

COURSE CODE: DCAP501

COURSE TITLE: Modern Programming Tools and Techniques-I

Date of Exam:- 12 Oct

Session:- 1:30-4:30

Time Allowed : 3 hours

Max. Marks: 80

1. This paper contains 10 questions divided in two parts on 1 page.

2. Part A is compulsory.

3. In Part B (Questions 2 to 10), attempt any 6 questions out of 9. Attempt all parts of the questions chosen.

4. The marks assigned to each question are shown at the end of each question in square brackets.

5. Answer all questions in serial order.

PART A

Q1: Define

[20 Marks]

- a) Explain the features of java.
- b) Differentiate between java and C++.
- c) What are interfaces? Give one example.
- d) Explain the significance of "super" keyword.
- e) What are packages? How we include them in program?
- f) What is the difference between an interface and an abstract class?
- g) What are final classes and final methods?
- h) Explain the event delegation model.
- i) What are applets?
- j) What is Inheritance? Explain with example all the types.

PART B

Q2: Write a program to print first n natural numbers and display each number with a gap of 1 second. [10]

Q3: What are threads? Write a program to implement multithreading. [10]

Q4: Explain the different methods of stringBuffer class with suitable examples. [10]

Q5: Explain the different access specifiers available in java with the help of an example. [10]

Q6: What are Nested Classes? Write one program which illustrates the use of nested classes in java. [10]

Q7: How to extend an interface in java? What will happen if we define the interface but didn't implement it in a class? [10]

Q8: What is exception handling? Differentiate between throw, throws and finally. [10]

Q9: Write and explain the different operators available in java with the help of program. [10]

Q10: What are streams? Differentiate between character and byte streams with examples. [10]