

एम4.3-आर4% इंट्रोडक्शन टू आई सी टी रिसोर्सेज
M4.3-R4: INTRODUCTION TO ICT RESOURCES

अवधि: 03 घंटे

DURATION: 03 Hours

अधिकतम अंक: 100

MAXIMUM MARKS: 100

ओएमआर शीट सं.:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
OMR Sheet No.:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

रोल नं.:

Roll No.:

उत्तर-पुस्तिका सं.:

Answer Sheet No.:

परीक्षार्थी का नाम:

Name of Candidate: _____; Signature of candidate: _____

परीक्षार्थियों के लिए निर्देश:

Instructions for Candidate:

कृपया प्रश्न-पुस्तिका, ओएमआर शीट एवं उत्तर-पुस्तिका में दिये गए निर्देशों को ध्यान पूर्वक पढ़ें।	Carefully read the instructions given on Question Paper, OMR Sheet and Answer Sheet.
प्रश्न-पुस्तिका की भाषा हिन्दी एवं अंग्रेजी में है। परीक्षार्थी किसी भी एक भाषा का चयन कर सकता है। (अर्थात्, या तो हिन्दी या अंग्रेजी)	Question Paper is in Hindi and English language. Candidate can choose to answer in any one of the language (i.e., either Hindi or English)
इस मॉड्यूल/पेपर के दो भाग हैं। भाग एक में चार प्रश्न और भाग दो में पाँच प्रश्न हैं।	There are TWO PARTS in this Module/Paper. PART ONE contains FOUR questions and PART TWO contains FIVE questions.
भाग एक "वैकल्पिक" प्रकार का है जिसके कुल अंक 40 है तथा भाग दो, "व्यक्तिप्रक" प्रकार है और इसके कुल अंक 60 है।	PART ONE is Objective type and carries 40 Marks. PART TWO is subjective type and carries 60 Marks.
भाग एक के उत्तर, इस प्रश्न-पत्र के साथ दी गई ओएमआर उत्तर-पुस्तिका पर, उसमें दिये गए अनुदेशों के अनुसार ही दिये जाने हैं। भाग दो की उत्तर-पुस्तिका में भाग एक के उत्तर नहीं दिये जाने चाहिए।	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 for PART TWO .
भाग एक के लिए अधिकतम समय सीमा एक घण्टा निर्धारित की गई है। भाग दो की उत्तर-पुस्तिका, भाग एक की उत्तर-पुस्तिका जमा कराने के पश्चात दी जाएगी। तथापि, निर्धारित एक घंटे से पहले भाग एक पूरा करने वाले परीक्षार्थी भाग एक की उत्तर-पुस्तिका निरीक्षक को सौंपने के तुरंत बाद, भाग दो की उत्तर-पुस्तिका ले सकते हैं।	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 .
परीक्षार्थी, उपस्थिति-पत्रिका पर हस्ताक्षर किए बिना अथवा अपनी उत्तर-पुस्तिका, निरीक्षक को सौंपे बिना, परीक्षा हाल नहीं छोड़ सकता हैं। ऐसा नहीं करने पर, परीक्षार्थी को इस मॉड्यूल/पेपर में अयोग्य घोषित कर दिया जाएगा।	Candidate cannot leave the examination hall/room without signing on the attendance sheet or handing over his Answer sheet to the invigilator. Failing in doing so, will amount to disqualification of Candidate in this Module/Paper.
प्रश्न-पुस्तिका को खोलने के निर्देश मिलने के पश्चात एवं उत्तर देने से पहले उम्मीदवार यह जाँच कर यह सुनिश्चित कर ले कि प्रश्न-पुस्तिका प्रत्येक दृष्टि से संपूर्ण है।	After receiving the instruction to open the booklet and before answering the questions, the candidate should ensure that the Question booklet is complete in all respect.

नोट: यदि हिन्दी संस्करण में कोई त्रुटि / विसंगति पाई जाती है, तो उस अवस्था में अंग्रेजी संस्करण ही मान्य होगा।

Note: In case of any discrepancy found in Hindi language, English version will be treated as final.

