**MCQ Questions - 1 Mark**

1. scanf() is a predefined function in\_\_\_\_\_\_header file.

a) stdlib. h

b) ctype. h

**c) stdio. h**

d) stdarg. H

2. What will be the output of the following C code?

#include <stdio.h>

int main()

{

int y = 10000;

int y = 34;

printf("Hello World! %d\n", y);

return 0;

}

**a) Compile time error**

b) Hello World! 34

c) Hello World! 1000

d) Hello World! followed by a junk value

3. What will be the output of the following C code?

#include <stdio.h>

void main()

{

int k = 8;

int x = 0 == 1 && k++;

printf("%d%d\n", x, k);

}

a) 0 9

**b) 0 8**

c) 1 8

d) 1 9

4. What will be the output of the following C code?

#include <stdio.h>

void main()

{

char a = 'a';

int x = (a % 10)++;

printf("%d\n", x);

}

a) 6

b) Junk value

**c) Compile time error**

d) 7

5. What will be the output of the following C code snippet?

#include <stdio.h>

void main()

{

unsigned int x = -5;

printf("%d", x);

}

a) Run time error

b) Aries

**c) -5**

d) 5

6. What is the output of the C Program.?

int main()

{

float a=10.0;

a = (int)a % 3;

printf("%f", a);

return 0;

}

A) 0

B) 1

**C) 1.000000**

D) Compiler Error.

7. Choose a syntax for C Ternary Operator from the list.

**A) condition ? expression1 : expression2**

B) condition : expression1 ? expression2

C) condition ? expression1 < expression2

D) condition < expression1 ? expression2

8. What is the output of the C statement.?

int main()

{

int a=0;

a = 5<2 ? 4 : 3;

printf("%d",a);

return 0;

}

A) 4

**B) 3**

C) 5

D) 2

9. What is the output of C Program.?

#include <stdio.h>

int main()

{

int i = (1, 2, 3);

printf("%d", i);

return 0;

}

a) 1

**b) 3**

c) Compile time error

d) Undefined behavior

10. What is the output of C Program.?

#include <stdio.h>

int main()

{

int i;

i = 1, 2, 3;

printf("%d", i);

return 0;

}

**a) 1**

b) 3

c) Compile time error

d) Undefined behavior

**MCQ Questions - 2 Marks**

1. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main()

{

int a=4,b=2,c=3,d=5;

int ans = a\*b+c-d/2;

printf("%d",ans);

return 0;

}

A.0

**B.9**

C.18

D.12

2. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main(){

int a=4;

if(a==2){

a =a>>1;

printf("%d",a);

}

else{

a = a>>2;

printf("%d",a);

}

return 0;

}

A.0

**B.1**

C.4

d.8

3. What will be output if you will compile and execute the following c code?

#include <stdio.h>

void main()

{

int i = 1;

if (i == 0)

{

goto label1;

}

else

{

printf("Hi");

goto label2;

}

label1: printf("Hello");

label2: printf("There");

}

A.Hi There

**B.HiThere**

C.Hello There

D.HelloThere

4. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main()

{

int a,b,c;

a = b = 10;

c = a == b;

printf("%d %d %d",a,++b,c);

return 0;

}

**A.10 11 1**

B.10 10 10

C.11 10 1

D. 11 11 10

5. What will be output if you will compile and execute the following c code?

#include <stdio.h>

int main()

{

int a=1;

switch(a)

{

case 0: printf("0 "); break;

case 1: printf("1 ");

case 2: printf("2 ");

default: printf("Go ");

}

a=1;

switch(a)

{

case 0: printf("0 ");

case 3: printf("3 ");

case 5: printf("5 ");

default: printf("Go ");

}

return 0;

}

**A.1 2 Go Go**

B.2 1 Go Go

C.1 2 5 Go

D.2 Go 5 Go

**Coding Questions - 5 Marks**

**Write a program to take input of length and breadth of the rectangle and print its area and perimeter separated by a blank space.**

#include "stdio.h"

int main(){

int l=0;

int b=0;

scanf("%d",&l);

scanf("%d",&b);

int area= l\*b;

int perimeter= 2\*(l+b);

printf("%d ", area);

printf("%d", perimeter);

return 0;

}

**Test Cases:**

| **Test case 1** | **Test case 2** | **Test case 3** | **Test case 4** | **Test case 5** |
| --- | --- | --- | --- | --- |
| **Input**  10  20  **Output**  200 60 | **Input**  4  5  **Output**  20 18 | **Input**  7  10  **Output**  70 34 | **Input**  0  0  **Output**  0 0 | **Input**  15  5  **Output**  75 40 |

**Write a program using switch case to judge whether a character is an consonant or a vowel. If any other character is entered, display “INVALID CHARACTER”.**

#include "stdio.h"

int main(){

char ch;

scanf("%c", &ch);

if((ch>='a' && ch<='z')||(ch>='A' && ch<='Z')){

switch (ch) {

case 'a':

case 'A':

case 'e':

case 'E':

case 'i':

case 'I':

case 'o':

case 'O':

case 'u':

case 'U':

printf("VOWEL");

break;

default:

printf("CONSONANT");

break;

}

}

else printf("INVALID CHARACTER");

return 0;

}

**Test Cases:**

| **Test case 1** | **Test case 2** | **Test case 3** | **Test case 4** | **Test case 5** |
| --- | --- | --- | --- | --- |
| **Input**  A  **Output**  VOWEL | **Input**  w  **Output**  CONSONANT | **Input**  \*  **Output**  INVALID CHARACTER | **Input**  c  **Output**  CONSONANT | **Input**  i  **Output**  VOWEL |

**Coding Questions - 10 Marks**

1. **Computer cannot understand decimal numbers, it understands only zeros and ones. Write a program to help dumb computer by converting decimal number to binary.**

Ans:

#include <stdio.h>

void getBinary(int);

int main()

{

int num=0;

printf("Enter an integer number :");

scanf("%d",&num);

printf("\nBinary value of %d is =",num);

getBinary(num);

return 0;

}

/\*Function definition : getBinary()\*/

void getBinary(int n)

{

int loop;

/\*loop=15 , for 16 bits value, 15th bit to 0th bit\*/

for(loop=15; loop>=0; loop--)

{

if( (1 << loop) & n)

printf("1");

else

printf("0");

}

}

|  | **Test Case 1** | **Test Case 2** | **Test Case 3** |
| --- | --- | --- | --- |
| **Input** | 45 | 46 | 48 |
| **Output** | 0000000000101101 | 0000000000101110 | 0000000000110000 |