

DSA Supreme

Week -2 Quiz

Question 1

Which type is best suited to represent the logical values?

☐ A int

☒ B bool

☐ C char

☐ D float

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 2

Decision Control statements in C++ can be implemented using

☐ A if

☐ B if-else

☐ C conditional-operator

☒ D all of above

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Question 3

```
#include <iostream>
using namespace std;
int main() {

    if (0) {
        cout << "Hello" ;
    }
    else
    {
        cout << "Good Bye" ;
    }
    return 0;
}
```

- ☐ A Hello
- ☒ B Good Bye
- ☐ C HelloGood bye
- ☐ D Compilation error

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 4

if you have to make decision based on multiple choices, which of the following is best suited?

- ☐ A if
- ☐ B if-else
- ☒ C if-else-if
- ☐ D all of above

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

Question 5

In situations where we need to execute body of the loop before testing the condition, we should use_____.

- ☐ A for loop
- ☐ B while loop
- ☒ C do-while loop
- ☐ D nested for loop

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

Question 6

which loop is faster in C++ Language, for, while or do-while?

- ☐ A for loop
- ☐ B while loop
- ☐ C do-while loop
- ☒ D all work at same speed

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Question 7

What is the way to suddenly come out of or quit any loop in C++?

- ☐ A continue;
- ☒ B break;
- ☐ C leave;
- ☐ D exit(0);

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 8

Consider the following loop: `for(int i = 0; i<5; i++)`; How much iterations it will take?

- ☐ A error
- ☒ B 5
- ☐ C 6
- ☐ D some garbage value

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 9

A switch construct can be used with which of the following types of variable?

- ☐ A int
- ☒ B int, char
- ☐ C int, float, char
- ☐ D Any basic datatype

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 10

The destination statement for the goto label is identified by what label?

- ☐ A \$
- ☐ B @
- ☐ C *
- ☒ D :

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Question 11

What will be the output of following code?

```
#include <iostream>
using namespace std;
int main() {
    int n ;
    for (n = 5; n > 0; n--)
    {
        cout << n;
        if (n == 3)
            break;
    }
    return 0;
}
```

A 543

B 54

C 5432

D 53

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

What will be the output of following code?

```
#include <iostream>
using namespace std;
int main() {
    int a = 10;
    if (a = 15)
    {
        time;
        cout << a;
        if (n == 3)
            goto time;
    }
    break;

    return 0;
}
```

A 1010

B 10

C infinitely print 10

D compile time error

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Question 13

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {
int n = 15;
for (; )
cout << n;
return 0;
}
```

- ☐ A error
- ☐ B 15
- ☒ C infinitely printing n
- ☐ D none of the mentioned

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

Question 14

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {
int i;
for (i = 0; i < 10; i++);
{
cout << i;
}
return 0;
}
```

- ☐ A 123456789
- ☒ B 10
- ☐ C 12345678910
- ☐ D compile time error

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 15

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {

    int a, b, c;
    a = 2;
    b = 7;
    c = (a > b) ? a : b;
    cout << "c: " << c;

    return 0;
}
```

☐ A 2

☒ B 7

☐ C 9

☐ D 14

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 16

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {

    int a = 0;
    int b = 10;
    a = 2;
    b = 7;
    if (a && b) {
        cout << "true: " << endl;
    }
    else
    {
        cout << "false: " << endl;
    }
    return 0;
}
```

☒ A true

☐ B false

☐ C error

☐ D 10

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 17

What is the name of | operator?

- ☐ A sizeof
- ☒ B or
- ☐ C and
- ☐ D modulus

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 18

What will be the output of the following C++ code?

