BCA-I/BCA-CC-01/19

BCA 1st Semester (Honours) Examination, 2019-20 (CBCS)

BACHELOR OF COMPUTER APPLICATION

Course ID : 13511 **Course Code : BCA-CC-01**

Course Title : Computer Fundamental and PC Software

Time: 2 Hours **Full Marks: 50**

The figures in the margin indicate full marks.

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

Group-A

1. Answer *all* the following questions: 1×10=10

(i) According to Boolean Law A + 1 = ?

(a) 1 (b) A

(c) 0 (d) A'

(e) None of these

(ii) The basic architecture of computer was developed by

(a) John Von-Neumann (b) Charles Babbage

(c) Blaise Pascal (d) Garden Moore

(e) None of them

(iii) Which of the following memory is Non-Volatile?

(a) SRAM (b) DRAM

(c) ROM (d) All of these

(e) None of these

(iv) The normally interact with the system via user interface provide by the application software—

(a) Programmers (b) Developers

(c) Tester (d) User

(e) None of these

(v) Which of the following is not an advantage of a flowchart?

(a) Better Communication (b) Efficient Coding

(c) Systematic Testing (d) Improper Documentation

(e) None of these

(vi) 'Reference' command can be taken from which menu?

(a) Insert (b) Format

(c) Table (d) File

(e) None of these

(vii) The largest two digit hexa-decimal number is

(a) $(FD)_{16}$ (b) $(FE)_{16}$

(c) $(FF)_{16}$ (d) $(EF)_{16}$

(e) None of these

(viii) Compiler and Interpreters are themselves

(a) High level language (b) Codes

(c) Programs (d) Mnemonics

(e) None of these

(ix) Fifth Generation Computers are based on

(a) Artificial Intelligence (b) Programming Intelligence

(c) System Knowledge (d) VVLSI

(e) None of these

(x) GUI stands for

(a) Graph Use Interface (b) Graphical Universal Interface

(c) Graphical User Interface (d) Graphical Unique Interface

(e) None of these

Group-B

2. Answer *any five* questions: 2×5=10

(a) Convert $(9AE \cdot BC)_{16}$ to Octal.

(b) Prove that — $A'B + AB + A'B' = A' + B$.

(c) Differenciate between 1'S complement and 2'S complement.

(d) What is E-mail?

(e) What is Computer Virus?

(f) What is the name of last column of Excel Worksheet?

(g) What is Minterm?

(h) What do you mean by Multiprogramming Operating System?

Group-C

3. Answer *any four* questions: 5×4=20

(a) (i) Explain different view of MS-Words.

(ii) How do you insert animation? Explain. 3+2=5

(b) Explain different classes of Memory Hierarchy. 5

(c) (i) Perform the subtraction using 2'S complement arithmetic = $(11101)_2 - (00101)_2$.

(ii) Design X-OR gate using NAND gates only. 3+2=5

(d) (i) What is USB?

(ii) What are the different types of software? 1+4=5

(e) Draw the Flowchart to find the greatest of three (3) numbers. 5

(f) What do you mean by Canonical form? What are the functions of Operating System? 2+3=5

Group-D

4. Answer *any one* question: 1×10=10

(a) (i) Simplify the following Expression:

$Y = A + A'B + A'B'C + A'B'C'D$

(ii) Obtain the following in SOP and POS form:

$F(A, B, C) = (A' + B)(B' + C)$

(iii) Simplify the following function and Design the circuit using Gates:

$F(W, X, Y, Z) = \sum_m(0, 2, 6, 8, 10, 11, 14)$ 3+3+4=10

(b) (i) Write the steps to create a pie chart in MS-Excel.

(ii) How do you insert Mathematical Equation in MS-Word? Explain.

(iii) What do you mean by Header and Footer? 5+4+1=10

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