#### 16BECS801

#### SOFTWARE TESTING

### **INTENDED OUTCOMES:**

• To make students understand the principles of software testing

- To explain the basics of software testing
- To highlight the strategies for software testing
- To stress the need and conduct of testing levels
- To identify the issues in testing management
- To bring out the ways and means of controlling and monitoring testing activity

### **UNIT- I INTRODUCTION**

Testing as an Engineering Activity- Role of Process in Software Quality-Testing as a Process-Basic Definitions- Software Testing Principles- The Tester's Role in a Software Development Organization-Origins of Defects- Defect Classes- The Defect Repository and Test Design- Defect Examples-Developer/Tester Support for Developing a Defect Repository

### **UNIT -II TEST CASE DESIGN**

Introduction to Testing Design Strategies, The Smarter Tester- Test Case Design Strategies-Using Black Box Approach to Test Case Design- Random Testing- Equivalence Class Partitioning, Boundary Value Analysis- Other Black-box Test Design Approaches- Black-box testing and COTS- Using White-Box Approach to Test design- Test Adequacy Criteria-Coverage and Control Flow Graphs- Covering Code Logic- Paths: Their Role in White-box Based Test Design- Additional White Box Test Design Approaches- Evaluating Test Adequacy Criteria

### **UNIT-III LEVELS OF TESTING**

The Need for Levels of Testing- Unit Test- Unit Test Planning- Designing the Unit Tests- The Class as a Testable Unit- The Test Harness- Running the Unit tests and Recording results-Integration tests-Designing Integration Tests- Integration Test Planning- System Test – The Different Types-Regression Testing-Alpha- Beta and Acceptance Tests

### **UNIT- IV TEST MANAGEMENT**

Introductory Concepts- Testing and Debugging Goals and Policies- Test Planning- Test Plan Components-Test Plan Attachments- Locating Test Items-

Reporting Test Results- The role of three groups in Test Planning and Policy Development- Process and the Engineering Disciplines- Introducing the test specialist- Skills needed by a test specialist- Building a Testing Group

### **UNIT- V CONTROLLING AND MONITORING**

Defining Terms-Measurements and Milestones for Controlling and Monitoring- Status Meetings- Reports and Control Issues- Criteria for Test Completion-SCM- Types of reviews-Developing a review program-Components of Review Plans- Reporting review results

### **TEXT BOOKS:**

S.NO	Author(s) Name	Title of the book	Publisher	Year of publication
1	Ilene Burnstein	"Practical Software Testing"	Springer International Edition, Chennai	2003

### **REFERENCE BOOKS:**

S.NO	Author(s) Name	Title of the book	Publisher	Year of publication
1	Edward Kit	"Software Testing in the	Pearson	1995
		Real World – Improving	Education, New	
		the Process"	Delhi	
2	Elfriede Dustin	"Effective Software	Pearson	2003
		Testing"	Education New	
		-	Delhi	
3	Renu Rajani and	"Software Testing -	Tata McGraw-	2003
	Pradeep Oak	Effective Methods, Tools	Hill, New Delhi	
	-	and Techniques"		

## KARPAGAM UNIVERSITY



Faculty of Engineering Department of Computer Science and Engineering

## Lecture Plan

Faculty Name : R.Santhosh Subject Name : Software Testing Subject code: 16BECS801 Class : IV-BE-CSE

S.No	Description of Portion to be Covered	Hrs	Page no. of Text book	Teaching Aids
1	<b>Fundamentals:</b> Discussion on software enginering	1	R[4]	BB
2	Introduction to Software Testing	1		BB
	UNIT- I INTRODUCT	ION		
3	1.1.Testing as an Engineering Activity-Role of Process in Software Quality	1	R[1] Page no 1-6	BB
4	1.2.Testing as a Process-Basic Definitions	1	R[1] Page no 6-8 19-25	BB
5	1.3.Software Testing Principles	1	R[1] Page no 26-33	BB
6	<b>Tutorial 1:</b> Importance of Testing in software quality	1		РРТ
7	1.4.The Tester's Role in a Software Development Organization	1	R[1] Page no 34-36	BB
8	1.5.Origins of Defects- Defect Classes- The Defect Repository and Test Design	1	R[1] Page no 43-51	BB
9	1.6.Defect Examples-Developer/Tester Support for Developing a Defect Repository	1	R[1] Page no 51-57	BB

10	Tutorial 2: Types of Defects	1		PPT			
	UNIT- II TEST CASE DESIGN						
11	2.1. Introduction to Testing Design Strategies, The Smarter Tester- Test Case Design Strategies	1	R[1] Page no 61-65	BB			
12	2.2. Using Black Box Approach to Test Case Design- Random Testing- Equivalence Class Partitioning, Boundary Value Analysis	1	R[1] Page no 66-75	BB			
13	2.3. Other Black-box Test Design Approaches- Black-box testing and COTS	1	R[1] Page no 76-87	BB			
14	<b>Tutorial 3:</b> Case study on Black box testing strategies	1		PPT			
15	2.4. Using White-Box Approach to Test design- Test Adequacy Criteria-Coverage and Control Flow Graphs	1	R[1] Page no 97-102	PPT			
16	2.5. Covering Code Logic- Paths:Their Role in White-box Based Test Design	1	R[1] Page no 103-110	BB			
17	2.6. Additional White Box Test Design Approaches- Evaluating Test Adequacy Criteria	1	R[1] Page no 111-123	BB			
18	<b>Tutorial 4:</b> Case study on white box testing strategies	1		PPT			
	UNIT -III LEVELS OF TH	ESTIN	G				
19	3.1. The Need for Levels of Testing- Unit Test- Unit Test Planning	1	R[1] Page no 133-140	BB			
20	3.2. Designing the Unit Tests- The Class as a Testable Unit	1	R[1] Page no 141-147	PPT			
21	3.3.The Test Harness- Running the Unit tests and Recording results	1	R[1] Page no 148-151	BB			
22	Tutorial 5: Unit test real world examples	1		PPT			

23	3.4.Integration tests-Designing Integration Tests	1	R[1] Page no 152-161	BB
24	3.5. Integration Test Planning	1	R[1] Page no 162-163	BB
25	3.6.System Test – The Different Types	1	R[1] Page no 163-175	BB
26	<b>Tutorial 6:</b> Integration test examples	1		PPT
27	3.7.Regression Testing- Alpha- Beta and Acceptance Tests	1	R[1] Page no 176-178	BB
	UNIT- IV TEST MANAG	EMEN	Т	
28	4.1. Introductory Concepts- Testing and Debugging Goals and Policies	1	R[1] Page no 189-196	BB
29	4.2. Test Planning- Test Plan Components- Test Plan Attachments	1	R[1] Page no 197-220	
30	Tutorial 7: Test plan sample	1		PPT
31	4.3. Locating Test Items-Reporting Test Results	1	R[1] Page no 221-225	BB
32	4.4. The role of three groups in Test Planning and Policy Development	1	R[1] Page no 226-229	BB
33	4.5. Process and the Engineering Disciplines	1	R[1] Page no 230-231	PPT
34	Tutorial 8: Sample Test Report	1		PPT
35	4.6. Introducing the test specialist- Skills needed by a test specialist	1	R[1] Page no 235-239	BB
36	4.7. Building a Testing Group	1	R[1] Page no 241-242	BB
	UNIT- V CONTROLLING AND	MON	ITORING	
37	5.1.Defining Terms-Measurements and Milestones for Controlling and Monitoring	1	R[1] Page no 263-282	BB
38	Tutorial 9: Metrics in Testing domain	1		PPT

