

**Department of Computer Science and Engineering**  
**University of Liberal Arts Bangladesh**  
**Mid Term Examination**  
**Semester – Spring 2020**  
**Course Title: Introduction to Computer Studies**  
**Course Code : CSE 101 (Sec: 6)**  
**Duration : 1:00 Hours**

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**PLEASE ANSWER ALL QUESTIONS.**

**Total 20 Marks**

**QUESTION 1**

7 marks

Perform the following binary operations:

- a)  $(1100000)_2 - (1011111)_2$
- b)  $(10111)_2 \div (101)_2$
- c)  $(1100)_2 \times (1101)_2$

**QUESTION 2**

7 marks

Write Short notes on the following topics. Also provide at least one example for each of them:

- a) Push Technology and Pull Technology
- b) Cloud Computing
- c) Impact printers and Non-impact printers

**QUESTION 3**

4 marks

A software reads an English passage from a text file (say **englishPassage**). Afterwards it translates the passage into Bangla (say **banglaPassage**). It stores the translated Bangla text into another file. Briefly describe the data flow when the software is running.

**QUESTION 4**

2 marks

Write the impacts and applications of computers in education and healthcare.

**\*\*END OF QUESTIONS\*\***