

B.E. (Computer Engineering) (Insem)**OBJECT ORIENTED MODELING & DESIGN****(2019 Pattern) (Semester- VII) (Elective - III) (410244D)****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 diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume the suitable data, if necessary.

- Q1) a)** Draw a class diagram for following consider university database that keeps track of students & their majors, transcripts and registration & university courses several sections of each courses are offered and each section is related to instructor who is teaching. It also keep track of sponsored research Project of faculties & graduate students of academic departments of a particular college. The database also keep track of acknowledgement of each person & contacts awarded to each faculty. [6]
- b)** What do you mean by abstract class? Explain with example. [4]
- c)** Draw a class diagram for Railway Reservation system. [5]

OR

- Q2) a)** Explain different methods of identifying analysis classes. [6]
- b)** Differentiate between class diagram and object diagram in UML. [4]
- c)** Explain concept of association class with an example. [5]

- Q3) a)** Construct state transition diagram for computerization of your college library. [5]
- b)** Explain different pseudo states in chart diagram. [5]
- c)** Differentiate between terms Aggregation & Composition. [5]

OR

- Q4)** a) Explain different components of a state diagram. [5]
b) Explain different types of states in state chart diagram. [5]
c) Draw state chart diagram for handling telecommunication system. [5]