39	5.2. Status Meetings-Reports and Control Issues	1	R[1] Page no 283-288	BB	
40	5.3.Criteria for Test Completion	1	R[1] Page no 289-291	BB	
41	5.4. SCM	1	R[1] Page no 292-295	PPT	
42	<b>Tutorial 10:</b> Diffetence between allocation methods	1		PPT	
43	5.5. Types of reviews-Developing a review program	1	R[1] Page no 307-313	BB	
44	5.6. Components of Review Plans- Reporting review results	1	R[1] Page no 314-336	BB	
	FUNDAMENTALS				
TOTAL LECTURE HOURS			8 32		
TOTAL TUTORIAL HOURS			10		
TOTAL HOURS			44		

## REFERENCES

1	Ilene Burnstein, "Practical Software Testing" Springer International Edition, Chennai
2	Edward Kit, "Software Testing in the Real World – Improving the Process" Pearson Education, New Delhi
3	Elfriede Dustin, "Effective Software Testing" Pearson Education New Delhi
4	Renu Rajani and Pradeep Oak, "Software Testing – Effective Methods, Tools and Techniques" Tata McGraw-Hill, New Delhi

# **Online Questions**

# <u>Unit-I</u>

Questions	opt1	opt2	opt3	opt4	opt5	opt6	Answers
	Checking that we	Checking that we	Performed by an	Making sure			Checking that
	are building the	are building the	independent test	that it is what			we are building
	right system	system right	team	the user really			the system right
Verification is:				wants			
A regression test:	Will always be	Will help ensure	Will help ensure	Can only be run			Will help
	automated	unchanged areas	changed areas of	during user			ensure
		of the software	the software have	acceptance			unchanged
		have not been	not been affected	testing			areas of the
		affected					software have
							not been
							affected
If an expected result is not specified	We cannot run	It may be difficult	It may be difficult	We cannot			It may be
then:	the test	to repeat the test	to determine if	automate the			difficult to
		-	the test has	user inputs			determine if the
			passed or failed	-			test has passed
							or failed
Which of the following could be a	Testing fault	1,2,3,4 are valid	1,2,3 are valid	All of them are			All of them are
reason for a failure?		reasons; 5 is not	reasons; 4 & 5 are	valid reasons for			valid reasons
			not	failure			for failure
Test are prioritized so that:	You shorten the	You do the best	You do more	You find more			You do the best
_	time required for	testing in the time	effective testing	faults			testing in the
	testing	available	_				time available
Which of the following is not a static	Error guessing	Walkthrough	Data flow	Inspections			Error guessing
testing technique			analysis				
Which of the following statements	Component	Component	Component	Component			Component
about component testing is not true?	testing should be	testing is also	testing should	testing does not			testing does not
	performed by	know as isolation	have completion	involve			involve
	development	or module testing	criteria planned	regression			regression
	_		_	testing			testing

During which test activity could faults be found most cost effectively?	Execution	Design	Planning	Check Exit criteria completion	Planning
Which, in general, is the least required skill of a good tester?	Being diplomatic	Able to write software	Having good attention to detail	Able to be relied on	Able to write software
The purpose of requirement phase is	To freeze requirements	To understand user needs	To define the scope of testing	All of the above	All of the above
The process starting with the terminal modules is called –	Top-down integration	Bottom-up integration	None of the above	Module integration	Bottom-up integration
The inputs for developing a test plan are taken from	Project plan	Business plan	Support plan	None of the above	Project plan
Function/Test matrix is a type of	Interim Test report	Final test report	Project status report	Management report	Project status report
Defect Management process does not include	Defect prevention	Deliverable base- lining	Management reporting	None of the above	Deliverable base-lining
What is the difference between testing software developed by contractor outside your country, versus testing software developed by a contractor within your country?	Does not meet people needs	Cultural difference	Loss of control over reallocation of resources	Relinquishments of control	Cultural difference
Software testing accounts to what percent of software development costs?	20-Oct	40-50	70-80	10-May	40-50
A reliable system will be one that:	Is unlikely to be completed on schedule	Is unlikely to cause a failure	Is likely to be fault-free	Is likely to be liked by the users	Is unlikely to cause a failure
How much testing is enough	This question is impossible to answer	The answer depends on the risks for your industry, contract and special requirements	The answer depends on the maturity of your developers	The answer should be standardized for the software development industry	The answer depends on the risks for your industry, contract and special requirements
Which of the following is not a characteristic for Testability?	Operability	Observability	Simplicity	Robustness	Robustness

Cyclomatic Complexity method comes under which testing method.	White box	Black box	Green box	Yellow box	White box
Which of these can be successfully tested using Loop Testing methodology?	Simple Loops	Nested Loops	Concatenated Loops	All of the above	All of the above
To test a function, the programmer has to write a, which calls the function and passes it test data.	Stub	Driver	Proxy	None of the above	Driver
Equivalence partitioning is:	A black box testing technique used only by developers	A black box testing technique than can only be used during system testing	A black box testing technique appropriate to all levels of testing	A white box testing technique appropriate for component testing	A black box testing technique appropriate to all levels of testing
When a new testing tool is purchased, it should be used first by:	A small team to establish the best way to use the tool	Everyone who may eventually have some use for the tool	The independent testing team	The vendor contractor to write the initial scripts	A small team to establish the best way to use the tool
Inspections can find all the following except	Variables not defined in the code	Spelling and grammar faults in the documents	Requirements that have been omitted from the design documents	How much of the code has been covered	How much of the code has been covered
Software Debugging is a set of activities that can be planned in advance and conducted systematically.	TRUE	FALSE	none of these	any one	FALSE
Which of the following is not a software testing generic characteristics?	Different testing techniques are appropriate at different points in time	Testing is conducted by the developer of the software or an independent test group	Testing and debugging are different activities, but debugging must be accommodated in any testing strategy	None of the mentioned	Different testing techniques are appropriate at different points in time
ITG stands for	instantaneous test group	integration testing group	individual testing group	independent test group	independent test group

