

Registration No.: _____

PNR No.: 117181DCA467844

COURSE CODE : DCAP501

COURSE NAME : MODERN PROGRAMMING TOOLS & TECHNIQUES-I

Time Allowed: 03:00 hrs

Max.Marks: 80

1. This question paper is divided into two parts A and B.
2. Answer all the questions in serial order.
3. Part A contains 10 questions of 2 marks each. All questions are compulsory.
4. Part B contains 10 questions (Questions 2 to 11) of 10 marks each, attempt any 06 questions out of 10. Attempt all parts of the selected question. Only first 06 attempted questions would be evaluated.
5. The student is required to attempt the question paper in English medium only.
6. Simple non programmable calculator is allowed.

PART A

- Q1(a)** "A wrapper class is a class that envelops the value of every primitive data type." Discuss.
- (b)** In an array, the memory is allocated for the same data type sequentially and is given a common name. Justify.
- (c)** The class that implements the interface can use the variables as declared in the interface and cannot modify or change the value of the variable. Discuss.
- (d)** "Creating a package is simple." Explain the method that supports this statement.
- (e)** Give the significance of the String to String() method.
- (f)** Which state does the thread enter, when a thread class is created at any instance? Which method is used to return the name of the thread group?
- (g)** What are file stream classes?
- (h)** An applet tag is used to add Java applets. Elaborate.
- (i)** Frames can be closed by just clicking on the close button. Discuss.
- (j)** "The mousePressed() and mouseReleased() methods are invoked when the mouse is pressed and released, respectively." Comment.

PART B

- Q2.** "The interface specifies four methods that are invoked when a component is resized, moved, shown or hidden." Justify.
- Q3.** "Finally blocks are executed once the try block exits." Justify?
- Q4.** Once the interfaces are defined, it can be implemented by one or more classes. How can this be achieved? Give a program example.
- Q5.** "No matter what type of information is being transferred and where the information is coming from or going to, the algorithm for reading and writing the data remains the same." Write the steps followed in these algorithms.
- Q6.** What are the different AWT Controls? Discuss any two in detail.
- Q7.** What are the different Decision Making Statements in Java? Discuss each with the help of an example.
- Q8.** What is the structure of a Java Program? Discuss with the help of an example.
- Q9.** Write a program to calculate the perimeter $[2*(l+b)]$ and area $[l*b]$ of a rectangle using classes and objects. Values of length and breadth to be taken from the user at runtime.
- Q10.** What are nested classes? Demonstrate with the help of an example.
- Q11.** How can an image be displayed using an applet? Discuss with an example.