins, Determine his usual time to cover the distance.

1. 36
2. 42
3. 24
4. 30

Answer: 36

Question 10 – A and B quote for a tender, Initially their quotation was in the ratio of 9:7. During Negotiation, A reduced his quotation lower than B by Rs 2,00,000. Now their quotation is in the ratio of 6:7. Determine the total amount reduced by A to get the work.

1. 9,00,000
2. 5,00,000
3. 8,00,000
4. 6,00,000

Answer: 9,00,000

Question 11 – The expenditure during the first 7 months of a year for milk consumption by a family is Rs 11,200, and during the last 5 months, it is Rs 8000. The average expenditure per month during the whole year is:

1. Rs 1610
2. Rs 1580
3. Rs 1600
4. Rs 1590

Answer – Rs 1600

Question 12 – A and B invested a sum of Rs. 3,00,000 in the ratio of 2:3 respectively. In the first 2 years, they got simple interest at the rate of 12% per annum. Then, the

total amount was invested for next 2 years on compound interest at the rate of 15% per annum. What was the percentage profit of A and B?

1. A- 58.48%, B- 58.48%
2. A- 70.25%, B- 60.25%
3. A- 60.25%, B-70.25%
4. A- 63.99%, B- 63.99%

Answer: A- 63.99%, B- 63.99%

Question 13 – Zahir bought a Oneplus 9 Pro phone, which has a marked price of rs. 52,000 at a discount of 2%. Then he changed his mind and wanted to buy iPhone 13 Pro Max, which has a market price of Rs. 1, 55, 000 and a discount of 7% on the marked price. At what minimum percentage profit must Zahir sell his Oneplus 9 Pro phone so that he can buy iPhone 13 Pro Max using the money he would receive from selling the old phone and Rs. 85,546 from his savings?

1. 9%
2. 15%
3. 6%
4. 12%

Answer: 15%

Question 14 – A, B and C are employed to do a piece of work for Rs. 621. A and B together complete $\frac{18}{23}$ of the work, and B and C together complete $\frac{7}{23}$ of the work. What amount should be paid to C?

Answer – 271

Question 15 – Equal amount has been deposited by Rhythm in two different schemes, M and N, which are offering same rate of interest that is $\frac{55}{95}$. After 2 years, the interest received from scheme M is Rs. 880 less than the interest received

from scheme N after 4 years. Find $\frac{91119}{111}$ of the amount deposited by rhythm in scheme M.

Answer – Rs. 654.55

Question 16 – A girl covered a definite distance at some speed.If she had moved 6km/h faster, She would have taken 45 minutes less. If she had moved 5 Km/h slower, She would have taken 45 minutes more. What is the distance in km?

1. 495
2. 462
3. 425
4. 518

Answer – 495 km

Question 17 – Previous Year's income of A, B and C are in the ratio of 7 : 9 : 6, respectively. There previous years and current years income ratios 3 : 5, 2: 3 and 4 : 5 respectively. If the sum of their current years 's income is Rs. 15,680., find the sum of A's previous year's income and it's current year's income.

1. 9,840
2. 9,640
3. 9,820
4. 9,730

Answer – 9840 Rs.

Question 18 – The wheel of a bike has a radius of 70cm. How many revolutions approximately per minute would the wheel make.If it is moving at a speed of 90km/h? (Use = 22/7)

1. 312
2. 341
3. 357

4. 325

Answer – 341

Question 19 – Simplify the following:

[late] \left [\frac{1 + \frac{3}{4}}{4 − \frac{2}{3}} \div \frac{4 + \frac{2}{3}}{4 − \frac{2}{3}} − 4 \frac{1}{2} of \left\{ \frac{2\frac{1}{2}}{1 \frac{1}{4}} + \frac{2}{3} of \frac{3\frac{1}{2} + 1\frac{1}{2}}{3 − \frac{1}{2}} \right\} \right] \times \left (\frac{-8}{117} \right) [/latex]

1. 2
2. 0
3. 3
4. 1

Answer: 1

Verbal Ability

Question 1. Identify the error in the sentence:

The explosion in music consumption over the last century has made 'what you listen' an important personality construct.

1. has made 'what you listen'
2. an important personality construct.
3. consumption over the last century
4. The explosion in music

Answer – has made 'what you listen'

Question 2. Each sentence in the given paragraph contains four underlined phrases. Three of these phrases have been correctly used, and one has been incorrectly used. Select the phrase from among the following options that best replaces the INCORRECT phrase in the sentence.

The traditional craftsmen don't have access to a local manufacturing base, funds, design inputs and market which have brought our craftsmen and our traditional arts and crafts on the brink of extinction.

1. Has brought
2. Designs to input
3. Towards a brink
4. Excess to the

Answer – Has brought

Question 3. Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

The major impact of drug abuse is on the brain, which consequentially affect every other aspect of life of the person addicted to drugs.

1. Is on the brain, which consequentially
2. of the person addicted to drugs.
3. The major impact of drug abuse
4. every other aspect of life

Answer – Is on the brain, which consequentially

Question 4. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate options to fill in the blank.

What is more common in a poorly (A) _____ home is a vague constellation of symptoms described as the sick-building syndrome. It is (B)_____by a general feeling of malaise, headache, dizziness and irritation of mucous membranes. It may also be (C)_____by nausea, itching, aches pains and depression. Sick-building syndrome is becoming (D) _____ in big cities with small houses, which are generally over-furnished.

1. (A)aired (B)outlined (C) encouraged (D) familiar
2. (A)open (B) featured (C) assisted (D) casual
3. (A) ventilated (B) featured (C)assisted (D) casual
4. (A) stuffy (B) informed (C)maintained (D) natural

Answer – (A) ventilated (B) featured (C)assisted (D) casual

Question 5. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate options to fill in the blank.

Tai Chi which originated in China, is now widely used for physical and (1)_____ fitness worldwide. It is an ancient practice that (2) _____ martial arts with meditation. It aims at (3) _____ mind and body into sync with rhythmic practice. Since it works on both mind and body, it leads to (4) _____ for physical as well as mental health.

Blank (1) A. intellectual, B. social, C. mental, D. psychological

Blank (2) A. mixes, B. associates, C. joins, D. combines

Blank (3) A. bringing, B. taking, C. leading, D. carrying

Blank (4) A. profits, B. benefits, C. advantages, D. perks

1. (1)-B, (2)-D, (3)-C, (4)-B
2. (1)-D, (2)-A, (3)-B, (4)-C
3. (1)-C, (2)-B, (3)-B, (4)-D
4. (1)-C, (2)-D, (3)-A, (4)-B

Answer – (1)-C, (2)-D, (3)-A, (4)-B

Question 6. Select the most appropriate set of idioms that would fill in the blanks and complete the given passage.

Life is never a linear line but a curve. It's full of (1)_____. When faced with critical moments. It is better to switch off from the problem for some time and relax. Such an approach will help you think of solutions with greater clarity. Of course, you will still need to (2)_____ from time to time,but you will also agree that (3) _____. There is no need to panic and worry in anticipating that things may go wrong in life. It's always better to wait and (4) _____ when you come to it.

1. 1. Round the bends 2. Straighten things out 3. The world will not end in a day 4. Cross the Rubicon when it comes.
2. 1. Ups and downs 2. Straighten things out 3. Heavens are not falling 4. Cross the bridge when you come to it
3. 1. Uphill and down dale 2. Put your cards on the table 3. Heavens are falling 4. Cross the bridge when you come to it
4. 1. Twists and turns 2. Iron out matters 3. Heavens will not fall 4. Cross the river when you reach the shore.

Answer: 1. Ups and downs 2. Straighten things out 3. Heavens are not falling 4. Cross the bridge when you come to it

Question 7. Select the option in which the underlined idiom has been used appropriately

1. Mr. Sawant is always palming on the least interesting jobs to his assistant even though they are assigned to him.
2. The fraudulent company sold fake gold and tried to palm off them as genuine, however, some aware customers reported it to the police.
3. Do not try to palm off your leftovers onto my sister, we do not appreciate it.
4. The most successful dealers are those who always palm off their quality products to their customers.

Answer – The fraudulent company sold fake gold and tried to palm off them as genuine, however, some aware customers reported it to the police.

Question 8. Select the most appropriate set of idioms that would fill in the blanks and complete the given passage.

Mrinal is a total travel addict. One can say he (1) _____ travel. He loves exploring new places. Each year he (2) _____ for a new destination. Islands and sea hold a special appeal for him but he tires quickly of lazy days in the sand and soon he develops (3) _____ and finds himself on the move to look for something different. The unique island escapes have lots to offer him. Whether it is wildlife exploration or ancient monuments or a (4) _____, he finds every experience very exhilarating and immersive. He loves to share his experiences so that he can tempt others.

1. 1. Stuff of dreams, 2. Fly in and out, 3. Tickle in the feet, 4. Slice of cake
2. 1. Eats, sleeps and drinks , 2. Sets course, 3. Itchy feet, 4. Slice of culture
3. 1. Ready to go the extra mile drinks , 2. Set sail for, 3. Ants in his pants, 4. Taste of culture
4. 1. Eats, sleeps and drinks, 2. Set off, 3. Achilles heels, 4. Immersive culture

Answer – 1. Eats, sleeps and drinks , 2. Sets course, 3. Itchy feet, 4. Slice of culture

Question 9 – Select the most appropriate options to fill in the blanks in the given passage.

With coronavirus cases (1)_____ America and abroad, travelers with a United States passport remain grounded. To date, just nine countries(2)_____Americans without restrictions.

1. (1)continues to spike in (2) are opening to
2. (1) continuing to spike in (2) is open to
3. (1) continuing to spile in (2)are open for
4. (1)continuing to spike in (2) are open to

Answer – (1)continuing to spike in (2) are open to

Question 10 – Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given here.

A _____ salesman persuaded my mother to buy a new washing machine that connects to the internet, although the one she had was fine. Now my mother is a _____ but even could not learn how to operate it. Most of the time, it is an old person who becomes a _____ to these tech-savvy salesman. We tried all means to get the washing machine going but it's really complicated and there seems to be no _____ in sight.

1. Silver surfer
2. Silver bullet
3. Silver-tongued
4. Sitting duck

1. 3142
2. 1243
3. 1423
4. 2413

Answer – 3142

Question 11 – Sentences of a paragraph are given below in jumbled order. Arrange the sentence in the correct order to form a meaningful and coherent paragraph.

1. In the 19th century, for instance, out-of-body experiences became a popular topic and were eagerly diagnosed by early psychical researchers.
2. Some consist of little more than a fleeting feeling that body and mind have come loose.
3. Either way, out of body experiences have fascinated humanity for centuries, entering folklore, spiritual belief and mythology.
4. While others recount tales of floating far from the person's physical body and traveling to otherworldly plains.
5. Reports of out-of-body experiences vary.

1. BCDEA
2. DCAEB
3. EBDCA
4. AEBDC

Answer – AEBDC

Question 12 – For the four sentence (S1-S4) paragraph below, sentences S1 and S4 are given. From P, Q, R, S , select the appropriate sentences for S2-S3, respectively.

S1. Culture is the characteristics and knowledge of a particular group of people, encompassing language, religion, cuisine, social habits, music and arts.

S2: _____

S3: _____

S4: Many countries, such as France, Italy, Germany, the US, India, Russia and China are noted for their rich cultures.

1. Today, the influences of Western culture can be seen in almost every country in the world.
2. Thus, culture can be seen as the growth of a group identity fostered by social patterns unique to the group.
3. As a result, Hinduism became a major driver of culture in India.
4. The Center for Advanced Research on Language Acquisition goes a step further, defining culture as a shared pattern of behaviors and interactions, cognitive constructs and understanding that are learned by socialization.
5. SP
6. PQ
7. RP
8. SQ

Answer – SQ

Question 13 – Select the most appropriate option to fill in the blanks in the given sentence.

One must face all _____ of life with equanimity.

1. Vicissitudes
2. Vicissittudes
3. Viccisitudes
4. Vicisitudes

Answer – Vicissitudes

Question 14 – Select the most appropriate option to fill in the blanks in the given passage.

True happiness comes from (1)_____ you love and who love you in return. If the people you surround yourself with are bringing you down(2)____trim the fat.

1. (1)surrounding yourself with people whom (2) then it's time to
2. (1) surround yourself with people whom (2) then it's time to
3. (1) surrounding yourself with people whom (2) then it's time you
4. (1) surrounding yourself around people whom (2) then it's time

Answer – (1) surrounding yourself with people whom (2) then it's time you

Question 15 – Select the option that can be used as a one word substitute for the underlined part of the sentence.

The romantic complex situation or mix up happened when Rahul met my landlords assuming they were my parents.

1. Arsenal
2. Fastidious
3. Imbroglio
4. embargo

Answer – imbroglio

Question 16 – Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. (where a sperm cell is specifically chosen because of its sex chromosomes)
2. The law was amended in 2003 to bring the technique of preconception sex selection within the ambit of the Act
3. The law as it stands not only prohibits determination and disclosure of the sex of the foetus but also bans advertiments related to preconception and prenatal determination of sex.
4. The law first came into force in 1996 as the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994, in response to the falling sex ratio and fears that ultrasound technologies were being used to detremine the sex of the foetus.
5. Essentially, the banning practices where medical practitioners try to influence the sex of the child before conception by using techniques such as sperm sorting.

1. BDACE
2. DCBAE
3. DBEAC
4. BADCE

Answer: DCBAE

Question 17 – Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order (e.g. ABCDE) which would form a meaningful, unified and coherent paragraph.

1. It might be due to the US society's national self-image that is closely linked to the mythology of immigration, to ethnic identity as a search for validating origins.
2. Diasporas and homelands are locked in peculiar, dialectical relationships- the South Asian diaspora looks to the sub-continent as an anchor for identity formation, however mythical and uncomfortable it might be and cultural producers cannot ignore this relationship, however problematic.
3. British Asian artists opt for an unsentimental, sometimes even comical, treatment of these issues, while South Asian American writers and filmmakers respond in more somber fashion, perhaps reflecting the sacred status of roots search in North American Culture.
4. As 'return of native' is a prevalent theme in post-colonial literature; South Asian Atlantic narratives present India, Pakistan and Bangladesh as a powerful force for members of the diaspora.
5. These 'roots' visits represent a rite of passage as much for 'ethnic' writers and filmmakers, creatively and intellectually, as for their fictionalized characters in an emotional and spiritual sense-such journeys occupy complex psychological ground.

Answer – DBECA

Question 18 – For the four sentence paragraph below, sentences S1 and S4 are given. From P,Q,R and S, select the appropriate sentences that can fit S2 and S3 respectively. While your answer in the text box provided without any spaces e.g. XY or YZ.

S1. The history of paper is inextricably linked with that of culture and science.

S2

S3

S4. The information had to be set on a lightweight and durable medium that was easily transportable.

1. Watermarking involved using metal wires to add decorations to paper.

Q.Humans had an urgent need to communicate certain information to each other in written form.

1. The Japanese immediately learned papermaking techniques and began using pulp derived from mulberry bark to produce this precious material themselves.
2. The spark that set off the invention of paper was simple but extremely significant.

Answer – SQ

Question 19 – Read the following passage and answer the questions that follow:

I drop Khasnobis at the Park Hotel – I suspect he has a booze session there – and dart quickly out of the heart of Calcutta. The Salt Lake City is on the right side of a alodrous road leading to the Calcutta airport. This new township is relatively clean and its roads are broad – Bengal's Chief Minister lives here – but it lacks the tang of old Calcutta. It has some bizarre buildings. My guest house, for instance, is an architectural flimflam. One first walks into a cavernous hall painted pastel blue. A concrete carbuncle erupts right at the centre of its otherwise flat roof. Its cavity is painted baby pink. Mock Corinthian pilasters protrude from its walls. At the end of

the hall is a flight of stairs, which leads to a set of rooms with ornate wooden doors. One of the rooms is mine.

My room usually smells dank, but today it is prussic acid. I call the caretaker.

"What is this smell?"

He wrinkles his nose and sniffs the air.

"It is room freshener, sir." He fishes out a container from one of the side cupboards and hands it over to me. It is indeed the room freshner. It assures you of a redolence of wild roses.

"I was happy with dank, friend".

"Sir?"

