

V Semester B.C.A. Degree Examination, Nov./Dec. 2015  
(Y2K8 Scheme) (F + R)  
BCA 501 : SOFTWARE ENGINEERING  
(100 – 2013-14 and Onwards) (90 – Prior to 2013-14)

Time : 3 Hours

Max. Marks : 90/100

**Instructions :** Section – A, B, C is common to all. Section – D is applicable to the students who have admission in 100 marks.

## SECTION – A

Answer **any ten** questions. **Each** question carries **2** marks. **(10×2=20)**

1. What is software product ? Name two types of software product.
2. What is the difference between software engineering and system engineering ?
3. What is system decommissioning ?
4. What are functional requirements ? Give one example.
5. Define cohesion and coupling.
6. What is test case ? Give one example for test case.
7. Define volatile requirement.
8. List different phases of project management.
9. What is quality assurance ? What is the purpose of quality assurance ?
10. Define reliability. Mention its types.
11. Write any two characteristics of GUI.
12. What is fault detection and recovery ?

## SECTION – B

Answer **any five** questions. **Each** question carries **5** marks. **(5×5=25)**

13. Discuss the challenges of software engineer.
14. Explain system procurement process in detail.



15. Explain prototyping model.
16. Describe any two styles of user system interaction.
17. What is risk identification ? Explain its techniques.
18. Write a short note on black box testing.
19. Explain different types of interface errors.
20. Explain different types of software reliability metrics.

### SECTION – C

Answer **any 3** questions :

**(3×15=45)**

21. Explain spiral model with neat diagram. Discuss advantages and disadvantages. **15**
22. a) Explain requirement elicitation and analysis process. **8**  
b) Discuss object oriented design process in detail. **7**
23. a) Explain IEEE structure of SRS. **10**  
b) Write SRS for library system. **5**
24. a) Explain the contents of test plan. **8**  
b) Explain different levels of testing. **7**
25. a) Explain quality control in detail. **8**  
b) Write a short note on software productivity. **7**

### SECTION – D

Answer **any 1** question. **Each** question carries **ten** marks.

**(1×10=10)**

26. Explain the fundamental process activities involved in SDLC with neat diagram. **10**
27. Write a short note on :  
a) Context model. **5**  
b) COCOMO model. **5**