

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT-3	Sheet No. 1/5
Branch	Information Technology			Semester	VI
Course Code		Course Name	Software Testing		
Course Outcome - 1	Illustrate basics of Software Testing types and its level			Teach Hrs	Mark s
Learning Outcome 1	Explain Software testing fundamentals			10	15
Contents	<ul style="list-style-type: none"> • Software Testing : <ul style="list-style-type: none"> ✓ Introduction ✓ Objectives Of Testing ✓ Testing Principles • Software Testing Life Cycle • V model of Testing <ul style="list-style-type: none"> ✓ Verification Vs Validation • Quality Control Vs Quality Assurance 				
Method of Assessment	External: End semester theory examination (Pen paper test).				
Learning Outcome 2	Explain Software Testing Process			6	10
Contents	<ul style="list-style-type: none"> • Types and Level of Software Testing • Testing Vs Debugging • Software Build Process • Test Maturity Model 				
Method of Assessment	Internal: Mid semester theory examination (Pen paper test).				
Learning Outcome 3	Classify Software Testing			10	15
Contents	<ul style="list-style-type: none"> • White box – Path , Loop , Condition • Black Box – <ul style="list-style-type: none"> ✓ Functional (Unit, Integration, System) ✓ Non Functional (Load, Security, Usability, Performance, Portability, Efficiency) • Grey Box • Other Testing (Stress, Alpha, Beta, Mutation, Monkey, Agile, GUI, API, Device Testing – Mobile App Testing, Accessibility) 				

Method of Assessment	External: End semester theory examination (Pen paper test).			
Learning Outcome 4	Explain Software Testing Techniques	8	10	
Contents	<ul style="list-style-type: none"> • White Box Testing Technique <ul style="list-style-type: none"> ✓ Data Flow Testing ✓ Control Flow Testing ✓ Branch Coverage Testing ✓ Statement Coverage Testing ✓ Decision Coverage Testing • Black box Testing Technique <ul style="list-style-type: none"> ✓ Decision Table ✓ All-pair Testing ✓ Cause-Effect Testing ✓ State Transition ✓ Use Case • Grey Box Testing Technique <ul style="list-style-type: none"> ✓ Matrix Testing ✓ Regression Testing 			
Method of Assessment	External: End semester theory examination (Pen paper test).			
RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 2/5	
Branch	Information Technology	Semester	VI	
Course Code		Course Name	Software Testing	
Course Outcome - 2	Construct Test Documents	Teach Hrs	5	Mark s
Learning Outcome 5	Explain Testing documentation for case development	5	5	
Contents	<ul style="list-style-type: none"> • Testing Documentation <ul style="list-style-type: none"> ✓ Introduction ✓ Types of Test document ✓ Benefit and Drawback • Test scenario 			
Method of Assessment	External: End semester theory examination (Pen paper test).			

Learning Outcome 6	Explain Test case and its design techniques			6	5
Contents	<ul style="list-style-type: none"> • Test case • Test case design technique <ul style="list-style-type: none"> ✓ Error Guessing ✓ Equivalence Partitioning ✓ Boundary Value Analysis 				
Method of Assessment	External: End semester theory examination (Pen paper test).				
Learning Outcome 7	Develop test case document for your project			6	10
Contents	<ul style="list-style-type: none"> • Prepare test scenarios • Prepare test data • Write test cases for Functional testing, Non-functional testing • Write Unit test, Integration test and User Acceptance Test 				
Method of Assessment	External: Laboratory observation and viva voce.				
RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE			FORMAT-3	Sheet No. 3/5
Branch	Information Technology			Semester	VI
Course Code		Course Name	Software Testing		
Course Outcome - 3	Plan test and its deliverables			Teach Hrs	Marks
Learning Outcome 8	Explain Test plan and its components			7	10
Contents	Test Plan <ul style="list-style-type: none"> ✓ Types ✓ Component/Attributes ✓ Writing guidelines ✓ Importance 				
Method of Assessment	External: End semester theory examination (Pen paper test).				
Learning Outcome 9	Plan Testing with its component			6	10