"Never mind. Is there another room vacant? I can't sleep in this room."

The caretaker wrings his hands. "No room is vacant on this floor sir. I could ask one of the guests to swap his room with yours."

"No, I don't want that. What about the rooms on the top floor?"

"We have two rooms on the top floor, sir. One of them is vacant. But it is not air-conditioned."

"I don't mind sleeping there. Kindly get the roon ready for me."

The night is breezy and pleasant. I light up a mosquito repellent and, in the whirring comfort of the ceiling fan, lapse into a delicious sleep.

I wake up with a start, sweating all over. The ceiling fan has ceased whirring. The power must have gone off. The mosquito coil eyes me with an orange glow. Where is Ghosh sleeping now? Does he have a ceiling fan in his room? Or a mosquito coil? Does he have a room at all? Is he sleeping in the open? As I stand up and walk towards the window the ceiling fan begins its drone. The light that comes from a

window a few yards across from mine is not strong enough to illuminate my room but bright enough to show me what is going on in that room. I silently draw the curtains and get back to bed. I am not a voyeur.

Based on the information given in the passage about the narrator's place of accommodation, find out the option that is erroneous.

Options

1. The rooms with ornate wooden doors were not on the topmost floor of the guest house and were air-conditioned and occupied.
2. The guest house opens into a huge hall painted in pastel blue which has a false ceiling at the center of the room done in baby pink.
3. The single storey guest house, located in old calcutta, is an example of bizarre buildings in the area and is itself a sham of architectural design.
4. The rectangular columns sticking out from the walls in the main hall were more examples of the architectural hypocrisy of the building.

Answer – The rooms with ornate wooden doors were not on the topmost floor of the guest house and were air-conditioned and occupied.

Question 20 – According to the passage, which of the following options is true?

1. The narrator gets back to bed because he respects people's privacy and did not want to snoop on others unwatched.
2. The narrator was not ready to be discovered snooping into other's privacy and there was a risk of people seeing him.
3. The narrator knew at any moment the power would come back and in bright lights there was always a chance that people outside would see him.
4. The narrator was disgusted with people's lack of civic sense when he follows the light coming from another window and decides to get to bed.

Answer – The narrator gets back to bed because he respects people's privacy and did not want to snoop on others unwatched.

Question 21 – Which of the following statements DOES NOT hold good as per the information given in the passage?

1. On other days too the narrator's room was not a comfortable one as it was unpleasantly damp and unaired.
2. The narrator requests the caretaker to shift his room as he was unable to bear the distinctive smell which had filled the air.

3. When the narrator questions the caretaker, he takes out a bottle of room freshener from his uniform pocket and tells him that this was the cause of the obnoxious smell in the room.
4. The caretaker is submissive to the complaints raised by the narrator and offers to help him out even though he has several limitations in the present set up.

Answer –

Question 22 – Read the passage and answer the question:

When we arrive at the crucial tension at the heart of gender identity politics, and one that most of its proponents either haven't noticed, or choose to ignore because it can only be resolved by rejecting some of the key tenets of the doctrine.

Many people justifiably assume that the word 'transgender' is synonymous with 'transesxual', and means something like : having dysphoria and distress about your sexed body, and having a desire to alter that body to make it more closely resemble the body of opposite sex. But according to the current terminology of gender identity politics, being transgender has nothing to do with a desire to change your sexed body. What it means to be trasngender is that your innate gender identity does not match the gender you were assigned at birth. This might be the case even if you are perfectly happy and content in the boy you possess. You are transgender simply of you identify as one gender, but socially have been perceived as another.

It is a key tenet of the doctrine that the vast majority of people can be described as 'cisgender', which means that our innate gender identity matches the one we were assigned at birth. But as we have seen, if gender identity is a spectrum, then we are all non-binary, because none of us inhabits the points represented by the ends of that spectrum. Every single one of us will exist at some unique point along that spectrum, determined by the individual and idiosyncratic nature of our own particular identity, and our own subjective experience of gender. Given that, it's not clear how anybody ever could be cisgender. None of us was assigned our correct gender identity at birth, for how could we possibly have been?

Once we recognise that the number of gender identities is potentially infinite, we are forced to concede that nobody is deep down cisgender, because nobody is assigned the correct gender identity at birth. In fact, none of us was assigned a gender identity

at birth at all. We were placed into one of two sex classes on the basis of our potential reproductive function, determined by our external genitals. We were then raised in accordance with the socially prescribed gender norms for people of that sex. We are all educated and inculcated into one of two roles, long before we are able to express our beliefs about our innate gender identity, or to determine for ourselves the precise point at which we fall on the gender continuum. So defining transgender people as those who at birth were not assigned the correct place on the gender spectrum has the implication that every single one of us is transgender; there are no cisgender people.

The logical conclusion of all this is: if gender is a spectrum, not a binary, then everyone is trans. Or alternatively, there are no trans people. Either way, this a profoundly unsatisfactory conclusion, and one that serves both to obscure the reality of female oppression, as well as to erase and invalidate the experiences of transsexual people.

The way to avoid this conclusion is to realize that gender is not a spectrum. It's not a spectrum, because it's not an innate, internal essence or property. Gender is not a fact about persons that we must take as fixed and essential, and then build our social institutions around that fact. Gender is socially constructed all the way through, an externally imposed hierarchy, with two classes, occupying two value positions: male over female, man over woman, masculinity over femininity.

The truth of the spectrum analogy lies in the fact that conformity to one's place in the hierarchy, and to the roles it assigns to people, will vary from person to person. The solution is not to reify gender by insisting on ever more gender categories that define the complexity of human personality in rigid and essentialist ways. The solution is to abolish gender altogether. We do not need gender. We would be better off without it. Gender as a hierarchy with two positions operates to naturalise and perpetuate the subordination of female people to male people, and constrains the development of individuals of both sexes. Reconceiving of gender as an identity spectrum represents no improvement.The solution to an oppressive system that

puts people into pink and blue boxes is not to create more and more boxes that are any colour but blue or pink. The solution is to tear down the boxes altogether.

Which statement is true among the four options?

1. Social structures around the globe have become amorphous and porous, making it very easy for the average citizen to express his/her beliefs about their distinctive gender identity.
2. Family and society mould us, educate us and inculcate progeny into one of two roles. As infants, expression of disparate attractions, identity or beliefs is non-existent.
3. From ancient times, Indian government has been inclusive about all manner of sexual identity and our relifious texts are replete with people professing vaious identities.
4. The author is a leader of social mores and religion, enabling her to understand the vicissitudes among human beings.

Question 23 – Though Nature dictates biology, gender politics is social. Which option correctly reflects this truism?

1. The rules of natural law are intrinsic to humans. But human nature and positive law may be independent of it. Society and governments want to legislate, and not necessarily accept man's inherent rights.
2. It is in the best interest of natural order that men and women follow the ancient rule of hunter-gatherer and nurturer. There is a higher order and meaning in this division of labour, and society should follow it.
3. Though biology and birth are factual and fixed, a result of evolution or God, gender politics is a socially constructed pyramid, imposed by the stronger or richer, that says man occupies a higher position and has power over women.
4. Power play and politics manipulates the economically or socially weak for political benefit routinely. Toxic ideas of gender shape social identity and political thought. In this, Nature is left far behind, an expedient accomplice.

Question 24 – Which is the simplest way to describe a transgender, according to the author?

Options

1. The description is about people who enjoy the freedom to exercise their individual choices in any way.
2. The description is about outcasts and outliers in society, who simply cannot fit into the normal social dynamics.
3. It describes a person who feels wronged by parents and society and straightjacketed into a persona they are not.
4. The description is about the instinctual personality at a person discovered as antithetical to what was originally and natally dispensed.

Question 25 – Would you infer from the passage that 'cisgender' humans occupy at least half of the population?

Options

1. It is conjectured that there are some who are comfortable in their personalities/skin, possibly identify wholly with a social or biological construct and accept the cisgender theory to describe themselves.
2. Almost all humans are not hundred percent classically masculine or feminine but have inimitable crossover personality traits. E.g. a man may be ultra sensitive, or a lady a highly reasonable stoic. This implies we are unique and non binary, not a true cisgender
3. If man considers himself an animal, albeit an evolved one, then a clear male-female gender universe makes an equitable universe, where different labels do not have any meaning.
4. Our subjective experience about gender influences the adult we will eventually become, regardless of what we were called at birth. It is a choice of some societies, and thus cisgender offers clarity place and position.

Reasoning Ability

Question 1 – Identify the letter cluster that does not belong to the following series:

ZBVEKQWAMHTNPCF, FCPNTHMWQKEVZ, VEKQMHTNPCF, FCPNHMQKE, KQMHNPF, PNMQK, KMN

1. PNMQK
2. FCPNHMQKE
3. KQMHNPF
4. FCPNTHMWQKEVZ

Answer:- FCPNHMQKE

Question 2 – Four pair of letter cluster have been given , out of which some pairs are alike and other pairs are different . Select the once that are similar.

1. EJOTYDIX : VMLWBGRA
2. RWBGLQVA : IZYKOTED
3. CHMRWBGL : XKNUDETO
4. NSXCHMRW : MVCHSPIZ

1. b,c & d
2. A, c & d
3. A, b & d
4. C and d only

Ans. A

Question 3 – In a certain code language

'M & N' means 'M is the husband of N'

'M @ N ' means 'M is the mother of N'

'M % N' means 'M is the daughter of N' and

'M # N' means 'M is the son-in-law of N'

How is N related to Q if 'N@T%K#V&P@Q'?

1. Mother-in-law
2. Sister-in-law
3. Mother
4. Sister

Answer:- Sister

Question 4 – Study the following information carefully and answer the question that follows.

Seven persons, A, B, C, D, E, F and G, use different brands of clothes, namely Raymond, Allen Solly, Van Heusen, FabIndia, Levi's, Wrangler and Nike, but not necessarily in the same order. Each of them bought a different car, namely BMW, Ferrari, Ford, Porsche, Honda, Lamborghini and Toyota.

The one who uses Wrangler did not buy either of Ferrari, Porsche and Ford. G uses Levi's brand and did not buy BMW. C bought Honda. F does not use Van Heusen and

did not buy either of Ford and BMW. The one who uses Allen Solly bought Toyota, and the one who uses Nike bought Lamborghini. B uses Raymond. Lamborghini is bought by none of A, B and F. BMW is not bought by the person who uses Wrangler or Van Heusen. E bought Ferrari. A does not use Wrangler, FabIndia or Van Heusen. Who uses FabIndia?

Enter the answer in the space provided on the screen. Answer should be in whole numbers without any symbols (eg %, kms, ms, etc.)

Answer:- D

Question 5 – Identify the letter-cluster that does not belong to the following series.

ANP, BOQ, DQS, GTW, KXZ

_____

Ans. GTW

Question 6 – Read the given statement and courses of action carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given courses of action logically follow(s) for pursuing

Statement:

The sanitation workers in a state have decided to go on state-wide strike again in a newly formed state.

Courses of action:

1. The sanitation workers demands should be accepted by the State Government
2. The sanitation workers going on strike should be dismissed from their jobs.

3. The demands of the sanitation workers should be considered with reference to their services in the recent Covid pandemic.
4. Either I or III follows
5. Either II or III follows
6. Either I or II follows
7. Only III follows

Ans. Either I or III follows

Question 7 – A question is given, Following by two statement is labelled I and II, Identify which of the statements is/are sufficient to answer the questions:

Statement:

Five persons – Asrith, Somu, Biswas, Mayur and Riswan – Were sitting around a circular table. Do all of them face the centre?

Conclusion:

1. Asrith sits second to the left of Somu; Biswas sits second to the right of Asrith.
2. Mayur sits third to the left of Riswan; Somu sits to the immediate left of Mayur, but Riswan is not an immediate neighbour of somu.

1. Both the statements I and II together are necessary
2. Either statement I alone or statement II alone is sufficient
3. Statement I alone is sufficient, While statement II alone is insufficient
4. Statement II alone is sufficient, while statement I alone is insufficient

Ans. Both the statements I and II together are necessary

Question 8 – A cricket club wishes to extend its life membership to some promising cricketers. The Executive board has decided the following criteria for giving away these memberships.

2022.   i) The candidate must not be more than 28 years of age and not less than 18 years of age as on 1 May 2022.

2023.   ii) The candidate must have participated in at least two inter-university tournaments, one of which must have been played under his/her captaincy.

iii) The candidate must have scored at least one century in a state level tournament.

1. iv) The candidate must have played at least one national level cricket match in which he/she has not scored less than a fifty.
2. v) The candidate must have won at least one Man/Woman of the Match in a tournament which is at least of a state level tournament.

1. In case a candidate fulfils all criteria except

1. ii) but has won a state level tournament under his/her captaincy, his case may be referred to the secretory

1. In case a candidate fulfils all criteria except the required runs as mentioned in criteria

1. iv) but is an all-rounder who have scored at least 25 runs along with taking two wickets in the same match, his/her case may be considered by the chairman.

Refer to the details of a candidate provided below and four options that follow. Select the appropriate option that applies to the person's candidature.

Mithilesh is an emerging player with excellent records to his credit. He has represented his university in seven inter-university tournaments, out of which he has won two cups for his university as captain and has scored four fifties. He was born on 25 January after 53 years of India's independence. He has also represented his state in three inter-state tournaments, one of which was played under his captaincy in which he scored a fifty and took four wickets for which he was given the Man of the Match award. He also scored a century in his debut national level cricket match

1. Candidate is not to be selected.
2. Candidate may be referred to the Secretary.
3. Candidate is to be selected.
4. Candidate may be considered by the Chairman.

Answer: Candidate is to be selected.

Question 9 – In a certain code language,

A # B means 'A is the father of B'

'A $ B'' means 'A is mother of B'

A + B' means 'A is the father in-law of B'

'A % B' means 'A is the son -in -law of B'

'A * B' means 'B is the son of A', and

'A @ B' means 'B is the sister of A'.

Which of the following statements is correct?

1. L#M@N$T' means 'L is the maternal grandfather of T.
2. C+D*E@F' means 'C is the paternal grandfather of F
3. 'G% H#J$ K' means 'G is the father of K.
4. P@Q$R@S' means 'P is the maternal uncle of S

Answer:- L#M@N$T' means 'L is the maternal grandfather of T.

Question 10 – A statement is given followed by two arguments. Decide which of the arguments is/are strong with respect to the statement.

Statement:

In each and every type of graduation, financial education should be made mandatory in the curriculum.

Arguments:

1. Students having good financial education will lead to development of the economy of the nation.
2. Financial education will help students to not fall in debt trap.

1. Neither argument I nor argument II is strong
2. Both arguments I and II are strong
3. Argument II is strong
4. Argument I is strong

Answer:- Both arguments I and II are strong

Question 11 – A candidate must

1. a) be a graduate in any discipline with at least 60% marks
2. b) have at least 55% marks in graduation if he/she has minimum 55% marks in post-graduation c) have at least 50% marks in graduation and minimum 55% marks in post-graduation if he/she holds a PhD degree.
3. d) have at least 55% marks in graduation if he/she has minimum 5 years of work experience after post-graduation.
4. e) have at least 55% marks in graduation if he/she has minimum 10 years of work experience after graduation.

Based on the criteria given above and without assuming any additional information, take a decision for the following candidate.

Harbhajan has secured 62% marks in post-graduation and has been working for the past 6 years since then. He has secured 55% marks in graduation.

1. The candidate is eligible under criterion b) only.
2. The candidate is eligible under criteria b) and c) only.
3. The candidate is eligible under criteria b) and d) only.
4. The candidate is eligible under criterion c) only.

Answer:- The candidate is eligible under criteria b) and d) only.

Question 12 – A question is given followed by two statements labellel I & II. Identify which of the statements are sufficient to answer the question.

Questions:

In a reputed school, the number of Grade I, II & III teaching faculty members are in ratio of 4:5:6 respectively. Find the percentage of female family members in the school?

Statements:

1. 50% of grade I facility members are male and 30% of grade II faculty members are female.
2. In grade III, the number of female faculty members is equal to the number of male faculty members.

1. Data in both statements I & II together are sufficient to answer.
2. Data in statements II alone is sufficient to answer.
3. Data in statement I alone is sufficient to answer
4. Neither data in statement I nor II is sufficient to answer

Answer:- Data in both statements I & II together are sufficient to answer.