By collecting during software testing, it is possible to develop meaningful guidelines to halt the testing process.	Failure intensity	Testing time	Metrics	All of the mentioned	Metrics
Which of the following issues must be addressed if a successful software testing strategy is to be implemented?	Use effective formal technical reviews as a filter prior to testing	Develop a testing plan that emphasizes "rapid cycle testing."	State testing objectives explicitly	All of the mentioned	All of the mentioned
Test cases should uncover errors like	Nonexistent loop termination	Comparison of different data types	Incorrect logical operators or precedence	All of the mentioned	Nonexistent loop termination
Which of the following errors should not be tested when error handling is evaluated?	Error description is unintelligible	Error noted does not correspond to error encountered	Error condition causes system intervention prior to error handling	Error description provide enough information to assist in the location of the cause of the error	Error description is unintelligible
What is normally considered as an adjunct to the coding step	Integration testing	Unit testing	Completion of Testing	Regression Testing	Unit testing
Which of the following is not regression test case?	A representative sample of tests that will exercise all software functions	Additional tests that focus on software functions that are likely to be affected by the change	Tests that focus on the software components that have been changed	Low-level components are combined into clusters that perform a specific software sub- function	Low-level components are combined into clusters that perform a specific software sub- function
Which testing is an integration testing approach that is commonly used when "shrink-wrapped" software products are being developed?	Regression Testing	Integration testing	Smoke testing	Validation testing	Smoke testing
Defects are less costly if detected in which of the following phases	Coding	Design	Requirements Gathering	Implementation	Requirements Gathering

User Acceptance testing is	White box testing	Black box testing	Gray box testing	None of the	Black box
				above	 testing
Error guessing is a	Test verification	Test execution	Test control	Test data	Test data
	techniques	techniques	management	management	management
			techniques	technique	 technique
Histogram refers to	Bar chart	Run chart	Pareto diagram	Correlation	Bar chart
				diagram	
Pareto principle advocates	20-80 rule	80-20 rule	40-60 rule	60-40 rule	 80-20 rule
Which one is not Structural Testing?	Regression	Parallel	Acceptance	Stress	Acceptance
Testing comes under which category	Preventive	Appraisal	Failure	None of the	Appraisal
of cost of quality?				above	
Which of the following is not true	Top-Down	Use of stubs or	All modules need	Bottom – up	All modules
about Incremental testing?	approach can be	drivers are	to be completed	approach is also	need to be
	used	required	prior to testing	possible	completed prior
					to testing
Which of the following is not a part of test plan?	Scope	Mission	Objective	Risk	Mission
Which one is not Statistical Tool?	Cause and effect	Stratification	Run Chart	Regression	Cause and
	Graphing			Analysis	effect Graphing
The 'v' represent the following term:	Verification and	Static testing and	Black box testing	Software	Software
	validation	Dynamic testing	and white box	development	development
			testing	process and	process and
				software testing	software testing
				process	process
Function point is a measure of	Effort	Complexity	Usability	Size	Size
You are told to prepare a report on the	A histogram	A pareto diagram	A cause and	A scatter plot	A histogram
most commonly occurring product			effect diagram		
defects. You review the software					
defect reports, which categories the					
defects of coding errors, requirement					
errors, documentation errors, etc. The					
best tool to report this information is					
A statistical technique to assess,	Pareto chart	Control chart	Run chart	Histogram	Control chart
monitor and maintain the stability of a					
process is					

The two types of incremental testing approaches are top down and bottom up approach.	TRUE	FALSE	none of these	any one	TRUE
If the measurement taken by the two people are same refers to the terms as	Reliability	Validity	Calibration	Ease of use and simplicity	Reliability
Test Readiness review is conducted by the	Project manager	Test manager	Quality assurance personnel	User/Customer	Test manager
You are performing a test to see that it complies with the user requirement that a certain field be populated by using a drop down box containing a list of values. What kind of testing are you doing?	White box testing	Black box testing	Load testing	Regression testing	Black box testing
Which is the reputed testing standard?	M Bridge awards	QAI	ISO	Microsoft	ISO
Configuration Management Plan describes the Configuration Management procedures and structures to be used.	TRUE	FALSE			TRUE
This type of testing method attempts to find incorrect or missing functions, errors in data structures or external database access, interface errors, Performance errors and initialization and Termination errors. It is called as	White Box Testing	Grey Box Testing	Black Box Testing	Open Box Testing	Black Box Testing
Phase Definition. It will come under	CMM Level 1	CMM Level 2	None	any one	CMM Level 2
Software testing which is done without planning and Documentation is known as	adHoc Testing	Unit Testing	Regression testing	Functional testing.	adHoc Testing
Acceptance testing is known as	Beta Testing	Greybox testing	Test Automation	White box testing	Beta Testing
Retesting the entire application after a change has been made called as?	Full Regression Testing	Unit Regression	Regional Regression	Retesting	Full Regression Testing

# <u>Unit-II</u>

Questions	opt1	opt2	opt3	opt4	opt5	opt6	Answers
It measures the quality of a productIt is a specific part of the QA procedure, It is a corrective process,It applies for particular product & Deals	Validation	Verification	Quality Assurance	Quality Control			Quality Control
with the product.							
What are the Types of Integration Testing?	Big Bang Testing	Bottom Up Testing	Top Down Testing	All the above			All the above
Product Risk affects The quality or performance of the software.	TRUE	FALSE					TRUE
A metric used to measure the characteristic of documentation and code called as	Process metric	Product Metric	Test metrics	none of these			Product Metric
Which is non-functional	Unit Testing	Block box	Performance Testing	Regression			Performance Testing
The process that deals with the technical and management issues of software development called as?	Delivery Process	Testing Process	Software Process	all the above			Software Process
Which is Black-Box Testing method?	equivalence partitioning	code coverage	fault injection	none of these			equivalence partitioning
Business Risk affects The Organization developing or Procuring the software.	TRUE	FALSE	none	all the above			TRUE
Automation Testing should be done before starting Manual testing.Is the above statement correct?	Yes	No	may be yes	none of these			No
Earlier a defect is found the cheaper it is to fix it. Is the	Yes	No					Yes

above statement correct?					
Informing to the developer which bug to be fix first is	Severity	Priority	Fix ability	Traceability	Priority
The approach/document used to make sure all the requirements are covered when writing test cases	Test Matrix	Checklist	Test bed	Traceablity Matrix	Traceablity Matrix
Executing the same test case by giving the number of inputs on same build called as	Regression Testing	ReTesting	Ad hoc Testin	Sanity Testing	ReTesting
Control Charts is a statistical technique to assess, monitor, and maintain the stability of a process.	TRUE	FALSE			TRUE
To check whether we are developing the right product according to the customer requirements are not. It is a static process	Validation	Verification	Quality Assurance	Quality Control	Verification
To check whether we have developed the product according to the customer requirements r not. It is a Dynamic process.	Validation	Verification	Quality Assurance	Quality Control	Validation
Staff development plan describes how the skills and experience of the project team members will be developed.	TRUE	FALSE			TRUE
It is a set of levels that defines a testing maturity hieraecy	TIM (Testing Improving Model)	TMM (Testing Maturity Model)	TQM(Total Quality Management)	all the above	TMM (Testing Maturity Model)

