NOTE:

## IMPORTANT INSTRUCTIONS:

1. Question Paper in English and Hindi and Candidate can choose any one language.
2. In case of discrepancies in language, English version will be treated as final.
3. There are TWO PARTS in this Module/Paper. PART ONE contains FOUR questions and PART TWO contains FIVE questions.
4. 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.
5. 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 EEPROM stands for
A) Electrically Erasable Programmable Read of Memory
B) Erasable Electrically Programmable Read Only Memory
C) Easily Erasable Programmable Read Only Memory
D) Electrically Erasable Programmable Read Only Memory
1.2 Which of the following belongs to Systems Software?
A) Word Processing Software
B) Web Browser
C) Operating System
D) Spreadsheet Software
1.3 Background color or effects applied on a document is not visible in
A) Web layout view
B) Print Layout view
C) Reading View
D) Print Preview
1.4 If you need a text to show vertically in a cell. How will you achieve this?
A) Choose Vertical on Text alignment in Format Cells dialog box
B) Choose 90 Degrees in Orientation of Format Cells dialog box
C) Choose Distributed from the Vertical drop down list of Format Cells dialog box
D) Choose Center across Selection from Horizontal combo box in Format Cells dialog box
1.5 A transparent DBMS
A) hides sensitive information from users
B) keeps its logical structure hidden from users
C) keeps its physical structure hidden from users
D) provides physical map of underlying hardware to users
1.6 Convert the Hexadecimal number 5A to Binary
A) 01011001
B) 01001010
C) 01011010
D) 01000100
1.7 A collection of worksheets is called as
A) Excel Sheets
B) Workbook
C) Excel worksheets
D) Excel Book
1.8 A CPU consists of at least
A) ALU and Registers
B) ALU and Control Unit
C) ALU and Memory
D) RAM and ROM
1.9 The resolution of a printer is measured in:
A) Megabits
B) Hz
C) Dots per inch (DPI)
D) Inches (diagonal)
1.10 An example of a volatile memory is:
A) CD-ROM
B) RAM
C) ROM
D) Hard Disk
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 All data processing systems must provide for the input, processing, and output of data.
2.2 The principal advantage of database systems is the ability to share the same data across multiple applications and systems.
2.3 Dot matrix printer uses optical technique to print.
2.4 An example of an input device is a printer.
2.5 A bit is bigger than a byte.
2.6 Entity is a characteristic of object in database.
2.7 The kernel is a program that constitutes the central core of a computer operating system.
2.8 Mnemonics are associated with machine language.
2.9 Internet is network of networks.
2.10 Volatile memory is directly accessible by the CPU.
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 | In the year 1969, Department of Defence of the United States <br> started a network called | A. | Binary |
| 3.2 | A device that accomplishes modulation and demodulation | B. | Insert |
| 3.3 | Number system to the base 2 | C. | Word Wrapping |
| 3.4 | The first screen that appears after the computer is switched on | D. | Shortcut |
| 3.5 | Approximately a billion bytes or 10000 megabytes | E. | Compiler |
| 3.6 | The menu on which the WordArt option is available | F. | What-if analysis |
| 3.7 | Translate source code into equivalent machine language <br> program. | G. | ARPAnet |
| 3.8 | Readymade formulas of Excel | H. | Interpreter |
| 3.9 | Automatic recalculation of result of a formula if the data is <br> changed | I. | Desktop |
| 3.10 | The icons with an arrow in Windows Desktop | J. | Functions |
|  |  | K. | 0.9765625GB |
|  |  | L. | MODEM |
|  |  | M. | INTRANET |

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. | Internal | B. | Animation | C. | Physical |
| :---: | :--- | :---: | :--- | :--- | :--- |
| D. | Two | E. | Calibri | F. | Backup |
| G. | 1000 | H. | I/O Module | I. | External |
| J. | Database | K. | Logical | L. | 1024 |
| M. | Home |  |  |  |  |

4.1 The Semiconductor memories are $\qquad$ types.
4.2 $\qquad$ is a name of a Font.
4.3 Optical disks are used for $\qquad$ memory.
4.4 The $\qquad$ tab is to take you to first page of website.
4.5 The address of a location of the main memory is called $\qquad$ address.
$\qquad$ is the rapid display of a sequence of images to create an illusion of movement.
4.7 The external memory systems are accessible by the CPU through $\qquad$ .
4.8 Magnetic Tapes are examples of $\qquad$ memory.
4.9 An arrangement of data in a particular order is called $\qquad$ .
4.10 The 1 KB equals $\qquad$ bytes.

## PART TWO

(Answer any FOUR questions)
5.
a) Compare and contrast between Linux and UNIX.
b) Convert the hexadecimal number D6FA into decimal number and octal number.
c) What are the main components of CPU? Discuss them in detail.
6.
a) Write short notes on applications of Multimedia in Education and Entertainment.
b) Explain the difference between Multiprogramming and Multiprocessing systems.
c) Write short notes on Computer Reservations System.
7.
a) Discuss how can you have animation in MS-Power Point slides?
b) Define function in Spreadsheet Software. Describe any five functions.
c) What is the difference between relative, absolute and mixed references? Explain with example.
8.
a) Write short notes on System Software and Application Software.
b) With a neat diagram explain the organizations of a computer.
c) Explain following with example in MS-Word:
i) Mail-Merge
ii) Header, Footer, Footnote and Endnote
9.
a) Define the concept of aggregation with suitable example.
b) Consider the EMPLOYEE database as shown below:

Emp (person_id, person_name, street, city)
Works (person_id, company_id, salary)
Company (company_id, company_name, company_city)
Give expressions in SQL for each of the following queries:
i) Write the statement to create Emp Table.
ii) Write the statement to create Works Table.
iii) Write the statement to create Company Table.
iv) Display names and salary of those employees who are getting salary greater than Rs. 10,000.
v) Find the names and cities of residence of all employees who work for "SBBJ Bank".
vi) Count the employees on the basis of similar salaries.

