

HirePro

QUESTION 7

GROUP Aptitude

SECTION Attention to Details

Mark(1)

Time: 00:19:50

In the following number series how many numbers are there which are immediately followed by perfect squares?

18 16 12 9 1 18 10 4 32 8 9 21 24 14 25 2 4 36 28 15 9 2 1

A 2

B 9

C 8

D 5

Previous Question

Next Question



HirePro

QUESTION: 10 GROUP: Aptitude SECTION: Problem Solving Mark(s): 1

TIME LEFT 00:19:46

Kiran purchased a mobile phone; either he needs to pay the price of the mobile phone as a single payment or pay Rs. 2000 as cash down payment followed by Rs. 2200 at the end of the first year, Rs. 2420 at the end of the second year, Rs. 2662 at the end of the third year. Interest being compounded 10% per annum. What is the cash price of the mobile phone?

Rs. 7200

Rs. 8000

Rs. 9282

Rs. 8600

2200

2420

2662
—
7282

+ 2L = 9282

Previous Question

Next Question



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QUESTION 15 GROUP Aptitude SECTION: Problem Solving Mark(s): 1

Time: 00:19:39

Two pipes 'A' and 'B' can fill a tank in 48 minutes and 56 minutes respectively while another pipe 'C' can empty the tank in 1 hour and 12 minutes. When will the tank be filled completely when all the three pipes are opened together?

- 19 min
- 42 min
- 36 min 48 sec
- 40 min 19 sec

$$\begin{array}{ccc} A & B & C \\ 48 & 56 & 72 \\ \hline 21 & 18 & -14 \\ \hline 1008 & 84 & \end{array} \Rightarrow \text{Ans} = 25$$

$$20 \frac{1008}{25} = 40.32 \text{ min}$$

Previous Question

Next Question



QUESTION: 12 GROUP: Aptitude SECTION: Logical Reasoning Mark(s): 1

Direction: Study the information given below and answer the question that follows:

There are eight boys – P, Q, R, S, T, U, V and W – who are to form two teams of four boys each. T and U cannot be together in the same team. R and S must be in the same team. If V and W are in the same team, then U must also be in that team.

Question: If T, S and V form a team, which of the following boys can be on the same team?

R

None of the above

P

U

Previous Question

Next Question



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QUESTION: 30 GROUP: Programming SECTION: Python Programming Mark(s): 1

What is the output of below code

```
import math  
n = math.ceil(3.666666)  
print(n)
```

math.floor(3.6)

= 3

19
20
21
22
23
24
25
26
27
28
29

Previous Question Next Question

HP

HirePro

Instructions

Time Left: 00:19:45

QUESTION: 11 GROUP: Aptitude SECTION: Puzzles Mark(s): 1

IF QUARTER is coded as SSDOX/AW, then PARTNER will be coded as;

RUYQARW

SYUQRAW

RYUQRAW

RYUQWRA



15

Previous Question

Next Question

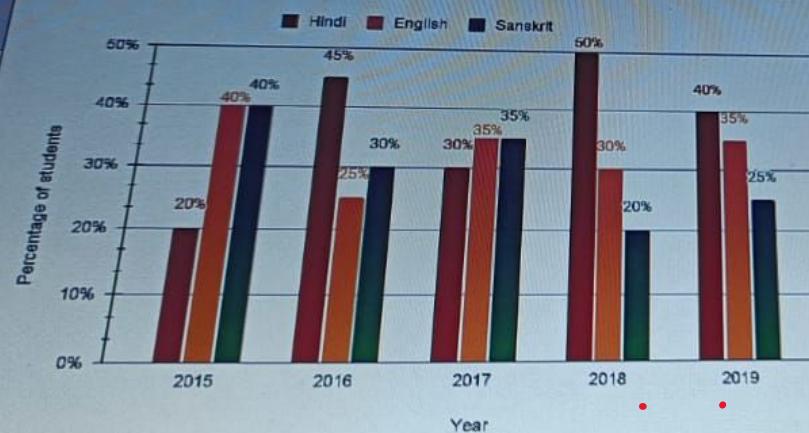


QUESTION: 6 GROUP: Aptitude SECTION: Data Analysis Mark(s): 1

TIME LEFT 00:19:52

Direction: Study the following information and answer the question that follows:

The bar graph shows the percentage of students who took Hindi, English or Sanskrit as optional subjects.

**Question:** The total number of English students in 2016 and 2018 together was 665 and the total number of students in 2018 was 200 more than that of 2016. What was the total number of students in 2016 and 2018 together? ≈ 2438

$$\frac{3y}{10} + \frac{x}{4} = 665$$

$$x+y=?$$

$$x = 200 + y$$

[Previous Question](#)[Next Question](#)

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Instructions

TIME LEFT 00:19:40

QUESTION: 14 GROUP: Aptitude SECTION: Logical Reasoning Mark(s): 1

Direction: Study the information given below and answer the question that follows:

There are eight boys – P, Q, R, S, T, U, V and W – who are to form two teams of four boys each. T and U cannot be together in the same team. R and S must be in the same team. If V and W are in the same team, then U must also be in that team.

Question: Which of the following teams is not possible?

T, R, S and V

T, P, Q and S

U, P, Q and V

T, R, S and W

X T-S together

14★

15

Previous Question

Next Question



HirePro

Instructions

TIME LEFT 00:19:40

QUESTION: 14 GROUP: Aptitude SECTION: Logical Reasoning Mark(s): 1

Direction: Study the information given below and answer the question that follows:

There are eight boys – P, Q, R, S, T, U, V and W – who are to form two teams of four boys each. T and U cannot be together in the same team. R and S must be in the same team. If V and W are in the same team, then U must also be in that team.

Question: Which of the following teams is not possible?

T, R, S and V

T, P, Q and S

U, P, Q and V

T, R, S and W

14★

15

Previous Question

Next Question



HirePro

QUESTION 15 GROUP Aptitude SECTION: Problem Solving Mark(s): 1

00:19:39

Two pipes 'A' and 'B' can fill a tank in 48 minutes and 56 minutes respectively while another pipe 'C' can empty the tank in 1 hour and 12 minutes. When will the tank be filled completely when all the three pipes are opened together?

- 19 min
- 42 min
- 36 min 48 sec
- 40 min 19 sec

15

Previous Question

Next Question



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After 10 attempts, there will be auto submission.

DO NOT refresh or close the browser without submitting the test.

TEST STRUCTURE

Groups	Type of Questions	No. of Questions	Duration
Aptitude	ReferenceToContext, MCQ	15	20 mins
Programming	MCQ	15	20 mins
Technical	MCQ	25	35 mins

SPECIAL INSTRUCTIONS

Important:

- This test is video and audio proctored. During the test, video and audio would be recorded and analysed to maintain integrity of the test.
- There is a further manual proctoring done on these videos by HirePro as well as the hiring organization.

Result ENG 09:31 23-10-2023



Type here to search



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QUESTION: 13 GROUP: Aptitude SECTION: Logical Reasoning Mark(s): 1

TIME LEFT: 00:19:42

Direction: Study the information given below and answer the question that follows.

