[Total No. of Printed Pages—3

Seat No.

[5352]-539

## S.E. (E&TC/Elex) (Second Semester) EXAMINATION, 2018 OBJECT ORIENTED PROGRAMMING

## (2015 PATTERN)

Time: Two Hours

Maximum Marks: 50

- N.B. :- (i) Neat diagrams must be drawn wherever necessary.
  - (ii) Figures to the right indicate full marks.
  - (iii) Assume suitable data if necessary.
- 1. (a) Explain the basic concepts and features of OOP. [6]
  - (b) Discuss the significance of Input/Output operators in C++ and their equivalence with 'C'. [3]
  - (c) Discuss the usage of the operators that cannot be overloaded in C++. [3]

Or

- 2. (a) What is a constructor? Discuss its types with suitable examples. [6]
  - (b) Explain the concept of Inheritance in C++ with a suitable example.

    What are its types? [6]

| ( <i>a</i> ) | Explain in brief the different data types in Java. [6]  |
|--------------|---|
| ( <i>b</i> ) | What are command line arguments? Explain their significance   |
|              | with suitable example. [7]  |
|              | Or Or   |
| (a)          | Explain appropriately the following: [6]  |
|              | <ul><li>(i) The this keyword.</li><li>(ii) finalize( ).</li></ul>                                     |
| (b)          | Discuss Access Control in Java and its significance. [3]  |
| ( <i>D</i> ) |   |
| ( <i>c</i> ) | What is the significance of Static Members in Java? Explain   |
|              | with example. [4]   |
| (a)          | Describe different forms of inheritance in JAVA. Explain the  |
|              | syntax of single inheritance. [6]   |
| ( <i>b</i> ) | What is an interface in JAVA, Write similarities and differences                                      |
|              | between an interface and a class? [6]   |
|              | Or  |
| (a)          | What is Package? How do we add a class or an interface  |
|              | to a package in JAVA. [6]   |
| ( <i>b</i> ) | Describe the various four forms of implementing interfaces  |
|              | in JAVA. [6]  |
|              |   |
| (a)          | What is a thread in JAVA? Explain single threaded and   |
|              | multithreaded program. What is difference between   |
|              | multiprocessing and multithreading? [7]   |
| 2]-539       | 2   |
|              | <ul> <li>(a)</li> <li>(b)</li> <li>(c)</li> <li>(a)</li> <li>(b)</li> <li>(a)</li> <li>(b)</li> </ul> |

(b) What is an exception in JAVA? How do we define a try block and a catch block? [6]

Or

- 8. (a) What is an applet in JAVA? Explain a local applet and a remote applet? [6]
  - (b) Write a program in JAVA to create multiple threads and demonstrate how two threads communicate with each other? [7]

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