

Aptitude

1. The cost price of an article is Rs. 480. If it is to be sold at a profit of 6.25 percent, what

would its selling price be?

A. Rs. 510

B. Rs. 530

C. Rs. 503

D. Rs. 519

E. None of these

Answer (A)

Explanation

The selling price of the article is, Selling price = Cost Price + Selling price * (Percent Profit/100)

Selling Price = 480 + (6.25/100)*480 = 510

Hence, the correct option is option A.

2. The profit earned after selling an article for Rs 996 is the same as the loss incurred after selling the article for Rs 894. What is the cost price of the article?

A. Rs 935

B. Rs 905

C. Rs 945

D. Rs 975

E. None of these

Answer (C)

Explanation

Let the CP be the Cost Price and SP be Selling Price.

Profit = SP - CP = 996 - CP

Loss = CP - SP = CP - 894

Now as Profit = Loss

2*CP = 1890

CP =945

Hence, the cost price is 945.



3. The ages of Nishi and Vinnee are in the ratio of 6:5 After 9 years the ratio of their ages

will be 9:8 What is the difference in their ages?

- a) 9 years
- b) 7 years
- c) 5 years
- d) 3 years
- e) None of these

Answer (D)

Explanation

Let the ages of Nishi and Vinnee be x and y.

Now, as per given conditions,

(x/y) = (6/5) i.e 5x=6y

after 9 years,

(x+9)/(y+9) = 9/8 i.e 8x-9y=9

After solving we get x = 18 and y = 15.

Differences in the ages = 18-15=3

Hence, option D is correct.

4. Find out the wrong number in the given series

9050, 5675, 3478, 2147, 1418, 1077, 950

- a) 3478
- b) 1418
- c) 5673
- d) 2147
- e)1077

Answer (E)

Explanation

9070 - 15^3 = 5675 , 5675 - 13^3 = 3478 , 3478 - 11^3 = 2147 , 2147 - 9^3 = 1418 , 1418 -

 $7^3 = 1075 \neq 1077$, $1075 - 5^3 = 950$

5. Profit earned by the organisation is distributed among officers and clerks in the ratio of 5:3 If the number of officers is 45 and the number of clerks is 80 and the amount received by each officer is rs 25,000 what was the total amount of profit earned?



A. Rs. 22 lakh

B. Rs. 18.25 lakh

C. Rs. 18 lakh

D. Rs. 23.25 lakh

E. None of these

Answer (C)

Explanation

The total amount distributed among officers = 45*25000= 11,25,000

If the total amount is x, then this amount is (5/8)x=11,25,000

Hence, x=18,00,000

- 5. Which of the following statements is not true?
- (A) Acquisition of 'life-skills' is part of maturation
- (B) Acquisition of 'life-skills' is part of social process
- (C) 'Life-skills' are directly moulded
- (D) 'Life-skills' are learnt
- 6. A student wants to share his problem with his teacher and visits the teacher for the same at his home. In such a situation, the teacher should—
- (A) Suggest to him to escape from his home
- (B) Contact the student's parents and provide help
- (C) Extend reasonable help and boost his morale
- (D) Warn him to never visit his home

Answer: C

- 7. If a student alleges against you for showing favouritism in evaluation of scripts, how would you deal with him? https://www.freshersnow.com/placement-papers-download/
- (A) Reject his allegations
- (B) Adopt punitive measure
- (C) Make efforts to reveal his position
- (D) Show his answer book and few more

Answer: D

- 8. The major responsibility with which school personnel have been entrusted is that of—
- (A) Adjusting social demands to the needs of the child



- (B) Adjusting the child to conform to the demands of society
- (C) Changing human nature to conform to social expectations
- (D) Preparing the child to change the society

Answer: B

- 9. In order to develop a good rapport with students, a teacher should (select the most important activity)—
- (A) Love his students
- (B) Be friendly with all
- (C) Pay individual attention
- (D) Communicate well

Answer: C

- 10. The best reason because of which a teacher can command respect from his students is if—
- (A) He follows innovative practices in the class
- (B) He dictates notes to the class
- (C) He reads and explains the text-book
- (D) He does not give home assignment

Answer: A

English

Directions (Questions.1-3): Choose the word/group of words which is MOST SIMILAR in meaning to the word/group of words printed in bold as used in the passage.

- 1). Clamored
- a) Acclaimed
- b) Applauded
- c) Cried
- d) Refused
- e) Decided
- 2).Stimulate



- a) Increase
- b) Goad
- c) Project
- d) Exhilarate
- e) Weaken
- 3).Spur
- a) Hindrance
- b) Trigger
- c) Curb
- d) Impede
- e) Prohibit

Directions (Question. 4 to 5): Choose the word/group of words which is MOST OPPOSITE in meaning of the word/group of words printed in bold as used in the passage.

- 4).Viable
- a) Practicable
- b) Reasonable
- c) Feasible
- d) Impossible
- e) Workable
- 5).Sluggish
- a) Indolent
- b) Alert
- c) Lifeless
- d) Slack
- e) Slow

Directions (Questions.6-10): Read each sentence to find out whether there is any grammatical or idiomatic error in it. If any error is present choose that particular option

as answer. If there is 'NO error', the answer is 'e'. (Ignore errors of punctuation, if any.) 6).

- a) The CBI has filed a petition in NIA court
- b) Here seeking its permission to interrogate
- c) A Sri Lankan national held for



- d) Allegedly spying for Pakistan
- e) No error
- 7).
- a) The government apprised the court
- b) About instituting another committee
- c) That would review and draft amendments
- d) To the five key laws over environment, forest, wildlife, air and water
- e) No error
- 8).
- a) In the absence of a legal guarantee of safety and privacy
- b) The court should not ask for sources
- c) To be revealed, especially when the cases at stake
- d) Involve powerful people in politics and business
- e) No error
- 9).
- a) Government plan to link the universal health assurance scheme
- b) For providing medical treatment
- c) To all citizens with Aadhar number
- d) To check ghost beneficiaries
- e) No error
- 10).
- a) The supreme Court has ruled that
- b) Citizens have no fundamental right
- c) To carry out business in potable liquor and the state
- d) Has the power to prohibit such trade
- e) No error

Answers:

1). c) 2). b) 3). b) 4). d) 5). b) 6). a) 7). b) 8). e) 9). a) 10). c)