Question 13 – Mohit, Vibha, Shalini, Garima, Puneet, Preeti and Kanika are seven teachers who are teaching different courses, namely Psychology, Sociology and Commerce. At least two teachers teach the subjects in each course. All the teachers are staying in different residential buildings, namely A, B, C, D, E, F and G, but not exactly in the same order. Mohit teaches Psychology with Puneet and stays in Building C. Garima lives in Building G and does not teach Sociology. One of the teachers who lives in Building F teaches Commerce. Vibha and Shalini do not teach the subjects in the same courses. The teachers who teach Psychology do not live in Building B. Preeti lives in Building A, but does not teach Commerce. Kanika teaches the same subjects as Preeti. Shalini stays in Building E.

In which building does Puneet stay?

1. B
2. D
3. A
4. C

Answer:- D

Coding
Question 1-

Jack and Jill are playing string game. Jack has given Jill two strings A and B.

Jill has to derive a string C from A,by deleting elements from string A, such that string C does not contain any element of string B.

Jill needs help to do this task. She wants a program to do this as she is lazy.

Given strings A and B as input ,give string C as Output.

Example 1:

- **Input:**
  tiger   -> input string A
  ti   -> input string B
- **Output:**
  ger   -> Output string C
- **Explanation:**
  After removing "t" and "i" from "tiger", we are left with "ger".
  So, the answer is "ger".

Example 2:

- **Input:**
  processed   -> input string A
  esd   -> input string B
- **Output:**
  proc   -> Output string C
- **Explanation:**
  After removing "e" "s" and "d" from "processed", we are left with "proc".
  So, the answer is "proc".

Example 3:

- **Input:**
  talent   -> input string A
  tens   -> input string B
- **Output:**
  al   -> Output string C

Explanation:

After removing "t" "e" and "n" from "talent", we are left with "al".

So, the answer is "al".

C++

```cpp
#include <bits/stdc++.h>
using namespace std;

int main() {
  string a,b;
  cin>>a;
  cin>>b;

  string c = " ";
  for(int i=0; i< a.length();i++){
    for(int j=0; j< b.length()-1;j++){
      if(a[i]==b[i])
      continue;
      else
      c+=a[i];
    }
  }


  cout<< c<< "\n";
  return 0;
}
```

Python

```python
a = input()
b = input()
c = ""
for i in a:
  if i in b:
    continue
  else:
    c += i
print(c)
```

Question 2

Mahesh and Suresh are playing a new game "**Checkers**". This is a very simple game but becomes challenging when more expert players are playing.

Below is the description of the game and rules: The game is played by 2 players.

This game consists of an N*M matrix. Each of the cells is background lit by lights.

And these cells are either Green or Black. The green and black cells are randomly lit and will be represented with 1's and 0's respectively.

Green cells are the cells that needs to be captured.

Black cells cannot be captured

Everyone is in the race to capture the maximum number of cells possible.

In a single chance, a player can capture all those adjacent cells which share an edge.

Once there is no adjacent edge the chance breaks and the next player will play.

Mahesh always starts the game and Suresh is second.

Both players are playing optimally, **find out how many cells Suresh captures.**

Input:

- N and M, size of matrix
- A[i][j] for all 1<=i<=N and 1<=j<=M

Let us try to understand it with an example

Consider the matrix below

N = 4

M = 4

A = 1001

    0110

    0110

    1001

If Mahesh plays first, he will try to capture most of the 1's, he will capture A[2][2], A[2][3], A[3][2] and A[3][3]. Now there is no adjacent cells left. So, the chance will be given to Suresh.

Now Suresh's turn.

He can capture either of A[1][1] or A[4][1] or A[4][7] or A[4][4]. He will capture any one cell, and as there is no adjacent deft, the chance will now be given to Mahesh.

The game proceeds and then again Suresh's turn will come, and he will again be able to choose only 1 cell and finally Mahesh will end the game by choosing the final cell.

Like this Mahesh has captured 6 cells and Suresh has captured only 2 cells.
Hence 2 is the answer.

Example 1:

- **Input:**
  2 2   -> Input integer, N, M
  1 1   -> Input integer, A[i]
  1 1   -> Input integer, A[N]
- **Output:**
  0   -> Output
- **Explanation:**
  In the above scenario, it is very clear that if Mahesh plays first, he will capture all the cells as all the cells are adjacent to each other.
  There will be nothing left for Suresh. Hence the cells captured by Suresh will be 0.
  Hence the answer is 0.

Example 2:

- **Input:**
  4 4   -> Input integer, N, M
  1001   -> Input integer, A[i]
  0110   -> Input integer, A[i+1]
  0110   -> Input integer, A[i+2]
  1001   -> Input integer, A[N]
- **Output:**
  2   -> Output
- **Explanation:**
  If Mahesh plays first, he will try to cover most of the 1's, he will cover A[2][2], A[2][3], A[3][2] and A[3][3]. Now there is no adjacent cells left. So, the chance will be given to Suresh.

  Now Suresh's turn.
  He can capture either of A[1][1] or A[4][1] or A[4][1] or A[4][4]. He will capture any one cell, and as there is no adjacent left, the chance will now be given to Mahesh.

  The game proceeds and then again Suresh's turn will come, and he will again be able to choose only 1 cell, and finally Mahesh will end the game by choosing the final cell.

  Like this Mahesh has captured 6 cells and Suresh has captured only 2 cells.
  Hence 2 is the answer.

Python

```
def getMaxVol(money, price, volume, n):
  K = []
  for i in range(n + 1):
    temp = []
    for j in range(money + 1):
      temp.append(0)
    K.append(temp)
  for i in range(n + 1):
    for m in range(money + 1):
      if i == 0 or m == 0:
        K[i][m] = 0
      elif price[i - 1] <= m:
        K[i][m] = max(volume[i - 1] + K[i - 1][m - price[i - 1]], K[i - 1][m])
      else:
        K[i][m] = K[i - 1][m]
  return K[n][money]


N, money = map(int, input().split())
price = list(map(int, input().split()))
volume = list(map(int, input().split()))
print(getMaxVol(money, price, volume, len(volume)))
```

Advanced Quantitative

Question 1: The probability of having at least one girl and one boy in a family of four children, assuming equal probability of male and female births is:

1. 0.8525
2. 0.7625
3. 0.8750
4. 0.9375

Answer: 0.8750

Question 2: Find the distance between the points of intersection of the tangent to the hyperbola xy = 1 at the point $(2, \frac{1}{2})(2, \frac{1}{2})$ with the axes.

1. 1414
2. 1515
3. 1717
4. 1313

Answer:

Question 3: If α and β are the roots of the quadratic equation px² = qx = r = 0, then what is the value of (α³ + β³) / (α^(-3) + β^(-3))?

The options are:

1. (3pqr - q³) / r³
2. q² - 2pr
3. r³ / p³
4. r² / p²

And the correct answer is: r³ / p³

Question 4: If $1 \leq x \leq 3$ and $-8 \leq y \leq 16$, and the minimum value of $\frac{x+y}{yx+y}$ is $\frac{a}{b}$, then the values of a and b satisfy which of the following equations?

1. a + b = 1
2. $a^2 + b^2 = 89$
3. a − b = 0.5
4. $a^2 - b^2 = -15$

Answer: $a^2 + b^2 = 89$

Question 5: If the roots of $2x^3 - 3x^2 - 11x + 6 = 0$ are in Arithmetic progression, then the greatest positive integer root is

Answer: 3

Question 6: If real number x, y, z satisfy the
equation $(x+y)2+(y+z)2+(z+x)2=2(xy+yz+zx)(x+y)2+(y+z)2+(z+x)2=2(xy+yz+zx)$, find the value of the expression 3x + 5y + 7z

Answer: 64

Question 7: Login identities are formed by using four distinct letters from the alphabet followed by a fixed number of digits not necessarily distinct. If we want to generate 999 crore identities, how many digits should be there in a login identity?

Answer:

Question 8: Study the table below and answer the following question:

Characteristics	2009		2014		2019	
Total	Persons of voting age	Percent voted	Persons of voting age	Percent voted	Persons of voting age	Percent voted
Total	109	70	115	69	128	68
Male	60	73	61	70	63	69
Female	59	69	62	68	65	70
Caucasian	95	78	106	72	118	68
African – American	15	56	18	54	20	52
Region						
Northwest	79	75	81	73	96	68
South	35	58	38	62	42	56
Age(years)						
18-24	11	55	13	51	26	51
25-44	48	68	49	66	50	64
45-64	37	78	42	76	44	70
64+	18	67	19	67	40	63

In 2014 what percentage (to nearest value) of persons of voting age were male?

1. 52.55%
2. 53.04%
3. 50.55%
4. 51.65%

Answer: Option B – 53.04%

Question 9: Study the table below and answer the following question:

Characteristics	2009		2014		2019	
Total	Persons of voting age	Percent voted	Persons of voting age	Percent voted	Persons of voting age	Percent voted
Total	109	70	115	69	128	68
Male	60	73	61	70	63	69
Female	59	69	62	68	65	70
Caucasian	95	78	106	72	118	68
African – American	15	56	18	54	20	52
Region						
Northwest	79	75	81	73	96	68
South	35	58	38	62	42	56
Age(years)						
18-24	11	55	13	51	26	51
25-44	48	68	49	66	50	64
45-64	37	78	42	76	44	70
64+	18	67	19	67	40	63

In 2009, how many females of voting age voted?

1. 43.76 million
2. 40.71 million
3. 42.36 million
4. 41.89 million

Answer: Option B – 40.71 million

Question 10: Study the table below and answer the following question:

Characteristics	2009		2014		2019	
Total	Persons of voting age	Percent voted	Persons of voting age	Percent voted	Persons of voting age	Percent voted
Total	109	70	115	69	128	68
Male	60	73	61	70	63	69
Female	59	69	62	68	65	70
Caucasian	95	78	106	72	118	68
African – American	15	56	18	54	20	52
Region						
Northwest	79	75	81	73	96	68
South	35	58	38	62	42	56
Age(years)						
18-24	11	55	13	51	26	51
25-44	48	68	49	66	50	64
45-64	37	78	42	76	44	70
64+	18	67	19	67	40	63

Over the three elections, what is the ratio of the total votes cast by females to those cast by African- American?

1. 128.3: 28.5
2. 127.3: 25.6
3. 125: 25
4. 126.3: 27.6

Answer: Option A – 128.3: 28.5

Advanced Reasoning

Telegram: @PLACEMENTLELO

Question 1 – Seven car drivers, P, Q, R, S, T, U and W, reach Delhi in a particular sequence. U reached immediately before P, but does not immediately follow S. R is the last one to reach Delhi. T follows immediately after P and is subsequently followed by W.

Who ranked last in the sequence of reaching Delhi?

Answer:- R

Question 2 – In a certain code, ETY written as 145. How will EOJT be written in that code?

Ans . 150

Question 3 – Eight boys, B1, B2, B3, B4, B5, B6, B7, and B8, sit around a circular table facing towards the centre. B3 is second to the left of B5. B1 is third to the right of the one who sits diagonally opposit to B4. B6 sits opposite to the one who is to the immediate left of B2. Neither B6 nor B7 is adjacent to B3. B8 sits second to the right of B2. Who is the immediate left of B3?

Answer:-B2

Question 4 –In a certain code, if FOCUS = 23 and PERIL=43, the GAMBLE will be equal to:

1. 47
2. 51
3. 41
4. 78

Question 5 –A statement is given followed by three arguments. Decide which of the arguments is/are strong with respect to the statement.
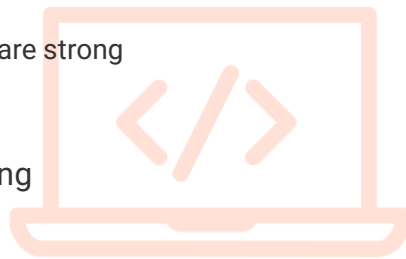
Statement:

It is observed that in India, many students go to foreign countries for studies, and in the end, they settle there.

Arguments:

1. Foreign countries have a better lifestyle.
2. Quality of education in foreign countries is much better than that in India.
3. Foreign countries give more privileges to their citizens.

1. Argument II is strong
2. Argument I is strong
3. Both arguments I and II are strong
4. Argument III is strong

Ans. A – Argument II is strong

Question 6 – The following criteria is decided by a company for the selection of an accountant.

1. The candidate must have done MBA in Finance
2. Minimum and maximum age of the candidate should be between 21 years and 35 years as 31 March 2022.
3. If the candidate does not satisfy the above two conditions but has completed his/her CA, the case will be forwarded to the Finance head and he/she can allow the candidate to appear for the interview.
4. If the candidate satisfies conditions 1 and 2 above, then such candidates will be called for the preliminary interview.
5. If the candidate has scored 60% marks in the preliminary interview, then he/she will be called for the final interview.
6. For the final selection, the candidate must get 80% marks in the final interview.

Mr. Mohil Srivastava was born on 4 May 1995 and has done MBA 1 year ago. He was number one in the merit list of candidates of the preliminary interview, with a score of 58%. Based on the given criteria, decide whether Mr. Mohit Srivastava will be selected or not.

Answer: Not selected

Question 7 – There are five floors in a building, numbered 1 to 5 in such a way that the lowermost floor is numbered 1 and the topmost floor is numbered 5. Five members, namely R, L, T, C and A, live on different floors of the building, but not necessarily in the same order. Also, these five work in different companies, namely C1, C2, C3, C4, and C5. T stays on floor no. 2 and works in C4, and C stays on floor no. 5. Also, the one who stays on floor no. 1 is working in C1. Who lives on floor no. 3 and in which company does she/he work?

Statements:

1. Neither L nor A works in C1.
2. One who lives on floor no. 3 works in C3; A does not work in C3.

1. Data in statement II alone is sufficient to answer
2. Neither data in statement I nor II is sufficient to answer
3. Data in statement I alone is sufficient to answer
4. Data in both statements I and II are sufficient to answer

Answer: Data in both statements I and II are sufficient to answer

Question 8 – Read the given information carefully and then answer the question that follows.

A restaurant serves seven different sweets to its customers on Saturday night after the dinner. The sweets are as follows: Gulab jamun, Sandesh, Modak, Shrikhand, Payasam, Phirni and Ghevar. The diner is free to select the order of the seven sweets, according to the following conditions:

1. Payasam is served some time after Shrikhand
2. Exactly one sweet should be served between Sandesh and Modak in the same order.

iii. Phirni is served some time before Sandesh

1. Payasam is served either fifth or sixth.
2. Gulab Jamun is served second.

Which of the following sequences is acceptable?

1. Shrikhand, Gulab Jamun, Phirni, Ghevar, Sandesh, Payasam, Modak.
2. Phirni, Gulab Jamun, Sandesh, Shrikhand, Payasam , Modak, Ghevar
3. Phirni, Gulab Jamun, Shrikand, Payasam, Sandesh, Ghevar, Modak
4. Shrikand, Gulab Jamun, Ghevar, Sandesh, Payasam, Modak, Phirni,

Answer: A

Question 9 – Read the following information carefully and answer the given question.

The following are the eligibility criteria for applying for the post of Officer in an MNC:

1. The candidate should be a graduate with minimum 68% marks.
2. The candidate should have at least 65% marks in graduation if he/she has post-graduation with at least 70% marks.
3. The candidate should have at least 60% in graduation and at least 65% marks in post-graduation if he/she holds a Doctoral Degree (PhD).

1. The candidate should have at least 60% marks in both graduation and post-graduation if he/she has at least 4 years of work experience after post-graduation.
2. The candidate should have at least 65% marks in graduation if he/she has at least 8 years of work experience after graduation.

Details of a candidate are given below. You have to decide under which of the above criteria is the candidate eligible. The candidate may be eligible under one or more criteria given above.

Read the information given in the question and find out the correct answer.

Sushama has been working from 3 years after completing her PhD. She has 65% marks in graduation and 60% in post-graduation.

1. Only criteria (iii) and (iv)
2. Only criteria (iii)
3. Only criteria (iv)
4. Not eligible

Answer: A – Only criteria (iii) and (iv)

Question 10 – A statement is given followed by two arguments. Decide which of the arguments is/are strong with respect to the statement?

