

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) A requirement to begin designing physical files and databases is: 1) _____
A) implementation complete. B) all datatypes determined.
☒ C) normalized relations. D) physical tables created.
- 2) Database access frequencies are estimated from: 2) _____
A) random number generation. B) security violations.
C) user logins. ☒ D) transaction volumes.
- 3) All of the following are objectives when selecting a data type EXCEPT: 3) _____
A) improve data integrity. B) support all data manipulations.
☒ C) use a lot of storage space. D) represent all possible values.
- 4) The smallest unit of application data recognized by system software is a: 4) _____
A) column. ☒ B) field. C) data type. D) row.
- 5) An appropriate datatype for adding a sound clip would be: 5) _____
A) VARCHAR. B) DATE. C) CHAR. ☒ D) BLOB.
- 6) A contiguous section of disk storage space is called a(n): 6) _____
A) sector. ☒ B) extent. C) track. D) tablespace.
- 7) A(n) _____ is a field of data used to locate a related field or record. 7) _____
A) index B) key ☒ C) pointer D) lock
- 8) A factor to consider when choosing a file organization is: 8) _____
☒ A) efficient storage. B) DML.
C) DDL. D) inefficient data retrieval.
- 9) A method that speeds query processing by running a query at the same time against several partitions of a table using multiprocessors is called: 9) _____
A) perpendicular query processing. ☒ B) parallel query processing.
C) query optimization. D) multiple partition queries.
- 10) Distributing the rows of data into separate files is called: 10) _____
A) vertical partitioning. B) normalization.
C) file allocation. ☒ D) horizontal partitioning.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 11) One decision in the physical design process is selecting structures. 11) T
- 12) The logical database design always forms the best foundation for grouping attributes in the physical design. 12) F

13) Efficient database structures will be beneficial only if queries and the underlying database management system are tuned to properly use the structures.

13) T

14) Denormalization almost always leads to more storage space for raw data.

14) T

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

15) Within Oracle, the named set of storage elements in which physical files for database tables may be stored is called a(n):

15)

A) table.

B) partition.

✓ C) tablespace.

D) extent.