

M. Sc. (Computer Science) 3rd Semester Examination – 2019 (DDE)

Subject: Computer Science

Paper: MCS – 301 (Object Oriented Analysis and Design)

Full Marks: 22½

Time: 1 Hour

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer question number 1 and any three questions from the rest.

- 1) Write short note *on any one (1)* of the following: 7½
 - a) Different types of diagrams as per UML – 1 specification.
 - b) Four (4) steps that are followed in Java for initialization of instance variables.
- 2) Briefly explain **role, responsibility and behavior** models in OOAD. 5
- 3) What are **actor, reactor and agent** in OOAD? Explain. 5
- 4) Briefly explain **association, aggregation and composition** in OOAD with suitable diagram. 5
- 5) Draw **Use Case Diagram** for a typical ATM (Automated Teller Machine). 5
- 6) Explain methods for initializing arrays in Java with suitable examples. 5