



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

SIXTH SEMESTER – APRIL 2022

UCS 6501 – SOFTWARE ARCHITECTURE

Date: 15-06-2022

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

PART – A

ANSWER ALL THE QUESTIONS

(10×2=20)

1. Define software architecture.
2. What are the different influenced aspects for better software architecture?
3. State on Process control architecture.
4. List any two features of Heterogeneous Architectures.
5. State on shared information system.
6. What is Database integration?
7. What do you understand by Domain driven design?
8. Define the term Module.
9. State on cohesive mechanism.
10. What is core-domain?

PART – B

ANSWER ALL THE QUESTIONS

(5×8=40)

11. a) Give a brief note on Layered Systems.
(OR)
b) Compare repositories and interpreters with respect to architectural styles.
12. a) Explain process control paradigm with various process definitions.
(OR)
b) Illustrate on Instrumentation Software.
13. a) Bring out the guidance for User-Interface architectures.
(OR)
b) Discuss the significances of integration in software development environments.
14. a) Illustrate on Layered architecture.
(OR)
b) Write a note on domain events.
15. a) Describe the relationships between bounded contexts.
(OR)
b) State on context mapping for strategic design.

PART – C

ANSWER ANY TWO QUESTIONS

(2×20=40)

16. a) Explain Pipes and Filter architectural styles with an illustrative example. (10)
- b) Explain the architectural styles based on Data abstraction and object-oriented organization (10)
17. a) Consider the case study of building a software controlled mobile robot. Describe its challenging problems and design considerations with any four requirements. Finally give the solution by layered architecture for all the four requirements. (10)
- b) Explain the functions of architecture structures for shared information system. (10)
18. a) Describe the Life cycle of a domain object. (10)
- b) Describe the steps involved in making implicit concept explicit in detail. (10)

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