United International **University**
Department of **C**omputer **S**cience and **E**ngineering
CSI 221, Database Management Systems, **Spring 2021**

In-class Assignment 3, Time: ***30*** *minutes*, **Set - B**

1. Suppose your hard disk block size is 6KB, each data record size is 3KB and each index record size is 2KB. You have stored 8 data records in the disk as follows: **[6]**

1	200	… …
2	600	… …

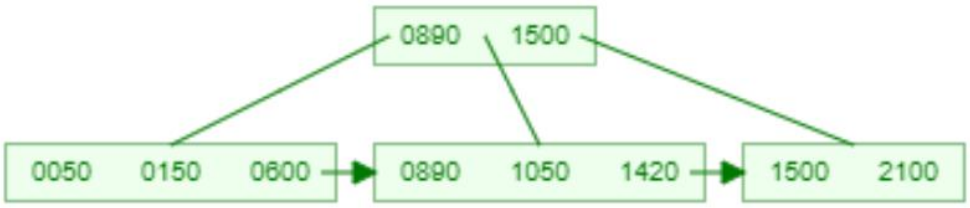
3	800	… …
4	300	… …

5	900	… …
6	1100	… …

7	150	… …
8	550	… …

Now build a secondary dense index structure based on the 2nd attribute of this data.

2. Consider the following B+ tree index structure with maximum degree=4.



Now insert 770 and 1365 sequentially within this B+ tree structure. **[7+7]**
[Show each split operation and necessary calculations clearly.]