

Code: 15A05505

B.Tech III Year II Semester (R15) Regular Examinations May/June 2018

SOFTWARE TESTING

(Information Technology)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define component testing.
 - (b) What is decision statement? Give an example.
 - (c) List the applications of transaction flows.
 - (d) What is conjugation? Give an example.
 - (e) What is domain testing? Give an example.
 - (f) What is domain closure?
 - (g) Why use complementary operators for path expression?
 - (h) What are the advantages of decision tables?
 - (i) What is unreachable state?
 - (j) State the properties of relation.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 (a) Discuss about software architecture bugs.
(b) Explain different types of coding bugs.

OR

- 3 (a) Discuss about the path testing criteria.
(b) Explain single link marker instrumentation with neat flow diagram.

UNIT – II

- 4 (a) Explain about transaction flow structure.
(b) Describe the data-flow anomalies.

OR

- 5 (a) Write short notes on transaction control block.
(b) Define the following terms: (i) Slicing. (ii) Dicing. (iii) Debugging.

UNIT – III

- 6 (a) What is ugly domain? Discuss how programmers treat ugly domains.
(b) Explain about domain compatibility testing.

OR

- 7 (a) Briefly discuss about random testing.
(b) What is span compatibility? Explain it.

UNIT – IV

- 8 (a) Write short notes on distributive laws, absorption rule and loops.
(b) What is the looping probability of a path expression? Explain with an example.

OR

- 9 Explain regular expressions and flow anomaly detection.

UNIT – V

- 10 Explain with an example, how to convert specification into state-graph. Also, discuss how contradictions can come out.

OR

- 11 (a) Discuss in detail about the properties of relations.
(b) Describe the basic principles of graph matrix.