A Non-Functional Software testing done to check if the user interface is easy to use and understand	Usability Testing	Security Testing	Unit testing	Block Box Testing	Usability Testing
The review and approved document (i.e. Test plan, System Requirement Specification's) is called as	Delivery Document	Baseline Document	Checklist	none of these	Baseline Document
What are the Testing Levels?	Unit Testing	Integration Testing	System Testing and Acceptance Testing.	All the above	All the above
Cost of quality = Prevention Cost + Appraisal cost + Failure cost	TRUE	FALSE			TRUE
A useful tool to visualize, clarify, link, identify, and classify possible cause of a problem. This is also called as "fishbone diagram" what is this?	Pareto Analysis	Cause-and- Effect Diagram	all the above	none of these	Cause-and- Effect Diagram
It measures the quality of processes used to create a quality product. It is a system of management activities, It is a preventive process, It applies for entire life cycle & Deals with Process.	Validation	Verification	Quality Assurance	Quality Control	Quality Assurance
Variance from product specifications is called?	Report	Requirement	Defect	all the above	Defect
Verification is	Process based	Product based	none	all the above	Process based
White box testing is not called as	Glass box testing	Closed box testing	OPen box testing	Clear box testing	Closed box testing

Name the events that will be analyzed, Count the named incidents, Rank the count by frequency using a bar chart & Validate reasonableness of the analysis is called as	Pareto Analysis	Cause and Effect Diagram	SWOT Analysis	Pie Charts	Pareto Analysis
Retesting of a single program or component after a change has been made?	Full Regression Testing	Unit Regression	Regional Regression	Retesting	Unit Regression
Requirement and Analysis, Design, Development or Coding, Testing and Maintenance is called as Software Development Life Cycle (SDLC)	TRUE	FALSE			TRUE
A Plan to overcome the risk called as	Migration Plan	Master plan	Maintenance plan	Mitigation Plan	Mitigation Plan
Beta testing will be done at	User place	Developers place	all the above	none of these	User place
Unit Testing will be done by	Testers	End Users	Customer	Developers	Developers
Optimization, Defect Prevention, and Quality Control. Its come under the	CMM Level 2	CMM Level 3	CMM Level 4	CMM Level5	CMM Level
can be used to design good test cases.	Equivalence Classes	Parameterizing	Boundary Values	trimming	a or c
By applying we minimize the redundant test cases.	Equivalence Partioning	Parameterizing	Boundary Values	trimming	Equivalence Partioning
test cases are like a green light for the application and help to determine whether or not the application should go into production.	System	Acceptance	Critical	Performance	Acceptance
In order to write black box test cases we need the	requirement document	design	project plan	All of above	All of above

help you to design a series of test cases that have a high likelihood of finding	requirement document	software testing techniques	project plan	SRS	software testing techniques
White-box testing, sometimes called, is a test case design method that uses the control structure of the procedural design to derive	gray box testing	glass-box testing	steel-box testing	Coding testing	glass-box testing
In order to generate effective tests at a lower cost, test designers analyze the following sources of information:	Requirements and functional specifications	Source code	All of above	Operational profile	All of above
Methodologies adopted while performing Maintenance Testing	Breadth Test and Depth Test	Retesting	Confirmation Testing	Sanity Testing	Breadth Test and Depth Test
<ul> <li>Which of the following is true about Formal Review or</li> <li>Inspection:-</li> <li>i. Led by Trained Moderator</li> <li>(not the author).</li> <li>ii. No Pre Meeting</li> <li>Preparations</li> <li>iii. Formal Follow up process.</li> <li>iv. Main Objective is to find defects</li> </ul>	ii is true and i,iii,iv are false	i,iii,iv are true and ii is false	i,iii,iv are false and ii is true	iii is true and i,ii,iv are false	i,iii,iv are true and ii is false
White Box Techniques are also called as :-	Structural Testing	Design Based Testing	Error Guessing Technique	Experience Based Technique	Structural Testing
What is an equivalence partition (also known as an equivalence class.?	A set of test cases for testing classes of objects	An input or output range of values such that only one value in the	An input or output range of values such that each value in	An input or output range of values such that every tenth value in	An input or output range of values such that only one value in the

		range becomes a test case	the range becomes a test case	the range becomes a test case	range becomes a test case
The Test Cases Derived from use cases	Are most useful in uncovering defects in the process flows during real world use of the system	Are most useful in uncovering defects in the process flows during the testing use of the system	Are most useful in covering the defects in the process flows during real world use of the system	Are most useful in covering the defects at the Integration Level	Are most useful in uncovering defects in the process flows during real world use of the system
Exhaustive Testing is	Is impractical but possible	Is practically possible	Is impractical and impossible	Is always possible	Is impractical but possible
Which of the following is not a part of the Test Implementation and Execution Phase	Creating test suites from the test cases	Executing test cases either manually or by using test execution tools	Comparing actual results	Designing the Tests	Designing the Tests
Which of the following techniques is NOT a White box technique?	Statement Testing and coverage	Decision Testing and coverage	Condition Coverage	Boundary value analysis	Boundary value analysis
A Project risk includes which of the following	Organizational Factors	Poor Software characteristics	Error Prone software delivered.	Software that does not perform its intended functions	Organizational Factors
The Planning phase of a formal review includes the following :-	Explaining the objectives	Selecting the personnel, allocating roles.	Follow up	Individual Meeting preparations	Selecting the personnel, allocating roles.
A Person who documents all the issues, problems and open	Moderator.	Scribe	Author	Manager	Scribe

points that were identified during a formal review.					
Which of the following is a Key Characteristics of Walk Through	Scenario, Dry Run, Peer Group	Pre Meeting Preparations	Formal Follow Up Process	Includes Metrics	Scenario , Dry Run , Peer Group
What can static analysis NOT find?	the use of a variable before it has been defined	unreachable ("dead") code	memory leaks	array bound violations	memory leaks
Incidents would not be raised against:	requirements	documentation	test cases	improvements suggested by users	improvements suggested by users
A Type of functional Testing, which investigates the functions relating to detection of threats, such as virus from malicious outsiders.	Security Testing	Recovery Testing	Performance Testing	Functionality Testing	Security Testing
Which of the following is not a major task of Exit criteria?	Checking test logs against the exit criteria specified in test planning.	Logging the outcome of test execution.	Assessing if more tests are needed.	Writing a test summary report for stakeholders.	Logging the outcome of test execution.
Testing where in we subject the target of the test, to varying workloads to measure and evaluate the performance behaviors and ability of the target and of the test to continue to function properly under these different workloads.	Load Testing	Integration Testing	System Testing	Usability Testing	Load Testing
Testing activity which is performed to expose defects in the interfaces and in the interaction between integrated components is :-	System Level Testing	Integration Level Testing	Unit Level Testing	Component Testing	Integration Level Testing
Static analysis is best described as:	The analysis of batch programs.	The reviewing of test plans.	The analysis of program	The use of black box	The analysis of program

	code.	testing.	co	ode.
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# <u>UNIT-III</u>

