**MCQ Questions - 1 Mark**

1. What is short int in C programming?

a) The basic data type of C

b) Qualifier

**c) Short is the qualifier and int is the basic data type**

d) All of the mentioned

2. Which of the following declaration is not supported by C language?

**a) String str;**

b) char \*str;

c) float str = 3e2;

d) Both “String str;” and “float str = 3e2;”

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

#include <stdio.h>

void main()

{

int x = 5;

if (x < 1);

printf("Hello");

}

a) Nothing

b) Run time error

**c) Hello**

d) Varies

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

#include <stdio.h>

int main()

{

int x = 0;

if (x++)

printf("true\n");

else if (x == 1)

printf("false\n");

}

a) true

**b) false**

c) compile time error

d) undefined behaviour

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

#include <stdio.h>

int main()

{

int x = 0;

if (x == 1)

if (x == 0)

printf("inside if\n");

else

printf("inside else if\n");

else

printf("inside else\n");

}

a) inside if

b) inside else if

**c) inside else**

d) compile time error

6. C language was invented in the year.?

A) 1999

B) 1978

**C) 1972**

D) 1990

7. What is an Identifier in C Language.?

A) Name of a Function or Variable

B) Name of a Macros

C) Name of Structure or Union

**D) All the above.**

8. An Identifier can start with.?

A) Alphabet

B) Underscore ( \_ ) sign

C) Any character that can be typed on a keyboard

**D) Option A & Option B**

9. What is the output of C Program.?

#include <stdio.h>

int main()

{

float c = 5.0;

printf ("Temperature in Fahrenheit is %.2f", (9/5)\*c + 32);

return 0;

}

a) Temperature in Fahrenheit is 36.00

**b) Temperature in Fahrenheit is 37.00**

c) Temperature in Fahrenheit is 34.00

d)Temperature in Fahrenheit is 33.00

10. What is the output of C Program.?

#include <stdio.h>

int main()

{

char a = '\012';

printf("%d", a);

return 0;

}

**a) 10**

b) 9

c) 8

d) 7

**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=2,b=3,c=6,d=5;

int ans = a/b\*c+d\*2-5;

printf("%d",ans);

return 0;

}

A.3

B.4

**C.5**

D.0

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

#include<stdio.h>

int main(){

int a=5;

if(a == 5){

a = (a^4);

printf("%d",a);

}

else{

a = (a|2);

printf("%d",a);

}

return 0;

}

A.0

**B.1**

C.5

D.8

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

#include <stdio.h>

int main()

{

printf("%d ", 5);

goto l2;

printf("%d ", 2);

l1:goto l2;

printf("%d ", 3);

l2:printf("%d ", 4);

}

A.5 3

**B.5 4**

C.5 2

D.5 3 4

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

#include <stdio.h>

int main()

{

int a = 3,b=2;

a = ++b + ++a;

printf("%d",a);

return 0;

}

A.5

B.6

**C.7**

D.9

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

#include <stdio.h>

int main()

{

int a=5;

switch(a)

{

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

case 3: printf("3 "); break;

case 5: printf("5 ");

default: printf("Go ");

}

a=10;

switch(a)

{

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

case 3: printf("3 ");break;

case 5: printf("5 ");break;

default: printf("Go "); break;

}

return 0;

}

**A.5 Go Go**

B.5 5

C.5 Go 5 Go

D.5 Go 5

**Coding Questions - 5 Marks**

**1.** **Write program to display whether a number is negative, positive or zero.**

#include "stdio.h"

int main(){

int a;

scanf("%d",&a);

if(a==0)printf("ZERO");

else if(a<0)printf("NEGATIVE");

else printf("POSITIVE");

return 0;

}

**Test Cases:**

| **Test case 1** | **Test case 2** | **Test case 3** | **Test case 4** | **Test case 5** |
| --- | --- | --- | --- | --- |
| **Input**  6  **Output**  POSITIVE | **Input**  -1  **Output**  NEGATIVE | **Input**  0  **Output**  ZERO | **Input**  -3  **Output**  NEGATIVE | **Input**  26  **Output**  POSITIVE |

**2.** **Write a program to check whether the input character is alphabet, digit or a special character.**

#include "stdio.h"

int main(){

char c;

scanf("%c",&c);

if((c>='a' && c<='z')|| (c>='A' && c<='Z'))printf("ALPHABET");

else if(c>='0' && c<='9') printf("DIGIT");

else printf("SPECIAL CHARACTER");

return 0;

}

**Test Cases:**

| **Test case 1** | **Test case 2** | **Test case 3** | **Test case 4** | **Test case 5** |
| --- | --- | --- | --- | --- |
| **Input**  A  **Output**  ALPHABET | **Input**  5  **Output**  DIGIT | **Input**  #  **Output**  SPECIAL CHARACTER | **Input**  c  **Output**  ALPHABET | **Input**  2  **Output**  DIGIT |

**Coding Questions - 10 Marks**

1. **A bank manager has to count the number of notes needed to fulfill a particular amount. Write a program to help the bank manager in finding number of notes.**

**Ans:**

**#include <stdio.h>**

**int main()**

**{**

**int amount;**

**int note1, note2, note5, note10, note20, note50, note100, note500;**

**note1 = note2 = note5 = note10 = note20 = note50 = note100 = note500 = 0;**

**printf("Enter amount: ");**

**scanf("%d", &amount);**

**if(amount >= 500)**

**{**

**note500 = amount/500;**

**amount -= note500 \* 500;**

**}**

**if(amount >= 100)**

**{**

**note100 = amount/100;**

**amount -= note100 \* 100;**

**}**

**if(amount >= 50)**

**{**

**note50 = amount/50;**

**amount -= note50 \* 50;**

**}**

**if(amount >= 20)**

**{**

**note20 = amount/20;**

**amount -= note20 \* 20;**

**}**

**if(amount >= 10)**

**{**

**note10 = amount/10;**

**amount -= note10 \* 10;**

**}**

**if(amount >= 5)**

**{**

**note5 = amount/5;**

**amount -= note5 \* 5;**

**}**

**if(amount >= 2)**

**{**

**note2 = amount /2;**

**amount -= note2 \* 2;**

**}**

**if(amount >= 1)**

**{**

**note1 = amount;**

**}**

**printf("Total number of notes = \n");**

**printf("500 = %d\n", note500);**

**printf("100 = %d\n", note100);**

**printf("50 = %d\n", note50);**

**printf("20 = %d\n", note20);**

**printf("10 = %d\n", note10);**

**printf("5 = %d\n", note5);**

**printf("2 = %d\n", note2);**

**printf("1 = %d\n", note1);**

**return 0;**

**}**

|  | **Test Case 1** | **Test Case 2** | **Test Case 3** |
| --- | --- | --- | --- |
| **Input** | **250** | **2560** | **3126** |
| **Output** | **100=2**  **50=1** | **500=5**  **50=1**  **10=1** | **500=6**  **100=1**  **20=1**  **5=1**  **1=1** |