

SVKM
Mithibai College (Arts, Sci & Comm)

Programme: B.Sc (Computer Science) - (CBCGS)

Year: III/Semester VI (Exam Year: 2023-2024)

Subject: ETHICAL HACKING & CYBER FORENSICS

Date: 01 Apr 2024

Time: 10:30 am - 01:00 pm (02:30 Hrs.)

Max Marks: 75

FINAL EXAMINATION(2023-2024)

Instructions:

1. This question paper contains 2 pages
2. Answer to each new question to be started on a fresh page.
3. Figure in right hand side indicates full marks

1. (Attempt Any 3 Questions)

15

- A. What is a waterhole attack, and how does it target specific individuals or organizations? What preventive measures can be taken to safeguard against waterhole attacks? 5
- B. Describe the different types of keyloggers. 5
- C. Illustrate the importance of security awareness training for employees in preventing and mitigating security incidents with the topics that should be covered in such training programs. 5
- D. Identify and summarize the measures that can prevent clickjacking incidents. 5

2. (Attempt Any 3 Questions)

15

- A. What is Ethical Hacking? Explain the types of hackers. 5
- B. Elaborate on how whois and traceroute is used in Footprinting. 5
- C. Discuss the password cracking countermeasures. 5
- D. Explain SYN flooding attack in detail. 5

3. (Attempt Any 3 Questions)

15

- A. What is Digital Forensics? How it is different from other Forensics? 5

B. Explain the Investigation Triad in computer forensics.	5
C. State the three modes of protection of defence in depth.	5
D. Explain typical digital phases with the following:	5
1. Acquisition	
2. Recovery	
3. Analysis	
4. Presentation	
4. (Attempt Any 3 Questions)	15
A. Explain the law against email crimes.	5
B. How Warning banners are often easier to present in court than policy manuals	5
C. Explain Legal process in detail.	5
D. What is the affidavit? Explain the purpose affidavit.	5
5. (Attempt Any 3 Questions)	15
A. Discuss the concept of buffer overflow attacks and their potential impact on software security.	5
B. Explain Social Engineering with an example.	5
C. Describe Internet forensics and internet crimes with respect to cyber forensics.	5
D. XYZ Marketing Agency has recently implemented a new digital marketing campaign for a client in the healthcare industry. The campaign involves targeted advertising on social media platforms to promote a new medical product. However, concerns have arisen regarding the legality and ethics of certain aspects of the campaign. As the legal and ethical compliance officer for XYZ Marketing Agency, you are tasked with conducting a thorough review of the campaign to ensure it aligns with industry regulations and ethical standards.	5