

Code: 17F00401

MCA IV Semester Regular Examinations May 2019

**OBJECT ORIENTED ANALYSIS & DESIGN**

(For 2017 admitted batches only)

Time: 3 hours

Max. Marks: 60

Answer all the questions

\*\*\*\*\*

- 1 (a) Describe the attributes of a complex system.  
(b) Explain role of abstraction and role of hierarchy.

**OR**

- 2 (a) Explain OOP, OOD and OOA.  
(b) What do you mean by hierarchy? Demonstrate hierarchy using single & multiple inheritance and aggregation.

- 3 (a) List kinds of object relationships and explain with examples.  
(b) Explain in detail the process of measuring quality of an abstraction.

**OR**

- 4 (a) Explain behavior analysis and domain analysis approaches for object oriented system analysis.  
(b) Discuss in brief about key abstractions and mechanisms.

- 5 (a) Explain common mechanisms applied in UML.  
(b) Explain modeling structural relationships with example.

**OR**

- 6 (a) Discuss the behavioral diagrams used to handle dynamics of designing a system.  
(b) Explain with example, modeling a logical database schema.

- 7 (a) Explain names, owned elements and visibility with respect to packages.  
(b) What is the significance of ports? Demonstrate their usage for components.

**OR**

- 8 (a) Explain modelling an embedded system with sketch.  
(b) Explain with neat diagram modelling a fully distributed system.

- 9 (a) What is use-case diagram? Explain modelling the context of a system with the help of use-case diagram.  
(b) Considering a relevant example, explain transition in state machine.

**OR**

- 10 (a) Demonstrate modelling flow of control by time-ordering with suitable example.  
(b) Explain time and location with respect to model a system.

\*\*\*\*\*