

作者	微信	最后修订时间
芬达	cjc44020	2019-10-14
KK		2019-10-11

## 前言

- 题目基于网上流出的题库整理，来源于"1Z0-883 V9.02 5.6DBA.pdf"
- 未经作者允许禁止复制传阅群外人员，更不能用于商业用途 (群号见文档底部)
- 答案均为作者整理，自认为正确率较高
- 为了激发读者自主学习性，答案不提供解题思路和过程

本文档修复了"1Z0-883 V9.02 5.6DBA.pdf"的各种错误，包括标点符号、拼写错误、大小写错误、逻辑错误，并且进行了重新排版，尽量去掉图片，换成可以方便复制和测试的SQL语句，花费了大量的时间。本文档不收费，如有错误之处欢迎指出。欢迎打赏，有技术问题也可以咨询我，欢迎添加作者微信。

## 约定

都是5.6的答案，5.7答案有区别时会有特别指出

## 开始

---

1. Consider a total and sustained failure of the disk on which the MySQL data directory resides.

Which **three** High Availability scenarios are resilient to this case?

A. active/passive Distributed Replicated Block Device (DRBD).

B. standard master-slave replication

C. MYSQL service for Windows Cluster

D. MySQL NDB Cluster

E. Oracle Solaris Cluster

解释:

经常硬盘故障，那就要选择基于复制的高可用架构，保证数据有冗余不丢失，才是合适的高可用。

A.是磁盘复制；B.标准主从复制；D.NDB底层的每个node可以存一部分数据，或者完整的数据(根据配置)

C、E均是基于共享存储的高可用。

---

2. You want to start monitoring statistics on the distribution of storage engines that are being used and the average sizes of tables in the various databases. Some details are as follows:

- The MySQL instance has 400 databases.
- Each database on an average consists of 25-50 tables. You use the query:

```
SELECT TABLE_SCHEMA,  
       `ENGINE`, COUNT(*) ,  
       SUM(data_length) total_size  
FROM INFORMATION_SCHEMA.TABLES  
WHERE TABLE_TYPE = 'BASE TABLE'  
GROUP BY TABLE_SCHEMA, ENGINE;
```

**Why is this query slow to execute?**

A. Counting and summarizing all table pages in the InnoDB shared tablespace is time consuming.

**B. Collecting information requires various disk-level operations and is time consuming.**

C. Aggregating details from various storage engine caches for the final output is time consuming.

D. Collecting information requires large numbers of locks on various INFORMATION\_SCHEMA tables, thereby causing contention.

---

3. A database exists as a read-intensive server that is operating with `query_cache_type = DEMAND`. The dataset is refreshed periodically, but the resultset size of the queries does not fluctuate. Note the following details about this environment:

- A web application uses a limited set of queries.
- The Query Cache hit rate is high.
- All resultsets fit into the Query Cache.
- All queries are configured to use the Query Cache successfully. The response times for queries have recently started to increase. The cause for this has correctly been identified as the increase in the number of concurrent users accessing the web service.

**Based solely on the information provided, what is the most likely cause for this slowdown at the database level?**

A. The Query Cache is pruning queries due to an increased number of requests.

B. `query_cache_min_res_unit` has been exceeded, leading to an increased performance overhead due to additional memory block lookups.

C. Mutex contention on the Query Cache is forcing the queries to take longer due to its single-threaded nature.

D. The average resultset of a query is increasing due to an increase in the number of users requiring SQL statement execution.

参考:

<https://blog.csdn.net/Jaystrong/article/details/79282022>

---

4. The following commands are available In the Linux binary distributions of MySQL:

- mysqld
- mysqld\_safe
- mysql.server

**What is the correct description of each of these commands?**

A. mysqld is the server. mysqld\_safe is a shell script that Invokes mysqld. mysql.server is a wrapper for mysqld\_safe.

B. mysqld is a shell script that starts mysql.server. mysqld\_safe causes the server to start up in data recovery mode. mysql.server is the server.

C. mysqld is the server. mysqld\_safe causes the server to start up In data recovery mode. mysql.server is a wrapper for mysqld\_safe.

D. mysqld, mysqld\_safe, and mysql.server reside in different locations but are all symlinked to the same script.

---

5. Consider the MySQL Enterprise Audit plugin. The following event detail is found in the audit log:

```
<AUDIT RECORD
  TIMESTAMP="2013-04-09T01:54:17"
  NAME="Connect"
  CONNECTION_ ID="3"
  STATUS="1045"
  USER="kate "
  PRIV USER=""
  OS_ LOGIN=""
  PROXY_ USER=""
  HOST="localhost "
  IP=""
  DB="" />
```

Which **two** points can be concluded from the given event?

- A. A connection was blocked by a firewall or a similar security mechanism.
  - B. A connection was attempted via socket rather than TCP.**
  - C. A connection failed because the proxy user privileges did not match the login user.
  - D. A connection as the user kite was successful.
  - E. A connection failed due to authentication being unsuccessful.**
- 

**6. Which two statements are true about a table cache in MySQL?**

- A. A global table cache is used for all open tables.
  - B. A separate table cache is used for data in each open table.
  - C. A table cache is used to cache frequently used table indexes.
  - D. A table cache is used to cache the status of individual tables**
  - E. A table cache is used to cache open table file descriptors.**
- 

**7. You are investigating the performance of a query, which selects data from an InnoDB table. Consider the following Performance Schema diagnostics output for the query:**

```
mysql> SELECT event_id, event_name, timer_wait, nesting_event_id, source
-> FROM (SELECT thread_id, event_id, event_name, timer_wait, nesting_event_id, source
-> FROM performance_schema.events_statements_history_long
-> UNION ALL
-> SELECT thread_id, event_id, event_name, timer_wait, nesting_event_id, source
-> FROM performance_schema.events_stages_history_long
-> UNION ALL
-> SELECT thread_id, event_id, event_name, timer_wait, nesting_event_id, source
-> FROM performance_schema.events_waits_history_long
-> )events
-> WHERE event_name <> 'idle' AND thread_id=287
-> ORDER BY event_id;
```

event_id	event_name	timer_wait	nesting_event_id	source
8944	statement/sql/select	660816000	NULL	mysqld.cc:931
8945	stage/sql/init	90045000	8944	mysqld.cc:933
8946	stage/sql/checking permissions	4729000	8944	sql_parse.cc:5225
8947	stage/sql/Opening tables	52657000	8944	sql_base.cc:4911
8948	stage/sql/init	57268000	8944	sql_select.cc:1050
8949	stage/sql/System lock	22860000	8944	lock.cc:304
8950	wait/lock/table/sql/handler	1581660	8949	handler.cc:7118
8951	wait/lock/table/sql/handler	2139156	8949	thr_lock.cc:556
8952	wait/synch/mutex/mysys/THR_LOCK::mutex	294408	8951	thr_lock.cc:558
8953	stage/sql/optimizing	17927000	8944	sql_optimizer.cc:138
8954	stage/sql/statistics	349445000	8944	sql_optimizer.cc:381
8955	wait/io/table/sql/handler	302137776	8954	handler.cc:2734
8956	wait/synch/mutex/mysys/THR_LOCK::mutex	219240	8954	thr_lock.cc:856
8957	stage/sql/preparing	6961000	8944	sql_optimizer.cc:500
8958	stage/sql/executing	735000	8944	sql_executor.cc:110
8959	stage/sql/Sending data	14572000	8944	sql_executor.cc:187
8960	stage/sql/end	1327000	8944	sql_select.cc:1105
8961	stage/sql/query end	3387000	8944	sql_parse.cc:4935
8962	stage/sql/closing tables	6128000	8944	sql_parse.cc:4983
8963	stage/sql/freeing items	29857000	8944	sql_parse.cc:6233
8964	stage/sql/cleaning up	1187000	8944	sql_parse.cc:1760

Which statement is true about the output?

- A. The query did not find its table in the table definition cache.
- B. The event with event\_id = 8945 is a child of the event with event\_id = 8944.
- C. The query read data from the data file rather than directly from the buffer pool.
- D. The time the query took is the sum of all timer\_wait values.

8. A MySQL instance is running on a dedicated server. Developers access the server from the same network subnet. Users access the database through an application that is running on a separate server in a DMZ.

Which **two** will optimize the security of this setup?

- A. disabling connections from named pipes or socket files (depending on the operating system of the server)
- B. running the server with --skip-networking specified
- C. limiting logins to originate from the application server or the server's subnet
- D. starting the server with --bind-address=0.0.0.0 specified
- E. Installing MySQL on the application server, and running the database and application on the same server
- F. enabling and using SSL for connections to the MySQL database

9. Given the result of the following query:

```
+-----+-----+
| Host           | User           |
+-----+-----+
.....
| example.com    | kate           |
| localhost      | mike           |
| %              | mike           |
| db.example.com | mike           |
.....
+-----+-----+
```

**What is the name returned from the executed command?**

- A. 'mike'@'localhost'
- B. 'mike'@'%'
- C. 'mike'@'db.example.com'
- D. ''@'db.example.com'

E. The innodb locks unsafe for binlog setting determines which transaction is rolled back.

You then TRUNCATE this table to empty it.

```
mysql> SELECT * INTO OUTFILE '/tmp/t1.sql' from t1;
mysql> TRUNCATE t1;
```

---

Which **two** methods will restore data to the t1 table?

A. `mysql> LOAD DATA INFILE '/tmp/t1.sql' INTO TABLE t1;`

B. `$ mysqladmin -u root -p -h localhost test --restore /tmp/t1.sql`

C. `$ mysql -u root -p -h localhost test < /tmp/t1.sql` The safer , easier way to help you pass any IT exams.

D. `$ mysqlimport -u root -p -h localhost test /tmp/t1.sql`

E. `mysql> INSERT INTO t1 VALUES FROM 'tmp/t1.sql';`

---

12. You need to replicate a table from a master to a slave. The master and slave copies of the table will have different numbers of columns.

Which **two** conditions must be true?

A. Each extra column in the copy with more columns must not have a default value.

B. Columns that are common to both versions of the table must be defined in the same order on the master and the slave.

C. The slave database cannot have more columns than the master. Only the master database can have more columns.

D. Columns that are common to both versions of the table must come first in the table definition, before any additional columns are defined on either server.

E. The master database cannot have more columns than the slave. Only the slave database can have more columns.

---

13. You want to upgrade the MySQL Server.

In which **two** cases would you not use a binary backup?

A. when you upgrade skipping a major version, for example, from 5.0 to 5.6

B. when you upgrade between major versions, for example from 5.5 to 5.6

C. when the Release Notes indicate either a data or index format between versions was changed

D. when the Release Notes indicate that functionality between versions was changed

E. when the Release Notes Indicate that syntax between versions was changed

---

**14.** The MySQL user 'adam' currently has USAGE permissions to the database. The football database is transactional and has non-stop updates from application users. The 'adam' user needs to be able to take consistent backups of the football database by using the --single-transaction option.

**Which extra GRANT permissions are required for adam to take mysqldump backups?**

A. The 'adam' user must also have SINGLE TRANSACTION global grant to take a consistent backup.

B. The 'adam' user must have the SUPER privilege in order to take data backups.

**C. The 'adam' user must also have SELECT on the football database for backups to work.**

D. The 'adam' user needs the PROCESS privilege to be able to take a consistent backup while other users are connected.

---

**15. Which statement true about the FLUSH LOGS command?**

A. It requires the RELOAD, FILE, and DROP privileges.

**B. It closes and reopens all log files.**

C. It closes and sends binary log files to slave servers.

D. It flushes dirty pages in the buffer pool to the logs.

---

**16.** You need to dump the data from the master server and import it into a new slave server.

**Which mysqldump option can be used when dumping data from the master server in order to include the master server's binary log information?**

A. include-master-info

B. master-binlog

C. include-log-file

**D. master-data**

---

**17. Which MySQL utility program should you use to process and sort the Slow Query Log based on query time or average query time?**

A. mysqlslow



B. mysqldumpslow

C. mysqlshow

D. mysqldump

E. mysqlaccess

---

**18.** You want to create a temporary table named OLD\_INVENTORY in the OLD\_INVENTORY database on the master server. This table is not to be replicated to the slave server.

**Which two changes would ensure that the temporary table does not propagate to the slave?**

A. Use the --replicate-do-db, --replicate-do-table, or --replicate-wild-do-table option with the value equal to OLD\_INVENTORY.

B. change the binlog\_format option to ROW and restart mysqld before you create the OLD\_INVENTORY table.

C. Stop SQL\_THREAD on the slave until you have finished using the OLD\_INVENTORY temporary table.

D. Set binlog\_format=MIXED with the --replicate-ignore-temp-table option.

E. Use the --replicate-ignore-table option with the value equal to OLD\_INVENTORY.OLD\_INVENTORY and restart rmysqld before creating the temporary table.

---

**19. Which three statements are true about configuring the Performance Schema in MySQL 5.6?**

A. All settings can be configured in the MySQL configuration file.

B. All settings are exposed through the setup tables in the performane schema database.

C. Instrumentation of background threads can be disabled only after a thread has started.

D. Accounts and tables can be instrumented dynamically.

E. Changes made dynamically to the setup tables are persistent over restarts.

F. The Performance Schema is enabled by default

---

**20.** Consider the following:

```
mysql> EXPLAIN SELECT * FROM city WHERE CountryCode = 'USA'
***** 1. row *****
id: 1
select_type: SIMPLE
table: city
type: ALL
possible_keys: NULL
key: NULL
key_len: NULL
ref: NULL
rows : 4079
Extra: Using where
```

**What does the possible keys column in this output denote?**

- A. whether there are any indexes on the tables that you are querying
  - B. if there are any indexes that may be used to solve this query
  - C. whether you are using any indexes in your query
  - D. If it is possible for you to include any indexes in your query**
- 

**21. Is It true that binary backups always take less space than text backups?**

- A. Yes, because binary backups only contain data, and not statements required to insert data into the tables.
  - B. No, because if InnoDB tables contain many empty pages, they could take more space than the INSERT statements.**
  - C. No, because text backups can have optimizations, which make them smaller such as updating many rows at once.
  - D. Yes, because even if InnoDB tables Contain many empty pages, text backups have empty INSERT statements for them.
- 

**22. Which three statements describe the purpose of a read buffer?**

- A. It is used to cache results of nested queries that use any storage engine.
- B. It is used to cache results of nested queries that use only MyISAM tables.**
- C. It is used to perform sequential table scans only for MyISAM.**
- D. It is used to perform sequential table scans for any storage engine.
- E. It is used for bulk inserts into partitions that use any storage engine.

F. It is used for bulk inserts into partitions that use only the MyISAM storage engine.

---

**23. What metadata does the INFORMATION\_SCHEMA.COLLATIONS table provide?**

- A. the names of foreign keys between tables
  - B. the names of ordering rules for character sets
  - C. how the optimizer chooses an execution plan
  - D. a list of constraints on a table
- 

**24. Which two types of indexes are supported by the MEMORY storage engine?**

- A. HASH Indexes, which provide fast lookups that use a unique index
  - B. B-TREE indexes, which provide better performance with non-unique Index values and other comparison operators
  - C. FULLTEXT Indexes, which provide fast text searching
  - D. T-TREE Indexes, which optimize data and index storage in memory
  - F. R-TREE Indexes, which provide GIS data Indexing
- 

**25. By default, InnoDB presents a consistent snapshot read during a transaction.**

**How is this accomplished?**

- A. InnoDB locks the rows accessed during the
  - B. InnoDB uses
  - C. InnoDB does not write commits to the datafiles until earlier
  - D. InnoDB uses the redo logs to recreate data that has changed.
  - E. InnoDB stores updates in the doublewrite buffer.
- 

**26. Assume that you want to know which MYSQL Server options were set to custom values.**

**Which two methods would you use to find out?**

- A. Check the configuration files in the order in which they are read by the MySQL Server and compare them with default values.

