



BBC-003-003109

Seat No. _____

B. C. A. (Sem. I) Examination

July – 2021

**CS - 03 : Computer Fundamentals And Emerging
Technology**

Faculty Code : 003

Subject Code : 003109

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 Answer the following : 20

- (1) Give definition of Computer.
- (2) The brain of any computer system is _____
- (3) Which technology was used in Second generation computers?
- (4) ALU stands for _____
- (5) Give the full form of GIS.
- (6) Give the full form of GPS.
- (7) EBCDIC stands for _____
- (8) Give definition of Operating System.
- (9) Give the full form of EEPROM.
- (10) Give the full form of LCD.
- (11) 1 Nibble = _____ bits.
- (12) What is Cache Memory?
- (13) USB stands for _____
- (14) _____ generation of computers was made up of Vacuum tubes?
- (15) DPI stands for _____
- (16) Give the full form of Bit.
- (17) 1's Complement of the 10010.

- (18) _____ is the most popular input device for direct entry of data and instructions into computer.
- (19) Does the compiler program translate the whole source code in one step? (Yes/No)
- (20) Give the full form of CDMA.

- 2** (A) Attempt the following : (Any **Three**) **6**
- (1) Draw block diagram with all components.
 - (2) Explain Time Sharing OS.
 - (3) Explain Remote Sensing.
 - (4) Define: Half Duplex and Full Duplex
 - (5) Discuss Plasma.
 - (6) List out four number systems with their base and range.
- (B) Attempt the following : (Any **Three**) **9**
- (1) Explain Characteristics of Computer.
 - (2) Explain MICR.
 - (3) Define: Carry Bit, Parity Bit, Sign Bit
 - (4) Give definition of Assembler, Compiler and Interpreter.
 - (5) Explain wi-Fi in detail.
 - (6) Explain ROM, PROM, and EPROM.
- (C) Attempt the following : (Any **Two**) **10**
- (1) Write a note Analog, Digital & Hybrid Computer.
 - (2) Convert following from Binary to Octal
(i) 10011011 (ii) 1101110
 - (3) Explain ports and its types.
 - (4) Explain different types of Optical Scanner.
 - (5) Explain Mouse.

- 3 (A) Attempt the following : (Any Three) 6**
- (1) Define: Double word and Quad word.
 - (2) Explain Light Pen.
 - (3) 2's Complement of (11100010).
 - (4) Convert $(AB2)_{16} = (?)_2$.
 - (5) Explain Blu-Ray Disc.
 - (6) Convert: $(425)_{10} = (?)_6$
- (B) Attempt the following : (Any Three) 9**
- (1) Difference between Impact Printer & Non-Impact Printer.
 - (2) Solve binary subtraction using 1's complement and 2's complement : $11100011 - 1010101$
 - (3) Explain Magnetic Tape and Magnetic Disk.
 - (4) Explain CD and DVD.
 - (5) Explain CRT.
 - (6) Explain RAM in detail.
- (C) Attempt the following : (Any Two) 10**
- (1) Explain different types of Computer Languages.
 - (2) Write a note on Optical Fiber.
 - (3) What is Virus? Explain types of virus.
 - (4) Explain Bluetooth technology.
 - (5) Write a note on Cell Phone Frequency and Cell Phone Network.