

Total No. of Questions : 5]

SEAT No. :

**P2140**

[Total No. of Pages : 2

**[5803]-502**

**T.Y. B.B.A. (Computer Application)**

**CA - 502 : OBJECT ORIENTED SOFTWARE ENGINEERING**

**(2019 Pattern) (Semseter - V) (CBCS)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

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

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

**[5 × 2 = 10]**

- a) List any two advantages and disadvantages of waterfall model.
- b) What is the use of section 9 in SRS format.
- c) Define Role Names.
- d) What is meant by Inception.
- e) Define forking.
- f) What is realization.
- g) List the types of inheritance.

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

**[4 × 4 = 16]**

- a) Describe the coad and yourdon method in detail.
- b) Draw a collaboration diagram for ATM system.
- c) Explain UML architecture.
- d) What is object orientation? State various reasons for why object orientation.
- e) What is class diagram. Explain with Notations.

***P.T.O.***

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

- a) Draw the deployment diagram for railway reservation system.
- b) What is meant by Iterative development state it's various advantages.
- c) Define sequence diagram. Explain different kind of it's notations.
- d) What is association. Explain any two terms in association.
- e) Define the following terms
  - i) Transition
  - ii) Concurrency
  - iii) Actor
  - iv) Navigation.

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

- a) Explain generalization relationship along with stereotype.
- b) Write short note on Type and Roles.
- c) Explain understanding requirement of object oriented analysis.
- d) Explain which diagrams are called as on interaction diagram. Explain with example.
- e) What is package? Explain it with import and export stereotypes.

**Q5)** Attempt the following : **[12]**

- a) Construct a design element for point of the sale terminal management system that can be used for buying and selling of goods in the retail shop. When the customer arrives at the post check point with the items to purchase, the cashier records each item price and add the item information to the running sales transaction. The description and price of the current items are displayed. On completion of the item entry the cashier informs the sales totals and tax to the customer. The customer chooses payment type (cash, cheque, credit/debit) After the payment is made the system generates a receipt and automatically updates the inventory, the cashier handovers the receipt to the customer.

Consider above situation draw the following UML diagram.

- i) Use case diagram.
- ii) Activity diagram.
- iii) Class diagram.

