

# CBCS Scheme

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15CS552

**Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018**

## **Introduction to Software Testing**

Time: 3 hrs.

Max. Marks: 80

**Note: Answer any FIVE full questions, choosing one full question from each module.**

### Module-1

- 1 a. Explain Testing and Debugging cycle with a diagram. (08 Marks)  
b. What are errors? Explain Software quality in detail. (08 Marks)

OR

- 2 a. Explain Levels of testing with a neat diagram. (08 Marks)  
b. Explain Functional Testing and structural Testing. (08 Marks)

### Module-2

- 3 a. Write a Pseudo code for structured programming version of triangle programme. (08 Marks)  
b. List and explain equivalence class Testing with diagram. (08 Marks)

OR

- 4 a. Explain Boundary value analysis and Robustness Testing. (08 Marks)  
b. What are Decision Tables? Draw the Decision Table for Triangle problem. (08 Marks)

### Module-3

- 5 a. Explain Fault Based Adequacy Criteria. (08 Marks)  
b. Explain mutation Analysis Terminologies. (08 Marks)

OR

- 6 a. Explain in brief :  
i) Statement Testing ii) Branch Testing. (08 Marks)  
b. Explain McCabe's Basis path method. (08 Marks)

### Module-4

- 7 a. Define scaffolding. Explain Generic versus specific scaffolding. (08 Marks)  
b. Define: i) Sensitivity ii) Restriction iii) Partition iv) Visibility. (08 Marks)

OR

- 8 a. Explain the following :  
i) Risk Planning ii) Monitoring the process. (08 Marks)  
b. Explain the following:  
i) Quality Goals ii) Dependability properties. (08 Marks)

### Module-5

- 9 a. Explain the following :  
i) Usability ii) Regression testing (08 Marks)  
b. Explain the upper level SATM Finite state machine. (08 Marks)

OR

- 10 a. Explain the path based integration testing. (08 Marks)  
b. Explain call graph based integration. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.