QUESTION BANK 2 – SCHOOL

Ignore the case-errors of typing.

1. How many values can a function return?
2. When can a function be used in an expression?
3. Explain the different visibility modifiers in java
4. How do functions implement overloading?
5. In java, String objects are passed by reference to a function call. However changes made to them are not reflected back to them. Why?

Ans: The values in String objects cannot be changed, if a new value is assigned, a new object with the same name is created, and the old one is lost.

1. Difference between equals() and compareTo() methods
2. Give the output:
3. Int i=3, j=0;

Float k=3.2f;

Long m=-3;

If (Math.ceil(i)<Math.floor(k))

{

If(Math.abs(i)==m)

Sopln(i);

Else

Sopln(j);

Else

Sopln(Math.abs(m)+1);

}

1. import java.io.\*;

public class A

{

public static void main(String args[])

{

byte x=64,y;

y=(byte)(x<<2);

System.out.println(y);

}

}

1. What will happen when you attempt to compile and run the following code?

Public class MyClass

{

Public class void main(String args[])

{

Sting s1=”one”;

String s2=”two”;

If(s1.equals(s2))

{

Sopln(“Strings equals”);

}

Boolean b1=true;

Boolean b2=true;

If(b1.equals(b2))

Sopln(“true”);

}

}

1. What will be the output? Explain your answer.

Class A

{

Int add(int a)

{

Return a+10;

}

Long add(int a)

{

Return a+20;

}

}

Class B extends A

{

Static public void main(String [] args)

{

B b=new B();

Int x=b.add(12);

}

}

1. Write the syntax of the destructor. What is destructor? And when is it invoked?
2. Differentiate between print() and println() functions with examples for each.
3. What is the wrapper class for the primitive type Integer and character?

13.What is the data type of 25.34567?

14.Explain why a class is thought of as a user-defined type?

15.What is the spac occupied by a composite type?

Ans: The space of a composite type is the sum of the sizes of it’s members.

16. Explain what happens when the following is executed?

Student s=new Student();

Ans : A new object created, memory is allocated for it and the memory address of the object is stored in the variable s.

17.What is the similarity and distinction between a function and a constructor?

18. Enlist all the primitive integer data types, the space occupied by them and their smallest and largest values.

19. What is a package? How do you create packages in java?

Ans : A package is a set of classes and interfaces. Each package has a name. The package is stored in the directory with the name of the package. Packages are used to avoid naming conflicts. A package is created by writing

package packagename; at the beginning of the class.

Give the example of page number 248.

20. Which are the classes in java used to work with character data?

Ans : Character class, String class, StringBuffer

21. If int x=5, what is the value of x, after the following expression is evaluated?

i))x+=x++ +(x%17);

ii) x/=x+(x/10);

22. Find the errors :

a. public class Calculate(){..}

b. private protected int a=3;

c. default Doctors appointment()

23. Give an example to illustrate that a class is a user-defined type.

(Give a small program which has member variables.)

24.What are the uses of the keywords static and final?

25. What is the error?

class Check

{

void calc()

{

int c= 2+3;

}

public static void main(String args[])

{

System.out.println(“The answer is :”+calc());

}

}

Ans:Only a function that returns a value can be used in an expression. So calc() cannot be used in displaying output.

Also, a static function can call only static functions. Thus either calc() should be declared static or an object of Check class should be created to access calc().

26.What is the difference between getter and setter methods? (V.imp)

Also learn examples for this.

27.Explain the need of escape sequence in java

28. The getter and setter methods are usually used for protected members.(T/F)

29. What are mutator methods?

30. What is the method to assign names to getter and setter methods?

31.What are the advantages and disadvantages of using temporary instances?

32. Define a user-defined class Time which has the following data members,

Hr,min,sec(private members, int type)

33)What will be the result of the following program segments?

i). !(1010101)

ii) 111101 && 01010101

iii) 1010101 || 01010

iv) 110101>>2

34. Differentiate between pure and mixed expressions and give

examples for each.

35.Give the output :

for(int i=k.length()-1;k>=0;k--) System.out.print(k.charAt(i));

36. What is a compound statement?

37. What will be the output of the following, if int a[]={1,2,3,4,5}; i)System.out.println(8+a[2]); ii)System.out.println(a[0]%(a[4]/5));

38. What is the difference between equals() and compareTo() methods.

39. What is the difference between equals() and equalsIgnoreCase()?

40. Explain the different visibility modifiers (access specifiers) of java.

41. What do you mean by dynamic initialization?

42. If String s=”Malayalam”, what will be the output of the following :

k.lastIndexOf(‘a’);

43. Which are the data types in java? (Both primitive and reference)

44. Write the java expression for :

(sin y / tan-1 y)+y

45. Explain the logical operators of java.

46. What is the difference between || and ^.

47. What is the output of : (int)(“shantiniketan”.charAt(4))

48. What is args[]?

Ans : It is the array of arguments passed to the main() method. It is of String type. The index of the array starts with 0. The values to args[] are passed when the program is run.

49. How can you completely control access to the member variables / or secure them?

Ans : By making them private members.

Accessor methods : Used to access mostly private member variables. It has the name get+the name of the member variable with a capital letter. Ex. getName(). Using getter methods even private members of a class can be accessed from other classes. They provide read access to a variable. One getter method is used for one variable only. Return type same as the data type of the variable, takes no arguments.

Setter methods: (Mutator methods)Used to set/change the values of member variables especially private members. The name of setter method is set+ the name of the member variable with a capital letter. Return type is void and takes a parameter of type of the data member.

49. What is the difference between Printables and Pageables? (Arrays chapter)

50. How do you accept input from the Scanner class?

51. How do you accept primitive values from the user?(Ans: Explain the functions of scanner class)

52. Explain nextXXX() function.

53. How do you create an object of the scanner class?

Ans : Scanner sc=new Scanner(System.in);

54. Mentions 3 types of exceptions in java.

(Ex. IOException)

55. Initialize values to a 3X4 array.

56. What are support methods?

Ans: The methods that are used to assist the service methods are called support methods.

57. What are service methods?

Ans:Public methods.

58. Which are the different levels of scope and visibililty in java?

(Page 371)

59. Learn the visibility modifiers explanation as in Encapsulation lesson.

60. Learn the scope in the program on page 372 carefully.

61. Write in a table the scope and visibility rules of each access specifier.

62. How do you exit out of a program in java?

(Use System.exit() function.

63. Difference between break and continue statements.

64. How do u insert time when a program is running.

Ans: use an empty loop.

For(int i=0;i<1000;i++)

;

(Note:An empty loop should have ; in it, as it will have no statements in it.)

65.What is the difference entry-controlled and exit-controlled loop?

66.Explain the 2 types of loops.

(Explain entry-controlled and exit-controlled loops)

67. What do you mean by rvalue and lvlue?