There are eight boys – P, Q, R, S, T, U, V and W – who are to form two teams of four boys each. T and U cannot be together in the same team. R and S must be in the same team. If V and W are in the same team, then U must also be in that team.

Question: If we know that W must always be with either V or Q, then how many possible ways are there to form the teams?

A

B

C ?

D None of these

Flag this question

14

15

Previous Question

Next Question



QUESTION: 12 GROUP: Aptitude SECTION: Logical Reasoning Mark(s): 1

Direction: Study the information given below and answer the question that follows:

There are eight boys – P, Q, R, S, T, U, V and W – who are to form two teams of four boys each. T and U cannot be together in the same team. R and S must be in the same team. If V and W are in the same team, then U must also be in that team.

Question: If T, S and V form a team, which of the following boys can be on the same team?

R

None of the above

P

U

Previous Question

Next Question



HirePro

Instructions

Time Left: 00:19:45

QUESTION: 11 GROUP: Aptitude SECTION: Puzzles Mark(s): 1

IF QUARTER is coded as SSDOX/AW, then PARTNER will be coded as;

RUYQARW

SYUQRAW

RYUQRAW

RYUQWRA



15

Previous Question

Next Question



HirePro

Instructions

TIME LEFT 00:19:46

QUESTION: 10 GROUP: Aptitude SECTION: Problem Solving Mark(s): 1

Kiran purchased a mobile phone; either he needs to pay the price of the mobile phone as a single payment or pay Rs. 2000 as cash down payment followed by Rs. 2200 at the end of the first year, Rs. 2420 at the end of the second year, Rs. 2662 at the end of the third year. Interest being compounded 10% per annum. What is the cash price of the mobile phone?

Rs. 7200

Rs. 8000

Rs. 9282

Rs. 8600

Previous Question

Next Question



HirePro

Instructions

Time Left: 00:19:47

QUESTION: 9 GROUP: Aptitude SECTION: Attention to Details Mark(s): 1

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement:

Input: jasmine rose 43 holly 32 daisy 52 poppy 39 Alyssum 27

Step (1): 27 jasmine rose 43 holly 32 daisy 52 poppy 39 Alyssum

Step (2): 27 32 jasmine rose 43 holly daisy 52 poppy 39 Alyssum

Step (3): 27 32 39 Alyssum jasmine rose 43 holly daisy 52 poppy

Step (4): 27 32 39 43 Alyssum daisy jasmine rose holly 52 poppy

Step (5): 27 32 39 43 52 Alyssum daisy holly jasmine rose poppy

Step (6): 27 32 39 43 52 Alyssum daisy holly jasmine poppy rose

Based on this answer the following question:

Input: Nigella 82 Pea Snapdragon 75 59 Godetia Candytuft Heather 35 49 Violet

How many steps will be required to complete the rearrangement?

7/8

5

Previous Question

Next Question



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Instructions

Time Left: 00:19:49

QUESTION: 8 GROUP: Aptitude SECTION: Data Sufficiency Mark(s): 1

Direction: The question is followed by two statements (I) and (II). Answer the question using the following instructions.

Mark (A) if the question can be answered by one of the statements alone but not by the other.

Mark (B) if the question can be answered by using either statement alone.

Mark (C) if the question can be answered using both statements together, but can not be answered using either statements alone.

Mark (D) if the question cannot be answered.

What is the marked price of a book?

(I) The selling price after giving 25% discount on the marked price is Rs. 900.

(II) If the book was sold on the marked price then the profit earned on the cost price would be either 20% or Rs. 200.

(A)

(C)

(B)

(D)

Previous Question

Next Question



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QUESTION 7 GROUP Aptitude

SECTION Attention to Details

Mark(1)

Time: 00:19:50

In the following number series how many numbers are there which are immediately followed by perfect squares?

18 16 12 9 1 18 10 4 32 8 9 21 24 14 25 2 4 36 28 15 9 2 1

A 2

B 9

C 8

D 5

Previous Question

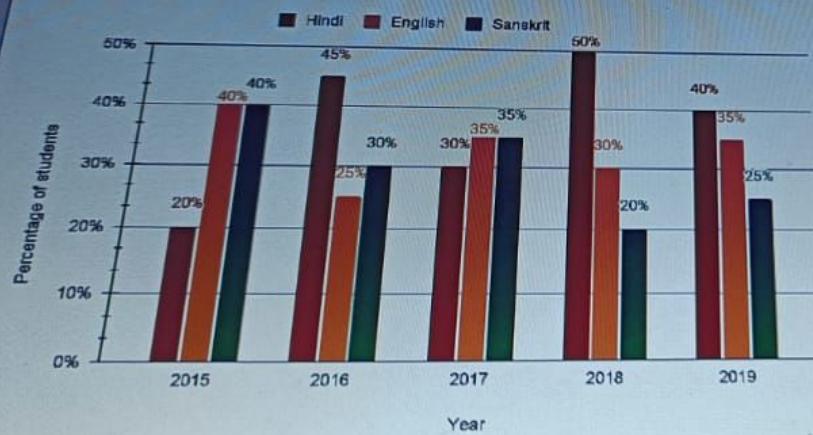
Next Question



QUESTION: 6 GROUP: Aptitude SECTION: Data Analysis Mark(s): 1

Direction: Study the following information and answer the question that follows:

The bar graph shows the percentage of students who took Hindi, English or Sanskrit as optional subjects.



Question: The total number of English students in 2016 and 2018 together was 665 and the total number of students in 2018 was 200 more than that of 2016. What was the total number of students in 2016 and 2018 together?

Previous Question

Next Question



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1

2

3

4

5

6

7

8

9

10

11

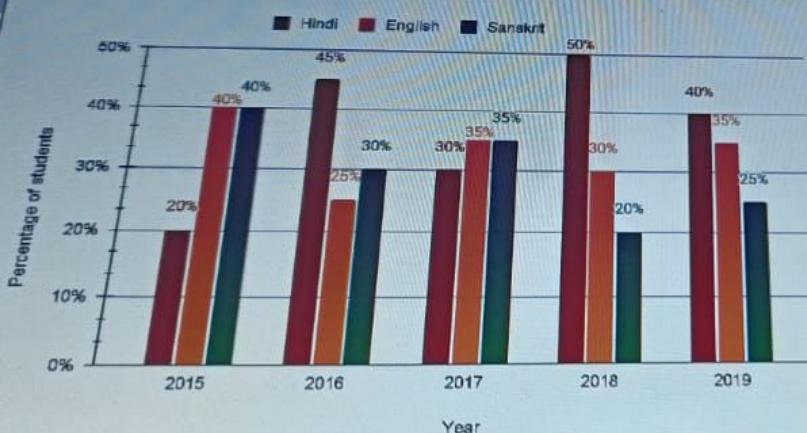
12

QUESTION: 5 GROUP: Aptitude SECTION: Data Analysis Mark(s): 1

TIME LEFT: 00:19:53

Direction: Study the following information and answer the question that follows:

The bar graph shows the percentage of students who took Hindi, English or Sanskrit as optional subjects.



Question: If the total number of students in 2017 was 2000, then what is the ratio of the sum of Hindi and English students to the difference of Hindi and Sanskrit students?