Reasoning

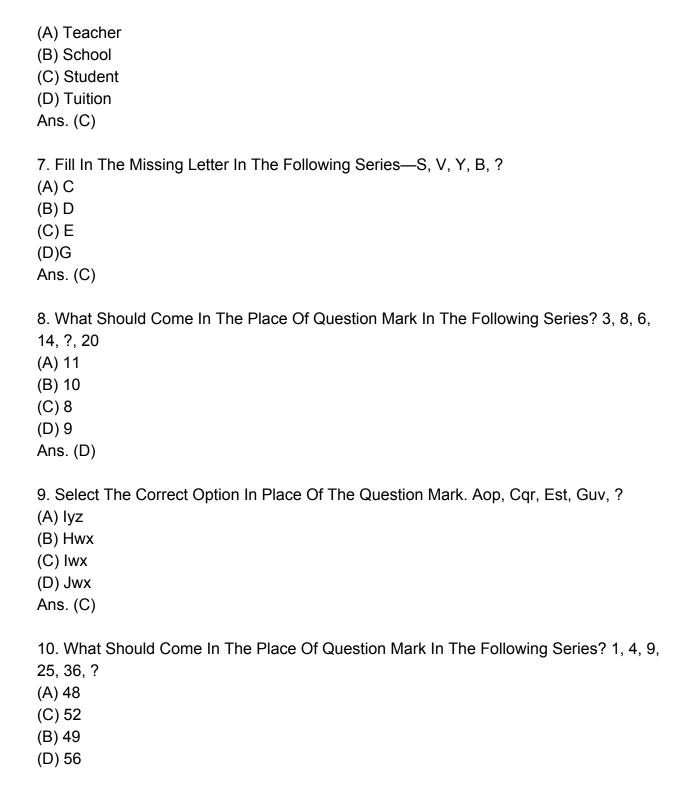
1. What Should Come In The Place Of (?) In The Given Series? Ace, Fgh, ?, Pon (A) Kkk



```
(B) Jki
(C) Hjh
(D) lkl
Ans. (A)
2. Typist: Typewriter:: Writer:?
(A) Script
(B) Pen
(C) Paper
(D) Book
Ans. (B)
3. Paint: Artist:: Wood:?
(A) Furniture
(B) Forest
(C) Fire
(D) Carpenter
Ans. (D)
4. Acme: Mace:: Alga:?
(A) Glaa
(B) Gaal
(C) Laga
(D) Gala
Ans. (D)
5. Eighty: Gieyth:: Output:?
(A) Utoptu
(B) Uotupt
(C) Tuoutp
(D) Tuotup
Ans. (D)
```

6. 'medicine' Is Related To 'patient' In The Same Way As 'education' Is Related To—







Ans. (B)



Aptitude

- 1) Find the Next Number 2,6,12,20?A. 24
- C. 42 D. 30

B. 29

E. None of these

Solution: 30

Explanation: 2, 6, 12, 20 1 x 2, 2 x 3, 3 x 4, 4 x 5, (5 x 6) Answer is 30. Product of two consecutive natural numbers

- 2) The marked price of a radio is 30% more than its cost price. If a discount of 10% is given on the marked price, find the gain percent.
- A. 20%
- B. 17%
- C. 19%
- D. 21%
- E. None of the above

Solution: B

Explanation:

Given

Let Cost Price = 100 Rs

Marked price = 30 % more than Cost Price

- = 30 % of C.P + C.P
- $= ((30/100) \times 100) + 100$
- = 30 + 100



= 130 Rs Given Discount = 10 % of marked price = (10 / 100) x 130 = 13 Rs Selling Price = Marked Price - Discount = 130 - 13

- 3) There are two sections in a question paper each contains five questions. A student has to answer 6 questions. The maximum number of questions that can be answered from any section is 4. How many ways he can attempt the paper?
- a) 50
- b) 100
- c) 120
- d) 200

Solution: 200

Explanation: Possible ways in which he can attempt 6 questions are

5C4*5C2 = 50

5C3*5C3 = 100

5C2*5C4 = 50

50+100+50 = 200

- 4) The HCF of two numbers is 24. The number which can be their LCM is
- A. 84
- B. 128
- C. 120
- D. 274

Solution: D

Explanation: Let the two numbers be x and y,

HCF = 24

LCM = 1344



```
HCF \times LCM = x \times y
24 \times 1344 = xy
xy = 32256
(x-y) = 80
y = 80 + y
(80+y)\times y = 32256
y^2 + 80y - 32256 = 0
y^2 + 224y - 144y - 32256 = 0
y(y+224) -144(y+224) = 0
y = 114 \& -224
x = 80 + 114
x = 194
x+y = 194+80 = 274
```

- 6) A person receives a sum of Rs. 2100 as interest for investing some amount at 10% p.a compounding annually for 2 years. Find the amount invested at the beginning?
- A. 9000
- B. 10000
- C. 9500
- D. 10500

Solution: B

Explanation: Given Compound Interest = Rs.2100 Rate of Interest (r) = 10 % p.aNo.of years (n) = 2To find, amount received at the beginning => principal Compound Interest = P[1 + (r/100)n-1]=> 2100 = P[1 + (10 / 100)2 - 1]=> 2100 = P[1 + (1/10)2-1]=> 2100 = P[(11 / 10)2- 1] => 2100 = P[(121 / 100) - 1]

=> 2100 x (100 / 21) = P



Principal = Rs. 10000 Amount invested at the beginning = Rs. 10000

- 7) What is the value of c, If 8 is 4% of a, and 4 is 8% of b. c equals b/a.
- A. 12
- B. 1/4
- C. 0.155
- D. None of these

Solution: B

Explanation:

Let be the 4% of a is 4a/100.

Since this equals 8, we have 4a/100=8.

Solving for a yields $a=8\times(100/4)=200$.

Also, 8% of b equals 8b/100, and this equals 4.

Hence, we have $(8/100) \times b=4$.

Solving for b yields b = 50.

Now, c=b/a=50/200=1/4.

- 8) P, Q and R can do a work in 20, 30 and 60 days respectively. How many days does it need to complete the work if P does the work and he is assisted by Q and R on every third day?
- A. 10 days
- B. 14 days
- C. 15 days
- D. 9 days

Solution: C

Amount of work P can do in 1 day = 1/20

Amount of work Q can do in 1 day = 1/30

Amount of work R can do in 1 day = 1/60



P is working alone and every third day Q and R is helping him Work completed in every three days = $2 \times (1/20) + (1/20 + 1/30 + 1/60) = 1/5$ So work completed in 15 days = $5 \times 1/5 = 1$ That is, the work will be done in 15 days

- 9) Manu, Manju and Maya can do a work in 90, 30 and 45 days respectively. If they work together, in how many days will they complete work?
- A. 15
- B. 10
- C. 20
- D. 25

Solution: A

Explanation: Manu, Manju and Maya together can do the work = 1/90 + 1/30 + 1/45 = 1+3+2/90=1/15

So, They will complete the work in 15 days.

