RGPV WING) I	(DIPL BHOPAL	.OMA	OBE CURRI	CULUM FOR T	HE FOR	MAT-3	Sheet No. 1/5			
Branch	Information	on Tec	hnology		Semeste	r VI				
Course Code			Course Name	Information So	ecurity an	d Cyber	Law			
Course O	utcome -		Identify Information Security within the system							
Learning 1	Outcome	Outli	ne Information	Security		6	10			
Contents		• S	ecurity Principles	f Security, Types , CIA Triad logies: Threat,	·		ity, Risk,			
Method Assessme	of nt	Internal: Mid semester theory examination (Pen paper test).								
Learning 2	Outcome	Expla	in threats, atta	cks & vulnerabi	ilities	9	10			
Contents		• M	ttack, Brute force lalware threat: V	Passive (DoS atta e attack, Dictiona Virus, worms, Tro erview, classifica	ry attack) jan horse, l	ogic bom				
Method Assessme	of nt	Exteri	nal: End semeste	r theory examina	tion (Pen p	aper test	:).			
Learning 3	Outcome	Expe	riment with atta	acks and vulner	ability	4	10			
Contents		fo	olders in compute	lities like creating er system Scan after creatin						
Method Assessme	of nt	Exteri	nal: Laboratory o	bservation and vi	va voce.					
RGPV WING) I	(DIPL BHOPAL	.OMA	OBE CURRI	CULUM FOR T	HE FOR	мат-з	Sheet No. 2/5			

Branch	Infor	matio	n Tecl	nnology		Semester	VI					
Course Code				Course Name	Information Se	ecurity and (Cyber La	ıw				
Course C	utcom	1e -	Apply	different Cryp	ques	Teach Hrs	Mark s					
Learning 4	Outc	ome	Explain cryptography 7 10									
Contents			DTıSıCi	ecryption ransposition Tech	verview, plain tex nnique : Rail fence nique: Caesar (abetic Cipher	e, Simple Colu	ımnar					
Method Assessme	ent	of	Exterr	external: End semester theory examination (Pen paper test).								
Learning 5	Outc	ome		cribe Symmet tography algor	-	netric key	8	10				
Contents			Ty	ypes (DES, RSA	symmetric key Algorithm, Diffie Overview, MD-5	Hellman algoi	rithm)					
Method Assessme	ent	of	Intern	al: Mid semester	theory examinat	ion (Pen pape	er test).					
Learning 6	Outc	ome	Mak	e use of crypto	graphic tool and	l technique	7	10				
Contents			 Perform encryption & decryption on given message by using programming language (C/Python/ PHP/Java) Experiment with available cryptology tool (like CrypTool) Send and receive secret message using command prompt o available stenography tool (like steghide) 									
Method Assessme	ent	of	of External: Laboratory observation and viva voce.									
RGPV WING)	•	DIPLO	OMA	OBE CURRI COURSE	CULUM FOR TI	HE FORM	_	Sheet lo. 3/5				

Branch	Inf	ormatio	n Tecl	hnology		Semester	VI				
Course Code				Course Name	Information Se	ecurity and (Cyber La	w			
Course C	Outc	ome -	Build secured Internet & Web Application Teach system								
Learning 7	Ou	itcome	Expl	lain Internet Se	ecurity		9	10			
Internet Security: Concept & issues, Do and Don'ts, Sec Socket Layer (SSL), Transport Layer Security (TLS), HTTP SET IP Security: Overview Firewall: Concept, Types VPN Security											
Method Assessme	ent	of	Exterr	External: End semester theory examination (Pen paper test).							
Learning 8	Ou	itcome	_	ain Web Ap Sec) & Identity	plication Secu Management	ırity (Web	6	10			
Contents			Ir S	njection, Cross-s pyware, Keylogg	Security: Overvients Security: Overvients	SS) , Phishin	g , Sn	iffing ,			
Method Assessme	ent	of	Interr paper		er/Quiz/Short An	swer type	questions	s (pen			
Learning 9	Ou	itcome		identity man Application sys	aged, secured tem	Internet &	8	10			
Contents			• C C C • Pc	ohn the ripper) reate Digital Sig ryptool) erform/Demonstrertificate into syserform contracts		t using avail port and us	able too	ls (like			
Method Assessme	ent	of	Exterr	nal: Laboratory o	bservation and vi	va voce.					