1:13

Previous Question

Next Question



$$\frac{2000 \times 3}{100} = 600 - H$$

$$-700 - E$$

$$-700 - S$$

$$1200 : 100$$

$$13:1$$

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QUESTION: 4 GROUP: Aptitude SECTION: Puzzles Mark(s): 1

00:19:54

Pointing to C, A said to B that, "She is my grandfather's only daughter's daughter", and then B said to A that, "She is granddaughter of my father's mother", what is the relation of A and B, if both are girls?

Either sister or cousin

Cousin

Can't be determined

Sister

Previous Question

Next Question



QUESTION 2 GROUP: Aptitude SECTION: Puzzles MARKS: 1

How many such pairs of letters are there in the word "CONDUIT" which has as many letters between them (from both the sides) as in the alphabets from A to Z?

3

No pairs

2

1

NO - 1 PAIR

Previous Question

Next Question



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Instructions

TIME LEFT: 00:19:56

QUESTION: 3 GROUP: Aptitude SECTION: Problem Solving Mark(s): 1

Four bells toll at intervals of 10, 15, 20 and 30 sec respectively. If they toll together at 10:32 a.m., then at what time between 11:20 a.m. and 11:25 a.m. will they toll together again?

11:21 a.m.

All of the given options

11:22 a.m.

11:23 a.m.

- 1
- 2
- 3 
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Previous Question

Next Question



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1

QUESTION 1

GROUP: Aptitude

SECTION: Problem Solving

Mark(s): 1

00:19:59

A jar full of milk solution of 135 litres consists of milk and sugar in the ratio of 13:5. How much litres of milk should be added into the solution, so that the milk and sugar will be in the ratio 8:3?

 1.5 litres B 2.5 litres 2.0 litres 3.0 litres

$$\frac{13}{18} \times 135 = 97.5$$

$$\begin{array}{c} 135 \\ \diagup \quad \diagdown \\ 13 \quad 55 \\ \times 135 \\ \hline 18 = 57.5 \end{array}$$

$$\frac{97.5 + x}{27.5} = \frac{8}{3}$$
$$3(97.5 + x) = 8(27.5)$$
$$292.5 + 3x = 220$$
$$3x = 220 - 292.5$$
$$3x = -72.5$$
$$x \approx 2.5$$

[Previous Question](#)[Next Question](#)

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0 100, 0.0%

00:19:30

QUESTION: 30 GROUP: Programming SECTION: Python Programming Mark(s): 1

What is the output of below code

```
import math  
n = math.ceil(3.666666)  
print(n)
```

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micron
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3

3.66

3.00

3.0



Previous Question

Next Question



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01/01/2024

00:19:32

QUESTION: 29 GROUP: Programming SECTION: CPP Programming Marks: 5

What will be the output of the program given below?

```
19
20
21 #include <iostream>
22 using namespace std;
23 int main()
24 {
25     void display(int *);
26     int a = 10, *ptr;
27     ptr = &a;
28     cout << *ptr << endl;
29     display(ptr);
30     cout << *ptr << endl;
31     return 0;
32 }
33 void display(int *abc)
34 {
35     void display2(int *);
36     cout << --(*abc) << endl;
37 }
```

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Previous Question

Next Question

Waiting for ans.Hirepro.in...



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QUESTION

QUESTION 28

GROUP Programming

SECTION C Programming

Marked 1

00:19:33

What will be the output of the program given below?

```
19
20
21
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24
25
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27
28
29
30
#include <stdio.h>
int main()
{
    int x, y;
    int z = 4, r;
    r = y >> 3;
    if (r == 0)
        printf("Pass");
    else if (r == 2)
        printf("Fail");
    else
        printf("Not decided");
    return 0
}
```

Not decided

Fail

Previous Question

Next Question



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00:19:36

QUESTION: 26 GROUP: Programming SECTION: C Programming Mark(0) 1

What will be the output of the program given below?

```
1 #include <stdio.h>
2 int fun1(int a, int b, int c)
3 {
4     micros
5     89985-10803147
6     int d = a + (b - a) * c;
7     printf("%d %d %d %d ", a, b, c, d);
8     return ((c == 2) ? b : a + c);
9 }
10 int fun2(int a, int b, int c)
11 {
12     micros
13     89985-10803147
14     int j = b - a * c + a * b;
15     printf("%d ", a * b);
16     return j;
17 }
18 int main()
19 {
20     micros
21     89985-10803147
22     int a = 1, b = -1;
23     static int c;
24     printf("%d ", fun1(a, b, c));
25 }
```

[Previous Question](#)[Next Question](#)

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QUESTION 23

GROUP: Programming SECTION: C Programming Marks: 1

00:19:39

What will be the output of the program given below?

```
#include <stdio.h>
int main()
{
    char s[5] = { 'a', 'b', 'c', 'd', '\0' };
    char* point = s + point[1];
    ++point;
    printf("%c", -*point);
    *point--;
    printf("%c", *point++);
    return 0;
}
```

b c

c b

b b

Previous Question

Next Question



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QUESTION: 27 GROUP: Programming SECTION: Python Programming mark(s): 1

Choose correct output of below lambda expression.

```
i = Lambda a, b, c: a + b * c  
print(i(7, 6, 2))
```

27

28

29

30

7

10

1

Error

00:19:34

$a+b-1 \cdot c$

$7+6 \cdot 2$

\downarrow

$7+0=7$

Previous Question Next Question

hp

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QUESTION 24 GROUP: Programming SECTION: C Programming Marks: 1

00:19:38

What will be the output of the program given below?

```
19
20
21
22
23
24 24
25
26
27
28
29
30
```

```
#include <stdio.h>
int main()
{
    micron
    #9985-1080147
    void display(int (*f)())
    {
        f();
    }
    int show()
    {
        printf("on the programming");
        return 0;
    }
    void display(int (*f)())
    {
        f();
    }
```

Previous Question

Next Question



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QUESTION

00:19:37

QUESTION: 25 GROUP: Programming SECTION: CPP Programming Status: 1

What will be the output of the program given below?

```
19
20
21
22
23
24
25
26
27
28
29
30
2/2
QUESTION: 25
GROUP: Programming
SECTION: CPP Programming
Status: 1
#include <iostream>
using namespace std;
class Bar
{
public:
    int var;
    void set(int i)
    {
        var = i;
    }
    void disp()
    {
        cout << var << endl;
    }
    void show()
    {
        cout << "Class Bar" << endl;
    }
};
```

Previous Question

Next Question

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QUESTION: 22 GROUP: Programming SECTION: Python Programming Mark(s): 1

Choose correct output of below lambda expression

```
i = lambda a, b: a + b * c  
print(i(5, 6, 2))
```

13
17
Error
["13"]

Previous Question Next Question



HirePro

QUESTION 16

00:19:42

QUESTION 21 GROUP Programming SECTION Python Programming Mark(0) 0

What is the output of below code snippet:

```
def call0:  
    try:  
        return 1  
    finally:  
        return 2  
  
x = call0  
print(x)
```

micro
try:45-10803147

micro
try:45-10803147

micro
try:45-10803147

21

22

23

24

25

26

27

28

-1

Error, multiple return statements

None of the options

1

Previous Question

Next Question



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QUESTION 16

QUESTION: 20 GROUP: Programming SECTION: Python Programming MARKS: 1

TIME LEFT: 00:19:44

Which function lets you inherit methods from a parent class?

