



QP CODE: 20100810



Reg No : .....

Name : .....

**BCA DEGREE (CBCS) EXAMINATION, MARCH 2020**

**Fourth Semester**

Bachelor of Computer Application

**Core Course - CA4CRT03 - SYSTEM ANALYSIS AND SOFTWARE ENGINEERING**

2017 Admission onwards

15A28E78

Time: 3 Hours

Marks: 80

**Part A**

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Define a System.
2. What are the functions of a System Analyst?
3. What is the objective of software engineering?
4. What is a software component.
5. If we have less domain knowledge(new technology) which software lifecycle model will be choosen?
6. What is Technical feasibility?
7. What do you mean by an External Entity?
8. What are internal logical files?
9. What are the parts of design process?
10. What is an object?
11. What is test case?
12. What is cyclomatic complexity?

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain guidelines for organization chart.





14. What is DSS? How it helps in decision making?
15. You selected RAD model. Explain the selection.
16. Explain the different symbols used in Use case diagram.
17. What do you mean by maintainability?
18. Explain the important properties of a modular system.
19. Explain the four general ways of characterising failure occurrences in time.
20. What is mutation testing?
21. Explain equivalence class testing.

(6×5=30)

### **Part C**

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Write a note on increment process model.
23. Explain the various cost estimation techniques.
24. Explain about IEEE Recommended practice for software design descriptions.
25. Discuss in detail about the levels of testing.

(2×15=30)

