1.

If a boat covers 20 km upstream and 40 km downstream in 5 hours, while it covers 30 km upstream and 60 km downstream in 8 hours, what is the speed of the boat in still water?

A) 5 km/h

B) 6 km/h

C) 7 km/h

D) 8 km/h

Answer: B) 6 km/h

2.

If log2x+log4x+log16x=214, then x equal to

A)2

b)8

C)4

D)16

Answer: B) 8

3.

# The ratio of the amount for two years under compound interest annually and for one year under simple interest is 6:5. When the rate of interest is same, then find the value of rate of interest?

A) 10

B)20

C) 16

D) 15

Answer: B) 20

4.

If a three-digit number abc is such that a!+b!+c!=abc, what is the number abc?

A) 145

B) 138

C) 246

D) 313

Answer: A) 145

5.

The difference between a two-digit number and the number obtained by interchanging the digits is 36. What is the difference between the digits of the number?

A) 3

B) 4

C) 5

D) 6

Answer: B) 4

6.

A pole of height 15 meters casts a shadow 9 meters long. What is the height of a nearby building if its shadow measures 12 meters?

A) 10 meters

B) 12 meters

C) 18 meters

D) 20 meters

Answer: D) 20 meters

7.

A train is traveling from City A to City B at an average speed of 90 km/h, and another train is traveling from City B to City A at an average speed of 120 km/h. If the distance between the two cities is 600 km, how far from City A will the two trains meet?

A) 200 km

B) 240 km

C) 300 km

D) 360 km

Answer: B) 240 km

8.

A conical vessel of radius 6 cm and height 8 cm is completely filled with water. A sphere is lowered into the water and its size is such that when it touches the sides, it is just immersed. What fraction of water overflows?

A) 0.625

B) 0.375

C) 0.125

D) 0.175

Answer: B) 0.375

9.

What comes next in the series: AB, EF, IJ, MN, ...

A) PQ

B) ST

C) QR

D) WX

Answer: C)QR

10.

The sum of the first n terms of an arithmetic series is given by the formula Sn = 2n^2 + 3n. Find the common difference of the series.

A) 1

B) 2

C) 3

D) 4

Answer: D) 4

**CODING QUESTIONS**

**1.**

What will be the output of the following C code?

​

#include <stdio.h>

int const print()

{

printf("akash.com");

return 0;

}

void main()

{

print();

}

a) Error because function name cannot be preceded by const

b) akash.com

c) akash.com is printed infinite times

d) Blank screen, no output

Answer-b

2.

What will be the output of the following C code? (Initial values: x= 7, y = 8)

​

#include <stdio.h>

void main()

{

float x;

int y;

printf("enter two numbers \n");

scanf("%f %f", &x, &y);

printf("%f, %d", x, y);

}

a) 7.000000, 7

b) Run time error

c) 7.000000, junk

d) Varies

Answer-d

​3.

Which of the following is an invalid assignment operator?

a) a %= 10;

b) a /= 10;

c) a |= 10;

d) None of the mentioned

Answer-d

4.

What will be the output of the following C code?

​

#include <stdio.h>

int main()

{

int a = 1, b = 2;

a += b -= a;

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

}

a) 1 1

b) 1 2

c) 2 1

d) 2 2

Answer-c

5.

What will be the output of the following C code?

​

#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

Answer-b

6.

What will be the output of the following C code?

​

#include <stdio.h>

int main()

{

int y = 0;

if (1 |(y = 1))

printf("y is %d\n", y);

else

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

}

a) y is 1

b) 1

c) run time error

d) undefined

Answer-a

​7.

What will be the output of the following C code?

​

#include <stdio.h>

int main()

{

int x = -2;

x = x >> 1;

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

}

a) 1

b) -1

c) 2 31 – 1 considering int to be 4 bytes

d) Either -1 or 1

Answer-b

​8.

What will be the final values of i and j in the following C code?

​

#include <stdio.h>

int x = 0;

int fun()

{

if (x == 0)

return x + 1;

else

return x - 1;

}

int gun()

{

return x++;

}

int main()

{

int i = (fun() + gun()) | gun(); //bitwise or

int j = gun() | (fun() + gun()); //bitwise or

}

a) i value is 1 and j value is 1

b) i value is 0 and j value is 0

c) i value is 1 and j value is undefined

d) i and j value are undefined

Answer-d

9.

Comment on the following C statement.

​

n = 1;

printf("%d, %dn", 3\*n, n++);

a) Output will be 3, 2

b) Output will be 3, 1

c) Output will be 6, 1

d) Output is compiler dependent

Answer-b

10.

What is the output of this C code?

​

#include <stdio.h>

main()

{

int n = 0, m = 0;

if (n > 0)

if (m > 0)

printf("True");

else

printf("False");

}

a) True

b) False

c) No Output will be printed

d) Run Time Error

Answer-c

11.

What will be the output of the following C code?

​

#include <stdio.h>

void main()

{

int b = 5 & 4 & 6;

printf("%d", b);

}

a) 5

b) 6

c) 3

d) 4

Answer-d

12.

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

​

#include <stdio.h>

void main()

{

int h = 8;

int b = (h++, h++);

printf("%d%d\n", b, h);

}

a) 10 10

b) 10 9

c) 9 10

d) 8 10

Answer-c

13.

What will be the final values of a and c in the following C statement? (Initial values: a = 2, c = 1)

​

c = (c) ? a = 0 : 2;

a) a = 0, c = 0;

b) a = 2, c = 2;

c) a = 2, c = 2;

d) a = 1, c = 2;

Answer-a

14.

What will be the output of the following C code?

​

#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

Answer-c

15.

Operation “a = a \* b + a” can also be written as \_\_\_\_\_\_\_\_\_\_\_

a) a \*= b + 1;

b) (c = a \* b)!=(a = c + a);

c) a = (b + 1)\* a;

d) All of the mentioned

Answer-a

16.

What will be the output of the following C code?

​

#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) Run time error

Answer-c

17.

What will be the output of the following C code?

​

#include <stdio.h>

void main()

{

int x = 4;

int \*p = &x;

int \*k = p++;

int r = p - k;

printf("%d", r);

}

a) 4

b) 8

c) 1

d) Run time error

Answer-c

18.

What will be the output of the following C code?

​

#include <stdio.h>

int main()

{

int x = -2;

x = x >> 1;

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

}

a) 1

b) -1

c) 2 31 – 1 considering int to be 4 bytes

d) Either -1 or 1

Answer-b

19.

What will be the output of the following C code?

​

#include <stdio.h>

int main()

{

int x = -2;

if (!0 == 1)

printf("yes\n");

else

printf("no\n");

}

a) yes

b) no

c) run time error

d) undefined

Answer-a

20.

What will be the output of the following C code?

​

#include <stdio.h>

int main()

{

int y = 0;

if (1 |(y = 1))

printf("y is %d\n", y);

else

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

}

a) y is 1

b) 1

c) run time error

d) undefined

Answer-a