list()

super()

classmethod()

inherit()

16

17

18

19

20 ★

21

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24

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Previous Question

Next Question



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QUESTION 19

GROUP: Programming SECTION: C Programming

Mark(s): 1

00:19:45

What will be the output of the program given below?

```
#include <stdio.h>
int main()
{
    int p[10] = {1, 4, 6, 9, 5, 3,
                2, 8, 7, 0};
    int i;
    for(i=0; i<10; i++)
        printf("%d ", p[i]);
    return 0;
}
```

Previous Question

Next Question



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QUESTION: 18 GROUP: Programming SECTION: CPP Programming Marks: 1

Which one of the given options is correct about the below given code snippet?

```
class class_name
{
    int a;
public:
    class_name (void);
    ~class_name ();
};

class_name::class_name()
{
    a = 1; b = a + 2;
}
```

#

Constructor ?

Destructor ?

Constructor is declared and defined.

Constructor is declared but not defined.

[Previous Question](#) [Next Question](#)

hp

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QUESTION 16

QUESTION: 17 GROUP: Programming SECTION: CPP Programming MARKS: 1

00:19:48

What will be the output of the program given below?

```
#include <iostream>
using namespace std;

void xHandler(int test)
{
    try
    {
        if(test == 0) throw test;
        if(test == 1) throw "a";
        if(test == 2) throw 123.33;
    }
    catch(int i)
    {
        cout << "Caught an integer" << endl;
    }
    catch(...)
    {
        cout << "Caught one!" << endl;
    }
}
```

Previous Question

Next Question



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QUESTION 26 GROUP: Programming SECTION: C Programming

00:09:13

What will be the output of the program given below?

```
function int fun1()
{
    int a=1, b=-1;
    static int c;
    printf("%d ", fun1(a++, b++));
    return 1;
}

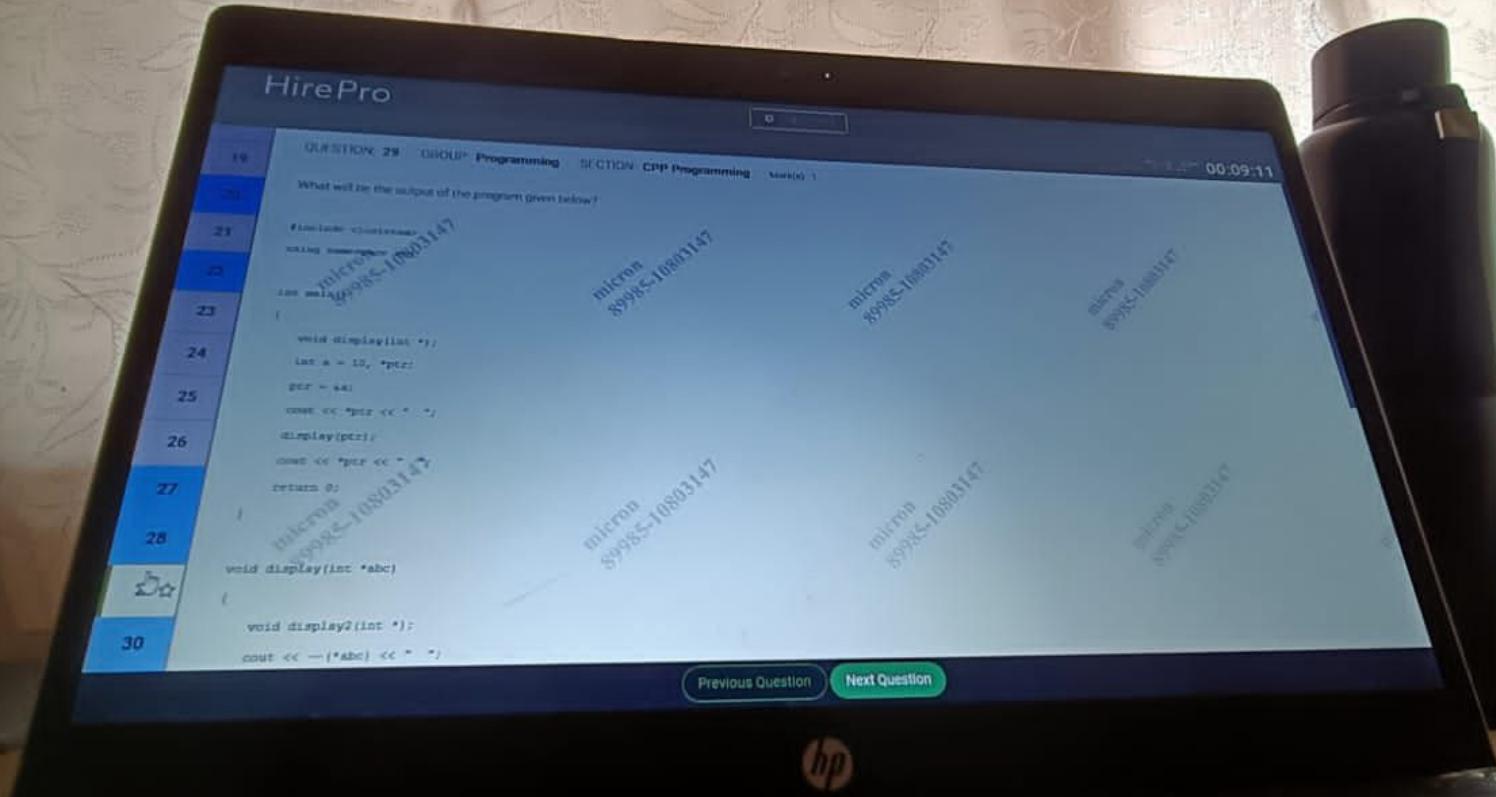
int fun2(int a, int b, int c)
{
    int d = a+b; // a++2
    printf("%d ", a+b);
    return d;
}

int main()
{
    int a = 1, b = -1;
    static int c;
    printf("%d ", fun1(a--, b++, c--));
}
```

Previous Question

Next Question





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QUESTION 25 GROUP: Programming SECTION: CPP Programming mark(s): 1

What will be the output of the program given below?