जब तक आपसे कहा न जाए तब तक प्रश्न-पुस्तिका न खोलें।

DO NOT OPEN THE QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Hkkx ,d / PART ONE

¼IHkh iz'uksa ds mÙkj nsa½ / (Answer all the questions)

1. izR;sd iz'u ds mÙkjksa ds dbZ fodYi uhps fn, x, gSaA
,d lcls mi;qDr fodYi pqusa vkSj mls fuEufyf[kr funsZ'kksa ds vuqlkj iz'u i= ds lkFk miyC/k djk, x,
^^vks, evkj** mÙkj

i=d esa ntZ djsaA

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 ,l,eh,l dk vFkZ / SMPS means
A) System Management Power Supply
B) Synchronous Mode Power Supply
C) Switched Mode Power Supply
D) Sequential Mode Power Supply
- 1.2 ,d lfdZV fLop
A) vxzsf"kr djus ls igys MsVk j[kus
ds fy, blesa cM+s cQj gksrs
gSa
B) vkus okyh ÝhDosalh ds vk/kkj ij
MsVk cny ldrs gSa
C) 'ks;jM fyad vkil esa feyk ldrs
gSa
D) MsVk VªkalQj djus ds fy, igys
izksxzke dh t:jr gS
A circuit switch
A) has large buffers to hold data before
forwarding
B) can switch data based on the incoming
frequency
C) can interconnect shared links
D) needs to be programmed prior to data transfer
- 1.3 foaMks ds 'Taskbar' esa
A) os IHkh izksxzke fn[kk, tkrs
gSa tks bl le; [kqys gSaA
B) dsoy os izksxzke fn[kk, tkrs
gSa tks vkius de ls de nks ckj
bl dEl;wVj ij mi;ksx fd, FksA

- C) os IHkh izksxzke fn[kk, tkrs
gSa tks vkius dHkh Hkh bl
dEl;wVj ij mi;ksx fd, FksA
D) dsoy os izksxzke fn[kk, tkrs
gSa tks vkius bl dEl;wVj ij Mkys
gSaA
The 'Taskbar' in windows will
Show you all the programs you currently have
open
B) Show you only the programs you used the last
two times you were on the computer
C) Show you every program you've ever used on
the computer
D) Show you only those programs you have
installed on the computer
- 1.4 opqZvy eseksjh ----- dk
Hkkx gS / Virtual Memory is part of
A) RAM
B) ROM
C) HARD DISK
D) PROM
- 1.5 ,d dal;wVj ok;jl D;k dj ldrk gS\ /
What can a computer virus do?
A) Kill the mouse
B) Change how your computer operates
C) Spoil hard disk
D) Backup your data
- 1.6 ,d VsyusV gS / Telnet is a
A) Network of Telephones
B) Television Network
C) Remote Login
D) Remote Copy
- 1.7 'zip' ds foLrkj ds lkFk ,d Qkby
dks bafxr djrk gSA / A file with
extension of 'zip' indicates
A) a folder
B) a backup file
C) an encrypted file
D) a compressed file
- 1.8 foaMks VkLd eSustj [kksyus ds
fy, ----- izsl djsaA / Press
_____ to open the windows task manager.
A) Shift + Ctrl + Esc
B) Ctrl + Alt + Esc
C) Ctrl + Alt + Delete
D) Shift + Ctrl + Delete

- 1.9 IPv4 ,M^asl esa -----
 fcV~l 'kkfey gSA / The IPv4 address
 contains _____ bits.
- A) 4
 B) 32
 C) 12
 D) 8
- 1.10 fiax dekaM }jkj / Ping command can
 A) Measure round-trip time
 B) Report packet loss
 C) Report latency
 D) All of the above

2- uhps fn, x, izR;sd fooj.k ;k rks
 IR; ;k vIR; gSA ,d lcls mi;qDr fodYi
 pqusa vkSj mls fuEufyf[kr
 funsZ'ksa ds vuqlkj iz'u i= ds lkFk
 miyC/k djk, x, ^vks, evkj** mÙkj i=d
 esa ntZ djsaA (1x10)