Questions	opt1	opt2	opt3	opt4	opt5	opt6	Answers
Reviewing the test Basis is a part of which phase	Test Analysis and Design	Test Implementation	Test Closure	Evaluating exit criteria			Test Analysis and Design
a part of which phase		and execution		and reporting			
Reporting Discrepancies as	Test Analysis	Test	Test Closure	Evaluating			Test Implementation
phase :-	and Design	and execution	Activities	and reporting			and execution
Which of the following items would not come under Configuration Management?	operating systems	test documentation	live data	user requirement document			live data
Handover of Test-ware is a part of which Phase	Test Analysis and Design	Test Planning and control	Test Closure Activities	Evaluating exit criteria and reporting			Test Closure Activities
The approach/document used to make sure all the requirements are covered when writing test cases	Test Matrix	Checklist	Test bed	Traceability Matrix			Traceability Matrix
Executing the same test case by giving the number of inputs on same build called as	Regression Testing	ReTesting	Ad hoc Testing	Sanity Testing			ReTesting
A Non-Functional Software testing done to check if the user interface is easy to use and understand	Usability Testing	Security Testing	Unit testing	Block Box Testing			Usability Testing

The review and approved document (i.e. Test plan, System Requirement Specification's) is called as	Delivery Document	Baseline Document	Checklist	all the above	Baseline Document
What are the Testing Levels?	Unit Testing	Integration Testing	System Testing and Acceptance Testing.	All the above	All the above
Retesting of a single program or component after a change has been made?	Full Regression Testing	Unit Regression	Regional Regression	none	Unit Regression
What are the Types of Integration Testing?	Big Bang Testing	Bottom Up Testing	Top Down Testing	All the above	All the above
Retesting modules connected to the program or component after a change has been made?	Full Regression Testing	Unit Regression	Regional Regression	Retesting.	Regional Regression
Standards and procedures for managing changes in an evolving software product is called?	Confirmation Management	Confederation Mangement	Configuration Management	Compartability Management	Configuration Management
What is correct Software Process Cycle?	Plan(P) >Check(C) >Act(A) >Do(D)	Plan(P) >Do(D) >Check(C) >Act(A)	Plan(P) >Do(D) >Act(A) >Check(C)	all the above	Plan(P) >Do(D) >Check(C) >Act(A)

Conducted to validate that the application, database, and network they may be running on can handle projected volumes of users and data effectively. The test is conducted jointly by developers, testers, DBA's and network associates after the system Testing called as	Functional Testing	Stress/Load Testing	Recovery Testing	Integration Testing	Stress/Load Testing
Which Software Development Life cycle model will require to start Testing Activities when starting development activities itself	Water falls model	Spiral Model	V-model	Linear model	V-model
How severely the bug is effecting the application is called as	Severity	Priority	Fix ability	Traceability	Severity
means under what test environment(Hardware, software set up. the application will run smoothly	Test Bed	Checkpoint	Code Walk through	Checklist	Test Bed
A Plan to overcome the risk called as	Migration Plan	Master plan	Maintenance plan	Mitigation Plan	Mitigation Plan
Lower and upper limits are present in	Control chart	Run chart	Bar chart	Resource chart	Control chart
Syntax checking is a	Code coverage technique	Structural testing technique	Functional testing technique	Statement coverage technique	Functional testing technique

A principal goal is to detect functional and structural					
defects in the unit is the		Integration	System	Acceptance	
goal oftest	Unit testing	testing	testing	testing	Unit testing
Which testing is used to	U			<u> </u>	U
detect defects that occur on		Integration	System	Accentance	Integration
the interfaces of units	Unit testing	testing	testing	testing	testing
	e int testing	tosting		none	
lest takes place	alpha	hata	both a and b	none	alpha
at the developer's site	aipiia	Deta		nono	alpila boto
test sends the				none	Deta
software to a cross-section					
of users who install it and					
use it under realworld					
working conditions	alpha	beta	both a and b		
Always testing to be					
performed by an					
independent					
team	development	client	testing	manager	testing
Functional and quality					
requirements are the two					
major requirements for	functional	performance	security	recovery	performance
testing	testing	testing	testing	testing	 testing
Results of performance					
testing should be	qualifiable	quantifiable	none		quantifiable
Stress testing is one of the		Integration	System	Acceptance	
types oftesting	Unit testing	testing	testing	testing	System testing
When a system is tested					
with a load that causes it to					
allocate its resources in					
maximum amounts, this is	functional		performance	recovery	
called testing	testing	stress testing	testing	testing	stress testing

	1	1	1	1 1	1 1
the systems'					
level is maintained when					
devices are interchanged, or					
when they fail	stress	quality	threshold	performance	performance
The following objective					T T
holds for which testing?					
"Show that all the					
configuration changing					
commands and menus work	configuration		performance	recoverv	configuration
properly"	testing	stress testing	testing	testing	testing
		<u>U</u>	0	0	
Password checking is					
essential to maintain	.1 1 1 1	1.	•,	C	
of the system	threshold	quality	security	performance	security
testing subjects					
a system to losses of					
resources in order to	<b>C</b>		<b>6</b>		
determine if it can recover	configuration		performance	recovery	
from the losses	testing	stress testing	testing	testing	recovery testing
Regression testing is not a					
level of testing, but it is the					
retesting of software that					
occurs when changes are					
made to ensure that the					
version of the					
software has retained the					
capabilities of the					
version and that					
introduced due to the				none of the	
abangag	old now	now old	both a and b	above	now old
When software is heing	olu, new	new, olu			
developed for a specific					
alignt tosts are					
carried out after system		Accentance	System	Integration	Accentance
testing	Unit testing	testing	testing	testing	testing
testing		iesting	testing	testing	testing

Which testing identifies any					
unprotected entries into the					
system that may allow					
access through unexpected		Acceptance	System	Integration	
channels	security testing	testing	testing	testing	security testing
At test a single		Integration	System	Acceptance	
component is tested	Unit testing	testing	testing	testing	unit testing
At the several					
components are tested as a					
group, and the tester					
investigates component		Integration	System	Acceptance	Integration
interactions	Unit testing	testing	testing	testing	testing
principle goal is to evaluate					<u> </u>
attributes such as usability,					
reliability, and performance is					
the goal of		Integration	System	Acceptance	
test	Unit testing	testing	testing	testing	System testing
test begins when all					
of the components have been		Integration	System	Acceptance	
integrated successfully	Unit testing	testing	testing	testing	System testing
A encapsulates					
multiple interacting methods					
operating on common data, so					
what we are testing is the				none of the	
Intraciass Interaction of the	altiant	alaaa	mode of	none of the	
methods.	object	Class	method	above	Class
One of the most beneficial					
features of object-oriented					
development is	encapsulation	polymorphism	class	object	encapsulation

