Q1

A physical record may contain:

a. Only one logical record
b. Multiple logical records from one table
c. Multiple logical records from multiple tables
d. All of the above
Q1

A physical record may contain:

a. Only one logical record
b. Multiple logical records from one table
c. Multiple logical records from multiple tables
d. All of the above

(a) Multiple LRs per PR
(b) LR split across PRs
(c) PR containing LRs from different tables
Q2

A typical ratio of disk access time to memory access time is:

a. .01
b. 100
c. 10,000
d. 1,000,000
Q2

A typical ratio of disk access time to memory access time is:

a. .01
b. 100
c. 10,000
d. 1,000,000

d. 1,000,000

Remark: “The speed of a disk access is measured in milliseconds [10^{-3}], whereas a memory access is measured in nanoseconds [10^{-9}]” (pg. 267).
Q3

Which of the following is not an output of physical design?

a. Choice of index files
b. Choice of candidate keys
c. Placing rows from two tables in the same physical record
d. Lowering the normal form level of two tables by combining them
Q3

Which of the following is not an output of physical design?

a. Choice of index files

b. *Choice of candidate keys*

c. Placing rows from two tables in the same physical record

d. Lowering the normal form level of two tables by combining them
Q4

Which of the following contributes to the difficulty of physical design:

a. Complexity of the specific DBMS environment
b. Application profiles are hard to collect and changing
c. Uncertainty about the number of physical record accesses
d. All of the above
Q4

Which of the following contributes to the difficulty of physical design:

a. Complexity of the specific DBMS environment
b. Application profiles are hard to collect and changing
c. Uncertainty about the number of physical record accesses

d. All of the above

Remark: See section 8.1.4 (pg. 269).
Which of the following types of files is usually not provided by relation DBMS?

a. Heap
b. Hash file
c. Stack
d. B-tree
Q5

Which of the following types of files is usually not provided by relation DBMS?

a. Heap
b. Hash file
c. Stack
d. B-tree

Remark: A heap is an unordered sequential file (pg. 273).