



HITBULLSEYE

LEVEL 1: LPU TECHNICAL TEST 03

Question No: 1

DIRECTIONS for the question: Mark the best option:
What will be outcome of this pseudo code

```
input Counter
while(Counter<5) do
    Counter=Counter+1
display Counter
end-while
```

Assume that the input value provided to variable, Counter is 1

- ☒ 2,3,4,5
- ☐ 2,3,4
- ☐ 1,2,3,4,5
- ☐ 1,2,3,4

Question No: 2

DIRECTIONS for the question: Mark the best option:
What will be the output of this code

```
airline="AirIndia"
luggage_weight=28
Al_weight_limit=30
EM_weight_limit=35
if(airline=="AirIndia"):
    if(luggage_weight<=Al_weight_limit):
        print("Check-in cleared")
    else:
        print("Remove some luggage and come back")
elif(airline=="Emirates"):
    if(luggage_weight<=EM_weight_limit):
        print("Check in cleared")
    else:
        print("Remove some luggage and come back")
else:
    print("Invalid airline")
```

- ☐ Invalid airline
- ☐ Remove some luggage and come back
- ☒ Check in cleared
- ☐ None of the above

Question No: 3

DIRECTIONS for the question: Mark the best option:

What will be the output of this code (Python 3)

```
x = 10
y = 5
print("sum of",x,"and",y,"is",x+y)
```

- ☐ sum of 10
- ☐ sum is 15
- ☐ sum of 10 and 5 is 10
- ☒ sum of 10 and 5 is 15

Question No: 4

DIRECTIONS for the question: Mark the best option:
What will be the output of this code

```
num1=100
num2=200
num3=6
if(5>=num3):
    if(num1>100 or num2>150):
        print("1")
elif(num1>=100 and num2>150):
    print("2")
else:
    print("3")
```

- ☐ 1
- ☒ 2
- ☐ 3
- ☐ Error

Question No: 5

DIRECTIONS for the question: Mark the best option:

What should be the value of num1 and num2 to get the output as "1"?

```
if((num1/num2==5) and (num1+num2)>5):  
    print("1")  
elif((num1-num2)<=1 or (num1%num2)==0):  
    print("2")  
else:  
    print("3")
```

- ☐ num1= 11 , num2=2
- ☐ num1= 0 , num2=5
- ☒ num1= 5 , num2=1
- ☐ num1= -10 , num2=2

Question No: 6

DIRECTIONS for the question: Mark the best option:
What will be the output of this code

```
a = -10  
b = -200  
c = 2000  
d = 4000  
if( a*b >=d):  
    if(d>c):  
        if(d%c!=0):  
            print(11)  
        else:  
            print(22)  
    else:  
        if(b/a >0):  
            if(a print(33)  
        else:  
            print(44)
```

- ☐ 11
- ☐ 22
- ☐ 33
- ☒ 44

Question No: 7

- ☐ 10
- ☐ 20
- ☒ 1020
- ☐ 2010

Question No: 8

- ☐ Instantiating Base
Base
- ☒ Instantiating Derived
Base
Derived
- ☐ Instantiating Base
Instantiating Derived
Base
Derived
- ☐ Instantiating Base
Base
Instantiating Derived
Base
- ☐ None of the mentioned

Question No: 9

- ☐ 321
- ☐ 12
- ☐ 213

• 123

Question No: 10

- ☐ A::fun()
- ☒ B::fun()
- ☐ Run Time Error
- ☐ Compiler Error

Question No: 11

- ☐ Value of i before Change: 10
Value of i after Change: 10
- ☐ Value of i before Change: 10
Value of i after Change: 20
- ☐ Value of i before Change: 10
Run Time Error
- ☒ Compiler Error

Question No: 12

- ☒ Constructor is executed
Destructor is executed
- ☐ Destructor is executed
- ☐ Constructor is executed
- ☐ Run Time Error
- ☐ Compiler Error

Question No: 13

DIRECTIONS for the question: Mark the best option:

```
#include  
using namespace std;  
int main()
```

```

{
    int x = 1 , y = 1, z = 1;

    cout << (++x || ++y && ++z ) << endl;

    cout << x << " " << y << " " << z ;

    return 0;
}

```

- ☐ 2 2 2
- ☒ 2 1 1
- ☐ 2 2 1
- ☐ 1 2 2

Question No: 14

- ☐ Base::fun() called
Base Constructor Called
- ☐ Derived Constructor Called
Base::fun() called
Derived Constructor Called
- ☐ Base Constructor Called
Base::fun() called
- ☐ Compiler Error

Question No: 15

DIRECTIONS for the question: Mark the best option:

```

bool fun( int n )
{
    return ! ( n & n-1 );
}

```

What is the above function doing ?

- ☐ Return true if n is power of 2.
- ☐ Return true if n has only single 1 in binary form
- ☒ A & B Both
- ☐ None of the Above

Question No: 16

- ☐ 0
- ☐ 1
- ☐ 99
- ☒ 100

Question No: 17

DIRECTIONS for the question: Mark the best option:

Where const qualifier can be used ?

- 1) static member of a class
- 2) Function arguments
- 3) Reference variables
- 4) Member functions of a class

- ☒ 1,2,3,4
- ☐ 1,2,4
- ☐ 1,3,4
- ☐ 2,3,4

Question No: 18

- ☒ 870
- ☐ 900

☐ 841

☐

93
0

Question No: 19

DIRECTIONS for the question: Mark the best option:

What will be the output of the below expression.

num = (num>>1) + num + (num<<1)

- ☐ Multiplies an integer with 3
- ☐ Multiplies an integer with 7
- ☒ Multiplies an integer with 3.5
- ☐ Multiplies an integer with 6.

