



BD-003-2011010

Seat No. _____

B. Sc. (Sem. I) (CBCS) (W.E.F. 2019) Examination

March - 2021

**CA-101 : Computer Fundamentals &
Programming in C**

Faculty Code : 003

Subject Code : 2011010

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

[Total Marks : 70

- 1 (a) Attempt following questions : 4
(1) Full form of ASCII.
(2) Full form of BCD.
(3) Full form of RAM.
(4) Full form of GB.
- (b) Answer in brief : 2
What is Computer ?
- (c) Answer in detail. 3
Explain Analog and Digital computer.
- (d) Write note on. 5
Explain Mainframe and Super Computer.
- 2 (a) Attempt following questions : 4
(1) Full form of PCI.
(2) Full form of ROM.
(3) Full form of EBCDIC.
(4) Full form of USB.
- (b) Answer in brief. 2
What is Unicode ?
- (c) Answer in detail. 3
Explain Binary to Octal, Decimal and Hexa Decimal conversion.

- (d) Convert the following : 5
- (a) $(101011)_2 = (?)_{10}$
- (b) $(125)_{10} = (?)_2$
- (c) $(ABC)_{16} = (?)_2$
- (d) $(10101)_2 + (11000)_2$
- (e) $(10100)_2 - (01001)_2$
- 3 (a) Attempt following questions. 4
- (1) Full form of GIS.
- (2) Full form of GPS.
- (3) Full form of WiFi.
- (4) Full form of PPM.
- (b) Answer in brief. 2
- What is GPS ?
- (c) Answer in detail. 3
- Explain Working of Modem.
- (d) Write a note on. 5
- Explain EMAIL.
- 4 (a) Attempt following questions. 4
- (1) Full form of CLI.
- (2) Full form of GUI.
- (3) Full form of KBPS.
- (4) Full form of CDMA.
- (b) Answer in brief. 2
- What is Hard Copy and Soft Copy ?
- (c) Answer in detail. 3
- What is Virus ? Explain types of virus.
- (d) Write a note on. 5
- Explain compiler and Interpreter
- 5 (a) Attempt following questions. 4
- (1) _____ developed C language.
- (2) List any two header files in C language.
- (3) What is keyword ?
- (4) What is variable ?

- (b) Answer in brief. 2
 Explain Flowchart.
- (c) Answer in detail. 3
 Explain Relational Operators in C language.
- (d) Write a note on. 5
 Explain Logical operators in C language.
- 6 (a) Attempt following questions. 4
 (1) C is also called Middle level language. (True/False)
 (2) _____ is a graphical representation of programming.
 (3) Algorithm is a textual representation of programming.
 (True/False)
 (4) Define term Type Conversion.
- (b) Answer in brief. 2
 Explain Data Types in C language.
- (c) Answer in detail. 3
 Write a program to enter any number and check that no.
 is odd or even.
- (d) Write a note on. 5
 Write a program to check entered year is leap year or not.
- 7 (a) Attempt following questions. 4
 (1) What is scanf() ?
 (2) Define term printf().
 (3) Define term sqrt().
 (4) Define term strlen().
- (b) Answer in brief. 2
 Explain goto statement.
- (c) Answer in detail. 3
 Explain nested if statement
- (d) Write a note on. 5
 Explain while loop with example.
- 8 (a) Attempt following questions. 4
 (1) for and while loop is entry controlled loop (True/False)
 (2) _____ is a exit controlled loop.
 (3) _____ statement is used to terminate from the loop.
 (4) goto is also called jumping statement. (True/False)

- (b) Answer in brief. 2
 Explain if...else statement.
- (c) Answer in detail. 3
 Explain break statement with example.
- (d) Write a note on. 5
 Explain for loop with example.
- 9** (a) Attempt following questions. 4
 (1) Array index start with _____.
 (2) Full form of UDF.
 (3) Define term recursion.
 (4) Define pointer.
- (b) Answer in brief. 2
 What is pointer ?
- (c) Answer in detail. 3
 Explain UDF.
- (d) Write a note on. 5
 Explain Array with example.
- 10** (a) Attempt following questions. 4
 (1) Collection of similar data is called array. (True/False)
 (2) Collection of different data is called structure. (True/False)
 (3) Define term Arguments.
 (4) List the types of UDF.
- (b) Answer in brief. 2
 What is Array ?
- (c) Answer in detail. 3
 Explain Nesting Functions.
- (d) Write a note on. 5
 Explain structure with example.
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