

Total No. of Questions : 4]

SEAT No. :

PC410

[6359]-530

[Total No. of Pages :2

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

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4.
- 2) Neat diagram must be drawn whenever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

Q1) a) Model a real-world scenario 'fruit' class using Object Oriented Paradigm **[5]**

b) Differentiate between Object Oriented Programming and Procedural Oriented Programming. **[5]**

c) Write a short note on: **[5]**
i) Data Encapsulation
ii) Inheritance

OR

Q2) a) Differentiate between class and structure. **[5]**

b) What are limitations of Procedural Oriented Programming? **[5]**

c) Describe polymorphism in details. **[5]**

Q3) a) Enlist the visibility/access modifiers in OOP. How is information hiding achieved using a 'private' access modifier? **[5]**

b) Write a program demonstrating the use of static variables and methods in OOP. **[5]**

c) Identify classes, objects and methods for subtracting two complex numbers. **[5]**

OR

P.T.O.

- Q4) a)** Write a short note on ‘new’ and ‘delete’ operators. [5]
- b) Design a class ‘employee’ with suitable instance variables and methods. Create the database of the employees and display the records using an array of objects. [5]
- c) What is the need of forward declaration in OOP? Explain with an example. [5]