- 10) Ravi's salary was reduced by 25%. Percentage increase to be effected to bring the salary to the original level is
- A. 20%
- B. 25%
- C. 33 1/3%
- D. 30%

Solution: C

Verbal Ability

Directions 1-5: Pick out the most effective word from the given words to fill in the blank to make the sentence meaningfully complete



1. While facts are and data hard to come by, even scientists occasionally throw side the professional pretense of and tear into each other with shameless appeals to authority and arguments that shameless appeals to authority and argument that are unabashedly ad hominid. a. elusiveobjectivity b. establishcourtesy c. demonstrate neutrality d. ineluctablecooperation ANS: (A)	
2. While the disease is in state it is almost impossible to determine its existence by a. a dormantpostulate b. a criticalexamination c. an acuteanalysis d. a latentobservation ANS: (d)	ce
3. The storehouse was infestedrats. A) by B) of C) D) in Ans: C	
 4. Please distribute these sweetsthe children A) in B) between C) amid D) among Ans: D 	
5. This custom seems to have originatedand East European country A) in B) from	



C) by D) with Ans: A

6. Synonym:-Opulous

A. Popular

B. Respectful

C. Populated(thickly)

D. hard working

Solution: C

7. Read the following passage carefully and answer the questions given below it. Certain words are printed in bold to help you to locate them while answering some of the questions.

The yearly festival was close at hand. The store room was packed with silk fabrics. Gold ornaments, clay bowls full of sweet curd and platefuls of sweetmeats. The orders had been placed with shops well in advance. The mother was sending out gifts to everyone. The eldest son, a government servant, lived with his wife and children in far off lands. The second son had left home at an early age. As a merchant he travelled all over the world. The other sons had split up over petty squabbles, and they now lived in homes of their own. The relatives were spread all across the world. They rarely visited. The youngest son, left in the company of a servant, was soon bored and stood at the door all day long, waiting and watching. His mother, thrilled and excited, loaded the presents on trays and plates, covered them with colourful kerchiefs, and sent them off with maids and servants. The neighbours looked on.

The day came to an end. All the presents had been sent off. The child came back into the house and dejectedly said to his mother, "Maa, you gave a present to everyone, but you didn't give me anything!" His mother laughed, "I have given all the gifts away to everyone, now see what's left for you." She kissed him on the forehead. The child said in a tearful voice, "Don't I get a gift?" "You'll get it when you go far away." https://www.freshersnow.com/placement-papers-download/



"But when I am close to you, don't I get something from your own hands?" His mother reached out her arms and drew him to her. "This is all I have in my own hands. It is the most precious of all."

Why did the	woman's s	second son	travel?
-------------	-----------	------------	---------

A.	не	was	restless	by	natu	re
R	НΔ	did r	not want	to d	etay a	s ŧ

- B. He did not want to stay at home
- C. He was rich and could afford to travel
- D. His job was such that he had to travel
- E. None of these

Solution: D

- 8. What did the youngest child do while his mother was busy?
- 1. He waited for a chance to steal some sweetmeats.
- 2. He pestered his mother to give him a present.
- 3. He stood at the door with servants.
- A. Only 1
- B. Only 2
- C. Both 1 and 3
- D. Only 3
- E. None of these

Solution: D

9. Although he puts in......of overtime and takes few holidays, he...... cannot support his family.

- A. sufficient, however
- B. lot, besides
- C. much, thus
- D. plenty, still



E. frequency, yet

Solution: D

10. ANTONYM:-EXODUS

- A. Influx
- B. Home-coming
- C. Return
- D. Restoration

Solution: A

Reasoning

- 1) If "football" is "cricket" ,"cricket" is "basketball" ,"basketball" is "volleyball","volleyball" is "khokho" and "khokho" is cricket, which is not a ball game?
- A. cricket
- B. football
- C. khokho
- D. basketball

Answer: A

- 2) Which of the following is a recursive set of production
- A. S --> a|A, A --> S
- B. S --> a|A, A --> b
- C. S -->aA, A-->S
- D. None of these

Solution: C



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3) 3 Which term of the series 5, 10, 20, 40, is 1280?
A. 10th B. 9th C. 8th D. None of these
Solution: B
Explanation: Ann ,Ben ,Charlie ,David ,Elle ,Feynman ,Gyle and Harry are sitting in a row facing North. (i) Ann is fourth to the right of Elle (ii) Harry is fourth left of David (iii) Charlie and Feynman , which are not at the ends are neighbours of Ben and Elle respectively. (iv) Harry is immediate left of Ann and Ann is the neighbour of Ben.
4) In following question, a number series is given with one term missing. Choose the correct alternative that will same pattern and fill in the blank spaces.: 0.5, 1.5, 4.5, 13.5,
A. 45.5 B. 39.5 C. 30.5 D. 40.5
Solution: D
5) The 'M' state government has decided hence forth to award the road construction

- contracts through open tenders only. Courses of action:
- I. The 'M' state will not be able to get the work done swiftly as it will have to go through tender and other procedures.
- II. Hence forth the quality of roads constructed may be far better.
- A. If only I follows
- B. If only II follows



C. If either I or II follows D. If neither I nor II follows E. If both I and II follow
Solution: D
6) Find the next term in this series – 2,3,6,18,108,?
A. 54 B. 1002 C. 216 D. 1944
Solution: D
7) In a certain language, RIPPLE is written as 785514. What is the code of PILLER in that language?
A. 561147 B. 561174 C. 581174 D. 581147
Solution: D
8) Pointing to a girl in the photograph, Amar said, "Her mother's brother is the only son of my mother's father." How is the girl's mother related to Amar?
A. Mother B. Sister C. Aunt D. Grandmother E. None of these
Solution: E