Contents	Write Test plan for your project by using sample test plan template covering all basic test plan component / attribute (Objective, Scope, Methodology, Assumption, Risk, Role, Schedule etc.)			
Method of Assessment	External: Laboratory observation and viva voce.			
Learning Outcome 10	Apply execution of test case & mark its coverage	6	10	
Contents	<ul style="list-style-type: none"> • Perform Test execution and reporting • Prepare Traceability Matrix 			
Method of Assessment	Internal: Lab Observation/Assignment			
RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 4/5	
Branch	Information Technology	Semester	VI	
Course Code		Course Name	Software Testing	
Course Outcome - 4	Make use of available test management tool	Teach Hrs	Mark s	
Learning Outcome 11	Explain Software Bug	7	10	
Contents	Software bug <ul style="list-style-type: none"> ✓ Introduction ✓ Terminology - Defect, Bug, Error, Issue, Mistake, Failure ✓ Bug Life Cycle ✓ Bug Reporting - Severity and Priority 			
Method of Assessment	External: End Semester theory examination (Pen paper test).			
Learning Outcome 12	Outline Test management tool and bug tracking tool	9	10	
Contents	<ul style="list-style-type: none"> • Test Data Mining • Test Reporting • Version Control • Case study on available Test management tool like Quality Centre • Case study on available bug tracking tool like bugzilla / Jira 			

Method of Assessment	Internal: Mid semester theory examination (Pen paper test).			
Learning Outcome 13	Develop and track test case	6	10	
Contents	Design and track sample test case based on software requirement of project by using available bug tracking tool			
Method of Assessment	External: Laboratory observation and viva voce.			
RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 5/5	
Branch	Information Technology	Semester	VI	
Course Code		Course Name	Software Testing	
Course Outcome - 5	Make use of available tool for automation testing	Teach Hrs	7	Mark s
Learning Outcome 14	Outline Automation testing tool	7	10	
Contents	<ul style="list-style-type: none"> Automation Testing Vs Manual Testing Why and when to automate Case study on available automation testing tool like Selenium/ Cypress 			
Method of Assessment	Internal: Mid semester theory examination (Pen paper test).			
Learning Outcome 15	Construct automated test script	6	10	
Contents	Write automated test cases script in java/python/php to test web application using recent available automation testing tool framework like Selenium			
Method of Assessment	Internal: Lab Observation/Assignment			

NOTE: **"available" means latest tools / technology, since tools name mentioned as per current industry trends that may get change over course of time hence faculties are not restricted to teach or follow tools as mentioned, faculties can have their option with change of tool technology.*

REFERENCE BOOKS:

S No	Title & Publication	Author
1	Software Engineering – A Practitioner’s Approach	Roger Pressman
2	Software Testing: A Practical Approach PHI Learning	Abhishek Desai
3	Software Testing - A Craftsman’s Approach	Paul C Jorgenson
4	https://www.javatpoint.com	Web resource
5	https://www.bugzilla.org	Web resource
6	https://www.atlassian.com/software/jira	Web resource
7	https://www.selenium.dev	Web resource
8	https://www.cypress.io	Web resource
9	E-books/E-tools/Relevant software to be used as recommended by AICTE/RGPV	