Statements:

In schools, primary level education should be given in the mother tongue of the students

Arguments

1. Students can learn very easily in their mother language.
2. Students will feel more comfortable while thinking and absorbing the knowledge provided by the teacher.

Options

1. Both arguments I and II are strong
2. Argument I is strong
3. Neither argument I nor II is strong
4. Argument II is strong

Answer: a – Both arguments I and II are strong.

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Numerical Ability

Question 1 – The sum of n observations is 11280 and their mean is 705. Find the value of n.

1. 15
2. 16
3. 14
4. 13

Answer: 16

Question 2 – If the area of the triangle with base 16cm is equal to the area of square with side 14cm, then what is the altitude of the triangle in cm?

1. 24.5
2. 28.0
3. 21.4
4. 26.2

Answer: 24.5

Question 3 –

In a computer game a builder can build a wall in 16 hours while a destroyer can demolish such a wall completely in 40 hours. Both the builder and the destroyer were initially set to work together on level ground. But after 24 hours, the destroyer was taken out. What was the total time taken to build the wall?

1. 26 hours 46 minutes
2. 25 hours 6 minutes
3. 24 hours 16 minutes
4. 25 hours 36 minutes

Answer: Option D – 25 hours 36 minutes

Question 4 –

Calculate the compound interest on a sum of rs. 12,000 at 8% per annum for 2(5/8) years nearest to a rupee.

1. Rs. 2,712
2. Rs. 9,612
3. Rs. 2,698
4. Rs. 2,066

Answer: Rs. 2,698

Question 5 – A certain sum of money becomes Rs. 4,500 at a certain rate of compound interest of 4 years and Rs. 75000 in 8 years. Find the money?

1. Rs. 2900
2. Rs. 2500
3. Rs. 2700
4. Rs.2300

Answer:2700

Question 6 – A farmer has 5 hectares of land and grows wheat on it. Given that the cost of sowing is 3 times the cost of seeds, the cost of labour is 150% higher than the cost of the sowing and the sum of all the other costs before selling the crop is 2 times the cost of labour. How many kg of wheat per hectare was produced if the farmer earned a profit of 150% (profit calculated on the total money spent in the

agricultural process) and if it is given that the cost of seeds was rs. 7,000 and wheat sold by the farmer was at the rate of Rs. 18 per kg?

1. 4812.88 kg
2. 5152.77 kg
3. 5515.35 kg
4. 5317.16 kg

Answer: Option B – 5152.77 kg

Question 7 – A rabbit takes 9 jumps for every 5 jumps of a lion and fox takes 7 jumps for every 9 jumps of a rabbit. The distance covered by the lion in 3 jumps, the distance covered by the fox in 2 jumps and the distance covered by the rabbit in 5 jumps is equal. Find the ratio of their respective speed.

1. 25 : 75 : 135
2. 28 : 14 : 35
3. 50 : 105 : 54
4. 45 : 55 : 65

Answer: Option C – 50 : 105 : 54

Question 8 – A vehicle is purchased for Rs. x. Spent Rs. 3,000 on repairs, Rs. 2000 on transportation, Rs. 5,000 on insurance and Rs. 2,500 on a music system. The vehicle is sold at a 20% profit of Rs. 1,50,000. What is the value of x?

1. 1,12,500
2. 1,11,000
3. 1,10,500
4. 1,11,500

Answer: Option A – 1,12,500

Question 9 – A start from P to Q at the same time when B starts from Q to P. Both cross each other at a certain point. A completes the journey to Q in 9 hours after crossing and B to P in 4 hours after crossing each other. Determine the ratio of their speed.

1. 2 : 3
2. 1 : 5
3. 1 : 3
4. 2 : 5

Answer: 2 : 3

Question 10 – 9 men, 7 women and 5 children are to distribute 2483 pens in three days. On the first day, all were present to distribute. On the second day, 3 men and 2 children were absent. On the third day, 3 women and 3 children were absent. The number of pens distributed by each man, woman and child in a single day is in the ratio of 5 : 3 : 2. Calculate the total pens distributed on the third day.

1. 793
2. 663
3. 973
4. 988

Answer: 793

Question 11 – Let the numbers of primes between 12 and 99 be n, and out of these the number which remains prime after interchanging the digits is m. what percent is m of n?

1. 32%
2. 25%
3. 30%
4. 40%

Answer: 40%

Question 12 – The present age of B is 2 years less than the average of present ages of A and C. After 13 years the age of A is 28 years more than the age of C and 8 years ago the age of C was 70% of the age of B, then find the difference between the age A and B.

1. 18
2. 16
3. 12
4. 14

Answer : 12

Question 13 – A sum of money has been distributed between P, Q, and R. P gets (0.3) of the sum, Q gets (0.2) of the remainder, R gets Rs. 1120. What is the sum (in Rs.)

1. 2800
2. 2000
3. 2500
4. 2400

Answer: 2000

Question 14 – 26 men can complete a bridge in 8 days, 4 days after they started working, 12 more men joined them. How many days will they now take to complete the remaining work?

1. 2(19/38)
2. 2(27/38)
3. 2(23/38)
4. 2(28/38)

Answer:2(28/38)

Question 15 – The average speed of a vehicle during its journey from A to B was 48 km/h, and for B to A it was 54 km/h. What was its average speed (in km/h) for the entire journey?

1. 50.82
2. 50
3. 51
4. 51.34

Answer : Option A – 50.82

Question 16 – If $x^2-6x+1=0$ then $\frac{(x^4+1}{x^2)(x^2+1)}{x^4-1}=?$

1. $\pm 13222 \pm 22132$
2. $\pm 6622 \pm 2266$
3. $\pm 3322 \pm 2233$
4. $\pm 9922 \pm 2299$

Answer:

Question 17 – In a school out of 4800 students, $13\%_{31\%}$ students are girls, out of which 62.5% girls like apples. If there are 2000 students who do not like apples, then what is the number of boys who do not like apples?

Answer: 300

Question 18 – What is the difference between the greatest number of four digits which is divisible by 15, 25, 40 and 75 and the smallest four digit number which is divisible by 15, 25, 40 and 75.

1. 8600
2. 8300
3. 8400
4. 8500

Answer: 8400

Question 19 – Study the following table and answer the question below:

The table shows number of people (in hundreds) participating in Annual Fair from 6 different towns over the years:

Years Towns	2015	2016	2017	2018	2019	2020
A	4.2	5.1	6.3	4.4	5.8	6.2
B	5.5	5.3	5.1	5.0	5.4	6.8
C	4.5	6.2	6.5	5.9	5.4	4.9
D	5.8	5.7	5.3	5.1	4.9	4.8
E	6.0	6.1	5.9	5.3	5.5	5.7
F	5.7	6.2	6.6	5.1	4.4	4.3

What is the sum of the average number of people participating in the fair from towns E and F over all the years?

Answer: 11.13

Verbal Ability

Question 1 –

Select the option that can be used as a one-word substitute for the given group of words.

A group of spoiled girls from high school arrived at Reema's party.

1. Posse
2. Regalia
3. Snob
4. Entourage

Answer – Snob

Question 2 –

Select the most appropriate option to fill in the blank.

Not many people understand that those suffering from _____ need help.

1. Kleptmania
2. Keleptomania
3. Klepotomania
4. Kleptomania

Answer – Kleptomania

Question 3 –

Choose the most appropriate option to complete the following sentences.

A protein breakfast _____ prepare. Top your morning toast with scrambled eggs, a

slice of smoked salmon, or some lean ham and , when _____ time, enjoy an omelet.

1. Needn't take long to; you do have a little more
2. Needn't taking any longer to; you do has a little more
3. Needn't taking any longer to; you do have little more
4. Needn't take no longer to; you do have a little much more.

Answer – Needn't take long to; you do have a little more

Question 4 –

Choose the most appropriate option to complete the following sentences.

Performance is _____ of both technical and expressive skills. Technical skills can

be taught _____ instinctive.

1. Generally regarded as a synthesis; while expression is more
2. Regarded generally as synthesis; while more expression is
3. Regarded generally as a synthesis; while expression is most
4. Generally regarded as synthesis; while expressions are more.

Answer – Generally regarded as synthesis; while expressions are more.

Question 5 –

Sentences of the paragraph given below are jumbled order. Arrange the sentences in

the correct order to form a meaningful and coherent paragraph.

1. It is considered the most well-known, most widely used toxic defoliants in Operation Trail Dust, as the program was called.
2. The goal of the operation was to defoliate the countryside and as a result, flush out members of the National Liberation Front of North Vietnam and deprive them of access to food supplies.
3. Just as American veterans and people of Southeast Asia still struggle today with the long-term effects of exposure to Agent Orange, so too do the many species of the Southeast Asian forests stripped of their vegetation.

4. Agent Orange was developed by the US Department of the Army Advanced Research Project Agency (ARPA) and used as a defoliant in Vietnam and parts of Laos and Cambodia from 1962 to 1971.
5. The creation and use of Agent Orange are part of the explosion of chemical fertilizers, insecticides, and herbicides after World War II— one of the main contributors to the alarming loss of biodiversity in the past half-century.

1. DABCE
2. ECDAB
3. EABCD
4. DCEAB

Answer – DABCE

Question 6 –

Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. The Zhangjiajie National Forest Park in the Chinese province of Hunan features gigantic pillar-like rocks, the kind you see throughout the movie.
2. The only difference is they aren't floating; they are the result of many years of erosion.
3. The erosion which forms these pillars is the result of expanding ice in the winter and the plants which grow on them.
4. The floating 'Hallelujah Mountains' you saw in the movie Avatar were inspired by a real place on Earth.
5. These formations are distinct hallmarks of the Chinese landscape, and can be found in many ancient Chinese paintings.

1. A, B, E, D, C
2. C, D, A, B, E
3. D, C, B, A, E
4. D, A, B, C, E

Answer – DABCE

Question 7 –

For the four sentence paragraph below, sentences S1and S4 are given. From P, Q, R and S, select the appropriate sentences that can fit S2 and S3, respectively, (write your answer in the text box provided without any spaces ed. XY or YZ).

S1 – Owls always attract humans with their spooky yet lovable physical characteristics and mysterious behaviors.

S2 –

S3 –

S4 – Usually, they take a nap facing downward and sometimes they turn their massive heads backward for a comfortable sleep in some different places.

P – They follow this sleep pattern due to having a heavy head.

Q – They do not build their own nests; instead of manufacturing, they choose to snatch hawks, falcons, eagles, or other animal needs.

R – But, among several peculiar behaviors of these intriguing birds, what captures most human eyes is how they enjoy slumber.

S – These enigmatic birds have different sleeping patterns than humans and mammals

Answer – RS

Question 8 –

Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

Buddhism does not deny the reality of material existence, nor does it ignore the very great effect that the physical world has at us.

Options

1. Buddhism does not deny
2. nor does it ignore
3. the very great effect that
4. the physical world has at us.

Answer: D

Question 9 –

Select the most appropriate set of options to fill in the blank.

The Athenians saw Socrates as a threat, especially to the Athenian youth. Socrates A. _____ quite a following among the young men of Athens. He taught these impressionable minds to question everything, even Athenian B._____. Eventually, Socrates was arrested and put on trial for corrupting the youth, not believing the gods, and creating new deities.

The 'Apology' is Socrates' C._____ against these charges. Instead of crying and pleading for mercy, Socrates accepts his charges and attempts to D. _____ the jury with reason. He argued that it was his calling from the gods to seek knowledge and that it was through his questions he uncovered truth.

1. (A)acquired (B)authority (C)defense (D) persuade
2. (A) attempted (B) force (C) security (D) advise
3. (A)enjoyed (B)command (C) protection (D)dissuade
4. (A)developed (B)esteem (C)shelter (D)provoke

Answer – (A)acquired (B)authority (C)defense (D) persuade

Question 10 –

Each sentence contains four underlined phrases. Three of these phrases have been correctly used, and one has been incorrectly used. Choose the phrase from the options which best replaces the INCORRECT phrase in the sentence.

Lomov went towards the window there, at a table spotted with ink stains, had seated a young man with his hair standing up in four tufts on his head, and long faded uniform.

Options

1. Spots of
2. Was sitting
3. Over his head

4. Through the window

Answer – was sitting

Question 11 –

Identify the error in the given sentence

Money, whether it's represented by seashell, a metal coin, a piece of paper, or a string of a code electronically mined by a computer, don't always have value.

Options

1. a metal coin, a piece of paper, or
2. a computer, don't always have value
3. a string of a code electronically mined by
4. Money, whether it's represented by seashell

Answer: B

Question 12 –

For the four sentence paragraph below, sentences S1and S4 are given. From P, Q, R and S, select the appropriate sentences that can fit S2 and S3, respectively.

S1: The economist Robert Solow noted that "there is no shortage of talk about the middle class" — and that was 10 years ago.

S2:

S3:

S4: These definitions range from a wholly subjective set of aspirations to a highly specific measure of household income, and everything in between.

P: There is nothing approaching a universal definition of a middle class.

Q: All of this requires a reasonably clear idea of who we are talking about.

R: In the final analysis, how can the quality of life of the middle class be improved?

S: However, there is a kaleidoscopic range of definitions.

Options

1. S and R
2. R and P
3. P and R
4. S and P

Answer – S and P

Question 13 –

Given below is a paragraph with five sentences, which are presented in a jumbled order. Write down the best order (ABCDE) which would form a meaningful, unified, and coherent paragraph.

A – As in the visual realm, a second picture is not necessary to explain what a first picture means; if it were otherwise, we'd fall prey to infinite recursion.

B – No one needs to say what facts and objects represent, as they are simply there, embedded in our picture of reality and so to say what they represent is actually nonsense, absurd.

C – Rather than coming up with a theory about how words and facts represent reality, which is crucial to both realists and anti-realists, he determined that representation is irrelevant.

D – What Wittgenstein understood is that you can't use words to explain representation, because words are representation themselves.

E – Wittgenstein developed a philosophy that was deeply embedded in the world – not in idealized realms of thought like a rational idealist, but in how we talk about the world.

Answer – EDCBA

Question 14 –

Choose the most appropriate set of idioms that would fill in the blanks and complete the text given here.

Alan and John, both young software engineers founded a 1. _____ a few years ago. They saw opportunities in the world of social networking and plunged headlong into it. Since they were 2. _____ in this arena, they were not sure of their success but they were mentally prepared 3. _____. Today they have 4. _____ and have made a name for themselves.

1. 1. Start up 2. Turn the early corner 3. To toe the boat 4. Hit a gold mine
2. 1. Start up 2. Hitched the wagon to a star 3. To do or die 4. Hit the goalpost
3. 1. Start up 2. The early birds 3. To sink or swim 4. Hit the jackpot.
4. 1. Start up 2. The early worms 3. To sink or swim 4. Hit the bulls eye.

Answer – 1. Start up 2. The early birds 3. To sink or swim 4. Hit the jackpot.

Question 15 –

Choose the most appropriate set of idioms that would fill in the blanks and complete the text given here.

Introducing a new idea to launch a product can sometimes become a tough proposition. Not everyone is amenable to unconventional ideas. One can expect stiff opposition to something that is not (1) _____. You can expect CEO's or other important people at the helm of corporates (2) _____ for coming up with crazy ideas. That's not all —— there may be others who want to (3) _____ into the conversation as

you make your pitch to potential investors. But it's not a one formula fix for all. You may come across clients who recognise your inspiration and are ready to (4) _____ only to catch the train of your genius.

1. 1. Run off the shore 2,. Raking you over the coals 3. Throw a bat 4. Throw caution to the wolves
2. 1. Run off the mill 2. Raking you over the coals 3. Throw a red herring 4. Throw caution to the wind.
3. 1. Run off the street 2. Toasting on the grill 3. Catch the red herring 4. Throw caution to the wind.
4. 1. Chip of the old block 2. Roasting you 3. Show a red flag 4. Throw caution to the dogs.

Answer – 1. Run off the mill 2. Raking you over the coals 3. Throw a red herring 4. Throw caution to the wind.

Question 16 –

Read the following passage and fill in the blanks by selecting the most appropriate option.

There is no denying that the traditional way of learning and development is the most 1. _____ way for education. But of late, self-directed and self-paced 2. _____ method is being used by adults for their professional development and self learning. Owing to the numerous 3. _____ ranging from discharging professional duties to fulfilling family obligations, a significant number of people cannot 4. _____ themselves for a traditional college programme. .