9) The product of 4 consecutive even numbers is always divisible by:
A. 600 B. 768 C. 864 D. 384
Solution: D
To solve this question, we need to know two facts. Fact 1: The product of 4 consecutive numbers is always divisible by 4!.
Fact 2: Since, we have 4 even numbers, we have an additional 2 available with each number. Now, using both the facts, we can say that the product of 4 consecutive even numbers is always divisible by, $= (24) \times 4! = (24) \times 4! = 16 \times 24 = 16 \times 24 = 384$
10) If the sum of 4 times a number A and 3 times a number B is equal to the sum of number B and seven times the number A, then what is the value of A:B?
A. 2:3 B. 3:2 C. 4:3 D. 3:4
Solution: A



```
1) Print the below pattern (half diamond using numbers)
Input:
        3 4
Output:
         3
        44
        555
        6666
        555
        44
        3
Input:
        4 4
Output:
        4
        55
        666
        7777
        666
        55
        4
Program:
#include
int main()
  int i,j,s,N,count=0;
  scanf("%d%d",&s,&N);
  for(i=s;count<4;count++)</pre>
  {
    for(j=0;j<count+1;j++)
       printf("%d",i);
    printf("\n");
    i=i+1;
  }
  for(i=s+N-2;count>0;count-)
```



```
{
     for(j=0;j<count-1;j++)</pre>
       printf("%d",i);
     printf("\n");
    i=i-1;
  }
  return 0;
}
2) Print the following pattern (half diamond using numbers)
Input:
3
Output:
2*2
3*3*3
3*3*3
2*2
1
Input:
Output:
1
2*2
3*3*3
4*4*4*4
4*4*4*4
3*3*3
2*2
1
Program:
#include
int main()
{
  int i,j,k,N,count=0;
```



```
scanf("%d",&N);
  for(i=1;i\leq=N;i++)
  {
     k=1;
     for(j=0;j< i;j++)
        printf("%d",i);
        if(k<i)
        {
           printf("*");
           k=k+1;
        }
     printf("\n");
  }
  for(i=N;i>0;i-)
  {
     k=1;
     for(j=0;j< i;j++)
        printf("%d",i);
        if(k<i)
        {
           printf("*");
           k=k+1;
        }
     printf("\n");
  }
  return 0;
}
3) Print the below pattern.
Input:
4
Output:
```



```
1
2*3
4*5*6
7*8*9*10
7*8*9*10
4*5*6
2*3
1
Program:
#include
int main() {
 int i,j,count=1,n;
 printf("Enter a number\n");
 scanf("%d",&n);
for(i=1;i<=n;i++)
{
for(j=1;j<=i;j++)
    {
      if(j<i)
       printf("%d*",count++);
       else
       printf("%d",count++);
    }
           printf("\n");
   }
count=count-n;
for(i=n;i>=1;i-)
       for(j=1;j<=i;j++)
 {
    {
       if(j<i)
       printf("%d*",count++);
       printf("%d",count++);
    count=(count+1)-2*i;
    printf("\n");
   }
```



```
return 0;
}
4) Print the following pattern.
Input:
3 4
Output:
3
44
555
6666
6666
555
44
3
Program:
#include<stdio.h>
int main()
  int i,j,s,N,count=0;
  scanf("%d%d",&s,&N);
  for(i=s;count<4;count++)</pre>
     for(j=0;j<count+1;j++)
       printf("%d",i);
     printf("\n");
     i=i+1;
  }
for(i=s+N-2;count>0;count-)
     for(j=0;j<count-1;j++)</pre>
       printf("%d",i);
     printf("\n");
     i=i-1;
  }
```



```
return 0;
}
5) Print the below pattern.
Input:
5
Output:
1
3*2
4*5*6
10*9*8*7
11*12*13*14*15
Program:
#include<stdio.h>
int main()
  int i,j,k,l=1,N,d,r,count=0;
  scanf("%d",&N);
  for(i=1;i\leq=N;i++)
  {
     k=1;
     d=i%2;
     r=l+i-1;
     for(j=0;j<i;j++)
     {
if(d==0)
          printf("%d",r);
          r–;
          if(k<i)
            printf("*");
            k=k+1;
          }
```



```
|++;
          continue;
       }
       printf("%d",I);
       |++;
       if(k<i)
          printf("*");
          k=k+1;
       }
     printf("\n");
  }
  return 0;
}
6) Print the below pattern.
Input:
Output:
1*2*3*4*17*18*19*20
- -5*6*7*14*15*16
----8*9*12*13
____10*11
Program:
#include<stdio.h>
void pattern(int);
int main()
{
         int n;
        scanf("%d", &n);
        pattern(n);
        return 0;
}
```