RGPV WING) I		(DIPLO	ОМА	OBE CURRI COURSE						
Branch	Info	rmatio	n Tec	hnology		Sen	nester	VI		
Course Code				Course Name	Information So	ecuri	ty and C	yber	Law	
Course O	utcor	me -	Make secui	use of too	l techniques n testing and sc			Teacl Hrs	Mark s	
Learning 10	Outo	come	Expla	nin IDS and Ema	ail security			9	10	
 Intrusion Detection System: Introduction, types Email Security: Introduction, Working Principles (SMTP,PGP,MIME), Email Spoofing, Spamming Other Malwares: Rootkits, Trapdoors, Botnets, Adware 									Principles	
Method Assessme	nt	of	Exteri	nal: End semeste	r theory examina	tion (Pen pape	er test).	
Learning 11	Outo	come	-	in penetration irus	testing, ethica	l hac	king &	6	10	
 antivirus Penetration Testing: Introduction, Need, Method, Website Network Penetration Ethical Hacking: Introduction, types of Ethical hackers Penetration testing Vs Ethical hacking 										
			EP	thical Hacking: Ir	on ntroduction , type g Vs Ethical hacki	s of E			/ebsite &	
Method Assessme	nt	of	EPA	thical Hacking: Ir enetration testing	on htroduction , type g Vs Ethical hacki w , need	s of E	thical ha	ickers		
			• E • P • A	thical Hacking: Ir enetration testing ntivirus: Overvie nal: End semeste	on ntroduction , type g Vs Ethical hacki w , need r theory examina	es of E ng tion (Pen pape	ickers		
Assessment Learning			• E • P • A Exterior Apply active	thical Hacking: Ir enetration testing ntivirus: Overvie nal: End semeste	on introduction , type g Vs Ethical hacki w , need r theory examina esting, scanning cing & Spoofing u on testing to find te / Metasploit	es of Eng tion (& sp using a vulne	Pen pape	er test 7 tools). 10	

RGPV WING)	вн	(DIPL OPAL	ОМА	OBE CURRI	CULUM FOR TI	HE	FORM	AT-3	Sheet No. 5/5		
Branch	Inf	ormatio	on Tec	hnology		Sem	nester	VI			
Course Code				Course Name	Information Se	ecurit	ty and (yber	Law		
Course C	utc	ome -	Make use of tools for reporting Cyber Crime under cyber laws Teach Hrs								
Learning 13	Οι	itcome	Explain Cyber Crime 8 10								
 Cyber Crime: Introduction, Challenges, Classifications of Cybercrime Cyber Criminal Activities: Cyberbullying, Cyber Terrorism, Identity Theft, Web Hijacking, Online Banking & Job Frauds, Software Piracy, Defamation, Vishing 								errorism,			
Method Assessme	ent	of	Exteri	nal: End semeste	r theory examina	tion (Pen pap	er test).		
Learning 14	Οι	itcome	Expl	ain Cyber laws	and Cyber Fore	nsics	•	7	10		
Contents			• C • C	opyright law, Pat yber forensics: xperts working	ndia: IT Act 200 ent law Introduction , I in cyber security	mport			·		
Method Assessme	ent	of	Exteri	nal: End semeste	r theory examina	tion (Pen pap	er test).		
Learning 15	Oı	itcome	Mak	e use of reporti	ng tools for cyb	er cr	ime	4	10		
Contents			۷,	lote: Student si	nal portal for repo hould be aware dure / process of o	of c	yber la	w and			
Method Assessme	ent	of	Interr	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.	Cryptography & Network Security, Published by Tata McGrawHills	Atul Kahate
2.	Network Security Essentials: Application & Standards, Pearson	William Stallings
3.	Cryptography and Network Security - Principles and Practice , Pearson	William Stallings
4.	Principles of Information Security	Whitman, Thomson
5.	Principles of Cyber crime published by Cambridge University Press	Jonathan Clough
6.	Cyber Crime Law & Practice published by ICSI	Mamta Bhinani
7.	https://cse29- iiith.vlabs.ac.in/List%20of%20experiments.html	Virtual Lab IIT HYDERABAD
8.	http://swayam.gov.in	Nptel
9.	https://www.tutorialspoint.com	Web resource
10.	https://cybercrime.gov.in/	Web resource for cyber crime reporting
11.	e-books/e-tools/relevant software to be used as recommended by AICTE/RGPV	

