

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – V-EXAMINATION – WINTER 2015

Subject Code: 3350704**Date: 10/12/2015****Subject Name: Computer And Network Security****Time: 10:30 AM TO 1:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

Q.1

Answer any seven out of ten. દશમાંથી કોઈપણ સાતના જવાબ આપો.

14

1. Define Symmetric Encryption.
૧. વ્યાખ્યા આપો: Symmetric Encryption
2. Define Trapdoor.
૨. વ્યાખ્યા આપો: Trapdoor.
3. Define Spoofing.
૩. વ્યાખ્યા આપો: Spoofing.
4. Define Firewall.
૪. વ્યાખ્યા આપો: Firewall.
5. Define Decryption.
૫. વ્યાખ્યા આપો: Decryption.
6. List any Two Components of Good Password.
૬. સારા Password ના Components ની યાદી બનાવો.
7. List any Two Advantages of Intrusion Detection System.
૭. Intrusion Detection સિસ્ટમ ના કોઈપણ બે ફાયદા ની યાદી બનાવો.
8. List any two Security Threats.
૮. Security Threats ના કોઈપણ બે ફાયદા યાદી બનાવો
9. Define Spam.
૯. વ્યાખ્યા આપો: Spam
10. Define Steganography.
૧૦. વ્યાખ્યા આપો: Steganography.

Q.2

(a) Explain Dumpster Diving.

03**પ્રશ્ન. ૨**

(અ) Dumpster Diving સમજાવો.

03**OR**

(a) Explain Piggybacking.

03

(અ) Piggybacking સમજાવો.

03

(b) Explain Caesar Cipher.

03

(બ) Caesar Cipher સમજાવો.

03

		OR	
	(b)	Write Short note on Stegnography.	03
	(બ)	Stegnography પર લઘુ નોંધ લખો.	03
	(c)	Explain Asymmetric Encryption.	04
	(ક)	Asymmetric Encryption સમજાવો.	04
		OR	
	(c)	Write short note on Security Basics.	04
	(ક)	Security Basics પર લઘુ નોંધ લખો.	04
	(d)	Explain Denial of Service attacks.	04
	(ડ)	Denial of Service attacks સમજાવો.	04
		OR	
	(d)	Explain Hierarchical Trust model.	04
	(ડ)	Hierarchical Trust model સમજાવો.	04
Q.3	(a)	Explain Vermin Cipher with Example.	03
પ્રશ્ન. 3	(અ)	ઉદાહરણ સાથે Vermin Cipher સમજાવો.	03
		OR	
	(a)	Explain Centralized Infrastructure.	03
	(અ)	Centralized Infrastructure સમજાવો.	03
	(b)	Explain Steps to obtain Digital certificate.	03
	(બ)	Digital certificate મેળવવા માટે પગલાંઓ સમજાવો	03
		OR	
	(b)	Write Short note on Internet.	03
	(બ)	Internet પર લઘુ નોંધ લખો.	03
	(c)	Explain IP Security Architecture.	04
	(ક)	IP Security Architecture સમજાવો.	04
		OR	
	(c)	Write note on DMZ.	04
	(ક)	DMZ પર લઘુ નોંધ લખો.	04
	(d)	Explain Digital Signature.	04
	(ડ)	Digital Signature સમજાવો.	04
		OR	
	(d)	Explain E-Mail Security.	04
	(ડ)	E-Mail Security સમજાવો.	04
Q.4	(a)	Explain Network Based Intrusion Detection System.	03
પ્રશ્ન. 4	(અ)	Network Based Intrusion Detection System સમજાવો.	03
		OR	
	(a)	Explain Web Security Threats.	03
	(અ)	Web Security Threats સમજાવો	03
	(b)	Explain Transport Layer Security.	04
	(બ)	Transport Layer Security સમજાવો	04
		OR	
	(b)	Explain Tunneling.	04
	(બ)	Tunneling સમજાવો.	04

(c) For Given Plaintext= WINTER, Key=

2	1	3
4	2	1
3	6	7

07

Find Cipher Text using Hill Cipher.

(ક) આપેલ Plaintext= WINTER, Key=

2	1	3
4	2	1
3	6	7

09

માટે Hill Cipher નો ઉપયોગ કરી Cipher Text શોધો.

- Q.5** (a) Explain Rail Fence Technique with Example **04**
- પ્રશ્ન. ૫** (અ) ઉદાહરણ સાથે રેલ Fence ટેકનીક સમજાવો. **0૪**
- (b) Explain Secure Electronic Transaction. **04**
- (બ) Secure Electronic Transaction સમજાવો. **0૪**
- (c) Explain Logical Components of IDS. **03**
- (ક) IDS ના Logical Components સમજાવો. **03**
- (d) If Key=COLGATE, Write Playfair Cipher Key Matrix. **03**
- (ડ) Key=COLGATE, તે Playfair સાઈફર કી મેટ્રિક્સ લખો **03**