void pattern(int n)



```
{
         int i, j, k, s, a = 1,b = n*n + 1;
         for (i = n; i >= 1; i-)
                   for (s = 0; s < n - i; s++)
                            printf("-");
                   for (j = 0; j < i; j++)
                            printf("%d*", a++);
                   for (k = 0; k < i - 1; k++)
                            printf("%d*", b++);
                   printf("%d\n", b);
                                                               // last b should without *
                   b = 2*(i - 1);
         }
}
7) Prims Algorithm
// A C / C++ program for Prim's Minimum
// Spanning Tree (MST) algorithm. The program is
// for adjacency matrix representation of the graph
#include <stdio.h>
#include inits.h>
#include<stdbool.h>
// Number of vertices in the graph
#define V 5
// A utility function to find the vertex with
// minimum key value, from the set of vertices
// not yet included in MST
int minKey(int key[], bool mstSet[])
{
// Initialize min value
int min = INT_MAX, min_index;
for (int v = 0; v < V; v++)
if (mstSet[v] == false && key[v] < min)
min = key[v], min_index = v;
return min_index;
```



```
}
// A utility function to print the
// constructed MST stored in parent[]
int printMST(int parent[], int n, int graph[V][V])
printf("Edge \tWeight\n");
for (int i = 1; i < V; i++)
printf("%d - %d \t%d \n", parent[i], i, graph[i][parent[i]]);
}
// Function to construct and print MST for
// a graph represented using adjacency
// matrix representation
void primMST(int graph[V][V])
// Array to store constructed MST
int parent[V];
// Key values used to pick minimum weight edge in cut
int key[V];
// To represent set of vertices not yet included in MST
bool mstSet[V];
// https://www.freshersnow.com/placement-papers-download/
// Initialize all keys as INFINITE
for (int i = 0; i < V; i++)
key[i] = INT_MAX, mstSet[i] = false;
// Always include first 1st vertex in MST.
// Make key 0 so that this vertex is picked as first vertex.
key[0] = 0;
parent[0] = -1; // First node is always root of MST
// The MST will have V vertices
for (int count = 0; count < V-1; count++)
{
// Pick the minimum key vertex from the
```



```
// set of vertices not yet included in MST
int u = minKey(key, mstSet);
// Add the picked vertex to the MST Set
mstSet[u] = true;
// Update key value and parent index of
// the adjacent vertices of the picked vertex.
// Consider only those vertices which are not
// yet included in MST
for (int v = 0; v < V; v++)
// graph[u][v] is non zero only for adjacent vertices of m
// mstSet[v] is false for vertices not yet included in MST
// Update the key only if graph[u][v] is smaller than key[v]
if (graph[u][v] \&\& mstSet[v] == false \&\& graph[u][v] < key[v])
parent[v] = u, key[v] = graph[u][v];
}
// print the constructed MST
printMST(parent, V, graph);
}
// driver program to test above function
int main()
{
/* Let us create the following graph
23
(0)--(1)--(2)
|/\|
6| 8/ \5 |7
|/\|
(3)----(4)
9 */
int graph[V][V] = \{\{0, 2, 0, 6, 0\},
\{2, 0, 3, 8, 5\},\
\{0, 3, 0, 0, 7\},\
```



```
{6, 8, 0, 0, 9},
\{0, 5, 7, 9, 0\}\};
// Print the solution
primMST(graph);
return 0;
Output:
Edge Weight
0 - 12
1 - 23
0 - 36
1 - 4 5
8) Print the below pattern.
Input:
3
Output:
333
3 1 3
323
3 3 3
Program:
#include<stdio.h>
int main()
{
  int i, j, n, c=1;
  scanf("%d", &n);
  for(i=1; i<=n+1; i++)
     for(j=1; j<=n; j++)
     {
```



```
if(i!=1 \&\& j==n-1)
       printf("%d ", c);
                  C++;
       }
       else
       printf("%d ", n);
         }
            printf("\n");
          return 0;
}
9) Program to find the average of n (n < 10) numbers using arrays
#include <stdio.h>
int main()
int marks[10], i, n, sum = 0, average;
printf("Enter n: ");
scanf("%d", &n);
for(i=0; i<n; ++i)
printf("Enter number%d: ",i+1);
scanf("%d", &marks[i]);
sum += marks[i];
}
average = sum/n;
printf("Average = %d", average);
return 0;
}
Enter n: 5
Enter number1: 45
Enter number2: 35
Enter number3: 38
Enter number4: 31
Enter number5: 49
```



```
Average = 39
10) Operations On Linked List
#include<stdio.h>
#include<stdlib.h>
struct node
int data;
struct node *next;
void display(struct node* head)
struct node *temp = head;
printf("\n\nList elements are - \n");
while(temp != NULL)
printf("%d --->",temp->data);
temp = temp->next;
}
void insertAtMiddle(struct node *head, int position, int value) {
struct node *temp = head;
struct node *newNode;
newNode = malloc(sizeof(struct node));
newNode->data = value;
int i;
for(i=2; inext != NULL) {
temp = temp->next;
}
newNode->next = temp->next;
temp->next = newNode;
void insertAtFront(struct node** headRef, int value) {
struct node* head = *headRef;
struct node *newNode;
```



```
newNode = malloc(sizeof(struct node));
newNode->data = value;
newNode->next = head;
head = newNode;
*headRef = head;
}
void insertAtEnd(struct node* head, int value){
struct node *newNode;
newNode = malloc(sizeof(struct node));
newNode->data = value;
newNode->next = NULL;
struct node *temp = head;
while(temp->next != NULL){
temp = temp->next;
temp->next = newNode;
void deleteFromFront(struct node** headRef){
struct node* head = *headRef;
head = head->next;
*headRef = head;
}
void deleteFromEnd(struct node* head){
struct node* temp = head;
while(temp->next->next!=NULL){
temp = temp->next;
temp->next = NULL;
}
void deleteFromMiddle(struct node* head, int position){
struct node* temp = head;
int i;
for(i=2; inext != NULL) {
temp = temp->next;
temp->next = temp->next->next;
```



```
}
int main() {
/* Initialize nodes */
struct node *head;
struct node *one = NULL;
struct node *two = NULL;
struct node *three = NULL;
/* Allocate memory */
one = malloc(sizeof(struct node));
two = malloc(sizeof(struct node));
three = malloc(sizeof(struct node));
/* Assign data values */
one->data = 1;
two->data = 2;
three->data = 3;
/* Connect nodes */
one->next = two;
two->next = three;
three->next = NULL;
/* Save address of first node in head */
head = one;
display(head); // 1 --->2 --->3 --->
insertAtFront(&head, 4);
display(head); // 4 --->1 --->2 --->3 --->
deleteFromFront(&head);
display(head); // 1 --->2 --->3 --->
insertAtEnd(head, 5);
display(head); // 1 --->2 --->3 --->5 --->
deleteFromEnd(head);
display(head); // 1 --->2 --->3 --->
int position = 3;
insertAtMiddle(head, position, 10);
display(head); // 1 --->2 --->10 --->3 --->
deleteFromMiddle(head, position);
display(head); // 1 --->2 --->3 --->
}
Output:
```

Wipro Elite NLTH Coding Placement Questions



List elements are -



1. Evaluate the expression: 2 + 5 * 6 - 7 * 8 / 4 + 6

- A. 22
- B. 23
- C. 21
- D. 24

Answer: D

Explanation:

Given Question is 2 + 5 * 6 - 7 * 8 / 4 + 6

when we apply BODMAS RULE to the above question, we get

$$= 2 + (5 * 6) - (7 * 2) + 6$$

$$= 2 + 30 - 14 + 6$$

$$= 38 - 14$$

= 24

2. Can you find the approximate value for the following expression:

- A. 450
- B. 280
- C. 320
- D. 210

Answer: B

Explanation:

Given



Rounding off the given Expression we get,

- = (30 / 100) * 260 + (60 / 100) * 510 (104)
- = 78 + 306 104
- = 384 104
- = 280
- 3. In the below given sequence, what should be the Missing number?

77, 64, 51, X , 25, 12

- A. 37
- B. 40
- C. 38
- D. 36

Answer: C

Explanation:

The given series is -- 77, 64, 51, X, 25, 12

Consecutive numbers decrease by 13

Following this pattern, the Missing Number X should decrease by 13 from the previous number.