RG	GPV (Diplo	ma Wing) Bhopal	SCHEME FOR		Br	anch C	Code	C	ourse C	ode	CO Code	LO Code	Form	at No. 4
	` •	87 1	OUTC	OME	I	0	4				1	1		
Course	Name	Information Secur	ity and Cyber Law						<u> </u>					
CO Des	scription	Identify Informati	on Security within the	system										
LO Des	scription	Outline Information	on Security											
				SCHEME O	F STUI	DY								
S. No.		Learning Cor	itent	Teaching – Learning Method	D	-	tion of	T-L	Teac h Hrs.	Pract. /Tut Hrs.		Rs Requi	red	Remark
1	SecuriSecuri	ition, Need of Security ity Principles, CIA Tri ity Terminologies: rability, Risk, Attacks	ad Threat, Exploit,	Interactive classroom teaching, demonstration, quiz, assignments, tutorial	the prostuce of questi	e conterovide hadents. nduct a iz/tutor	will exp nts and andout Teachersignmerial to re practices	ts to er will nents/ nake	6	NIL	boai bool	douts, ch rd, PPT, t k, charts, o film.		
			,	SCHEME OF A	SSESS	MENT								
S. No.	o. Method of Assessment Description of A		ssessment	Maximum Marks		Resources Required				ternal / iternal				

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

10

Pen Paper / Quiz /Short answer

Pen paper test + rating scale

Internal

Mid Sem /Quiz/ Short

Answer type questions

1

Faculties should aware students about different security terminologies

RG	PV (Diplor	na Wing) Bhopal		E FOR LEARN OUTCOME	ING	Br	anch ((Course Co	ode	CO Code	LO Code	Format No. 4
						I	0	4				1	2	
Course	Name	Information Secur	ity and Cyber I	Law										
CO Des	cription	Identify Informati	on Security witl	hin the system										
LO Des	cription	Explain threats, at	ttacks & vulnera	abilities										
				SCH	EME OI	F STU	DΥ							
S. No.		Learning Conte	nt	Teaching – Learning Method	Descr	iption Proces		Tea Hr	-	Pract. /Tut Hrs.		LRs Req	uired	Remarks
1	 Attack: Active & Passive (DoS attack, Backdoor, Man In Middle Attack, Brute force attack, Dictionary attack) Malware threat: Virus, worms, Trojan horse, logic bomb Vulnerabilities: Overview, classification, identification 		Interactive classroom teaching, demonstratio n, quiz, assignments, tutorial	the con provide student will co assignr quiz/tu student	eacher will explain e contents and rovide handouts to udents. Teacher ill conduct ssignments/ niz/tutorial to make udents practice eir knowledge.				NIL	boa boo	Handouts, chalk board, PPT, text book, charts, video film.			
	·			SCHEM	E OF AS	SSESS	MENT	•			'			'
S. No.	Metho	d of Assessment	Descriptio	n of Assessmen	it		imum ırks			Resource	ces Rec	quired		External / Internal
1		semester theory xamination	Pen	Paper Test		-	.0		Test Paper + rating scale			External		
	I		ADDITIONAL	INSTRUCTIO	NS FOR	RTHE	HOD	FACUI	LTY	(IF ANY	7)			1
					NIL									

