RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 1/5

Branch	Information Technology	Semester	VI

Course Code		Course Name	Information Security and Cyber Law

Course Outcome - 1	Identify Information Security within the system	Teach Hrs	Marks
Learning Outcome 1	Outline Information Security	6	10
Contents	• Definition, Need of Security, Types of Security • Security Principles, CIA Triad • Security Terminologies: Threat, Exploit, Vulnerability, Risk, Attacks		
Method of Assessment	Internal: Mid semester theory examination (Pen paper test).		
Learning Outcome 2	Explain threats, attacks & vulnerabilities	9	10
Contents	• 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		
Method of Assessment	External: End semester theory examination (Pen paper test).		
Learning Outcome 3	Experiment with attacks and vulnerability	4	10
Contents	• Perform Vulnerabilities like creating Backdoor to access file and folders in computer system • Perform Security Scan after creating vulnerability like backdoor		
Method of Assessment	External: Laboratory observation and viva voce.		

RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 2/5

Branch	**Information Technology**			**Semester**	**VI**
Course Code		**Course Name**	**Information Security and Cyber Law**		
Course Outcome – 2	**Apply different Cryptography techniques**			**Teach Hrs**	**Marks**
Learning Outcome 4	**Explain cryptography**			**7**	**10**
Contents	• Cryptography : Overview, plain text & cipher text, Encryption & Decryption • Transposition Technique : Rail fence, Simple Columnar • Substitution Technique: Caesar Cipher, Playfair Cipher, Hill Cipher, Mono-alphabetic Cipher • Steganography				
Method of Assessment	External: End semester theory examination (Pen paper test).				
Learning Outcome 5	**Describe Symmetric & Asymmetric key cryptography algorithms**			**8**	**10**
Contents	• Symmetric & Asymmetric key Cryptography: Introduction, Types (DES, RSA Algorithm, Diffie Hellman algorithm) • Hashing Concept: Overview, MD-5 algorithm, SHA algorithm				
Method of Assessment	Internal: Mid semester theory examination (Pen paper test).				
Learning Outcome 6	**Make use of cryptographic tool and 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 or available stenography tool (like steghide)				
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**	**Information Security and Cyber Law**		
Course Outcome - 3	**Build secured Internet & Web Application system**			**Teach Hrs**	**Marks**
Learning Outcome 7	**Explain Internet Security**			**9**	**10**
Contents	• 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				
Method of Assessment	External: End semester theory examination (Pen paper test).				
Learning Outcome 8	**Explain Web Application Security (Web AppSec) & Identity Management**			**6**	**10**
Contents	• Web Application Security: Overview, Cookies & Privacy, SQL Injection, Cross-site scripting (XSS) , Phishing , Sniffing , Spyware, Keyloggers • Identity Management: Digital Signature, Electronic Signature				
Method of Assessment	Internal–Mid semester/Quiz/Short Answer type questions (pen paper)				
Learning Outcome 9	**Build identity managed, secured Internet & Web Application system**			**8**	**10**
Contents	• 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.				
Method of Assessment	External: Laboratory observation and viva voce.				

RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 4/5

Branch	Information Technology	Semester	VI

Course Code		Course Name	Information Security and Cyber Law

Course Outcome - 4	Make use of tool techniques for Email security, penetration testing and scanning	Teach Hrs	Marks
Learning Outcome 10	**Explain IDS and Email security**	9	10
Contents	• Intrusion Detection System: Introduction, types • Email Security: Introduction, Working Principles (SMTP,PGP,MIME), Email Spoofing, Spamming • Other Malwares: Rootkits, Trapdoors, Botnets, Adware		
Method of Assessment	External: End semester theory examination (Pen paper test).		
Learning Outcome 11	**Explain penetration testing, ethical hacking & antivirus**	6	10
Contents	• Penetration Testing: Introduction, Need, Method, Website & Network Penetration • Ethical Hacking: Introduction , types of Ethical hackers • Penetration testing Vs Ethical hacking • Antivirus: Overview , need		
Method of Assessment	External: End semester theory examination (Pen paper test).		
Learning Outcome 12	**Apply penetration testing, scanning & spoofing activities**	7	10
Contents	• 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		
Method of Assessment	Internal: Lab Observation/Assignment		

RGPV (DIPLOMA WING) BHOPAL	OBE CURRICULUM FOR THE COURSE	FORMAT-3	Sheet No. 5/5

Branch	Information Technology	Semester	VI

Course Code		Course Name	Information Security and Cyber Law

Course Outcome - 5	Make use of tools for reporting Cyber Crime under cyber laws	Teach Hrs	Marks
Learning Outcome 13	**Explain Cyber Crime**	8	10
Contents	• 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		
Method of Assessment	External: End semester theory examination (Pen paper test).		
Learning Outcome 14	**Explain Cyber laws and Cyber Forensics**	7	10
Contents	• 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 security		
Method of Assessment	External: End semester theory examination (Pen paper test).		
Learning Outcome 15	**Make use of reporting tools for cyber crime**	4	10
Contents	• Make use of National portal for reporting Cyber Crime *'Note: Student should be aware of cyber law and able to understand procedure / process of cyber crime reporting'*		
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	