B. Check the command-line options provided for the MySQL Server and compare them with default values.

C. Check the output of SHOW GLOBAL VARIABLES and compare it with default values.

D. Query the INFORMATION\_SCHEMA.GLOBAL\_VARIABLES table and compare the result with default values.

---

**27. Which two are true regarding MySQL binary and text backups?**

A. Binary backups are usually faster than text backups.

B. Binary backups are usually slower than text backups.

C. Text backups are human-readable while binary backups are not.

D. Binary backups are not portable across different operating systems.

---

**28. Consider the following statement on a RANGE partitioned table: ALTER TABLE orders DROP PARTITION p1, p3;**

**What is the outcome of executing the above statement?**

A. Only the first partition (p1) will be dropped as only one can be dropped at any time.

B. All data in p1 and p3 partitions are removed, but the table definition remains unchanged.

C. A syntax error will result as you cannot specify more than one partition in the same statement.

D. All data in p1 and p3 partitions are removed and the table definition is changed.

---

**29. Consider the following table:**

```
CREATE TABLE `games` (  
  `id` int(10) unsigned NOT NULL AUTO_INCREMENT,  
  `keyword` varchar(45) NOT NULL,  
  `action` varchar(45) DEFAULT NULL,  
  `date` datetime NOT NULL,  
  PRIMARY KEY ( `id`, `date` ),  
  UNIQUE KEY `keyword_idx` ( `keyword`, `date` )  
 ) ENGINE=InnoDB DEFAULT CHARSET= latin1  
PARTITION BY RANGE( TO_DAYS (date) )(  
  PARTITION g201301 VALUES LESS THAN( TO_DAYS('2013-01-01 00:00:00') ) ,  
  PARTITION g201302 VALUES LESS THAN( TO_DAYS('2013-02-01 00:00:00') ) ,  
  PARTITION g201303 VALUES LESS THAN( TO_DAYS('2013-03-01 00:00:00') ) ,  
  PARTITION g201304 VALUES LESS THAN( TO_DAYS('2013-04-01 00:00:00') ) ,
```

```
PARTITION gMORES VALUES LESS THAN (MAXVALUE) ) ;
```

**Which method should be used to add a new g201305 partition to the table?**

A. ALTER TABLE games REORGANIZE PARTITION gMORES INTO (PARTITION g201305 VALUES LESS THAN (TO\_DAYS('2013-05-01 00:00:00')), PARTITION gMORES VALUES LESS THAN (MAXVALUE));

B. ALTER TABLE games ADD PARTITION g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') );

C. ALTER TABLE games COALESCE PARTITIONS (gMORES. INTO g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') ), gMORES VALUES LESS THAN ( MAXVALUE ) );

D. ALTER TABLE games SPLIT PARTITION (gMORES. INTO g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') ), gMORES VALUES LESS THAN ( MAXVALUE ) );

E. ALTER TABLE games DROP PARTITIONS (gMORES. ADD PARTITION g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') ), gMORES VALUES LESS THAN ( MAXVALUE ) );

---

**30.** On a master server that is using Statement-based replication a table of log data has become very large. You decide to delete 100,000 rows.

**Which **two** methods can be independently invoked to ensure that the delete is properly propagated to the slave?**

A. Use the LIMIT clause to limit the deletion to 100,000 rows.

B. Change the replication mode to MIXED before issuing any delete statements when the LIMIT clause is used.

C. Use the LIMIT clause in conjunction with the ORDER BY clause.

D. the data modification is non-deterministic, the query optimizer will resolve any potential issues.

---

**31.** Data is stored in MyISAM engine and needs backups taken using the mysqldump tool. This database has many triggers and views that also need to be backed up at the same time. A user 'backupuser' is created to facilitate backups automatically and has the following privileges:

```
+-----+
| Grants for backupuser@localhost
|
```

```
+-----+
+-----+
| GRANT USAGE ON *.* TO 'backupuser'@'localhost' IDENTIFIED BY PASSWORD
| '*94BDCEBE19083CE2A1F959FD02F964C7AF4CFC29' |
| GRANT SELECT, LOCK TABLES, SHOW VIEW ON `living`.* TO 'backupuser'@'localhost'
|
+-----+
+-----+
```

When the backup is taken, there are no errors.

### Why are triggers missing from the backup?

- A. The FILE privilege is required to back up the TRG files stored in the database directory.
- B. The PROCESS privilege will allow the user access to process items such as triggers and functions.
- C. The ALL privilege is required to back up triggers because triggers have a wide variety of abilities.
- D. The TRIGGER privilege is required to create, execute, and show triggers in a database.

**32.** There are multiple Instances of MySQL Server running on a single OS that is backed up using the mysqlbackup command.

The servers are configured as follows:

The /etc/my.cnf contains default values eg; datadir=/var/lib/mysql/ with extra instances having their own separate my.cnf file (eg /etc/mysql/instanceN.cnf overriding the defaults as required).

A restore of the second stance is attempted from the mysqlbackup archive using the following command:

```
mysqlbackup --backup-dir=/opt/backup/mysql/instance2 copy-back
```

Upon starting the second mysqld instance, you notice that the data does not match the expected backup.

### Which command-line option is required to successfully update the second instance?

- A. --instance=/var/lib/mysql/instance2
- B. --restore=2
- C. --copy-back-from-log
- D. --defaults-file=/etc/mysql/instance2.cnf
- E. --backup-instance=/var/lib/mysql/instance2

33. Consider the table mydata:

```
CREATE TABLE `mydata` (  
  `id` int(11) NOT NULL AUTO_INCREMENT,  
  `a` int (11) DEFAULT NULL,  
  `b` int (11) DEFAULT NULL,  
  PRIMARY KEY ( `id` ) ,  
  KEY `a_idx` ( `a` )  
)ENGINE=InnoDB;
```

```
mysql> select * from mydata;
```

```
+-----+-----+-----+
```

```
| id | a   | b   |
```

```
+-----+-----+-----+
```

```
| 1 | 1 | 1 |
```

```
| 2 | 1 | 1 |
```

```
| 3 | 2 | 2 |
```

```
| 4 | 2 | 2 |
```

```
| 5 | 2 | 3 |
```

```
+-----+-----+-----+
```

```
5 rows in set (0.00 sec)
```

You issue the following:

```
mysql> begin;  
mysql> update mydata set a=0 where b=3;
```

innodb\_locks\_unsafe\_for\_binlog is not enabled. The transaction Isolation level is set to the InnoDB default.

**How many rows are now protected by locks?**

- A. one
- B. one row, and a next-key lock for the supremum
- C. five**
- D. one row, and a gap-lock

34. You have taken a Logical Volume Manager (LVM. snapshot backup of a volume that contains the MySQL data directory.

**Why is it important to remove snapshots after completing a RAW backup in this way?**

- A. The system can only support one snapshot per volume, and you need to remove it to be able to take your next backup.

**B. The snapshot size will continue to grow as changes to the volume are made.**

C. The snapshots take a significant amount of disk space as they are a duplicate copy of the data.

D. The system keeps a copy of changes in memory and can cause an out of memory event.

---

**35. Which **two** statement are true about the mysql upgrade command?**

A. The mysql\_upgrade command is a utility that patches the mysqld binary from its base version to a new version.

**B. The mysql upgrade command is run to check and attempt to fix tables for certain incompatibilities with the current version of MySQL.**

C. The mysql upgrade command executes on a stopped MySQL server data directory to ensure that it is prepared for upgrade.

**D. The mysql upgrade command also executes the mysqlcheck command in order to provide all of its functionality.**

---

**36.** You notice in your MySQL error log that there are frequent sort aborted client errors.

**Which **two** are potential causes of this error?**

**A. A client was killed during a sort operation.**

B. A transaction was rolled back

C. The sort was too large for sort\_buffer\_size, causing an error.

**D. The host server has run out of memory for sort operations.**

---

**37.** you want to dump only data form the userdata table.

**Which MySQL dump command argument is required to accomplish this?**

A. --table =userdata in order to dump only the data form the userdata table

B. --data-only as this specifies that only data is to be dumped

C. --single-transaction as this obtains a consistent view of data only

**D. --no-create-info to skip writing CREATE TABLE statements**

---



**38.** A MySQL server has the Query cache enabled.

- Qcache\_free\_blocks is half the total number of blocks.
- Qcache\_lowmem\_prunes is half the value of the query cache hit rate.
- Qcache\_free\_memory is half the query cache size.
- The average query size is less than half query\_cache\_min\_res\_unit.

**Which two actions can be taken to increase the efficiency of the Query Cache?**

**A. Reduce query\_cache\_min\_res\_unit.**

B. Reduce query\_alloc\_block\_size.

**C. Increase query\_cache\_size.**

D. Increase query\_cache\_min\_res\_unit.

E. Increase query\_alloc\_block\_size.

---

**39.** Consider the two partial outputs of the SHOW GLOBAL VARIABLES command from a master and slave server:

**Master:**

Variable name	Value
connect_timeout	5
log_bin	ON
max_connections	100
shared_memory_base_name	MYSQL
server_id	2
tmp_table_size	5242880
version	5.6.10

**Slave:**

Variable name	Value
connect_timeout	5
log_bin	OFF
max_connections	10
shared_memory_base_name	MYSQL5

Variable name	Value
server_id	2
tmp_table_size	4266336
version	5.6.13

There is a problem with the slave replicating from the master.

**Which statement describes the cause of the problem?**

- A. The version of the slave is newer than the version of the master.
  - B. The max\_connections variable on the slave needs to be increased.
  - C. The log\_bin variable is set to OFF on the slave.
  - D. Server\_id is not unique**
  - E. The shared\_memory\_base\_name variable must match the master/
- 

**40. which three allocate memory per thread in MySQL?**

- A. read buffer**
  - B. query cache
  - C. InnoDB buffer pool instance
  - D. sort buffer**
  - E. thread cache
  - F. internal temporary table**
- 

**41. Consider the following:**

```
Mysql> explain select * from city where name = "jacksonville" And Countrycode = "USA" \G
***** 1.Row*****
Id: 1
Select_type: SIMPLE
Table: city
Type: ref
Possible_keys: name_country_index
Key: name_country_index
Key_len: 13
Ref: const,const
```

Rows: 1  
Extra: using where

**Which statement best describes the meaning of the value for the key\_len column?**

- A. It shows the total size of the index row.
- B. It shows how many columns in the index are examined
- C. It shows the number of characters indexed in the key.
- D. it shows how many bytes will be used from each index row.**

---

**42. An administrator installs MYSQL to run under a mysql OS account. The administrator decides to disable logins to the mysql account by using /nologin or /bin/false as the user's shell setting.**

- A. This prevents mysql from starting when standard startup scripts are used.
- B. the OS needs to allow logging in as mysql so that administrative tasks can be performed.
- C. this prevents creation of a command shell with the mysql account, while allowing mysql to run.**
- D. The mysql user needs a login and its home directory must be the base directory of the installation.

---

**43. Consider the optimize table command. (Choose two)**

**To serve which two purposes would you consider using this command?**

- A. To improve performance by defragmenting the table.**
- B. To improve performance by sorting indexes.**
- C. To improve performance by updating index statistics without rebuilding the table.
- D. To correct problems with a MYISAM table that has become corrupted
- E. To check a table's structure to see if it may have been damaged and needs repair.

---

**44. You want to lock the three MYISAM tables a,b and c. You issue the following statements:**

```
Mysql> LOCK TABLES a READ;  
Mysql> LOCK TABLES b READ;
```

```
Mysql> LOCK TABLES c READ;
```

**What is the result?**

- A. Tables a,b, and c are all locked.
  - B. Only the lock on table a takes effect.
  - C. Only the lock on table c takes effect.
  - D. None of the tables are locked.
- 

**45.** Consider the MYSQL enterprise audit plugin. On attempting to start the MYSQL service after a crash, you notice the following error:

```
[ERROE] plugin "audit_log" init function returned error.  
In the audit log file, you notice the final entry:  
...  
< AUTIT_RECORD  
TIMESTAMP= "2013-07-09T02:12:35"  
NAME= "CONNECT"  
CONNECTION_ID= "98"  
Status= "0"  
USER="kate"  
OS_LOGIN=""  
PROXY_USER=""  
HOST="LOCALHOST"  
IP=""  
DB=""
```

**What action should you take to fix the error and allow the service to start?**

- A. Re-install the audit plugin
  - B. Execute the command flush logs
  - C. Execute the command set global audit\_log\_flush= ON
  - D. Move or rename the existing audit.log file.
- 

**46.** Consider the MYSQL enterprise audit plugin.

**Which two event types are the only ones to include the server ID attribute? (Choose two)**

- A. Quit
- B. Query

C. Noaudit

D. Shutdown

E. Audit

F. Kill

---

47. which **two** statements are true about innodb\_thread\_concurrency? (Choose two)

A. It can be configured dynamically by using set global innodb\_thread\_concurrency =....

B. value of 0 serializes all innnoDB queries.

C. It is a synonym for the thread\_concurrency variable.

D. it lowers mutex contention when the value is set lower than the number of logical CPU cores.

E. it specifies the parallelism allowed for a single query inside innnoDB

---

48. which **two** methods can be used to specify custom options for a MYSQL server that is running as a windows service? (Choose two)

A. adding options to the default configuration file.

B. Pointing the service to a custom configuration file during installation

C. specifying options on the command line.

D. configuring options on the windows service options tab of the MYSQL installer GUI

---

49. An existing master-slave setup is currently using a delayed replication of one hour. The master has crashed and the slave must be "rolled forward" to provide all the latest data. The show slave status indicates the following values:

```
RELAY_LOGIN_FILE='HOSTNAME-relay-bin.000004'  
Relay_log_pos= 1383
```

Which command set would make the slave current?

A. STOP SLAVE; CHANGE MASTER TO MASTER\_DELAY=0; START SLAVE;

B. STOP SLAVE; CHANGE MASTER TO MASTER\_DELAY=0; RELAY\_LOGIN\_FILE='HOSTNAME-relay-bin.000004', Relay\_log\_pos= 1383;

C. STOP SLAVE; CHANGE MASTER TO RELAY\_LOG\_FILE='HOSTNAME-relay-bin.00004',  
Relay\_log\_pos= 1383;

D. STOP SLAVE; SET GLOBAL master\_delay=0; START SLAVE;

---

**50.** You have a server that has very limited memory but has a very large table. You will use mysqldump to back up this table.

**Which option will ensure mysqldump will process a row at a time instead of buffering a set of rows?**

A. --quick

B. --skip-buffer

C. --single-transaction

D. --tab

---

**51.** Consider two tables that are equally defined, except for the partitioning method, and have two million records in each table.

