

Code No: R05320506

R05**Set No. 2****III B.Tech II Semester Examinations, December 2010****SOFTWARE TESTING METHODOLOGIES****Common to Information Technology, Computer Science And Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions****All Questions carry equal marks**

1. Explain essential and inessential finite-state behavior with examples. [16]
2. Compare the transaction testing strategies with the data-flow testing strategies. [16]
3. (a) What is meant by a nice domain? Give an example for nice two-dimensional domains.
- (b) Discuss the following terms: [8+8]
 - i. Linear domain boundaries
 - ii. Non linear domain boundaries
 - iii. Complete domain boundaries
 - iv. Incomplete domain boundaries
4. (a) What is meant by a test case? Discuss when the testing process will be stopped?
- (b) What are the factors which will decide the importance of a bug? Discuss them clearly. [8+8]
5. Minimize the following logic function using Karnaugh Map method :

$$F(A, B, C, D) = ABC'D + A'BCD + A'B'C' + A'B'D' + AC' + AB'C + B'.$$
 [16]
6. Explain about Regular Expressions and Flow-Anomaly Detection. [16]
7. (a) Explain clearly the single link marker path instrumentation with an example.
- (b) Discuss how path testing is useful to host a new code, maintenance. [8+8]
8. (a) How can the graph be represented in matrix form?
- (b) Discuss Node reduction algorithm.
- (c) How can node reduction optimization be done? [3+7+6]

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R05**Set No. 4****III B.Tech II Semester Examinations, December 2010****SOFTWARE TESTING METHODOLOGIES****Common to Information Technology, Computer Science And Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions****All Questions carry equal marks**

1. (a) What is meant by a nice domain? Give an example for nice two-dimensional domains.
- (b) Discuss the following terms: [8+8]
 - i. Linear domain boundaries
 - ii. Non linear domain boundaries
 - iii. Complete domain boundaries
 - iv. Incomplete domain boundaries
2. (a) How can the graph be represented in matrix form?
- (b) Discuss Node reduction algorithm.
- (c) How can node reduction optimization be done? [3+7+6]
3. Explain about Regular Expressions and Flow-Anomaly Detection. [16]
4. Compare the transaction testing strategies with the data-flow testing strategies. [16]
5. (a) Explain clearly the single link marker path instrumentation with an example.
- (b) Discuss how path testing is useful to host a new code, maintenance. [8+8]
6. Minimize the following logic function using Karnaugh Map method :
 $F(A, B, C, D) = ABC'D + A'BCD + A'B'C' + A'B'D' + AC' + AB'C + B'$. [16]
7. Explain essential and inessential finite-state behavior with examples. [16]
8. (a) What is meant by a test case? Discuss when the testing process will be stopped?
- (b) What are the factors which will decide the importance of a bug? Discuss them clearly. [8+8]

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R05**Set No. 1**

III B.Tech II Semester Examinations, December 2010

SOFTWARE TESTING METHODOLOGIES

Common to Information Technology, Computer Science And Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions

All Questions carry equal marks

1. Minimize the following logic function using Karnaugh Map method :

$$F(A, B, C, D) = ABC'D + A'BCD + A'B'C' + A'B'D' + AC' + AB'C + B'$$
 [16]
2. Explain essential and inessential finite-state behavior with examples. [16]
3. (a) How can the graph be represented in matrix form?
 (b) Discuss Node reduction algorithm.
 (c) How can node reduction optimization be done? [3+7+6]
4. (a) What is meant by a test case? Discuss when the testing process will be stopped?
 (b) What are the factors which will decide the importance of a bug? Discuss them clearly. [8+8]
5. (a) What is meant by a nice domain? Give an example for nice two-dimensional domains.
 (b) Discuss the following terms: [8+8]
 - i. Linear domain boundaries
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7. (a) Explain clearly the single link marker path instrumentation with an example.
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8. Compare the transaction testing strategies with the data-flow testing strategies. [16]

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R05**Set No. 3****III B.Tech II Semester Examinations, December 2010****SOFTWARE TESTING METHODOLOGIES****Common to Information Technology, Computer Science And Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions****All Questions carry equal marks**

1. (a) What is meant by a test case? Discuss when the testing process will be stopped?
(b) What are the factors which will decide the importance of a bug? Discuss them clearly. [8+8]
2. Minimize the following logic function using Karnaugh Map method :

$$F(A, B, C, D) = ABC'D + A'BCD + A'B'C' + A'B'D' + AC' + AB'C + B'. \quad [16]$$
3. (a) Explain clearly the single link marker path instrumentation with an example.
(b) Discuss how path testing is useful to host a new code, maintenance. [8+8]
4. Explain about Regular Expressions and Flow-Anomaly Detection. [16]
5. (a) How can the graph be represented in matrix form?
(b) Discuss Node reduction algorithm.
(c) How can node reduction optimization be done? [3+7+6]
6. (a) What is meant by a nice domain? Give an example for nice two-dimensional domains.
(b) Discuss the following terms: [8+8]
 - i. Linear domain boundaries
 - ii. Non linear domain boundaries
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7. Explain essential and inessential finite-state behavior with examples. [16]
8. Compare the transaction testing strategies with the data-flow testing strategies. [16]
