Reg. No. | | | | | | | | | | | | |

**Question Paper Code : 27467**

**5 Year M.Sc. DEGREE EXAMINATION, MAY/JUNE 2016**

**Fifth Semester**

**Software Engineering**

**XSE 351/10677 SW 504 – SOFTWARE ARCHITECTURE**

**(Regulations 2003/2010)**

**Time : Three Hours** **Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. Write about the disadvantages of object-oriented systems.

2. Substantiate, why Main Program/Subroutine with shared data style is not suitable for KWIC.

3. Define hared information system.

4. Define software architecture.

5. Mention the functional and structural dimensions for a user-interface system.

6. What is meant by QFD ?

7. State any four functional dimensions of user interface system.

8. What is meant by quality functional deployment ?

9. Write a short note on AESOP.

10. Define architectural design.

## 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 in detail the necessary architectural structures for shared information system that is suitable for banking system. **(16)**

**OR**

(b) Explain the scope of integration software development environment domain with an example. **(16)**

13. (a) (i) Discuss the features of quantified design space. **(8)**

(ii) Describe the quality assurance technique Quality Function Deployment and its process. **(8)**

**OR**

(b) (i) Explain the design rules for user-interface architecture. **(6)**

(ii) Explain the functional and structural dimension of user interface system. **(10)**

14. (a) Write notes on the following :

(i) Formalizing an architectural style. **(8)**

(ii) Adding implicit invocation to traditional programming languages. **(8)**

**OR**

(b) (i) Briefly explain the features of an ideal architectural description language. **(8)**

(ii) Describe the properties of first class connectors. **(8)**

15. (a) Name three examples for research systems that aim to support architectural design and analysis. Briefly explain about the components and connectors in UniCon. **(16)**

**OR**

(b) (i) Define Fable, Illustrate the structure of a Fable. **(8)**

(ii) For the KWIC problem, offer different solutions using different architectural styles. Compare the solutions based on the Quality attributes. **(8)**

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