The following query is executed and takes 2 minutes and 38 seconds to complete.

```
ALTER TABLE orders_hash ADD PARTITION p6;
```

You then execute the following query, which takes 13 seconds to complete;

```
ALTER TABLE orders_linear_key ADD PARTITION p6;
```

**What could explain the difference in completion time?**

A. The HASH algorithm is computationally harder than the LINEAR KEY algorithm.

B. The LINEAR KEY method changes fewer partitions.

C. The HASH algorithm requires a filesort of the index before updating.

D. The partition type does not affect the speed, it was due to I/O load when running the first query.

---

**52.** You enable binary logging on MySQL Server with the configuration:

```
binlog-format=STATEMENT
log-bin
```

**Which database updates are logged on the master server to the binary log by default?**

- A. All updates not involving temporary tables
  - B. All updates to the default database, except temporary tables
  - C. All updates except to the TEMPDB database
  - D. All updates to all databases
  - E. All updates, except to the PERFORMANCE\_SCHEMA database
- 

**53. Which **three** are requirements for running multiple MySQL servers with remote access on the same host?**

- A. Each server must have its own InnoDB log files.
  - B. Each server must use the syslog feature to manage multiple log sources.
  - C. Each server must run on a different disk.
  - D. Each server must have a unique TCP/IP configuration.
  - E. More than one CPU core must exist on the host.
  - F. InnoDB tablespace files must be separated between servers.
- 

**54. What does the Performance Schema provide?**

- A. auto-tuning based on settings and ongoing workload
  - B. insight into the internal working of MySQL
  - C. recommendations for schema changes
  - D. a text-based version of MySQL Enterprise Monitor
- 

**55. What are **two** advantages of using the INFORMATION\_SCHEMA database rather than using the SHOW command?**

- A. SHOW commands run slower than queries against INFORMATION\_SCHEMA.

B. Extracting information from INFORMATION\_SCHEMA requires no MySQL specific syntax.

C. SELECT allows you to filter, sort, concatenate, and transform results from INFORMATION\_SCHEMA.

D. The INFORMATION\_SCHEMA tables can be updated directly with standard SQL commands.

56. An employee cannot access the company database. You check the connection variables:

```
mysql> SHOW GLOBAL VARIABLES LIKE 'connect%';
+-----+-----+
| Variable_name | Value |
+-----+-----+
....
| connect_timeout | 10    |
| init_connect   |       |
| max_connect_errors | 10    |
| max_connections | 50    |
| max_user_connections | 10    |
....
+-----+-----+
8 row in set (0.01 sec)
```

A look at the user privileges shows:

```
GRANT ... TO 'bob'@'%.example.com' WITH MAX_USER_CONNECTIONS 0;
GRANT ... TO 'kay'@'%.example.com' WITH MAX_USER_CONNECTIONS 1;
GRANT ... TO 'joe'@'%.example.com' WITH MAX_USER_CONNECTIONS 50;
```

**What is a valid explanation for why one of the users is unable to connect to the database?**

A. Bob has max\_user\_connections set to zero, which blocks all his connections.

B. Joe has exceeded the max\_user\_connections global limit.

C. All users are blocked because max\_user\_connections is accumulated over the host account information.

D. Kay is already connected elsewhere and attempting to log in again.

E. Is too small to allow a connection to occur.

57. You inherit a legacy database system when the previous DBA, Bob, leaves the company. You are notified that users are getting the following error:



```
mysql>CALL film_in_stock(40, 2, @count);  
ERROR 1449 (HY000) : The user specified as a definer ("bob" @ "localhost" ) does not exist
```

**How would you identify all stored procedures that pose the same problems?**

- A. Execute `SELECT *FROM mysql.routines WHERE DEFINER="bob@localhost".`
  - B. Execute `SHOW ROUTINES WHERE DEFINES=" bob@localhost".`
  - C. Execute `SELECT * FROM INFORMATION_SCHEMA. ROUTINES WHERE DEFINER="bob@localhost".`
  - D. Execute `SELECT * FROM INFORMATION_SCHEMA. PROCESSLIST WHERE USER=" bob "` and `HOST="localhost";`
  - E. Examine the MySQL error log for other ERROR 1449 messages.
- 

**58.** You execute `mysqladmin shutdown` on a MySQL server that is described as follows:  
It is running with both active and idle client connections.  
It has open transactions against InnoDB.  
It has active multi-row inserts into MyISAM engine tables.  
`InnoDB_fast_shutdown` is set to 1.

**What are **three** effects of shutting down the server by using a `mysqladmin shutdown` command?**

- A. Connections that have an open transaction are rolled back.
  - B. Connections with statements running against MyISAM tables wait for completion.
  - C. New client connections are not accepted after shutdown is initiated.
  - D. Connections are accepted during the shutdown process because a graceful shutdown can take large amounts of time.
  - E. Partial updates may occur for non-transactional tables.
- 

**59. What are **three** facts about backups with `mysqldumps`?**

- A. can back up a remote database server
- B. allow a consistent backup to be taken
- C. are always faster to restore than binary backups
- D. are able to back up specific items within a database

- E. create automatically compressed backups
  - F. will lock all storage engines for duration of backup
- 

**60. What are **three** methods to reduce MySQL server exposure to remote connections?**

- A. setting -skip-networking when remote connections are not required
  - B. using the sql\_mode=STRICT\_SECURE after connections are established for encrypted communications
  - C. setting specific GRANT privileges to limit remote authentication
  - D. setting -mysql\_secure\_configuration to enable paranoid mode
  - E. using SSL when transporting data over remote networks
- 

**61. Which **two** options describe how MySQL Server allocates memory?**

- A. Each thread allocates memory from a global pool.
  - B. Global memory resources are allocated at server startup.
  - C. Thread memory is pre-allocated up to thread\_cache\_size for performance.
  - D. Each connection may have its own per-thread memory allocations.
- 

**62. Consider the key buffer in a MySQL server.**

**Which **two** statements are true about this feature?**

- A. It is a global buffer.
  - B. It is set on a per-connection basis
  - C. It caches index blocks for MyISAM tables only.
  - D. It caches index blocks for InnoDB tables only.
  - E. It caches index blocks for all storage engine tables.
- 

**63. Which **two** events will cause a slave server to create a new relay log file?**

- A. starting of the I/O thread

**B. execution of the FLUSH LOGS statement**

- C. starting of the SQL thread
  - D. reaching the slave\_pending\_jobs\_size\_max limit
  - E. execution of FLUSH TABLES WITH READ LOCK
- 

**64.** You have a MySQL replication setup and you want to stop the SQL thread on the slave.

```
Mysql>SHOW SLAVE STATUS\G
...
Slave_IO_Running: Yes
Slave_SQL_Running: No
```

**To serve which **two** purposes might you stop the SQL thread on the slave while keeping the I/O thread running?**

- A. To allow you to make a lock-free backup**
  - B. To allow the remaining events to be processed on the slave while not receiving new events from the master
  - C. To allow for points-in-time recovery on the slave**
  - D. To prevent schema changes from propagating to the slave before they are validated
  - E. To stop any transaction experiencing a deadlock
- 

**65. Which **two** capabilities are granted with the SUPER privilege?**

- A. allowing a client to kill other client connections**
  - B. allowing a client to shut down the server
  - C. allowing change of the server runtime configuration**
  - D. allowing client accounts to take over the account of another user
- 

**66.** Consider the MySQL Enterprise Audit plugin. You are checking user accounts and attempt the following query:

```
mysql>SELECT user, host plugin FROM mysql.users;
ERROR 1146 (42S02): Table 'mysql.users' doesn't exist
```

Which subnet of event attributes would indicate this error the audit.log file?

- A. NAME="Query" STATUE="1146" SQLTEXT="select user, host from users"/>
  - B. NAME="Error" STATUS="1146" SQLTEXT="Error 1146 (42S02): Table "mysql.users" doesn't exist"/>
  - C. NAME="Query" STATUS="1146" SQLTEXT="Error 1146 (42S02): Table "mysql.users" doesn't exist"/>
  - D. NAME="Error" STATUE="1146" SQLTEXT="select user, host from users"/>
  - F. NAME="Error" STATUS="0" SQLTEXT="Error 1146 (42S02): Table "mysql.users" doesn't exist"/>
- 

67. Which **three** methods will show the storage engine for the Country table?

- A. SHOW CRATE TABLE Country;
  - B. SHOW ENGINE Country STATUS;
  - C. SHOW TABLE STATUS LIKE 'Country';
  - D. SELECT ENGINE FROM INFORMATION\_SCHEMA.TABLES WHERE TABLE\_NAME='Country';
  - E. SELECT ENGINE FROM INFORMATION\_SCHEMA.ENGINES WHERE TABLE\_NAME='Country';
- 

68. The following output is from a SHOW SLAVE STATUS:

```
mysql> SHOW SLAVE STATUS\G
***** 1. row *****
slave_IO_state: Waiting for master to send event
.....
Slave_IO_Running: Yes
slave_SQL_Running: Yes
.....
SQL_Delay: 360
SQL_Romaining Delay: NULL
slave_SQL_Runing state: slave has read all rolay log; waiting for the lave I/o thread to
update it
```

What would cause the SQL\_Delay variable to have a value of 360?

- A. The network latency between the master and the slave is 360 milliseconds.
- B. The slave will need an estimated 360 seconds to update the remaining contents from the relay log.

C. The slave was configured for delayed replication with a delay of six minutes.

D. The master has performed a large transaction, which will take 360 seconds to complete on the slave.

---

69. A MySQL Server is configured as follows:

```
[mysql]  
Default-authentication-plugin=sha256_password
```

Examine the output from the following SET PASSWORD statement:

**Why has this occurred?**

A. The sha256\_password authentication plugin must use the SHA256\_PASSWORD () function in SET PASSWORD.

B. The sha256\_password authentication plugin expects a raw sha256 formatted string with the PASSWORD () function.

C. The sha256\_password plugin must be with old\_passwords=2 set.

D. The sha256\_password plugin uses AUTHENTICATION\_STRING () function to set account passwords.

---

70. Consider the three binary log files bin.00010, bin.00011, and bin.00012 from which you want to restore data.

**Which method would use mysqlbinlog for greater consistency?**

A. shell> mysqlbinlog bin.00010 | mysql  
shell> mysqlbinlog bin.00011 | mysql  
shell> mysqlbinlog bin.00012 | mysql

B. shell> mysqlbinlog bin.00010 bin.00011 bin.00012 | mysql

C. shell> mysqlbinlog - - restore bin. 00010 bin.00011 bin.00012

D. shell> mysqlbinlog - - include-gtids=ALL bin.00010 bin.00011 bin.00012 | mysql

---

71. You want to use mysqldump to create a full backup with the following requirements:  
It must include all schema and data.

All CREATE statements must exist in the dumps.

The command should be future-proofed to include changes to the schema at a later date without requiring modifications to the mysqldump command.

**Which **three** options in addition to the default settings must be used to ensure this?**

A. -all-databases

B. -create-options

C. -databases

D. -events

E. -master-data

F. -routines

G. -tables

---

**72.** You want to enhance the security of a new standard MySQL installation on a Unix-type operating system.

**What should you do?**

A. Disable the mysql\_access program

B. Run the mysql\_secure\_installation script

C. You would do nothing. By default, the security level of a MySQL installation is very high.

D. Run the mysqld\_safe script.

---

**73. Which **two** statements describe the behavior of the server's SQL mode?**

A. The server's SQL mode determines how the server should behave when performing data validation checks and interpreting different forms of syntax.

B. The server's SQL mode determines whether the server should be read-only or should accept commands such as INSERT and UPDATE.

C. The server's SQL mode can be changed at the session level with a SET SESSION sql\_mode="new\_value" command.

D. The server's SQL mode, when globally set on a slave server, applies to events sent from the master.

---

74. You want to immediately stop access to the database server for the remote user 'mike'@'client.example.com'. The user is currently not connected to the server.

Which **two** actions can you take to stop any access from the user?

A. Use REVOKE ALL PRIVILEGES FROM 'mike'@'client.example.com'.

B. Restart the server with --skip-networking enabled.

C. Use GRANT USAGE ON . TO 'mike'@'client.example.com' WITH MAX\_CONNECTIONS\_PER\_HOUR=0

D. Use GRANT USAGE ON . TO 'mike'@'client.example.com' MAX\_USER\_CONNECTIONS=0

E. Use DROP USER 'mike'@'client.example.com'

F. Execute the mysql\_secure\_installation command.

75. Consider the following:

```
CREATE TABLE `Country` (  
  `Code` char(3) NOT NULL DEFAULT '',  
  `Name` char(52) NOT NULL DEFAULT '',  
  ...  
  PRIMARY KEY (`Code`)  
);  
  
CREATE TABLE `CountryLanguage` (  
  `CountryLanguage_id` int(10) unsigned NOT NULL AUTO_INCREMENT,  
  `CountryCode` varchar(5) NOT NULL DEFAULT '',  
  `Language` char(30) NOT NULL DEFAULT '',  
  `IsOfficial` enum('T','F') NOT NULL DEFAULT 'F',  
  ...  
  PRIMARY KEY (`CountryLanguage_id`)  
);
```

```
mysql> EXPLAIN SELECT c.Name FROM Country c INNER JOIN CountryLanguage c1 ON c.Code =  
c1.CountryCode WHERE c1.Language = 'ENGLISH' ORDER BY IsOfficial;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
+-----+-----+-----+-----+  
| id | select_type | table | type | possible_keys | key | key_len | ref |  
| rows | Extra |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
+-----+-----+-----+-----+  
| 1 | SIMPLE | c1 | ALL | NULL | NULL | NULL | NULL |  
| 984 | Using where; Using filesort |  
| 1 | SIMPLE | c | eq_ref | PRIMARY | PRIMARY | 3 |  
world.c1.CountryCode | 1 | Using condition |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
+-----+-----+-----+-----+  
2 rows in set (0.00 sec)
```

**Which ALTER TABLE statement will improve the performance of the query?**

- A. ALTER TABLE "country" ADD INDEX "idx\_code"("code");
  - B. ALTER TABLE "country" ADD INDEX "idx\_namecont"("name","countrycode")
  - C. ALTER TABLE "countrylanguage" ADD INDEX "idx\_lang"(language)
  - D. ALTER TABLE "countrylanguage" ADD INDEX "idx\_offlang"("isofficial","language");
- 

**76.** You see the following status output on your MySQL Server:

```
| Table_locks_immediate | 82953015 |  
| Table_locks_waited   | 20892193 |
```

**What are two strategies to avoid waiting for table locks?**

- A. Avoid using the FLUSH TABLES WITH READ LOCK statements
  - B. Start MySQL with the --skip\_external\_locks options
  - C. Change the tables to use the InnoDB storage engine
  - D. Start MySQL with --innodb\_table\_locks = 0
  - E. Use a slave for large reporting jobs
- 

**77.** You have just executed a manual backup by using the following command:

```
mysqlbackup -u root -p --socket=/tmp/my.sock --backup-dir=/my/backup/ backup
```

The operation completed without error.

**What is the state of this backup and operation required before it is ready to be restored?**

- A. Backup State = Compressed Backup Operation = copy-back
  - B. Backup State = Raw Backup Operation = apply-log
  - C. Backup State = Raw Backup Operation = backupdir-to-image
  - D. Backup State = Prepared Backup Operation = apply-log
  - E. Backup State = Prepared Backup Operation = validate
-



---

**78.** You are using the Performance Schema to investigate replication on a slave:

```
mysql> SELECT THREAD_ID, threads.NAME, SUM(COUNT_STAR) AS TotalCount, SUM(SUM_TIMER_WAIT)
AS TotalTime
-> FROM performance_schema.events_waits_summary_by_thread_by_event_name
-> INNER JOIN performance_schema.threads USING(THREAD_ID)
-> WHERE threads.NAME LIKE 'thread/sql/slave/_%'
-> GROUP BY THREAD_ID, threads.NAME;
```

THREAD_ID	NAME	TotalCount	TotalTime
20	thread/sql/slave/_io	5785	654785731198
21	thread/sql/slave/_sql	3875	96931638913
22	thread/sql/slave/_worker	0	0
23	thread/sql/slave/_worker	0	0
24	thread/sql/slave/_worker	0	7262131209667
25	thread/sql/slave/_worker	0	15498842906584

Assume that all instruments and consumers are enabled and all threads are instrumented.

