Printed Pages : 3

EIT062

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 113602

Roll No.

B. Tech.

(SEM. VI) THEORY EXAMINATION, 2014-15
SOFTWARE TESTING

Time : **3** Hours]   [Total Marks : **100**

Note : Attempt ALL questions.

1   Attempt any four parts of the following: **5×4=20**

    (a)   What is testing? Differentiate between effective and exhaustive software testing.

    (b)   Define the following terms:
Errors, faults and failures.

    (c)   Differentiate between testing and debugging.

    (d)   Why do bugs occur? How many states does a bug have?

    (e)   What is software testing life cycle?

    (f)   Write a note on test metrics and measurements.

2 Attempt any two parts of the following: **10×2=20**

    (a) Explain white-box testing. What are the types of errors detected by black-box testing?

    (b) What is the objective of white-box testing? What is the significance of cyclomatic complexity?

    (c) Write short notes on the following:

        (i) Model based testing

        (ii) Structural testing

3 Attempt any two parts of the following: **10×2=20**

    (a) What is the need of integration testing? Differentiate between top down and bottom up integration.

    (b) Explain acceptance testing. What is the difference between system testing and acceptance testing?

    (c) Write short notes on the following:

        (i) Beta Testing

        (ii) Scalability testing

4 Attempt any two parts of the following: **10×2=20**

    (a) How does regression testing help in producing quality software?

    (b) Explain the following regression test selection techniques:

        (i) Minimization

        (ii) Dataflow

        (iii) Ad hoc

(c) Write short notes on the following:

    (i)   Iterative testing

    (ii)   Defect seeding

5   Write short notes on any four of the following: **5×4=20**

    (a)   Test Planning

    (b)   Software Quality

    (c)   Test Management System

    (d)   Test Automation

    (e)   Software Maintenance

    (f)   Defect Management.

———