

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

**B.Tech.(CSE/Electronics & Computer Engg./IT) (2011 Onwards) (Sem.-6)**

**SOFTWARE ENGINEERING**

**Subject Code : BTCS-603**

**Paper ID : [A2308]**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION-A**

**Answer briefly :**

1. What is client server environment?
2. What is white box testing?
3. What is a formal method system?
4. What do you mean by metrics?
5. What is cyclomatic complexity?
6. Define software engineering as defined in IEEE 610.12.1990 standard.
7. Write four advantages of using software engineering for development of software.
8. What do you mean by SEI-Capability Maturity Model?
9. Which software fails?
10. What are disadvantages of using library routines?

## SECTION-B

11. What are size metrics? How is function point metric advantageous over LOC metric?
12. How do you assess the quality of software design? Discuss SQA plan.
13. What is meant by modular design? When and how should a modular design be implemented?
14. Discuss White Box techniques in detail.
15. Discuss Mutation testing technique in detail.

## SECTION-C

16. What are the five levels of CMM? List important features of each of these levels.
17. Explain the following :
  - a) Use-Case diagrams
  - b) Software metrics
  - c) CASE
18. a) What is the difference between decision table and decision tree?  
b) What is difference among formal, semiformal and informal methods of software development?