



NATIONAL UNIVERSITY
OF COMPUTER & EMERGING SCIENCES

CS2006 – Operating System

Fall 2023

ID: _____

Name: _____

Quiz # 4

Marks: 10

Date: _____

1. When a page is chosen to be replaced, why don't we always write it onto the swap area?

Writing to or from secondary storage is a slow process and we always want to avoid it somehow. When replacing a page, it has to be written onto the swap area. Before writing it to that, it is checked whether the page brought from secondary storage has been updated or not. If it is same as that of the secondary storage's image of this page, then there is no need to write, as it is a slow process and we can always bring this page from secondary storage. There is a bit associated with every page, the Dirty bit, which indicates that whether the page has been updated or not. Only if this bit is set, the OS knows that the page is no longer the same, so it writes it onto swap area before replacing it.