

Department of Computer Science
Gujarat University



Certificate

Roll No: 37

Seat No: _____

This is to certify that Mr./Ms. Jeel Digeshkumar Mavani student of MCA Semester – V has duly completed his/her term work for the semester ending in December 2020, in the subject of Network Security towards partial fulfillment of his/her Degree of Masters in Computer Applications.

11th, December 2020
Date of Submission

Internal Faculty

Head of Department

MCA – V

Roll No.: - 37 **Exam Seat No.: -**

[illegible]

ASSIGNMENT :- 1

1 List all symmetric key

- Advanced Encryption standard.
- Data encryption model.
- International data encryption algorithm.
- Blowfish
- Rivest Cipher 4 (RC4)
- Rivest Cipher 5 (RC5)
- Rivest Cipher 6 (RC7).

2 List all asymmetric key algorithms.

- RSA.
- Diffie - Hellman.
- ElGamal.
- ECC

3 List all algorithms for message digest.

- MD5
- SHA-1

Assignment :- 2

a. PII :-

Personal identifiable information is any data that could potentially identify a specific individual.

b. US privacy act of 1974 :-

Establishes a code of fair information maintenance use and dissemination of information about individual that is maintained in system of by federal agencies.

c. FOIA :-

It requires the full or partial disclosure of previously unclassified information and documents controlled by United States government upon request.

d. FERPA :-

It governs the access to educational information and records by public entities such as potential employers, public funded educational institutes, and foreign governments.

e. CFAA :-

The law prohibits accessing a computer without authorization or in excess of authorization.

f. COPPA :-

The children online privacy protection act.

g. VPPA :-

It regulates the disclosure of information about customers consumption of video content imposing prescriptive requirement to obtain consumers consent to such disclosure.

h. HIPAA :-

Ensures that individual health care plans are accessible portable and renewable.

i. CIBIA :-

It requires financial institutions. companies that offer consumers. financial products or services like loans financial or investment advice or insurance - to explain their information sharing practices to their customers.

i FCRA :-

The FCRA regulates foreign donations and ensures that such contributions do not adversely affect internal security.

j FACTA :-

FACTA is principally known for its provisions against identity theft.

ASSIGNMENT :- 3

① STATE THE FULL FORM :-

1. RADIUS :-

REMOTE AUTHENTICATION DIAL - IN USER SERVICE.

2. TACACS :-

Terminal Access controller Access control.

3. L2TP :-

Layer 2 Tunneling protocol.

4. PPTP :-

Point - to point tunneling protocol.

5. EAP :- Extensible Authentication protocol.

6. CHAP :-

Challenge - Handshake Authentication protocol.

7. NTLM :-

Windows challenge / Response.

8. PAP :-

Password Authentication Protocol.

9. SSH :-

Secure shell.

10. LDAP :-

Lightweight Directory Access protocol.

ASSIGNMENT :- 4.

1. List names of software :-

1. Firewall :-

Fortigate

Sophos xa firewall.

Watchguard network security.

Sonicwall.

Cisco.

Classwired firewall.

2. Intrusion Detection & prevention :-

OSSEC

Snort

Sargates.

Security onion.

3. Antivirus :-

Bitdefender

Norton Antivirus

Avira Antivirus

Trend micro.

Kaspersky Antivirus.

4. Packet sniffing :-

Wireshark.

Steel control packet Analyzer.

NetworkMiner.

Kismet.

2. State any 10 security software used by ethical hackers.

Metasploit framework.

Nmap.

OpenSSH.

Wireshark.

News.

Aircrackng.

Shost.

John the ripper.

Lophicrack.

3. What is the role of CERT.

CERT primary role is to raise security awareness among Indian cyber community and to provide technical assistance and advise them to help them recover from computer security incidents.

4. List OWASP top ten.

Injection

Broken Authentication.

Sensitive Data exposure.

XNL External Entities.

Broken Access control.

Security misconfigurations.

Cross site scripting.

Insecure deserialization.

Insufficient logging and monitoring.