

BCA 1st Semester (Hons.) Examination,2021
BACHELOR OF COMPUTER APPLICATION

Course ID: 13311

Course Code: BCA-CC-01

Course Title: Computer Fundamental and PC software

Time : 2 Hours

Full Marks : 50

The figures in the right hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group – A

1. Answer all the questions:

1 X 10 = 10

i. Which device is required for internet connection?

- a) Joystick
- b) Modem
- c) CD drives
- d) NIC card
- e) None of these

ii. CD ROM stand for:

- a) Compactable Read Only memory
- b) Compact Data Read Only memory
- c) Compactable Disk Read only memory
- d) Compact Disk Read Only memory
- e) None of these.

iii. MSI stands for-

- a) Medium scale integrated circuit
- b) Medium system integrated circuit
- c) Medium scale intelligent circuit
- d) Medium system intelligent circuit
- e) None of these

iv. Which of the following is part of the CPU?

- a) Printer
- b) Key Board
- c) Moused
- d) ALU
- e) None of these

v. Where are data and programmed stored when the processor use them?

- a) Main memory
- b) Secondary memory
- c) Disk memory
- d) Programmed memory
- e) None of these

vi. Which of the following is not ‘anti-virus’?

- a) Quick-Heal
- b) F-prot
- c) Oracle
- d) MCA Fee
- e) None of these

vii. BCD is-

- a) Binary coded decimal
- b) Bit coded decimal
- c) Binary coded digit
- d) Bit coded digit
- e) None of these.

viii. The 1's compliment of 101101 is:

- a) 001101
- b) 010010
- c) 100010
- d) 101101
- e) None of these

ix. Which of the following allows you to communicate with multiple user at the same time?

- a) Instant massaging
- b) E-Mail
- c) Video Conferencing
- d) A photo community
- e) None of these.

x. Which of the following is not a computer language?

- a) MS-Excel
- b) COBOL
- c) JAVA
- d) C++
- e) None of these

Group-B

2. Answer any FIVE questions:

2 X 5 = 10

- i. Convert $(8AD.EC)_{16}$ to Octal.
- ii. Define middleware.
- iii. Differentiate between RAM and ROM.
- iv. What do you mean by FTP?
- v. Define algorithm.
- vi. What do you mean by multitasking?
- vii. Prove that: $A + A'B + A'B' = 1$
- viii. Write the function of ALU.

Group-C

3. Answer any FOUR questions:

5 X 4 = 20

i.a. How do you copy and rename a single file in DOS?

b. Define non-weighted code with example.

3 + 2 = 5

ii. a. Perform the subtraction using 1's compliment arithmetic:

$$(1110)_2 - (1001)_2$$

b. What is watermark picture?

4 + 1 = 5

iii. Define telnet? Write down the advantages of assembly language over machine language.

iv. a. Define E-mail.

b. Write down the benefits of Internet.

1 + 4 = 5

v. what are the major advantage of power point? How do you insert animation?

vi. Prove that NAND gate is Universal gate.

Group-D

4. Answer any ONE question:

10 X 1 = 10

i. a. Briefly discusses different types of application software.

b. draw the flowchart and a algorithm that a number is prime or not.

6 + 4 = 10

ii. a. Prove that: $(A+C)(A+D)(B+C)(B+D) = AB+CD$

b. Obtain the following expression in SOP forms:

$$F(a, b, c, d) = \sum (1,3,5,7,9,12,13)$$

c. Simplify the following function and design the circuit using gates:

3 + 3 + 4 = 10

$$F(a, b, c, d) = \sum (1,3,4,5,6,7,9,12,13)$$
