

**BCA (Honours) 1st Semester Examination, 2021 (CBCS)**

**Subject: Computer Application**

**Paper name: Computer Fundamental and PC software**

**Paper code: BCA-101**

**Time: 3 Hours**

**Full Marks: 80**

*The figures in the margin indicate full marks.*

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

**1. Answer any SIX questions:**

**6x5=30**

- a. What is volatile memory? Why it is called volatile? Give example.
- b. How do you sort data in MS-Excel?
- c. Find the complement of  $F = (XY'Z + XY + YZ')$
- d. Write the use of following function in Excel =SUM (A2:A7, A9, A12:A15), =IF (C2<D3, 'TRUE,' 'FALSE'), =MAX (B2:C11)
- e. What is spreadsheet? Explain its feature.
- f. Simplify the following to minimum number of literals:  $f = x'z + xy + yz + xy'$
- g. Write short note on basic gates.
- h. Discuss different features of MS-Power Point.

**2. Answer any FIVE questions:**

**5x10=50**

- a. Minimize the function  $F(A, B, C, D) = \sum (0,1,2,3,8,9,10,11)$  using K-map and design the circuit using gates.
- b. What is drop cap? Differentiate between linespacing and paragraph spacing.
- c. What is universal gate? Implement X-NOR gate using universal gates.
- d. Compare and contrast the characteristics of the following:
  - (i) Dot matrix printer versus Laser printer
  - (ii) Cathode ray tube monitors versus liquid crystal display monitors.
- e. Write the disadvantages of K-map. What is Header & Footer in MS-Word.
- f. Perform the subtraction using 2's complement arithmetic  $(1010)_2 - (1010)_2$ . Find the dual form of  $(x + \bar{y})(y + \bar{z})$ .
- g. Write a short note on Pie chart and Bar chart in MS-Excel.