Exam Code: 510-015
Exam Name: Ase 12.0 server administration professional
Vendor: Sybase
Version: DEMO
Part: A

1: Given:
   The employees table has an index created as follows:
   ```sql
   create index emp_index1
   on employees(last_name, first_name desc)
   ```
Which of the following queries would not require a sort? (Choose 2)
A. select * from employees order by last_name, first_name
B. select * from employees order by last_name ASC, first_name DESC
C. select * from employees order by first_name DESC, last_name ASC
D. select * from employees order by last_name DESC, first_name ASC
**Correct Answers: B D**

2: Given: number of worker processes = 10, max parallel degree = 5, max scan parallel degree = 4.
   Table A has the following characteristics: Datarows locking, No indexes, a column named price,
   5000 rows, 4 partitions. A user executes the following query: Select * from A where price < $10.
Which of the following conditions would cause the query to run in serial instead of parallel? (Choose 2)
A. there are not enough worker processes available at run time
B. the database option select into/bulkcopy/pllsort is not set to true
C. the partition skew is 2.3
D. the database is set for single user mode
E. max parallel degree does not match the number of partitions
**Correct Answers: A C**

3: Which of the following statements describes readpast locking? (Choose 2)
A. It can be specified at the session, transaction, and table level.
B. It allows insert, update, and delete commands to read past any incompatible lock.
C. It allows readers to not block writers.
D. It allows select and readtext queries to silently skip all rows or pages locked with incompatible locks.
**Correct Answers: B D**

4: The ACME company has an 8 CPU SMP system running Adaptive Server Enterprise (ASE).
The ASE server has been allocated 1.5 GB of 2.0 GB of memory available. The ASE server has
been allocated 2 engines. There are 1,000 concurrent users of the ASE server.
The sp_sysmon report shows the spinlock contention rate averages 70-80% for the default data cache.
Which steps can be taken to correct this performance problem?
A. Add a 16KB buffer pool to the server.
B. Increase the size of the tempdb database.
C. Add two engines to the ASE server.
D. Add named caches to and bind the appropriate objects to the named caches.
E. Add more locks to the server.
Correct Answers: D

5: What is the purpose of dsync flag?
A. to synchronize primary and mirrored devices  
B. to synchronize primary and secondary databases  
C. to control whether writes to operating system files are buffered or not  
D. to control Backup Server’s access to a dump device  
Correct Answers: C

6: All of the following execution class associations exist in the ASE when user FRED, running application ctisql, logs in. Which one will be applied to FRED’s session?
A. sp_binindexeclass ctisql, AP, NULL, EC1  
B. sp_binindexeclass ctisql, AP, FRED, EC2  
C. sp_binindexeclass FRED, LG, NULL, EC1  
D. sp_binindexeclass FRED, LG, ctisql, EC2  
E. It depends on the order of the creation of the bindings  
Correct Answers: B

7: The reorg command may be used to: (Choose 2)
A. Compact a table that uses datarows locking.  
B. Reclaim unused space in a table that uses allpages locking.  
C. Reclaim unused space in an index that uses datapages locking.  
D. Rebuild a table that uses allpages locking.  
Correct Answers: A C

8: What are some ways to reduce last data page lock contention for inserts? (Choose 3)
A. alter the table to use the Datarows locking scheme  
B. alter the table to use the Datapages locking scheme  
C. partition the table  
D. create a clustered index on a random key  
E. increase the server configuration for the number of locks  
F. increase the server configuration for the deadlock checking period  
Correct Answers: A C D

9: The "abstract plan language" is:
A. A language used to tell the optimizer how to process a query.  
B. The internal command language used by sp_sysmon.  
C. A new type of command language for creating very complicated queries.  
D. The language used internally by the server for planning the most efficient use of memory.  
Correct Answers: A

10: Which two actions can cause locking on system tables in tempdb? (Choose 2.)
A. create table in tempdb  
B. select into a #temptable
C. worktables created for reformatting
D. selecting from a large table in tempdb
Correct Answers: A B

11: Review the sp_sysmon section below.

