QUESTION BANK 1 August 2014 Set 1

1. Write the equivalent java expressions for the following :

a. (4a+5/34b-5a)3/4

b.**√**tan-1b+e2x

2. Give the java expressions for :

a. a2 +b2  x (a+b)2

b.sin(x+y) X tan (23)

3. What will be the value of c if int a=10, b=20?

a. int c=++a+b- -

b. int c=a-(++b)

4.What is the advantage of StringBuffer over String?

5.What will be the value of m at the end of the following code?

char x=’S’; int m;

m=(x==’a’)? ’A’ : ’a’;

6.What is the result of :

1110<<2

7. What will be the output of the following :

char a=’F’;

1. System.out.println(“The value of a is :”+(a+1));
2. System.out.println(“The value of a is :”+(a++));
3. System.out.println(“The value of a is :”+(++a));

8. What is the data type of output in the expression, if

fl-float, i-int,l-long type of variables.

(fl+l)\*(i+l)

9. What is the output of the following code?

class A

{

public static void main(String args[])

{

int a=5,b=8,c=12;

a=++b\*c – a;

System.out.println(“a=”+a)

}

}

10. What will be the output of the following block of code?

public void add()

{

int a=10;

for(int a=0;a<=2;a++)

{

System.out.println(“A is :“+ (a+1));

}

System.out.println(“A outside is:”+(a+1);

}

11.What is Java byte code?

12.How many values can a function return?

13.When can a function be used in an expression?

14.How do functions implement overloading?

Give the output:

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);

}

import java.io.\*;

public class A

{

public static void main(String args[])

{

byte x=64,y;

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

System.out.println(y);

}

}

15.Differentiate between print() and println() functions with examples for each.

16.What is the wrapper class for the primitive type Integer and character

17. What is the role of byte code in platform independence?

18.Explain Java compilation.

19.Explain the characteristic WORA of java.

20.Which is the driver method? Why is it called so?

21.What is abstraction?

22.What is the relation between a class and it’s object?

23.What is message passing?

24.What is information hiding?

25. How are real-world objects implemented in software terms?

26. How are data abstraction and encapsulation associated?

27.Define encapsulation.

28.Define abstraction..

29.Why is class called an object factory?

30. What is the significance of classes in java?

31. What is information hiding?

32. Explain abstraction with an example.

33.How are methods related to class?

34. Why is main() method called a driver class?

35.What are jar files?

36. What is dynamic initialization of variables?

37 What do you mean by reference types?

38 What is the difference between rvalue and lvalue?

39. Give the escape sequence for the following :

a.Hexadecimal number

b. Vertical tab

40 Which are the shorthand operators of java?

41 What are pure and impure expressions? Give examples.

42How do you convert a String type value to an int type value

43How do you covert a double type object to a primitive double value?

44 What is the difference between implicit and explicit type casting?

45If 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);

46. Find the errors :

a. public class Calculate(){..}

b. private protected int a=3;

c. default Doctors appointment()

47 Explain block scope with an example.

48 What is casting?

49. Explain abstraction with an example.

50How do you convert a float to a String type?

51What are the uses of the keywords static and final?

52Write the java statement to extract the 8th character from the string “Beautiful flowers”.

53Write the java statement to extract the substring from the 3rd character to 7th character from the string “Beautiful flowers”.

54Explain why a class is thought of as a user-defined type.

55What is the size occupied by a composite data type?

56Which is the function to remove the white spaces from a st ring?

57Explain the process what happens when an object is created.

58What is the similarity and distinction between a function and a constructor?

59What is the difference between compareTo() and equals() functions?

60Differentiate between runtime and compile-time errors.

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

62Explain the try, catch and finally blocks of java.

63Which are the 2 packages that are automatically imported into your java program?

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

k.lastIndexOf(‘a’);

65Give an example to import a java package into the program.

66How do you get the output :

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67 What is the difference between a class variable and an instance variable? How do you access the two?

68 What is the difference between function prototype and function signature? Give example.

69 What are actual and formal parameters?

70 What do you understand by reference?

71 Declare appropriate variables and store the following values.

i) 127.53

ii) 43-11-88

72When do you use ‘call by reference’ and when do you use ‘call by value’?

73What is the need of exception handling code in java?

74 What happens if you create the same String type variable twice, and initialize them to different values?

75 How do you pass arguments to the method main()?

**76** Design a class Employee with the following protected members.

Employee id

Name

Salary

Office address-(static)

77What are the advantages of using function overloading?

78Write the java expression for :

(sin y / tan-1 y)+y

79What is the difference between throws and throw keywords?

80What is the difference between

i.&& and &

ii.|| and |

81 Give the prototype for a public function calculate, which has variables n1 (integer

type) and str (String type) as parameters and boolean as return type.

82 How is polymorphism implemented in java?

83 Explain java compilation

84How do you force and exception in java to occur?

85 What do you mean by initial class?

86.What is the statement for the simple input of single characters?

87 Find the errors and rewrite correctly.

class A

{

int x;

static int y=20;

public void A(int z)

{

x=z;

}

public static void main(String args[])

{

A o = new A(5);

int sum=o.x+o.y;

System.out.println(“The sum of x and y is :”+sum);

}

}

88 What is the difference between String and StringBuffer?

89Which are the 3 classes in java of character data? Give an example for each.

90Write the statement to create a StringBuffer variable.

91What are the uses of wrapper classes?

92Mention any 2 types of exceptions that can occur in a java program and the reason that triggers each.

92Explain the bitwise operators in java.

93How many exceptions can a catch block handle?

94What is the difference between Byteoriented streams and characteroriented streams?

95 Describe the process of declaration, instantiation and initialization of objects.

96 When do you use the keyword void?

97What is the difference between protected and private access levels?