

[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 the remaining questions
  3. Make suitable assumptions wherever necessary.

- Q.1 Define and explain the following terms :
- a. Software Architecture versus Software Design. **5**
  - b. Modularity **5**
  - c. Task Structure Matrix **5**
  - d. Psychology and Philosophy of Design **5**
- Q.2 a. Explain in detail elements of software architecture. **10**
- b. Explain the concept of models in detail along with their usage and roles. **10**
- Q.3 a. Discuss in detail 4+1 view Model of Architecture. **10**
- b. Explain any two architectural styles in detail. **10**
- Q.4 a. Explain Architectural Description Language (ADL) in detail. **10**
- b. What are the problems in Software Architectural Design? **10**
- Q.5 a. What is the role of connector? Explain it with an example. **10**
- b. How to improve software architecture quality? Also explain the importance of assessing its quality. **10**
- Q.6 Write short notes on **any two** of the following : **20**
- a) Meta Models
  - b) Cohesion and Coupling
  - c) Software Product Life Cycle