RollNo. | | | | | | | | | | |

B.E(FT) END SEMESTER EXAMINATIONS – NOV/DEC 2023

Computer Science and Engineering

V Semester

CS6304 Software Engineering

(Regulation 2018 - RUSA)

Time: 3 Hours | Answer ALL Questions | Max.Marks 100

PART A [10 X 2 = 20 Marks]

1. What is the need for defining the phase in a Software Development Life Cycle?
2. What is the relationship between Personal Software Process [PSP] and Team Software Process [TSP]?
3. Mention any two reasons for volatile requirements?
4. Does Scenario Based Model capture the context sufficiently? Justify.
5. What are the disadvantages of Command Line Interfaces?
6. What are the advantages and disadvantages of "Black Box Testing"?
7. Why is exhaustive testing impossible?
8. What is version control and why is it important in Software Development?
9. Why are Virtual Teams becoming important for Software Development?
10. How does the number of classes in OO design relate to the project size?

PART – B (8 x 8 = 64 marks)
(Answer any 8 questions)

11. Compare and Contrast the Spiral and Unified Life Cycle Models? Illustrate with an example.
12. How does CMM and CMMI differ? Why is this difference significant?
13. How are the requirements changes carried out at the Requirements Phase and Specification Phase?
14. Illustrate the Data Flow for an online railway ticket reservation system?
15. How do the Graphical User Interface elements simplify the User Interface Design?
16. How are Decision and Loops tested in a given program?
17. Describe any four important features of a tool for managing software engineering teams?
18. Distinguish among Process, Project and Product Metrics?
19. Describe the Software Maintenance Phase?
20. Mention any four risk mitigation strategies for Software Development?
21. How does debugging find related defects in the Software?
22. Describe the salient features of COCOMO Model for cost and size estimation of software projects?

PART – C (2 x 8 = 16 marks)

23. Distinguish between Unit and Integration Testing? How are the test cases and Boundary conditions determined for each of these testing strategies?
24. How is the estimation for the development of the Software done using Function Point Analysis? What are its limitations?