

Reg. No. :

Question Paper Code : Z 9381

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2009.

Fifth Semester

Software Engineering

XSE 351 — SOFTWARE ARCHITECTURE

(Regulation 2003)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is meant by Software architecture?
2. Mention the important invariants of pipe (V,e) architectural style.
3. Specify any three domains in which shared information systems appear.
4. State the factors that are to be considered for solving building design problem.
5. What is meant by 4+1 view architectural model?
6. What is the use of CORBA architectural patterns?
7. State any four functional dimensions of user interface system.
8. What is meant by quality functional deployment?
9. What are the drawbacks of general purpose architecture tools?
10. What is the use of fable?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the need of software architecture. (6)
(ii) Explain layered architectural style with an application. (10)

Or

- (b) (i) Discuss the structure of architectural style with an application. (10)
(ii) Explain the strategy used to create best architecture for a system. (6)
12. (a) Explain different models used for specifying shared information system in business data processing. (16)

Or

- (b) (i) Discuss the structure of traditional compiler model. (6)
(ii) Comparison of pipe filter and repository system for integrating software development environments. (10)
13. (a) (i) Explain the design strategy used in UML. (10)
(ii) Explain the use of different diagrams generated using UML. (6)

Or

- (b) Discuss CORBA architectural pattern for describing open distributed system. (16)
14. (a) (i) Discuss the use of design space. (6)
(ii) Explain the design rules specified for user interface system. (10)
- (b) (i) State the properties of first class connector. (6)
(ii) Explain the design decisions to be considered for implicit invocation systems. (10)

15. (a) Describe Keyword in Context (KWIC) indexer using UNICON architectural description language. (16)

Or

- (b) Explain AESOP as generic tool for describing any architectural style. (16)