Blank 1. A. active B. adequate C. effective D. valid

Blank 2. A. teaching B. learning C. training D. studying

Blank 3. A. constraints B. coercions C. restraints D. allowances

Blank 4. A. deny B. enter C. decline D. enroll

1. (1)-D, (2)-A, (3)-B, (4)-C
2. (1)-C, (2)-D, (3)-A, (4)-B
3. (1)-B, (2)-D, (3)-C, (4)-A
4. (1)-C, (2)-B, (3)-A, (4)-D

Answer – (1)-C, (2)-B, (3)-A, (4)-D

Question 17 –

Choose the sentence in which the underlined idiom has been used appropriately:

1. Old Mrs. Jha kicked at the bucket years ago but her old classmates got to know of it only at another friend's funeral.
2. Mom thinks that the old grandfather clock has kicked the bucket; It hasn't been working for a few months.
3. Ah Chung, a San Francisco murderer, has literally kicked the bucket.
4. Some of the fish in my son's aquarium kicked into the buckets when we went on a vacation.

Answer – A

Question 18 –

Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given here.

Mr. Randhawa threatened Ms. Puri that he will take strong action against her but he's a _____. Not only does she know that very well but she is also no nonentity. She is _____ in cosmetics now, so, instead of reacting, she simply left the building. On her way out she bumped into a friend who offered her a lift but she turned him down. He is known to be a serious _____! She could not find a taxi, so it was _____ for her.

1. Road hog
2. Paper tiger
3. Top dog
4. Shank's pony

1. 1243
2. 2431
3. 2314
4. 1342

Answer – 2314

Question 19 –

Read the given passage and answer the questions that follow.

For the first few days, the two inmates of the small living room hardly conversed. The news reporter's voice filled up the silence and awkwardness. Sometimes, annoyed with mausaji's constant channel hopping, Chulbuli mausi uttered a frustrated "Uff-ho" and left the room. All these years she had hardly spoken to her sister's husband and had never liked the man. Mausaji too shared similar feelings for his sister-in-law. A working woman was of an alien species that Mausaji could not comprehend. He was a man of few words and had traditional patriarchal values. Lali mausi was his type.

It was a strange way that the North Pole and the South Pole came together. One afternoon the heat of Lucknow had made it impossible for Chulbuli mausi to take her beauty nap. Finding nothing purposeful to do, she decided to apply her 'multani mitti' face pack. While it dried on her face, she walked into the living room and sat on the sofa. Mausaji was absorbed in the debate between a politician, a social service worker and a film actor on the spread of the pandemic. It was a discussion for the namesake. The cacophony and the loud volume of the television set had turned the room into a madhouse. Mausaji never sat on the sofa. His chair was pulled close to the television. Chulbuli mausi made faces from behind for a while and then with a loud "uff-ho" got up suddenly and snatched the remote from mausaji's hand and lowered the volume.

Readers, don't compare this incident with similar everyday situations in your living room! In the last twelve years that Lali mausi had been married, her husband and

sister had spoken to each other barely a couple of times. In the initial years, mausaji had tried a few times to talk to his 'strange' sister-in-law but had backed off after cold responses. No one knew why Chulbuli mausi disliked mausaji. Relatives thought that it was the natural jealousy of an older sister who wasn't married. But the truth was something else!

Anyhow, let's not forget the television remote….Chulbuli mausi had snatched mausaji's day long companion and sat back on the sofa unperturbed. Mausaji on his part opened his mouth a few times, looked at his sister-in-law's 'multani mitti' covered face and sat down amicably in his chair accepting defeat. In all these years, forget about crossing him in so direct a fashion, no woman had dared open her mouth in front of him. He covertly looked at the remote in the hands of his opponent and then gave up.

1. According to the passage, which of the following options is true?

1. Chulbuli mausi seems to have come to Lucknow to stay with her elder sister and brother-in-law and is not a regular inmate of their house.
2. Lali mausi who was mausaji's type must be an obstinate homemaker, who abided by patriarchal regulations and dictates.
3. Mausaji gives up the fight at the end when he was defeated by an opponent who he realizes is his equal and can't be dominated.
4. Chulbuli mausi was in awe of her brother-in-law and therefore, made it a point to avoid him as much as possible and kept to herself.

Answer – B

Question 20 –

Mausaji found Chulbuli mausi 'strange'. What would be the most correct reason for this statement?

1. Mausaji has traditional values and cannot understand the wilful nature of women like Chulbuli mausi.
2. Chulbuli mausi's sense of servitude is against the patriarchal principles upheld by mausiji.
3. The docility of Chulbuli mausi baffles mausaji who are not used to such kind of behavior in women.
4. Mausaji did not get a chance to know his sister-in-law well in the last twelve years of his married life and found her ways comprehensible at last.

Answer − A

Question 21 −

Which of the following statements does not hold good as per the information given in the passage?

1. The scene is a classic example of family feuds caused in traditional set up due to gaps in values and thought processes of different people.
2. The scene described in the passage creates a sense of humour while at the same time making readers aware of the vast possibilities in human psychology and the inherent differences in perspectives.
3. The passage brings to light the concept of 'new age women' who may belong to traditional families but are modern in their thoughts and ways of life and do not hesitate to prove their point to others.
4. The passage is an example of serious critical writing on male domination and how women suffer at the hands of patriarchy without being able to take matters into their own hands ever.

Answer − B

Question 22 −

Read the given passage and answer the questions that follow:

One fact that never fails to astound me: Despite the immense culture changes and leap in knowledge over the epochs, the human brain— that crucible of consciousness, roiling with the psychologies that govern the behaviors we call human nature— has remained virtually unchanged for the past hundred thousand years. How humbling to consider that what is cognitively true of our ancestors—- who, lacking a knowledge of astronomy as the correct frame or reference for planetary motion, explained eclipses as acts of god and comets as omens of ill fortune— is as true of us.

The explanatory contexts in which this tendency manifests today may be different, but it manifests just the same—— especially in our interpersonal relationships, where so much of the correct frame of reference, that is the other person's inner reality, is invisible to us. It helps to remember that between our feelings and anything in the external world that causes the ripples of consciousness we call feelings— any difficult situation, any painful event, any hurtful action of another— their lie myriad possible causal explanations.

One fact I have learned about life through the empiricism of living: When we are hurt in a relationship, when we are spinning in the blooming buzzing confusion of sensemaking, the explanation we elect as correct usually has more to do with our own fears and vulnerabilities than it does with the reality of the situation; almost always, that explanation is wrong; almost always, the true explanation has more to do with the fears and vulnerabilities roiling in the other person invisibly to us.

And so, sensemaking and storytelling creatures that we are, we move through the real world in a self-generated dream, responding not to reality but to the stories we tell ourselves about what is true — stories at best incomplete and at worst injuriously incorrect, stories about what we do and don't deserve, stories the cost of which is connection, trust, love.

The great Buddhist teacher and peace activist Thich Nhat Hanh (October 11, 1926 – January 22, 2022) offers a three-step remedy for this elemental human tendency in a portion of his slender, potent book Fear: Essential Wisdom for Getting Through the Storm.

Hanh offers a three-step process for correcting wrong perception in relationship conflict and emerging victorious with deeper love:

The first thing we can do in these situations is to acknowledge internally that the pictures we have in our head, what we think happened, may not be accurate. Our practice is to breathe and walk until we are more calm and relaxed.

The second thing we can do, when we are ready, is to tell the people who we think have hurt us that we
are suffering and that we know our suffering may have come from our own wrong perception. Instead of coming to the other person or people with an accusation, we can come to them for help and ask them to explain, to help us understand why they have said or done those things.

There is a third thing we need to do, if we can. The third thing is very hard, perhaps the hardest. We need to listen very carefully to the other person's response to truly understand and try to correct our perception. With this, we may find that we have been the victim of our wrong perceptions. Most likely the other person has also been a victim of wrong perceptions.

Question – The human brain has apparently not evolved, says the author. Which is its best example?

1. No scientist can definitively verify that our brain has taken a quantum leap in intelligence over millennia. In the 21st century, the volume of rifts in personal & professional bonds indicates that stress kills empathy.
2. Man fills his brain with copious amounts of useless information, in the process neglecting human ties, love, kindness and self knowledge. Without the last, man is handicapped in his relationships.
3. Human brains have been compared to the best digital computers and can perceive truths well, but the ego muddies ur thoughts to destroy relationships
4. Humans continue to lack the criteria to figure out the obscure realities of other human brains, as thoughts and opinions are invisible, as once the knowledge of astronomy was in ancient times.

Answer – D

Question 23 – What is the connection between 'myriad possible causal explanations' and 'our own fears and vulnerabilities than it does with the reality of the situation'?

1. Any breakdown of communication is due to the absence of native intelligence. If both parties drop their psychological guards, they quickly recognise the vulnerabilities of the other, and the true essence of love repairs the breach.
2. As we are never alone, social pressure, dogma and received wisdom destroy the bedrock of empathy between two partners. We are at the mercy of our elders, our peers and conventional structures of engagement.
3. The pivotal reason for misery in relationships lies in our incorrect interpretation of the real cause and reason, simply because we are as opaque about our fears and weaknesses as our partner is.
4. Our own sadness and confusion overwhelm us to a point when it blinds us to the possibilities of explanations and an amicable solution. We retreat into our rigid beliefs., many of that are repressed toxic traumas of childhood.

Answer – C

Question 24 – Thich Nhat Hanh persuades us to – "stories at best incomplete and at worst injuriously incorrect, stories about what we do and don't deserve. Stories the cost of which is connection, trust and love." which tenet is the most imperative?

1. The ability to give space and time for the other to calm down
2. The ability to suspend judgment and listen with a loving heart
3. The ability to empty our brains of anger & allow love entry
4. The ability to reason with our inaccurate stories.

Answer – A

Question 25 – What do you infer from the following sentence – 'we move through the real world in a self-generated dream, responding not to reality but to the stories we tell ourselves about what is true"?

1. When we know that the world is an AI generated bubble, and we are simply virtual dolls, it is obvious that we are being directed to dream and move according to the higher beings pulling the strings.
2. Our brains and thoughts are so complex that they can fool us and take us to a make-believe universe, where we accept all our mythical hypotheses as being the gospel truth, with not an ounce of rigorous analysis or reasoning.
3. Scientists have tried to understand how we think, how we feel, and how we respond. Most hypotheses state that often the brain cannot differentiate between reality and a dream. No wonder we have so many divorces.
4. Our social conditioning is so entrenched that we are unable to sift projections from reality. And the sad truth is we do not even understand it until it's too late.

Answer – D

Reasoning Ability

Question 1 –

Five letter cluster have been given , out of which three are alike in some manner and two are different. Select the three pairs that are alike.

1. PFDNQXJMB:TJXQNJDQF
2. JNGKWTEUS:NRWTKGEYW
3. HKRXPDBGN:LOXRPBDKR
4. KOJEIWPNM:QSWPJIERQ
5. RQIFTPYWE:VUYPTFWAI

1. a, b, and d
2. b, d and e
3. a, b and c
4. b, c and e

Ans. D – b,c and e

Question 2 –

Find the wrong term in the given letter cluster series.

MHB, OJD, RMG, VQK, ZUP

_____

Ans. ZUP

Question 3 –

Identify the letter-cluster that does not belong to the following series

DW, FU, GT, IR, JQ, NL, MN, OL

1. JQ
2. MN
3. NL
4. OL

Answer: NL

Question 4 −

A question is given, followed by two statements labelled and II. Identify which of the statements is/are sufficient to answer the question.

Question:

Find the amount paid by Alankrutha for the shopkeeper for buying a perfume, if the marked price is Rs. 1500.

Statements:

1. Initially she received a Rs. 100 discount then after 40% off on the price.
2. She was given two successive discounts of 10% and 20%

1. Neither data in statement I nor II are sufficient to answer
2. Data in both statements I and II together are sufficient to answer
3. Data in statement II alone is sufficient to answer
4. Data in statement I alone is sufficient to answer

Answer: Data in statement II alone is sufficient to answer

Question 5 −

A question is given followed by two statements labelled I and II. Identify which one of the following statement is/are necessary to answer the question.

Questions:

What will be the height of three students Rachana, Rupali, and Pritam altogether, if pritam's height is 39cm?

Statements:

1. The sum of the height of Rachna & pritam is equal to 160cm.
2. The height of Rupali is equal to 3 times the height of pritam.

1. Statement II is alone sufficient while I alone is insufficient.
2. Both statements I & II are necessary.
3. Either statement I alone or statement II alone is sufficient
4. Statement I alone is sufficient while II alone is insufficient.

Ans. Both statements I & II are necessary.

Question 6 –

Classes of six different subjects: Maths, Physics, Chemistry, Hindi, English, and Social Science of 10th class are scheduled during the days from Monday to Saturday in a week. Chemistry class is scheduled Tuesday. Classes of Maths, Social-Sc, and Physics are planned one after the other in the same order. Classes of Hindi language are not scheduled on Monday or Wednesday.

Which one of the following combinations is odd in respect of others?

1. Maths-Social-Sc
2. Social-Sc.-Hindi
3. Chemistry-Maths
4. English-Chemistry

Ans. Social-Sc – Hindi

Question 7 : P & Q means 'P is the father of Q'

P @Q means 'P is the mother of Q'

P%Q means 'P is the brother of Q'

P#Q means 'P is the sister of Q'

P&Q means 'P is the wife of Q'

P$Q means 'P is the father of Q'

Based on the above, how N is related to K if N&D$P%G&T$R%K#L ?

1. Father's sister
2. Father's mother
3. Mother's mother
4. Mother's sister

Ans. Wrong question

Question 8 – Following are the criteria for selection of a College Librarian. The candidate must:

1. a) Be a post-graduate in Library Science with at least 60% of marks.
2. b) Have a doctoral degree (Ph. D.) in the subject of Library Science.
3. c) Have done any bachelor's degree with at least 55% of marks.
4. d) Have passed 10th and +2 securing at least 50% marks in each.
5. e) Have at least 10 years of work experience as an assistant librarian.
6. f) Have secured at least 60% of marks in the selection interview.
7. g) Be in the age range of 35 to 50 years as on 15 July 2019.

If a candidate fulfills all the above criteria but e) above, the case may be sent to the review committee for its approval.

Based on the criteria given above and without assuming any additional information, take a decision for the following candidate:

Raman Pandey is a post-graduate of 2002-2004 in Library science with 67% of marks, he has passed B.A. from Ramjas college obtaining 62% marks. His passing marks in the 10th and +2 examination was 58% and 61%, respectively. He is September 1978 born and is working as an assistant librarian in a Delhi university for the past eight years. Prior to his current post, he had worked on a similar post in a

college from July 2007 to November 2011. He is a doctorate in library science and fared well in the selection interview by scoring 68% marks.

1. The candidate is to be selected.
2. The candidate is not to be selected.
3. The case is to be forwarded to the review committee.
4. The information given is inadequate

Answer: The candidate is to be selected.

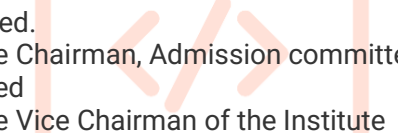**Question 9 –** Study the given information below and answer the following question.

Following are the criteria required to be fulfilled for being admitted to M. Phil Social Psychiatry admission at National Institute of Psychiatry

i) The candidate should possess a graduation degree with in Psychology. Sociology or Home science with at least 75% Marks.

ii) The candidate should possess a post graduate degree in Psychology/ Social Work/ Home Science with more than 70% marks

iii) The candidate should be at least 22 years and should not be more than 30 years of age as on 01 July 2021.

iv) The candidate should have cleared written entrance exam with at least 70% marks and personal interview with minimum 65% marks.

1. In case a candidate fulfill all criteria except ii) but has scored more than 80% and above in personal interview then the case is to be referred to the Chairman, Admission committee.

2. In case a candidate fulfill all criteria except iii) but possesses one year research experience in the area of Cognitive Science, then the case is to be referred to the Vice Chairman of the institute.

Refer to the details of a candidate provided below and four options that follow. Select the appropriate option that applies to the person's candidature.

