



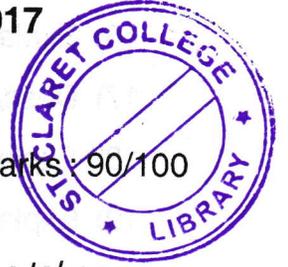
SN – 673

36

V Semester B.C.A. Degree Examination, Nov./Dec. 2017  
(Repeaters) (Y2K8 Scheme)  
(BCA 501) : SOFTWARE ENGINEERING

Time : 3 Hours

Max. Marks 90/100



- Instructions :** 1) Section – A, B, C is common to all.  
2) Section – D is applicable to the students who have taken admission in 2011-12 and onwards.

SECTION – A

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

- 1) What is Software Engineering ? Mention any two components of Software Engineering.
- 2) Explain system decommissioning.
- 3) Define SRS. List any two characteristics of a good SRS.
- 4) What is requirement management process ?
- 5) Define prototype. Mention its characteristics.
- 6) Explain Loose coupling and Tight coupling.
- 7) What is structural decomposition ?
- 8) What are the characteristics of GUI ?
- 9) Define POFOD.
- 10) Define verification and validation.
- 11) What is interface testing ? Mention any two types of interfaces.
- 12) What is software risk ?

SECTION – B

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

- 13) What is software process ? Explain the different activities of software process.
- 14) Write a note on data-flow models.
- 15) Describe the difference between functional and non-functional requirements.

P.T.O.



- 16) Explain evolutionary and throw-away prototyping.
- 17) Describe the various software design principles.
- 18) Explain advantages and disadvantages of software reuse.
- 19) Explain cyclomatic complexity.
- 20) Write a note on software maintenance.

## SECTION - C

III. Answer **any three** questions.

(3×15=45)

- 21) a) Define SDLC. Explain the different phases of SDLC.  
b) Explain different phases of system engineering process with a neat diagram. (7+8)
- 22) a) Write the structure of SRS document.  
b) Explain user interface prototyping with a neat diagram. (8+7)
- 23) a) Explain cohesion and explain different types of cohesion.  
b) Discuss object oriented process in details. (8+7)
- 24) a) Explain different types of reliability metrics.  
b) Explain user-interface design activities. (8+7)
- 25) a) Describe different types of testing.  
b) Explain cocomo model. (8+7)

## SECTION - D

IV. Answer **any one** question. **Each** question carries **10** marks.

(10×1=10)

- 26) Compare and contrast between waterfall model and spiral model. 10
- 27) Write short note on :
  - a) Software Quality Assurance. 5
  - b) System Procurement Process. 5