

Q.5	Attempt any two:				
i.	Which documents are covered by documentation testing? In what three ways does good documentation contribute to the product's overall quality?	5	3	2	1, 2
ii.	What is threat modeling? Explain the role of buffer overrun/ overflow in security.	5	2	1	1, 2
iii.	Explain the process of web page testing using black box techniques. What specific elements are typically tested?	5	2	1	1, 2
Q.6	Attempt any two:				
i.	What do you mean by severity and priority of a bug? Explain the bug's life cycle with suitable diagram.	5	2	1	1, 2
ii.	What are the key stages involved in bug life cycle? How does automated bug tracking system helps in tracking bugs?	5	2	1	1, 2
iii.	Explain the role of test design specification, test cases Specification and test procedures specification.	5	2	1	1, 2

Total No. of Questions: 6

Total No. of Printed Pages:4

Enrollment No.....



Faculty of Science / Engineering

End Sem Examination Dec 2024

CA3SE07 Software Testing

Programme: BCA / BCA-

Branch/Specialisation: Computer

MCA (Integrated)

Application

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

		Marks	BL	PO	CO	PSO
Q.1	i. In JUnit which of the following assertions is used to check if two values are equal? (a) assertTrue() (b) assertNull() (c) assertEquals() (d) assertEquals()	1	1	1	1, 2	
	ii. Which of the following testing techniques ensures that the software product runs correctly after the changes during maintenance? (a) Path testing (b) Integration testing (c) Unit testing (d) Regression testing	1	1	1	1, 2	
	iii. Which one of the following is a measure of the testing difficulty of a program? (a) Number of statements in the program (b) Number of decision statements in the program (c) Complexity of the arithmetic expressions used in the program (d) Time complexity of the program	1	2	1	1, 2	
	iv. If variable assigned the incorrect length, type, and storage class' this belong to which type of error- (a) Data reference errors (b) Data declaration errors (c) Computation errors (d) Comparison errors	1	1	1	1, 2	

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v.	What is backward compatibility?	1	1	1	1, 2
	(a) Ensuring newer version of software can run on new hardware				
	(b) The ability of software to work with older versions of itself.				
	(c) Ensure the ability of software to share data				
	(d) None of these				
vi.	Which testing is also known as interaction testing?	1	2	1	1, 2
	(a) Configuration testing				
	(b) Compatibility testing				
	(c) Unit testing				
	(d) Configuration testing and compatibility testing both				
vii.	During documentation testing, which type of software documentation is not considered?	1	1	1	1, 2
	(a) Packaging text and graphics				
	(b) Marketing material, ads, and other inserts				
	(c) Software Requirements Specification (SRS)				
	(d) Warranty/registration				
viii.	Website's hit counter is checked in-	1	2	1	1, 2
	(a) White box testing				
	(b) Grey box testing				
	(c) Black box testing				
	(d) Performance testing				
ix.	Deferred status in bug life cycle means:	1	2	1	1, 2
	(a) Developer feels that the bug is not genuine?				
	(b) Bug is repeated twice or the two bugs mention the same concept of the bug				
	(c) The bug is expected to be fixed in next releases				
	(d) The bug is fixed				
x.	Priority is defined as-	1	2	1	1, 2
	(a) The seriousness of the defect on the product functionality				
	(b) The level of impact that bug has on the functionality of application/system				
	(c) The order in which a defect should be fixed				
	(d) The type of test the team prefers to carry out				

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Q.2	Attempt any two:				
i.	What is the utility of dynamic black-box testing? Differentiate between equivalence class partitioning and boundary value analysis with example and diagram.	5	4	3	1, 2
ii.	What is JUnit? What are the advantages of using JUnit over manual testing? What are assertions in JUnit and how are they used?	5	2	1	1, 2
iii.	Differentiate the following in context of software testing: (a) Verification and validation (b) Data testing and state testing	5	2	1	1, 2
Q.3	Attempt any two:				
i.	How static white-box testing is different from dynamic white-box testing? Compare peer reviews, walkthroughs and inspections.	5	4	3	1, 2
ii.	Draw and explain the subsumption hierarchy of coverage-based testing.	5	2	1	1, 2
iii.	What are various coding standards and guidelines? What things are covered by generic code review checklist?	5	2	1	1, 2
Q.4	Attempt any two:				
i.	At which level configuration testing is applied? Explain the step-by-step approach for configuration testing.	5	2	1	1, 2
ii.	What do you mean by data sharing compatibility? Explain any three examples of data sharing compatibility.	5	2	1	1, 2
iii.	Explain important traits that make a good user interface. What role does accessibility testing play in user interface testing, particularly for users with disabilities?	5	3	2	1, 2

Marking Scheme
CA3SE07 (T) Software Testing (T)

		Marks
Q.1	i) In JUnit which of the following assertions is used to check if two values are equal? (c) assertEquals()	1
	ii) (d) Regression Testing	1
	iii) (b) Number of decision statements in the program	1
	iv) (b) Data Declaration Errors	1
	v) What is backward compatibility? (a) The ability of software to work with older versions of itself.	1
	vi) Which testing is also known as interaction testing? (d) configuration testing and compatibility testing both	1
	vii) During Documentation Testing, Which type of Software Documentation is not considered (c) Software Requirements Specification (SRS)	1
	viii) Website's hit counter is checked in (c) Black box Testing	1
	ix) Deferred status in bug life cycle means: (c) The bug is expected to be fixed in next releases	1
	x) Priority is defined as (c) The order in which a defect should be fixed.	1
Q.2	Attempt any two:	
	i. Utility - 1 Marks Difference - 4 Marks	5
	ii. Junit - 1 Marks Advantages - 2 Marks Assertions in JUnit - 2 Marks	5
	iii. V&V - 2.5 Marks error, fault and failure - 2.5 Marks	5

Q.3 Attempt any two:

i.	Difference	- 2 Marks	5
	Compare	- 3 Marks	
ii.	Draw	- 2 Marks	5
	Explain	- 3 Marks	
iii.	Definition	- 2 Marks	5
	Generic Code Review Checklist	- 3 Marks	

Q.4 Attempt any two:

i.	At which level	- 1 Marks	5
	Steps	- 4 Marks	
ii.	Definition	- 2 Marks	5
	three example	- 3 Marks	
iii.	Three important traits	- 2.5 Marks	5
	Role	- 2.5 Marks	

Q.5 Attempt any two:

i.	Which Documents	- 2.5 Marks	5
	Three ways	- 2.5 Marks	
ii.	What is Threat Modeling	- 3 Marks	5
	Buffer Overrun/ Overflow	- 2 Marks	
iii.	Process - 2 Marks		5
	Elements - 3 Marks		

Q.6 Attempt any two:

i.	Severity and Priority	- 2 Marks	5
	Bug's life cycle	- 3 Marks	
ii.	What are the key Stages	- 2.5 Marks	5
	Automated Bug Tracking System	- 2.5 Marks	
iii.	Test Design Specification	- 2 Marks	5
	Test Cases Specification and	- 2 Marks	
	Test Procedures Specification.	- 1 Marks	

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