



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Seventh Semester, B.E. - Computer Science and Engineering

Semester End Examination; Dec. - 2019

Object Oriented Programming with Java

Time: 3 hrs

Max. Marks: 100

Note: Answer **FIVE** full questions, selecting **ONE** full question from each unit.

UNIT - I

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|---|----|--|---|
| 1 | a. | With an example program, illustrate how members of a structure can be accessed in C programming language. | 8 |
| | b. | Explain the characteristics of object oriented programming. | 8 |
| | c. | Declare a class with length and width as instance variables and within this class define a method for determining area of rectangle. | 4 |
| 2 | a. | Write Java program, which illustrate method overloading. | 8 |
| | b. | Define a class that illustrates the following types of constructors: | |
| | | i) Parameterized Constructor | 8 |
| | | ii) Default Constructor | |
| | c. | Differentiate between structure and class. | 4 |

UNIT - II

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|---|----|---|---|
| 3 | a. | With the help of a simple program, explain the process of compiling and running Java program. | 8 |
| | b. | Write Java program, to find the largest element in an array. | 8 |
| | c. | With syntax and example, explain Ternary operator in Java | 4 |
| 4 | a. | Explain type casting in Java with examples. | 8 |
| | b. | Write Java program to find the sum and average of numbers passed as a command line arguments. | 8 |
| | c. | With example, explain structure of Java program. | 4 |

UNIT - III

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|---|----|---|---|
| 5 | a. | Explain class modifiers in Java. | 8 |
| | b. | Write a Java program to illustrate accessing private data members of a class. | 8 |
| | c. | Differentiate between methods and constructors. | 4 |
| 6 | a. | Write a Java program to illustrate the concept of multilevel inheritance. | 8 |
| | b. | Write a Java program to illustrate the use of super keyword in inheritance. | 8 |
| | c. | Differentiate between interface and class. | 4 |

UNIT - IV

- 7 a. With example, explain the significance of finally block in Java 8
- b. Write a Java program, to illustrate the case of catching three unchecked exceptions. 8
- c. List any four commonly used class of Java.lang package. 4
- 8 a. Discuss different thread states. 8
- b. Write a Java program to create three thread with MAXIMUM, MINIMUM and NORMAL Priority. 8
- c. Discuss any four methods of thread class. 4

UNIT - V

- 9 a. Explain Delegation event model. 10
- b. Write a Java program to illustrate the use of any two mouse related events. 10
- 10 a. Explain the different stages present in the life time of an APPLET. 10
- b. Write Java applet to draw five rectangles and to fill it with different colors. 10

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