

BCA 6th Semester

030010607: CC14: Software Testing Techniques

Assessment Policy

Theory Assessment Parameter						
Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 40 marks	Remarks
A1	Open Book	60 mins	1	20	4 x 1=4	During the 8 th week
A2	Quiz	60 mins	1	20	4 x 1=4	During the 3 rd week
A3	Unit Test	90 mins	2	30	6 x 2=12	During the 5 th and 11 th week
A4	Internal Examination	180 mins	1	60	15 x1=15	During the 14 th week
A5	Self-Creation	30 mins	2	50	5 x1=5	During 13 th week.
Practical Assessment Parameter						
A6	Unit Test (Practical)	120 mins	2	20	4 x2=8	During the 5 th and 11 th week
A7	Internal Examination including viva (Practical)	120 mins	1	40	8 x1=8	During the 14 th week
A8	Journal/Viva (Practical)	-	-	-	4 x1=4	During Semester

Assessment Type Classification

Assessment Code :	A1	Weightage of Content :	Unit	(%)	
			1	10	
			2	20	
			3	40	
			4	30	
Assessment Type :	Open Book	Tentative Date :	During the 8 th week		
Kind of Question Format:	1) Analyze the given scenario and prepare appropriate test strategy. (2 out of 2)[2 X 5=10] 2) Do as directed.(5 out of 6)[5 X 2 =10]				
To measure :	Knowledge and Analysis				
Course Outcome :	CO1: Discuss the needs, concepts, process and importance of application testing. CO2: Describe application testing levels and strategies CO3: Analyze, evaluate and use relevant application testing techniques and tools for specific application environment.				
Programme Outcome :	PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO3: Effective communication and presentation skill. PO4: Ability to understand professional and ethical responsibility. PO5: Recognition of the need for life-long learning.				

Assessment Code :	A2	Weightage of Content :	Unit	(%)	
			1	100	
Assessment Type :	Quiz	Tentative Date :	During the 3 rd week		
Kind of Question Format:	Multiple Choice Answer Questions. (40 out of 40) [20 Marks]				
Assessment :	Offline				

To measure :	Knowledge
Course Outcome :	<p>C01: Discuss the needs, concepts, process and importance of application testing.</p> <p>C02: Describe application testing levels and strategies</p> <p>C03: Analyze, evaluate and use relevant application testing techniques and tools for specific application environment.</p> <p>C04: Design test plan, develop and execute test cases for application acceptance.</p> <p>C05: Appreciate the need for test automation tools with its usage.</p> <p>C06: Analyse and test web and mobile applications.</p>
Programme Outcome :	<p>PO1: Ability to understand the concepts of key areas in computer science.</p> <p>PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society.</p> <p>PO3: Effective communication and presentation skill.</p> <p>PO4: Ability to understand professional and ethical responsibility.</p> <p>PO5: Recognition of the need for life-long learning.</p>

Assessment Code :	A3	Weightage of Content :	Unit	(%)
			1	20
			2	50
			3	30
Assessment Type :	Unit Test 1	Tentative Date :	During the 5 th and 11 th week	
Kind of Question Format:	<p>Q-1 (A) Do as directed. (4 out of 4) [01 x 04 = 04]</p> <p>(B) Answer in brief. (3 out of 6) [02 x 03 = 06]</p> <p>Q-2 Answer the following questions.</p> <p>(A) Practical based question. [01 x 05 = 05]</p> <p>OR</p> <p>(A) Practical based question. [01 x 05 = 05]</p> <p>(B) Practical based question. [01 x 05 = 05]</p> <p>OR</p> <p>(B) Practical based question. [01 x 05 = 05]</p> <p>Q-3 Answer the following in detail. (2 out of 3) [02 x 05 = 10]</p>			

Assessment :	Formative
To measure :	Knowledge and Analysis
Course Outcome :	<p>CO1: Discuss the needs, concepts, process and importance of application testing.</p> <p>CO2: Describe application testing levels and strategies</p> <p>CO3: Analyze, evaluate and use relevant application testing techniques and tools for specific application environment.</p> <p>CO4: Design test plan, develop and execute test cases for application acceptance.</p>
Programme Outcome :	<p>PO1: Ability to understand the concepts of key areas in computer science.</p> <p>PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society.</p> <p>PO3: Effective communication and presentation skill.</p> <p>PO4: Ability to understand professional and ethical responsibility.</p> <p>PO5: Recognition of the need for life-long learning.</p>