	I	1	1	1 1	1	1
A program unit, in the, can be built with a well-defined public interface that proclaims its services (available methods) to client classes.	class	object	method	procedure		class
Classes are usually a part of a class hierarchy where there are existing relationships	overriding	polymorphism	encapsulation	inheritance		inheritance
Subclasses inherit methods from their	subclass	neighbour class	superclasses	none of the above		superclasses
is developed especially for test and is in addition to the code that composes the system under development.	test case	test plan	test harness	test procedure		test harness
The harness consists of that call the target code	drivers	stubs	method	code		drivers
is a technique that can be used to hide information.	encapsulation	polymorphism	class	object		encapsulation
The harness consists of that represent modules it calls	drivers	stubs	method	code		stubs
when a unit has been completely tested and finally passes all of the required tests it is ready for	delivery	retest	integration	system test		integration

to assemble the individual units into working subsystems and finally a complete system that is ready for system test is the goal oftesting	Unit testing	Integration testing	System testing	recovery testing	Integration testing
The auxiliary code developed to support testing of units and components is called a	test case	test plan	test harness	test procedure	test harness
integration test should only be performed on units that have been reviewed and have successfully passed	Unit testing	Integration testing	System testing	recovery testing	Unit testing
A is described as a sequence of method executions linked by messages	method group	method overriding	method call	method- message path	method- message path
Very often subsystems selected for are prioritized	Unit testing	Integration testing	System testing	recovery testing	Integration testing
A encapsulates multiple interacting methods operating on common data, so what we are testing is the intraclass interaction of the methods.	object	class	method	none of the above	class
Password checking is essential to maintain of the system	threshold	quality	security	performance	security
testing subjects a system to losses of resources in order to determine if it can recover from the losses	configuration testing	stress testing	performance testing	recovery testing	recovery testing

Which of the following	operating	test	live data	user		live data
items would not come under	systems	documentation		requirement		
Configuration				document		
Management?						

# <u>UNIT-IV</u>

Questions	opt1	opt2	opt3	opt4	opt5	opt6	Answers
The							
has a key role in							
developing and							
implementing the							
managerial components.	developer	test specialist	manager	customer			test specialist
setting goals and policies							
requires the							
participation and							
support of	upper	lower					upper
·	management	management	tester	developer			management
to increase market share							
10% in the next 2 years							
in the area of financial							
software is an example			Business/technical				
ofgoal	Business goal	Technical goal	goal	Political goal			Business goal
to reduce defects by 2%							
per year over the next 3							
years is an example of			Business/technical				
goal.	Business goal	Technical goal	goal	Political goal			Technical goal
to reduce hotline calls by							
5% over the next 2 years							
is an example of			Business/technical				Business/technical
goal.	Business goal	Technical goal	goal	Political goal			goal

to increase the number						
of women and minorities						
in high management						
positions by 15% in the						
next 3 years is an						
example of			Business/technical			
goal	Business goal	Technical goal	goal	Political goal		Political goal
is guided						
by policy, supports goal						
achievement, and is a						
vital part of all						
engineering activities.	Developing	testing	Planning	specification		Planning
A can be described as (i)						
a statement of intent, or						
(ii) a statement of a						
accomplishment that an						
individual or an						
organization wants to						
achieve	plan	metric	review	goal		goal
A						
A statement						
relates to an area where						
an individual, group, or						
organization wants to						
make improvements	plan	metric	review	goal		goal
goal is in	organizational					
the top level in the	functional			personal-level		
hierarchy of goals	unit	organizational	specific goals	goals		organizational
The organizational						
functional unit is						
represented in						
level in						
the hierarchy of goals	top	intermediate	low	none of the above		intermediate

In the testing domain,						
statements						
should provide a high-						
level vision of what						
testing is to accomplish						
in the organization with						
respect to quality of						
process and product.	goal	plan	requirements	design		goal
should						
express testing goals for		test				
each project	test case	procedures	Test plans	test metric		Test plans
A can be						
defined as a high-level						
statement of principle or						
course of action that is						
used to govern a set of						
activities in an						
organization	policy	metric	review	goal		policy
Because a						
provides the vision and						
framework for decision						
making, it is important						
to have the policy						
formally adopted by the						
organization,						
documented, and						
available for all						
interested parties.	goal	metric	review	policy		policy
An is						
suggested as a location				intraorganizational		intraorganizational
for policy statements	database	requirements	TMM hierarchy	web site		web site
statements						
reflect, integrate, and						
support achievement of						
testing goals.	goal	metric	policy	plan		policy

tests must be					
performed at several					
levels such as unit ,					
integration, system, and					
acceptance tests as					
appropriate for each	Execution-				
software product	based	regression	security	performance	Execution-based
is the					
process dedicated to					
locating the defects,					
repairing the code, and					
retesting the software.	testing	Debugging	auditing	security testing	Debugging
A is a document					
that provides a					
framework or approach					
for achieving a set of					
goals	manual	metric	process	plan	plan
	Ta al Ovalita	Test Ovelite	Tatal Quality	Tatal Quality	Tabal Quality
TOM represents	Management	Manager	Nanagement	Notal Quality	Nanagement
I QM Teplesellts	Management	Mallagel	Management	Manager	management
A Plan to overcome the	Migration				
risk called as	Plan	Master plan	Maintenance plan	Mitigation Plan	Mitigation Plan
refers to the					
activities and tasks					
managers engage in to					
periodically check the					
status of each project.					
Reports are prepared					
that compare the actual					
work done to the work	Project		Project		
that was planned.	controlling	Milestones	monitoring	none of the above	Project monitoring

consists						
of developing and						
applying a set of						
corrective actions to get						
a project on track when						
monitoring shows a						
deviation from what was	Project		Project			
planned.	controlling	Milestones	monitoring	none of the above		Project controlling
are						
tangible events that are						
expected to occur at a						
certain time in the						
project's lifetime.						
Managers use them to	Project		Project			
determine project status	controlling	Milestones	monitoring	none of the above		Milestones
The itself may						
be a component of the						
overall project plan or						
exist as a separate						
document	manual	document	policy	master test plan		master test plan
Each test plan should						
have a						
so that it can be						
associated with a						
specific project and						
become a part of the	unique					
project history	identifier	plan	name	address		unique identifier
may be						
described as						
distinguishing						
characteristics of a						
software component or						
system.	behaviour	Features	performance	function		Features

has a set of					
deliverables that					
includes the test plan					
along with its associated					
test design					
specifications, test					
procedures, and test	security	recovery	Execution-based	performance	Execution-based
cases.	testing	testing	testing	testing	testing
is					
supplementary code that					
is written specifically to					
support the test efforts,					
for example, module					
drivers and stubs	test case	test plan	test procedure	test harness	test harness
A is a					
hierarchical or treelike					
representation of all the					
tasks that are required	СММ			Work Breakdown	Work Breakdown
to complete a project	hierachy	TQM	Both a and b	Structure	Structure
is used to					
identity the features					
covered by the design					
and associated tests for		test design			test design
the features	test case	specification	test procedure	test harness	specification
		opcomoution			opcomoderon
A in general					
is a sequence of steps					
required to carry out a		test design			
specific task	test case	specification	procedure	test harness	procedure
to loopto and		++			
to locate and	to at also inv	test		Tastitan	To at the us
track the items that are	test design	procedure		Test item	Test item
submitted for test	specification	specification	test narness	i ransmittal Report	i ransmittal Report
Each Test Item					
Transmittal Report has a					
unique	identifier	name	address	plan	identifier

