



USN

10CS/IS81

Eighth Semester B.E. Degree Examination, Dec.2023/Jan.2024
Software Architecture

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART – A

- 1 a. What are the different activities involved in creating software architecture? (06 Marks)
b. Identify the influences of Architectural Business Cycle (ABC) to and from software Architecture. (08 Marks)
c. Explain the three important architectural structures. (06 Marks)
- 2 a. What is meant by heterogeneous architecture? With example explain the three kinds of heterogeneity. (10 Marks)
b. With a neat diagram, explain feedback and feedforward control systems. (06 Marks)
c. Write the advantages and disadvantages of impact invocation in architecture style. (04 Marks)
- 3 a. What is performance scenario? With diagram explain attributes of performance general scenario. (10 Marks)
b. Explain fault detection and fault recovery in availability tactics. (10 Marks)
- 4 a. What do you mean by architecture pattern? How it is categorized? Explain the structure part of the solution for ISD layered architecture. (10 Marks)
b. Briefly explain any five steps used to implement the pipes and filter pattern. (10 Marks)

PART – B

- 5 a. Define Presentation Abstraction Control (PAC) architectural pattern. With diagram explain the structure of PAC architectural pattern. (10 Marks)
b. Explain the implementation steps of Model View Controller (MVC). (10 Marks)
- 6 a. Describe the implementation steps of Microkernel architecture. (12 Marks)
b. What is Reflection architectural pattern? Explain the structure of reflection architecture pattern. (08 Marks)
- 7 a. What are the variants of whole – part design pattern? Explain them. (05 Marks)
b. With diagram explain the six phases of master slave design pattern. (10 Marks)
c. Write any five variants that may be possible in proxy design pattern. (05 Marks)
- 8 a. What is evolutionary delivery life cycle model? Draw and explain the evolutionary delivery life cycle model. (08 Marks)
b. What are suggested standard organization points for interface documentation? (12 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.