RGPV (Diploma Wing) Bhopal			CHEME FOR LEARNING		Branch Code		Course Co	de CO Code	LO Code	Format No. 4	
	(F	··g / F	OUTCOM	OUTCOME		0	4		1	3	
Course	Name	Information Security	and Cyber Law			·	<u> </u>		<u>'</u>	<u> </u>	<u>'</u>
CO Des	cription	Identify Information	Security within the sys	tem							
LO Des	cription	Experiment with atta	cks and vulnerability								
			,	SCHEME O	F STU	DY					
S. No.		Learning Content	Teaching – Learning Method	Descript Pro	tion of	T-L	Teach Hrs.	Pract. /Tut Hrs.	LRs Requ	iired	Remarks
1	Perfo creati	rm Vulnerabilities ng Backdoor to access	like Interactive lab file classroom	Teacher w		or	NIL	4	Handouts, c board, PPT,		

components inside

the lab to students,

provide quiz,

remedial and tutorials.

assignment etc., teacher will conduct

students will practice,

book, charts,

Computers

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Laboratory test by observation	Laboratory observation and viva voce	10	Observation schedule/check-list /rating scales /rubrics	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

• Faculties & Students can create different vulnerabilities (like backdoor) by using command prompt into system

teaching,

quiz,

tutorial

like

demonstration,

assignments,

• Perform checking the backdoor in system.

and folders in computer system

• Perform Security Scan after

vulnerability

creating

backdoor

RGPV (Dir	oloma Wing) Bhopal	SCHEME FOR LEARN	ING Branch	Code	Course Code	CO Code	LO Code	Format No. 4
` 1	8/ 1	OUTCOME	I 0	4		2	4	
Course Name	Information Securit	y and Cyber Law						
CO Description	Apply different Cry	ptography techniques						
LO Description	Explain cryptograp	hy						
	'	SCHE	ME OF STUDY					
S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teac Hrs.	/ L'nf	LRs Req	uired	Remarks

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Cryptography: Overview, plain text & cipher text, Encryption & Decryption Transposition Technique: Rail fence, Simple Columnar Substitution Technique: Caesar Cipher, Playfair Cipher, Hill Cipher, Monoalphabetic Cipher Steganography 	classroom teaching, demonstratio n, quiz, assignments,	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.	

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	End semester theory examination	Pen Paper Test	10	Test Paper + rating scale	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Faculty & Students can be use "Cryptool" for better understanding the working principles cryptography algorithms. Download & Install the Cryptool (https://www.cryptool.org/en/ct1/downloads)on your PC & see the simulation process.

RGPV (Diplor	na Wing) Bhopal	SCHEME FOR LEARNING	В	ranch (Code	Cou	rse Code	CO Code	LO Code	Format No. 4
	8, 1	OUTCOME	I	I 0 4			2	5		
Course Name	urse Name Information Security and Cyber Law						·			
CO Description	Apply different Cry	ptography techniques								
LO Description	Description Describe Symmetric & Asymmetric key cryptography algorithms									
	<u> </u>	COMPAGE		T . T .						

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Symmetric & Asymmetric key Cryptography: Introduction, Types (DES, RSA Algorithm, Diffie Hellman algorithm) Hashing Concept: Overview, MD-5 algorithm, SHA algorithm 	classroom teaching, demonstration, quiz, assignments,	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	Mid Sem /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)

Faculty & Students may use available "Cryptool" for better understanding the working principles of symmetric & asymmetric key cryptography. Download & Install the Cryptool (https://www.cryptool.org/en/ct1/downloads) on your PC & see the simulation process.

RGPV (Diplo	ma Wing) Bhopal	SCHEME FOR LEARNING	Bı	ranch (Code	Cou	urse C	ode	CO Code	LO Code	Format No. 4
` 1	87 1	OUTCOME	I	0	4				2	6	
Course Name	Course Name Information Security and Cyber Law										
CO Description	CO Description Apply different Cryptography techniques										
LO Description Make use of cryptographic tool and technique											
COHEME OF CTUDY											

S. No.	Learning Content	Teaching –Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Perform encryption & decryption on given message by using programming language (C/Python/PHP/Java) Experiment with available cryptology tool (like CrypTool) Send and receive secret message using command prompt or available stenography tool (like steghide) 	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	7	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	Laboratory observation and viva voce	10	Observation schedule/check-list /rating scales /rubrics	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Faculties & students can refer the available cryptology tool like Cryptool (https://www.cryptool.org/en/ct1/downloads) for demonstration and performing encryption & decryption method.

