

B.E. Degree Examination, September 2020
Semester - VIII

CS16011 – ADVANCED SOFTWARE ENGINEERING

(Computer Science and Engineering)

(Regulation 2016)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions

PART A - (8 X 2 = 16 marks)

1. If you were a lead developer of a software company and you are asked to submit a project/product within a stipulated time-frame with no cost barriers, which model would you select?
 - A) Waterfall
 - B) Spiral
 - C) RAD
 - D) Incremental
2. Which of the following is not a dimension of scalability?
 - A) Size
 - B) Distribution
 - C) Manageability
 - D) Interception
3. Agile Software Development is based on
 - A) Incremental Development
 - B) Iterative Development
 - C) Linear Development
 - D) Both Incremental and Iterative Development
4. Which architecture is used when there is a high volume of transactions to be processed by the server?
 - A) Multi-tier client–server architecture
 - B) Master-slave architecture
 - C) Distributed component architecture
 - D) Peer-to-peer architecture
5. Why knowledge acquisition is a non linear process? Explain.
6. How is Traceability maintained?
7. How do you deal when requirements change frequently?
8. Consider, your company wishes to move from using desktop applications to accessing the same functionality remotely as services. Identify three risks that might arise in the transition.

PART B - (4 X16 = 64 marks)

9. (a) Discuss various software development life cycle models. Suggest which model is best suited for delivery of end product in shorter time duration and Justify it. (16)
- (OR)**
- (b) Justify the pros of Object Oriented design using UML over traditional development methodology and explain in detail. (16)
10. (a) How will you measure the Software Development Process and the end Product? Explain in detail about Measurement scales and Scale types (16)

(OR)

- (b) How will you analyze the Experimental data? Discuss various simple data analysis techniques (16)
11. (a) Compare Various Agile Methodologies. Suggest one method of your choice, which is best suited for modern software development and Justify your answer. (16)

(OR)

- (b) Explain in detail about Scrum Methodology and discuss how this methodology could go wrong? (16)
12. (a) Explain the necessity for following the Architectural patterns with the sketch of various Architectural patterns. (16)

(OR)

- (b) Why an Object Oriented approach of software development is not suitable for a real-time system development. (16)