



**GOVERNMENT POLYTECHNIC, NAGPUR.**  
(An Autonomous Institute of Govt. of Maharashtra)

**Term End Examination- 18 EVEN**

**Diploma in INFORMATION TECHNOLOGY**

**Course Code : IT405E**

**Course Name : Network Administration & Security**

**Time : 03**

**Max. Marks : 70**

**Instructions:**

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Use of non-programmable calculator is permissible
5. Assume suitable data if necessary
6. Preferably, write the answers in sequential order.

<b>Q1</b>		<b>Attempt any FIVE</b>	<b>(10)</b>	<b>COs</b>
1R2	a)	What does 'Secure' means?		CO1
4R2	b)	Why Network Architecture is required?		CO1
5R2	c)	Give features of Windows 2003 server.		CO3
6R2	d)	What is public Key Encryption service?		CO2
4R2	e)	List different Directory Services with operating system they are used in.		CO2
1R2	f)	What are Security goals? Define each security goals.		CO1
3R2	g)	State different limitations of Firewall.		CO2
<b>Q2</b>		<b>Attempt any THREE</b>	<b>(12)</b>	
1R4	a)	How Amateurs are different from Career criminals?		CO1
2U4	b)	How are biometric technologies being deployed, and how likely are they to be deployed in the future?		CO1
3U4	c)	State reasons behind Network Vulnerability		CO1
5U4	d)	Give steps for Adding Web based Administration in Windows 2003 Server.		CO3
2U4	e)	Give impacts of installing unauthorized software/hardware.		CO1
<b>Q3</b>		<b>Attempt any THREE</b>	<b>(12)</b>	
1R4	a)	List at least three kinds of damage a company could suffer when the integrity of program or company data is comprised.		CO1
2U4	b)	What is piggybacking? Give reason how it is different from shoulder surfing.		CO1
4U4	c)	List the features of Windows NT domain		CO3
5U4	d)	Write the steps for creating the bootable disk for Windows 2003 server.		CO3
3U4	e)	Describe IDS with its types.		CO1, CO2
<b>Q4</b>		<b>Attempt any THREE</b>	<b>(12)</b>	

2U4	a)	Describe the role of people in security		CO1
5U4	b)	Describe different terms used for good network design.		CO1
6U4	c)	Illustrate the various security issues in Windows 2003 server.		CO1
1U4	d)	Preserving confidentiality, integrity and availability of data is a restatement of the concern over interruption, interception, modification and fabrication. How do the first three concepts relate to the last four? Justify your answer.		CO1
2R4	e)	What is Dumpster Diving? How to protect against dumpster diving		CO1
<b>Q5</b>			<b>(12)</b>	
3A6	a)	Answer the following question based on Firewall: I. How Packet filtering Firewall is different from Application Proxy Firewall? II. Why Guards Firewall is mostly used in Universities? Give Reason.		CO1,CO2
4U6	b)	Describe VPN. What Security Vulnerabilities Are Addressed By VPN?		CO2,CO3
6A6	c)	Give steps for creating user accounts in windows 2003 server and which options required for Deleting or Disabling a User Account.		CO3
<b>Q6</b>			<b>(12)</b>	
5A6	a)	Answer the following questions based on Meeting Network Needs: I. How to choose network types. II. What will be the server requirement for college network?		CO2,CO3
6A6	b)	Write the steps required for the installation of a Network printer in Windows 2003 server environment. Also give steps test this installation from another PC.		CO3
4U6	c)	Illustration Active directory services in brief.		CO3

## Course Outcomes

CO1	Justify the solutions for real world problems regarding security of computer
CO2	Design the computer network
CO3	Configure the networking resources and software from the server.
CO4	Troubleshoot network devices in the case of breakdown.
CO5	Use the different types of network technologies for internet connection
CO6	Identify and repair the network faults