

**B.TECH. CSE SEMESTER – II**  
**2020**  
**WORKSHEET-II**

1. What is an operator? What are the various types of arithmetic, relational, logical, and increment & decrement operators? Clearly state their meaning and example of each.
2. Explain with example the use of Bitwise operators in C.
3. Differentiate between operator precedence and associativity.
4. List various fundamental data types available in C along with their sizes.
5. What is the difference between `++i` and `i++`?
6. Draw the basic structure of C program.
7. Explain type-conversion and typecasting. Differentiate between implicit typecasting and explicit typecasting.
8. Give the syntax and semantic of Input and Output functions used in C.

I. Standard I/O

- a. `getchar()`
- b. `putchar()`

II. Standard Output function- `printf()`

- a. Ordinary character
- b. Conversion specification

III. Standard Input function-`scanf()`

9. Explain declaration, initialization, and assignment of variables in C.

10. Write the output of below programs-

```
int main()
{
    int z;
    z=3+2>2+7?3+2:2+7;
    printf("z=%d",z);
    return 0;
}
```

```
int main()
{
    int i=-3,j=2,k=0,z;
    z=++i&&++j||++k;
    printf("i=%d\nj=%d\nk=%d\nz=%d",i,j,k,z);
    return 0;
}
```

<pre>int main() {     int i=-1,j=2,k=0,z;     z=++i&amp;&amp;&amp;++j  ++k;     printf("i=%d\nj=%d\nk=%d\nz=%d",i,j,k,z);     return 0; }</pre>	<pre>int main() {     int x=20,y=40,z=5,p;     p=x&lt;y&lt;z;     printf("p=%d",p);     return 0; }</pre>
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<pre>int main() {     int a=2019,z;     z=a&gt;=2019 - 2019 ;     printf("Result=%d\n", z);     return 0; }</pre>	<pre>int main() {     int a=2020, b=2018, c=2010,z;     z=a&amp;&amp;b&gt;c;     printf("z=%d",z);     return 0; }</pre>
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<pre>int main() {     int x =1957, y =1947, z =2018,p;     p=x&gt;y&gt;z;     printf("p=%d",p);     return 0; }</pre>	<pre>int main() {     printf("%d", printf("University of Lucknow\n"));     return 0; }</pre>
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<pre>int main() {     int a = 2019, z = 0;     z = (a&gt;2015 ? (a&lt;= 2010? 111 : 222) : 999);     printf("Value of z = %d", z);     return 0; }</pre>	<pre>int main() {     int x=3,y=9,z;     z=x=y;     printf("z=%d",z);     return 0; }</pre>
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