

Total No. of Questions : 8]

**PD-4098**

SEAT No. :

[Total No. of Pages : 2

**[6402]-58**

**S.E. (Information Technology)**  
**OBJECT ORIENTED PROGRAMMING**  
**(2019 Pattern) (Semester - III) (214444)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidate:*

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume Suitable data if necessary

**Q1)** a) Write a program to create a class student with data members roll no, name & address. Initialize the values for data members using the constructor and display them. [9]

b) Explain the parameterized constructor with an example. [9]

OR

**Q2)** a) Explain constructor overloading with an example. [9]

b) What is the garbage collection and finalize ()method? [9]

**Q3)** a) Implement the following Inheritance

Class Employee is Super Class and Programmer is subclass. Employee class has data member salary of float data type. The programmer class has a data member bonus of integer data type. Access the salary of the Employee class from the Programmer class. [9]

b) Differentiate between compile time polymorphism and run time polymorphism. [8]

OR

**P.T.O.**

- Q4)** a) Define Interface. Explain how multiple inheritance is achieved in Java. [9]  
b) Illustrate Multilevel inheritance with an example. [8]

**Q5)** a) Write a Program to accept and display the month number. Throw a number format exception if an improper month number is entered. [9]  
b) Explain the exception handling mechanism with an example. [9]

OR



OR

- Q8)** a) Explain the following File operations using File class: [9]

  - i) Create a File
  - ii) Read from a File
  - iii) Write to a File
  - iv) Close a File

b) Implement a program for maintaining a database of student records using Files. Student has Student\_id, name, Roll\_no, Class, marks, and address. Display the data for a few students. [8]

  - Create Database
  - Display Database
  - Delete Records
  - Update Record
  - Search Record.