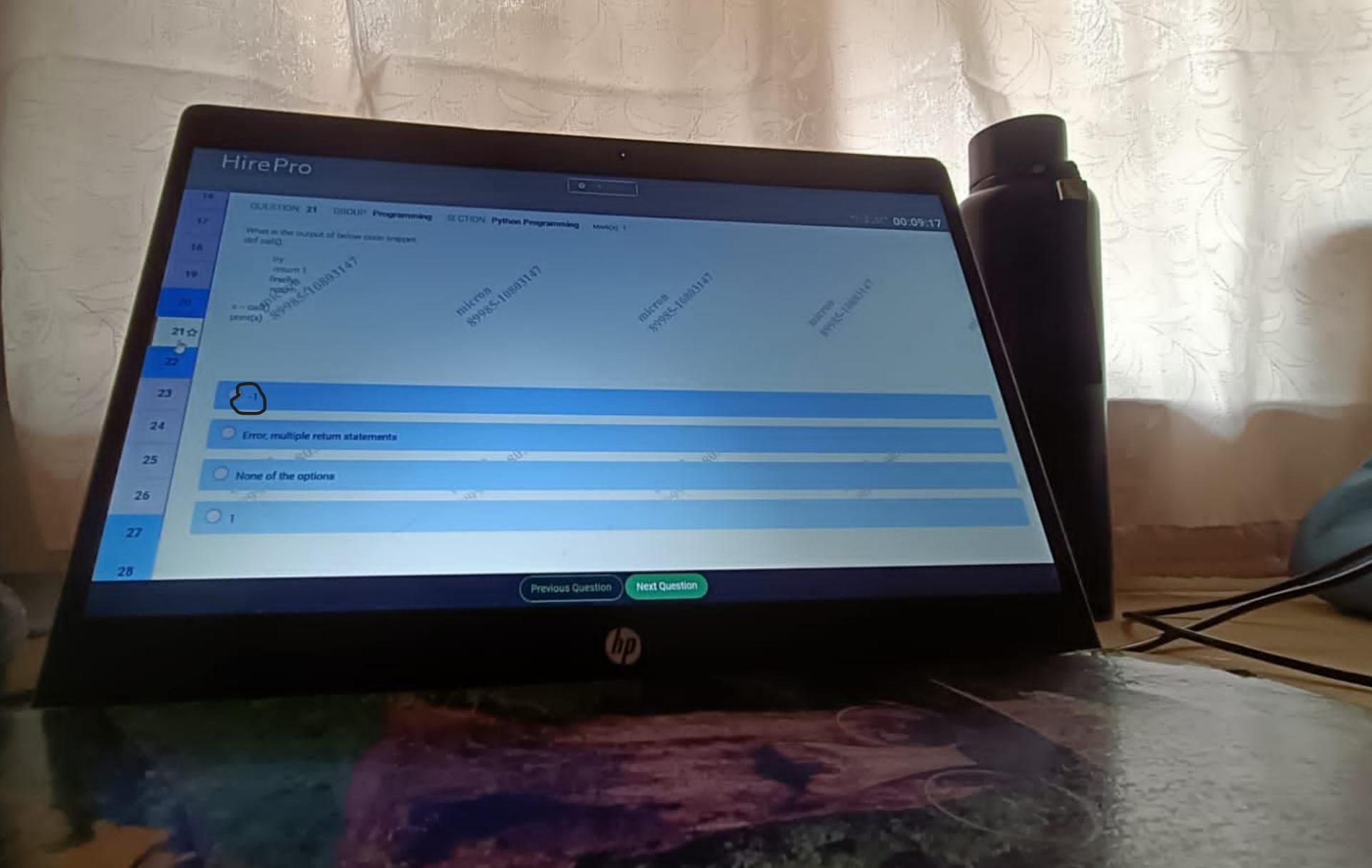
```
1 #include <iostream>
2 using namespace std;
3 class Sample {
4 public:
5     int var;
6     void set(int i)
7     {
8         var = i;
9     }
10    void show()
11    {
12        cout << "Class Has ";
13    }
14 };
15
16 int main()
17 {
18     Sample s;
19     s.set(10);
20     s.show();
21     cout << endl;
22     return 0;
23 }
```

00:09:14

micron 89985.10893147 micron 89985.10893147 micron 89985.10893147 micron 89985.10893147

Previous Question Next Question





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QUESTION 19 GROUP: Programming SECTION: C Programming

What will be the output of the program given below?

```
19x
16
17
18
19
20
21
22
23
24
25
26
27
```

```
int main()
{
    int arr[5] = {1, 2, 3, 4, 5}, i;
    int p[5] = {0, 1, 2} + 2;
    printf("%d", arr[p[0]]);
    printf("\n");
    int print(int *a, int *b)
    {
        int p;
        p = *b++;
        *b = ++p;
        *b = ++p;
    }
    print(arr, p);
    printf("\n");
}
```

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89985-10803147

micron
89985-10803147

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HirePro

QUESTION: 23 GROUP: Programming SECTION: C Programming Mark(s): 1

Time Left: 00:09:15

What will be the output of the program given below?

```
#include <stdio.h>
int main()
{
    char alpha[] = { 'a', 'b', 'c', 'd', 'e' };
    char *point = &alpha[1];
    ++point;
    printf("%c ", --*point);
    *point--;
    printf("%c", *point++);
    return 0;
}
```

24 25 26 27 28 29 30

b c
 c b
 b b

Previous Question Next Question

Waiting for amit.hirepro...



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QUESTION 18 GROUP: Programming SECTION: CPP Programming Version 1 00:09:19

Which one of the given options is correct about the below given code snippet?

```
class_name<-->{  
    int a, b;  
    public:  
        class_name();  
        ~class_name();  
        class_name(class_name&);  
        void fun();  
};  
  
class_name a, b;  
a = 12, b = a + 22;
```

Constructor is declared and defined.
 Constructor is declared but not defined.
 Constructor is not declared but defined.

Previous Question Next Question

16

17

18

19

20

21

22

23

24

25

26

27

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QUESTION 17 GROUP: Programming SECTION: CPP Programming

00:09:21

What will be the output of the program given below?

```
#include <iostream>
using namespace std;
void X(int test)
{
    try
    {
        if(test == 0) throw test;
        if(test == 1) throw 'a';
        if(test == 2) throw 123.33;
    }
    catch(int i)
    {
        cout << "Caught an integer" << endl;
    }
    catch(...)
    {
        cout << "Caught one!" << endl;
    }
}
```

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QUESTION: 16 GROUP: Programming SECTION: CPP Programming Mark(s): 1

00:09:22

Which of the statement(s) given below is/are correct?

I) For ifstream class, open is automatically assumed, even if a mode that does not include them is passed as second argument to the open function.

II) For fstream class, the default value is only applied if the function is called without specifying any value for the mode parameter.

Neither (I) nor (II)

Both (I) and (II)

Only (I)

Only (II)

Previous Question Next Question



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QUESTION 55 GROUP: Technical SECTION: Digital Electronics

Mark(s) 1

Time 00:33:46

An expression is realized using 2:1 mux then a 4:1 mux. The expression is $Y = A'B'C + A'BC + AB'C' + ABC + ABC'$. The inputs to the 2:1 mux are (2:1 Mux S2 -> A, S1 -> B and S0 -> C). For 4:1 mux if S1 -> A and S0 -> B what are the inputs and if S1 -> B AND S0 -> C what are the inputs ?

1 3 4 7 6

01011011; 1 C C C; 1 1 A A'

01011011; 1 C C C; A A A A'

01011011; C C C C; A A A A'

01011011; C C C' 1; A A' A 1 ✓

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End Test

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QUESTION: 54 GROUP: Technical SECTION: Microprocessors and Microcontrollers Mark(s): 1

TIME: 00:33:48

The micro - processor chip register RALU chip has:

- Arithmetic functions only
- Memory function
- Instructions to execute data
- Basic control and arithmetic functions

?

