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## Question Paper Code: 80592

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Sixth Semester

Computer Science and Engineering

IT 6004 - SOFTWARE TESTING

(Common to Seventh Semester Information Technology)

(Regulations 2013)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

- Mention the objectives of Software Testing?
- 2. Define defects with an example.
- 3. Sketch the control flow graph for an ATM withdrawal system.
- 4. Give a note on the procedure to compute cyclomatic complexity.
- List out types of system testing.
- Compare and contrast Alpha Testing and Beta Testing.
- Discuss on the role of manager in a test group.
- 8. What are the issues in testing object orient systems?
- 9. Mention the criteria for selecting test tool.
- 10. Distinguish between milestone and deliverable.

PART B  $\leftarrow$  (5 × 16 = 80 marks)

11. (a) Elaborate on the principles of software testing and summarize the tester role in software development organization. (16)

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(b) Explain in detail processing and monitoring of the defects with defect repository. (16)

12.	(a)	Demonstrate the various black box test cases using Equivalence class partitioning and boundary values analysis to test a module for Payroll system. (16)				
,		Or				
	(b)	(i) Explain the various white box techniques with suitable test cases. (8)				
		(ii) Discuss in detail about code coverage testing. (8)				
13.	(a)	Explain the different integration testing strategies for procedures & functions with suitable diagrams. (16)				
		Or				
	(b)	How would you identify the hardware and software for configuration testing and explain what testing techniques applied for website testing?  (16)				
14.	(a)	(i) What are the skills needed for a test specialist? (8)				
11.	(4)	(ii) Explain the organizational structure for testing teams in single product companies. (8)				
		Or				
	(b)	(i) Explain the components of test plan in detail. (8)				
	,	(ii) Compare and contrast the role of debugging goals and policies in testing. (8)				
<b>15</b> .	(a)	Explain the design and architecture for automation and outline the challenges. (16)				
		Or				
	(b)	What are metrics and measurements? Illustrate the types of product metrics. (16)				
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