

[Time: 3 Hours]

[Marks:80]

Please check whether you have got the right question paper.

- N.B: 1. Question No. 1 is compulsory.
2. Attempt any Three questions out of remaining questions.
3. Make suitable assumptions whenever necessary.

- Q.1** Design Domain-Specific Software Architecture (OSSA) for online admission for MCA in Mumbai University System. Assume suitable entities, attributes etc. Domain Model must consists following :- **20**
a) Domain Dictionary and Information Model.
b) Feature Model and Operational Model.
- Q.2** Discuss Architectural Analysis Goals. Explain types of Analysis. **10**
Explain in short the following terminology: **10**
1) Accuracy
2) Precision
3) Rationale
4) Design Recovery
- Q.3** a) Discuss Elements of the Architectural Style. **10**
b) What is Connector. What is the role of Connector. Give Variation Dimensions of Distributor Connector. **10**
- Q.4** a) Discuss Service -Oriented Architectures. **10**
b) Discuss Design issues for NFP's: Dependability and Adaptability. **10**
- Q.5** a) Discuss frameworks for Pipe-and-Filter Architectural Style. **10**
b) What is ATAM? Explain in detail. **10**
- Q.6** Write short notes on the following (any Two) **10**
a) Simulation-Based Analysis
b) Challenges in Migrating Code
c) Stakeholder driven modeling.
