

ASSIGNMENT 3.

Module Title: Programming Languages and paradigms

Maximum Marks: 30

INSTRUCTIONS:

- *This Assignment consists of one section with five questions*
- **Attempt all questions**
- *Section B is practical, you will use computer lab3*
- *Do This questions in your respective groups*
- *Each group member must attend or participate*

NOTES: *This assignment will be submitted and be presented on Monday*

Question 1.

- a) Briefly describe object oriented programming [2 mks]
- b) Briefly describe four major features of java programming language. [2 mks]
- c) Explain Identifiers in java [2 mks]
- d) Explain the tools you need to run java programs [2 mks]
- e) With the use of examples describe java exceptions [2 mks]

Question 2.

- a) **Write a java program and show how to store the following values using arrays:**
 - **Age** [15, 5, 50, 45, 35, 12, 9, 10]
 - **Names** [Claudine, Bosco, James, Justine, Pierre, Sylvie]
 - **Telephone-number** [0788828702, 0727755089, 0785983780, 0788557409]
 - **Salary** [5000.50, 4500.65 , 1500]

With the above program show how to display some of the values stored in the declared arrays.[4mks]

Question 3.

- a) Write a program to deal with student marks in the following way after the user have entered the marks from the keyboard: [4mks]
- The time student marks are between 100 and 80, it will display “ Excellent”
 - The time student marks are between 79.9and 60, it will display “ Satisfaction”
 - The time student marks are between 59.9 and 50, it will display “ Pass”
 - The time student marks are below 50, it will display “ Totally Failing”
 - The marks should be scanned from the Keyboard

Question 4. Using decision making statements, write a program to display numbers in descending order after you have scanned the starting number[3 mks]

Question 5.

- a) Write a Java program that takes a number as input and prints its addition table up to 35. [4 mks]
- b) Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers scanned from the keyboard.[5 mks]

Question 6.Write a java program to calculate the factorial of any number scanned by the programmer from the keyboard. [5 mks]