Which **two** facts can be concluded from the given output?

- A. At most two schemas are being updated concurrently.
- B. The server needs more cores to use all slave threads.
- C. The slave cannot process the relay log fast enough to use all threads.
- D. The slave is configured with `slave_parallel_workers = 4`.

---

**79.** Which **two** are considered good security practices when using passwords?

- A. Choose short passwords to save on storage space.
- B. Do not use dictionary-based words
- C. Store passwords external to the database
- D. use one-way encryption for storage of passwords
- E. use simple keyboard actions that give mixed letters.

---

**80.** You will configure a MySQL Server to act as a replication master.

Which **two** options must be configure correctly to allow this? (Choose two)

A. log-master-updates

B.log-bin

C. server\_id

D. master-logging

E. enable-master-start

F. rpl\_recovery\_rank

---

**81. What are **two** functions of the maximum size of the relay log files if the value of max\_binlog\_size variable? (Choose two)**

A. It determines the maximum size of the relay log files if the value of max\_relay\_log\_size is 0.

B. It determines the collective maximum size for all binary log files created.

C. It determines the size when the server will rotate the binary logs.

D. It determines the maximum size of a transaction that can be written in a binary log in row based replication.

E. It determines the maximum size of each binary log packet from the master to the slave.

F. It determines the ceiling for a relay log and truncates to max\_binlog\_size.

---

**82. You are Using three tables: events\_stages\_current, events statements\_current, and events\_waits\_current in the Performance Schema.**

Some fields are common between these three tables, Including:

```
mysql> DESC events_waits_current;
```

+-----+-----+-----+-----+-----+-----+-----+						
-+						
Field	Type	Null	Key	Default	Extra	
+-----+-----+-----+-----+-----+-----+-----+						
-+						
THREAD_ID	bigint(20) unsigned	NO		NULL		
EVENT_ID	bigint(20) unsigned	NO		NULL		
END_EVENT_ID	bigint(20) unsigned	YES		NULL		
EVENT_NAME	varchar(128)	NO		NULL		
SOURCE	varchar(64)	YES		NULL		

TIMER_START	bigint(20) unsigned	YES	NULL
TIMER_END	bigint(20) unsigned	YES	NULL
TIMER_WAIT	bigint(20) unsigned	YES	NULL
...			
NESTING_EVENT_ID	bigint(20) unsigned	YES	NULL
NESTING_EVENT_TYPE	enum('STATEMENT','STAGE','WAIT')	YES	NULL

Assume that all consumers and instruments are enabled and timed.

Which **two** statements are true about the tables and their fields?

- A. Each of the tables has exactly one row per Instrumented thread.
- B. TIMER\_WAIT is equal to the difference between TIMER\_END and TIMER\_START.
- C. NESTING\_EVENT\_ID and NESTING\_EVENT\_TYPE are used to establish a tree of events.
- D. The TIMER\_START field always increases with EVENT\_ID across all three tables.
- E. A connection can find its event with SELECT \* FROM ... WHERE THREAD\_ID = CONNECTION\_ID ().

---

**83. Identify a performance impact when using the Performance Schema.**

- A. There is no impact on performance.
- B. There is an overhead for querying the Performance Schema but not for having enabled.
- C. There is a constant overhead regardless of settings and workload.
- D. The overhead depends on the settings of the Performance Schema

---

**84. Which **three** are properties of the MyISAM storage engine? (Choose three)**

- A. Transaction support
- B. FULLTEXT indexing for text matching
- C. Table and page level locking support
- D. Foreign key support
- E. Geospatial indexing

F. HASH index support

G. Table level locking only

---

**85. What is the effect of the RESET MASTER command on binary log files?**

A. It deletes all binary log files listed in the index file and creates a new binary log file.

B. It rotates existing binary logs and creates a new binary log file.

C. It causes all connected slave servers to reconnect to the master and re-establish replication.

D. It deletes all binary log files whose contents have been sent to slave servers.

---

**86. As an administrator, you create a user account with the following statement:**

```
GRANT SELECT, UPDATE, DELETE ON WORLD.* to 'joe'@'example.com'
```

(题库丢失问题..)

A. The account is not created because you must always specify a password for new users.

B. Depending on active SQL modes, you may be prevented from creating the account. Otherwise, an account with no password is created.

C. An account with no password is created, regardless of SQL modes.

D. Because no password is specified, the account is created with an empty password that must be changed by the user on first login.

---

**87. The following options are enabled for a server:**

```
Slow-log=1  
log-bin  
relay-log=1  
general-log=1  
log_output=file
```

**Which **two** assertions about the server are accurate? (Choose two)**

A. More disk space is used.

B. More memory is used.

C. There is an increase in storage I/O requirements.

D. There is better data integrity.

---

**88.** Your developer have created a table to store some of their program' data. After examining the Slow Query Log, you see that they are using the LIKE operator SUBSTR () functions against a VARCHAR(10000) column quite often.

An example of the start of one row of data: 'GREEN010204958831993-12-12/2...'

**What should you do to improve the overall performance?**

A. Convert the column to TEXT and add a fulltext index to the table.

B. Create multiple prefix indexes of differing lengths.

C. Convert their column to BINARY.

D. Redesign the table so that the most commonly searched for string patterns are in their own columns.

---

**89.** Which **two** statements are true about the general-log server option?

A. It records when a client connects to or disconnects from the server.

B. It is a session option and can be set for different client connections.

C. It is a static option and cannot be changed at run time.

D. It records every statement only for the root user.

E. It records every statement received by the server.

---

**90.** Which **three** features are available in the NDB storage engine when used in a default configuration?

A. full transactional support at all isolation levels

B. built-in synchronous replication of data

C. automatic load balancing of SQL nodes

D. distributed fulltext indexing for faster text matching

E. built-in high availability of data

F. automatic node recovery

---

**91.** Consider an installation of MySQL 5.6 server with binary logging enabled. A full backup was taken successfully using:

```
mysqlbackup -u root -p --socket=/tmp/my.sock --backup-dir=/my/backup/ backup
```

The backup is restored to a development server successfully. You need this installation to have the most up-to-date data available from the original host.

**What **two** statements are true regarding the use of point-in-time recovery?**

**A. To utilize point-in-time recovery, the backup must be taken with the -with-pitr option.**

B. The mysqlbackup -apply-log process will print the last binary log file and position executed.

C. The mysqld binary will print the last known binary log file and position in the error log when it is started.

**D. To do point-in-time recovery you must explicitly restore the backup with the -apply-binary-log-into option.**

---

**92.** You use --login-path to access a MySQL server on a Linux installation.

**Which statement is true about the --login-path option that is created by using mysql\_config\_editor?**

A. All system users have access to the MySQL server via --login-path=local.

B. --login-path can be used only for MySQL servers running on a local machine.

**C. --login-path allows you to provide login credentials without passing clear text passwords on the command line.**

D. When using --login-path to connect to a remote MySQL server, the remote server version must be 5.6 or later.

---

**93. Which statement is true about using Microsoft Windows Cluster as a platform for MySQL?**

A. It is provided by means of IP-level disk replication.

B. It is a shared-nothing architecture.

C. It Implements High Availability by using the .NET Connector's load balancing capabilities.

D. It relies on the shared disk architecture being visible to both servers.

---

94. Consider typical High Availability (HA) solutions that do not use shared storage.

Which **three** HA solutions do not use shared storage?

A. MySQL Replication

B. Distributed Replicated Block Device (DRBD) and MySQL

C. Windows Cluster and MySQL

D. Solaris Cluster and MySQL

E. MySQL NDB Cluster

---

95. Full Atomicity, Consistency, Isolation, Durability (ACID) compliance is a necessity for a new application, which heavily reads and writes data.

This requires the following config file options:

```
sync_binlog=1
innodb_flush_log_at_trx_commit=1
innodb_doublewrite=1
```

However, this configuration is expected to introduce disk I/O overhead.

What **three** changes will reduce disk I/O overheads?

A. Use of soft links for database directories on the same physical disk

B. Use of battery-backed write cache RAID controllers

C. Use of separate directories on the same physical disk for log file and data files

D. Placement of InnoDB log file and datadir on separate physical disks

E. Allocation of RAM to the buffer pool such that more of the data can fit in RAM

F. Use of delay\_key\_write=ON for batch index update

---

96. Assume that you are starting a MySQL server with the command:

```
/usr/local/bin/mysqld --defaults-file=$HOME/mysql/my.cnf --extra-defaults-  
file=$HOME/mysql/extra-my.cnf
```

**Which set of configuration options will be used?**

- A. Those specified in the default configuration files, \$HOME/mysql/my.cnf and \$HOME/mysql/extra-my.cnf
- B. Those specified in the \$HOME/mysql/my.cnf and \$HOME/mysql/extra-my.cnf files
- C. Those specified in the default configuration files and in \$HOME/mysql/extra-my.cnf
- D. Those specified in the default configuration files and in \$HOME/mysql/my.cnf**

**测试方法:**

```
[root@fander etc]# strace mysqld --defaults-file=/data/mysql/mysql3311/my.cnf --extra-  
defaults-file=/data/mysql/mysql3311/my.bu.cnf 2>&1 |grep my.cnf  
stat("/data/mysql/mysql3311/my.cnf", {st_mode=S_IFREG|0644, st_size=8331, ...}) = 0  
open("/data/mysql/mysql3311/my.cnf", O_RDONLY) = 3
```

---

**97. Which hardware storage option, when set up with redundant disks, offers the least stability, availability, and reliability for MySQL data?**

- A. RAID 5
- B. iSCSI
- C. SAN (Storage Area Network)
- D. NFS (Networked File System)**

---

**98.** You are installing a MySQL server on a fresh installation of Linux by using the MySQL Enterprise RPM packages.

**Which three actions are performed during installation?**

- A. Setting up a mysql user**
- B. Setting up a mysql group**
- C. Initializing the data directory**
- D. Executing the mysql\_secure\_installation tool
- E. Prompting a user to set the MySQL root user password

---

**99. Which statement is true about Distributed Replicated Block Device (DRBD)?**



- A. It is a shared disk technology.
  - B. It replicates data asynchronously to the passive node.
  - C. It guarantees an identical copy of the data on the passive node.
  - D. It can manage only one MySQL instance per block device.
- 

**100. Consider the CHECK TABLE command In which **two** situations should this command be used?**

A to make sure a table has no structural problems

B to find out why a query takes a long time to execute on a given table

C to make sure that no table indexes are corrupted

D to improve performance by updating index distribution statistics on innodb tables

E to repair table structure problems

---

**101.** The 'applicationdb' is using InnoDB and consuming a large amount of file system space. You have a /backup partition available on NFS where backups are stored. You investigate and gather the following information:

```
[mysql]
datadir=/var/lib/mysql/
innodb_file_per_table=0
```

Three tables are stored in the InnoDB shared tablespace and the details are as follows:

- The table data\_current has 1,000,000 rows.
- The table data\_reports has 1,500,000 rows.
- The table data\_archive has 4,500,000 rows.

```
shell> ls -l /var/lib/mysql/
-rw-rw---- 1 mysql mysql 744G Aug 26 14:34 ibdata1
-rw-rw---- 1 mysql mysql 480M Aug 26 14:34 ib_logfile0
-rw-rw---- 1 mysql mysql 480M Aug 26 13:47 ib_logfile1
```

You attempt to free space from ibdata1 by taking a mysqldump of the data\_archive table and storing it on your backup partition.

```
shell> mysqldump -u root -p applicationdb data_archive > /backup/data_archive.sql
mysql> DROP TABLE data_archive;
```

Unfortunately, this action does not free any actual disk space back to the file system and the server disk space is running out.

**Which set of actions will allow you to free disk space back to the file system?**

A. Execute OPTIMIZE TABLE so that the InnoDB engine frees unused pages on disk back to the file system:

```
mysql> OPTIMIZE TABLE data_current, data_reports;
```

B. Set the server to use its own tablespace, and then alter the table so that data is moved from the shared tablespace to its own:

```
mysql> SET GLOBAL innodb_file_per_table=1;
mysql> ALTER TABLE data_current ENGINE=InnoDB
mysql> ALTER TABLE data_reports ENGINE=InnoDB
```

C. Take a backup, stop the server, remove the data files, and restore the backup:

```
shell> mysqldump -u root -p applicationdb > /backup/applicationdb.sql
shell> /etc/init.d/mysql stop
shell> cd /var/lib/mysql/
shell> rm ibdata1 ib_logfile0 ib_logfile1
shell> /etc/init.d/mysql start
shell> mysql -u root -p applicationdb < /backup/applicationdb.sql
```

D. Enable compression on the table, causing InnoDB to release unused pages on disk to the file system:

```
mysql> SET GLOBAL innodb_file_per_table=1;
mysql> SET GLOBAL innodb_file_format=Barracuda;
mysql> ALTER TABLE data_current ROW_FORMAT=COMPRESSED KEY_BLOCK_SIZE=8;
mysql> ALTER TABLE data_history ROW_FORMAT=COMPRESSED KEY_BLOCK_SIZE=8;
```

---

**102.** Compare a typical Distributed Replicated Block Device (DRBD) with MySQL Standard Replication using master-slave replication.

**Which two Statements are correct?**

A. Both technologies USE the TCP/IP stack as their primary transmission medium.

B. DRBD uses shared-disk technology.

C. Both technologies guarantee an identical copy of data on the secondary node.

D. Only MySQL can maintain a time-delayed copy of data on the secondary node.

---

**103.** Consider the MySQL Enterprise Audit plugin.

A CSV file called data.csv has 100 rows of data.

The stored procedure `prepare_db()` has 10 auditable statements.  
You run the following statements in the `mydb` database:

```
mysql> CALL prepare_db();  
mysql> LOAD DATA INFILE '/tmp/data.csv' INTO TABLE mytable;  
mysql> SHOW TABLES;
```

**How many events are added to the audit log as a result of the preceding statements?**

A. 102; top-level statements are logged, but `LOAD DATA INFILE` is logged as a separate event.

**B. 3; only the top-level statements are logged.**

C. 111; top-level statements and all lower-level statements are logged.

D. 12; only top-level statements and stored procedure events are logged.

---

**104.** The `appstats` database has activity during office hours only. All the data is stored in the MyISAM engine and needs backups taken using the `mysqldump` tool. This database has many triggers and views that also need to be backed up at the same time.  
A user 'backupuser' is created to facilitate backups automatically.

**Which **three** GRANT permissions are required to allow backups in this scenario?**

**A. TRIGGER**

B. PROCESS

C. CREATE VIEW

**D. SHOW VIEW**

**E. LOCK TABLES**

F. EVENT

---

**105.** The PAM Authentication plugin requires the `/etc/pam.d/mysql` service file to be configured.

Most of the existing PAM service files use common definitions, for example:

```
auth include common-auth  
account include common-account  
session include common-session  
password include common-password
```

On some systems, the common - \* files may be named system\_\* files.