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
int a = 5, b = 6, c, d;
```

```
c = a, b;
```

```
d = (a, b);
```

```
cout << c << " " << d;
```

```
return 0;
```

```
}
```

☒ A 5 6

☐ B 6 5

☐ C 6 7

☐ D 6 8

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

It is a separator here. In C, the value a is stored in c and in d the value b is stored in d because of the bracket.

Question 19

Single Correct Option,

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {

    int i, j;
    j = 10;
    i = (j++, j + 100, 999 + j);
    cout << i;

    return 0;
}
```

- ☐ A 1000
- ☐ B 11
- ☒ C 1010
- ☐ D 1001

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

j starts with the value 10. j is then incremented to 11. Next, j is added to 100. Finally, j (still containing 11) is added to 999 which yields the result 1010.

Question 20

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {

    int x, y;
    x = 5;
    y = ++x * ++x;
    cout << x << y;

    y = x++ * ++x;
    cout << x << y;

    return 0;
}
```

- ☒ A 749963
- ☐ B 736749
- ☐ C 367497
- ☐ D 367597

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 21

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {

double a = 21.09399;
float b = 10.20;
int c, d;
c = (int) a;
d = (int) b;
cout << c << " " << d;

return 0;
}
```

A 20 10

B 10 21

C 21 10

D 10 20

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

Question 22

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int main() {

int a = 20, b = 10, c = 15, d = 5;
int e;
e = a + b * c / d;
cout << e << endl;

return 0;
}
```

A 50

B 60

C 70

D 90

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 23

Where does the execution of the program starts?

- ☐ A fun()
- ☒ B main()
- ☐ C void()
- ☐ D else function

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 24

What are mandatory parts in the function declaration?

- ☐ A return type, function name
- ☒ B return type, function name, parameters
- ☐ C parameters, function name
- ☐ D parameters, variables

✗ Your Answer is Incorrect

Correct Answers: A

Your Answers: B

Question 25

Single Correct Option, +1.00, -0.00



Which is more effective while calling the functions?

- ☐ A call by value
- ☒ B call by reference
- ☐ C call by pointer
- ☐ D call by object

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

In the call by reference, it will just passes the reference of the memory addresses of passed values rather than copying the value to new memories which reduces the overall time and memory use

Question 26

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
void car{
cout << "Audi R8";
}
int main() {
car();

return 0;
}
```

- ☒ A Audi R8
- ☐ B Audi R8Audi R8
- ☐ C compile time error
- ☐ D runtime error

✗ Your Answer is Incorrect

Correct Answers: C

Your Answers: A

Expected braces like car()

Question 27

What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
void fun(int x, int y){
x = 20;
y = 10;
}
int main() {

int x = 10;
fun (x, x);
cout << x;

return 0;
}
```

- ☒ A 10
- ☐ B 20
- ☐ C compile time error
- ☐ D 30

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

In this program, we called by value so the value will not be changed, So the output is 10

Question 28

Single Correct Option, +1.00, -0.00



What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int fun(int x = 0, int y = 0, int z){
    return (x + y + z);
}
int main() {

    cout << fun(10);

    return 0;
}
```

☐ A 10☐ B 0☒ C error☐ D Garbage value

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

Default arguments should always be declared at the rightmost side of the parameter list but the above function has a normal variable at the rightmost side which is a syntax error, therefore the function gives an error.

Question 29

Single Correct Option, +1.00, -0.00



What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
int fun(int = 0, int = 0);
int main() {

    cout << fun(5);

    return 0;
}

int fun(int x, int y){
    return (x + y);
}
```

☐ A -5☐ B 0☐ C 10☒ D 5

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Explanation: C++ allows to define such prototype of the function in which you are not required to give variable names only the default values. While in function definition you can provide the variable names corresponding to each parameter.

Question 32

How many minimum bits are needed to represent the decimal number 15 in binary form?

☐ A 3

☒ B 4

☐ C 5

☐ D 6

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 30

Question 33

What is the decimal equivalent of the binary number 1111?

☐ A 7

☐ B 8

☒ C 15

☐ D 16

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

What is the decimal equivalent of the binary number 1001?

☐ A 8

☒ B 9

☐ C 10

☐ D 11

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 31

What is the binary equivalent of the decimal number 13?

☒ A 1101

☐ B 1100

☐ C 1011

☐ D 1110

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 34

How many bits are required to represent INT in C++?

☒ A 32

☐ B 31

☐ C 16

☐ D 100

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 35

What will be the output of the following C code?

