

Total No. of Questions : 5]

SEAT No. :

**PC1167**

[Total No. of Pages : 2

[6317]-302

T.Y. B.B.A. (C.A.)

**CA - 502 : OBJECT ORIENTED SOFTWARE ENGINEERING**  
**( 2019 CBCS Pattern) (Semester - V)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) All questions are compulsory.
- 2) Neat diagram must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.

**Q1)** Attempt any Five of the following:

**[5×2 = 10]**

- a) What is Object Orientation?
- b) What is actor?
- c) Explain Tagged Value.
- d) Explain notations of use case diagram.
- e) Explain term Join and Fork.
- f) Define swim lane.
- g) What is system boundary?

**Q2)** Attempt any Four of the following:

**[4×4 = 16]**

- a) Explain five UP work flows of UP in detail.
- b) Draw state chart diagram for ATM system.
- c) Describe the Rumbaugh method in detail.
- d) Define things. Explain types of things in UML.
- e) Explain Object oriented Design in detail.

**P.T.O.**

**Q3)** Attempt any Four of the following: **[4×4 = 16]**

- a) What is mean by Iterative Development? States its various advantages.
- b) Define UML. Explain architecture of UML.
- c) Explain class diagram with example.
- d) Explain relationship types in detail.
- e) Explain Booch method in detail.

**Q4)** Attempt any Four of the following: **[4×4 = 16]**

- a) What is SRS? Explain types of SRS specification.
- b) What is risk management in project management?
- c) Explain visibility modes along with well labelled diagram.
- d) What is class diagram. Explain with Notations.
- e) Draw a collaboration diagram for ATM system.

**Q5)** Attempt the following: **[3×4 = 12]**

Railway reservation system is a system used for booking tickets over internet -any customer can book tickets for different trains. Customer can book a ticket only if tickets are available. Customer searches for the availability of ticket then if the tickets are available the books the ticket by initially filling details in a form. Tickets can be booked in two ways buy i-ticket or e-ticket booking.

In case of e-ticket booking Customer can book the ticket online and the tickets are couriered to particular customer at their address, but in case of e-ticket booking and cancelling ticket are booked and cancelled online sitting at the home and customer himself has to take print of the ticket but in both the cases amount for tickets are deducted from customer's amount.

For cancellation of ticket the customer's has to go at reservation office then fill cancellation form and ask the clerk to cancel the ticket then the refund is transferred to customer's account. After booking ticket, the customer has to check out by paying fare amount to clerk.

Consider above situation. Draw the following diagram:

- a) Use case diagram
- b) Class diagram
- c) Activity diagram

