Total No. of Questions: 6 *Total No. of Printed Pages:3*

Enrollment No.....

Faculty of Science

End Sem (Odd) Examination Dec-2019

CA3SE07 Software Testing

Programme: BCA 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. Pick the correct statement from the following. **1**

(a) Every error causes a failure
(b) Every error causes a fault
(c) Every failure is caused by a fault
(d) Every bug causes a failure

ii. Boundary value analysis belongs to? **1**

(a) White Box Testing
(b) Black Box Testing
(c) White Box & Black Box Testing
(d) None of these

iii. Which one of the following types of bugs may not get detected in black-box testing, but are very likely to be get detected by white-box testing? **1**

(a) Syntax errors (b) Behavioural errors
(c) Logic errors (d) Performance errors

iv. Code coverage analysis is used to measure which one of the following? **1**

(a) Thoroughness of testing (b) Quality of test cases
(c) Quality of code (d) Distribution of bugs

v. Configuration testing deals with hardware while compatibility testing deals with software. **1**

(a) True (b) False (c) Can't say (d) None of these

P.T.O.

vi. Number of test cases can be reduced with the help of _____ **1**
(a) Acceptance testing (b) Regression testing
(c) Equivalence partitioning (d) Quality assurance

vii. Testing error messages falls under documentation testing. **1**
(a) True (b) False (c) Can't say (d) None of these

viii. Website components tested during website testing is/are **1**
(a) Text (b) Hyperlinks (c) Graphics (d) All of these

ix. _____ is not the state of bug in bug Life Cycle? **1**
(a) Open (b) Resolved (c) Closed (d) Critical

x. A set of inputs, execution preconditions and expected outcomes is known as a **1**
(a) Test plan (b) Test case
(c) Test document (d) Test Suite

Q.2 i. "Test to pass and test to fail both are necessary during testing." Justify the statement. **3**

ii. Define equivalence class partitioning and boundary value analysis. Explain any two examples each. **7**

OR iii. Write the importance of static black-box testing. Explain the approach of high-level review of the specification. **7**

Q.3 Attempt any two:

i. What do you mean by static white-box testing? Explain formal reviews along with peer reviews, walkthroughs and inspections in detail. **5**

ii. What is unit testing? Explain the role of stub and driver in top-down and bottom up testing using suitable diagram. **5**

iii. Why both black box and white-box testing is necessary? Differentiate between statement, branch coverage and condition coverage using suitable example. **5**

Q.4 Attempt any two:

i. What do you mean by configuration testing? Write step by step approach of configuration testing. **5**

ii. Explain data sharing compatibility using three examples. **5**

iii. Explain any five important traits that make a good user interface? **5**

Q.5 i. Explain the importance of documentation testing. **4**

ii. What basic elements of a web page can easily be tested with a black-box approach? Explain testing of any four elements in detail. **6**

OR iii. Explain any six areas that you need to consider when performing configuration and compatibility testing of a website. **6**

Q.6 Attempt any two:

i. What is bug-tracking system? List three reasons that a database bug-tracking system is so much more useful than a paper-Based system. **5**

ii. What do you mean by test tools and automation? Explain macro recording and playback and programmed macros in automation. **5**

iii. Explain basic states of a software bug's life cycle along with the two common additional states? **5**

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Marking Scheme
CA3SE07 Software Testing

Q.1	i.	Pick the correct statement from the following. (c) Every failure is caused by a fault	**1**
	ii.	Boundary value analysis belongs to? (b) Black Box Testing	**1**
	iii.	Which one of the following types of bugs may not get detected in black-box testing, but are very likely to be get detected by white-box testing? (c) Logic errors	**1**
	iv.	Code coverage analysis is used to measure which one of the following? (b) Quality of test cases	**1**
	v.	Configuration testing deals with hardware while compatibility testing deals with software. (a) True	**1**
	vi.	Number of test cases can be reduced with the help of _____ (c) Equivalence partitioning	**1**
	vii.	Testing error messages falls under documentation testing. (a) True	**1**
	viii.	Website components tested during website testing is/are (d) All of these	**1**
	ix.	_____ is not the state of bug in bug Life Cycle? (d) Critical	**1**
	x.	A set of inputs, execution preconditions and expected outcomes is known as a (b) Test case	**1**

Q.2	i.	Test to pass and test to fail both are necessary during testing.		**3**
		Definition	1 mark	
		Justification	2 marks	
	ii.	Definition equivalence class partitioning	1.5 marks	**7**
		Definition of boundary value analysis	1.5 marks	
		Any two examples each	4 marks	
OR	iii.	Definition of static black-box testing	2 marks	**7**
		Approach of high-level review of the specification	5 marks	

Q.3		Attempt any two:		
	i.	Definition of static white-box testing	1 mark	**5**
		Formal reviews	4 marks	
	ii.	Definition of unit testing	1 mark	**5**
		Diagram	1 mark	
		Role of stub and driver	3 marks	
	iii.	Necessity of black box and white-box testing	2 marks	**5**
		Difference b/w statement, branch coverage and condition coverage	3 marks	

Q.4		Attempt any two:		
	i.	Definition of configuration testing	2 marks	**5**
		Approach of configuration testing	3 marks	
	ii.	Definition of data sharing compatibility	2 marks	**5**
		Three examples	3 marks	
	iii.	Any five important traits that make a good user interface		**5**
		1 mark for each trait	(1 mark * 5)	

Q.5	i.	Definition of documentation testing	2 marks	**4**
		Importance of documentation testing	2 marks	
	ii.	Name of basic elements	2 marks	**6**
		Testing of any four elements	4 marks	
OR	iii.	Any six areas that you need to consider when performing configuration and compatibility testing of a website.		**6**
		1 mark for each area	(1 mark *6)	

Q.6		Attempt any two:		
	i.	Definition of bug-tracking system	2 marks	**5**
		Three reasons	3 marks	
	ii.	Definition of test tools and automation	2 marks	**5**
		Macro recording and playback and programmed macros in automation	3 marks	
	iii.	Basic states of a software bug's life cycle along with the two common additional states		**5**
		Diagram	2 marks	
		Explanation	3 marks	

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