Reg. No……………………………………..   Name…………………………………………

B.C.A. DEGREE END SEMESTER EXAMINATION OCTOBER 2017
SEMESTER – 3 : BACHELOR OF COMPUTER APPLICATIONS (CORE COURSE)
COURSE: 16U3CRBCA8, SOFTWARE ENGINEERING
(For Regular - 2016 Admission)

Time: Three Hours   Max Marks: 75

PART A
Answer *all* questions. Each question carries **1** mark.

1. Define Software Engineering.
2. What are the attributes of good software?
3. What is meant by feasibility study?
4. List various objectives of Software Project planning.
5. Name the key elements involved in user interfaces.
6. What is a Real-time system?
7. Define Smoke Testing.
8. What do you mean by white box testing?
9. Define debugging.
10. What is the purpose of DFD?

(1 x 10 = 10)

PART B
Answer *any eight* questions. Each question carries **2** marks.

11. List the characteristics of software project.
12. Distinguish between verification & validation.
13. Mention any two non-functional requirements on software to be developed.
14. What is known as SRS review? How is it conducted?
15. What do you mean by horizontal and vertical partitioning?
16. List the guidelines for data design.
17. What is stress testing?
18. State the objectives and guidelines for debugging.
19. List out the importance of cost estimation in software development.
20. List any 4 categories of CASE tools.   (2 x 8 = 16)

PART C

Answer *any five* questions. Each question carries **5** marks.

21. Explain about RAD Model.
22. Discuss in detail the data modeling activity.
23. Draw DFD diagram for Library Management System.
24. Explain data architectural and procedural design for a software.
25. Explain the set of principles for Software Engineering Design.
26. Distinguish between alpha and beta testing?
27. Explain in detail about the Maintenance Process.

(5 x 5 = 25)

PART D

Answer *any two* questions. Each question carries **12** marks.

28.
   a. What are the necessities of Life cycle model? Elaborate on the various Software life cycle models and its issues?
   b. Which is more important the product or process? Justify your answer.

29.
   a. Explain the ways and means for collecting the software requirements and how are they organized and represented?
   b. Draw an ER diagram for University Information System.

30. What are the characteristics of a good design? Describe different type of coupling and cohesion. How design evaluation is performed?

31.
   a. What are the upper and lower CASE tools? What is the purpose of upper-CASE tools?
   b. Explain in detail the COCOMO model.

(12 x 2 = 24)

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