When we subtract 13 to the number before X (i.e 51) we get 51--13=38

- 4. In how many ways can the letters of the word, 'KEYBOARD' be arranged in such a way that the vowels always come together?
- A. 4250
- B. 4520
- C. 4320
- D. 4230



Explanation:

In the word 'KEYBOARD' we treat the vowels EOA as one letter. Thus, we have KYBRD (EOA). Thus we have 6 letters can be arranged in 6! = 720 ways

The vowels (EOA) can be arranged among themselves in 3! = 6 ways

Therefore, Required number of ways= (720*6)= 4320

5. In how many ways can a committee consisting of 4 men and 5 women be formed from a group of 7 men and 9 women?

A. 7C4 9C5

B. 4C7 5C9

C. 7C5 9C4

D. 9C4 7C5

Answer: A

Explanation:

Group consisting of 7 men and 9 women 4 men can be selected from 7 men in 7C4 ways 5 women can be selected from 9 women in 9C5 ways Therefore, the Total number of ways= 7C4 9C5

6. The ratio of a number of boys and girls in a class is 3: 2. In the 1st semester exam, 20% of boys and 25% of girls get more than or equal to 90% marks. What percentage of students get less than 90% marks?

A. 56

B. 70

C. 80

D. 78

Answer: D



Explanation: Let boys =3x and girls =2x. Number of those who get less than 90% mark =(80% of 3x) + (75% of 2x)=(80/100)*3x + (75/100*2x) = 39x/10Required percentage = (39x/10*1/5x*100)% = 78%.

- 7. A starts some business with Rs. 50,000. After 3 months B joins him with Rs. 70,000. At the end of the year. https://www.freshersnow.com/previous-year-question-papers/ In what ratio should they share the profit?
- A. 1:3
- B. 1:5
- C. 3:2
- D. None of these

Answer: D

- 8. P is able to do a piece of work in 15 days and Q can do the same work in 20 days. If they can work together for 4 days, what is the fraction of work left?
- A. 11/15
- B. 8/15
- C. 7/15
- D. 2/11

Answer: B

Explanation:

Amount of work P can do in 1 day = 1/15Amount of work Q can do in 1 day = 1/20Amount of work P and Q can do in 1 day = 1/15 + 1/20 = 7/60Amount of work P and Q can together do in 4 days = $4 \times (7/60) = 7/15$ Fraction of work left = 1 - 7/15 = 8/15



9. A started business with Rs. 45,000 and B joined afterward with 30,000. If the profit at the end of a year was divided in the ratio 2: 1 respectively, then B would have joined A for business after.
A. 1 month B. 3 month C. 4 month D. 2 month
Answer: B
10. What is the area of a triangle with base 5 meters and height 10 meters?
A. 20 square meters B. 25 square meters C. 35 square meters D. 40 square meters
Answer: B
Explanation: Area of a triangle = 1/2 * base * height So, the area = 1/2 * 5 * 10 = 25 square meters
11. If January 1, 1996, was Monday, what day of the week was January 1, 1997?
A. Thursday B. Friday C. Wednesday D. Sunday
Answer: C

Explanation:



The year 1996 is divisible by 4, so it is a leap year with 2 odd days.

As per the question, the first day of the year 1996 was Monday, so the first day of the year 1997 must be two days after Monday. So, it was on Wednesday.

- 12. In a camp, there is a meal for 120 men or 200 children. If 150 children have taken the meal, how many men will be catered to with the remaining meal?
- A. 50
- B. 40
- C. 30
- D. 10

Answer: C

Explanation:

Meal for 200 children = Meal for 120 men

- => Meal for 1 child = Meal for 120/200 men
- => Meal for 150 children
- = Meal for (120×150)/ 200 men = Meal for 90 men

Total meal available = Meal for 120 men

Remaining meal

- = Meal for 120 men Meal for 90 men
- = Meal for 30 men
- 13. A wheel rotates 10 times every minute and moves 20 cm during each rotation. How many meters does the wheel move in one hour?
- A. 6 metre
- B. 12 metre
- C. 1200 metre



D. 120 metre

Answer: D

Number of times wheel moves in 1 hour = 10 * 60 = 600Distance moves = (600 * 20) cms = 12000 cms Therefore, In metres = 120 metre

14. What is the average of the first five multiples of 12?

A. 36

B. 40

C. 38

D. 42

Answer: A

15. Eight persons participated in a shooting competition. The top score is 85 points. Had the top score been 92 points instead of 85 points, the average score would have been 84. Find the number of points actually scored in the competition.

A. 645

B. 655

C. 665

D. 636

Answer: 665

Explanation: Let the actual number of points scored be x, Then [x + (92 - 85)]/8 = 84, (x + 7)/8 = 84, x = (84*8)-7, x = 665



(Q. 1-5) In each of the following questions, two rows of numbers are given. The resultant number in each row is to be worked out separately

based on the following rules and the questions below the rows of numbers are to be answered. The operations of numbers progress from the left to

the right.

Rules:

- (i) If an odd number is followed by a two digit even number, then they are to be added.
- (ii) If an odd number is followed by two digit odd number, then the second is to be subtracted from the first number.
- (iii) If an even number is followed by a number which is a perfect square of a number then the second number is to be divided by the first number.
- (iv) If an even number is followed by a two digit even number then the first number is to be multiplied by the second number.
- 1. I. 15 11 20 400 II. 8 12 10

If the resultant of the second set of numbers is divided by the resultant of the first set of numbers, what will be the outcome?

A. 196

B. 200

C. 19

D. 92

E. None of the Above

Answer: E. None of the Above

Explanation:

15 -11 = 4 [Rule ii] 4 * 20 = 80 [Rule iv] 400 / 80 = 5 [Rule iii] r1 = 5 8 * 12 = 96 [Rule iv] 96 * 10 = 960[Rule iv] r2 = 960

960/5 = 192

2. I. 40 30 3600

II. 15 24 17

What is the sum of the two resultant numbers of the set of numbers given above?

A. 22



- B. 25
- C. 28
- D. 42
- E. None of the Above

Answer: B. 25

Explanation:

40 * 30 = 1200 [Rule iv] 3600/1200 = 3 [Rule iii] 15 + 24 = 39 [Rule i] 39 – 17 = 22 [Rule ii] 22 + 3 = 25

3. I. 8 16 16 14

II. 13 11 12 144

What is the difference between the resultant of the first set of numbers and the second set of numbers?