Refer http://steghide.sourceforge.net/documentation.php for performing Stegnography

RG	PV (Diplor	na Wing) Bhopal	SCHEME FOI		Br	anch C	Code	Cours	e Code	CO Code	LO Code	Format No. 4
110.	- ((2 -p-0-	(g) 2op	OUTC	COME	I	0	4			3	7	2 01 111110 1 (07 1
Course 1	Name	Information Securit	y and Cyber Law					'				
CO Des	cription	Build secured Intern	net & Web Applicat	tion system								
LO Desc	cription	Explain Internet Sec	curity									
				SCHEME (OF STU	DY						
S. No.		Learning Conte	ent	Teaching – Learning Method		ription Proces	of T-L	Teach Hrs.	Pract. /Tut Hrs	. LR	s Require	d Remarks
I	 Internet Security: Concept & issues, Do and Don'ts, Secure Socket Layer (SSL), Transport Layer Security (TLS), HTTPS, SET IP Security: Overview Firewall: Concept, Types VPN Security 			teaching, demonstration , quiz, assignments, provide handouts students. Teache conduct assignments, quiz/tutorial to m		nd buts to wher will nments/ o make	9	NIL	boar book	douts, chard, PPT, te cd, PPT, te c, charts, o film.		
				SCHEME OF A	ASSESS	MENT	•	·	·	·		·
S. No.	Metho	d of Assessment	Description of A	Assessment		imum arks		Rese	ources Req	uired		External / Internal
1	End semester theory examination Pen Paper		Test	-	10		Test I	Paper + ratir	ig scale		External	
		A	DDITIONAL INST	RUCTIONS FO	R THE	HOD/	FACUL	TY (IF A	NY)			
				NI	L							

RGPV (Di	oloma Wing) Bhopal	SCHEME FOR LEARNIN	G Branch Coo	de C	ourse Code	CO Code	LO Code	Format No. 4
- / (]	g) -I	OUTCOME	I 0 4			3	8	
Course Name Information Security and Cyber Law								
CO Description	Build secured Inter	net & Web Application system						
LO Description	Explain Web Applie	cation Security (Web AppSec) &	Identity Managemo	ent				
		SCHEM	IE OF STUDY					
S. No.	Learning Content	Teaching – Learning	Description of T-L Process	Teach Hrs.	Pract.	LRs R	equired	Remarks

S. No.	Learning Content	Teaching — Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Web Application Security: Overview, Cookies & Privacy, SQL Injection, Cross-site scripting (XSS), Phishing, Sniffing, Spyware, Keyloggers Identity Management: Digital Signature, Electronic Signature 	classroom teaching, demonstration,	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.	

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Mid Sem /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)

Faculties & Students may refer Sql Injection tool "Havij" for Vulnerabilities.

Faculties & Students may refer the web tool Golden Eye (http://www.keyloggerz.com/goldeneye.html) for Keylogger working & Understanding. For understanding the working of sniffing, install "Wireshark" & goto wireshark > Capture > Interface > Start.

RGPV (Diplor	na Wing) Bhopal	SCHEME FOR LEARNING	B	ranch (Code	Course Co	de Co	O de	LO Code	Format No. 4
		OUTCOME	I	0	4		3	3 9	9	
Course Name	rse Name Information Security and Cyber Law									
CO Description	ription Build secured Internet & Web Application system									
LO Description	O Description Build identity managed, secured Internet & Web Application system									

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Implement password management using available tools(like John the ripper) Create Digital Signature document using available tools (like Cryptool) Perform/Demonstrate import, export and usage of digital certificate into system. Perform firewall configuration Identify and testing of browser cookies. 	classroom teaching,	Teacher will demonstrate major components inside the lab to students, students will practice, provide quiz, assignment etc., teacher will conduct remedial and tutorials.	NIL	8	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	Laboratory observation and viva voce	10	Observation schedule/check-list /rating scales /rubrics	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

