2018

1. Choose the correct answer of the following :

   (a) The size of float data type in C++ is :

   (i) 2 bytes (ii) 4 bytes

   (iii) 8 bytes (iv) None

   (b) The output of the following loop is :

   for (i=1; i<=5j; i++);

   count <<i; http://www.biharpaper.com

   (i) 2 (ii) 4

   (iii) 6 (iv) 8

   (c) What is the ouput of the following program ?

   public class Test First App {

   ```
   public static void main (string[]orgs)
   {
   system.out.println((i==1)?(7==8)?(S:6:4));
   }
   }
   ```

   (i) 4 (ii) 6

   (iii) 5 (iv) 1

   (d) The statement

   system.out.print((double)7/4);

   prints

   (i) 1.75 (ii) 1

   (iii) 1.0 (iv) 2.0

   (e) What do the statement

   int i = s; http://www.biharpaper.com

   system.out.print (i++ + ++i);

   Print ?

   (i) 11 (ii) 12

   (iii) 10 (iv) 13

   (f) Which of the following is procedural language :

   (i) Pascal (ii) Small talk

   (iii) C++ (iv) None

   (g) Cout stands for :

   (i) Class output (ii) Character output

   (iii) Common output (iv) Call output

(h) The value of : $3\% - 2$ is :

    (i)   1   (ii) -1

    (iii) 1.5   (iv) -1.5

(i) getch ( ) is

    (i)   Input character function

    (ii) Input string function

    (iii) Output character function

    (iv) None

(j) An array is a :

    (i)   Derived data type

    (ii) Fundamental data type

    (iii) Both (i) & (ii)

    (iv) None of these   http://www.biharpaper.com

2. What is matrix multiplication ? Write a C++ program for matrix multiplication.

3. What is recursion in C++ ? How many types of recursion ? Explain each of them.

4. What is inheritance in C++ ? How many types of inheritance ? Explain any two with example.

5. What is constructor ? How many types of constructors are these in C++ ? Explain each of them.

6. (a) Write a C++ program to evaluate xy by using recursion, where x is float and y is integer.

(b) Write a Java program to print the following pyramid.

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

7. What do you mean by data encryption and data decryption ? Explain with example.

8. Write a java program to find the sum and average of n numbers. http://www.biharpaper.com

9. What is applet ? Write an applet program to find the sum of two numbers.

10. Write short notes on any **three** of the following :

    (a) Artificial intelligence

    (b) Constructor

    (c) Operator overloading

    (d) Interface

    (e) Method overloading

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