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	**Information Security and Cyber Law**
CO Description	**Identify Information Security within the system**
LO Description	**Outline Information Security**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	● Definition, Need of Security, Types of Security ● Security Principles, CIA Triad ● Security Terminologies: Threat, Exploit, Vulnerability, Risk, Attacks	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 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 should aware students about different security terminologies

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	**Information Security and Cyber Law**
CO Description	**Identify Information Security within the system**
LO Description	**Explain threats, attacks & vulnerabilities**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	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, 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	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	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				1	3	

Course Name	**Information Security and Cyber Law**
CO Description	**Identify Information Security within the system**
LO Description	**Experiment with attacks and vulnerability**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	• Perform Vulnerabilities like creating Backdoor to access file and folders in computer system • Perform Security Scan after creating vulnerability like backdoor	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	4	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	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
- Perform checking the backdoor in system.

RGPV (Diploma Wing) Bhopal	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				2	4	

Course Name	**Information Security and Cyber Law**
CO Description	**Apply different Cryptography techniques**
LO Description	**Explain cryptography**

SCHEME OF STUDY

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, Mono-alphabetic Cipher • Steganography	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	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 (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	**Information Security and Cyber Law**
CO Description	**Apply different Cryptography techniques**
LO Description	**Describe Symmetric & Asymmetric key cryptography algorithms**

SCHEME OF STUDY

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	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	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 (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	**Information Security and Cyber Law**
CO Description	**Apply different Cryptography techniques**
LO Description	**Make use of cryptographic tool and technique**

SCHEME OF STUDY

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

RGPV (Diploma Wing) Bhopal	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				3	7	

Course Name	**Information Security and Cyber Law**
CO Description	**Build secured Internet & Web Application system**
LO Description	**Explain Internet Security**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	● 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	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	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	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				3	8	

Course Name	**Information Security and Cyber Law**
CO Description	**Build secured Internet & Web Application system**
LO Description	**Explain Web Application Security (Web AppSec) & Identity Management**

SCHEME OF STUDY

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	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 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 (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	**Information Security and Cyber Law**
CO Description	**Build secured Internet & Web Application system**
LO Description	**Build identity managed, secured Internet & Web Application system**

SCHEME OF STUDY

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.	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	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.

RGPV (Diploma Wing) Bhopal	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				4	10	

Course Name	**Information Security and Cyber Law**
CO Description	**Make use of tool techniques for Email security, penetration testing and scanning**
LO Description	**Explain IDS and Email security**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	• Intrusion Detection System: Introduction, types • Email Security: Introduction, Working Principles (SMTP,PGP,MIME), Email Spoofing, Spamming • Other Malwares: Rootkits, Trapdoors, Botnets, Adware	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	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	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				4	11	

Course Name	**Information Security and Cyber Law**
CO Description	**Make use of tool techniques for Email security, penetration testing and scanning**
LO Description	**Explain penetration testing, ethical hacking & antivirus**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	● Penetration Testing: Introduction, Need, Method, Website & Network Penetration ● Ethical Hacking: Introduction , types of Ethical hackers ● Penetration testing Vs Ethical hacking ● Antivirus: Overview , need	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	10	Test 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	12	

Course Name	**Information Security and Cyber Law**
CO Description	**Make use of tool techniques for Email security, penetration testing and scanning**
LO Description	**Apply penetration testing, scanning & spoofing activities**

SCHEME OF STUDY

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.	

SCHEME OF ASSESSMENT

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 (Diploma Wing) Bhopal	SCHEME FOR LEARNING OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				5	13	

Course Name	**Information Security and Cyber Law**
CO Description	**Make use of tools for reporting Cyber Crime under cyber laws**
LO Description	**Explain Cyber Crime**

SCHEME OF STUDY

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	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	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 OUTCOME	Branch Code			Course Code			CO Code	LO Code	Format No. 4
		I	0	4				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**

SCHEME OF STUDY

S. No.	Learning Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	• 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 security	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	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 (http://www.cyberforensics.in/default.aspx)

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	**Information Security and Cyber Law**
CO Description	**Make use of tools for reporting Cyber Crime under cyber laws**
LO Description	**Make use of reporting tools for cyber crime**

SCHEME OF STUDY

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 for reporting Cyber Crime	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	4	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	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.