Unique Paper Code 62341101

Name of the Paper Computer Fundamentals (GEC-1.2)

Name of the Course B.VOC.(CBCS)

Semester I

Duration 3 Hours

Maximum Marks 50

All questions carry equal marks.

Attempt ANY FOUR out of Six Questions

- Q1. Draw a block diagram to illustrate the basic organization of computer system and explain the functions of its various units.. Mention four characteristics of computers. Mention two limitations of computer. Write a note on "How computers became saviours in the pandemic?"
- Q2. What is the purpose of OCR software in optical character recognition? Describe hand-held scanners and flat-bed scanners. Differentiate between Bar Code reader and MICR.
- Q3 Perform the following conversions:

$$(BA.AB)_{16} = (?)_{10}$$

$$(11010101.1101)_2 = (?)_{16}$$

$$(345.45)_8 = (?)_2$$

$$(724)_8 = (?)_{16}$$

Perform the following arithmetic operation using signed 2's complement notation for negative numbers. (-36) + (18)

Q4. Why is Cloud Computing important in modern systems? How Cloud Computing lowers IT costs? Compare various models of cloud services.

- Q5. Describe the two categories of system software. Describe the functions of an operating system and name any four operating systems. ? What is the difference between system software and application software?
- Q6. What is 'Memory Hierarchy"? What is the purpose of using different types of memories in a Computer system? Which one is the fastest memory among Registers and Cache memory? Justify your answer. Explain various types of cache memory. What is the use of BIOS in computer system?