

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE – SEMESTER- V EXAMINATION-SUMMER 2023****Subject Code: 3150714****Date: 23/06/2023****Subject Name: Cyber Security****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		<b>Marks</b>
<b>Q.1</b>	(a) Define System and Web Vulnerability.	<b>03</b>
	(b) Explain Metasploit and OpenVAS.	<b>04</b>
	(c) Describe Nmap. Explain different functionality with its command in detail.	<b>07</b>
<b>Q.2</b>	(a) Define Snort.	<b>03</b>
	(b) Differentiate between Stateful and Stateless firewalls.	<b>04</b>
	(c) Explain Network Sniffers with suitable example.	<b>07</b>
<b>OR</b>		
	(c) Define NAT. Describe Port Forwarding with its types in detail.	<b>07</b>
<b>Q.3</b>	(a) Explain Curl, OpenSSL and Stunnel.	<b>03</b>
	(b) Define Password cracking and Brute force tools. Explain any one in brief.	<b>04</b>
	(c) Describe DVWA. Explain SQL injection in DVWA with example in detail.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Explain Zed Attack Proxy.	<b>03</b>
	(b) Explain following terms: 1. Datapipe 2. Fpipe 3.WinRelay 4.Traffic Probe	<b>04</b>
	(c) Discuss the Web Vulnerability tools in detail.	<b>07</b>
<b>Q.4</b>	(a) Define Digital Forensics.	<b>03</b>
	(b) Explain types of Cyber Crimes.	<b>04</b>
	(c) Explain IT Act, 2000. List out and discuss different sections under IT Act, 2000 in detail.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) Define Incident Response.	<b>03</b>
	(b) Discuss about Contaminants and Destruction of Data.	<b>04</b>
	(c) Discuss Attack vector. List out different types of Attack vector.	<b>07</b>
<b>Q.5</b>	(a) Explain SQL Injection.	<b>03</b>
	(b) Discuss Keyloggers and Spyware.	<b>04</b>
	(c) Explain Virus, Worms, Trojan Horses and Backdoors in detail with example.	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) Explain Steganography with example.	<b>03</b>
	(b) Explain Buffer Overflow attack in detail.	<b>04</b>
	(c) Describe DOS and DDOS attack with suitable example.	<b>07</b>