Assessment Code :	A3	Weightage of Content :	Unit	(%)
			1	10
			2	10
			3	20
			4	20
5	40			
Assessment Type :	Unit Test 2	Tentative Date :	During the 5 th and 11 th week	
Kind of Question Format:	<p>Q-1 (A) Do as Directed .(4 out of 4) [01 x 04 = 04] (B) Short answer questions. (3 out of 6) [02 x 03 = 06]</p> <p>Q-2 (A) Practical based question. [01 x 05 = 05] OR (A) Practical based question. [01 x 05 = 05] (B) Practical based question. [01 x 05 = 05] OR (B) Practical based question. [01 x 05 = 05]</p>			

	Q-3 Answer the following in detail. (2 out of 3) [02 x 05 = 10]
Assessment :	Formative
To measure :	Knowledge and Analysis
Course Outcome :	<p>C01: Discuss the needs, concepts, process and importance of application testing.</p> <p>C02: Describe application testing levels and strategies</p> <p>C03: Analyze, evaluate and use relevant software testing techniques and tools for specific application environment.</p> <p>C04: Design test plan, develop and execute test cases for application acceptance.</p> <p>C05: Appreciate the need for test automation tools with its usage.</p> <p>C06: Analyse and test web and mobile applications.</p>
Programme Outcome :	<p>PO1: Ability to understand the concepts of key areas in computer science.</p> <p>PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society.</p> <p>PO3: Effective communication and presentation skill.</p> <p>PO4: Ability to understand professional and ethical responsibility.</p> <p>PO5: Recognition of the need for life-long learning.</p>

Assessment Code :	A4	Weightage of Content :	Unit	(%)
			1	15
			2	20
			3	15
			4	25
			5	15
			6	10
Assessment Type :	Internal Examination	Tentative Date :	During the 14 th week	
Kind of Question Format:	As per external question paper format.			

Assessment :	Formative
To measure :	Knowledge and Analysis
Course Outcome :	<p>CO1: Discuss the needs, concepts, process and importance of application testing.</p> <p>CO2: Describe application testing levels and strategies</p> <p>CO3: Analyze, evaluate and use relevant software testing techniques and tools for specific application environment.</p> <p>CO4: Design test plan, develop and execute test cases for application acceptance.</p> <p>CO5: Appreciate the need for test automation tools with its usage.</p> <p>CO6: Analyse and test web and mobile applications.</p>
Programme Outcome :	<p>PO1: Ability to understand the concepts of key areas in computer science.</p> <p>PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society.</p> <p>PO3: Effective communication and presentation skill.</p> <p>PO4: Ability to understand professional and ethical responsibility.</p> <p>PO5: Recognition of the need for life-long learning.</p>

Assessment Code :	A5	Weightage of Content :	Unit	(%)
			1	15
			2	20
			3	15
			4	25
			5	15
			6	10
Assessment Type :	Self-Creation Parameter	Tentative Date :	During 13 th week.	
Kind of Question Format:	Presentation & Documentation 1. Presentation and communication skills.[5 Marks] 2. Documentation [05 Marks] 3. Testcase generation[40 Marks]			