Yogesh completed her B.Sc in psychology in the year 2015 with three fourth of one hundred eight. He completed M. Sc in Home Science in 2020 with five seventh of one hundred five marks. He opted for and successfully completed a one year dissertation during in his M. Sc. program. He qualified the written entrance exam with seven ninth of one hundred and one marks and was given three fourth of eighty seven marks in the personal interview. He was 21 years old on her last birthday on 17th August 2020.

1. Candidate is to be selected.
2. Case to be referred to the Chairman, Admission committee.
3. Candidate is to be rejected
4. Case to be referred to the Vice Chairman of the Institute

Answer:- Case to be referred to the Vice Chairman of the Institute

Question 10 – A statement is given followed by two arguments numbered I & II. Decide which of the arguments is strong with respect to the statement /question.

 Statement:

Apart from academic testing , school should also test physical fitness of each & every student before promoting to next class.

Argument:

1. Education system in developed nations encourage physical fitness among students.
2. A physically fit person looks more attractive.

1. Argument I is strong
2. Both argument I & II are strong
3. Neither argument I & nor II is strong
4. Argument II is strong

Answer:- Neither argument I & nor II is strong

Question 11 – Study the following informations carefully, and answer the questions given below:

A, B, C, D, E, F and G are seven friends. Each of them likes different colour, viz. Magenta, Yellow, Brown, Green Oraange, Red and Blue. Also, each of them uses a different brand of pencils, viz. Natraj, Apsara, Camlin, Faber, Staedtler, Pentonic and Goodwill. The choices of colour and brands are not necessarily in the same order.

B likes Red colour and his brand of the pencil is Staedtler. The one whose brand is Apsara likes Blue colour. E's pencil brand is Faber, C likes Green colour and his pencil's brand is not Natraj, G's pencil brand is Goodwill and he does not like either Yellow or Brown colour. The brand of the one who likes Orange is Pentonic. E does not like the Brown Colour. A's brand is neither Apsara nor Pentonic. D does not like Blue.

Who likes Magenta?

Answer:- G

Advanced Coding

Question 1

Joe was reading an interesting novel when all of a sudden, his 5 year old son came to him and started asking few questions about functions.

He tried making him understand various functions, but his son didn't get find it interesting.

Then he created his function Absent number function A(S)

According to this function, there is always the smallest positive integer number in a sequence that is not available.

In simple words,if you sort the given sequence ,then the smallest integer number (other than 0) which is not present in the sequence is the Absent number.

Consider a sequence S= [1, 2, 3], then B(S)=4.

The minimum value greater than 0 which is not present here is in the sequence is 4.

Now his son found it interesting ,so Joe extended this logic to sub-sequence.

If there is a given sequence S, you have to find the Absent Number for each sub-sequence and then sum it up.

if the answer is large, print the result modulo, 109 +7.

Let say there exist a sequence with N = 3, and sequence S = [1, 2, 1]
Below are the various sub-sequences of it,

Basically it will be 2N:

[ ] : B([ ]) = 1
[1] : B([1]) = 2
[2] : B([2]) = 1
[1] : B([1]) = 2
[1, 2] : B([1, 2]) = 3
[2, 1] : B([2, 1]) = 3
[1, 1] : B([1, 1]) = 2
[1, 2, 1] : B([1, 2, 1]) = 3

Total sum of all B(S) = 1+2+1+2+3+3+2+3 = 17.

Hence the answer is 17.

Example 1:

- **Input:**
  2 -> input Integer ,N
  1 1 -> input Integer,S
- **Output:**
  7 -> Output
- **Explanation:**
  In the above scenario below are the various sub-sequence and respective function of it:
  [ ] : B(I) = 1
  [1]: B([1])= 2
  [1]: B([1]) = 2
  [1,1]: B([1,1]) = 2

  Total sum of all B(S) = 1+2+2+2 = 7 Hence the answer is 7.

Example 2:

- **Input:**
  3 -> Input integer, N
  1 2 1 -> Input integer, S
- **Output:**
  17->Output
- **Explanation:**
  In the above scenario below are the various sub-sequences and respective function of it.
  [ ] : B([ ]) = 1
  [1] : B([1]) = 2
  [2] : B([2]) =1
  [1] : B([1]) = 2
  [1, 2] : B([1, 2]) = 3
  [2, 1] : B([2, 1]) = 3
  [1, 1] : B([1, 1]) = 2
  [1, 2, 1] : B([1, 2, 1]) = 3

Total sum of all B(S) = 1 + 2 + 1 + 2 + 3 + 3 + 2 + 3 = 17.

Hence the answer is 17.

Python
from itertools import combinations

def fun(n, s):
  ans = 1
  comb = []
  for i in range(n):
    comb += combinations(s, i + 1)

```
    for i in comb:
        a = minMis(list(i))
        ans += a
    return ans

def minMis(arr):
    for i in range(len(arr)):
        if i + 1 not in arr:
            return i + 1
    return len(arr) + 1

n = int(input())
s = list(map(int, input().split()))
print(fun(n, s))
```

Question 2

James has a sequence of N numbers. There is also an integer X which is a random
number from other sources.

He is allowed to perform a specific operation on this sequence X number of times.
Below is the operation:

- Pick exactly one element from the sequence and multiply it with -1.

Your task is to find out the number of different sequences which can be formed by
performing the above operation.

If the answer is large, print the result modulo.
109 +7.

Let us try to understand it with an example,

N = 3
X = 2

S = [1, 2, 3]

There are 2 ways in which this operation can be performed.

- Way 1: Either -1 should be multiplied to the same element 2 times, OR
- Way 2: -1. Should be multiplied to two different elements once each.

Way 1:

If we multiply -1, to each element 2 times. It will become +1 (-1 *-1).

We will get same sequence for each element:

- Multiply -1, 2 times to S[1] : [1, 2, 3].
- Multiply -1, 2 times to S[2] : [1, 2, 3].
- Multiply -1, 2 times to S[3] : [1, 2, 3].

So, the unique sequence is just 1 which is [1, 2, 3].

Way 2:

If we multiply -1, to two different elements just 1 time each. We get:

- Multiply -1 to S[1] & S[2] : [-1, -2, 3].
- Multiply -1 to S[2] & S[3] : [1, -2, -3].
- Multiply -1 to S[1] & S[3] : [-1, 2, -3].

Hence, we get a total of 3 different sequences from Way 2.

Total 1 + 3 = 4 different sequences.

Hence the answer is 4.000

Example 1:

- **Input:**
  3 1 -> Input integer, N, X
  {1, 2, 1} -> Input integer, S
- **Output:**
  3 -> Output
- **Explanation:**
  In the given scenario, we have X =1. Hence, we can have this multiplication of -1 only once. So, if we multiply -1, to different elements just 1 time. We get:
  - Multiply -1 to S[1] & S[2] : [-1, -2, 1].
  - Multiply -1 to S[2] & S[3] : [1, -2, -1].
  - Multiply -1 to S[1] & S[3] : [-1, 2, -1].

Hence, we get a total of 3 different sequences.

So, the answer is 3.

Example 2:

- **Input:**
  3 2 -> Input integer, N, X
  {1, 2, 3} -> Input integer, S

- **Output:**
  4 -> Output
- **Explanation:**
  There are 2 ways in which this operation can be performed
    o Way 1: Either – 1 should be multiplied to the same element 2 times, OR
    o Way 2: -1 should be multiplied by different elements once.

As shown in the above Demo example, there will be a total of 4 different sequences which can be achieved from this.

Hence the answer is 4.

C++

```cpp
#include <bits/stdc++.h>
using namespace std;

//count element
int ct(int a[], int n)
{
  // Creates an empty hashset
  unordered_set< int> s;

  // Traverse the input array
  int res = 0;
  for (int i = 0; i < n; i++) {

    // If not present, then put it in
    // hashtable and increment result
    if (s.find(a[i]) == s.end()) {
      s.insert(a[i]);
      res++;
    }
  }

  return res;
}

int factorial(int n) {
   if(n == 0)
   return 1;
  int factorial = 1;
  for (int i = 2; i < = n; i++)
    factorial = factorial * i;
  return factorial;
}
int total_combination(int n, int x) {
  return factorial(n) / (factorial(x) * factorial(n - x));
}
int main(){
```

```cpp
    int n,x,ans,cnt=0;
    cin>>n>>x;
    int a[n];
    for(int i=0;i< n;i++){
        cin>>a[i];
    }

int k= ct(a,n);

 if(x%2==0){
     ans=1;
     ans+=total_combination(k,x);


    }
    else{
        ans=k-1;
        ans+=total_combination(k,x);
    }
    cout<< ans<<"\n";
    return 0;
}
```

Python

```python
n, x = map(int, input().split())
arr = list(map(int, input().split()))
ans = 0
for i in range(n-1):
  for j in range(i+1, n):
    ans += 1
if x % 2 == 0:
  ans += 1
print(ans)
```

Advanced Quantitative

Question 3:- In a xy-plane a particle starts moving from origin (0,0) to a point p(x,y) (x,y are positive, >0) and particle is moving either right side or upwards only (upwards means vertically upward and right side means horizontally right). So, the particle reaches p(x,y) in A way and the number of onto functions possible for a function F if the domain contains m elements and co domain contains n elements is B. Now given p(4,6), m = 6 and n = 4.

1. B>A
2. A=B
3. None of the given options

4. A>B

Answer:

Question 4: If the difference between the roots of $x^2 - \lambda x + \mu = 0$ is 2, then the relation between λ and μ is:

Options:

1. $\lambda = 4(\mu+1)$
2. $\lambda^2 = \mu+1$
3. $\lambda = 4(\mu+1)^2$
4. $\lambda^2 = 4(\mu+1)$

Answer: Wrong options

Question 5:- If the roots of the equation $y^{2} - 4y + c = 0$ [\latex] be two consecutive integers then $b^{2} - 4c =$ [\latex]

Answer: 12

Question 6:- There are 30 teams which are divided into 5 pools having six teams in each pool. In each pool, every team plays exactly one match between two teams of the pool. On the basis of points given on the basis of their performance, the best teams from each pool are selected for the next round. The next round is a knockout round, in this round, matches are fixed in a certain way. To decide the champion team, how many matches are to be played in all in the competition?

Answer: 34 matches

Question 7:- How many positive real numbers are there satisfying x < 2 and 3^{x} + \frac{2}{3^{x - 1}} = 5?[\latex]

Answer: 1

Question 8:- Study the following table and answer the question that follows

Key financials of selected private sector Banks.

Bank	DEP	ADV	RES	EQ	NP	EPS	CMP
Axis	568.25	248.45	38.23	3.5	5.61	25.20	890
Kotak Mahindra	465.72	211.62	12.65	2.25	3.60	12.62	480
Yes Bank	2486.50	1555.65	25.23	2.90	21.26	123.22	1725
Bank of India	762.53	378.25	18.08	3.76	2.33	12.22	490
City Union Bank	2655.05	1358.64	59.55	13.06	18.25	15.10	320
South Indian Bank	312.65	141.58	5.72	5.50	0.13	0.39	78

DEP − Deposit RS crore, NP − Net profit, ADV-Advance, EPS-Earning per share, RES-Reserve, CMP-Current Market Price, EQ-Equity, P/E- price per earning Ratio

What is the premium on each share of Axis Bank (Premium = CMP − Base price; Base Price = EQ/No.of shares; No. of Shares = NP/EPS)

1. 884.1
2. 854.1
3. 874.1
4. 864.1

Answer: Option C − 874.1

Question 9:- Study the following table and answer the question that follows

Key financials of selected private sector Banks.

Bank	DEP	ADV	RES	EQ	NP	EPS	CMP
Axis	568.25	248.45	38.23	3.5	5.61	25.20	890
Kotak Mahindra	465.72	211.62	12.65	2.25	3.60	12.62	480
Yes Bank	2486.50	1555.65	25.23	2.90	21.26123.22	123.22	1725

Bank of India	762.53	378.25	18.08	3.76	2.33	12.22	490
City Union Bank	2655.05	1358.64	59.55	13.06	18.25	15.10	320
South Indian Bank	312.65	141.58	5.72	5.50	0.13	0.39	78

DEP – Deposit RS crore, NP – Net profit, ADV-Advance, EPS-Earning per share, RES-Reserve, CMP-Current Market Price, EQ-Equity, P/E- price per earning Ratio

Which Bank has the highest CMP to EPS ratio?

1. City Union Bank
2. Kotak Mahindra
3. Bank of India
4. South Indian Bank

Answer: Option D – South Indian Bank

Question 10:-Study the following table and answer the question that follows

Key financials of selected private sector Banks.

Bank	DEP	ADV	RES	EQ	NP	EPS	CMP
Axis	568.25	248.45	38.23	3.5	5.61	25.20	890
Kotak Mahindra	465.72	211.62	12.65	2.25	3.60	12.62	480
Yes Bank	2486.50	1555.65	25.23	2.90	21.26123.22	123.22	1725
Bank of India	762.53	378.25	18.08	3.76	2.33	12.22	490
City Union Bank	2655.05	1358.64	59.55	13.06	18.25	15.10	320
South Indian Bank	312.65	141.58	5.72	5.50	0.13	0.39	78

DEP – Deposit RS crore, NP – Net profit, ADV-Advance, EPS-Earning per share, RES-Reserve, CMP-Current Market Price, EQ-Equity, P/E- price per earning Ratio

Which bank has the lowest net market value. Net market value = CMP * No.of shares

1. City Union Bank
2. Bank of India
3. South Indian Bank
4. Kotak Mahindra

Answer: Option C – South Indian Bank

Advanced Reasoning

Question 1: A statement is given followed by three arguments I, II and III. Decide which of the arguments is/ are strong with respect to the statement question.

Statement:

People who are not too much poor never prefer to have the education of their children in government primary school.

Arguments:

1. Quality of education in government primary schools is very poor.
2. Upper Caste people do not want their children to study with lower caste people.
3. Infrastructure of government primarily schools is in pathetic conditions.

1. Argument III is strong.
2. Both arguments I and III are strong
3. Argument II is strong
4. Argument I is strong

Answer: Argument I is strong

Question 2: A statement is given followed by three arguments I, and II. Decide which of the arguments is/ are strong with respect to the statement question.

Statement:

Basic nursing training should be part of the curriculum of all school students up to senior secondary level.

Arguments:

1. Students will acquire a skill which is very applicable in daily life.
2. During a pandemic like situation students can help each other.

1. Neither argument I nor argument II is strong.
2. Both arguments I and II are strong.
3. Argument I is strong.
4. Argument II is strong.

Answer: Both arguments I and II are strong.

Question 3: In a certain code language DRENCH is written as FSEIDO and COMPETENT is written as NPDUFQUOF. How will HYPOCHONDRIA be written in that language?

1. QZIIDPEOPBJS
2. ZIQDPIOPEJSB
3. PDIIZQSJBPOE
4. OXGGBNCMNZHQ

Answer: QZILDPEOPBJS

Question 4: As per the recruitment advertisement of an organization, the candidates for a particular post need to satisfy the following criteria.

1. Science graduate with 60% marks.
2. Age between 25 years to 40 years as of 01 August 2016
3. 2 years post-qualification work experience.
4. The candidate will have to score 55% marks in the selection tests

However, if the candidate fulfills the above-mentioned criteria, EXCEPT

(A) at (I) and if the candidate is not a science graduate but post-graduate in any stream with 60% marks, such cases will be referred to the HR Head.

(B) at (III) and if the candidate fulfills all the eligibility criteria but the post-qualification work experience but otherwise has a score of 75% of marks in the selection rest such cases will be referred to the CMD of the organization.

Based on the above information, whether Mr Nit who has done graduation in Mathematics with 66% marks. His date of birth is 11.12.1990. He has secured 82% marks in the selection process. His post – qualification work experience is 8 months.

Answer: not selected

Question 5: In a certain code language, VALU is written as 22A12U. How will DEAF be written in that language?

Answer: 4E1F

Question 6: A question is given followed by two statements labeled I and II. Identify which of the statements is/are sufficient to answer the questions.

There are five students Ravi, Saketh, Anil, Kalyan and Pavan of different heights. Who among them is the tallest?Statements:-

1. Saketh is taller than Anil and Kalayan but shorter than Pavan who is not the tallest
2. Pavan is taller than Sakther and Anil but shorter than Ravi.

