

[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** (4x5)
- a. What is the difference between an architectural style and an architectural pattern?
  - b. Compare Virtual Machine and Client-server architectural styles.
  - c. What is a duct? What purpose does it serve?
  - d. Name and describe the four possible roles played by a connector.
  - e. What are data-intensive connectors?
- Q.2**
- a. List Architectural Analysis Goals. Explain scopes of Analysis. **10**
  - b. Discuss Design issues for NFP's: Dependability and Adaptability. **10**
- Q.3**
- a. What is the difference between stateful and stateless mobility? Which is more challenging to realize. Justify your answer. **10**
  - b. What is AT AM? Explain in detail. **10**
- Q.4**
- a. What is a product line? How does it differ from a domain? **10**
  - b. What is DSSE? What are the three main concerns addressed by DSSE? How do they relate to one another? **10**
- Q.5**
- a. Name and Describe the different deployment activities. **10**
  - b. What are some criteria that can be used to evaluate architecture implementation frameworks? Explain C2 style. **10**
- Q.6** (10x2)
- a. Simulation based Analysis
  - b. Pareto Optimal
  - c. Stakeholder
  - d. Model-based Analysis

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