M4.3-R4: INTRODUCTION TO ICT RESOURCES

NOTE:

1. There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.

2. **PART ONE** is to be answered in the **OMR ANSWER SHEET** only, supplied with the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book.

3. Maximum time allotted for **PART ONE** is **ONE HOUR**. Answer book for **PART TWO** will be supplied at the table when the answer sheet for **PART ONE** is returned. However, candidates, who complete **PART ONE** earlier than one hour, can collect the answer book for **PART TWO** immediately after handing over the answer sheet for **PART ONE**.

TOTAL TIME: 3 HOURS   **TOTAL MARKS: 100**
                                                                  (PART ONE – 40; PART TWO – 60)

PART ONE
(Answer all the questions)

1. **Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the "OMR" answer sheet supplied with the question paper, following instructions therein.**   **(1x10)**

1.1 What characteristic of RAM memory makes it not suitable for permanent storage?
A) too slow
B) unreliable
C) it is volatile
D) too bulky

1.2 The circuit used to store one bit of data is known as
A) Register
B) Encoder
C) Decoder
D) Flip Flop

1.3 _____ Command is used to manipulate TCP/IP routing table.
A) route
B) ipconfig
C) ifconfig
D) traceroute

1.4 Which of the following is related to *ipconfig* in Microsoft Windows?
A) Display all current TCP/IP network configuration values
B) Modify DHCP settings
C) Modify DNS settings
D) All of the above

1.5 Ping command can
A) Measure round-trip time
B) Report packet loss
C) Report latency
D) All of the above

1.6   What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?
A)   Application
B)   Host-to-Host
C)   Internet
D)   Network Access

1.7   What command is used to create a backup configuration?
A)   copy running backup
B)   copy running-config startup-config
C)   config mem
D)   wr mem

1.8   The total time to prepare a disk drive mechanism for a block of data to be read from is its
A)   latency
B)   latency plus transmission time
C)   latency plus seek time
D)   latency plus seek time plus transmission time

1.9   FTP Tool
A)   Used to transfer data/files among computers on the Internet
B)   Archie data/files
C)   Copy file from
D)   Delete from file Internet

1.10   Multi programming system is
A)   A computer system that permits multiple users to run programs at same time
B)   A computer system that permits run same programs at multiple time
C)   A computer system that permits multiple Program to run programs at same time
D)   None of the above

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the "OMR" answer sheet supplied with the question paper, following instructions therein. **(1x10)**

2.1 Action implementing instruction's meaning are a actually carried out by Instruction program.

2.2 The main reasons to encrypt a file is to Secure it for transmission.

2.3 Linux is an operating system.

2.4 Relocatable programs can be loaded almost anywhere in memory.

2.5 A program in execution is called Procedure.

2.6 Simple Mail Transfer Protocol use for encryption files.

2.7 DVD is Memory Devices.

2.8 Printer can be shared in a LAN by many users.

2.9 PKZIP utility is used to encrypt or decrypt files.

2.10 The .DLL extension stands for Dynamic License Library file.

3. Match words and phrases in column X with the closest related meaning/ word(s)/phrase(s) in column Y. Enter your selection in the "OMR" answer sheet supplied with the question paper, following instructions therein. **(1x10)**

	X		Y
3.1	Assembly language	**A.**	MS-Office file extension
3.2	Process	**B.**	uses alphabetic codes in place of binary numbers used in machine language.
3.3	Cache memory	**C.**	A program in execution is called
3.4	An assembler is	**D.**	Machine dependent.
3.5	.DOC	**E.**	Write Through technique is used in which memory for updating the data
3.6	An assembly language is a	**F.**	Numbers of programs processed by it per unit time
3.7	Virtual memory is	**G.**	Data Compression Software
3.8	Throughput of a system is	**H.**	used in all major commercial operating systems
3.9	Bootstrap loader	**I.**	Volatile Storage
3.10	FTP	**J.**	File Transfer protocol
		K.	low level programming language
		L.	is executed when a system is first turned on or restarted
		M.	Operating System

4. **Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Enter your choice in the "OMR" answer sheet supplied with the question paper, following instructions therein.** **(1x10)**

A.	PROM	**B.**	LINUX	**C.**	Assembler
D.	Private encryption	**E.**	PC (Program Counter)	**F.**	WAN
G.	Router	**H.**	TCP/IP	**I.**	Symmetric encryption
J.	UNIX	**K.**	RAM	**L.**	Mail Server
M.	Latency Time				

4.1   SMTP Protocol used for transferring message between end user & _____.

4.2   Shell is the exclusive feature of _____.

4.3   Cache memory acts between CPU and _____.

4.4   _____ in an Operating System similar to Unix.

4.5   _____ in Programmable Read Only Memory.

4.6   The logical addresses in the _____ protocol suite are called IP addresses.

4.7   _____ is the time required by a sector to reach below read/write head.

4.8   _____ register keeps track of the instructions stored in program stored in memory.

4.9   _____ are present in the network to interconnect the LAN with WANs.

4.10   _____ in Wide Area Network connecting for located computers.

PART TWO
(Answer any **FOUR** questions)

5.
a) Explain how Firewall protect network?
b) Differentiate between virtual and cache memory.
c) Explain Network layer and Transport layer?

(5+5+5)

6.
a) Give the difference between multiprogramming and multiprocessing.
b) What are the different types of networking / internetworking devices?
c) Differentiate between synchronous and asynchronous data transfer method.

(5+5+5)

7. Discuss in brief the following terms:
a) Programmed I/O
b) Interrupt Initiated I/O
c) Direct Memory Access (DMA)

(5+5+5)

8. Explain the following:
a) Real time operating System
b) Assembly language
c) MAC Address

(5+5+5)

9.
a) What is anonymous FTP and why would you use it?
b) How to compresses and archives multiple files using win zip?
c) What are NETBIOS, NETBEUI and Kerberos in Networking?

(5+5+5)