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QUESTION: 53

GROUP: Technical

SECTION: Analog Circuits

Mark(s): 1

Time: 00:33:49

The state transition diagram is designed to realize a sequence detector which consists of five states to give the output. How many number of D-type flip-flop will be required to implement the logic?

 4 5 2 3

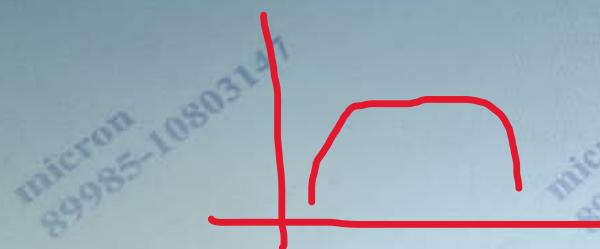
2 flt \rightarrow 4 states

3 flt \rightarrow 8 states

Gain of MOSFETs in low band frequency:

- Decreases with increase in frequency
- Remains Constant
- None of the given options
- Increases with increase in frequency

!



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QUESTION: 49 GROUP: Technical SECTION: Digital Electronics Mark(s): 1

TIME LEFT: 00:33:56

What is the characteristic equation $Q(\text{next})$ of an SR flip-flop?

R+SQ

S+RQ

R+SQ

S+RQ

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Which memory technology is preferred in FPGA for better speed?

DRAM

ROM

None of the given options

SRAM

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QUESTION 50

GROUP: Technical

SECTION: Analog Circuits

Mark(s): 1

TIME LEFT: 00:33:54

Select the correct sequence:

1. Bi-CMOS technology
2. n-MOS technology
3. C-MOS technology
4. ECL technology

- a. High speed operation
- b. Drivers
- c. Logic gates
- d. Super buffers

1-b, 2-c, 3-a, 4-d

1-b, 2-c, 3-d, 4-a

1-c, 2-a, 3-b, 4-b

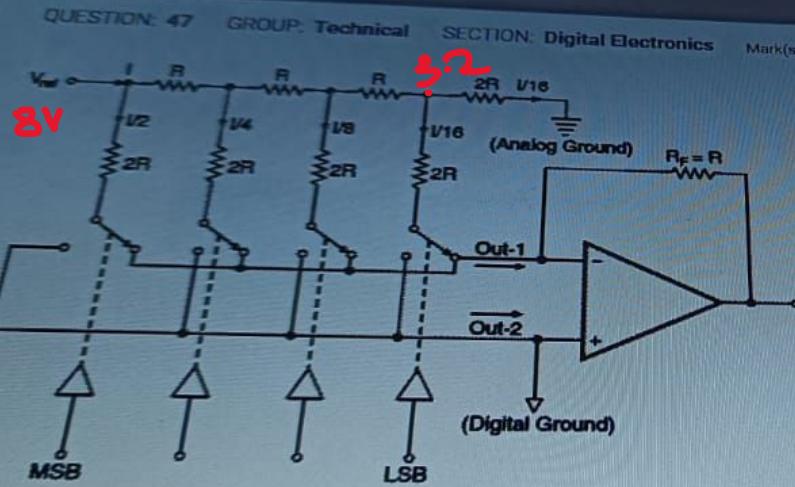
1-c, 2-a, 3-b, 4-d

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For the DAC shown if $V_{ref} = 8V$, what is the maximum output analog voltage.

-30V

30V

8V

$$\frac{2R}{5R} \times 8 = \frac{16}{5} = 3.2$$

$$V_o = \frac{8}{2} \left[\frac{b_0}{2^0} + \frac{b_1}{2^1} + \frac{b_2}{2^2} + \frac{b_3}{2^3} \right]$$

$$= 4 \left[1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} \right]$$

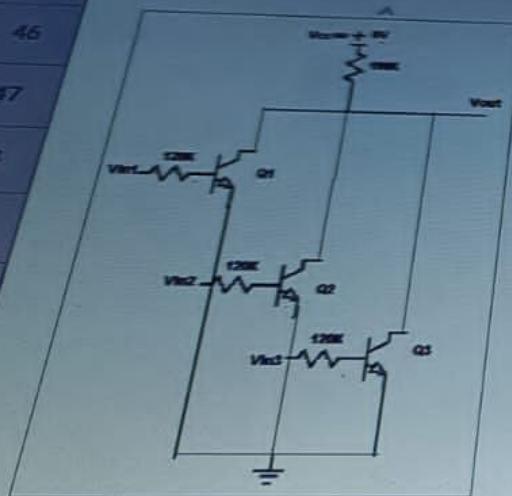
$$= 7.5V$$

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QUESTION: 51 GROUP: Technical SECTION: RTL Mark(s): 1

Time: 00:33:52

A 3 transistor circuit diagram is shown in figure- with logic low level-

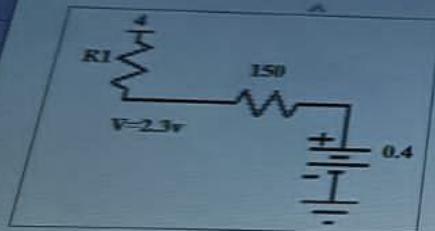


find the output level when all transistor work at low logic level

$V_o = \text{Undefined}$

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QUESTION: 46 GROUP: Technical SECTION: RTL Mark(s): 1
A RTL circuit diagram is shown in figure.



Calculate the value of R_1 -

$R_1 = 134 \text{ Ohm}$

$R_1 = 234 \text{ Ohm}$

$R_1 = 144 \text{ Ohm}$

$R_1 = 154 \text{ Ohm}$

$$\begin{aligned} &\Rightarrow \frac{4 - 2.3}{R_1} = \frac{2.3 - 0.4}{150} \\ &\Rightarrow \frac{1.7 \times 150}{R_1} = 1.9 \\ R_1 &= \frac{1.7}{1.9} \times 150 \end{aligned}$$

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QUESTION: 45 GROUP: Technical SECTION: Analog Circuits Mark(s): 1

TIME: 00:34:01

Calculate the total gain of 2 stage RC coupled amplifier, if each stage has individual gain of 100, collector resistance of 1K ohm and input impedance of 1K ohm.

5000

10000

1000

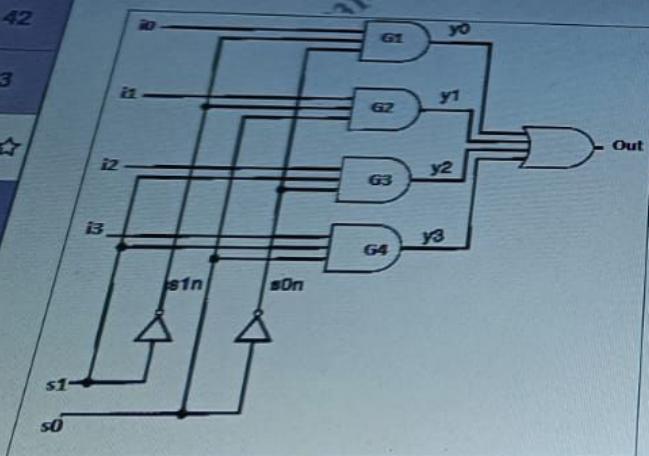
3000

$$Av_1 = \frac{100 \text{ } \mu\text{V}}{1\text{K} + 1\text{K}} = 50$$

$$Av_1 \cdot Av_2 = 50 \times 100 \\ = 5000$$

QUESTION: 44 GROUP: Technical SECTION: Verilog Mark(s): 1

In order to verify the circuit, verification code is created for the circuit shown below. While creating code, erroneously G1 is implemented with 'OR' function instead of AND function. Will verification code give correct output?



