

Total No. of Questions : 4]

SEAT No. :

PA-27

[Total No. of Pages : 2

[5931]-38

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

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2 and Q.3 or Q.4.
- 2) Neat diagram must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) Differentiate between object oriented programming and procedural oriented programming. [5]
- b) Model a real-world scenario 'vehicle' class using object oriented paradigm. [5]
- c) Write a short notes on: [5]
- i) Data Abstraction
  - ii) Inheritance

OR

- Q2)** a) Describe the characteristics of object oriented programming. [5]
- b) Write a short notes on: [5]
- i) Polymorphism
  - ii) Data Encapsulation
- c) What are the limitations of procedural oriented programming? [5]

- Q3)** a) Elaborate any two uses of 'this' keyword in object oriented programming. [5]
- b) How is method overloading achieved in object oriented programming? Explain with an example. [5]
- c) Identify classes, objects, and methods for adding two complex numbers. [5]

OR

P.T.O.

- Q4)** a) Write a program demonstrating passing an object as a parameter to a method. [5]
- b) What are the characteristics of static variables and methods? Explain with an example. [5]
- c) Design a class 'student' with suitable instance variables and methods. Create the database of the students and display the records using an array of objects. [5]

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