Unique Paper Code   **62343633**
Name of the Course   **B.A. Programme CBCS**
Name of the Paper   **Computer Fundamentals**
Semester   **I**
Duration   **3 Hour**
Maximum Marks   **75**
Students admitted in the year **2020**

Instructions for Candidates

Attempt any *FOUR* questions out of *SIX*.
All questions carry equal marks.

Q.1

How can we classify the computers based on their size. List three significant features and three limitations of the computers. How can computer be used for entertainment? What are the responsibilities of CU and ALU? Name any three peripheral devices.

Q.2

For each of the following numbers, give representation in the base mentioned against it:

a) $(562)_8$ $\rightarrow (?)_{16}$
b) $(952)_{10}$ $\rightarrow (?)_8$
c) $(110.101)_2$ $\rightarrow (?)_{10}$
d) $(25.8125)_{10} \rightarrow (?)_8,$
e) $(18.231D)_{16} \rightarrow (?)_{10.}$

Using 8-bit 2's complement notation, subtract $(00101110)_2$ from $(00010101)_2$.

Add $(111011.1011)_2$ and $(101010.11011)_2$.

Q3.

When you are writing a program, the electricity goes off. You find that your program is lost. Give a possible reason.

Give differences between SIMM and DIMM.

What are the different ways to access data from the storage devices? Illustrate each of them with a suitable example.

Describe the working of HDD.

Q.4

Name an input/output device that can be connected to the following ports:

      a) Serial Ports

      b) Parallel Port

      c) SCSI Port

      d) USB Port

Give an example of a suitable I/O devices used:

a) to digitize a paper photograph
b) to input a report
c) to read the branch code from a bank cheque.

What is the purpose of CPU clock in a computer?

Q.5.

Name the system software that acts as an interface between user and computer hardware? Enumerate its other functions.

Differentiate between multiprogramming and time-sharing operating systems.

What are utility programs? Name a utility program used to compress the files on Windows

Q.6

Which technology can be used for transferring the files over short distances without Internet? Give its significance, limitations, and applications.

What is cloud computing? Give four advantages of cloud computing.

What is data mining? Give two applications of data mining.

Describe the working of online digital library.