

# A1-R4: IT TOOLS & BUSINESS SYSTEMS

अवधि: 03 घंटे  
DURATION: 03 Hours

अधिकतम अंक: 100  
MAXIMUM MARKS: 100

ओएमआर शीट सं.:   
OMR Sheet No.:

रोल नं.:   
Roll No.:

उत्तर-पुस्तिका सं.:   
Answer Sheet No.:

परीक्षार्थी का नाम: \_\_\_\_\_; परीक्षार्थी के हस्ताक्षर: \_\_\_\_\_  
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 अंग्रेजी है। परीक्षार्थी केवल अंग्रेजी भाषा में ही उत्तर कर सकता है।	Question Paper is in English language. Candidate can answer in English language only.
इस मॉड्यूल/पेपर के दो भाग हैं। भाग एक में चार प्रश्न और भाग दो में पाँच प्रश्न हैं।	There are <b>TWO PARTS</b> in this Module/Paper. <b>PART ONE</b> contains <b>FOUR</b> questions and <b>PART TWO</b> contains <b>FIVE</b> questions.
भाग एक "वैकल्पिक" प्रकार का है जिसके कुल अंक 40 हैं तथा भाग दो, "व्यक्तिपरक" प्रकार है और इसके कुल अंक 60 हैं।	<b>PART ONE</b> is Objective type and carries 40 Marks. <b>PART TWO</b> 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।	<b>PART ONE</b> is to be answered in the <b>OMR ANSWER SHEET</b> only, supplied with the question paper, as per the instructions contained therein. <b>PART ONE</b> is <b>NOT</b> to be answered in the answer book for <b>PART TWO</b> .
भाग एक के लिए अधिकतम समय सीमा एक घण्टा निर्धारित की गई है। भाग दो की उत्तर-पुस्तिका, भाग एक की उत्तर-पुस्तिका जमा करने 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 <b>PART ONE</b> is <b>ONE HOUR</b> . Answer book for <b>PART TWO</b> will be supplied at the table when the answer sheet for <b>PART ONE</b> is returned. However, candidates who complete <b>PART ONE</b> earlier than one hour, can collect the answer book for <b>PART TWO</b> immediately after handing over the answer sheet for <b>PART ONE</b> .
परीक्षार्थी, उपस्थिति-पत्रिका पर हस्ताक्षर किए बिना अथवा अपनी उत्तर-पुस्तिका, निरीक्षक को सौंपे बिना, परीक्षा हाल नहीं छोड़ सकता है। 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.
<b>नोट: यदि हिन्दी संस्करण में कोई त्रुटि / विसंगति पाई जाती है, तो उस अवस्था में अंग्रेजी संस्करण ही मान्य होगा।</b> <b>Note: In case of any discrepancy found in Hindi language, English version will be treated as final.</b>	

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.**

**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. The three main components of a digital computer system are:  
A) Memory, Input/Output, DMA  
B) ALU, CPU, Memory  
C) Memory, Input/Output, CPU  
D) Control Circuits, ALU, Registers
- 1.2 Which one of the following is volatile?  
A) Bubble Memory  
B) RAM  
C) ROM  
D) Magnetic Disc
- 1.3 Which one of the following binary numbers is divisible by 4?  
A) 101010  
B) 100101100  
C) 1110001  
D) 100011
- 1.4 The cost of storing a bit is minimum in:  
A) Cache  
B) Register  
C) RAM  
D) Magnetic Disc
- 1.5 The resolution of a dot matrix printer is measured in:  
A) Megabits  
B) Dots per inch  
C) Hertz  
D) Inches
- 1.6 Linux open source is an  
A) Operating System  
B) Office Tool  
C) Programming Standard  
D) Proprietary Operating System
- 1.7 \_\_\_\_\_ maps IP address with domain name of sites.  
A) URL  
B) DNS  
C) DNS  
D) TCP

