

# CBCS Scheme

USN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

16MCA443

## Fourth Semester MCA Degree Examination, June/July 2018 Software Architecture

Time: 3 hrs.

Max. Marks: 80

**Note:** Answer FIVE full questions, choosing one full question from each module.

### Module-1

- 1 a. What is software Architecture? Explain the different structures. (08 Marks)  
b. What makes a good architecture? Explain the rule of thumb. (08 Marks)

OR

- 2 a. Explain in detail about the project life cycle context. (08 Marks)  
b. Explain with a neat diagram, how is Architecture Influenced? (08 Marks)

### Module-2

- 3 a. Explain the general scenario of the availability quality attribute. (08 Marks)  
b. Explain the tactics for the quality attribute modifiability. (08 Marks)

OR

- 4 a. Explain the general scenario of the performance quality attribute. (08 Marks)  
b. Explain the tactics for the quality attribute testability. (08 Marks)

### Module-3

- 5 a. Explain a Queuing model of performance for MVC with neat diagram. (08 Marks)  
b. Describe quality attribute checklists, thought, experiments and back – of – the envelope analysis. (08 Marks)

OR

- 6 a. Explain Gathering ASR from Requirements Documents. (08 Marks)  
b. Explain the categorization of Business Goals. (08 Marks)

### Module-4

- 7 a. Explain generate and test process of architecture design with a neat diagram. (08 Marks)  
b. Explain the steps of Attribute Driven Design method. (08 Marks)

OR

- 8 a. Mention and explain the types of Notations. (04 Marks)  
b. Mention and explain three step methods for choosing the view. (04 Marks)  
c. Explain the test activities and architect's role in testing (08 Marks)

### Module-5

- 9 a. Explain Layers architectural pattern (08 Marks)  
b. Write a short note on pipes and filters. (08 Marks)

OR

- 10 a. Explain blackboard architectural pattern. (08 Marks)  
b. Explain Broker architecture pattern. (08 Marks)

\* \* \* \* \*

Important Note: 1. On completing your answers, compulsorily fill in the above box with your USN. 2. Answers should be treated as malpractice, if the above box is not filled. 3. Responses should be marked as per the instructions given in the question paper.