

Sub: - Objective I: - Software Architecture

Q.P. Code : 814701

(3 Hours)

[ Total Marks : 80

- N.B. :** (1) Question number 1 is compulsory.  
 (2) **Attempt** any **three** from the remaining.  
 (3) Assume suitable data.

1. Design Domain-Specific Software Architecture (OSSA) for online shopping website Management System. Assume suitable entities, attributes etc. Domain Model must consists following :- 20
  - a) Domain Dictionary and Information Model.
  - b) Feature Model and Operational Model.
2.
  - a) Define Architectural analysis. Discuss various analysis types with an example. 10
  - b) Define the following terminology :- 10
    - 1) Component
    - 2) Configuration
    - 3) Ambiguity
    - 4) Architectural Pattern
    - 5) Precision
3.
  - a) Discuss Service-Oriented Architecture (SOA) and Web Service. 10
  - b) Explain with an example Software System Mobility and Architecture. 10
4.
  - a) Explain the distributed object style in connection with CORBA middleware. 10
  - b) What is C2 style? Explain its architecture. 10
5.
  - a) Discuss frameworks for the Pipe-and-Filter Architectural Style. 10
  - b) Discuss Elements of the Architectural Style. 10
6. Write short notes on the following. 20
  - a) Peer-to-Peer style.
  - b) Challenges in Migrating Code.
  - c) System Stakeholders.
  - d) Simulation-Based Analysis.