- A. 222
- B. 210
- C. 118
- D. 106
- E. None of the Above

Answer: D. 106

Explanation:

16 / 8 = 2 [Rule iii] 16 / 2 = 8 [Rule iii] 8 * 114 = 112 [Rule iv] 13 - 11 = 2 [Rule ii] 2 * 12 = 24 [Rule iv] 144 / 24 = 6[Rule iii] 112 - 6 = 106

4. I. 13 11 4

II. 17 13 12

If the resultant of the first set of numbers is multiplied by the resultant of the second set of numbers, what will be the outcome?

- A. 48
- B. 96
- C. 69
- D. 75
- E. None of the Above

Answer: B. 96



Explanation:

5. I. 19 15 12

II. 15 12 23 16

If the resultant of the second set of numbers is subtracted from the resultant of the first set of numbers what will be the outcome?

- A. 44
- B. 92
- C. 29
- D. 43
- E. None of the Above

Answer: A. 44

Explanation:

19 - 15 = 4 [Rule ii] 4 * 12 = 48 [Rule iv] 15 + 12 = 27 [Rule i] 27 - 23 = 4 [Rule ii] 16 / 4 = 4 [Rule iv] 48 - 4 = 44

(Q. 6-10) In each of the following questions, two rows of numbers are given. The resultant number in each row is to be worked out separately

based on the following rules and the questions below the rows of numbers are to be answered. The operations of numbers progress from the left to

the right.

Rules:

- (i) If an even number is followed by another even number they are to be added.
- (ii) If an even number is followed by a prime number they are to be multiplied
- (iii) If an odd number is followed by an even number, the even number is to be subtracted from the odd number
- (iv) If an odd number is followed by another odd number the first number is to be added to the square of the second number
- (v) If an even number is followed by a composite odd number, the even number is to be divided by the odd number.



6. I. 84 21 13

II. 15 11 44

What is the half of the sum of the resultants of the two rows?

- A. 116
- B. 132
- C. 232
- D. 236
- E. None of the Above

Answer: A. 116

Explanation:

7. I. 45 18 12

II. 22 14 9

What is the product of the resultants of the two rows?

- A. 75
- B. 48
- C. 45
- D. 64
- E. None of the Above

Answer: E. None of the Above

Explanation:

8. I. 12 7 16

II. 79 28 15

What is the difference between the resultants of the second row and the first row?

A. 276

B. 176



- C. 100
- D. 156

E. None of the Above

Answer: B. 176

Explanation:

12 * 7 = 84 [Rule ii] 84 + 16 = 100 [Rule i] R1 = 100 79 - 28 = 51 [Rule iii] 51 + (15)^2 = 276 [Rule iv] R2 = 276 276 - 100 = 176

9. I. 36 13 39

II. 77 30 7

What will be the outcome if the resultant of the second row is divided by the resultant of the first row?

- A. 12
- B. 16
- C. 8
- D. 6

E. None of the Above

Answer: C. 8 Explanation:

36 * 13 = 468 [Rule ii] 468 / 39 = 12 [Rule v] R1 = 12 77 - 30 = 47 [Rule iii] 47 + 49 = 96 [Rule iv] R2 = 96 R2/R1 = 96/12 = 8

10. I. 65 11 12

II. 15 3 11

What is the sum of the resultants of the two rows?

- A. 366
- B. 66
- C. 264
- D. 462

E. None of the Above

Answer: D. 462



Explanation:

65 + 121 = 186 [Rule iv] 186 + 12 = 198 [Rule i] R1 = 198 15 + 9 = 24 [Rule iv] 24 * 11 = 264 [Rule ii] R2 = 264 198 + 264 = 462

- 11. Introducing Veena, Kowri said "She is the only daughter of my father's only daughter". How is Kowri related to Veena?
- A. Niece
- B. Sister
- C. Aunt
- D. Mother
- E. None of these

Answer – D. Mother

Explanation :Kowri is Veena's mother.

- 12. Pointing toward a boy ,Arjun said , "He is the son of only son of my grandfather".How is the boy related to to Arjun?
- A. Brother
- B. Uncle
- C. Cousin
- D. Father
- E. None of these

Answer - A. Brother

Explanation: Grandfather son – father son: brother.

- 13. A man is said to lady, "Your mother's husband's sister is my aunt". How is the lady related to to the man?
- A. Mother
- B. Sister
- C. Daughter
- D. Aunt
- E. Grand daughter



Answer - B. Sister

Explanation:

Lady's mother,s huband : Father

Lady's father's sister: Aunt. Hence lady is man's sister.

14. Pointing to Kamal, Sheeba said, "His mother's brother is the father of my son Akilesh". How is Kamal related to Sheeba?

- A. Niece
- B. Nephew
- C. Aunt
- D. Sister-in-law
- E. None of these

Answer - B. Nephew

Explanation:

Father of Sheeba's son : Sheeba's husband

Kamal: Sister son of Sheeba's husband. Hence Kamal is Sheeba's Nephew.

15. Pointing to a photograph ,Nithish said, "She is the mother of my sons's wife's daughter". How is Nithish related to lady?

- A. Son
- B. Uncle
- C. Father
- D. Father in law
- E. None of these

Answer - D. Father - in - law

Explanation:

Nithish's son's wife's daughter – Nithish's son's daughter Mother of daughter of Nithish's son – Wife of Nithish's son

Hence Arun is the father-in-law of the lady.

16. If Kiran says, "Rocky's mother is the only daughter of my mother", How is Kiran related to Rocky?

A. Brother



- B. Father
- C. Uncle
- D. Grand father
- E. None of these

Answer - C. Uncle

Explanation:

Daughter of Kiran's mother - Kiran's Sister.

So Kiran is an Uncle of Rocky.

- 17. Pointing to a man, Dinesh said, "His only brother is the father of my daughter's father". How is the man related to Dinesh?
- A. Father
- B. Grand father
- C. Uncle
- D. Brother
- E. None of these

Answer – C. Uncle

Explanation:

Father of Dinesh daughter's father: Dinesh's father

So man is the brother of Dinesh's father.

- 18. Aswin said , "This girl is the wife of the grandson of my mother". Who is Aswin to that girl?
- A. Husband
- B. Father
- C. Brother
- D. Uncle
- E. Father-in-law

Answer - E. Father-in-law

Explanation:

Grandson of my mother: son

Wife of Aswin's son : Aswin's Daughter-in-law.