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				1	1	
Course Name	Software Testing												
CO Description	Illustrate basics of Software Testing types and its level												
LO Description	Explain Software testing fundamentals												
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	<ul style="list-style-type: none"> • Software Testing : <ul style="list-style-type: none"> ✓ Introduction ✓ Objectives Of Testing ✓ Testing Principles • Software Testing Life Cycle • V model of Testing <ul style="list-style-type: none"> ✓ Verification Vs Validation • Quality Control Vs Quality Assurance 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	10	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	End semester theory examination	Pen Paper Test	15	Question paper + Rating scale			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				1	2	
Course Name	Software Testing												
CO Description	Illustrate basics of Software Testing types and its level												
LO Description	Explain Software Testing Process												
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required			Remarks				
1	<ul style="list-style-type: none"> ● Types and Level of Software Testing ● Testing Vs Debugging ● Software Build Process ● Test Maturity Model 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	6	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment		Maximum Marks	Resources Required			External / Internal					
1	Mid semester theory examination (Pen paper test).	Quiz / Pen Paper / Short Answer		10	Test Paper + rating scale			Internal					
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				1	3	
Course Name		Software Testing											
CO Description		Illustrate basics of Software Testing types and its level											
LO Description		Classify Software Testing											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	<ul style="list-style-type: none"> ● White box – Path , Loop , Condition ● Black Box – <ul style="list-style-type: none"> ✓ Functional (Unit, Integration, System) ✓ Non Functional (Load, Security, Usability, Performance, Portability, Efficiency) ● Grey Box ● Other Testing (Stress, Alpha, Beta, Mutation, Monkey, Agile, GUI, API, Device Testing – Mobile App Testing, Accessibility) 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	10	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	End semester theory examination	Pen Paper Test	15	Question paper + Rating scale			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				1	4	
Course Name		Software Testing											
CO Description		Illustrate basics of Software Testing types and its level											
LO Description		Explain Software Testing Techniques											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	<ul style="list-style-type: none"> • White Box Testing Technique <ul style="list-style-type: none"> ✓ Data Flow Testing ✓ Control Flow Testing ✓ Branch Coverage Testing ✓ Statement Coverage Testing ✓ Decision Coverage Testing • Black box Testing Technique <ul style="list-style-type: none"> ✓ Decision Table ✓ All-pair Testing ✓ Cause-Effect Testing ✓ State Transition ✓ Use Case • Grey Box Testing Technique <ul style="list-style-type: none"> ✓ Matrix Testing ✓ Regression Testing 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	8	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	End semester theory examination	Pen Paper Test	10	Question paper + rating scale			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				2	5	
Course Name		Software Testing											
CO Description		Construct Test Documents											
LO Description		Explain Testing documentation for case development											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	<ul style="list-style-type: none"> • Testing Documentation <ul style="list-style-type: none"> ✓ Introduction ✓ Types of Test document ✓ Benefit and Drawback • Test scenario 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	5	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal								
1	End semester theory examination	Pen Paper Test	5	Question paper + rating scale	External								
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				2	6	
Course Name	Software Testing												
CO Description	Construct Test Documents												
LO Description	Explain Test case and its design techniques												
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	<ul style="list-style-type: none"> ● Test case ● Test case design technique <ul style="list-style-type: none"> ✓ Error Guessing ✓ Equivalence Partitioning ✓ Boundary Value Analysis 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	6	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	End semester theory examination	Pen Paper Test	5	Question paper + rating scale			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME		Branch Code		Course Code		CO Code	LO Code	Format No. 4
				I	0	4		2	7	
Course Name	Software Testing									
CO Description	Construct Test Documents									
LO Description	Develop test case document for your project									
SCHEME OF STUDY										
S. No.	Learning Content	Teaching –Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks			
1	<ul style="list-style-type: none"> ● Prepare test scenarios ● Prepare test data ● Write test cases for Functional testing, Non-functional testing ● Write Unit test, Integration test and User Acceptance Test 	Interactive lab classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will demonstrate major components inside the lab to students, students will practice, provide quiz, assignment etc., teacher will conduct remedial and tutorials.	NIL	6	Handouts, chalk board, PPT, text book, charts, video film.				
SCHEME OF ASSESSMENT										
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal			
1	Laboratory test by observation	Student write manual test case for given problem/project / Lab Observation Viva Voce	10	Observation schedule/check-list /rating scales /rubrics			External			
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)										
Faculties should promote student to write manual test cases in excel sheet for their project before coding on the basis of software requirement document / plan										

