

Total No. of Questions: 6

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Enrollment No.....



Faculty of Engineering  
End Sem (Odd) Examination Dec-2022  
OE00046 Software Testing

Programme: MCA

Branch/Specialisation: Computer  
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.

- Q.1 i. Locating or identifying the bugs is known as \_\_\_\_\_. **1**  
(a) Debugging (b) Testing  
(c) Coding (d) Maintenance
- ii. The defects that needed to fix immediately because it may cause great damage to the product is come under \_\_\_\_\_category. **1**  
(a) Critical (b) High (c) Medium (d) Low
- iii. Boundary value testing: **1**  
(a) Is the same as equivalence partitioning  
(b) Tests combinations of input circumstances  
(c) Test boundary conditions on, below and above the edges of input and output equivalence classes  
(d) Is used in white box testing strategy
- iv. After which phase, we can proceed to the white box testing? **1**  
(a) After coding phase (b) After SRS creation  
(c) After designing phase (d) After installation phase
- v. This thing is checked in which type of testing "User interface designed by the designer is user friendly or not." **1**  
(a) Usability (b) Compatibility  
(c) Smoke (d) Configuration
- vi. Software testing which is done without planning and documentation is known as- **1**  
(a) Smoke testing (b) Sanity testing  
(c) Usability testing (d) Ad-hoc testing

P.T.O.

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- vii. Creating \_\_\_\_\_ ensures complete test coverage. **1**  
 (a) Test cases (b) Test scenario  
 (c) Test Plan (d) Test criteria
- viii. When a new defect is reviewed by a QA lead and if the defect is valid, then the status of the defect would be \_\_\_\_\_. **1**  
 (a) New (b) Open (c) Paused (d) Verified
- ix. \_\_\_\_\_ is not a selenium component. **1**  
 (a) Selenium IDE (b) Maven  
 (c) WebDriver (d) Selenium Grid
- x. Which scripting language is used in QTP? **1**  
 (a) Test Script Language (b) Java Script  
 (c) ASP (d) VB Script
- Q.2 i. Define software testing and discuss its objectives. **2**  
 ii. Explain different roles in software testing process. **3**  
 iii. Explain defect management life cycle in detail. **5**  
 OR iv. Write brief note on role of testing in SDLC. **5**
- Q.3 i. Define boundary value analysis testing with example. **3**  
 ii. Explain any one white box and any one black box testing techniques with examples. **7**  
 OR iii. Design test case for the following situation: **7**  
 The character in column 1 should be either A or B and in the column 2 should be a digit. If both columns contain appropriate values then update is made. If the input of column 1 is incorrect, i.e. neither A nor B, then message X will be displayed. If the input in column 2 is incorrect, i.e. input is not a digit, then message Y will be displayed
- Q.4 i. Differentiate between sanity testing and smoke testing. **4**  
 ii. Explain software testing life cycle in detail with suitable diagram. **6**  
 OR iii. Explain the following with suitable example: **6**  
 (a) Regression testing (b) Exploratory testing  
 (c) Performance testing

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- Q.5 i. Is test scenario and test cases are independent to each other? **4**  
 Justify your answer.  
 ii. Explain Test scenario and test case with an example. Also explain the steps to create test scenarios for an application. **6**  
 OR iii. Define defect life cycle with a neat diagram. Also explain all states of defect lifecycle. **6**
- Q.6 Attempt any two:  
 i. Explain automation testing and its importance. Also explain automation testing process in detail. **5**  
 ii. What is the need of a test management tool? Also explain the features of test management tools and list out some most used test management tools. **5**  
 iii. What do you mean by selenium? Explain the following selenium tools: **5**  
 (a) Selenium IDE (b) Selenium RC  
 (c) Web Driver (d) Selenium Grid

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## Scheme of Marking

	Faculty of Engineering	
	End Sem (Odd) Examination Dec-2022	
	OE00046 - Software Testing	
	Programme: MCA	Branch/Specialisation:

Note: The Paper Setter should provide the answer wise splitting of the marks in the scheme below.