	<p>a. White Box [15 Marks] b. Black Box [25 Marks]</p> <p>Rules & Regulations:</p> <ul style="list-style-type: none"> • A team shall consist of either 2 or 3 members. • Team shall have to submit details of their team members with enrollment number and name on or before 30 -12- 2017 to respective subject teacher. • The topic shall be proposed by team and shall be finalized after the course teacher's approval. • A team shall be allowed to give presentation for approximately 15 minutes. • The presentation shall be followed by question answer session. Question shall be asked by teacher. • Students are free to select any programming language, technology and tool to performing testing. • Team will submit softcopy of presentation and full documentation on or before 14th week. • The evaluation criteria along with its weightage is as follow: 											
	<table border="1"> <thead> <tr> <th data-bbox="537 1123 776 1192">Presentation and Marks</th> <th data-bbox="776 1123 1203 1192">Evaluation based on</th> <th data-bbox="1203 1123 1393 1192">Evaluation weightage</th> </tr> </thead> <tbody> <tr> <td data-bbox="537 1192 776 1759" rowspan="3">Presentation (60)</td> <td data-bbox="776 1192 1203 1234">Topic submission on time</td> <td data-bbox="1203 1192 1393 1234">10</td> </tr> <tr> <td data-bbox="776 1234 1203 1759"> Test Case generation: 1. White Box (15 Marks) 1.1 Unit Testing 1.2 Control Flow Testing 1.3 Data Flow testing 2. Black Box (25 Marks) 1.1 User Interface and Navigation Testing 1.2 Classification Tree Testing 1.3 Decision Table Testing 1.4 Smoke Testing </td> <td data-bbox="1203 1234 1393 1759">40</td> </tr> <tr> <td data-bbox="776 1759 1203 1829">Presentation and communication skill</td> <td data-bbox="1203 1759 1393 1829">05</td> </tr> </tbody> </table>		Presentation and Marks	Evaluation based on	Evaluation weightage	Presentation (60)	Topic submission on time	10	Test Case generation: 1. White Box (15 Marks) 1.1 Unit Testing 1.2 Control Flow Testing 1.3 Data Flow testing 2. Black Box (25 Marks) 1.1 User Interface and Navigation Testing 1.2 Classification Tree Testing 1.3 Decision Table Testing 1.4 Smoke Testing	40	Presentation and communication skill	05
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Assessment :	Formative			
To measure :	Knowledge and Analysis			
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Assessment Code :	A6	Weightage of Content :	Unit	(%)
			2	70
			3	30
Assessment Type :	Unit Test 1	Minimum number of practicals to be certified as eligibility to appear:5	During the 5 th and 11 th week	
Kind of Question Format:	Q-1. Draw a flow graph for the given scenario[04 Marks] Q-2. Practical based question [13 Marks] Q-3.Viva [03 Marks]			
Assessment :	Formative			
To measure :	Knowledge			
Course Outcome :	CO1: Discuss the needs, concepts, process and importance of application testing. CO2: Describe application testing levels and strategies CO3: Analyze, evaluate and use relevant application testing techniques and tools for specific application environment. CO4: Design test plan, develop and execute test cases for application acceptance. CO5: Appreciate the need for test automation tools with its usage. CO6: Analyse and test web and mobile applications.			
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Assessment Code :	A6	Weightage of Content :	Unit	(%)
			2	5

			3	5	
			4	60	
			5	30	
Assessment Type :	Unit Test 2	Minimum number of practicals to be certified as eligibility to appear:5+5=10	During the 5 th and 11 th week		
Kind of Question Format:	Q-1. Draw a flow graph for the given scenario		[04 Marks]		
	Q-2. Practical based question		[13 Marks]		
	Q-3.Viva		[03 Marks]		
Assessment :	Formative				
To measure :	Knowledge				
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Assessment Code :	A7	Weightage of Content :	Unit	(%)
			2	25
			3	15
			4	25

			5	25	
			6	10	
Assessment Type :	Internal Examination including viva (Practical)	Minimum number of practicals to be certified as eligibility to appear:5+5+6=16	During the 14 th week		
Kind of Question Format:	Q-1. Draw a flow graph for the given scenario Q-2. Practical based question Q-3.Viva		[05 Marks]	[20 Marks]	[05 Marks]
Assessment :	Formative				
To measure :	Knowledge				
Course Outcome :	<p>CO1: Discuss the needs, concepts, process and importance of application testing.</p> <p>CO2: Describe application testing levels and strategies</p> <p>CO3: Analyze, evaluate and use relevant application testing techniques and tools for specific application environment.</p> <p>CO4: Design test plan, develop and execute test cases for application acceptance.</p> <p>CO5: Appreciate the need for test automation tools with its usage.</p> <p>CO6: Analyse and test web and mobile applications.</p>				
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Assessment Code :	A8	Weightage of Content :	Unit	(%)	
			2	25	
			3	20	

			4	20	
			5	25	
			6	10	
Assessment Type :	Journal/Viva (Practical)	Minimum number of practicals to be certified as eligibility to appear: All	During Semester		
Kind of Question Format:	Journal + Viva [01 x 04 = 04]				
Assessment :	Formative				
To measure :	Knowledge				
Course Outcome :	<p>C01: Discuss the needs, concepts, process and importance of application testing.</p> <p>C02: Describe application testing levels and strategies</p> <p>C03: Analyze, evaluate and use relevant application testing techniques and tools for specific application environment.</p> <p>C04: Design test plan, develop and execute test cases for application acceptance.</p> <p>C05: Appreciate the need for test automation tools with its usage.</p> <p>C06: Analyse and test web and mobile applications.</p>				
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UFM Policy:

- If two or more SCP reports are similar for coincidence, a penalty shall be imposed that shall usually be the same for the student who did the original as for the one copying from it.