**Which two reasons are valid for choosing to configure the mysql service differently from the common definition?**

**A. Not all features of common files are implemented by the PAM plugin.**

B. The PAM plugin does not recognize the include objective in the service files. ,

C. System password files are accessible if a common definition is used.

**D. There is greater control over how the configuration is set up for the PAM plugin.**

E. The account and session directives are not implemented in the PAM plugin.

---

**106.** A MySQL replication slave is set up as follows:

- Uses all InnoDB tables
- Receives ROW-based binary logs
- Has the read-only option The replication slave has been found in an error state. You check the MySQL error log file and find the following entries:

```
2013-08-27 13:55:44 9056 [ERROR] slave SQL: Could not execute write_rows event on table
test.t1; Duplicate entry '3' for key 'PRIMARY', Error_code: 1062; handler error
HA_ERR_FOUND_DUPP_KEY; the event's master log 56_master-bin.000003, end_log_pos 653,
Error_code: 1062
2013-08-27 13:55:44 9056 [Warning] Slave: Duplicate entry '3' for key 'PRIMARY'
Error_code: 1062
2013-08-27 13:55:44 9056 [ERROR] Error running query, slave SQL thread aborted. Fix the
problem, and restart the slave SQL thread with "SLAVE START". We stopped at log
'56_master-bin.000003' position 496
```

A. The slave was created with `mysqldump -u root -p --skip-lock-table --all-databases > /data/data.sql`

B. The slave user does not have INSERT, UPDATE, or DELETE permission and cannot execute the write rows function.

C. For tables with UNIQUE keys, statement-based replication must be used to maintain integrity.

D. The root user on the slave has executed FLUSH LOGS, causing the relay-log to doublewrite.

**E. The applications have the SUPER privilege, which allows them to update rows.**

---

**107.** Consider the MyISAM and InnoDB storage engines in MySQL 5.6.

Which **four** statements are true?

A. InnoDB is the default storage engine.

B. InnoDB has read-only transaction abilities.

C. MyISAM is the default storage engine.

D. InnoDB supports fulltext search.

E. MyISAM supports fulltext search.

F. InnoDB has R-TREE indexes.

---

~~108. Which hardware storage option, when set up with redundant disks, offers the least stability, availability, and reliability for MySQL data?(与97题重复)~~

A. RAID 5

B. iSCSI

C. SAN (Storage Area Network)

D. NFS (Networked File System)

---

109. Due to an authentication plugin that is used on the server, passwords are required to be sent as clear text as opposed to the usual encrypted format.

Which **two** methods would allow a client to connect to the server and send clear text passwords?

A. SET GLOBAL mysql\_cleartext\_passwords=1;

B. INSTALL PLUGIN mysql\_cleartext\_password SONAME 'mysql\_cleartext\_password.so';

C. mysql --enable-cleartext-plugin --uroot -p -h dbhost.example.com

D. mysql --protocol=PLAIN -uroot -p -h dbhost.example.com

E. export LIBMYSQL\_ENABLE\_CLEARTEXT\_PLUGIN='Y'

---

~~110. Consider the following table:(与29题重复)~~

Which method should be used to add a new g201305 partition to the table?

A. ALTER TABLE games REORGANIZE PARTITION gMORES INTO (PARTITION g201305 VALUES LESS THAN (TO\_DAYS('2013-05-01 00:00:00')), PARTITION gMORES VALUES LESS THAN (MAXVALUE));

B. ALTER TABLE games ADD PARTITION g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') );

C. ALTER TABLE games COALESCE PARTITIONS (gMORES. INTO g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') ), gMORES VALUES LESS THAN ( MAXVALUE ) );

D. ALTER TABLE games SPLIT PARTITION (gMORES) INTO g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') ), gMORES VALUES LESS THAN ( MAXVALUE ) ); E. ALTER TABLE games DROP PARTITIONS (gMORES, ADD PARTITION g201305 VALUES LESS THAN( TO\_DAYS('2013-05-01 00:00:00') ), gMORES VALUES LESS THAN ( MAXVALUE ) );

---

**111.** A MySQL Server has been running an existing application successfully for six months. The my.cnf is adjusted to contain the following additional configuration:

```
[mysqld]
default-authentication-plugin==sha256_password
```

The MySQL Server Is restarted without error.

**What effect will the new configuration have on existing accounts?**

A. They will have their passwords updated on start-up to sha256\_password format.

B. They will have to change their password the next time they login to the server.

C. They are not affected by this configuration change.

D. They all connect via the secure sha256\_password algorithm without any configuration change.

---

**112. How is user access to the Performance Schema determined?**

A. All users have full access during an active session.

B. Access is automatically determined based on which other databases and tables a user has access to.

C. Access is provided through normal database-level and table-level grants.

D. Users with the SUPER privilege have access.

---

113. Consider SELECT INTO OUTFILE backups.

Which statement is true?

- A. Target file must not exist; can be viewed by other OS users.
  - B. Target file can be overwritten; can be viewed by other OS users.
  - C. Target file must not exist; cannot be viewed by other OS users.
  - D. Target file can be overwritten; cannot be viewed by other OS users.
- 

114. You have forgotten the root user account password.  
You decide to reset the password and execute the following:

```
shell> /etc/init.d/mysql stop  
shell> /etc/init.d/mysql start --skip-grant-tables
```

Which additional argument makes this operation safer?

- A. --skip-networking, to prohibit access from remote locations '
  - B. --reset-grant-tables, to Start the sever with only the mysql database accessible
  - C. --read-only, to set all data to read-only except for super users
  - D. --old-passwords, to start MYSQL to use the old password format while running without the grant tables
- 

~~115. Identify a performance impact when using the Performance Schema?~~(与83题重复)

- A. There is no impact on performance.
  - B. There is an overhead for querying the Performance Schema bit not for having it enabled.
  - C. There is a constant overhead regardless of settings and Workload.
  - D. The overhead depends on the settings of the Performance Schema.
- 

~~116. You will configure a MySQL Server to act as a replication master.~~(与80题重复)

Which **two** options must be configured correctly to allow this?

- A. log-master-updates

B. log-bin

C. server\_id

D. master-logging

E. enable-master-start

F. rpl\_recovery\_rank

---

**117. Which two methods can be used to specify custom options for a MySQL server that is running as a Windows service?(与48题重复)**

A. adding options to the default configuration file

B. pointing the service to a custom configuration file during installation

C. specifying options on the command line

D. configuring options on the Windows service options tab of the MySQL Installer GUI

---

**118. Which three statements are true about memory buffer allocation by a MySQL Server?**

A Global buffers such as the InnoDB buffer pool are allocated after the server starts, and are never freed.

B Thread buffers are allocated when a client connects, and are freed when the client disconnects.

C. Buffers that are needed for certain operations are allocated when the operation starts, and freed when it ends.

D. User buffers are allocated at server startup and freed when the user is dropped.

E. All dynamic buffers that are set with a SET GLOBAL statement immediately set allocated globally, and are never freed.

---

**119. What are the functions of the RESET MASTER statement?**

A. deletes all binary log files listed in the index file, resets the binary log index file to be empty, creates a new binary log file, clears the values of the gtid\_purged system variable, and clears the global value of the gtid\_executed system variable

B. deletes the binary log files, resets the binary log index file, resets the GTID variable auto-increment number, clears the values of the qtid\_lost system variable, and clears the



gtid\_executed system variable

C. truncates the contents of the binary log table, resets the binary log index file to be empty, and resets the slave relay log to be empty

D. deletes all of the binary log files, deletes the Index files, and stops replication until the START MASTER statement is issued

---

**120.** You have been notified that the 'apps'. 'reports' table has been accidentally truncated. You have a single file mysqldump backup available taken prior to the truncate. The backup contains all the tables from the Instance, and the 'apps'. 'reports' table must be restored without affecting the other remaining databases and tables.

**Which restore option is suitable in this scenario?**

A. Restore the backup to another database instance and obtain a copy of the reports table individually.

B. Extract the 'apps'. 'reports' table from the backup using the SOURCE command.

C. Execute LOAD DATA INFILE 'backup.sql' SCHEMA= 'apps' TABLE= 'reports'

D. Execute mysqldump on the backup.sql file and apply --filter arguments to obtain only the 'apps'. 'reports' table.

---

**121.** What are **three** actions performed by the mysql\_secure\_installation tool?

A. It prompts you to set the root user account password.

B. It checks whether file permissions are appropriate within datadir.

C. It asks to remove the test database, which is generated at installation time.

D. It can delete any anonymous accounts.

E. It verifies that all users are configured with the longer password hash.

---

**122.** A user has demysql wrong row in a table and you are preparing a point-in-time recovery skipping the DELETE event.

The server is configured with:

```
+-----+-----+
| Variable_name | Value |
+-----+-----+
| enforce_gtid_consistency | ON |
```

```
| gtid_mode | ON |
+-----+
```

You have identified that the DELETE statement to skip has the Global Transaction Identifier (GTID) 'dbe07da-fe25-11e2-b6c7-0800274aa49e:5' and you replay the binary log with:

```
mysqlbinlog --exclude-gtids='dbhenvaa-fe25-11e2-b6c7-0800274aa49e:5' binlog.000002 |
mysql
```

However all events were skipped instead of just the one deleting the wrong row.

### What is the reason for this?

A. mysqlbinlog ignores arguments to ---exclude-gtids - It means ignore all events with GTIDs.

B. The server keeps track of which GTIDs have already been executed and skips those.

C. enforce\_gtid\_consistency is set to ON.

D. gtid\_mode must be set to AUTO during point in time recoveries.

---

**123.** Consider the following:

```
mysql> EXPLAIN SELECT DISTINCT City.id, City.name
-> FROM City, Country
-> WHERE Country.Name IN ('United States', 'Canada', 'Mexico')
-> AND City.CountryCode=Country.Code
-> ORDER BY name\G
***** 1. row *****
      id: 1
select_type: SIMPLE
      table: City
      type: ALL
possible_keys: NULL
      key: NULL
      key_len: NULL
      ref: NULL
      rows: 4079
      Extra: Using temporary; Using filesort
***** 2. row *****
      id: 1
select_type: SIMPLE
      table: Country
      type: eq_ref
possible_keys: PRIMARY
      key: PRIMARY
      key_len: 3
      ref: world.City.CountryCode
```

rows: 1  
Extra: Using where; Distinct

**Which statement best describes the meaning of the values in the ref columns?**

- A. world.City.CountryCode is used to sort the rows in the City table.
  - B. No indexed columns are used to select rows from the City table. The world.CityCountryCode column is used to select rows in the country table.**
  - C. No Indexed columns are used to select rows from the Country table. The world.City.CountryCode column is used to select rows in the City table.
  - D. world.City.CountryCode is used as the primary key for the Country table.
- 

**124. Which two methods will provide the total number of partitions on a table?**

- A. Use the command: SHOW CREATE TABLE**
  - B. Use the command: SHOW TABLE STATUS
  - C. Query the INFORMATION\_SCHEMA.PARTITIONS table**
  - D. Query the INFORMATION\_SCHEMA.TABLES table for the partition\_count
  - E. Query the performance\_schema.objects\_summary\_global\_by\_type table
- 

**125.** ~~You want to lock the three MyISAM tables a, b, and c.~~(与44题重复)  
You issue the following statements:

```
mysql> LOCK TABLES a READ;  
mysql> LOCK TABLES b READ;  
mysql> LOCK TABLES c READ;
```

**What is the result?**

- A. Tables a, b, and c are all locked.
  - B. Only the lock on table a takes effect.
  - C. Only the lock on table c takes effect.**
  - D. None of the tables are locked.
-

**126.** You inherit a legacy MySQL system. You would like to convert all MyISAM tables (excluding the database that contains the grant tables) to InnoDB tables in all databases.

**Which INFORMATION\_SCHEMA query will generate these commands?**

A. `SELECT CONCAT ('ALTER TABLE ', TABLE_SCHEMA, '.', TABLE_NAME, ' ENGINE=INNODB; ')`  
`INTO OUTFILE '/tmp/alter.sql' LINES TERMINATED BY '\n'`  
`FROM INFORMATION_SCHEMA.TABLES`  
`WHERE ENGINE = 'MyISAM' ;`

B. `SELECT CONCAT ('ALTER TABLE ', TABLE_SCHEMA, '.', TABLE_NAME, ' ENGINE=INNODB; ')`  
`INTO OUTFILE '/tmp/alter.sql' LINES TERMINATED BY '\n'`  
`FROM INFORMATION_SCHEMA.TABLES`  
`WHERE ENGINE = 'MyISAM'`  
`WHERE TABLE_SCHEMA <> 'mysql'`  
`;`

C. `SELECT CONCAT ('ALTER TABLE ', TABLE_SCHEMA, '.', TABLE_NAME, ' ENGINE=INNODB; ')`  
`INTO OUTFILE '/tmp/alter.sql' LINES TERMINATED BY '\n'`  
`FROM INFORMATION_SCHEMA.TABLES`  
`WHERE ENGINE ='MyISAM'`  
`AND TABLE_SCHEMA <> 'INFORMATION_SCHEMA' ;`

D. `SELECT CONCAT ('ALTER TABLE ', TABLE_SCHEMA, '.', TABLE_NAME, ' ENGINE=INNODB; ')`  
`INTO OUTFILE '/tmp/alter.sql' LINES TERMINATED BY '\n'`  
`FROM INFORMATION_SCHEMA.TABLES`  
`WHERE ENGINE = 'MyISAM'`  
`AND TABLE_SCHEMA <> 'mysql' ;`

---

**127.** Consider the CHECK TABLE command.

**In which **two** situations should this command be used?**

A. to make sure a table has no structural problems

B. to find out why a query takes a long time to execute on a given table

C. to make sure that no table Indexes are corrupted

D. to improve performance by updating Index distribution statistics on InnoDB tables

E. to repair table structure problems

---

**128.** A MySQL service is running in an environment that has many hosts and the DNS resolution is slow.

**Which **two** changes would improve performance?**

A. adding a secondary name server to the environment

B. starting mysqld with the skip-name-resolve option

C. configuring the large-table-size=8M option to Improve name caching

D. increasing host-cache-size to make the host cache larger

E. configuring the environment to use SSL for direct connections

---

**129.** While reviewing the MySQL error log, you see occasions where MySQL has reached the number of file handles allowed to it by the operating system.

**Which method will reduce the number of file handles in use?**

A. disconnecting idle localhost client sessions

B. implementing storage engine data compression options

C. relocating your data and log files to separate storage devices

D. activating the MySQL Enterprise thread pool plugin

---

**130.** You have a running Online transaction processing (OLTP) database, which has approximately 100 GB of InnoDB data on a system with 32G RAM.

The database is configured as follows:

```
[mysqld]
sort_buffer_size=1M
read_buffer_size=1M
join_buffer_size=1M
innodb_buffer_pool_size=24G
innodb_buffer_pool_instances=8
...
```

The underlying hardware has had a 32G RAM upgrade which resulted in 64G of memory being available.

The amount of connections being served will not change because the application is fairly static in nature.

