

Reg. No. :

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

**Question Paper Code: 43206**

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

Third Semester

Computer Science and Engineering

14UCS306 - SOFTWARE ENGINEERING

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- Which one of the following models is not suitable for accommodating any change?
  - Build AND Fix Model
  - Prototyping Model
  - RAD Model
  - Waterfall Model
- A COCOMO model is
  - common cost estimation model
  - constructive cost estimation model
  - complete cost estimation model
  - comprehensive cost estimation model
- Which of the following is not a diagram studied in requirement analysis?
  - Use Cases
  - Entity Relationship Diagram
  - State Transition Diagram
  - Activity Diagram
- What are the types of requirements?
  - Availability
  - Reliability
  - Usability
  - none of these

5. In what type of coupling, the complete data structure is passed from one module to another?
- (a) Control Coupling (b) Stamp Coupling  
(c) External Coupling (d) Content Coupling
6. The desired level of coupling is
- (a) Control coupling (b) Common coupling  
(c) Data coupling (d) No coupling
7. The main purpose of integration testing is to find
- (a) Design errors (b) Analysis errors  
(c) Procedure errors (d) Interface errors
8. For a function of two variables, boundary value analysis yields
- (a)  $4n + 3$  test cases (b)  $n + 4$  test cases  
(c)  $4n + 1$  test cases (d) None of the above
9. Which is not a size metric?
- (a) LOC (b) Program length  
(c) Function count (d) Cyclomatic complexity
10. What is related to the overall functionality of the delivered software?
- (a) Function-related metrics (b) Product-related metrics  
(c) Size-related metrics (d) None of these

PART - B (5 x 2 = 10 Marks)

11. Define Software process.
12. Distinguish between User Requirements and System Requirements.
13. What are the types of interface design?
14. Distinguish between black box testing and white box testing.
15. Define cyclomatic complexity?

PART - C (5 x 16 = 80 Marks)

16. (a) Explain the linear software life cycle model with neat diagram. Bring out the merits and demerits of this model. (16)

Or

- (b) Describe evolutionary process models with a suitable sketch. State its advantages and disadvantages. (16)
17. (a) (i) Explain about any two Requirement Elicitation Methods. (10)
- (ii) Discuss about functional and non-functional requirements. (6)

Or

- (b) Explain in detail about software document. (16)
18. (a) Discuss the differences between black box and white box testing and suggest how they can be used together in the testing process. (16)

Or

- (b) Describe the important principles and steps of user interface analysis and design. (16)
19. (a) Explain in detail about black box testing with suitable example? Explain about Equivalence class partition and boundary value analysis. State the comparison between these methods. (16)

Or

- (b) Explain in detail about integration testing process and system testing process. (16)
20. (a) What are the metrics used for estimating cost? Discuss in detail about the COCOMO model in cost estimation of the software? (16)

Or

- (b) Write short notes on the various estimation techniques. (16)