Therefore, Ashwin is a Father-in-law to that girl

19. Pointing to an old man, Jeeva said, "His son is my Son's uncle". How is the old man related to Jeeva?
A. Father B. Uncle C. Brother D. Grandfather E. None of these
Answer – A. Father
Explanation : Jeeva's son's uncle : Jeeva's Brother. Hence old man is the Father of Jeeva.
20.A woman introduce a man as the son of the brother of her mother. How is the man related to the woman?
A. Son B. Nephew C. Uncle D. Cousin E. None of these
Answer - D. Cousin
Explanation : Brother of mother : Uncle Uncle's son: Cousin.
CLASSIFICATION
21. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
A. bcdr B. ghst



C. nmlv

D. vxzw

E. akhi

Answer: E. akhi

Explanation: This only contain vowels

- 22. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
- A. ICICI Bank
- B. HSBC Bank
- C. AXIS Bank
- D. YES Bank
- E. HDFC Bank

Answer: B. HSBC Bank

Explanation :HSBC bank HQ alone located in London...remaining are located in MUMBAI

- 23. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
- A. Bhartiya Mahila bank
- B. Punjab National bank
- C. Indian Bank
- D. Punjab & Sid Bank
- E. Oriental bank of commerce

Answer: C. Indian Bank

Explanation :Indian Bank HQ located in Chennai remaining HQ – New Delhi

- 24. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
- A. Speak
- B. Think
- C. Ponder



D. Consider E. Reflect
Answer: A. Speak
Explanation :Speak - in the form of language
25. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?
A. Iron B. Chlorine C. Aluminium D. Mica E. Hydrogen
Answer: D. Mica
Explanation :Mica is not an element
ANALOGY
26. Energy : Joule :: Resistance : ?
A. Current B. Ohm C. Power D. Ampere
Answer: B. Ohm
Explanation :Second is the unit of measuring first.
27. Injury: Pain:: Thunder::?
A. Lightning B. Sound C. Fear

D. Rain



Answer: A. Lightning

Explanation :First causes the second

28. Despotic: Tyranny:: Generous:?

A. Partiality

B. Morality

C. Neutrality

D. Liberality

Answer: D. Liberality

Explanation :Second is the quality possessed by the first

29. 14 21 35 57 88 ?

A. 182

B. 129

C. 166

D. 127

E. 180

Answer: B. 129

Explanation:

$$21 - 14 = 7$$

$$35 - 21 = 14$$

$$57 - 35 = 22$$
 $14 - 7 = 7$; $22 - 14 = 8$

30. 13, 21, 37, 61, ?, 133

A. 96

B. 93

C. 92

D. 97

E. None of these

Answer: B. 93

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Explanation:

$$21 - 13 = 8$$

$$37 - 21 = 16$$

$$61 - 37 = 24...$$

31. 9, 10, 18, 57, ?, 1125

- A. 164
- B. 230
- C. 210
- D. 224
- E. 115

Answer: D. 224

Explanation:

$$18 * 3 + 3 = 57$$

33. 14, 8, 7, 11.5, 22, ?

- A. 56
- B. 59
- C. 53
- D. 58
- E. 52

Answer – A. 56

Explanation:

$$8 * 1 - 1 = 7$$

34. 13, 14, 26, 108, ? , 13712

A. 836



- B. 896
- C. 842
- D. 856
- E. 824

Answer – D. 856

Explanation:

- 13 * 1 + 1 = 14
- 14 * 2 2 = 26
- 26 * 4 + 4 = 108
- 108 * 8 8 = 856

856 * 16 + 16= 13712

35. 12, 14, 19, 36, ?, 358

- A. 105
- B. 104
- C. 106
- D. 102
- E. 101

Answer – E. 101

Explanation:

- $12 + 1^2 + 1 = 14$
- $14 + 2^2 + 1 = 19$
- $19 + 4^2 + 1 = 36$
- 36 + 8*8 + 1 = 101.

36. Conclusions:

- I. Some Pens are not Pencils
- II. Some Erasers are Pencils

Statements:

- A. Some Scales are Pencils. No Pencil is Eraser. All Erasers are Pens
- B. All Scales are Pencils. No Pencil is Eraser. Some Erasers are Pens
- C. No Scale is Pencil. No Pencil is Eraser. All Erasers are Pens
- D. All Scales are Pencils. All Pencils are Erasers. No Eraser is Pen.



E. None

Answer - D. All Scales are Pencils. All Pencils are Erasers. No Eraser is Pen.

37. Conclusions:

- I. Some Bats are Cats
- II. Some Mats are not Rats

Statements:

- A. All Mats are Cats. Some Rats are not Cats. Some Mats are Bats.
- B. Some Cats are not Rats. All Cats are Mats. All Mats are Bats.
- C. All Cats are Rats. No Rats are Mats. No Mats are Bats.
- D. Some Cats are Rats. No Rats are Mats. Some Mats are Bats.
- E. None

Answer – B. Some Cats are not Rats. All Cats are Mats. All Mats are Bats

38. Conclusions:

- I. Some Universities are not Hospitals
- II. All Schools being Colleges is a possibility

Statements:

- A. Some Hospitals are Schools. All Schools are Universities. No University is College.
- B. All Hospitals are Schools. All Schools are Universities. Some Universities are Colleges
- C. All Hospitals are Schools. No School is University. Some Universities are Colleges
- D. Some Hospitals are Schools. Some Schools are Universities. All Universities are Colleges
- E. None

Answer - C. All Hospitals are Schools. No School is University. Some Universities are Colleges

39. Conclusions:

- I. Some Oranges are not Kiwis
- II. Some Apples are not Bananas

Statements:

- A. Some Kiwis are Apples. No Apple is Orange. All Orange are Bananas
- B. All Kiwis are Apples. Some Apples are Oranges. All Oranges are Bananas
- C. No Kiwi is Apple. All Apples are Oranges. No Orange is Banana
- D. No Kiwi is Apple. No Apple is Orange. All Oranges are Bananas



E. None

Answer – C. No Kiwi is Apple. All Apples are Oranges. No Orange is Banana

40. Conclusions:

- I. Some TV's are Laptops
- II. Some Desktops are TV's

Statements:

- A. All TV's are Mobiles. Some Mobiles are Desktops. No Desktop is Laptop
- B. Some TV's are Mobiles. No Mobiles is Desktop. All Desktops are Laptops
- C. Some TV's are Mobiles. All Mobiles are Desktops. No Desktop is Laptop
- D. All TV's are Mobiles. No Mobile is Desktop. All Desktop are Laptops
- E. None

Answer – E. None