1. Data in statement I and II together are not sufficient to answer the question
2. Data either in statement I alone or in statement II alone is sufficient to answer the question
3. Data in statement II alone is sufficient to answer the question while the data in statement I alone is not sufficient to answer the question.
4. Data in statement I alone is sufficient to answer the question while the data in statement I alone is not sufficient to answer the question.

Ans. Data in statement I alone is sufficient to answer the question while the data in statement II alone is not sufficient to answer the question.

Question 7: Read the following information carefully and answer the questions given below:

A restaurant serves seven different sweets to its customers on Saturday, right after the dinner. The sweets are- Gulab jamun, Sandesh, Modak, Shrikhand, Payassam, Phimi and Ghevar. Dinner is free to select the order of the seven sweets, according to the following conditions.

1. Payasam is served sometime after Shrikhand
2. Exactly one sweet should be served between the Sandesh and Modak in the same order.
3. Phirni is served some time before Sandeesh
4. Payasam is served either fifth or sixth
5. Gulab jamun is served second

If Payasam is the sixth sweet served then which of the following cannot be true?

1. Shrikhand is the fifth sweet served
2. Sandesh is the fifth sweet served
3. Modak is the seventh sweet served
4. Phirni is the third sweet served

Answer: Shrikhand is the fifth sweet served

Question 8: Study the following information and answer the questions given below

Following are the criteria to get a job in a Drug firm.

The applicant must:-

1. Have passed graduation with science subject with at least 60% of marks
2. Have completed 21 years (male) and 20 years (female) of age as on or before 1st July 2016.
3. Pay deposit as follows

Marks at graduation	If son/daughter of staff	If not son/daughter of staff
75% and above	10,000/-	12,000/-
61% to 74%	12,000/-	15,000/-
60% and below	15,000/-	20,000/-

However,

1. If the candidate has secured more than 90% marks at graduation, should be referred to the Managing Director for consideration for further concession on deposit.
2. In case of SC/STs candidates, the deposit payable is 25% less in each of the above criteria.
3. If the candidate remits in case the amount of deposit immediately on the date of the first call, the candidate can be selected, provided he fulfills conditions (I) and (II).
4. If on the date of first call, the amount of deposit by the candidate eligible as per (I) and (II) is less than the total amount required but more than ¾ th the candidate can be provisionally selected, provided he deposits his balance with in next ten days.
5. If on the date of first call, the amount of deposit brought is less than the ¾ th but more than ½ the candidate through eligible as per (I) & (II) cab be sent to the Managing Director.
6. If on the date of first call, the amount of deposit is less than ½ the candidate is eligible as per (I) & (II) cannot be selected.

On the basis of the above criteria, decide which of the following given options is correct for the given question.

Krishna born on 28/11/1991 is a son of an employee working in the organization. He get 65% marks in B. Sc. and can deposit only 3000/-. However, he intends to the pay the balance in ten days. He is an SC category candidate.

1. If the candidate can be selected
2. If the candidate cannot be selected
3. If the candidate can be provisionally selected
4. If the candidate should be referred to the Managing Director

Answer: If the candidate can be provisionally selected

Question 9: Eight girls X, Y, Z, A, C, T, S and K are sitting around a circular table facing the center. X is sitting second to the left of Z and the third to the right of Y. T and C are immediate neighbors of each other and one of them is an immediate neighbor of X. A is sitting second to the right of S. K is sitting second to the left of T. Which girl is sitting between Y and A?

Answer: K

Question 10: Five friends participated in the race. Ajmal finished before Lachkam but behind Sultan. Akmal finished before Sohil but behind Munna. Who placed after Sultan?

Answer: Not enough information.

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Numerical Ability

Question 1 –

1. Which of the following is the decimalised value of $25665614_{46561256}$?

Options

1. $0.4^-0.4^-$
2. $0.225^-0.225$
3. 0.44
4. 2.25

Answer – $0.4^-0.4^-$

Question 2 –

The ratio of present ages of P and Q is 5:9 and is the age of P, 5 year hence is 50% of age of R 10 year hence. If the age of Q 15 year ago was 75% of the age of R 10 year ago, then find the average of P, Q and R.

Options

1. 50

2. 45
3. 60
4. 40

Answer: 40

Question 3 –

While tabulating the marks of 50 students, the marks obtained by a student got recorded as 56 in place of 65. By how much did the average marks become less due to this mistake?

1. 0.2
2. 0.3
3. 0.18
4. 0.25

Answer: 0.25

Question 4 –

Abhishek scored 38 out of 80 in theoretical physics. The full marks of the practical component is 50% of the theory counterpart. How much should he score at least in the practical component so as to pass the examination, if the overall percent required for doing so is 60?

Options

1. 28
2. 27
3. 34
4. 30

Answer: 34

Question 5 –

A sum of Rs. 800 is invested for 3 years at simple interest. The rate of interest for the 3 years is 6%, 8%, and 10% per annum. Find the total amount of interest earned at the end of 3 years.

1. Rs. 195
2. Rs. 192
3. Rs. 188
4. Rs. 185

Answer – 192

Question 6 –

If 10% profit of A is equal to 20% loss of B is equal to 15% loss of C, then what is the ratio of cost price of A,B, C?

Options

1. 33:6:44
2. 44:6:33
3. 6:44:33
4. 6:33:44

Answer:

Question 7 –

If the compound interest on a sum for 2 years at 3% be Rs. 736.89, what would be the simple interest?

1. Rs. 726
2. Rs. 716
3. Rs. 720
4. Rs. 700

Answer: Rs 726

Question 8 –

Simplify:

$$A = 5 \times 7 \div 7 \text{ of } 5 - 9 \div 3 \text{ of } 3 \times (9-6) + 4 \times 5 \div 8 \text{ of } 3\frac{1}{4}$$

$$B = 2\frac{3}{2} \div 4\frac{5}{4} \text{ of } 3\frac{2}{3}$$

$$A \div B \text{ of } A - 1$$

Options

1. $\frac{2021}{1102}$
2. $\frac{1101}{1291}$
3. \frac{1408}{169
4. $\frac{1961}{1408}$

Answer: \frac{1408}{169

Question 9 –

A whole seller sold a total of 90 air conditioners. Out of these he sold 2/5 parts of air conditioners at a profit of 2.5%, 50 air conditioners at the profit of 3.8% and sold the remaining air conditioners at a loss of 5%. If the aggregate profit of seller was Rs. 71,188, then what was the cost price of each air conditioner for the seller?

1. Rs. 28,220
2. Rs. 29,670
3. Rs. 27,380
4. Rs. 26,260

Answer: 27380

Question 10 –

The marks scored by Kiyara in Hindi, English, science and mathematics 6:8:9:10. If the LCM of her marks in the above stated subjects is 3600 then calculate the HCF of her marks.

Options

1. 8
2. 12
3. 10
4. 15

Answer: 10

Question 11 –

A mixture contains alcohol and water in the ratio of 7 : 5. If 7 litres of water is added to the mixture, then the ratio becomes 9 : 7. Find the quantity of alcohol in the given mixture?

1. 15.75
2. 15.35
3. 15.55
4. 15.25

Answer – 15.75

Question 12 –

A man was walking at a speed of 3km per hour on a foggy day. A carriage passed him in the same direction. He could see the carriage for 2 mins for a distance of 100 metre. Find the speed of the carriage.(In km per hour)

1. 8
2. 7
3. 6
4. 5

Answer: 6 km/hr

Question 13 –

The average of 8 numbers – 231, 256, 343, x, 273, 179, 308, 162 is 252. Find the value of x

Options

1. 261
2. 263
3. 264
4. 262

Answer: 264

Question 14 –

Rocky is twice as efficient as Gani and takes 63 days less than Gani to dig a well. Find the time in which they can complete digging the well together.

1. 55
2. 45

3. 42
4. 52

Answer – 42 days

Question 15 –

The speed of a train increases by 5km/hr after one hour, if the distance travelled by the train was 60km then what is the total distance covered in 16 hour?

1. 1640km
2. 1650km
3. 1480km
4. 1560km

Answer – 1560 km

Question 16 –

Ridhima earns 7177₇₁ more salary than Rhythm who earns 6236₃₂ more salary than Ritika. If the sum of the salaries of all three is Rs. 1, 34,800 then what is the salary of Ridhima?

Question 17 –

From an amount of Rs. 154980, some amount is given to A at interest rate of 15% and the remaining amount is given to B at interest rate of 14%. If the amount is given at simple interest rate and gives a total profit of Rs. 22472.1 after one year. Find the percentage change in profit (approximately) if the interest rates of A's and B's gets interchanged.

Answer – No change

Question 18 –

Study the following table and answer the question below:

The table shows number of people (in hundreds) participating in Annual Fair from 6 different towns over the years:

Years Towns	2015	2016	2017	2018	2019	2020
A	4.2	5.1	6.3	4.4	5.8	6.2
B	5.5	5.3	5.1	5.0	5.4	6.8
C	4.5	6.2	6.5	5.9	5.4	4.9
D	5.8	5.7	5.3	5.1	4.9	4.8
E	6.0	6.1	5.9	5.3	5.5	5.7
F	5.7	6.2	6.6	5.1	4.4	4.3

The difference between the people participating in the fair from all the town in the year 2015 and 2020 is?

Answer – 100

Question 19 –

A container contains a 50 liter mixture of milk and water in ratio 7:3. Some amount of the mixture is taken out and replaced with the same amount of water. The ratio of milk and water becomes 14:9. Find the amount of mixture that was taken out.

Options

1. $12\frac{12}{21}$ litre
2. 20 litre
3. $16\frac{23}{32}$ litre
4. 10 litre

Answer:

Verbal Ability

Question 1.

Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

After it had rained continuously for a week, then the cricket field was a massive sea of mud.

1. A massive sea of mud
2. For a week
3. After it had rained continuously
4. Then the cricket field was.

Answer – Then the cricket field was

Question 2.

The given sentence contains four underlined phrases. Three of these phrases have been correctly used and one has been incorrectly used. Select the phrase from THE options which best replaces the wrong phrase in the sentence.

I do not claim if I am always correct but I seriously doubt his competence and would not like to take a risk.

1. That I am always
2. To take some
3. Competition
4. Yet I have serious

Answer – that I am always

Question 3.

Parts of the given sentence have been given as options. One of them contains a grammatical error. Select the option that has the error.

According to Apter's study, more than 60 percent of married women experience sustained stress because of their mother-in-laws compared to just 15 percent of men.

Options

1. sustained stress because of their mother-in-laws
2. compared to just 15 percent of men
3. According to Apter's study, more than
4. 60 percent of married women experience

Answer – compared to just 15 percent of men

Question 4.

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

While the battle for freedom and democracy raged across the world, the people of India were A. _____ in their own fight for liberty. For almost a century, India had been under the direct rule of the British B._____, and any Indians had had enough. Mahatma Gandhi and the National Indian Congress pushed for a C_____ non-violent movement aimed at forcing Britain to "Quit India." Gandhi, D._____ of the tactics of non-violent civil disobedience, called for their use on August 8, 1942 with the passing of the Quit India Resolution.

1. (A) engaged (B) crown (C) completely (D) pioneer
2. (A) pledged (B) wreath (C) finally (D) beginner
3. (A) submerged (B) jewel (C) utterly (D) guide
4. (A) promised (B) crest (C) totally (D) explorer

Answer – (A) engaged (B) crown (C) completely (D) pioneer

Answer – (A) ventilated (B) featured (C)assisted (D) casual

Question 5.

Sentences of the paragraph are given below in jumbled order, Arrange the sentence in correct order to form a meaningful and coherent

1. Encryption involves using a cryptographic key, a set of mathematical values both the sender and recipient agree on.
2. They encrypt the data i.e convert human readable plaintext into incomprehensible text, ciphertext
3. When information or data is shared over the internet, it goes through a series of network devices worldwide, which form part of the public network.
4. To prevent this, users can install specific software or hardware to ensure the secure transfer of data or information.
5. As data travels through the public internet, there is a chance it could be compromised or stolen by hackers.

1. ABCED
2. BAEDC
3. CEDAB
4. DECBA

Answer – CEDAB

Question 6.

In the following passage, sets of idioms have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The conflict between Russia and Ukraine is a 1. _____ to the global economy that will hurt growth and raise pieces. Beyond the suffering and humanitarian crisis from Russia's invasion of Ukraine, the entire global economy will reel under the effects of slower growth and faster inflation. A rise in prices for commodities like food and energy will in turn push up inflation further, in turn eroding the value of incomes and 2. _____ . Neighboring economies in particular will face the impact further as they 3. _____ disrupted tarde, supply chains, and remittances as well as an historic surge in refugee flows. Finally reduced business confidence and higher uncertainty will

potentially 4. _____ from emerging markets, reverberating- across-worlds-regions.

Options.

1. 1. Major blow 2. Telling heavily on demand 3. Grapple with 4. Boost capital inflows
2. 1. Major bombshell 2. Weighing on demand 3. Come to grips with 4. Slow down capital flows
3. 1. Major turnover 2. Weighing on mind 3. Toying with 4. Spur on capital gains
4. 1. Major blow 2. Weighing on demand 3. Grapple with 4. Spur capital flows

Answer – 1. Major blow 2. Weighing on demand 3. Grapple with 4. Spur capital flows

Question 7.

Select the most appropriate option to fill in the blank.

The President listened to the _____ Minister's statement with interest.

Options

1. Ameteur
2. Amateur
3. Amatuer
4. Ametuer

Answer – Amateur

Question 8.

Select the most appropriate option to fill in the blank.

Globalization poses a great threat to _____ practices

Options

1. Indigenus
2. Indegenous
3. Indigenous
4. Indiginous

Answer – Indigenious

Question 9 –

Select the most appropriate option to fill in the blank.

Like everything, entertainment is _____ the years. People's tastes and what is acceptable at the time are heavy factors _____ and become popular.

Options

1. Something that changes over; in what is produced.
2. Something that changes over; in what are produced.
3. Something that changes all over; of what is produced.
4. Something that changings over; in what is produce.

Answer – Something that changes over; in what is produced.

Question 10 –

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

An emerging method of classroom teaching is contemplative pedagogy. It is (1)_____ on the idea that teaching and learning should be mindful. The curriculum (2) _____ under the method incorporates mind triggering exercises to (3) _____ learning and development. Being mindful invariably results in better academic (4) _____ for students. And for teachers, it brings an invaluable and enriching teaching experience.

Blank 1. A. focus B. focused C. focusing D. focuses

Blank 2. A. framed B. calculated C. directed D. designed

Blank 3. A. forward B. advance C. facilitate D. hamper

Blank 4. A. outcomes B. reactions C. results D. conclusions

1. (1)-C, (2)-D, (3)-A, (4)-B
2. (1)-D, (2)-A, (3)-B, (4)-C
3. (1)-B, (2)-D, (3)-C, (4)-A
4. (1)-C, (2)-B, (3)-A, (4)D

Answer – (1)-B, (2)-D, (3)-C, (4)-A

Question 11 –

Given below is a paragraph that has five sentences which are presented in jumbled order. Write down the best order (eg. ABCDE) which would form a meaningful, unified and coherent paragraph.

1. The "incessant shower of innumerable atoms" comes from all sides and the atoms shape themselves "into the life of Monday or Tuesday"
2. The word semi-transparent suggests that we cannot see clearly, or outside our own perceptual system.
3. Virginia Woolf's image of the mind "receiving" "a myriad impressions- trivial, fantastic, evanescent or engraved with the sharpness of steel" is an influential 20th century metaphor.
4. The exclusion of an organizing self , or mind : her novel aspires to be like Monet's cathedral, a record of evanescent stimuli, coalescing into a shape, is the other important thing about Woolf's description.
5. In the receptive world, life is a " luminous halo, a semi-transparent envelope surrounding us from the beginning of consciousness to the end".