<table>
<thead>
<tr>
<th>Procedure Cache Management</th>
<th>per sec</th>
<th>per xact</th>
<th>count</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Requests</td>
<td>242.6</td>
<td>5.4</td>
<td>150267</td>
<td></td>
</tr>
<tr>
<td>Procedure Reads from Disk</td>
<td>1.8</td>
<td>0.0</td>
<td>1104</td>
<td>0.7%</td>
</tr>
<tr>
<td>Procedure Writes to Disk</td>
<td>0.0</td>
<td>0.0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Procedure Removals</td>
<td>3.5</td>
<td>0.1</td>
<td>2180</td>
<td></td>
</tr>
</tbody>
</table>

Which statement is correct about this server's stored procedure activity?
A. This ASE server executes one committed transaction for each stored procedure executed.
B. 99.3% of the stored procedures are run using the WITH RECOMPILE option.
C. This report fragment is useful when sizing the Procedure Cache of ASE.
D. Additional online engines will be required to allow more stored procedures to execute per second.
Correct Answers: C

12: When a row is deleted on a table with datarows locking:
A. Rows on the page are moved up so the empty space is at the end of the page.
B. The space occupied by the deleted row is not reclaimed immediately.
C. The space occupied by the deleted row is filled with zeros.
D. The last row on the page is moved into the space created by the deleted row.
Correct Answers: B

13: The following query is executed frequently against the database.

```sql
select a.au_fname, a.au_lname,
       ad.street, ad.city,
       ad.state, ad.zip
from authors a, author_address ad
where a.au_id = ad.au_id
```

What database denormalization technique could be used to improve the performance of this query?
A. Move the au_lname and au_fname columns to the author_address table.
B. Collapse the author_address and authors table into a single table.
C. Move the city, state, and zip columns to the authors table.
D. Create a view called mailing_address to eliminate the two table join from the query.
E. Add the redundant column au_id to the author_address table.
Correct Answers: B
14: The titles table has 50,000 rows and a nonclustered index on the price column. Which of the following queries use less logical I/Os?

A. select "Min" = min(price), "Max" = max(price) from titles
B. select "Min" = (select min(price) from titles), "Max" = (select max(price) from titles)
C. They will both use the same number of I/Os

Correct Answers: B

15: An application uses stored procedures to perform updates, inserts and deletes for an OLTP application. Some update stored procedures optimize with a join order of table_A -> table_B. Other stored procedures optimize with a join order of table_B -> table_A. Which solution needs to be added within the stored procedures to guarantee that deadlocks are reduced or eliminated by always making the join order table_A -> table_B?

A. Non-correlated subqueries to force outside-in processing
B. SET FORCEPLAN ON
C. (index tableorder 1) - an index hint applied to table_A
D. SET SHOWPLAN ON
E. Define join-ordered Views on the affected tables

Correct Answers: B

16: The following are the server level lock promotion configuration parameters:

- page lock promotion HWM 200
- page lock promotion LWM 100
- page lock promotion PCT 60
- row lock promotion HWM 1800
- row lock promotion LWM 1200
- row lock promotion PCT 70

Table A is a datarows locked table. It has 200 data pages and every page has 10 data rows. A serial query has acquired 1400 data row locks. What kind of lock promotion will be attempted?

A. No lock promotion
B. Promotion to 140 page locks
C. Promotion to 140 page locks, then to a table lock
D. Promotion to a table lock

Correct Answers: D

17: Given the following cursor code fragment,

```
declar title_cursor cursor
for select price from title
for update
    go
    declare@price money
    open title_cursor
    fetch title_cursor into @price
```

What locks are held on the row or data page with each fetch?
A. Update locks
B. Exclusive locks
C. Shared locks
D. No locks are held
Correct Answers: A

18: Increasing the number of pre-allocated extents to 16 is likely to help the performance of which of the following operations?
A. Index creation
B. bcp in
C. select into
D. alter table lock datarows
E. dbcc checkstorage
Correct Answers: B

19: If a DBA detects many page splits after data has been sequentially inserted by an application, what is the best option to minimize the number of future page splits?
A. Deactivate the ascinserts option on the table
B. Set the max_row_per_page to a low value
C. Set the fillfactor to a low value at server level
D. Activate the ascinserts option on the table
E. Set the fillfactor to a low value at table level
Correct Answers: D

20: Which of the following operations require "quiesce database"?
A. Altering the database to a new size
B. Performing non-Sybase unmirroring and backup operations.
C. Truncating the transaction log
D. Dumping the database using Sybase Backup Server.
Correct Answers: B