

Section A

[40 marks]

Answer ALL questions in this section.

- A1. State which data type can be used to represent a logical value inside a Java program. [2]
- A2. State the correct command to execute a java program. [2]
- A3. Which method will be activated first when you start to run an applet program? [2]
- A4. Explain what encapsulation is. [4]
- A5. For the following statements below, fill in the blanks with an appropriate word. [10]
- (a) A data type that stores only one character is known as _____.
 - (b) The size of an array is known as _____.
 - (c) An object has attributes and _____.
 - (d) A windows component which a user can click on it is a _____.
 - (e) A series of characters that appears inside a String must enclose between _____ quotation marks.
- A6. Write a Java application that reads an integer value, determines and prints whether it is positive, negative or zero category. [16]
- Please enter a number 34
- 34 is a positive category
- A7. Declare a constant MAX to store a value of 2.67. [4]

Section B

[60 marks]

Answer ANY TWO questions in this section.

B1.

[30 marks]

- (a) (i) Declare an array status to store 100 string values. [3]
(ii) Write java codes making use of for loop structure to initialize all the elements inside the status array with value of “available”. [7]
- (b) Given the following array declaration statements, indicate whether the statements are valid or invalid. [10]
(i) Char c = ‘b’;
(ii) String code= “A”;
(iii) int d = 6;
(iv) double public = 2.1;
(v) boolean w[2] = {‘y’, ‘n’};
- (c) Rewrite the following selection structure using if else construct. [10]

```
switch(course)
{
case 'S': System.out.println("special course");
        break;
case 'E': System.out.println("express course");
        break;
case 'N': System.out.println("normal course");
        break;
default: System.out.println("no such course");
}
```

B2.

[30 marks]

- (a) Write Java statements to accomplish each of the following:
- (i) Declare a variable 'send' to be of type boolean. [2]
 - (ii) To compare the contents of both variables 'w' and 'g' of type String. [2]
 - (iii) To assign a value 4.5 to a variable 'data' of float data type. [2]
 - (iv) Display a message 'java exam' using a method from the Systems class. [2]
 - (v) Declare a method digest that returns a value of integer type and has integer argument 'w'. [2]
- (b) Binary search is one of the methods used to search for a particular record. Explain the steps how binary search is performed. [6]
- (c) Write a Java program which makes use of while loop to display numbers given below. [14]

Report

5 * 5 is 25

10 * 5 is 50

15 * 5 is 75

B3. **[30 marks]**

- (a) State FIVE type of containers found inside Java. [5]

- (b) Write java applet program to display a circle at row of 200, and column of 300. The width of the circle is 250, and the height of the circle is 350. The color of the circle is yellow. This applet class name is drawing. [15]

- (c) Write HTML codes to activate the applet written in part (b). [6]

- (d) State TWO ways to activate java applet program. [4]

-END OF PAPER-