

1st Sessional Examination 2017-18 (Odd Semester)

Roll No.:

Subject Name: SOFTWARE TESTING

Year/Branch: 4th yr/CS/IT

Subject Code: NCS-071

Max Time: 1Hours 30 Minute

Max Marks: 50

SECTION-A

Q.1 Attempt all parts carry equal marks. Write answer of each part in short. (2x5=10)

- (a) Define quality assurance.
- (b) Differentiate between Testing & Debugging.
- (c) Describe the limitations of testing?
- (d) Explain cyclomatic complexity ? Discuss different ways to compute it with examples.
- (e) Differentiate between verification & validation.

SECTION-B

Note: Attempt any five questions from this section. (5x5=25)

Q.2How is data flow testing performed? Explain in detail with the help of an example.

Q.3 What is mutation testing ? Explain with example.

Q.4 Explain the Equivalence class testing technique with example.

Q.5 Why exhaustive testing is not possible?

Q.6 State the goals of software testing.

Q.7 Determine the limitations of boundary value analysis technique? Discuss the situations in which it is not effective.

Q.8 Testing is not a single phase in the software development life cycle .Explain and comment.

Q.9 Discuss Branch coverage and condition coverage with example

SECTION-C

Note: Attempt any two questions from this section. (7.5x2=15)

Q.10 Consider a program for the determination of largest amongst three numbers. Its input is a triple of positive integers (a,b,c) & values are from interval [0,100]. Draw the program graph, DD.path graph, & Calculate the cyclomatic complexity & also find the independent paths.

Q.11 Differentiate between black box & white box testing technique. Consider a program to find the largest amongst 3 numbers. Generate test cases using one black box testing & one White box testing technique.

Q.12 What is decision table? What are condition stubs & condition entries? Develop a decision table & generate test case for the triangle problem.