

Test 1

Subject : Computer Application

Topic : Operator, Expression, Values and types

Time : 1 Hour

M.M.: 60

Q1. Mention the type of value obtained when the following expressions are executed: [5]

1. int x; float y; char c;
x+y*c/2.0;
2. char c; int a; double d;
c-d/a;
3. double d; int a; long p;
(d/a)*4/p;
4. float f; char c; short s;
(int)f+c/s;
5. int a; float f; double d; char c;
(float)(a/f)-d*c;

Q2. Find output: [4]

1. a=10;b=5;
c=a++/2 + b++*2
System.out.println(a+", "+b+", "+c);
2. a=10;
a+=100/a++ * ++a;
3. a=10;
a*=a+2 --a%10;
4. a=10;b=20;
b%=a-- + a--*2

Q3. Write equivalent java expression for the following: [5]

1. $\frac{x+y}{2}$
2. $\frac{xy}{2}$
3. $\left(1 + \frac{r}{100}\right)^n$
4. $\sqrt{a^2 + b^2}$
5. $\frac{i+j+k}{3}$

Q4. Write Output of the following statements. [12]

1. System.out.println(10%6%3);
2. System.out.println((double)10/4);
3. System.out.println((double)(10/4));
4. System.out.println('A'+1);
5. System.out.println("A"+1);
6. System.out.println('A'%2);
7. System.out.println(10+10==2*10);
8. System.out.println(2+2+"Equals"+2+2);
9. System.out.println(2*2+"Equals"+2*2);
10. System.out.println(2-2+"Equals"+2-2);
11. System.out.println(2+"+"+2+"="+4);
12. System.out.println("A"+'A');

Q5. Write all primitive data types with their size (in bits) [4]

Q6. Define the following with one example. [15X2=30]

1. Block
2. final keyword
3. Object
4. Scope of variable
5. main() method
6. escape squence
7. type conversion
8. operator precedence
9. tokens
10. character set
11. source code
12. byte code
13. machine code
14. Unicode
15. expression

***** All the best*****