

**Section A**

**[40 marks]**

**Answer ALL questions in this section.**

- A1. (a) State any TWO data types that are used in storing decimal points. [2]  
(b) State TWO values of Boolean data type that can be used in a Java program. [2]
- A2. (a) What is the purpose of writing comments inside a Java program? [2]  
(b) With ONE example, explain what block comments are. [4]
- A3. The following are a list of identifiers given to variables.

#mark	abc	Totalmark	class
action	true	Price\$	switch
Next_item	2nd		

Copy and complete the following table by placing the identifiers accordingly in the valid and invalid identifier name columns. [10]

- A4. (a) What is the purpose of using javac command? [2]  
(b) Give the syntax of it. [2]
- A5. Write a java program to ask the user to enter a weight. It will display a message “too heavy weight” if the weight is above 80.5, otherwise it will display a message “acceptable weight”. [16]

Please enter a weight : 90.6

Status : too heavy weight

**Section B**

**[60 marks]**

**Answer ANY TWO questions in this section.**

**B1.**

**[30 marks]**

- (a) Write a method calculateAverage that accepts two parameters p and q of type float and returns the average of the two numbers. [8]
- (b) Complete the following sentences with the appropriate answers. [10]
- (i) \_\_\_\_\_ symbol is used to represent increment operator.
  - (ii) An object is an \_\_\_\_\_ of a class.
  - (iii) The if else statement belongs to \_\_\_\_\_ type of program construct.
  - (iv) The 'less than' comparison operator is represented by \_\_\_\_\_.
  - (v) Syntax error also known as \_\_\_\_\_ error.
- (c) (i) What is the purpose of using length()? [2]
- (ii) Using ONE example, explain how length() works. [4]
- (d) Explain the following method header: public static char transmitData(String name, float size). [6]

**B2.**

**[30 marks]**

- (a) Write Java statements to accomplish each of the following.
- (i) Declare a variable price to be of type double. [2]
  - (ii) Declare a method header weight\_approximate that takes 2 float values w, z and returns a float. [2]
  - (iii) Declare a String array address that can be used to store 800 elements. [2]
- (b) Identify the error in each of the following program segment and explain how the error can be corrected.
- (i)

```
for(int p=0; p<10, ++p)
{
    System.out.println(p);
}
```

[4]
  - (ii)

```
if (w = 1)
    System.out.println(" correct choice");
else
    System.out.println("the rest");
```

[4]
- (c) Write a Java statement to accomplish each of the following:
- (i) Increment the variable point by 10. [2]
  - (ii) Create a textfield user with a default size. [2]
- (d) Give the general syntax of while..loop structure. [6]
- (e) State an appropriate method to perform the following on String objects. [6]
- (i) To convert a String object to upper case.
  - (ii) To check the contents of two string objects are the same.
  - (iii) To combine two String objects.

**B3.**

**[30 marks]**

- (a) Evaluate the following expressions and state the value of w: [10]
- (i)  $w = 5 + 3 * 3$
  - (ii)  $w = 10 - 9 / 5$
  - (iii)  $w = (8 != 12) \parallel (12 < 23)$
  - (iv)  $w = 9 + 9 \% 4 - 8$
  - (v)  $w = !(12 < 9)$
- (b) Rewrite the following codes into switch statements. [10]
- ```
if(code == 'A' || code == 'a')
    System.out.println(" Apple Product ");
else
    if(code == 'S' )
        System.out.println(" Samsung Product ");
    else
        System.out.println(" Others Product ");
```
- (c) Describe THREE advantages of using object orientation. [6]
- (d) Describe the start method of Applet. [4]

**- END OF PAPER -**