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# Question Paper Code: 20796

## B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2022.

Sixth Semester

### Information Technology

#### IT 8076 - SOFTWARE TESTING

(Common to: Computer Science and Engineering/Computer and Communication Engineering)

(Regulations 2017)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

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

- 1. List some examples for software defects?
- 2. What is a testing axiom?
- 3. How static test is different from structural testing?
- 4. What is random testing?
- 5. Who are all involved in acceptance testing? Comment.
- 6. Differentiate between the alpha and beta testing.
- 7. What are the skills needed for test specialist?
- 8. List out the various components of test plan.
- 9. What are the challenges in automation?
- 10. What is the test measurement process in software testing?

# PART B — $(5 \times 13 = 65 \text{ marks})$

11.	(a)	(i) Discuss the role of testers in software development organization. (5)
		(ii) Explain the various software testing principles. (8)  Or
	(b)	(i) What are the different classes of defects? Discuss. (7)
		(ii) Provide an example for defect and explain defect repository as well as test design using it. (6)
12.	(a)	With a suitable example, explain boundary value analysis and equivalence class partitioning. (13)
		$\operatorname{Or}$
	(b)	With a sample flow chart, detail different ways to find the number of test cases necessary to do the testing of a code using white box testing approach. (13)
13.	(a)	With a neat diagram, explain the unit testing, its planning and designing concepts. (13)
	(b)	With a neat diagram, explain the integration testing, its planning and designing. (13)
14.	(a)	Elaborate the various components of test plan and attachments in test management. (13)
		Or
	(b)	Describe the structure of test group and explain how it can be built. (13)
15.	(a)	How the tool selection process is carried out in testing strategy? (13)
		Or
	(b)	Elaborate the design and architecture of automation. Explain the challenges faced in automation. (13)

# PART C — $(1 \times 15 = 15 \text{ marks})$

16. (a) How the method selection process is carried out in test case design strategy? Explain with few samples. (15)

Or

(b) With suitable example, explain the object oriented testing. (15)

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