WORKSHEET-class-X
Revision of ix , programs on function
Time:1 hr.

1.The blueprint that defines the variables and the methods common to all of a certain   [1]
kind is termed as:
(a) class   (b) object   (c) package   (d) method

2.A data type which contains integer as well as fractional part and occupies 32 bits   [1]
space is:
(a) float   (b) char   (c) . double   (d) byte

3.What is the final value stored in variable x?
double x=Math.ceil(Math.abs(-7.3));   [1]
(a) 7.0   (b) 8.0   (c) 6.0   (d) 9.0

4. Which of the following keyword is used to create symbolic constants in Java?   [1]
(a) final   (b) Final   (c) Constant (d) Const

5. Name the type of error in the statement given below: [1]
double x;y;z;
(a) Logical error   (b) Syntax error   (c) Runtime error   (d) No error

6. A _____ method needs to be called with help of an object.   [1]
(a) void   (b) class   (c) non-static   (d) static

7. Parameters used in the method call statement are _____   [1]
(a) Actual parameters   (b) Informal parameters   (c) Formal parameters   (d) Void
parameters   [1]

8. The keyword which indicates that the method returns no value:
(a) public   (b) static   (c) void   (d) abstract   [1]

9. Choose the odd one: [1]
(a) >=   (b) %   (c) *I*   (d) *

10.int x=2, y=4, z=l;   [1]
int result= (++z)+y+(++x)+(z++);
(a) 11   (b) 12   (c) 10   (d) 9

11. Read the following case study and answer the questions given below by choosing the
correct option:
Java compilation is different from the compilation of other high-level languages. Other high-level
languages use interpreter or compiler but in Java , the source code is first compiled to produce an
intermediate code called the byte code, this byte code is platform
independent and is a highly optimized set of instructions designed to be executed by Java in the run
time system, called JVM (Java Virtual Machine), JVM is a Java interpreter loaded in the computer
memory as soon as Java is loaded. *NM* is different for different
platforms.
(i) Full form of *JVM* is:
(a) Java Visual Machine (b) Joint Vision Mechanism (c) Java Virtual Machine (d) Java virtual
mechanism
(ii) JAVA code is:
(a) Compiled and interpreted .(b) Only compiled (c) Only Interpreted (d) Translated
(iii) JAVA source code is compiled to produce:
(a) Object code   (b) Byte code (c) Final code (d) Machine code
(iv) *JVM* is an/ a _____ _
(a) Interpreter   (b) Compiler (c) Intermediate code   (d) High level language

12. find the output:-
```
int fnsqr(int x)
{
        return x*x;
}
void display()
{
        int n=5692,s=0;
        for(int i=n;i>0;i/=10)
        s=s+fnsqr(i%10);
        System.out.println(s);
}
```

13.

Define a class called with the following specifications:

Class name: Eshop

Member variables:

String name: name of the item purchased

double price: Price of the item purchased

Member methods:

void accept():   Accept the name and the price of the item using the methods of Scanner
                   class.

void calculate(): To calculate the net amount to be paid by a customer, based on the
                  following criteria:

Price	Discount
1000 – 25000	5.0%
25001 – 57000	7.5 %
57001 – 100000	10.0%
More than 100000	15.0 %

void display():   To display the name of the item and the net amount to be paid.

Write the main method to create an object and call the above methods.

14.   Define a class to overload the methods as follows:-

void perform(double r, double h)- to find out the curve surface area of cone. Formula to find out curve surface area of cone is [SA=3.14*r*l where l=$\sqrt{(r^2+h^2)}$]

void perform(int r, int c) – Use nested for loop to generate following format-

if r=4 c=5, output will be: 12345
                               12345
                               12345
                               12345
                               12345

void perform(int r, int c, char ch)-the quotient of the division of r and c, if ch is 'Q', otherwise print the remainder.