

Class – XI
Worksheet 1

I Term
Subject – Computer Science

1. What is an operating system? What are its functions?
2. What do you mean by utility software? Give one example.
3. What do you mean by Non-Pre emptive scheduling? Give examples
4. What do you meant by Pre emptive scheduling? Give examples.
5. What is meant by multiprogramming and multitasking?
6. Define device management.
7. Define file management.
8. What is a bus? How are they classified?
9. Convert $(4A8C)_{16}$ to binary.
10. Convert 10010110101110 to hexadecimal.
11. Convert the following binary number to decimal
(a)10010 (b)101010
12. Convert the decimal no 84 to its binary equivalent.
13. Which character is automatically added to a string in C++?
14. What are the difference between a keyword and an identifier?
15. What is the input operator ">>" and output operator "<<" called?
16. Write a program in C++ to accept marks in five subjects for a student and display the average mark.
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18. What is the difference between Runtime and Syntax errors?
19. What will be the character size of the following constants: '\a', "\a", "sachin\'s bat".
20. What will be the character size of the following constants: '\a', "\a", "sachin\'s bat".
21. What type of constants are the following: 14,011, 3.123, 0xA.
22. Given the following two definitions
Unsigned int u1=0, u2=7;
What is the result of each of the following expressions?
(a) u1&&u2 (b) u1||u2 (c)!u1 (d)!!u1
23. Given the following set of identifiers:

```
char ch;
short sh;
int intval;
long longval;
float fl;
```

Identify the datatype of the following expressions:

(a) 'a'-3 (b) intval * longval - ch (c) fl + longval / sh

24. Predict and rectify errors:

```
int main()
{
    cout<<"enter the two numbers;
    cin>>num>>auto;
    float area= length*breadth;
    cout<<"area is"<<area
}
```

25. Point out the errors in the following program

```
void main()
{
    cout<<"Enter a number";
    cin>>no;
    square=no*no
    cout<<"The square is"<<square;
```

26. Correct the errors if any in the following expressions:

i) cout<<"a" a;
 ii) cout>>"you are a fool";
 iii) int a; b ;
 iv) include<conio.h>

27. Write a program in c++ to convert temperature in Celsius to Fahrenheit?

28. What output will be the following code fragment produce?

```

int val, res, n=1000;
cin>>val;
res = n+val >1750 ? 400 : 200;
cout<<res;

```

i) if the input is 2000 ii) if the input is 500

29. What is the result of the following expression:

```
a>=b&&(a+b)>a
```

(1) a=3,b=0 (2) a=7,b=7

30. Evaluate $X = a++ + --a$; if $a=20$ initially?

31. Write a c++ program to input two numbers and print their quotient and reminder ?

32. What data type is required for a variable to store 34000?

33. What is meant by type conversion?

34. What is meant by type promotion?

35. Program to accept three numbers and print the largest of these three numbers.

36. Write a program in c++ to check whether a given number is even or odd?

37. Write a program to calculate the factorial of an integer.

38. Write a program to print the first n natural umbers and their sum.

39. Write an alternative code for the following using switch-case construct:

```

char wish;
if( wish== 'a')
    cout<< " YOU WILL GETT 40 OUT OF 40";
else if( wish== 'b')
    cout<< " MY FRIEND WILL GET 40 OUT OF 40";
else if( wish== 'c')
    cout<< " TEACHER WILL NOT GIVE 40 OUT OF 40";
else
    cout<<"NO ONE WILL GET 40 OUT OF 40";

```

40. Predict the out put :

i) for (int a=10;a>=0;a-=3);

cout<<a;

ii) for(int outer=1;outer<10;outer+=4)

41. Write a program to print first n natural numbers and their sum.

42. Write a program to calculate and print the roots of a quadratic equation $ax^2+bx+c=0$.

43. Write a program to check whether a number is prime or not.

44. Write equivalent while loop for the following for loop:

int sum;

for(int i=0,sum=0;i<10;i++)

sum+=i;

cout<< sum;

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IX-XII Boys Section