- For implementing the Password Policies, Faculties demonstrate desktop User & Group policies using computer management (go to This PC → Right click → Manage → Computer Management → Local Users & Groups)
- Faculties & Students can use password management tool like "John the Ripper" (https://www.openwall.com/john/) & Read the instruction (https://openwall.info/wiki/john/tutorials) for performing password vulnerabilities.
- For creating Digital Certificate using Command Prompt, Open Cmd > type "keytool –genkey –alias filename > keytool –v –list (for viewing certificate)
- For exporting Digital Certificate type keytool –export –alias filename –file filename.cer
- For identification & testing of cookies, go to browser (google chrome → settings → Security & Privacy→Cookies & other site data → See all Cookies & Site Data) to identify cookies.

RG	SPV (Diplo	ma Wing) Bhopal		OR LEARNING	Branch Code Cou		urse Co	de	CO Code	LO Code	Format No. 4		
	. (1	g) -I	OUT	COME	I	0	4				4	10	
Course	Name	Information Security and C	Cyber Law				1			'			
CO Des	cription	Make use of tool techniques	s for Email	security, penetration	on testi	ing an	d scannii	ng					
LO Des	cription	Explain IDS and Email secu	urity										
		1		SCHEME OF	STUD	ΟY							
S. No.		Learning Content		Teaching – Learning Method			otion of T	'-L	Teach Hrs.	Prac /Tut H		LRs Require	Remark
1	 Intrusion Detection System: Introduction, types Email Security: Introduction, Working Principles (SMTP,PGP,MIME), Email Spoofing, Spamming Other Malwares: Rootkits, Trapdoors, Botnets, Advance 		Interactive classroom teaching demonstration, quiz, assignments, tutorial	Teacher will explain the contents and provide handouts to		9	NII	I I	Handouts, chalk boar PPT, text book, char video film.	ts,			

students practice their

knowledge.

Adware

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	End semester theory examination	Pen Paper Test	10	Test Paper + rating scale	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

NIL

RG	SPV (Diplo	ma Wing) Bhopal	SCHEME FOR L	–	Branch Code Course		se Code	CO Code	LO Code	Format No. 4		
	` 1	3 / 1	OUTCOM	AE.	I	0	4			4	11	
Course	Name	Information Security	and Cyber Law			,	· ·			<u> </u>		
CO Description Make use of tool techniques for Email security, penetration testing and scanning												
LO Des	cription	Explain penetration	testing, ethical hacking	g & antivirus								
		<u>'</u>		SCHEME OF	STU	DY						
S. No.		Learning Cont	tent	Teaching Learning Me		Desc	cription o Process		Teach Hrs.	Pract. /Tut Hrs	LR . Requi	Remari
1	WebsEthica hackePenet	ration Testing: Introduction ite & Network Penetrational Hacking: Introductions rs ration testing Vs Ethical irus: Overview, need	on n, types of Ethical		ı,	the co	ner will exontents and the handounts. Teach act assignments to	d uts to ner will ments/	6	NIL	Handor chalk board, PPT, to book, charts,	uts,

knowledge.

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	End semester theory examination	Pen Paper Test	10	Test Paper + rating scale	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

NIL

RGPV (Diploma Wing) Bhopal		ma Wing) Bhopal	SCHEME FOR LEARNING	G B	ranch	Code	C	Course Code		CO Code	LO Code	Format No. 4
			OUTCOME	I	0	4				4	12	
Course Name Information Security and Cyber Law												
CO Descri	iption	Make use of tool tech	niques for Email security, pene	tration te	sting a	nd scar	ning					
LO Descri	iption	Apply penetration tes	sting, scanning & spoofing activ	ities								
			SCHEM	E OF ST	JDY							
S No Lograing Content		Teaching – De	scription	of T-L	Tea	ch	Pract. /T	ut	I De Doe	nninad	Domanlza	

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Perform Email Tracing & Spoofing using available tools Perform penetration testing to find vulnerabilities using available tools like Burp Suite / Metasploit Perform Installation & Working of Antivirus 	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	7	Handouts, chalk board, PPT, text book, charts, video film.	

