## 2021

## COMPUTER FUNDAMENTALS AND PROGRAMMING

Full Marks: 60

Time: Two hours

## The figures in the margin indicate full marks for the questions.

## A. Multiple Choice Questions

1 x 20=20

- 1. Who is known as the father of computers?
  - a. Alan Turing
  - b. Charles Babbage
  - c. Simur Cray
  - d. Augusta Adaming
- 2. Which of the following is non-volatile storage?
  - a. Backup
  - b. Secondary
  - c. Primary
  - d. Cache
- 3. Which of the following is not a function of the Input Unit?
  - a. It reads instructions and data from the outside world.
  - b. It converts the data into computer acceptable format.
  - c. It makes the data into user understandable format.
  - d. It supplies the data and instructions to the computer for further processing.
- 4. Which of the following values is the correct value of this binary code 1011 and 1111?
  - a. 11 and 14
  - b. 10 and 15
  - c. 11 and 15
  - d. 10 and 14

| 5. Select the correct statement from the following stateme | nts. |
|--|------|
|--|------|

- i) MS-Excel creates workbooks, and each workbook may contain more worksheets.
- ii) A worksheet in MS-Excel 2000 package has a maximum 0f 256 columns and 65536 rows.
- iii) Columns are identified by a number and rows are identified by a letter.
- iv) Cells are identified by the column letter and the row number.
- a. i, ii, iii
- b. ii, iii, iv
- c. i, iii, iv
- d. i, ii, iv
- 6. What is the decimal value for the octal value 1?
  - a. 1
  - b. 8
  - c. 10
  - d. 100
- 7. Which one of the following parts is called the brain of the computer?
  - a. ALU
  - b. Monitor
  - c. UPS
  - d. CPU
- 8. www stands
  - a. World Wild Worm
  - b. World Wide West
  - c. Wide Watch Web
  - d. World Wide Web
- 9. What is the full form EEPROM?
  - a. Electrically Erasable Process Read-Only Memory
  - b. Electrically Erasable Programmable Read-Only Memory
  - c. Electrical Erase Program Read-Only Memory
  - d. Electron Erase Program Read-Only Memory

| 10. | Wh  | nich of the following is not considered hardware?                              |
|-----|-----|--|
|     | a.  | Operating system   |
|     | b.  | CPU  |
|     | c.  | Keyboard   |
|     | d.  | Hard Disk  |
| 11. | Wh  | nich of the following is equal to a gigabyte?                                  |
|     | a.  | 1024 bytes   |
|     | b.  | 512 GB   |
|     | c.  | 1024 bits  |
|     | d.  | 1024 MB  |
| 12. | DC  | OS stands for  |
|     | a.  | Disk Operating System  |
|     | b.  | Disk Operating Session   |
|     | c.  | Digital Operating System   |
|     | d.  | Digital Open System  |
| 13. | The | e 2's complement of a binary no. is obtained by adding to its 1's complement.  |
|     | a.  | 0  |
|     | b.  | 1  |
|     | c.  | 10   |
|     | d.  | 12   |
| 14. | The | e brain of a computer system is  |
|     | a.  | CPU  |
|     | b.  | ALU  |
|     | c.  | Memory   |
|     | d.  | Control Unit   |
| 15. | A p | program that translates assembly language into the machine-language equivalent |
|     | a.  | Machine language   |
|     | b.  | Assembler  |
|     | c.  | Interpreter  |
|     | d.  | C Program  |
|     |     |  |

| 16.  | The hexadecimal representation of 14 is                              |        |
|------|--|--------|
|      | a. A   |        |
|      | b. F   |        |
|      | c. D   |        |
|      | d. E   |        |
| 17.  | Word processing software is a  |        |
|      | a. Synchronous Software  |        |
|      | b. Package Software  |        |
|      | c. Application Software  |        |
|      | d. System Software   |        |
| 18.  | The value of base in a decimal number system is                      |        |
|      | a. 2   |        |
|      | b. 8   |        |
|      | c. 10  |        |
|      | d. 16  |        |
| 19.  | Line Printers that print one line at a time are                      |        |
|      | a. Laser Printers  |        |
|      | b. Inkjet Printers   |        |
|      | c. Drum Printers   |        |
|      | d. Chain Printers  |        |
| 20   | In which of the following, the second-generation computer was based? |        |
|      | a. Transistor  |        |
|      | b. Vacuum tube   |        |
|      | c. Microprocessor  |        |
|      | d. Electron tube   |        |
| Very | Short Question   | 2*6=12 |
| 1.   | Define Operating System.   |        |
| 2.   | Write the differences between RAM and ROM.                           |        |
| 3.   | What is secondary memory?  |        |
| 4.   | Differentiate between MAN and WAN.                                   |        |

Convert decimal 62 to its binary equivalent.

B.

6. Write the difference between while and do-while loop.

C Short Question 4\*7=28

- 1. Draw the block diagram of a computer and briefly explain the function of the arithmetic and logic unit.
- 2. State the various functions performed by the operating system
- 3. Write a C program to find the factorial of a given number.
- 4. Write a C program to display even numbers between 1 and 50.
- 5. Discuss the merits and demerits of impact and non-impact printers.

OR

What is mail merge? Mention the steps to use mail merge in MS Word application.

- 6. Subtract 110101 100101 using 1's complement.
- 7. Write short notes on the following (any two)
  - i) Search Engine ii) Internet iii) Digitizers