```
#include <stdio.h>

void main()
{
    int a = 5, b = -7, c = 0, d;
    d = ++a && ++b || ++c;
    printf("\n%d%d%d%d", a, b, c, d);
}
```

☐ A 6 -6 0 0

☐ B 6 -5 0 1

☐ C 6 6 6 6

☒ D 6 -6 0 1

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Question 36

What will be the output of the following C code?

```
void main()
{
    int a = -5;
    int k = (a++, ++a);
    printf("%d\n", k);
}
```

☒ A -3

☐ B -5

☐ C 5

☐ D 4

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 37

```
#include <stdio.h>

int main()
{
    if (~0 == 1)
        printf("yes\n");
    else
        printf("no\n");
}
```

☐ A yes

☒ B no

☐ C error

☐ D undefined

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 38

```
#include <stdio.h>

int main()
{
    int x = -2;
    if (!0 == 1)
        printf("yes\n");
    else
        printf("no\n");
}
```

☒ A yes

☐ B no

☐ C error

☐ D undefined

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 39

```
#include <stdio.h>
int main()
{
    int y = 0;
    if (1 || (y = 1))
        printf("y is %d\n", y);
    else
        printf("%d\n", y);
}
```

☒ A yes is 1

☐ B 1

☐ C error

☐ D undefined

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 40

```
#include <stdio.h>
int main()
{
    int y = 1;
    if (y & (y = 2))
        printf("true %d\n", y);
    else
        printf("false %d\n", y);
}
```

☐ A true 2

☒ B false 2

☐ C either true 2 or false 2

☐ D true 1

✗ Your Answer is Incorrect

Correct Answers: C

Your Answers: B

It's either true or false, depending on the compiler.

Question 41

```
#include <stdio.h>
int main()
{
    int a = 10, b = 5, c = 5;
    int d;
    d = b + c == a;
    printf("%d", d);
}
```

☐ A syntax error

☒ B 1

☐ C 5

☐ D 10

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Question 42

```
#include <stdio.h>
int main()
{
    int a = 10, b = 5, c = 3;
    b != !a;
    c = !!a;
    printf("%d\t%d", b, c);
}
```

☒ A 5 1

☐ B 0 3

☐ C 5 3

☐ D 1 1

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 43

```
#include <stdio.h>

void main()
{
float x = 0.1;
if (x == 0.1)
printf("A");
else
printf("B");
}
```

- ☐ A A
- ☒ B B
- ☐ C AB
- ☐ D error

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Reference:

<https://learn.microsoft.com/en-us/cpp/build/why-floating-point-numbers-may-lose-precision?view=msvc-170>

Question 44

```
#include <stdio.h>

void main()
{
float x = 0.1;
printf("%d, ", x);
printf("%f", x);
}
```

- ☐ A 0.100000, junk value
- ☐ B junk value, 0.100000
- ☒ C 0, 0.100000
- ☐ D 0, 0.999999

✗ Your Answer is Incorrect

Correct Answers: B

Your Answers: C

Question 45

```
#include <stdio.h>

int main()
{
int c = 2 ^ 3;
printf("%d\n", c);
}
```

- ☒ A 1
- ☐ B 8
- ☐ C 9
- ☐ D 0

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 46

```
#include <stdio.h>

int main()
{
    unsigned int a = 10;
    a = ~a;
    printf("%d\n", a);
}
```

A -9

B -10

C -11

D 10

✗ Your Answer is Incorrect

Correct Answers: C

Your Answers: D

Question 47

```
#include <stdio.h>

void main()
{
    int x = 97;
    int y = sizeof(x++);
    printf("x is %d", x);
}
```

A x is 97

B x is 98

C x is 99

D runtime error

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 48

Single Correct Option, +1.00, -0.00



