

BRAC UNIVERSITY
Department of Computer Science and Engineering

Quiz 01
Semester: Summer 2024

Duration: 20 min
Full Marks: 10

Name:	ID:	Section:
--------------	------------	-----------------

CSE 330: Numerical Methods
SET- A

1. [CO3] Let $\beta = 2$, $m = 5$, $e_{\min} = -4$ and $e_{\max} = 4$. Answer the questions from (a) to (b) using the given data:
 - (a) (3 marks) Compute the maximum and the minimum non-negative number for the Denormalized form
 - (b) (3 marks) How many negative numbers can be represented using the Denormalized form using this system? Explain your answer.
 - (c) (4 marks) Let $\beta = 2$ and $m = 3$. Calculate the value of $fl(xy)$ for this system using Convention 1, where $x = 7/16$ and $y = 3/4$