Answer – CEBDA

Question 12 –

In the following passage, sets of idioms have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Montmorency was a perfect nuisance. He came and sat down on things, just when they were wanted to be packed; and he (1)_____ the fixed belief that, whenever Harris or George (2)_____ their hand for anything, it was his cold damp nose that they wanted. He put his leg into the jam, and he (3) _____, and he pretended that the

lemons were rats, and got into the hamper and killed three of them before Harris could (4)_____ with the frying-pan

1. 1. Laboured hard 2. Reached out 3. Upset the teaspoons 4. Landed a blow.
2. 1. Sweated it out 2. Put out 3. Messed up the teaspoons 4. Land him
3. 1. Tottered under 2. Reaches out 3. Reigned hellfire with teaspoons 4. Knock him down.
4. 1. Laboured under 2. Reached out 3. Worried the teaspoons 4. Land him

Answer – 1. Tottered under 2. Reaches out 3. Reigned hellfire with teaspoons 4. Knock him down.

Question 13 –

Four idioms are given below. Choose their sequence that would fill in the blanks and complete the text given here.

Sudatta is such a _____ . I never knew he was a musician! His latest album is turning out to be such a hit that it will eventually become a real _____ to come. However, he might need to start a fund for his younger brother, Devdatta, as a _____. Devdatta is the _____ of the family and everyone's.

1. Cash cow
2. Dark horse
3. Black sheep
4. Nest egg

1. 3143
2. 2423
3. 2143
4. 3412

Answer – 2143

Reasoning Ability

Question 1 –

Select the INCORRECT letter-cluster from the given series

NOPQ, RSLM, JKTU, HIVW, FGXY, ZADE, BCBC

1. ZADE
2. BCBC
3. FGXY
4. HIVW

Answer:- BCBC

Question 2 –

In a certain code language

M & N means 'M is the wife of N'

M @ N means 'M is the brother of N'

M $ N means 'M is the father of N'

M # N means 'M is the son of N'

M + N means 'M is the daughter of N'

Based on the above , how K is related to J if 'J#Q@T+L&B$K@D'?

1. Father's father
2. Mother's brother
3. Mother's father
4. Father's brother

Answer:- Father's brother

Question 3 –

Select the INCORRECT letter cluster from the given series.

 GDK, IFM, LIP, NLS, QOU

_____

Answer: NLS

Question 4 –

Given below is a question followed by three statements I, II and III, each containing some information. Decide which of the

Question :

Who among H, L, T, N and O is in the middle while standing in a line?

Statements:

1. L is to the right of O.
2. N is between H and O
3. L is between O and T

1. Only statements I and II are sufficient
2. Only statements II and III are sufficient
3. Only statements I and III are sufficient
4. All statements I, II and III are necessary.

Answer:- All statements I, II and III are necessary.

Question 5 –

A question is given followed by two statements labeled I and II. Identify which of the statements is/are sufficient to answer the question.

Question:

Among five sarees- W, X, Y, T and V each one of different prices, which is the costlies**t?**

Statements

1. X is costlier than Y and T but cheaper than V which is not the costliest.
2. V is costlier than X and Y but cheaper than W

1. Data in both statements I and II together are not sufficient to answer the question.
2. Data either in statement I alone or in statement II alone is sufficient to answer the question
3. Data in statement I alone is sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
4. Data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

Answer:- . Data in statement I alone is sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

Question 6 –

Study the given information carefully and answer the question that follows.

Seven people M, N, O, P, Q, R and S are having different hobbies, viz., coram, table tennis, badminton, bridge, hockey, football, and lawn tennis but not necessarily in the same order.

Each of them belongs to different countries viz. India, Peru, Bhutan, Nepal, Brazil, Spain and Japan, but not necessarily in the same order.

M belongs to Brazil. P likes lawn tennis. The person who likes hockey is from Peru. the person who likes badminton is from Spain. R does not belong to Spain, Peru, India, or Nepal. R does not like football, table tennis or bridge. N does not belong to Bhutan, Peru, India or Nepal. N does not like bridge, carom, table tennis or football. O does not like hockey and he is not from Nepal or India. Neither P nor S belongs to India. M does not like table tennis. The person from Bhutan likes football.

Who likes football?

Answer:- O

Question 7 –

Among the five pairs of letter-clusters given below three are alike in some manner and two are different. Choose the similar pairs by choosing appropriate options.

1. PFDNQXJMB : TJXQNJDQF
2. JNGKWTEUS : NRWTKGEYW
3. HKRXPDBGN : LOXRPBDKR
4. KOJEIWPNM : OSWPJIERQ
5. RQIFTPYWE : VUYPTFWAII

1. b,c and e
2. a,b and d
3. b,d and e
4. a,b and c

Answer –

Question 8 –

Following are the criteria required to be fulfilled for getting admission in a college for M. A. in Vocal Music.

1. The candidate must possess a bachelor degree in vocal or classical music with 60% or more marks.
2. The candidate must have secured at least 80% marks in his/her performance examinations at bachelor levels.
3. The candidate should have scored more than 75% marks in the entrance test and scored more than 80% marks in the practice
4. The candidate should be at least 22 years and at most 28 years as on 1st June 2022.

1. In case a candidate fulfill all criteria except the required percentage as mentioned in the criteria ii) but has scored 90% and above marks in practical then the case is to be referred to the admission committee.
2. In case a candidate fulfill all the criteria except the age criteria as mentioned in iv) but belongs to SC/ST community, the case is to be referred to the director.

Refer to the details of a candidate, provided below and four options that follow. Select the appropriate option that applies to the person's candidature.

Ms. Lalita belongs to Scheduled caste community who completed her bachelor degree in classical music in 2021 with seven ninth of ninety nine % marks. She was born ……..(missing) and was 21 year old when she completed her bachelor. She is an excellent performer and have secured six-seventh of one hundred three% marks in the practical exam…….(missing) entrance test and had secured two-fifth of one hundred eight two % marks in her bachelor's performance exam. She scored more tahn 80% marks in the entrance test.

1. The candidate is to be rejected
2. The case is to be referred to Admission Committee
3. The case is to be referred to the Director
4. The candidate is to be selected.

Ans.

Advanced Coding

Question 1-

Two parallel roads separated by a river are connected from cities A and B to an outer ring road. Both the roads have high flow of traffic throughout the day. People who want to travel from city A to city B or vice versa have to pass through the ring road which is a huge waste of time and money. In order to ease the traffic and also to make it convenient for commuters to travel from city A to city B and vice versa, construction of a bridge over the river is planned.

The surveillance team submitted a report stating the bridge should be constructed in the following manner:

- The ground or soil is stronger at certain points on the road favorable for the construction of the bridge.
- The strong ground positions are given from the starting point of each road. Say, road of city A has strong ground at 1,4 meaning there is a strong ground at a distance of 1 unit, another strong ground point at a distance of 4 units from the starting point of the road of city A.

Collate the strong ground positions of both the roads.

Sort them in ascending order.

Calculate the middle point or median of the combined strong ground positions.

The bridge should be constructed from road A as per the middle point calculated

Given the number of strong positions on the roads of A and B(N1 and N2 respectively), and the strong ground positions on each road, the task here is calculate the midpoint of the combined strong positions of both the roads.

NOTE: When the strong positions are combined, the repeated positions on the different roads are dropped.

Example 1:

- **Input:**
  3 -> Value of N1
  3 -> Value of N2
  {3,5,2} -> a[], Elements a[0]to a[N1-1], where each input element is separated by new line
  {1,2,3} -> b[], Elements b[0]to b[N2-1), where each input element is separated by new line
- **Output:** 2.50
- **Explanation:**
  From the inputs given above:
  Number of strong ground positions on road A:3
  Number of strong ground positions on road B:3
  The positions of strong ground from the starting point of road A are at a distance of 3,5,2
  The positions of strong ground from the starting point of road B are at a distance of 1,2,3
  Combining the strong ground positions of both the roads and sorting them in ascending order
  1,2,3,5
  Middle points are 2 and 3
  2+3=5
  5/2=2.5
  So, the middle point from where the bridge should be constructed is 2.5.
  Hence, the output is 2.50

Example 2:

- **Input:**
  2 -> Value of N1
  3 -> Value of N2

{2,3} -> all, Elements a[O]to a[N1-1), where each input element is separated by new line
{5,6,4} -> b[], Elements b[O]to b[N2-1), where each input element is separated by new line
- **Output:** 4.00
- **Explanation:**
  From the inputs given above:
  Number of strong ground positions on road A: 2
  Number of strong ground positions on road B:3

The positions of strong ground from the starting point of road A are at a distance of 2,3 The positions of strong ground from the starting point of road B are at a distance of 5,6,4 Combining the strong ground positions of both the roads and sorting them in ascending order:

2,3,4,5,6 > Middle point is 4

So, the middle point from where the bridge should be constructed is 4

Hence, the output is 4.

C++

```cpp
#include <bits/stdc++.h>
using namespace std;
int main(){
  int n1,n2;
  cin>>n1>>n2;
  vector< int> v1;
  vector< int> v2;
  for(int i=0;i< n1;i++){
    int t;
    cin>>t;
    v1.push_back(t);
  }
  for(int i=0;i< n2;i++){
    int t;
    cin>>t;
    v2.push_back(t);
  }
  unordered_set< int> s;
  for (int i=0; i < n1;i++){
    s.insert(v1[i]);
  }
  for (int i=0; i< n2;i++){
    s.insert(v2[i]);
  }
  for (auto it = s.begin(); it != s.end(); it++)
    cout << *it << " ";


  return 0;
}
```

Python

```
n1 = int(input())
n2 = int(input())
a = []
b = []
for i in range(n1):
  a.append(int(input()))
for i in range(n2):
  b.append(int(input()))
c = list(set(a + b))
c.sort()
l = len(c)
if l % 2 == 0:
  print((c[l//2] + c[(l//2)-1])/2)
else:
  print(c[l//2])
```

Question 2

You have a storeroom in your house. The storeroom is a square type and has sides of length N.

Your mom has divided the room into a 2-dimensional matrix M.
In each cell of that matrix, there is a box and has weight Wij (for all i<=N and j<=N).

As you are a mathematician, you are very much interested in the median concept. So, your mom gave you a task to test your intelligence.

You have to find the minimum of all row medians (weights) as maximum possible by rearranging the 2 dimensional matrix M. But you have a limit.

You are accepted to rearrange if and only if the sum of median weights of N rows should not exceed tolerance if it is not possible to rearrange the matrix M for a minimum of 1 time, then print -1,

NOTE: Here we considered the array as 1-indexed and median is calculated by the formula = (N+1)/2

Example – 1:

- **Input:**
  4 198 -> N and P values
  34 77 72 65 -> 1st row of length 4
  49 70 71 15 -> 2nd row of length 4
  12 84 5 78 -> 3rd row of length 4
  74 1 26 60 -> 4th row of length 4
- **Output:**
  26
- **Explanation:**
  Here we can rearrange the 2-d matrix as k > sum of all row medians. But how many possible re-arrangements we do we will get the same minimum median of all rows is 26.

Example – 2:

- **Input:**
  5 653
  38 43 5 26 35
  39 62 6 93 66
  80 35 51 28 22
  82 31 37 50 88
  92 96 5 96 49

Output:

38

Advanced Quantitative

Question 1:

Find the equation of line passing through the point of intersection of the following circles

$(x-y)^2+(y-3)^2=7$ and $(x-3)^2+(y-2)^2=5$

Options

1. 2x-y= 1
2. x+y= 1
3. x-y= 1
4. x-2y= 1

Answer – x-y= 1

Question 2:

Two complex numbers αα and ββ are such
that α+β=2,and, α4+β4=272$\alpha+\beta=2, and,\ \alpha^4+\beta^4=272$, then the quadratic
equation whose roots are α,andβ$\alpha, and \beta$ is:

Options

1. x2−2x+16=0$x^2-2x+16=0$
2. x2−2x−8=0$x^2-2x-8=0$
3. x2−2x−16=0$x^2-2x-16=0$
4. x2−2x+8=0$x^2-2x+8=0$

Answer: x2−2x−8=0$x^2-2x-8=0$

Question 3:

A pack of cards consists of 9 cards numbered 1 to 9. Three cards are drawn at random without replacement. Then the probability of getting 2 even and 1 odd numbered cards **** between

Options

1. 0.22 and 0.24
2. 0.12 and 0.14
3. 0.11 and 0.13
4. 0.34 and 0.36

Answer – 0.34 and 0.36

Question 4:

A right angle triangle is formed by two rectangular coordinates axes and the straight line whose intercept on the x and y axes are respectively 4 and 2 followed by the three points P(1,1); Q(1,2); R(2,2) which lie(s) outside the triangle.

1. Only R
2. Only P
3. P and Q

4. Only Q

Answer: Option A – Only R

Question 5:

There are ten straight parallel roads in a city ; the ith one is named X, $(1 \le i \le 10)(1 \le i \le 10)$. There are another twelve straight roads perpendicular to each $X_i X_i$ the jth one is called $y_j (1 \le j \le 12) y_j (1 \le j \le 12)$. One person wants to travel from the crossing point of $X_1, and, Y_1 X_1, and, Y_1$ to the crossing point of $X_{10}, and, Y_{12} X_{10}, and, Y_{12}$. How many different shortest paths are there to complete the journey?

Answer: 375 ways

Question 6:

Suppose M and N are two different units of measuring temperature. If $3 \circ M = 14 \circ N, -27 \circ M = 4 \circ N, and 6 \circ M = t \circ N 3 \circ M = 14 \circ N, -27 \circ M = 4 \circ N, and 6 \circ M = t \circ N$, then what is t?

Answer: 28^{\circ}

Question 7:

Suppose x, y are integers such that $0 \le x, y \le 10.0 \le x, y \le 10.$. . How many ordered pairs (x,y) are there that satisfy $x+yx-y-x-yx+y=0? x-yx+y-x+yx-y=0?$

Answer: 10

Question 8:

On the basis of the above mentioned table, what is the pooled average of the total number of employees of all categories in the year 2013?

Telegram: @PLACEMENTLELO

1. 1257
2. 1258
3. 1256
4. 1246

Answer: D – 1246

Question 9:

With reference to the above mentioned table: What is the difference between the total number of ASST consultants added to the company and the total number of Associate consultants during the year 2012-2016?

1. 236
2. 235
3. 237
4. 234

Answer: C – 237

Advanced Reasoning

Question 1 –

Shalini Got admitted in the M.Ed programme of the university. She has to choose papers for semester I and II, She must take exactly three papers in each semester. By the end of semester II,She must complete at least three papers in area AE, at least one paper in area BE, and at least one paper in area CE. The only papers available to the students are:

- Area AE: AE102,AE201,AE202, AE203
- Area BE: BE101, BE102, BE103, BE201
- Area CE: CE101, CE102, CE202

The selection of papers is subject to the following restrictions:

1. A student can take not more than two papers with the same letter designation per semester.
2. Papers with a number designation in 200s are offered only in the II semester. Papers with the number designation in 100s are offered in both I and II semesters.
3. No paper taken in the I semester can be repeated the II semester

Which of the following is a paper that shalini must take?

1. AE102
2. BE101
3. CE101
4. BE102

Answer: AE102

Question 2 –

In a certain code language BOMB is written as 316143, How will HELP be written in that language?

Answer: 961316

Question 3 –

Mehak, muskan, rajan, Lata, Deepak are five cousins Mehak is twice as old as muskan, rajan is half the age of muskan, Mehak is half the age of deepak and rajan is twice the age of lata.

Who comes in between Rajan and Mehak when they stand in according to ascending order of their ages?

Answer: Muskan

Question 4 –

Read the following paragraph and answer the following in YES/NO

Nitin was busy in a very complicated activity with his friends and suddenly he received a phone call from his father and during the call his father shared a ten-digit mobile phone number which he could not note down because of being busy in the activity. But he shared the phone number with his friends when his father shared it with him. Now Nitin and his friends want to recall the number and in the effort all of them agree that the first three numbers were 887. Two of them are sure that the fourth and fifth numbers were 8 and 9. Three of them agree that the sixth and seventh numbers were 2 and 7. Three more agree that the second last number was 6 and all of them agree that the last number was also 6. Is the recalled mobile phone number 887278966 correct?

Answer: No

Question 5 –

Statement: It is observed that despite many awareness advertisements and warning provided on a cigarettes, there is a lot of consumptions of cigarettes in india

Course of action:

1. The government should impose more tax on cigarettes
2. The government should issue a notice to reduce cigarette manufacturing units.

1. Only course of action I follows
2. Neither course of action I nor II follows
3. Only course of action II follows
4. Both course of action I and II follow

Answer:- Neither course of action I nor II follows