

1. Predict the output of the following code snippet.

```
#include<stdio.h>
int main()
{
    int k, num = 30;
    k = (num > 5 ? (num <= 10 ? 100 : 200) : 500);
    printf("%d\n", num);
    return 0;
}
```

- ☐ 500
☐ 200
☒ 30
☐ 100

2. Sample Code

```
#include<stdio.h>
int main()
{
    int x = 1 / 2 ;
    if(x) printf("x=%d\n", x);
    else printf("x=%d\n", x*2);
}
```

Which one of the following is printed when the sample code above is executed?

- ☐ x=-1
☐ x=2
☒ x=0
☐ x=1

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

```
#include<stdio.h>
int main()
{
    int ch=97;
    switch (ch)
    {
        case 'a':
            printf("A");
            break;
        case 'b':
            printf("B");
            break;
    }
    return 0;
}
```

- ☐ 97
- ☐ Compile time error
- ☒ A
- ☐ B

4. Predict the output.

```
#include<stdio.h>
int main()
{
    switch (printf("Do"))
    {
        case 1:
            printf("First\n");
            break;
        case 2:
            printf("Second\n");
            break;
        default:
            printf("Default\n");
            break;
    }
    return 0;
}
```

- ☐ Second
- ☐ DoSecond
- ☐ Default
- ☐ First
- ☒ DoSecond

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

```
#include<stdio.h>
int main()
{
    if(10)
    {
        printf("Hai");
    }
    else
    {
        printf("Bye");
    }
    return 0;
}
```

- ☐ HaiBye
- ☐ Bye

- ☒ Hai
- ☐ Compile time error

6. Predict the output.

```
#include<stdio.h>
int main()
{
    if(0)
    {
        printf("Hai");
    }
    else
    {
        printf("Bye");
    }
    return 0;
}
```

- ☐ HaiBye
- ☐ Compile time error
- ☐ Hai
- ☒ Bye

7. What would the following program produce when executed?

```
#include<stdio.h>
int main()
{
    if( 4 < 5 )
        printf("Hai\n");
        printf("Hello");
    else
        printf("Bye");
    return 0;
}
```

- ☒ Compile time error
- ☐ Hai
Hello
- ☐ Bye
- ☐ Hai

8. #include<stdio.h>

```
void main()
{
    int a=100;
    if(a>10)
    {
```

```
    printf("James Gosling");
}
else if(a>20)
{
    printf("Bjarne stroustrup");
}
else if(a>30)
{
    printf("Dennis ritchie");
}
}
```

- ☒ James Gosling
- ☐ Bjarne stroustrup
- ☐ Dennis ritchie
- ☐ Syntax error: else missing

9. What is the output of the following program?

```
#include <stdio.h>
int main()
{
    if (4 - 2 * 2)
    {
        printf("Hi");
    }
    else
    {
        printf("Bye");
    }
}
```

- ☐ Hi
- ☒ Bye
- ☐ HiBye
- ☐ Nothing will be printed on the screen

10. The following arithmetic expression in C evaluates to?

16 / 2 + 2 - 7 * 3 + 146 % 100

- ☐ 25
- ☐ -25
- ☐ -35
- ☒ 35

11.

What will be the output of the following pseudocode?

input m=9,n=6

m=m+1

n=n-1

m=m+n

if(m>n)

print m

else

print n

☐ 10

☐ 6

☐ 5

☒ 15

12. What will be the value of val if the input is 1, 2, 3, 9, 4 corresponding to n1 to n5?

If(n1 < n2)

Set val to n2

Else

Set val to n1

If(n3 > val)

Set val to n3

If(n4 > val)

Set val to n4

If(n5 > val)

Set val to n5

☒ 9

☐ 3

☐ 2

☐ 1

13. What will be the output of the following Pseudocode?

int a=9, b=7, c=8, d=4, e

e = a + b + c + d / 4

if (e > 5)

print "PASS"

else

print "FAIL"

☐ FAIL

☐ 0

☐ 1

☒ PASS

14. What will be the output of the following pseudocode?

Integer a, b, c

```
Set b = 5, a = 2, c = 2
if(b>a && a>c && c>b)
    b = a + 1
Else
    a = b + 1
End if
Print a + b + c
```

- ☐ 2
- ☒ 13
- ☐ 26
- ☐ 5

15. What will be the output of the following pseudocode?

```
Integer a, b, c
Set a = 108, b = 2, c = 3
if((a MOD 9) EQUALS 0)
    b = b + (a MOD 2)
    Print b
Else
    c = c + (a MOD 7)
    Print c
end if
```

[Note: MOD finds the remainder after the division of one number by another. For example, $5\%2$ leaves a quotient of 2 and a remainder of 1]

- ☒ 2
- ☐ 7
- ☐ 1
- ☐ 3

16. What is the output of the following pseudocode?

```
Integer b = 10, a = 1
if(0)
    a = a - 1
Else
    a = b + 1
    b = a - 1
    a = a - 1
End if
Print a
```

[Note: If(x) gets executed if the value inside if(), i.e., x is not zero]

- ☐ 3
- ☐ 5
- ☒ 10
- ☐ 11

17. What will be the output of the following pseudocode?

Integer a, b, c

Set b = 40, a = 20, c = 20

if (c > (c + a))

 b = 0

Else

 a = a + 2

 c = a + 2

End if

if (c > (b + a))

 b = 0

Else

 a = a + 2

 c = a + 2

End if

Print a + b + c

☐ 60

☐ 30

☒ 90

☐ 39

18. What will be the output of the following pseudocode?

Integer a, b

Set a = 3, b = 5

if (a & (b + 1))

 a = a + a

End if

Print a + b

☒ 11

☐ 30

☐ 8

☐ 7

19. What will be the output of the following pseudocode?

Integer a, b, c

Set a=2, b=4, c=9

If ((5 ^ a ^ b) < (3 + b + c))

 c = (a + b) + b

 c=a

end if

print a+b+c

☐ 17

☐ 5

☒ 8

☐ 11

20. What will be the output of the following pseudocode?

Integer p, q, r

Set p = 5, q = 10, r = 14

If (r > p OR (7-7) > (r-7))

 q=p

else

 p=12

end if

print p + q + r

☐ 26

☒ 24

☐ 22

☐ 35