**What is the most appropriate action for making use of the newly available memory?**

A. Double every MySQL system variable that allocates memory to Improve performance globally.

B. Increase only the buffer pool size to about 80% of the available system memory.

- C. Increase per-thread buffers, ensuring that you consume as much memory as possible.
  - D. Decrease the buffer pool instances and allocate all added memory to the buffer pool.
- 

**131.** You are attempting to secure a MySQL server by using SSL encryption. On starting MySQL, you get this error:

```
130123 10:38:02 [ERROR] mysqld: unknown option '--ssl'
```

**What is the cause of the error?**

- A. The --ssl level was not specified. .
  - B. The server was not started with the --enable-ssl-plugin opt in.
  - C. ssl is not a valid server option
  - D. The mysqld binary was not compiled with SSL support.**
  - E. The server's SSL certificate was invalid.
- 

**132. Which three methods can be used to make partial binary backups?**

- A. For MyISAM tables: use FLUSH TABLES... WITH READ LOCK, and then copy the \*.frm, \*.MYI and \*.MYD files of the tables you want to back up.**
  - B. For InnoDB tables using innodb\_file\_per\_table: use FLUSH TABLES ... WITH READ LOCK, and then copy the \*.frm, \*.ibd files of the tables you want to back up.
  - C. For InnoDB tables using innodb\_file\_per\_table: use MySQL Enterprise Backup and the --include option.**
  - D. For InnoDB tables using innodb\_file\_per\_table: use FLUSH TABLES ... FOR EXPORT, and then copy the \*.frm, \*.cfg and \*.ibd files.**
  - E. For InnoDB tables using innodb\_file\_per\_table: use ALTER TABLE ... DISCARD TABLESPACE, and then copy the \*.frm, and \*.ibd files.
  - F. For InnoDB tables using innodb\_file\_per\_table: use ALTER TABLE .. EXPORT TABLESPACE, and then copy the \*.frm, \*.cfg and \*.ibd files.
- 

**133.** MYSQL is installed on a Linux server and has the following configuration:

```
[mysqld]  
user=mysql  
datadir=/data/mysql/
```

As the 'root' user, you change the datadir location by executing:

```
shell> cp -R /var/lib/mysql /data/mysql/  
shell> chown -R mysql /data/mysql/
```

What is the purpose of changing ownership of datadir to the 'mysql' user?

- A. MySQL cannot be run as the root user.
- B. MySQL requires correct file ownership while remaining secure.
- C. MySQL needs to be run as the root user, but files cannot be owned by it.
- D. The mysqld process requires all permissions within datadir to be the same.

---

**134. What does the Performance Schema provide?(与54题重复)**

- A. auto-tuning based on settings and ongoing workload
- B. insight into the internal working of MySQL
- C. recommendations for schema changes
- D. a text-based version of MySQL Enterprise Monitor

---

**135.** You are having problems with connections from a specific host (192.168.1.15) not closing down correctly. You want to find the state of the threads from that host to check for long-running queries.

**Which statement will accomplish this?**

- A. `SELECT * FROM INFORMATION_SCHEMA.PROCESSLIST WHERE HOST='192.168.1.15';`
  - B. `SELECT * FROM INFORMATION_SCHEMA.EVENTS WHERE HOST='192.168.1.15';`
  - C. `SELECT * FROM INFORMATION_SCHEMA.STATISTICS WHERE HOST='192.168.1.15';`
  - D. `SELECT * FROM INFORMATION_SCHEMA.INNODB_METRICS WHERE HOST='192.168.1.15';`
-

**136.** Assume that you we starting a MySQL server with the command:(与96题重复)

```
/usr/local/bin/mysqld -defaults-file=$HOME/mysql/my.cnf -extra-defaults-  
file=$HOME/mysql/extra-my.cnf
```

**Which set of configuration options will be used?**

- A. those specified in the default configuration files, \$HOME/mysql/my.cnf and \$HOME/mysql/extra-my.cnf
- B. those specified in the \$HOME/mysql/my.cnf and \$HOME/mysql/extra-my.cnf files
- C. those specified in the default configuration files and in (题库截断了..)
- D. those specified in the default configuration files and in \$HOME/mysql/my.cnf**

```
[root@fander etc]# strace mysqld --defaults-file=/data/mysql/mysql3311/my.cnf --extra-  
defaults-file=/data/mysql/mysql3311/my.cnf 2>&1 |grep my.cnf  
stat("/data/mysql/mysql3311/my.cnf", {st_mode=S_IFREG|0644, st_size=8331, ...}) = 0  
open("/data/mysql/mysql3311/my.cnf", O_RDONLY) = 3
```

**137.** You are using GTIDS in replication. You need to skip a transaction with the GTID of aaa-bbb-ccc-ddd-eee: 3 on a slave.

**Which command would you execute from a MySQL prompt?**

- A. STOP SLAVE;  
SET GTID\_NEXT="aaa-bbb-ccc-ddd-eee:3";  
BEGIN;  
COMMIT;  
SET GTID\_NEXT="AUTOMATIC";  
START SLAVE**
- B. STOP SLAVE;  
SET GLOBAL SQL\_SLAVE\_SKIP\_COUNTER=1;  
START SLAVE;
- C. STOP SLAVE;  
BEGIN;  
SET GTID IGNORE="aaa-bbb-ccc-ddd-eee:3";  
COMMIT;  
START SLAVE;
- D. STOP SLAVE;  
RESET SLAVE;  
BEGIN;



```
SKIP NEXT GTID;  
COMMIT;  
START SLAVE;
```

**138.** Consider the MySQL Enterprise Audit plugin, while audit logging enabled.

Which **two** security concerns should be considered when using the audit plugin?

- A. The log should be safely stored in a secure place with limited access.
- B. Circular logging means that audit information may be overwritten if size is too small.
- C. Only user information is logged; queries are managed through the General Log.
- D. Only queries are logged and not connection information.
- E. The contents of the log file are unencrypted.

**139.** A simple master-to-slave replication is currently being used. The following Information is extracted from the `show slave status` output:

```
Last_SQL_Error: Error 'Duplicate entry '8' for key 'PRIMARY' on query. Default database: 'mydb'.Query: 'insert into mytable VALUES('8','George')'  
Skip_Counter: 0  
Retrieved_Gtid_Set: 38f32e23480a7-32a1-c323f78067fd37821:1-9  
Executed_Gtid_Set: 38f32e23480a7-32a1-c323f78067fd37821:1-8  
Auto_Position: 1
```

You execute a "SHOW CREATE TABLE mytable" on the slave:

```
CREATE TABLE `mytable` (  
  `ID` int(11) NOT NULL DEFAULT '0',  
  `name` char(10) DEFAULT NULL,  
  PRIMARY KEY (`ID`)  
)
```

The table mytable on the slave contains the following:

```
+-----+-----+  
| ID   | name  |  
+-----+-----+  
| 7    | Nancy |  
| 8    | George|  
+-----+-----+
```

You have issued a STOP SLAVE command. One or more statements are required before you can issue a START SLAVE command to resolve the duplicate key error.

**Which statement should be used?**

- A. SET GLOBAL SQL\_SKIP\_SLAVE\_COUNTER=1
  - B. SET GTID\_NEXT="CONSISTENCY"; BEGIN; COMMIT; SET GTID\_NEXT="AUTOMATIC";
  - C. SET GLOBAL enforce\_gtid\_consistency=ON
  - D. SET GTID\_EXECUTED="38f32e23480a7-32a1-c323f78067fd37821:9";
  - E. SET GTID\_NEXT="38f32e23480a7-32a1-c323f78067fd37821:9"; BEGIN; COMMIT; SET GTID\_NEXT="AUTOMATIC"
- 

**140.** You are investigating whether migrating an InnoDB database to MySQL Cluster is a viable high Availability upgrade for your production database.

**Which two requirements would make the upgrade incompatible?**

- A. FULLTEXT indexes
  - B. READ\_COMMITTED transaction isolation
  - C. row length greater than 16,000 bytes
  - D. BLOB data types
  - E. TEXT data types
- 

**141.** What are four capabilities of the mysqladmin client program?

- A. pinging the server
  - B. shutting down the server
  - C. creating and administering all users and privileges
  - D. creating and dropping databases
  - E. initiating a binary backup by using the START BACKUP command
  - F. starting and stopping a replication slave
  - G. initiating data Imports from binary or tabular backups
-

**142.** A user starts the MySQL server with the following command-line options: --slow\_query\_log --log-output=TABLE, FILE, NONE

**Which statement is true for the given server configuration? ,.**

A. It starts slow query logging and records statements in both a file and the slow log table in the mysql database.

B. It starts slow query logging but mysqld writes slow statements to console.

**C. It starts slow query logging but statements are not logged at all**

D. It starts slow query logging and records statements only in the slow\_log table in the mysql database.

---

**143.** You have a consistent mysqldump backup named '130818.sql' with a timestamp of 2013-08-18 03:57:59 and a few days worth of binary logs in files 'bin.00001' through to 'bin.00003'.

A DBA accidentally issues the command "DROP DATABASE application;" at 2013-08-18 10:01:21 deleting all of the associated data.

**Which process is needed to return the MySQL Server up to but not including the DROP DATABASE statement?**

**A. shell> mysql -u root -p < 130818.sql**

**shell> mysqlbinlog --start-datetime='2013-08-18 03:57:59' bin.00001 | mysql -u root -p**

**shell> mysqlbinlog bin.00002 | mysql -u root -p**

**shell> mysqlbinlog --stop-datetime='2013-08-18 10:01:21' bin.00003 | mysql -u root -p**

B. shell> mysql -u root -p < 130818.sql

shell> mysqlbinlog -u root -p --replay-binlogs --start-datetime='2013-08-18 03:57:59' --stopdatetime='2013-08-18 10:01:21'

C. shell> mysql -u root -p < 130818.sql

shell> mysqlbinlog --start-datetime='2013-08-18 03:57:59' --stop-datetime='2013-08-18 10:01:21' bin.00002 bin.00003 | mysql -u root -p

D. mysql> source 130818.sql;

mysql> REPLAY BINARY LOGS START= '2013-08-18 03:57:59', STOP='2013-08-18 10:01:21';

E. mysql> source 130818.sql;

mysql> LOAD BINARY DATA IN FILE ('bin.00001', 'bin.00002', 'bin.00003'),

-> START\_LOG\_TIME= '2013-08-18 03:57:59', STOP\_LOG\_TIME= '2013-08-18 10:01:21';

---

**144.** As an administrator, you execute the following statement to remove the existing user account: REVOKE ALL PRIVILEGES, GRANT OPTION FROM 'web' @'localhost'

### What is the outcome?

- A. The account 'web' @ 'localhost' has all its privileges removed and (the account deleted from the server.
  - B. The account 'web' @ 'localhost' can no longer be used for login, but privileges were retained for re enabling at a later time.
  - C. The account 'web' @ 'localhost' loses all its privileges, except USAGE.
  - D. An error results because a REVOKE statement without an ON clause is invalid.
- 

145. Consider the following:

```
mysql> EXPLAIN SELECT Name FROM Country WHERE Population BETWEEN 1 AND 10000\G
***** 1. row *****
id: 1
select_type: SIMPLE
table: Country
type: range
possible_keys: i_pop
key: i_pop
key_len: 4
ref: NULL
rows : 10
Extra: Using where
```

### What does the range value in the type column mean?

- A. There is a range of indexes that can be used.
  - B. This type of index uses the range hash.
  - C. You can use an index and return rows that fall within a range of values.
  - D. The table will be scanned over a certain range of values.
- 

146. What are **two** methods of taking a binary backup on a MySQL Server using InnoDB storage engine?

- A. MySQL Enterprise Backup
- B. mysqldump with --binary-data option
- C. mysqlhotcopy
- D. file system snapshots

**147.** Consider a server with lots of free RAM.

**Which **two** statements are true about setting the per-thread buffers higher than required?**

A. More memory per thread is beneficial in all scenarios.

**B. It causes increased overhead due to initial memory allocation.**

**C. It can affect system stability during peak load times, due to swapping.**

D. It requires increasing the `thread_cache_size` variable.

---

**148.** You are using replication from a master server to a slave server. The size of the data being changed in a single transaction on the master exceeds the `max_allowed_packet` setting on the slave.

**Which **two** are possible outcomes?**

A. If you are using ROW-based replication, it reduces the size of the data sent to be smaller than the `max_allowed_packet` value, ignoring unused columns.

**B. The slave shuts down the I/O thread and produce an error.**

C. If you are using STATEMENT-based replication, as long as the statement size is smaller than `max_allowed_packet`, your changes propagates to the slave without an error.

**D. The original transaction on the master fails with an error informing you to increase the `max_allowed_packet` value.**

E. The slave processes as much of the transaction as possible until It reaches the `max_allowed_packet` value.

---

**149.** You are given two InnoDB tables with identical structures, 'table1' and 'table2'. The primary key on each is 'id' table1 has two rows, with `id=1` and `id=2`. table2 has no rows. You issue the following statements, which proceed without error or warning:

```
start transaction;
insert into table2 select * from table1 where id=1;
insert into table2 select * from table1 where id=2;
truncate table table1;
insert into table1 select * from table2;
rollback;
```

**How many rows are now in each table?**

- A. In all cases, table1 has two rows and table2 has two rows.
- B. In all cases, table2 has two rows and table1 has no rows.

**C. If autocommit=1, both tables have two rows.**

- D. If autocommit=0, neither table has rows.

---

**150.** A master-slave replication setup has the slave showing the following error:

```
110902 16:47:08 [ERROR] Slave I/O: Got fatal error 1236 from master when reading data
from binary log: 'Client requested master to start replication from impossible position',
Error_code: 1236
110902 16:47:08 [Note] Slave I/O thread exiting, read up to log 'mysql-bin.000033',
position 4621679
```

On the master server, the binary logs show:

```
...
-rw-rw---- 1 mysql mysql 4625729 2011-09-01 13:45 mysql-bin.000032
-rw-rw---- 1 mysql mysql 4620018 2011-09-01 13:45 mysql-bin.000033
```

**What could explain this error?**

- A. The sync\_relay\_log=1000 setting on the slave is too small.
- B. binlog\_cache\_size=1024 is too small and transactions are lost.
- C. enforce\_qtid\_consistency=ON and consistency is broken between the master and the slave.

**D. sync\_binlog=OFF and the master server crashed.**

- E. binlog\_format=STATEMENT and a non-deterministic query was executed.

---

~~**151.** You need to replicate a table from a master to a slave. The master and slave copies of the table will have different numbers of columns. (与12题重复)~~

**Which two conditions must be true?**

- A. Each extra column in the copy with more columns must not have a default value.

**B. Columns that are common to both versions of the table must be defined in the same order on the master and the slave.**

C. The slave database cannot have more columns than the master. Only the master database can have more columns.

D. Columns that are common to both versions of the table must come first in the table definition, before any additional columns are defined on either server.

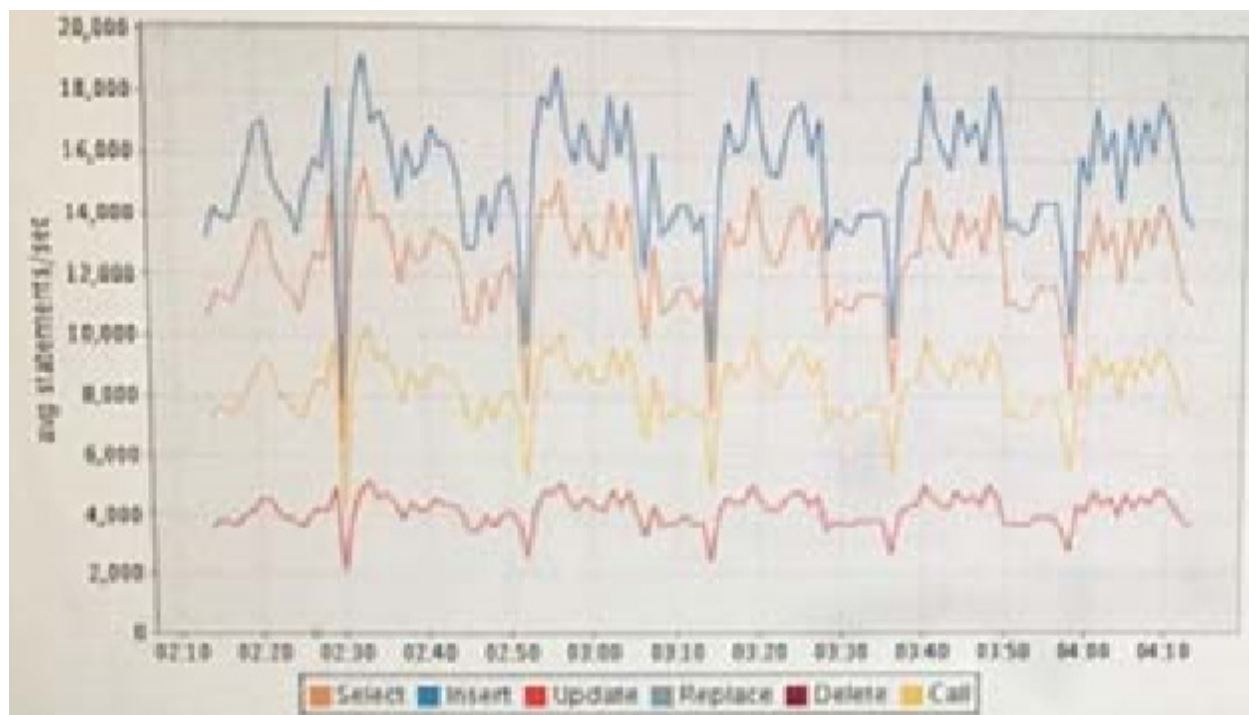
E. The master database cannot have more columns than the slave. Only the slave database can have more columns.