1						1
is a diary of the						
events that take place						
during the test.	test log	test plan	test result	test harness		test log
The tester should record						
in a						
(sometimes						
called a problem report)						
any event that occurs						
during the execution of						
the tests that is						
unexpected,						
unexplainable, and that						
requires a follow-up	test case		test incident			test incident
investigation	report	test log	report	none of the above		report
report is						
prepared when testing is	test case	test summary	test incident			test summary
complete.	report	report	report	none of the above		report
The view						
involves commitment						
and support for those						
activities and tasks						
related to improving						
testing process quality.	developer's	user's	tester's	manager's		manager's
The ,	· · ·					 U
view encompasses the						
technical activities and						
tasks that when applied,						
constitute best testing						
practices	developer's	user's	tester's	manager's		developer's
The view is						
defined as a cooperating						
or supporting view.	developer's	user's	tester's	manager's		user's
					1	

have an						
important role in the						
development of testing						
goals and policies	developer	user	tester	manager		developer
play an						
indirect role in the						
formation of an						
organization's testing						
goals and polices since						
these goals and policies						
reflect the organizations						
efforts to ensure						
customer/client/user		users and				
satisfaction	developer	client	tester	manager		users and client
support						
the test planning						
maturity goal by		users and				
preparing the test plans	developer	client	tester	manager		manager
By supporting a test						
group an organization						
acquires in						
areas that relate to						
testing and quality issues	coordination	management	teamwork	leadership		leadership
activities						
include filling positions,						
assimilating new						
personnel, education						
and training, and staff						
evaluation	testing	management	Staffing	none of the above		Staffing
includes						
providing leadership,						
building teams,						
facilitating						
communication,						
motivating personnel,						
resolving conflicts, and						
delegating authority.	testing	Directing	management	Staffing		Directing

includes selecting organizational structures, creating positions, defining						
delegating authority.	Organizing	Directing	management	Staffing		Organizing
When the project is completed they return to the test organization for	testing	assignment	reassignment	none of the above		reassignment
is the						
central person						
concerned with all						
aspects of testing and	tost managar	tastland	tost onginoors	junior test		tast managar
quality issues.	lest manager		test engineers	engineers		lest manager
the test manager and						
works with a team of						
test engineers on				iunior test		
individual projects.	test manager	test lead	test engineers	engineers		
design.						
develop, and execute						
tests, develop test						
harnesses, and set up						
test laboratories and				junior test		
environments	test manager	test lead	test engineers	engineers		
are usually						
new hires. They gain						
experience by						
participating in test						
design, test execution,						
and test harness				junior test		
development	test manager	test lead	test engineers	engineers		

is used to						
identity the features						
covered by the design						
and associated tests for		test design			test design	
the features	test case	specification	test procedure	test harness	specification	
are						
tangible events that are						
expected to occur at a						
certain time in the						
project's lifetime.						
Managers use them to	Project		Project			
determine project status	controlling	Milestones	monitoring	none of the above	Milestones	
is the						
central person						
concerned with all						
aspects of testing and				junior test		
quality issues.	test manager	test lead	test engineers	engineers	test manager	
By supporting a test						
group an organization						
acquires in						
areas that relate to						
testing and quality issues	coordination	management	teamwork	leadership	leadership	
to reduce defects by 2%						
per year over the next 3						
years is an example of			Rusiness /technical			
	Rusiness goal	Technical goal	goal	Political goal	Technical goal	
goal.	Dusiness goar	Technical goal	goai			
<sup>13</sup>						
is written specifically to						
support the test efforts						
for example, module						
drivers and stubs	test case	test plan	test procedure	tost barnoss	tost barnoss	
				LEST HALLESS	LEST HULLESS	
has a kov rolo in						
developing and						
implomenting the						
managorial components	dovolonor	tost specialist	managar	customor	tost specialist	
managenai components.	ueveloper	lest specialist	manager	customer	lest specialist	

# <u>UNIT-V</u>

Questions	opt1	opt2	opt3	opt4	opt5	opt6	Answers
Which of the							
about Formal							
Review or							
Inspection:- i. Led							
by Trained							
Moderator (not the							
author) ii. No Pre							
Meeting							
Freparations III.							
process iv Main	ii is true and		i iji iv are				
Objective is to find	i.iii.iv are	i.iii.iv are true	false and ii is	iii is true and			ii is true and
defects	false	and ii is false	true	i,ii,iv are false			i,iii,iv are false

The Phases of formal review process is mentioned below arrange them in the correct order.i. Planning ii. Review Meeting iii. Rework iv. Individual Preparations v. Kick Off vi. Follow Up	i,ii,iii,iv,v,vi	vi,i,ii,iii,iv,v	i,v,iv,ii,iii,vi	i,ii,iii,v,iv,vi		i,v,iv,ii,iii,vi	1
The Planning phase of a formal review includes the following :	Explaining the objectives	Selecting the personnel, allocating roles	Follow up	Individual Meeting preparations		Selecting the personnel, allocating roles	

A Person who documents all the issues, problems and open points that were identified during a formal review.	Moderator	Scribe	Author	Manager		Scribe
				~		
Who are the						
persons involved in						
i. Manager ii.						
Moderator iii. Scribe			ii,iii,iv are	i,iv are true		
/ Recorder iv.	i,ii,iii,iv are	i,ii,iii are true	true and i is	and ii, iii are		i,ii,iii are true
Assistant Manager	true	and iv is false	false	false		and iv is false

Which of the following is a Key Characteristics of Walk Through	Scenario , Dry Run , Peer Group	Pre Meeting Preparations	Formal Follow Up Process	Includes Metrics		Scenario , Dry Run , Peer Group
What can static analysis NOT find?	the use of a variable before it has been defined	unreachable ("dead") code	memory leaks	array bound violations		memory leaks
Incidents would not be raised against:	requirements	documentation	test cases	improvements suggested by users		improvements suggested by users
Which of the following is not a major task of Exit criteria?	Checking test logs against the exit criteria specified in test planning.	Logging the outcome of test execution	Assessing if more tests are needed	Writing a test summary report for stakeholders.		Logging the outcome of test execution
Static analysis is best described as:	The analysis of batch programs.	The reviewing of test plans.	The analysis of program code.	The use of black box testing.		The analysis of program code.