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				3	8	
Course Name		Software Testing											
CO Description		Plan test and its deliverables											
LO Description		Explain Test plan and its components											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	Test Plan: <ul style="list-style-type: none"> ✓ Types ✓ Component/Attributes ✓ Writing guidelines ✓ Importance 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/quiz/tutorial to make students practice their knowledge.	7	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	End semester theory examination	Pen Paper Test	10	Question paper + rating scale			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				3	9	
Course Name	Software Testing												
CO Description	Plan test and its deliverables												
LO Description	Plan Testing with its component												
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	Write Test plan for your project by using sample test plan template covering all basic test plan component / attribute (Objective, Scope, Methodology, Assumption, Risk, Role, Schedule etc.)	Interactive lab classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will demonstrate major components inside the lab to students, students will practice, provide quiz, assignment etc., teacher will conduct remedial and tutorials.	NIL	6	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	Laboratory test by observation	Test plan document prepared for project work/ Lab Observation Viva Voce	10	Observation schedule/check-list /rating scales /rubrics			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
Detailed Test plan document on the basis of software requirement specification with coverage of all attributes for project can be checked by faculties													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				3	10	
Course Name	Software Testing												
CO Description	Plan test and its deliverables												
LO Description	Apply execution of test case & mark its coverage												
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required			Remarks				
1	<ul style="list-style-type: none"> Perform Test execution and reporting Prepare Traceability Matrix 	Interactive lab classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will demonstrate major components inside the lab to students, students will practice, provide quiz, assignment etc., teacher will conduct remedial and tutorials.	NIL	6	Handouts, chalk board, PPT, text book, charts, Computers							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment			Maximum Marks	Resources Required			External / Internal				
1	Lab Observation/Assignment	Test case result after completion of coding of project / Lab Observation			10	Observation schedule/check-list /rating scales /rubrics			Internal				
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
Faculties can check out the result of testing of software after/during completion of coding and trace error													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				4	11	
Course Name		Software Testing											
CO Description		Make use of available test management tool											
LO Description		Explain Software bug											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	Software bug <ul style="list-style-type: none"> ✓ Introduction ✓ Terminology - Defect, Bug, Error, Issue, Mistake, Failure ✓ Bug Life Cycle ✓ Bug Reporting - Severity and Priority 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	7	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	End semester theory examination	Pen Paper Test	10	Question paper + rating scale			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code		CO Code	LO Code	Format No. 4
					I	0	4				4	
Course Name		Software Testing										
CO Description		Make use of available test management tool										
LO Description		Outline Test management tool and bug tracking tool										
SCHEME OF STUDY												
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks					
1	<ul style="list-style-type: none"> • Test Data Mining • Test Reporting • Version Control • Case study on <i>available</i> Test management tool like Quality Centre • Case study on <i>available</i> bug tracking tool like bugzilla / Jira 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	9	NIL	Handouts, chalk board, PPT, text book, charts, video film.						
SCHEME OF ASSESSMENT												
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal					
1	Quiz/ Short Answer type questions	Pen Paper / Quiz / Short Answer	10	Pen paper test + rating scale			Internal					
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)												
NIL												

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				4	13	
Course Name		Software Testing											
CO Description		Make use of available test management tool											
LO Description		Develop and track test case											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	Design and track sample test case based on software requirement of project by using <i>available</i> bug tracking tool	Interactive lab classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will demonstrate major components inside the lab to students, students will practice, provide quiz, assignment etc., teacher will conduct remedial and tutorials.	NIL	6	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	Laboratory observation and viva voce.	Student able to use bug tracking tool and asked queries related to it / Lab Observation Viva Voce	10	Observation schedule/check-list /rating scales /rubrics			External						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
Faculties use available any bug tracking tools to demonstrate test case design writing and tracking (like Jira / bugzilla / Quality Centre)													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				5	14	
Course Name		Software Testing											
CO Description		Make use of available tool for automation testing											
LO Description		Outline Automation testing tool											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching –Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	<ul style="list-style-type: none"> Automation Testing Vs Manual Testing Why and when to automate Case study on <i>available</i> automation testing tool like Selenium/ Cypress 	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to students. Teacher will conduct assignments/ quiz/tutorial to make students practice their knowledge.	7	NIL	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	Quiz/ Short Answer type questions	Pen Paper / Quiz / Short Answer	10	Pen paper test + rating scale			Internal						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
NIL													

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME			Branch Code			Course Code			CO Code	LO Code	Format No. 4
					I	0	4				5	15	
Course Name		Software Testing											
CO Description		Make use of available tool for automation testing											
LO Description		Construct automated test script											
SCHEME OF STUDY													
S. No.	Learning Content	Teaching –Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks						
1	Write automated test cases script in java/python/php to test web application using recent <i>available</i> automation testing tool framework like Selenium	Interactive lab classroom teaching, demonstration, quiz, assignments, tutorial	Teacher will demonstrate major components inside the lab to students, students will practice, provide quiz, assignment etc., teacher will conduct remedial and tutorials.	NIL	6	Handouts, chalk board, PPT, text book, charts, video film.							
SCHEME OF ASSESSMENT													
S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required			External / Internal						
1	Lab Observation/Assignment	Student able to use Automation Testing concept and its tool and asked queries related to it / Lab Observation	10	Observation schedule/check-list /rating scales /rubrics			Internal						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)													
Faculties demonstrate the usage of available automation testing tools (like Selenium) to student													