---

**152.** After a database upgrade from 5.5.32 to 5.6.14, the average sustained inserts have increased dramatically, but are not as consistent as before.

Examine the following details:

- On the previous 5.5.32 version, inserts were represented by an almost flat line at around 10000/sec.
- Nothing else has changed in environment.
- All other types of DML and queries are in proportion to their 5.5 ratios.
- The same my.cnf has been used.
- The storage administrator investigated the disk subsystem and found it to have been used only 60% at the peak insert rate of 18000/sec.



**What could be the cause of the problem?**

A. The InnoDB buffer pool is too large and is over committing system memory.

B. The InnoDB log file size is too small.

C. The InnoDB additional memory pool is being flushed.

D. tmp\_table\_size is too small, causing internal temporary tables to be written to disk.

---

**153. What are **two** functions of the mysqlbinlog utility?**

A. to compress binary logs before sending them to slave servers

**B. to extract statements from a binary log that match a given regular expression**

**C. to display the contents of a binary log in text format**

D. to compress relay logs for storage on slave servers

E. to display the contents of a relay log in text format

---

**154. mysqldump was used to create a single schema backup:**

```
shell> mysqldump -u root -p sakila > sakila2013.sql
```

**Which **two** commands will restore the sakila database without interfering with other running databases?**

A. mysql> USE sakila; LOAD DATA INFILE 'sakila2013.sql';

**B. shell> mysql -u root -p sakila < sakila2013.sql**

C. shell> mysqlimport -u root -p sakila sakila2013.sql

**D. shell> mysql -u root -p -e 'use sakila; source sakila2013.sql'**

E. shell> mysql -u root -p --silent < sakila2013.sql

---

**155. You are investigating the performance of the server and see the following information:**

- events\_waits\_summary\_global\_by\_event\_name in the Performance Schema shows that the wait/synch/mutex/sql/LOCK\_table\_cache event is dominating other wait events.
- The Table\_open\_cache\_overflows status variable is 0.

**Which action should be taken to remove the performance bottleneck described here?**

A. Decrease the value of table\_definition\_cache.

B. Increase the value of table\_definition\_cache.

C. Decrease the value of table\_open\_cache.



- D. Increase the value of table\_open\_cache.
  - E. Decrease the value of table\_open\_cache\_instances.
  - F. Increase the value of table\_open\_cache\_instances.
- 

**156.** You are using replication and the binary log files on your master server consume a lot of disk space.

**Which two steps should you perform to safely remove some of the older binary log files?**

- A. Ensure that none of the attached slaves are using any of the binary logs you want to delete.
  - B. Use the command PURGE BINARY LOGS and specify a binary log file name or a date and time to remove unused files.
  - C. Execute the PURGE BINARY LOGS NOT USED command.
  - D. Remove all of the binary log files that have a modification date earlier than today.
  - E. Edit the .index file to remove the files you want to delete.
- 

**157.** You want to shutdown a running MySQL Server cleanly.

**Which three commands that are valid on either Windows or Linux will achieve this?**

- A. shell> pkill -u mysql mysqld\_safe
  - B. shell> service mysql safe\_exit
  - C. shell> /etc/init.d/mysql stop
  - D. shell> mysqladmin -u root -p shutdown
  - E. mysql> STOP PROCESS mysqld;
  - F. shell> net stop mysql
  - G. shell> nmc mysql shutdown
- 

**158.** Consider the following EXPLAIN of a simple join:

```
mysql> EXPLAIN SELECT CountryList.Name, CityList.Name, CityList.Population  
-> FROM CountryList JOIN CityList ON CountryList.Code = CityList.Country
```

```

-> WHERE CityList.Population > 8000000\G
***** 1. row *****
id: 1
select_type: SIMPLE
table: CountryList
type: ALL
possible_keys: NULL
key: NULL
key_len: NULL
ref: NULL
rows : 239
Extra:
***** 2. row *****
id: 1
select_type: SIMPLE
table: CityList
type: ALL
possible_keys: NULL
key: NULL
key_len: NULL
ref: NULL
rows : 4079
Extra: Using where

```

**How many estimated rows must be examined to perform the SELECT?**

- A. the number of rows in the first table. The second table rows are matched by the ON clause.
  - B. the product of the number of rows in each table
  - C. the number of rows in the second table. The first table rows are matched by the WHERE and on clauses.
  - D. the sum of the number of rows in each table**
- 

**159. Which two statements are true about table\_open\_cache?**

- A. It is used to cache row data in open tables.
  - B. it holds file descriptors for open tables.**
  - C. The size of the table\_open cache may be set per-session.
  - D. There is only one table\_open\_cache, which is shared among all sessions.**
- 

**160.** You attempt to connect to a MySQL Server by using the mysql client program. However, you receive the following notice:

```
ERROR 2059 (HY000): Authentication plugin 'mysql_clear_password' cannot be loaded: plugin not enabled
```

**\*\*What would you run to fix the issue? \*\***

- A. the mysql client with the --ignore-password--hashing option
- B. the mysql\_secure\_installation script to update server security settings
- C. the mysql\_client with the --enable-cleartext-plugin option
- D. the mysql\_upgrade script
- E. the install plugin command for the mysql\_cleartext\_password plugin

**161.** You notice that query performance decreases significantly while backing up MySQL with mysqldump.

You have:

```
+-----+-----+
| Variable_name          | Value      |
+-----+-----+
| innodb_max_dirty_pages_pct | 75         |
| innodb_old_blocks_pct   | 37         |
| innodb_old_blocks_time  | 0          |
| innodb_sort_buffer_size | 1048576    |
+-----+-----+
```

You monitor SHOW ENGINE INNODB STATUS during backup and have:

```
-----
BUFFER POOL AND MEMORY
-----
Total large memory allocated 12877824000; in additional pool allocated 0
Dictionary memory allocated 312221600
Buffer pool size      767988
Free buffers          0
Database pages        742612
Old database pages    273879
Modified db pages     175072
Pending reads         0
Pending writes: LRU 0, flush list 0, single page 0
Pages made young 13079116, not young 1076972005
1293.85 youngs/s, 0.00 non-youngs/s
Pages read 39196378, created 14737983, written 30910606
1287.86 reads/s, 0.00 creates/s, 0.00 writes/s
Buffer pool hit rate 982 / 1000, young-making rate 85 / 1000 not 0 / 1000
Pages read ahead 0.00/s, evicted without access 0.00/s, Random read ahead 0.00/s
```

```
LRU len: 742612, unzip_LRU len: 0
I/O sum[0]:cur[0], unzip sum[0]:cur[0]
```

**Which configuration change will improve performance during backups?**

- A. decreasing innodb\_max\_dirty\_pages\_pct to 0
- B. increasing innodb\_sort\_buffer\_size to 200MB
- C. increasing innodb\_old\_blocks\_pct to 50
- D. increasing innodb\_old\_blocks\_time to 1000**

---

**162.** You have a scheduled task on Linux that executes mysqldump against the localhost server periodically.

When checking the logs of this event to ensure that things are working and that backups will restore, you notice an output that is concerning.

The command the scheduled task is executing as follows:

```
$ mysqldump -u backupuser -h 127.0.0.1 -pt100043va living --protocol=TCP >
/backups/latest.sql
Warning: Using a password on the command-line interface can be insecure.
```

**Which two methods are available to avoid the warning?**

A. Connect through the socket rather than the default --protocol=TCP for the local connection.

```
$ mysqldump -u backupuser -h 127.0.0.1 -pt100043va living --socket=/tmp/mysql.sock >
/backups/latest.sql
```

**B. Store your password in an option file eg: ~/.my.cnf and use --defaults-file so that it is read and used.**

**[client]**

**password=it100043va**

**C. Use mysql\_config\_editor, which allows you to store encrypted login credentials in your home directory.**

D. Use the password validation plugin available to improve user name and password strength.

---

**163.** You are looking for the cardinality of the idx\_actor\_last\_name index for the actor table.

**Which query will provide you with this information?**

A. `SELECT * FROM INFORMATION_SCHEMA.TABLES WHERE INDEX NAME='idx_actor_last_name':`

B. `SHOW TABLE STATUS FROM actor WHERE Index = 'idx_actor_last_name';`

C. `SELECT * FROM INFORMATION_SCHEMA.STATISTICS WHERE TABLE_NAME='actor' AND INDEX_NAME = 'idx_actor_last_name ';`

D. `DESCRIBE INDEX FROM 'actor' WHERE Index = 'idx_actor_last_name':`

---

**164. Which **two** are correct steps in taking a binary backup of MyISAM tables?**

A. Always stop the server prior to the backup.,

B. Stop the server or lock the tables prior to the backup.

C. Stop the server or lock the databases prior to the backup.

D. Make a copy of the .frm, .MYD, and the .MYI files.

E. Make a copy of the binary log and tablespace files.

---

**165. Which **two** statements are true about the mysql\_upgrade command?**

A. The mysql\_upgrade command is a utility that patches the mysqld binary from its base version to a new version.

B. The mysql\_upgrade command is run to check and attempt to fix tables for certain Incompatibilities with the current version of MySQL.

C. The mysql\_upgrade command executes on a stopped MySQL server data directory to ensure that it is prepared for upgrade.

D. The mysql\_upgrade command also executes the mysqlcheck command in order to provide all of its functionality.

---

**166. Consider the events\_% tables in Performance Schema.**

**Which **two** methods will clear or reset the collected events in the tables?**

A. using DELETE statements, for example, `DELETE FROM performance_schema.events_waits current;`

B. using the statement `RESET PERFORMANCE CACHE;`

C. using the statement `FLUSH PERFORMANCE CACHE;`

D. using TRUNCATE statements, for example, TRUNCATE TABLE performance\_schema.events\_waits\_current;

E. disabling and re-enabling all instruments

F. restarting MySQL

---

**167. What are **four** capabilities of the mysql client program?**

A. creating and dropping databases

B. creating, dropping, and modifying tables and indexes

C. shutting down the server by using the SHUTDOWN command

D. creating and administering users

E. displaying replication status information

F. initiating a binary backup of the database by using the START BACKUP command

---

**168. Which **two** statements are true about InnoDB auto-increment locking?**

A. The auto-increment lock can be a table-level lock.

B. InnoDB never uses table-level locks.

C. Some settings for innodb\_autoinc\_lock\_mode can help reduce locking

D. InnoDB always protects auto-increment updates with a table-level lock

E. InnoDB does not use locks to enforce auto-increment uniqueness.

---

**169. Consider the ANALYZE TABLE command.**

**In which **two** situations should this command should be used?**

A. when you need to find out why a query is taking a long time to execute

B. when you want to update index distribution statistics

C. after large amounts of table data have changed

D. when you want to check a table's structure to see if it may have been damaged and needs repair

---

**170.** A particular government's security policy is to have very strict data encryption and safety settings.  
This is done by restricting access based on their own CA authority and limiting access to particular users within a department.

**Which method could be used to restrict access as required?**

A. using GRANT USAGE, SSL ... ON \*.\* TO user@remotchost IDENTIFIED BY 'secret\_password'

B. using GRANT ... REQUIRE SSL for a secure connection

C. using GRANT ... REQUIRE X509 AND REQUIRE ISSUER '/C....' AND REQUIRE SUBJECT '/C=....'

D. using GRANT USAGE, X509, ... ON . TO user@remotchost IDENTIFIED BY 'secret\_password'

---

**171.** Which **two** statements are true about the CSV engine?

A. it provides fast linear indexing of data.

B. It provides an easy import/export mechanism for data.

C. it is stored in three files: a data file, a metadata file, and an .frm file.

D. It supports a range of delimiters and field enclosures for maximum benefit.

E. It allows for faster full ext matching because it uses plain text storage.

---

**172.** A MySQL database uses all InnoDB tables and is configured as follows:

```
shell> cat /etc/my.cnf
[mysqld]
log-bin
server-id=1
```

You will be setting up a replication slave by using mysqldump. You will need a consistent backup taken from your running production server. The process should have minimal impact to active database connections.

**Which **two** arguments will you pass to mysqldump to achieve this?**

A. --create-apply-log

B. --master-data

C. --single-transaction

D. --lock-all-tables

E. --skip-opt

---

**173.** Consider the MySQL Enterprise Audit plugin. You are checking user accounts and attempt the following query:(与66题重复)

```
mysql> SELECT user, host., plugin FROM mysql.users; ERROR 1146 (42S02): Table 'mysql.users' doesn't exist
```

**Which subset of event attributes would indicate this error in the audit.log file?**

A. NAME="Query" STATUS="1146" SQLTEXT="select user, host from users"/>

B. NAME="Error" STATUS="1146" SQLTEXT="Error 1146 (42S02): Table 'mysql.users' doesn't exist"/>

C. NAME="Query" STATUS="1146" SQLTEXT="Error 1146 (42S02): Table 'mysql.users' doesn't exist"/>

D. NAME="Error" STATUS="0" SQLTEXT="Error 1146 (42S02): Table 'mysql.users' doesn't exist"/>

---

**174. Which **two** statements are true regarding partitioning in MySQL?**

A. Tables with BLOB and TEXT columns cannot be partitioned.

B. Partitioning allows easier management of smaller data sets for certain queries.

C. Partitioning allows different columns to be stored in separate files.

D. The partitioning expression is an integer or function that returns an integer value or NULL value.

E. Partitioning is only available for those storage engines that implements it natively.

---

**175.** You successfully install the MySQL 5.6 server with a default configuration by using the RPM packages. You need to move the datadir location to your storage array and make a few configuration adjustments.

The MySQL server has no data that you wish to keep.

