

- Instructions :**
- (1) All questions are **compulsory**.
  - (2) Answer **each** next main question on a **new** page.
  - (3) Illustrate your answers with neat sketches **wherever** necessary.
  - (4) Figures to the **right** indicate **full** marks.
  - (5) **Use** of Non-programmable Electronic Pocket Calculator is **permissible**.
  - (6) Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.

1. (a) Attempt any **THREE** of the following [12]
  - (i) What is modeling? Also state its four features.
  - (ii) Explain concept of interface in component diagram.
  - (iii) Explain the swim lane activity diagram with one example.
  - (iv) Define multiplicity and qualification of class diagram.  
  - (b) Attempt any **ONE** of the following [6]
    - (i) Draw sequence diagram for ATM session.
    - (ii) Draw sequence diagram for placing purchase order.
  
2. Attempt any **FOUR** of the following : [16]
  - (a) Draw class diagram for library management system.
  - (b) Describe the concept of concurrent sub-state with respect to state diagram.
  - (c) Draw the deployment diagram for login form.
  - (d) Draw use case diagram for Hospital management system.
  - (e) Explain following types of relationship with notation:
    - (i) Realization
    - (ii) Generalization
    - (iii) Dependency
    - (iv) Association
  - (f) Describe notations used for deployment diagram.
  
3. Attempt any **FOUR** of the following : [16]
  - (a) Draw sequence diagram for library Management system.
  - (b) Explain forking and joining with diagram.
  - (c) Draw and explain notations used for object diagram.
  - (d) Explain SDLC in UML.
  - (e) Describe << include >> and << extend >> relationships in use case diagram.
  
4. (a) Attempt any **THREE** of the following : [12]
  - (i) Draw activity diagram for online railway reservation system.
  - (ii) Sketch component diagram for order processing.
  - (iii) What is modeling? What are four principles of modeling?
  - (iv) Discuss Role name, Constraint, Ordering.  
  - (b) Attempt any **ONE** of the following : [6]
    - (i) What is importance of nested activity diagram?.
    - (ii) Draw state diagram for online movie reservation system.
  
5. Attempt any **TWO** of the following : [16]
  - (a) What is primary and secondary actors in use case? Draw a use case diagram for hotel management system.
  - (b) Draw the symbols in deployment diagram and state use of it.
  - (c) Explain conceptual model of UML.

6. Attempt any **FOUR** of the following :

[16]

- (a) Discuss in brief OMT by Rumbaugh.
- (b) What do you mean by artifacts in deployment diagram?
- (c) Draw class diagram for bank system.
- (d) Draw component diagram for airline reservation system.
- (e) Draw swim lane activity diagram for setting exam paper.

**Paper Discussion Schedule for T.Y. Diploma Sem.VI**

<b>Date</b>	<b>Day</b>	<b>Timing</b>	<b>Centre</b>
9 April 2017	Sunday	9 a.m. to 11 a.m.	Dadar, Nerul
9 April 2017	Sunday	12 p.m.to 2 p.m.	Thane

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