

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086**  
**(For candidates admitted during the academic year 2015-16)**

**SUBJECT CODE : 15CS/PC/ST44**

**M. Sc. DEGREE EXAMINATION, APRIL 2017**  
**INFORMATION TECHNOLOGY**  
**FOURTH SEMESTER**

**COURSE : CORE**  
**PAPER : SOFTWARE QUALITY ASSURANCE AND TESTING**  
**TIME : 1 ½ HOURS** **MAX. MARKS: 50**

**SECTION - A**

**Answer all the following:** **(5 x 2 = 10)**

1. Define Verification and Validation.
2. What is the purpose of a System Test Plan?
3. State the two major assumptions of Mutation Testing.
4. Give the types of Data Flow Anomalies.
5. Brief about the major objectives of Acceptance Testing.

**SECTION - B**

**Answer any four of the following:** **(4 x 5 = 20)**

6. Describe the sequence of testing activities involved in testing a program.
7. Write short notes on the characteristics of Automated Test Cases.
8. Define Debugging. Give its approaches.
9. Discuss about Data Flow Graph.
10. Explain the acceptance criteria for any five quality attributes.
11. Elaborate on Test Design preparedness Metrics.

**SECTION - C**

**Answer any two of the following:** **(2 x 10 = 20)**

12. Explain the types of Path Selection Criteria.
13. Compare Top Down and Bottom Up Technique. Give its advantages and Disadvantages.
14. (a) Discuss about McCall's Quality Factor.  
(b) Write short notes on Test Execution Strategy.

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