

UNIT-III

Part – A (Short Answer Questions)

S.No	Questions	BT	CO	PO
1	Define hash function.	L1	CO3	PO4
2	What is SHA-512?	L1	CO3	PO4
3	Expand HMAC.	L1	CO3	PO5
4	What is message authentication?	L1	CO3	PO5
5	Define digital signature.	L2	CO3	PO3
6	What is key distribution?	L1	CO3	PO4
7	What is Kerberos?	L1	CO3	PO3
8	Define Public Key Infrastructure (PKI).	L1	CO3	PO2
9	What is X.509 certificate?	L1	CO3	PO4
10	What is Certificate Authority (CA)?	L1	CO3	PO3

Part – B (Long Answer Questions)

1	Explain SHA hashing algorithms and their applications.	L3	CO3	PO3
2	Describe message authentication and HMAC in detail.	L2	CO3	PO3
3	Explain digital signatures and authentication protocols.	L2	CO3	PO4
4	Discuss Public Key Infrastructure (PKI) and X.509 certificates.	L3	CO3	PO4
5	Explain Kerberos authentication service architecture.	L2	CO3	PO3
6	Explain HMAC architecture and operation.	L3	CO3	PO3
7	Discuss CMAC and its working procedure.	L2	CO3	PO3
8	Explain the role of hash functions in message authentication.	L2	CO3	PO4
9	Explain symmetric key distribution using symmetric encryption.	L3	CO3	PO4
10	Describe Kerberos architecture and operation with diagram.	L2	CO3	PO3