1.8 The term DBMS stands for-

- A) Digital Bar Management Software  
B) Data Base Management System  
C) Domain Based Management Software  
D) Data Base Management Software

1.9 The most commonly used web browser is:

- A) Internet Explorer  
B) Netscape  
C) Both A) and B)  
D) None of the above

1.10 A Nibble consists of \_\_\_\_\_ Bits.

- A) 2  
B) 4  
C) 8  
D) 16

**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 A byte is bigger than nibble.  
2.2 The row of relational database is tuple.  
2.3 OCR stands for Optical Care Reader.  
2.4 The higher the resolution of screen better is picture quality.  
2.5 A Linux is a command line user interface operating system.  
2.6 A byte is smallest unit of storage.  
2.7 The binary equivalent of octal no. 473 is 100111011.  
2.8 Cache memory is faster than main memory.  
2.9 ALU is part of CPU.  
2.10 MS Word is a system software.

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	A number system with base 8.	A.	Downloading
3.2	Layer of software embedded on bare hardware to enhance the computing capability of bare machine.	B.	Domain Name
3.3	Text based strings corresponding to numeric IP address.	C.	Compiler
3.4	A single work assembled using elements from more than one medium like images, sounds, videos, text etc.	D.	Octal
3.5	Translates source code into equivalent machine code.	E.	WWW
3.6	It is used for various purposes like e-mail, e-commerce, e-governance, education, social networking etc.	F.	Multimedia
3.7	Any extra device added to the computer.	G.	Operating System
3.8	Large scale collection of documents located worldwide.	H.	Peripheral
3.9	It is a type of network topology.	I.	Internet
3.10	The process of storing a page on web server.	J.	Star
		K.	HTTP
		L.	Decimal
		M.	Uploading

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.	Ariel	B.	Printer	C.	Animation
D.	Data Warehouse	E.	Data mining	F.	Assembler
G.	1000	H.	Hard Disk Drive	I.	LAN
J.	Cables	K.	1024	L.	Android
M.	RAM				

- 4.1 1 KB equals \_\_\_\_\_ bytes.
- 4.2 \_\_\_\_\_ is both an Input-Output device.
- 4.3 \_\_\_\_\_ is an operating system for mobile devices based on the Linux kernel and Java.
- 4.4 \_\_\_\_\_ is a primary memory.
- 4.5 \_\_\_\_\_ is the name of a font.
- 4.6 A big store house of data used for predicting futuristic trends based on the data stored is known as \_\_\_\_\_.
- 4.7 \_\_\_\_\_ allows sharing and communication of small networks.
- 4.8 Rapid display of sequence of images to create illusion of movement is known as \_\_\_\_\_.
- 4.9 Program to translate assembly language to machine language is known as \_\_\_\_\_.
- 4.10 \_\_\_\_\_ is a medium of communication for networking of computers.

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

- 5.**
- a) Convert  $(147)_{10}$  to binary number.
  - b) Give block diagram of a computer and explain it.
  - c) Explain basic functions of a operating system.  
**(5+5+5)**
- 6.**
- a) Explain macros in MS Word.
  - b) Explain high level language and low level language with examples.
  - c) Write short note on system software and application software.  
**(5+5+5)**
- 7.**
- a) Explain in detail the diverse application of Internet technology in various domains.
  - b) Give the process of creation of hyperlinks to link to a different slide in different presentation power point.
  - c) Explain how slide transition is used in ppt.  
**(5+5+5)**
- 8.** Write notes on:
- a) Classification of memory.
  - b) CPU components.
  - c) Differentiate between Compiler and Interpreter.  
**(5+5+5)**
- 9.**
- a) Create an excel sheet, fill in the numbers A1 to A10 cell, write formula to sum the above numbers in A11 and to average the sum in A12.
  - b) Explain security aspects associated with transfer of information via internet.
  - c) Explain the terms resolution, aspect ratio and refresh rate.  
**(5+5+5)**

