

[4959] - 212A

4

BE (Computer)

Software Testing & Quality Assurance

-2008 Course (410445)

ELECTIVE - II

MAY 2016

Time: 3 hours

Max.Marks: 100

Instructions to the Candidates:

1. Answer to the two Sections should be written in Separate books.
2. Neat diagrams must be drawn wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data, if necessary.

SECTION - I

- Q1) a) What is software testing? Discuss the various software testing strategies. [8]
- b) Explain in brief the software testing life cycle. [8]

OR

- Q2) a) What you mean by coding defects? Explain Developer/ Tester support for Defect Repository. [8]
- b) Describe in detail Test Plan. How to check defects in Test Plan & Test cases. [8]
- Q3) a) What is black box testing? Why black box testing? When to do black box testing? [8]
- b) Describe boundary value analysis with an example. [8]

OR

- Q4) Write Short Notes on (any two) [16]
- a) Domain Testing.
 - b) Positive and Negative Testing.
 - c) User Documentation Testing.
 - d) Test case design for black box Testing.
- Q5) a) Explain white box testing in detail with example. Describe the challenges in white box testing. [12]
- b) Write short note on Mutation Testing. [6]

OR

- Q6) a) Describe test case designs for white box testing. [6]
b) Write a short note on testing of Object Oriented Systems. [6]
c) Explain in short data flow testing. [6]

SECTION – II

- Q7) a) What is regression testing? Types of regression testing. When to do regression testing? [8]
b) Describe Smoke, Sanity & Random Testing. [8]

OR

- Q8) a) Why we need metrics in testing? Describe types of metrics. [8]
b) Describe in detail Adhoc & Scenario Testing with suitable examples. [8]
- Q9) a) Describe "Total Quality Management" (TQM) principles of continual improvement. [9]
b) What is meant by software quality control? Explain the method of measuring software reliability as a software quality attribute. [9]

OR

- Q10) a) Explain "Quality" in term of the generic expectations from any product. Differentiate between continuous improvement & continual improvement. [8]
b) Describe in brief Quality Assurance & Quality Control. [5]
c) Write a short note on Six Sigma. [5]
- Q11) a) Name a few benefits of using software test tools & automation. [8]
Describe principal attributes of tools and automation.
b) Describe the guidelines for tool selection. Which skills are required for a tester before using a tool for testing? [8]

OR

- Q12) Write Short note on [16]
a) Manual Testing
b) Automated Testing
c) GUI Testing
d) Rational Robot