- No, when select inputs s1 and S0 are 00 then only y0/Out will select i0 input.
- No, when select inputs s1 and S0 are 00,01,10,11 then only y0/Out will select i0 input.

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QUESTION: 40

GROUP: Technical

SECTION: Analog Circuits

Mark(s): 1

TIME LEFT: 00:34:08

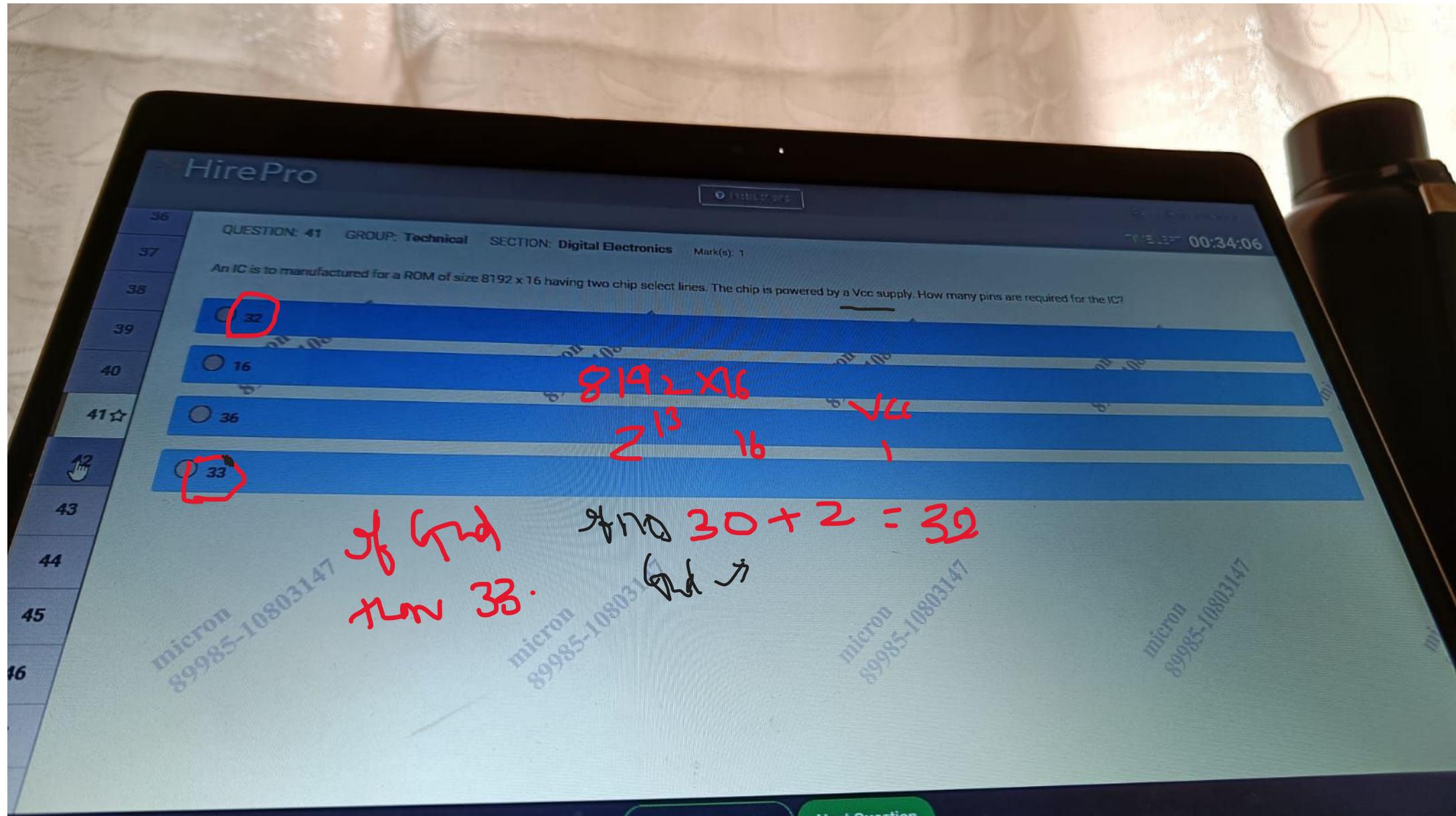
The donor and acceptor concentration of a PN junction diode are 1.4×10^{15} atoms/cm³ and 1.8×10^{14} atoms/cm³. Calculate the value of built-in potential at 300K.

 922.35 mV 541.75 mV 856.55 mV 228.95 mV

$$V_B = V_T \ln \left(\frac{N_A N_D}{N_i^2} \right)$$

$$= V_T \ln \left(\frac{1.4 \times 1.8 \times 10^{21}}{2.25 \times 10^{20}} \right)$$

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QUESTION: 42 GROUP: Technical SECTION: Basic Electronics Mark(s): 1

TIME LEFT: 00:34:05

The power consumed by a 3-phase, 400 V, delta connected load is 30 kW. The value of current per phase is 32 A. What is the power factor of the load?

0.781

0.833

0.905

0.653

$$\frac{400}{1.7} = 230$$

$$P = 3 \times 230 \times 32 = 22080$$

$$\text{PF} = \frac{22080}{30K} = 0.736$$

$\frac{30K}{22080}$ F

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QUESTION 38

GROUP: Technical

SECTION: VLSI

Mark(s): 1

Time Left: 00:34:09

In VLSI Design style, If all of the used logic cells are developed, characterized, and stored in a standard cell library, then it is called.

Programmable Logic Design

None of the given options

Full Custom Design

Semi Custom Design

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Next Question

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Instructions

TIME LEFT 00:34:11

QUESTION: 37 GROUP: Technical SECTION: Verilog Mark(s): 1

What is the purpose of given macro in universal verification methodology?

`uvm_create

Process objects created

Execute item

Sends created object

Objects are created and values are set by user



42

Previous Question

Next Question

What will be the total resistance of the circuit if each resistor has a value 1 ohm?



