Total No. of Questions : 5]	SEAT No. :
PA-1979	[Total No. of Pages : 3

[5954]-502 T.Y.B.B.A. (C.A.)

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

Time: 2½ Hours] [Max. Marks: 70

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Neat diagram must be drawn whenever necessary.
- 3) Figures to the right indicate full marks.
- **Q1)** Attempt any Five of the following:

 $[5 \times 2 = 10]$

- a) What is realization?
- b) What is interface?
- c) What is the use of section 4 in SRS format?
- d) Define forking.
- e) List any two advantages and disadvantages of prototyping model.
- f) Define Generalization.
- g) Write down the purpose of the object diagram.
- **Q2)** Attempt any Four of the following:

 $[4 \times 4 = 16]$

- a) Explain visibility modes along with well labelled diagram.
- b) Draw component diagram for online shopping.
- c) Describe the coad and yourdon method in detail.

- d) What is use cases? State include and extend relationship among use cases with sample.
- e) How to identify the element of an object model.

Q3) Attempt any Four of the following:

 $[4 \times 4 = 16]$

- a) What is package? Explain it with import and export stereotypes.
- b) Define Relationship. Explain different kinds of relationship.
- c) Define UML. What are the goals of UML?
- d) Define Up phases with the help of diagram.
- e) Explain generic components of the object oriented design model.

Q4) Attempt any Four of the following:

 $[4 \times 4 = 16]$

- a) Draw a collaboration diagram for ATM system.
- b) What is meant by Object Oriented Analysis?
- c) Define sequence diagram. Explain sequence diagrams notations.
- d) Write short note on Type and Roles.
- e) Define the following terms:
 - i) Link.
 - ii) State.
 - iii) Branching.
 - iv) Note.

Q5) Attempt the following:

[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 the tickets are available. Customer searches for available ticket then if the tickets are available he books the tickets by initially filling details in a form.

Tickets can be booked in two ways by i-ticket or by e-ticket booking.

In case of i-ticket booking customer can book the tickets online and the ticket are couriered to particular customer at their address.

But in case of e-ticket booking and cancelling tickets 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 ticket are deducted from customers account.

For the cancellation of ticket the customer has to go at reservation office & fill form and ask the clerk to cancel the ticket and refund the amount.

After booking ticket the customer has to checkout by paying fare amount to clerk.

Consider above situation. Draw the following UMLdiagram.

- a) Use case diagram.
- b) Class diagram.
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