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Lab Observation/Assignment	Lab Observation/work / assignment	10	Observation schedule/check-list /rating scales /rubrics	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Faculty & Students should visit the cyber forensics site (http://www.cyberforensics.in/) for email tracer and read the instructions before using For performing the Web Security / Penetration testing, Faculties & students should download Burp Suite Community Edition which is freely available for downloading & Installation. Visit the website (https://portswigger.net/burp/documentation/desktop) read the instructions before performing the testing.

RGPV (Diplo	ma Wing) Bhopal	SCHEME FOR LEARNING	Bı	ranch (Code	Course Cod	le Cod		Format No. 4
	87 1	OUTCOME	I	0	4		5	13	
Course Name	Information Security and Cyber Law								
CO Description	Make use of tools fo	or reporting Cyber Crime under cyl	oer law	7 S					
LO Description	n Explain Cyber Crime								
	<u> </u>	action of	E OFF	T T 7					

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	 Cyber Crime: Introduction, Challenges, Classifications of Cybercrime Cyber Criminal Activities: Cyberbullying, Cyber Terrorism, Identity Theft, Web Hijacking, Online Banking & Job Frauds, Software Piracy, Defamation, Vishing 	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	Test Paper + rating scale	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Faculty & Students should visit the National Cyber Crime Portal (https://cybercrime.gov.in/Webform/CyberAware.aspx) for understanding the Cyber Crimes, Cyber Safety Tips, Cyber Awareness and Cyber criminal activities.

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING	Bı	ancl	ı C	ode	Co	Course Code		CO Code	LO Code	Format No. 4
		OUTCOME	I	0		4				5	5 14	
Course Name	Information Security and Cyber Law											
CO Description	Make use of tools for reporting Cyber Crime under cyber laws											
LO Description	Explain Cyber laws and Cyber Forensics											
	·	COHEME	E OTI	DI								

S. No.	Learning Content	Teaching — Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
	 Cyber Laws in India: IT Act 2000, Offences and penalties, Copyright law, Patent law Cyber forensics: Introduction, Importance, Cyber Forensics experts working Social Engineering in cyber 	Interactive classroom teaching, demonstration,	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	Test Paper + rating scale	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

- Faculty & Students should visit government web resource for Cyber Laws (https://www.meity.gov.in/content/cyber-laws).
- Faculty will ensure that students will get aware of Cyber Laws against any Cyber Crime activities.
- For Cyber Forensics visit the Site (<u>http://www.cyberforensics.in/default.aspx</u>)

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING	Branch Code		Course C	Course Code		LO Code	Format No. 4		
		OUTCOME	I	0	4			5	15		
Course Name	Information Security and Cyber Law										
CO Description	Make use of tools for	Make use of tools for reporting Cyber Crime under cyber laws									
LO Description	ription Make use of reporting tools for cyber crime										
	1	SCHEME O	F STI	IDV							

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	Make use of National portal	Interactive lab	Teacher will	NIL	4	Handouts, chalk board,	
	for reporting Cyber Crime	classroom teaching,	demonstrate major			PPT, text book, charts,	
	1 2 3	demonstration, quiz,	components inside			video film.	
		assignments,	the lab to students,				
		tutorial	students will practice,				
			provide quiz,				
			assignment etc.,				
			teacher will conduct				
			remedial and				
			tutorials.				

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	
1	Lab Observation/Assignment	Lab Observation / Work / Assignment	10	Observation schedule/check-list /rating scales /rubrics	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Faculty & Students should be visit the National Cyber Crime Portal (https://cybercrime.gov.in/) for understanding the Cyber Crimes, Cyber Safety Tips, Cyber Awareness and reporting process for any cyber criminal activities.

Note: Each tool or activities should be used for education purpose only. Please don't misuse it otherwise legal action can be taken according to IT Laws.