

SECTION A

[40 marks]

Answer ALL questions in this section.

A1. (a) Briefly explain the purpose of using comments in Java. [2]

(b) Java supports three types of comments. List all of them. [3]

A2. Briefly explain the following terms, symbols, or methods found inside Java language. [10]

(a) %

(b) parseInt()

(c) start()

(d) overloading a method

(e) ++

A3. State whether each of the following statements is legal or illegal. [6]

(a) char b = "b";

(b) int result = 4 + 5;

(c) float y = 3.14;

(d) boolean if = true;

(e) byte couter= 11;

(f) String name = 'Joe';

- A4.** Write a Java statement to accomplish each of the following.
- (a) Test if the value of the variable mark is less than 30. If the condition is true, then it will display the message “mark is below 30”. [2]
 - (b) Declare a method header checkInfo that takes two parameters w and y of integer type and returns a character data type. [2]
 - (c) Decrement the variable point by 1 then add it to the bonus to get the new bonus. [2]
- A5.**
- (a) Briefly explain what an array is. [2]
 - (b) Declare a constant size come with a value of 200. [3]
 - (c) Declare an array amount to store 200 integers.
You need to use the constant size defined in part (b). [2]
 - (d) Write Java statements to display all the values inside the array amount. [4]
- A6.** List any **two** data types which belong to integer category. [2]

SECTION B

[60 marks]

Answer ANY TWO questions in this section.

B1.

[30 marks]

- (a) Write a java program to prompt the user to enter a gender.

If the gender is m or M, then it will display Male.

If the gender is f or F, then it will display female.

If the gender is not both of them then it will display Invalid entry. You need to use “switch” statement inside it. The following is a possible output. [18]

Enter the gender

M

The sex is Male

- (b) You need to produce a flowchart for the above program. [12]

B2.

[30 marks]

- (a) Briefly explain what a sorting process is. [2]
- (b) Briefly explain **two** features of external sort. [4]
- (c) Write a method bubblesort which receives a parameter data belonging to array of integer type. It will use bubble sort algorithm to sort the data array in ascending order.[18]
- (d) Briefly explain **one** advantage and disadvantage of using bubble sort. [4]
- (e) Which method to be used when sorting Strings? [2]

B3.

[30 marks]

- (a) Write a Java program to display all the even numbers from 60 down to 30. You need to use while loop to do it. [9]

- (b)
 - (i) List **four** methods found inside Java Applet. [4]

 - (ii) Briefly explain the purpose of using drawLine. [2]

 - (iii) Explain the syntax of drawLine. Give an example. [6]

- (c) Write a Java applet program to display the text hello at row 35 and column 55. The text color is blue. [9]

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