Reviewing the test Basis is a part of which phase	Test Analysis	Test Implementation	Test Closure	Evaluating exit criteria and reporting		Test Analysis
Reporting Discrepancies as incidents is a part of which phase :-	Test Analysis and Design	Test Implementation and execution	Test Closure Activities	Evaluating exit criteria and reporting		Test Implementation and execution
Which of the following items would not come under Configuration Management?	operating systems	test documentation	live data	user requirement document		live data
Handover of Test- ware is a part of which Phase	Test Analysis and Design	Test Planning and control	Test Closure Activities	Evaluating exit criteria and reporting		Test Closure Activities

Control Charts is a statistical technique to assess, monitor, and maintain the stability of a process.	TRUE	FALSE			TRUE
Staff development plan describes how					
the skills and experience of the project team members will be developed.	TRUE	FALSE			TRUE

The review and approved document (i.e. Test plan, System Requirement Specification's) is called as	Delivery Document	Baseline Document	Checklist	none of the above		Baseline Document
Name the events that will be analyzed, Count the named incidents, Rank the count by frequency using a bar chart & Validate reasonableness of the analysis is called as	Pareto Analysis	Cause and Effect Diagram	SWOT Analysis	Pie Charts		Pareto Analysis

Configuration Management Plan describes the Configuration Management procedures and structures to be					
used.	TRUE	FALSE			 TRUE
Phase Definition. It will come under	CMM Level 1	CMM Level 2	None		CMM Level 2

It measures the quality of a product It is a specific part of the QA procedure, It is a corrective process, It applies for particular product & Deals with the			Quality	Quality		
product.	Validation	Verification	assurance	control		Quality control
Product Risk affects The quality or performance of the software.	TRUE	FALSE				TRUE

A metric used to measure the characteristic of						
documentation and code called as	Process metric	Product Metric	test metric	none of the above		Product Metric
Business Risk affects The Organization developing or Procuring the						
software.	TRUE	FALSE				TRUE

Stratification is a Technique used to analyze/divide a universe of data into homogeneous groups(stratA	TRUE	FALSE			TRUE
It provides a set of levels and an assessment model, and presents a set of recommended practices that allow organizations to improve their testing processes.	TIM (Testing Improving Model)	TMM (Testing Maturity Model)	TQM(Total Quality Management)		TIM (Testing Improving Model)

Standards and procedures for managing changes in an evolving software product is called?	Confirmation Management	Confederation Mangement	Configuration Management	Compartability Management		Configuration Management
Maintenance Plan predicts the maintenance requirements of the system, maintenance costs and effort required	TRUE	FALSE				TRUE
Integration, It will come under	CMM Level 1	CMM Level 3	CMM Level 2	none of the above		CMM Level 3

I		I		l	l I		1
A metric used to							
measure the							
characteristic of							
the methods,							
Techniques and							
tools employed in							
developing							
implementing and							
maintaining the							
				none of the			
software system				none of the			<b>D</b>
called as	Process metric	Product Metric	test metric	above			Process Metric

Check						
Sheet(Checklist. is						
considered a simple						
, but powerful statistical tool						
because it						
differentiates						
between two	TRUF	FAI SF				TRUF
extremes.	INCL	TALJE				INCE
Management and						
will come under	CMM Level 1	CMM Level 3	CMM Level 4	CMM Level 2		CMM Level 4
				Software that		
A Project risk			Frror Prone	does not		
includes which of	Organizational	Poor Software	software	intended		Organizational
the following	Factors	characteristics	delivered.	functions		Factors

				1	l i i i i i i i i i i i i i i i i i i i	I	1 1
In a risk-based							
approach the risks							
identified may be							
used to : i.							
Determine the test							
technique to be							
employed ii							
Dotormino tho							
extent of testing to							
be carried out iii.							
Prioritize testing in							
an attempt to find							
critical defects as							
early as nossible iv	– .						
Dotorming the cost	11 1s Irue; 1,		11 & 111 are				
	111, 1V & v are	1,11,111 are true	True; i, iv	11, 111 & iv are			1,11,111 are true
of the project	False	and iv is false	are False	True; i is false			and iv is false

It is a set of levels that defines a testing maturity hierarchy	TIM (Testing Improving Model)	TMM (Testing Maturity Model)	TQM(Total Quality Management)	none of the above		TMM (Testing Maturity Model)
Optimization, Defect Prevention, and Quality Control. Its come under the	CMM Level 2	CMM Level 3	CMM Level 4	CMM Level 5		CMM Level 5
Monitoring testing status means identifying thestate of the testing process	current	previous	old	none of the above		current

The needs to determine if the testing tasks are being completed on time and within budget.	tester	manager	developers	none of the above		manager
In the past the measure LOC/hour has been used to evaluate productivity for	tester	manager	developers	none of the above		developers

lest effectiveness						
will						
allow managers to						
determine if test						
resources have been						
used wisely and						
productively to						
remove defects and						
evaluate product				none of the		
quality.	measurements	evaluations	testing	above		measurements

Test effectiveness allow						
managers to learn which testing						
activities are or are				none of the		
not productive	measurements	evaluations	testing	above		evaluations
usually result in some type of status report published by the						
that is distributed to				Status		Status
upper management.	Client meeting	testing	developing	meetings		meetings

is the technique is based						
on intentionally						
inserting a known set of defects into a				none of the		
program.	coding	viruses	Fault Seeding	above		Fault Seeding
The Capability Maturity Model includes						
configuration management as a						
Key Process Area at	CMM Level 2	CMM Level 3	CMM Level 4	CMM Level 5		CMM Level 2

are formally reviewed and agreed upon versions of software artifacts, from which all changes are measured	Baselines	documentation	manual	none of the above		Baselines
The team involved in						
change control is called a 	change control board	management board	configuration control board	SCM board		configuration control board

contain a history of all the changes and change information for each configuration item	configuration control board	Configuration status reporting	documents	manual		Configuration status reporting
Ais a						
whose purpose is to						
evaluate a software						
artifact or a set of	atatua	dafaat	adit			
software artifacts	status	defect	audit	review		review

reviews usually focus on project management and project status.	Managerial	technical	formal	informal		Managerial
reviews						
are an important						
way for colleagues						
to communicate and						
get peer input with						
respect to their work	Managerial	technical	formal	informal		informal

					1	1	
reviews							
require written							
reports that							
summarize findings,							
and in the case of							
one type of review							
called an inspection.							
a statement of							
responsibility for the							
results by the							
reviewers is also			<u>,</u>				<b>C</b> 1
required.	Managerial	technical	tormal	informal			tormal

Inspections are a type of review that is in nature and requires						
preparation on the						
team	Managerial	technical	formal	informal		formal
The key item that						
prepares is the						
that				checklist of		checklist of
for the review	manual	documents	plan	items		items

When the inspection meeting has been completed (all agenda items covered) the inspectors are usually asked to sign a written document that is sometimes	summary			none of the		summary
called a	report	status report	audit report	adove		report
have traditionally been applied to design and code	Inspections	Walkthroughs	Audit	Review		Walkthroughs
What can static analysis NOT find?	the use of a variable before it has been defined	unreachable ("dead") code	memory leaks	array bound violations		memory leaks

Incidents would not be raised against:	requirements	documentation	test cases	improvements suggested by users		improvements suggested by users
Maturity Model						
includes						
configuration						
management as a						
Key Process Area at						
	CMM Level 2	CMM Level 3	CMM Level 4	CMM Level 5		CMM Level 2

are formally reviewed and agreed upon						
artifacts, from which all changes are				none of the		
measured	Baselines	documentation	manual	above		Baselines
Business Risk affects The Organization developing or Procuring the software.	TRUF	FAI SF				TRUF