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

B.E(FT) END SEMESTER EXAMINATIONS – NOV/DEC 2021

Computer Science and Engineering
Semester V
CS6304 & Software Engineering
(Regulation 2018 - RUSA)

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

PART-A (10x2= 20 Marks)

1.	How does incremental process model differs from waterfall model?
2.	Why negotiation is required in finalizing the requirements?
3.	What is Closed Interviews?
4.	How the attributes differs in different context of department of motor vehicles and manufacturing in Data Modeling?
5.	List the three golden rules of User Interface Design
6.	What kind of impact will the Validation Testing creates in software?
7.	What are Symptoms and Causes in Debugging?
8.	What are different characteristics required to make a software testable?
9.	How do you manage the risk involved in any software?
10.	What is Test Coverage?

PART – B (8 x 8 = 64 marks)

(Answer any 8 questions)

11. Discuss in detail about any one evolutionary process model with a neat sketch.

12. Explain the different phases of unified process with a neat sketch.

13. Explain in detail about the different capability levels of Capability Maturity Model Integration (CMMI) with neat sketch.

14. Explain in detail about requirements elicitation process in detail.

15. Explain in detail how the models are developed using scenario based modelling with suitable example.

16. Explain Analysis and Design models in User Interface Design with its process

17. Explain the different types of integration testing in detail with neat diagram.

18. What is black box testing? List its methods involved and explain about Graph based testing method and orthogonal array testing method.

19. Discuss in detail about the different types of control structure testing with suitable example.

20. What is Software Cost Estimation? Explain about the COCOMO II Model in Empirical Estimation Models.

21. Explain in detail about the Risk Management and Mitigation with suitable example.

22. Discuss about the different categories of Software Metrics in detail.

PART–C(2x8=16 marks)

23. Build a network based course registration system for your university using the class based models.

24. Draw the flow graph and identify all the basis path for the following code. Also compute the cyclomatic complexity for the graph using all the three methods.

```
public int find(int amt)
    {

-1-  double rC = 0;

-1-  if (nd.equals("yes") )
     {
-2-       rC = 14.50;
     }

-3-  double t = amt * .0725;

-3-  if (amt >= 1000)
     {
-4-       sc = amt * .06 + rC;
     }
-5-  else if (amt >= 200)
     {
-6-       sc = amt * .08 + rC;
     }
-7-  else if (amt >= 100)
```

```
     {
-8-        sc = 13.25 + rC;
     }
-9-  else if (amt >= 50)
     {
-10-       sc = 9.95 + rC;
     }
-11- else if (amt >= 25)
     {
-12-       sc = 7.25 + rC;
     }
     else
     {
-13-       sc = 5.25 + rC;
     }

-14- tot = amt + t + sc;
-14- return tot;

     } //end find
```