- 2.1 vks,lvkbZ ekWMy esa] esy lfoZl
 ,lyhds'ku ys;j lfoZl gSA
- 2.2 foaMks ij best Qkby dEizsLM
 ugha fd;k tk ldrkA
- 2.3 MkWV eSfV^aDI fizavj
 ukWu&bEisDV Vkbifizavj gSA
- 2.4 ,d 10 csl Vh usVodZ ij vf/kdre
 [kaM dh yackbZ 100 ehVj gSA
- 2.5 lh M^akbo ij izksxzke Qkby
 QksYMj ls ,d izksxzke fMyhV
 djuk flVe ls ,d izksxzke dks
 gVkus dk lcls vPNk rjhdk gSA
- 2.6 IgdehZ ls IgdehZ usVodZ esa]
 izR;sd dal;wVj nksuksa
 DykbaV vkSj loZj lkW^TVos;j
 pykrk gS----
- 2.7 ;wMhih dusD'ku & mUeq[k
 izksVksdkWy gSA
- 2.8 tc vki vU; txg ds fy, ,d Qkby dks
 dkWih djrs gSa] vksfjftuy Qkby
 fMyhV gksrh gSA
- 2.9 xsLV ykWfxu uke ugha cnyk tk
 ldrkA
- 2.10 Dykl lh CykWd esa vkbZih
 ,M^asl dh la[;k 256 gSA

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

- 2.1 In the OSI model, mail service is application layer service.
- 2.2 Image files cannot be compressed on Windows.
- 2.3 Dot Matrix printer is non-impact type printer.
- 2.4 The maximum segment length on a 10BaseT network is 100 meters.
- 2.5 Deleting a program from the Program Files folder on the C drive is the best way to remove a program from the system.
- 2.6 In Peer-to-Peer network, each computer runs both client and server software..
- 2.7 UDP is connection-oriented protocol.
- 2.8 When you copy a file to another location, the original file is deleted.
- 2.9 Guest login name cannot be changed.
- 2.10 The number of IP addresses in Class C block is 256.

- 3- dkWye x esa fn, x, 'kCnksa vkSj okD;ksa dk feyku dkWye y esa fn, x, fudVre lacaf/kr vFkZ @ 'kCnksa @ okD;ksa ls djsaA muesa fn, x, vuqns'kksa dk ikyu djrs gq, vius fodYi iz'u i= ds lkFk fn, x, ^vks, evkj** mÙkj i=d esa ntZ djsaA

1/4x10½

X		Y	
3.1	PKZIP	A.	MS-Office file extension
3.2	Trojan	B.	Taskmgr.exe
3.3	og Windows file applications dks yksM djrk gS tks tc ju djrh gS rc Windows vksiu gksrh gS	C.	Graphical Object
3.4	RAID	D.	File
3.5	Gateway	E.	A type of windows file system
3.6	ppt	F.	Data Compression Software
3.7	CAT 5	G.	Telephone Communications
3.8	Icon	H.	A type of malicious program
3.9	fIEiysDI lapkj	I.	Fiber Optics
3.10	MsVk VakalQj dk lcls rst ehfM;k	J.	Fault tolerant disk
		K.	Television transmission
		L.	Four-pair wire medium
		M.	Connects two incompatible networks

- 4- uhps fn, x, izR;sd okD; esa uhps nh xbZ lwph ls ,d 'kCn ;k okD; dks [kkyh LFku esa yxk,aA lcls mi;qDr fodYi pqusa vkSj mls fuEufyf[kr vuqns'kksa ds vuqlkj iz'u i= ds lkFk fn, x, ^vks, evkj** mÙkj i=d esa viuk fodYi ntZ djsaA

