

SOUTH EASTERN UNIVERSITY OF SRI LANKA

FIRST EXAMINATION IN BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY FOR
MANAGEMENT STUDIES) – 2007/2008
SEMESTER – II, AUGUST/SEPTEMBER 2009

ITMS 1243 – FUNDAMENTAL OF PROGRAMMING

Answer all questions.

Time: 03 hours

Question No: 01.

a)

Fill in the blanks in each of the following statement:

1. The programs that translate high level language programs into machine language are called
2. The Command from the Java 2 Software Development Kit executes an application.
3. The Command from the Java 2 Software Development Kit compiles a Java program.
4. A Java program file must end with the file extension.
5. When a Java program is compiled , the file produced by the compiler end the File extension.
6. The file produced by the Java compiler contains that are interpreted to execute a Java applet or application.
7. Java programmer concentrate on creating their own user-defined types, called
8. The process of analyzing and designing a system from an object-oriented point of view is called
9. A begins the body of every method, and a Ends the body of every method.
10. Every statement ends with the a
11. are reserved for use by Java.
12. Java applications begins execution at method
13. Methods and display information in the command window.
14. The statement is used to execute one action when a condition is true and other action when that condition is false.

(1.5 X 14=21 Marks)

b) Categorize each of the following items as either hardware or software:

- i. CPU
- ii. Java compiler
- iii. Java interpreter
- iv. Input unit
- v. Editor

(05 Marks)

c) Write a program in Java to display the following output in the command window.

b.

```
****
* *
*
```

a.

```
*
**
****
```

(04 Marks)

Question No: 02.

a) Write a Java statement to accomplish each of the following task:

- i. Declare variable **sum** and **x** to be of type integer
- ii. Assign the sum of **x** and **y** to **z**, and increment **x** by 1 after the calculation. Use only one statement.
- iii. Test whether variable **count** is greater than 10. If it is, print "Count is greater than 10"

(09 Marks)

b) What are the advantages and limitations of drawing a flowchart?

(02 Marks)

c) What is the difference between a flowchart and a pseudocode?

(03 Marks)

d) Draw a flow chart to input Average Marks and find the grade according to the grade System given below.

75 - 100	"A"
65 - 74	"B"
55 - 64	"C"
45 - 54	"S"
0 - 44	"F"

(06 Marks)

Question No: 03.

a) Write down the output of the following programs

i.

```
public class IncDec
{
    public static void main (String args[])
    {
        int a=1;
        int b=2;
        int c;
        int d;
        c=++b;
        d=a++;
        c++;
        System.out.println("a = " + a);
        System.out.println("b = " + b);
        System.out.println("c = " + c);
        System.out.println("d = " + d);
    }
}
```

(05 Marks)

ii.

```
public class Test
{
    public static void main (String args[])
    {
        int y, x=1, total=0;
        ++x;
        y= x * x;
        System.out.println(y);
        total +=y; // equal to total=total + y
    }
    System.out.println(total);
}
```

(05 Marks)

b) Adams is working as an employee of AZO Company limited. The company has decided to increase the commission amount of Adams by 12%, if he achieves the sales target amount of Rs. 15,000. Suppose Adams has achieved the sales target amount. Write a program in Java to calculate increased commission amount.

(10 Marks)

Question No: 04.

a) Write a program to enter the Student No, Name and Marks of 3 subjects as constant and calculate the Total Marks, Average Marks as output.

(10 Marks)

b) Write a program to enter the Customer No, Name and Bank Balance as constant. If the bank balance greater than or equal Rs. 10,000, the customer will be treated as valid customer otherwise invalid customer.

(10 Marks)

c) Write a program in Java that takes three numbers as inputs and displays the larger one as an output.

(10 Marks)