

BANGALORI

Eighth Semester B.E. Degree Examination, Jan./Feb. 2023 Software Architectures

Time: 3 hrs.

Max. Marks:100

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

PART - A

- a. Define Software Architecture. With the help of neat block diagram of ABC (Architecture Business Cycle). Explain in detail different activities which are involved in creating a software architecture. (10 Marks)
 - b. Write a note on structure recommendation, process recommendation.

(10 Marks)

- 2 a. Explain in brief about KWIC (Keyword In Context) problem with abstract datatypes and implicit invocation styles to implement. (10 Marks)
 - b. Explain in detail about blackboard architectural style with its advantages and disadvantages.
 (10 Marks)
- 3 a. Explain availability tactics with Fault detection, Fault prevention and Fault recovery method. (10 Marks)
 - b. Classify the Security tactics. What are the different tactics for resisting attacks? (10 Marks)
- 4 a. Explain in detail about layered architecture pattern. Write its advantages and disadvantages.
 (10 Marks)
 - b. Explain in detail about Blackboard Architectural Pattern with its various participating components. (10 Marks)

PART - B

- 5 a. Define Broker architecture pattern. Explain types of participating components which comprises it. (10 Marks)
 - b. Explain with neat diagram, the Dynamic Scenarios of Model View Controller. (10 Marks)
- 6 a. What are the steps in implementing microkernel pattern? (10 Marks)
 - b. Bring about reflection pattern. Write its liabilities. (10 Marks)
- 7 a. Briefly explain the benefits of Master Slave pattern. (10 Marks)
- b. Explain the variants of whole part pattern design. (10 Marks)
- 8 a. Explain in detail the different steps performed while designing an architecture using the ADD method. (10 Marks)
 - b. Write a short note on:
 - i) Forming the team structure
 - ii) Documenting the view.

(10 Marks)

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