1/4x10½

A.	Nero	B.	Authentication	C.	.doc
D.	TCP	E.	Ring	F.	FTP
G.	Topology	H.	dlt	I.	Mesh
R.	DLL	K.	BOOT	L.	TCP/IP
M.	NIC				

- 4.1 ----- lhMh cfuZax lkWtVos;j gSA
 4.2 ----- ,lyhds'ku ds fy, Qqy VakaliksVZ ys;j lfoZl iznku djrk gSA
 4.3 ----- ,d usVodZ ls ,fjk ds ysvkmV dks doj dk o.kZu gSA
 4.4 cwV izkslsl ds var esa viuk uke vkSj ikloMZ dks ykWfxu ds IR;kiu dks --- dgk tkkr gSA
 4.5 ----- ,DIVsa'ku dk iw.kZ :i Mk;usfed fyad ykbczsjh Qkby ds fy, gksrk gSA

- 4.6 ----- ,d usVodZ ij lsaV vkSj fjlho flXuy ds iz;ksx ds fy, ,MsIVj dkMZ gSA
- 4.7 ekbØkslkWTV oMZ Qkby dk ,d ,DIvs'a'ku ----- Hkh gSA
- 4.8 ----- izksVksdkWy lwV esa ykWftdy ,M^asl dks vkbZih ,M^asl dgk tkrk gSA
- 4.9 ----- izfØ;k vkjaHk djus ls igys ikoj vkWu lsYQ VsLV vius ifj.kke dh lwpuuk dh lhekWI esa j[kh xbZ lwpuuk ls rquyuk djrk gSA
- 4.10 ----- VksiksykWth esa Vksdu ikflax dk mi;ksx fd;k tkrk gSA

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	PKZIP	A.	MS-Office file extension
3.2	Trojan	B.	Taskmgr.exe
3.3	Windows file loads applications that run when Windows open	C.	Graphical Object
3.4	RAID	D.	File
3.5	Gateway	E.	A type of windows file system
3.6	ppt	F.	Data Compression Software
3.7	CAT 5	G.	Telephone Communications
3.8	Icon	H.	A type of malicious program
3.9	Simplex communication	I.	Fiber Optics
3.10	fastest media for data transfer	J.	Fault tolerant disk
		K.	Television transmission
		L.	Four-pair wire medium
		M.	Connects two incompatible networks

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Choose the most appropriate option, enter your choice in the “OMR” answer sheet supplied with the question paper, following instructions therein. (1x10)

A.	Nero	B.	Authentication	C.	.doc
D.	TCP	E.	Ring	F.	FTP
G.	Topology	H.	dlt	I.	Mesh
R.	DLL	K.	BOOT	L.	TCP/IP
M.	NIC				

- 4.1 _____ is CD burning software.
- 4.2 _____ provides full transport layer services to applications.
- 4.3 A _____ is a description of the layout of area covered by a network.
- 4.4 The verification of your login name and password at the end of the boot process is called _____.
- 4.5 _____ extension stands for Dynamic Link Library file.
- 4.6 _____ is an adapter card used to send and receive signals on a network.
- 4.7 One of the extensions of Microsoft Word file is _____.
- 4.8 The logical addresses in the _____ protocol suite are called IP addresses.
- 4.9 The power-on self-test compares its results to the information stored in CMOS before proceeding with the _____ process.
- 4.10 _____ topology uses token passing.

Hkkx nks / PART TWO

1/4fdUgha pkj iz'uksa dk mÙkj

nsa^{1/2}/(Answer any FOUR questions)

5.

a) ftl dkWfUQxjs'ku dk mi;ksx fd;k x;k gS mlds fooj.k ds lkFk enjcksMZ baLVkWy djus ds pj.kksa dk fooj.k fy[ksaA baLVkWy djus ds fy, iz;ksx dh tkus okyh lko/kkfu;ka Li"V :i ls fy[ksaA vki dsoy lkW¶Vos;j ds ykblsal otZu ds mi;ksx ds fy, xzkgd dks dSls f'kf{kr djsaxs\ ykblsal izklr lkW¶Vos;j ds rhu ykHkksa dks fy[ksaA

b) vubaVjIVsM ikoj llykbZ ds ckjs esa fy[ksaA ;wihi yxkuk D;ksa egRoiw.kZ gS\ 50 dEl;wVjksa okyh iz;ksx'kkyk esa fctyh dh vkiwfrZ ds fy, fMtkbu djrs le; /;ku j[ks tkus okys fdUgh ikap dkjksa dks crk,aA

a) Write detailed steps to install motherboard with details of the configuration used. Clearly write the precautions to be used for installation. Also how will you educate the customer for using licensed version of the software only, write three benefits of licensed software?

