**QUESTION BANK set 2– X ICSE**

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

2. How are data abstraction and encapsulation associated?

3. Define encapsulation.

4 Define abstraction.

5. Why is class called an object factory?

6. What is the significance of classes in java?

7. What is information hiding?

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

char x=’S’; int m;

m=(x==’a’)? ’A’ : ’a’;

9. Write the output of the following code fragment. int m=2,n=15;

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

m++;

n--;

System.out.println(”m=”+m);

System.out.println(“n=”+n);

10.How are methods related to class?

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

13.What are jar files?

14. What is dynamic initialization of variables?

15 What do you mean by reference types?

16 What is the difference between rvalue and lvalue?

17 Give the escape sequence for the following :

a.Hexadecimal number

b. Vertical tab

18 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)

}

}

19 Which are the shorthand operators of java?

20 Give the syntax and an example for the ternary operator.

21 What do you mean by non-graphic character set?

22 What is operator associativity?

23 What are pure and impure expressions? Give examples.

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

25 Explain block scope with an example.

26 What is casting?

27 What is the significance of classes?

28 Explain the different access-specifiers of java.

29 What is the difference between the operators && and &,if both the operands

are boolean?

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

31 What is casting?

32 What is the significance of classes?

33 Give the java expressions for :

a2 +b2  x (a+b)2

sin(x+y) X tan (23)

34 Bit is an abbreviation for binary digit.

35 What is a compound statement?

36 What are the uses of the ‘return’ statement?

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

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

39 What are actual and formal parameters?

40 What do you understand by reference?

41 Declare appropriate variables and store the following values.

i) 127.53

ii) 43-11-88

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

43 What happens if you create a String type variable twice, and initialize them to values?

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

45 Design a class Employee with the following protected members.

Employee id

Name

Salary

Office address-(static)

46 Differentiate between pure and impure functions.

47 What are the advantages of using function overloading?

48 How does function overloading work?

49 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.

50 How is polymorphism implemented in java?

51 What is the difference between actual and formal parameters?

52. Give the escape sequences for the following :

i)Hexadecimal number

ii)Newline character

iii)Carriage return

53 What is the difference between the while and do-while loops?

54. How do the prefix operator ++ and postfix operator work ++ work in an expression?

Explain with an example.

55 Which are two types if java programs?

56 Explain Unicode character set

58 What is the difference between reference types and primitive types?

59 What is the significance of the dot operator?

60 What is the difference between call by value and call by reference?

61 Explain the different types of functions in java.

62 Explain function overloading with an example.

63. Given the following data types :

char c; int i; long l;

What will be the data type, when the following expression is evaluated?

c+i/(l+c);

64 What is the default value of a boolean variable?

65 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);

}

}

66 What is the result of :

1110<<2

1101>>2

1011<<3

67. What do you mean by dynamic initialization of variables?

68 What are user-defined data types?

69 What do you mean by IOStreams? Which are they?

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

71 Differentiate between user-dfined and primitive data types.

72 What do you mean by default access-specifier?

73 What do you mean by Exception handling?

74 What are mutators?

75 Write a program to illustrate the getter and setter methods.

76 What is an accessor method?

77 What are the uses of the wrapper classes?

78 Whhat is the difference between accessor and setter methods?

79 Differentiate between ByteOriented and CharacterOriented streams.

80 What are input stream and output streams?

81 If objD is an object of double data type, how do you convert it to the double primitive type?

82 Describe the creation of InputStreamReader with an example.

83 What are exceptions?

84 When do you use the DataInputStream?

85 What are the return types of the following String handling functions :

a.capacity()

b.charAt()

86 List the methods of DataInputStream and DataOutputStream.

87 What is the difference between ‘throws’ and try and catch blocks?

88 What is the use of the finally keyword?

89 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);

}

90 Give the hierarchy of the Exception class.

91 What are wrapper classes?

92 When do you need to use objects of primitive types instead of the primitive types.

93 Which are the different wrapper classes?

94 Learn the following:

Creating objects from the primitive types.

Getting the primitive types back from their objects.

Converting String data types to primitive types.

Converting primitive types to String types.

95 When do you use the keyword void?

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

97 Learn the return types and uses of all the string handling functions. Write an example for each.

98 What is the importance of the import statement?

99. Give the prototype of a function check() which receives a character ch and an int

i as parameters and returns true or false.

100 What are packages?

101 How do you create and include different classes in a package?

102 Which are the different packages of Java?

103 What is the difference between the selection and the sequential statements?

104 What is iteration?

105 Explain the ternary operator with an example and give the syntax. Also nested ternary.

106 What is the dangling else problem? How do you solve it?

107 What do you mean by nested ifs?

108 Compare if-else and ?: operator.

109 What would happen if there is no break in switch-case statement?

110 Compare switch and if-else.

111 When is it advantageous to use switch over if-else-if.

112 When do you create and empty while or for loop?

113 What are the different parts of a loop?

114 What is an infinite loop? Write the code to create an infinite loop.

115 What do you mean by block scope? Explain with an example.

116 What is the difference between the for and the while loop?

116. How many times will the following loop be executed and what will be the output?

int k=1,i=2; (3)

while(++i<6)

{

k\*=i;

System.out.println(k);

}

117 Which are the two categories of loops?

118 What are nested loops?

119 Which are the different jump statements?

120 What is the difference between break and continue?

121. What is the difference between implicit and explicit type casting?

122 Explain labels.

123 What is a global variable?

124 Write 2 advantages of using functions.

125 What are labels? Give an example.

126 Define composite data types. Give an example.

127. Give the java expression for :

a2 +b2  x (a+b)8

|a + b|

128. Learn uses and return types of all the String functions.

129.What is the difference between return and continue statements?