Question No: 20

DIRECTIONS for the question: Mark the best option:

What is the output of the following code?

```
classtest:  
def __init__(self):  
    self.variable='Old'  
    self.Change(self.variable)  
def Change(self,var):  
    var='New'  
obj=test()  
print(obj.variable)
```

- ☐ Error because function change can't be called in the __init__ function
- ☐ 'New' is printed
- ☒ 'Old' is printed
- ☐ Nothing is printed

Question No: 20

DIRECTIONS for the question: Mark the best option:
What is the output of the following code?

```
classtest:  
def __init__(self):  
    self.variable='Old'  
    self.Change(self.variable)  
def Change(self,var):  
    var='New'  
obj=test()  
print(obj.variable)
```

- ☐ Error because function change can't be called in the __init__ function
- ☒ 'New' is printed
- ☐ 'Old' is printed
- ☐ Nothing is printed

Question No: 22

DIRECTIONS for the question: Mark the best option:
Consider the following program in a language that has dynamic scoping

```
var x: real;  
procedure show:  
begin print(x);end;  
procedure small;  
var x: real;  
begin x: = 0.125; show; end;  
begin  
x:=0.25  
show; small  
end.
```

Then the output of the program is:

- ☐ 0.125 0.125
- ☐ 0.25 0.25
- ☒ 0.25 0.125
- ☐ 0.125 0.25

Question No: 23

DIRECTIONS for the question: Mark the best option:

The following C declarations:

struct node

{

int i;

float j;

};

struct node *s[10] ;

define s to be

- ☒ An array, each element of which is a pointer to a structure of type node
- ☐ A structure of 2 fields, each field being a pointer to an array of 10 elements
- ☐ A structure of 3 fields: an integer, a float, and an array of 10 elements
- ☐ An array, each element of which is a structure of type node.

Question No: 24

DIRECTIONS for the question: Mark the best option:

The value of j at the end of the execution of the following C program _____

intincr (int i)

{

```
static int count = 0;
count = count + i;
return (count);
}
main () {
int i, j;
for (i = 0; i <= 4; i++)
j = incr (i);
}
```

- ☒ 10
- ☐ 4
- ☐ 6
- ☐ 7

Question No: 25

DIRECTIONS for the question: Mark the best option:

Consider the following three C functions:

```
[P1] int * g (void)
{
int x= 10;
return (&x);
}
```

```
[P2] int * g (void)
{
int * px;
*px= 10;
return px;
}
```

```
[P3] int *g (void)
{
int *px;
px = (int *) malloc (sizeof(int));
*px= 10;
```

```
returnpx;  
}
```

Which of the above three functions are likely to cause problems with pointers?

- ☐ Only P3
- ☐ Only P1 and P3
- ☒ Only P1 and P2
- ☐ P1, P2 and P3

Question No: 26

DIRECTIONS for the question: Mark the best option:

Consider the following program

Program P2

```
var n : int;  
procedure W(var x : int)  
begin  
  x = x + 1;  
  print x;  
end  
procedure D  
begin  
  var n : int;  
  n = 3;  
  W(n);  
end  
begin \\begin P2  
  n=10;  
  D;  
End
```

If the language has dynamic scoping and parameters are passed by reference, what will be printed by the program?

- ☐ 10
- ☐ 11
- ☐ 3
- ☒ None of the above

Question No: 27

DIRECTIONS for the question: Mark the best option:

Consider the C program shown below

```
#include
```

```
#define print(x) printf("%d", x)
```

```
int x;
```

```
void Q(int z)
```

```
{
```

```
z+=x;
```

```
print(z);
```

```
}
```

```
void P(int *y)
```

```
{
```

```
int x = *y + 2;
```

```
Q(x);
```

```
*y = x - 1;
```

```
print(x);
```

```
}
```

```
main(void) {
```

```
x = 5;
```

```
P(&x);
```

```
print(x);
```

```
}
```

The output of this program is

- ☒ 12 7 6

- ☐ 22 12 11
- ☐ 14 6 6
- ☐ 7 6 6

Question No: 28

DIRECTIONS for the question: Mark the best option:

Consider the following C function

```
void swap (int a, int b)
{ int temp;
temp = a;
a = b;
b = temp;
}
```

In order to exchange the values of two variables x and y.

- ☐ call swap(x, y)
- ☐ call swap(&x, &y)
- ☐ swap (x, y) cannot be used as it does not return any value
- ☒ swap (x, y) cannot be used as the parameters are passed by value

Question No: 29

DIRECTIONS for the question: Mark the best option:

What Will Be the Output (value of variable a) of the following Code Snippet?

```
defouterFunction():
global a
    a = 20
definnerFunction():
global a
    a = 30
```

```
print('a =', a)
a = 10
outerFunction()
print('a =', a)
```

- ☐ 10
- ☒ 30
- ☐ 20
- ☐ None

Question No: 30

DIRECTIONS for the question: Mark the best option:
What is the output of the code shown below?

```
def f(x):
    yield x+1
    print("test")
    yield x+2
g=f(9)
```

- ☐ Error
- ☐ test
- ☐ test1012
- ☒ No output