b) Write about Uninterrupted Power Supply. Why it is important to have UPS? Write five factors to keep in mind while designing for a power supply to a lab of 50 computers.

(10+5)

6.

a) vki foaMkst vkWijsfVax fILVe esa dEizsl 1/4ftIM1/2 QksYMj dks dSls cuk;js vksj mi;ksx djsaxsa \

b) vki foaMkst vkWijsfVax fILVe esa, fILVe MsV vksj VkbE dSls cny ldrs gSa\ le>k,a fd dSls vki vuf/kÑr ifjorZu dks izfrcaf/kr dj ldrs gSa\

c)

foaMkst vkWijsfVax fILVe dh dk;Z{kerk 'fILVe fjLVksj' dks le>k,aA foaMkst fILVe dh jftLVah fjLVksj djus ds pj.kksa dks fy[ksaA jftLVah egRoiw.kZ D;ksa gS\

a)

How do you create and use compress (zipped) folders in Windows Operating System?

b)

How do you change System Date and Time in Windows Operating System? Explain how can you restrict unauthorized change?

c)

Explain System Restore functionality of Windows Operating System. Write steps to restore registry of Windows System. Why is registry important?

(5+5+5)

7.

a) LAN, MAN vksj WAN ds chp D;k varj gS\ Coaxial Cable vksj Optical Fiber ds ykHk D;k gSa\

b)

vkbZih ,Msafjax Ldhe D;k gS\ mnkgj.k ds lkFk Dykl lh ,Masflax Ldhe dks le>k,a\ fdrus vkbZih uacj vkbZihoh4 ,Masflax Ldhe dk mi;ksx dj ,d Dykl ch usVodZ esa laHko gSA usV vkbZMh vksj IcusV ekLd ds :i esa ,d Dykl ch usVodZ dk ,d mnkgj.k nsaA

a)

What is the difference between LAN, MAN and WAN? What are the advantages of Coaxial Cable and Optical Fiber?

b)

What is IP addressing scheme? Explain class C addressing scheme with example? How many IP numbers are possible in a Class B network using IPv4 addressing scheme. Give an example of one Class B network in the form of net id and subnet mask.

(5+10)

8.

a) foaMkst loZj vkWijsfVax fILVe esa ;wtj vksj xzqi ds cukus ds ckjs esa crk,aA ;wtj ds fy, vkbu

- dh xbZ Hkwfedk ls vki D;k le>rs
gSa\
- b) dSIs foaMkst loZj vkWijsfVax
flLVe esa odZxzqi ds fy, ,d
usVodZ ij Qkby vkSj QksYMj
'ks;j djrs gS\
- a) Explain the creation of user and group in Windows Server Operating System. What do you understand by roles assigned to user?
- b) How to Share Files and Folders Over a Network for Workgroups in Windows Server Operating System?

(7+8)

9. fuEufyf[kr dks le>k,a %
- a) ihlh V^acy'kwfVax ds IUnHkZ
esa cSdvi vkSj fjLVksj
vkWijs'ku
- b) ,d dEizsLM Qkby esa ls ,d ok;jl
baQsfDVM Qkby ds fMyh'ku
vkSj gVuk rFkk ,aVhok;jl
ifjHkk"kkvksa dh Hkwfedk
crk,aA
- c) gc] fLop] fczt] jkmVj vkSj xsVos
Explain the following:
a) Backup and Restore operations in context of PC troubleshooting
b) Deletion and Removal of Virus infected files from a compressed file and role of Antivirus definitions
c) Hub, Switch, Bridge, Router and Gateway

(5+5+5)