```
int main()
{

int a=3;

switch(a)
{
case 0: printf("0 ");
case 3: printf("3 ");
case 5: printf("5 ");
default: printf("RABBIT ");
}

a=10;
switch(a)
{
case 0: printf("0 ");
case 3: printf("3 ");
case 5: printf("5 ");
default: printf("RABBIT "); break;
}

return 0;
}
```

- ☐ A 5 RABBIT
- ☐ B 0 3 5 RABBIT 0 3 5 RABBIT
- ☐ C 0 3 5 RABBIT RABBIT
- ☒ D 3 5 RABBIT RABBIT

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Explanation:

Absence of break; after case statement causes control to go to next case automatically. So after matching 3 with a==3, program prints 3 and control falls down the ladder without checking case again printing everything below it. So Switch checks only once and falls down.

Question 49

```
int main()
{

int a=3;

switch(a)
{

case 2: printf("ZERO "); break;

case default: printf("RABBIT ");

}

}
```

- ☐ A RABBIT
- ☐ B ZERO RABBIT
- ☐ C No output
- ☒ D Compilation error

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Notice that it is "default" not "case default".

Question 50

```
int main()
{
    int a=3;

    switch(a)
    {

    }

    printf("MySwitch");
}
```

- ☒ A MySwitch
- ☐ B no output
- ☐ C compile time error
- ☐ D none of the mentioned

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 51

Single Correct Option

```
int main()
{
    int a;

    switch(a)
    {
        printf("APACHE ");
    }

    printf("HEROHONDA");
}
```

- ☐ A APACHE HEROHONDA
- ☒ B HEROHONDA
- ☐ C compile time error
- ☐ D none of the mentioned

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Notice the missing CASE or DEFAULT statements. Still compiler accepts. But without CASE statement nothing will be printed inside of SWITCH.

Question 52

```
int main()
{
    int a;

    switch(a);
    {
        printf("DEER ");
    }

    printf("LION");
}
```

- ☒ A LION
- ☐ B DEER LION
- ☐ C compile time error
- ☐ D none of the mentioned

✗ Your Answer is Incorrect

Correct Answers: B

Your Answers: A

Notice a semicolon at the end of switch(a);. So, printf DEER is out of SWITCH.

Question 53

```
int main()
{
    char code='A';

    switch(code)
    {
        case 64+1: printf("ANT ");break;
        case 8*8+4: printf("KING "); break;
        default: printf("NOKING");
    }

    printf("PALACE");
}
```

- ☐ A ANT KING PALACE
- ☐ B KING PALACE
- ☒ C ANT PALACE
- ☐ D ERROR

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

ASCII value of 'A' is 65. So (64+1) matches A. Also expression leading to Integers can be used as CASE Constants.

Question 54

Single Correct Option, +1.00, -0.00



```
int main()
{
    int k=8;

    switch(k)
    {
        case 1==8: printf("ROSE ");break;
        case 1 && 2: printf("JASMINE "); break;
        default: printf("FLOWER ");
    }

    printf("GARDEN");
}
```

- ☐ A ROSE GARDEN
- ☐ B JASMINE GARDEN
- ☒ C FLOWER GARDEN
- ☐ D none of the mentioned

✓ Your Answer is Correct

Correct Answers: C

Your Answers: C

(1==8) is false i.e 0. (1&&2) is true AND true i.e true i.e 1. So case allowed first ZERO 0 and then ONE 1. All integer constants are allowed for SWITCH Case Constants.

Question 55

```
int main()
{
    switch(24.5)
    {
        case 24.5: printf("SILVER ");break;
        case 25.0: printf("GOLD "); break;
        default: printf("TIN ");
    }

    printf("COPPER");
}
```

- ☐ A SILVER COPPER
- ☐ B TIN COPPER
- ☐ C COPPER

☒ D compile time error

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

You can not use float, double or Strings inside Switch or Switch CASE.