Q.1	i)	Locating or identifying the bugs is known as _____	1
		b)Testing	
	ii)	The defects that needed to fix immediately because it may cause great damage to the product is come under _____ category?	1
		a)Critical	
	iii)	Boundary value testing:	1
		c)Test boundary conditions on, below and above the edges of input and output equivalence classes	
	iv)	After which phase, we can proceed to the white box testing?	1
		a)After coding phase	
	v)	This thing is checked in which type of testing "User interface designed by the designer is user friendly or not."	1
		a)Usability	
	vi)	Software testing which is done without planning and Documentation is known as	1
		d)Adhoc Testing	
	vii)	Creating -----ensures complete test coverage	1
		b)Test scenario	
	viii)	When a new defect is reviewed by a QA lead and if the defect is valid, then the status of the defect would be _____	1
		b)Open	
	ix)	_____ is not a Selenium Component	1
		b)Maven	

	x)	Which scripting language is used in QTP ?	1
		d)VB Script	
Q.2	i.	Define Software Testing and discuss its objectives.	2
		Definition 1 Mark	
		Objectives 1 Mark	
	ii.	Explain different roles in Software testing process. .	3
		Each role 1.5 Marks	
	iii.	Explain defect management life cycle in detail.	5
		Each phase in life cycle 1 Mark	
	OR	iv.	5
		Write brief note on role of testing in SDLC.	
		Each phase 1 Mark	
Q.3	i.	Define Boundary value analysis testing with example	2
		Definition 1 mark	
		Example 1 Mark	
	ii.	Explain any two white box and any two black box testing techniques with examples.	8
		Each Technique 2 Marks	
		Definition 1 Mark	
		Example 1 Mark	
	OR	iii.	8
		Design test case for the following situation:	
		The character in column 1 should be either A or B and in the column 2 should be a digit. If both columns contain appropriate values then update is made. If the input of column 1 is incorrect, i.e. neither A nor B, then message X will be displayed. If the input in column 2 is incorrect, i.e. input is not a digit, then message Y will be displayed	
		Each steps of the solution 2 Marks	
Q.4	i.	Differentiate between Sanity testing and Smoke testing with suitable example.	3
		Definition of both testing 1 Mark	
		Differences between them 1 mark	
		Example 1 mark	
	ii.	Explain Software Testing Life cycle in detail with suitable diagram.	7
		Diagram 1 Mark	

		Each phase(6 phases) 1 marks	
OR	iii.	Explain the following with suitable example: a. Regression Testing 2 marks b. Exploratory testing 2 mark c. Performance Testing 3 mark	7
Q.5	i.	Is test scenario and test cases are independent to each other? Justify your answer. For correct answer 1.5 mark Justification 2.5 Marks	4
	ii.	Explain Test scenario and test case with an example. Also explain the steps to create test scenarios for an application. Definition test scenario and test case: 2 marks Example of both : 2 marks Steps to create test scenario : 2 Marks	6
OR	iii.	Define Defect life cycle with a neat diagram. Also explain all states of Defect lifecycle. Definition 2 Marks Diagram 2 Marks All states 2 Marks	6
Q.6		Attempt any two:	
	i.	Explain automation testing and its importance. Also explain automation testing process in detail. Explanation :1 marks Importance of Automation testing: 1.5 marks Automation testing process: 2.5 Marks	5
	ii.	What is the need of a test management tool? Also explain the features of Test management tools and list out some most used test management tools. Definition and need of test management tool: 2 marks Feature: 2 marks List of test management tool: 1 mark	5
	iii.	What you mean by Selenium? Explain the following Selenium tools: a) Selenium IDE b) Selenium RC c) Web Driver d) Selenium Grid	5

	Explanation of Selenium: 1 mark Selenium IDE: 1 mark Selenium RC : 1 mark Selenium Grid : 1 mark Web driver: 1 mark	
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