**Test Name: ST1\_2018\_CS101\_SETA\_MCQ**

**ST1\_2018\_CS101\_SETA\_Coding**

**\*\*\*\*\*ATTEMPT THE TEST WITH YOUR OWN EMAIL ADDRESS. \*\*\*\*\***

**1 mark**

T1

~~3. main()~~

~~{~~

~~char \*p;~~

~~p = "Hello";~~

~~printf("%c",\*&\*p);~~

~~}~~

**~~a. H~~**

~~b. Hello~~

~~c. Some address will be printed~~

~~d. Error~~

main()

{

int \*p;

int a=100;

p = &a;

printf("%d",\*&\*p);

}

**100**

garbage value

c. Some address will be printed

d. Error

T1

5. what will be the output of following code

#include<stdio.h>

int main()

{

int i=-5;

printf("%d\n",i>>1);

printf("%d",i<<1);

return 0;

}

**a. -3**

**-10**

b. 3

10

c. -2

-4

d. 2

4

T2

Q.1 Select the correct statement about following pointer declaration?

int \*ptr, p;

**A ptr is a pointer to integer, p is not**

B ptr is a pointer to integer, p may or may not be

Cptr and p, both are pointers to integer

D  ptr and p both are not pointers to integer

T2

Q.5 Continue statement is used for?

1. To get out of the loop
2. To handle run time error
3. **To stop the current iteration and begin with the next iteration.**
4. To continue with next function.

T3

Q.4 Pick the correct statements.  
I.   The body of a function should have only one return statement.  
II.  The body of a function may have many return statements.  
III. A function can return only one value to the calling environment.  
IV. If return statement is omitted, then the function does its job but returns no value to the calling environment.

1. I and II
2. I and III
3. **II and III**

     D) II and IV

**2 mark**

T1

Q1. What is the output of this C code?

#include<stdio.h>

void f(int\*p,int\*q)

{

p=q;

\*p=2;

}

int i=0,j=1;

int main()

{

f(&i,&j);

printf("%d %d\n",i,j);

return 0;

}

1. 2 2
2. 2 1
3. 0 1
4. **0 2**

T1

Q3. What will be the output of following program?

#include<stdio.h>  
int main()  
{  
 int tally=0;  
 for(; ;)  
 {

if(tally==10)  
 break;  
 printf("%d ",++tally);  
 }  
 return 0;  
}

a) 0 1 2 3 4 5 6 7 8 9 10

b) 0 1 2 3 ... infinite times

**c) 1 2 3 4 5 6 7 8 9 10**

d) 1 2 3 4 5 6 7 8 9

T2

Q.10 Predict the output for following output.

#include <stdio.h>

int main()

{

int c = 5, no = 10;

do {

no /= 10;

} while(c--);

printf(“%d\n”no);

return 0;

}

1. **0**
2. Compile time Error
3. 1
4. Run Time Error

T3

Q9. What will be the output of this code?

Int abc(int);

int main()

  {

     int i = abc(10);

     printf("%d", --i);

}

int abc(int i)

  {

     return(i++);

  }

1. 10
2. **9**
3. 11
4. Error

T4

Q.9 Predict the output

#include<stdio.h>

int main()

{

int i=40;

do{

printf("%d",i++);

}while(5,4,3,2,1,0);

return 0;

}

1. **40**
2. 44
3. 45
4. 41

T1

**5 mark**

**Problem statement**

Rina after her graduation needs a job,so she want to appear for Govt. Entrance exams and started taking coaching from coaching center.After the completion of reasoning exercise now she has started with aptitude,where she is learning number series. Help her to solve the particular series where she has to display only n terms of the series

**Sample input**

5

**Sample output**

2 6 18 54 162

**Sample explanation**

The Input consist of value of n where n is number of terms of series to be printed.

5 //first five terms of series to be displayed.

Output is n terms of series

2 6 18 54 162

**Solution** \*Text in bold is code snippet

**#include<stdio.h>**

**int main()**

**{**

**int a=2;**

int n,i;

scanf(“%d”,&n);

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

{

Printf(“%d “,a);

a=a\*3;

}

return 0;

}

T4

Q12. **Playing with Bits (10 Marks)**

**Playing with Bits :**

Ms Victoria went to City Mall and decided to play some games over there. Since she was very good in number system she found playing with bits game quite interesting. The game was to enter any random number in decimal and calculate the number of trailing zeros.

In case, the count of trailing zeros comes out to be even, then display the count in hexadecimal number system otherwise if the count of trailing zeros comes out to be an odd number then display the count in octal number system.

Consider following illustrations-

Illustration 1:

Let the input be 512.

Binary representation of 512 is 1000000000 .Number of trailing zeros=9 which is an odd number. Octal of 9 is 11 so output will be 11.

Illustration 2:

Let the input be 1024

Binary Representation of 1024 is 10000000000. Number of trailing zeros are 10 which is an even number.

Hexadecimal representation of 10 is A so output will be A.

Since it’s a Bits Game, Make sure to use ONLY Bitwise Operations. Could you help Meetu to win this game with the help of functions?

**Sample Input :**

512

**Sample Output:**

11

TESTCASES:

Testcase 1:

Input:

1024

Output:

A

Testcase 2:

Input:

2048

Output:

13

Testcase 3:

Input:

4096

Output:

C

Testcase 4:

Input:

8192

Output:

15

Testcase 5:

Input:

16384

Output:

E

Solution

**#include <stdio.h>**

**int trailing\_zeros(int);**

**int trailing\_zeros(int n)**

**{**

int count = 0,i;

for(i=0; i<(sizeof(int)\*8); i++)

{

if((n >> i ) & 1)

break;

count++;

}

return count;

}

int main()

{

int num,count1;

scanf("%d", &num);

count1=trailing\_zeros(num);

if(count1 & 1)

{

printf("%o",count1);

}

else

{

printf("%X",count1);

}

return 0;

}