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36★
 2/3 ohm

1/3 ohm

1 ohm

3 ohm

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QUESTION: 43 GROUP: Technical SECTION: Digital Electronics

TIME LEFT: 00:34:04

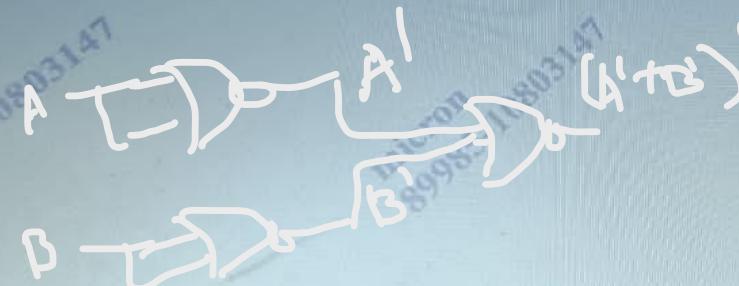
How many minimum number of NOR (two input) gates are required to implement two input AND gate.



3



3



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QUESTION: 35 GROUP: Technical SECTION: VLSI Mark(s): 1

For a CPLD (Complex Programmable logic device), the status of AND array and OR array will be:

- Fixed AND array and fixed OR array
- Programmable AND array and fixed OR array
- Programmable AND array and Programmable OR array**
- Fixed AND array and Programmable OR array

32

33

34

35★
35

36

37

38

39

40

1

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Previous Question

Next Question

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31

QUESTION 31 GROUP: Technical

SECTION: Microprocessors and Microcontrollers

Mark(s): 1

TIME: 00:34:21

What is the content of flag register of 8086 after the addition of 6501 and 2359?

 0004 0956 0145 1024

6501

$$\begin{array}{r} 2359 \\ \hline 8854 \end{array}$$

0110 0101: 0000 0001

0010 0011: 0101 1001

1000 1010: 1011 1010

8854

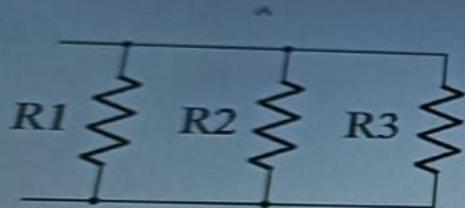
[Previous Question](#)[Next Question](#)

QUESTION: 34 GROUP: Technical SECTION: Basic Electronics

Mark(s): 1

Time: 00:34:16

Resistance in below circuit are connected in:



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R1, R2 series R3 in Parallel

R1, R2 parallel and R3 in Series

R1, R2 and R3 in Series

R1, R2 and R3 in Parallel

Previous Question

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HirePro

31

QUESTION: 32 GROUP: Technical

SECTION: Verilog Mark(s): 1

Time: 00:34:19

In a Verilog Module, input, output, inout wires of the ports are defined as

input[7:0] data;
output[3:0] out;
inout cont;

What does it mean?

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- 8 bit Input "data" port, 4 bit output "out" port and uni-directional "cont" wire
- 4 bit Input "data" port, 8 bit output "out" port and bi-directional "cont" wire
- 4 bit Input "data" port, 8 bit output "out" port and uni-directional "cont" wire
- 8 bit Input "data" port, 4 bit output "out" port and bi-directional "cont" wire

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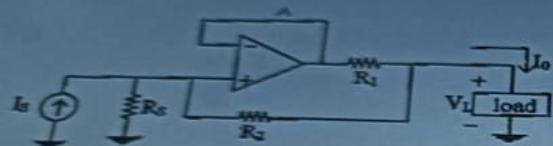
QUESTION: 33 GROUP: Technical

SECTION: Analog Circuits

Mark(s): 1

TIME LEFT: 00:34:18

Find the output impedance of the current amplifier.



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$(R_s + 2R_2)/(R_1 + R_2)$

$R_1(R_s + R_2)/(R_1 + R_2)$

$R_1(R_1 + R_2)/(R_s + R_2)$

$(R_1 + R_2)/(R_s + R_2)$

Previous Question

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QUESTION: 31

GROUP: Technical

SECTION: Microprocessors and Microcontrollers

Mark(s): 1

00:13:42

What is the content of flag register of 8086 after the addition of 6501 and 2359?

 0684 0956 0145 102A

6501

2359

Previous Question

Next Question



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QUESTION: 23 GROUP: Programming SECTION: C Programming Mark(s): 1

Time Left: 00:09:15

What will be the output of the program given below?

```
#include <stdio.h>
int main()
{
    char alpha[] = { 'a', 'b', 'c', 'd', 'e' };
    char *point = &alpha[1];
    ++point;
    printf("%c ", --*point);
    *point--;
    printf("%c", *point++);
    return 0;
}
```

24 25 26 27 28 29 30

b c
 c b
 b b

Previous Question Next Question

Waiting for amit.hirepro...



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Instructions

Time Left: 00:19:49

QUESTION: 8 GROUP: Aptitude SECTION: Data Sufficiency Mark(s): 1

Direction: The question is followed by two statements (I) and (II). Answer the question using the following instructions.

Mark (A) if the question can be answered by one of the statements alone but not by the other.

Mark (B) if the question can be answered by using either statement alone.

Mark (C) if the question can be answered using both statements together, but can not be answered using either statements alone.

Mark (D) if the question cannot be answered.

What is the marked price of a book?

(I) The selling price after giving 25% discount on the marked price is Rs. 900.

(II) If the book was sold on the marked price then the profit earned on the cost price would be either 20% or Rs. 200.

(A)

(C)

(B)

(D)

Previous Question

Next Question



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Instructions

TIME LEFT: 00:19:56

QUESTION: 3 GROUP: Aptitude SECTION: Problem Solving Mark(s): 1

Four bells toll at intervals of 10, 15, 20 and 30 sec respectively. If they toll together at 10:32 a.m., then at what time between 11:20 a.m. and 11:25 a.m. will they toll together again?

11:21 a.m.

All of the given options ✓

11:22 a.m.

11:23 a.m.

- 1
- 2
- 3 
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Previous Question

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QUESTION: 13 GROUP: Aptitude SECTION: Logical Reasoning Mark(s): 1

TIME LEFT: 00:19:42

Direction: Study the information given below and answer the question that follows.

There are eight boys – P, Q, R, S, T, U, V and W – who are to form two teams of four boys each. T and U cannot be together in the same team. R and S must be in the same team. If V and W are in the same team, then U must also be in that team.

Question: If we know that W must always be with either V or Q, then how many possible ways are there to form the teams?

A

B

C

D None of these

Flag this question

Previous Question

Next Question



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Instructions

Time Left: 00:19:47

QUESTION: 9 GROUP: Aptitude SECTION: Attention to Details Mark(s): 1

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement:

Input: jasmine rose 43 holly 32 daisy 52 poppy 39 Alyssum 27

Step (1): 27 jasmine rose 43 holly 32 daisy 52 poppy 39 Alyssum

Step (2): 27 32 jasmine rose 43 holly daisy 52 poppy 39 Alyssum

Step (3): 27 32 39 Alyssum jasmine rose 43 holly daisy 52 poppy

Step (4): 27 32 39 43 Alyssum daisy jasmine rose holly 52 poppy

Step (5): 27 32 39 43 52 Alyssum daisy holly jasmine rose poppy

Step (6): 27 32 39 43 52 Alyssum daisy holly jasmine poppy rose

Based on this answer the following question:

Input: Nigella 82 Pea Snapdragon 75 59 Godetia Candytuft Heather 35 49 Violet

How many steps will be required to complete the rearrangement?

5

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