You carry out the following actions:



```

- Stop the server gracefully.
*/etc/init.d/mysql stop

- Edit /etc/my.cnf and change the following from default settings:
*[mysqld]
datadir = /data/mysql/
sql-mode="STRICT_TRANS_TABLES, NO_ZERO_IN_DATE, NO_ZERO_DATE,
NO_AUTO_CREATE_USER, NO_ENGINE_SUB
innodb_data_home_dir = /data/mysql/
innodb_data_file_path = ibdata1:500M:autoextend
event_scheduler = on

- List the files in the current datadir:
*ls /var/lib/mysql
hostname.err  ib_logfile0  mysql          RPM_UPGRADE_HISTORY  test
ibdata1      ib_logfile1  performance_schema  RPM_UPGRADE_MARKER-LAST

- Move the files in the data directory
* cd /var/lib/mysql/
* cp * /data/mysql/

- List the files now in the new datadir:
*ls /data/mysql/
hostname.err  ib_logfile0  RPM_UPGRADE_HISTORY
ibdata1      ib_logfile1  performance_schema  RPM_UPGRADE_MARKER-LAST

```

The MySQL server does not start anymore after your adjustments.

**What are two steps in combination that will allow the server to start correctly?**

A. Execute `rm -f /data/mysql/ib*`

B. Execute `mysql_secure_installation --new-datadir`.

C. Copy all files and folders to the new datadir:

`cp -fR /var/lib/mysql/ * /data/mysql/`

D. Remove `event_scheduler = on` from `my.cnf`. This must be set when the server is running to be properly initialized.

E. Start the MySQL server with the correct `datadir` argument:

`/etc/init.d/mysql --datadir=/data/mysql/`

F. Execute `mysql_install_db --user=mysql --datadir=/data/mysql/`.

**176. Which two are true regarding MySQL binary and text backups?(与27题重复)**

A. Binary backups are usually faster than text backups.

B. Binary backups are usually slower than text backups.

C. Text backups are human-readable while binary backups are not.

D. Binary backups are not portable across different operating systems.

---

**177.** In a design situation, there are multiple character sets that can properly encode your data.

**Which three should influence your choice of character set?**

A. disk usage when storing data

B. syntax when writing queries involving JOINS

C. comparing the encoded data with similar columns on other tables

D. memory usage when working with the data

E. character set mapping Index hash size

---

**178.** How does the InnoDB storage engine handle deadlocks when they are detected?

A. The affected transactions wait for innodb\_lock\_wait\_timeout seconds, and then roll back.

B. The transaction isolation level determines which transaction is rolled back.

C. One of the affected transactions will be rolled back, the other is allowed to proceed.

D. Both the affected transactions will be rolled back.

E. The innodb\_locks\_unsafe\_for\_binlog setting determines which transaction is rolled back.

---

**179.** While attempting to set up a new replication slave on host '192.168.0.25' with the user 'replication' you encounter the following error:

```
ERROR 1218 (08S01): Error connecting to master: Host '92.168.0.25' is not allowed to connect to this MySQL server
```

**What should you do to resolve this error?**

A. Edit the DNS table on the master to include the domain name for the IP address of 192.168.0.25.

B. Add the user replication@192.168.0.25 with the correct password to the slave.

C. Edit the my.ini file on the slave so that the master-host variable is equal to the IP address of the master, and restart the slave.

D. Add the user replication@192.168.0.2 with the correct password to the master.

---

**180. Which two statements are true regarding MySQL security?**

A. The mysqld process should not be run as root or administrator.

B. The mysqld process should be run as root or administrator.

C. The mysqld process owner should own all files and directories to which the server writes.

D. The root or administrator users should own all files and directories to which the server writes.

E. The mysql user needs to have sudo privileges.

---

**181.** You back up by using mysqldump.

**Which configuration is required on the MySQL Server to allow point-in-time recovery?**

A. binlog\_format=ROW

B. binlog\_format=STATEMENT

C. gtid\_enable

D. apply-log

E. log-bin

---

**182. What are three key features of InnoDB in MySQL 5.6?**

A. It offers a secondary API by using memcache for interaction.

B. it supports fast index creation and dropping.

C. it utilizes T-TREE indexes for better performance of data and indexes in memory.

D. It has integrated failover capabilities at the storage engine level

E. It provides full transactional atomicity, consistency, isolation, durability (ACID) compliance.

---

**183. Which statement is true about the FLUSH LOGS command?**

- A. It requires the RELOAD, FILE, and DROP privileges.
  - B. It closes and reopens all log files.**
  - C. It closes and sends binary log files to slave servers.
  - D. It flushes dirty pages in the buffer pool to the REDO logs.
- 

~~184. Consider the following statement on a RANGE partitioned table: ALTER TABLE orders DROP PARTITION p1, p3;(与28题重复)~~

**What is the outcome of executing the above statement?**

- A. Only the first partition (p1) will be dropped as only one can be dropped at any time.
  - B. All data in p1 and p3 partitions are removed, but the table definition remains unchanged.
  - C. A syntax error will result as you cannot specify more than one partition in the same statement.
  - D. All data in p1 and p3 partitions are removed and the table definition is changed.**
- 

**185. Which **two** events will cause a slave server to create a new relay log file?**

- A. starting of the I/O thread**
  - B. execution of the FLUSH LOGS Statement**
  - C. starting of the SQL thread
  - D. reaching the slave\_pending\_jobs\_size\_max limit
  - E. execution of FLUSH TABLES WITH READ LOCK
- 

**186. What are **two** functions of the max\_binlog\_size variable?**

- A. It determines the maximum size of the relay log files if the value of max\_relay\_log\_size is 0.**
- B. It determines the collective maximum size for all binary log files created.
- C. it determines the size when the server will rotate the binary logs.**
- D. It determines the maximum size of a transaction that can be written in a binary log in row-based replication.

- E. It determines the maximum size of each binary log packet from the master to the slave.
  - F. It determines the ceiling for a relay log and truncates to max\_binlog\_size.
- 

**187.** You have a login-path named "adamlocal" that was created by using the `mysql_config_editor` command.

You need to check what is defined for this login-path to ensure that it is correct for your deployment.

You execute this command:

```
$ mysql_config_editor print --login-path=adamlocal
```

**What is the expected output of this command?**

- A. The command prints all parameters for the login-path. The password is printed in plain text.
  - B. The command prints all parameters for the login-path. The password is shown only when you provide the `--password` option.
  - C. The command prints all parameters for the login-path. The password is replaced with stars.
  - D. The command prints the encrypted entry for the login-path. It is only possible to see if an entry exists.
- 

**188. Which three are key advantages of standard MySQL replication?**

- A. provides arbitrary geographic redundancy at no extra overhead to master
  - B. can easily add slaves for read scaling
  - C. enables automatic resync of databases when discrepancies are detected
  - D. synchronously guarantees identical slave copy
  - E. supports native automatic failover
  - F. is easy to configure and has low performance overhead
- 

**189.** Consider the MySQL Enterprise Audit plugin.

You add the following lines to the `my.cnf` configuration file:

```
[mysqld]  
plugin-load=audit_log.so  
audit-log=FORCE_PLUS_PERMANENT
```

You attempt to start up the MySQL service and notice that it fails to start.

Which **two** statements would explain why the service did not start?

- A. FORCE\_PLUS\_PMANENT is not valid for the audit-log option.
  - B. The audit\_log.so library does not exist.
  - C. The audit\_log.so library is in a location that is different from that defined by the plugin\_dir option.
  - D. The audit plugin must be loaded dynamically by using the INSTALL PLUGIN command.
  - E. The audit log file does not exist in which to write audit events.
  - F. The audit\_log.so library is not an executable file.
- 

~~190. Consider a total and Sustained failure of the disk on which the MySQL data directory resides. (与1题重复)~~

Which **three** High Availability scenarios are resilient to this case?

- A. active/passive Distributed Replicated Block Device (DRBD)
  - B. standard master-slave replication
  - C. MySQL service for Windows Cluster
  - D. MySQL NDB Cluster
  - E. Oracle Solaris Cluster
- 

191. You examine the output of SHOW GLOBAL STATUS and notice that the value of Created\_tmp\_disk\_tables is consistently increasing.

Which **two** variables would likely fix this issue?

- A. table\_open\_cache
- B. table\_open\_cache\_instances
- C. table\_definition\_cache

D. tmp\_table\_size

E. max\_heap\_table\_size

F. max\_tmp\_tables

---

**192.** You are installing a MySQL server on a fresh installation of linux by using the MySQL Enterprise RPM packages.(与98题重复)

Which **three** actions are performed during installation?

A. setting up a mysql user

B. setting up a mysql group

C. initializing the data directory

D. executing the mysql\_secure\_installation tool

E. prompting a user to set the MySQL root user password

---

**193.** You occasionally have blocking transactions on your system. You want to create a query that will return the thread ID of Connections that are running for longer than 30 seconds and are blocking at least one other connection.

Which **two** INFORMATION\_SCHEMA tables, when joined, will provide this information?

A. PROCESSLIST

B. INNODB\_TRX

C. INNODB\_METRICS

D. STATISTICS

E. INNODB\_LOCK\_WAITS

F. EVENTS

G. INNODB\_SYS\_TABLESTATS

---

**194.** Which **two** methods can be used to Install a MySQL server as a Windows service?

A. Configure the service by using the MySQL Installer GUI.

B. Use the install option of the mysqld command.

C. Run the `mysql_install service` command.

D. Add the `--service` option to the MySQL configuration file.

---

**195.** You enable the Slow Query Log. You want to log only those queries that perform full table scans or take longer than 0.5 seconds to complete.

Which **two** options should be used with the Slow Query Log?

A. `--log-queries-not-using-indexes`

B. `--log-queries-with-table-scans`

C. `--log-sql-stats`

D. `--long-query-time`

E. `--query-duration`

F. `--max-elapsed-time`

---

**196.** Review the definition of the `phone_list` view.

```
CREATE OR REPLACE
ALGORITHM=MERGE
DEFINER=`root`@`localhost`
SQL SECURITY DEFINER
VIEW `phone_list` AS
SELECT
  e.id as id,
  e.first_name AS `first_name`,
  e.last_name AS `last_name`,
  coalesce(ph1.phone_no, '--') AS `office_no`,
  coalesce(ph2.phone_no, '--') AS `cell_no`
FROM employees e
LEFT JOIN employee_phone ph1
  ON ph1.emp_id = e.id AND ph1.type = 'office'
LEFT JOIN employee_phone ph2
  ON ph2.emp_id = e.id AND ph2.type = 'mobile'
```

The tables `employees` and `employee_phone` are InnoDB tables; all columns are used in this view.

The contents of the `phone_list` view are as follows:

```
mysql> select * from phone_list;
+-----+-----+-----+-----+-----+
| id  | first_name | last_name | office_no | cell_no |
+-----+-----+-----+-----+-----+
```



1	John	Doe	x1234	--
---	------	-----	-------	----

Which method can you use to change the cell\_no value to '555-8888' for John Doe?

- A. DELETE FROM phone\_list WHERE first\_name='John' and last\_name='Doe'; INSERT INTO phone\_list (first\_name, last\_name, office\_no, cell\_no) VALUES ('John', 'Doe', 'x12345', '555-8888');
- B. INSERT INTO employee\_phone (emp\_id, phone\_no, type) VALUES (1, '555-8888', 'mobile');
- C. UPDATE phone\_list SET cell\_no='555-8888' WHERE first\_name='John' and last\_name='Doe';
- D. UPDATE employee\_phone SET phone\_no='555-8888' where emp\_id=1;

197. Which **two** INFORMATION SCHEMA tables contain information about the execution state of connections in the MySQL Server?

- A. INFORMATION\_SCHEMA.PROCESSLIST
- B. INFORMATION\_SCHEMA.EVENTS
- C. INFORMATION\_SCHEMA.INNODB\_TRX
- D. INFORMATION\_SCHEMA.INNODB\_CMP
- E. INFORMATION\_SCHEMA.SESSION\_STATUS
- F. INFORMATION\_SCHEMA.THREAD\_STATUS

198. You install a copy of MySQL 5.6.13 on a brand new Linux server by using the RPM packages. The server starts successfully as verified by the following commands:

```
$ pidof mysqld
3132

$ tail -n2 /var/lib/mysql/hostname.err
2013-08-18 08:18:38 3132 [Note] /usr/sbin/mysqld: ready for connections.
Version: '5.6.13-enterprise-commercial-advanced' socket: '/tmp/mysql.sock' port: 3306
MySQL Enterprise Server - Advanced Edition (Commercial)
```

You attempt to log in as the root user with the following command:

```
$mysql -u root
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: NO)
```

**Which statement is true about this scenario?**

- A. The RPM Installation script sets a default password of password for new installations.
  - B. The local root user must log in with a blank password initially: `mysql -u root -p`.
  - C. New security measures mean that the `mysql_secure_installation` script must be run first on all new installations.
  - D. The `mysql_install_db` post installation script used `--random-passwords`.
- 

**199.** You create a login-path by using `mysql config editor` on a Linux operating system as the user 'sean'.

```
[sean@fedora --]$ mysql_config_editor set --login-path=seanfedora --host=localhost --
user=sean --password
```

**Which **two** statements are true about the command that you have executed?**

- A. Any user on the OS can access this login-path from the client utilities by specifying `--login-path=seanfedora`.
  - B. The user sean can access the login-path from the client utilities by specifying `login-path=seanfedora`.
  - C. The login-path credentials are stored encrypted in the user's home directory in `.mylogin.cnf`.
  - D. The login-path credentials are stored encrypted in the MySQL database for all users to access.
- 

**200.** You are investigating the performance of a slave and see the following in the Performance Schema on the slave:

```
slave> SELECT e.*
-> FROM performance_schema.threads t
-> INNER JOIN performance_schema.events_waits_summary_by_thread_by_event_name e
USING (THREAD_ID)
-> WHERE t.NAME = 'thread/sql/slave_sql' AND SUM_TIMER_WAIT > 0
-> ORDER BY SUM_TIMER_WAIT DESC;
+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+
```

THREAD_ID	EVENT_NAME	COUNT_STAR	
SUM_TIMER_WAIT	MIN_TIMER_WAIT	AVG_TIMER_WAIT	MAX_TIMER_WAIT
369	wait/io/table/sql/handler	2200224	
18162475138233	7191	8647812	11650897539
369	wait/synch/mutex/innodb/trx_mutex	2102626	
5570702385678	846	2649249	1243743093
369	wait/io/file/innodb/innodb_log_file	2	
39158237295	17746119	19579118436	39140491176
369	wait/synch/mutex/innodb/trx_undo_mutex	2048	
6376982184	27072	3113703	111974445
369	wait/synch/rwlock/innodb/index_tree_rw_lock	2048	
6290907606	2115	3071403	807385176
369	wait/io/file/sql/relaylog	10	
86453163	3560391	8645274	24726042
369	wait/synch/mutex/mysys/IO_CACHE::append_buffer_lock	6	
18917406	2294352	3152619	6772230
369	wait/synch/mutex/sql/THD::LOCK_thd_data	5	
12538566	2397564	2507544	2739348
369	wait/lock/table/sql/handler	2	
11474298	3246102	5737149	8228196
369	wait/synch/mutex/mysys/THR_LOCK::mutex	2	
5086152	2480472	2543076	2605680
369	wait/synch/mutex/mysys/my_thread_var::mutex	1	
3042639	3042639	3042639	3042639

On the master, you have:

```
master> SELECT @@session.binlog_format, @@global.binlog_format;
+-----+-----+
| @@session.binlog_format | @@global.binlog_format |
+-----+-----+
| ROW                      | ROW                      |
+-----+-----+
```

Which **two** statements are true based on the information given?

- A. The slave will benefit from more InnoDB buffer pool instances.
- B. The slave has updated more than two million rows.
- C. There are no PRIMARY KEYS and no UNIQUE KEYS on the updated tables.
- D. The slave's SQL thread has handled one statement.
- E. The updated tables were read from disk.

如果觉得对您有帮助，欢迎打赏

如有遗漏或错误，欢迎反馈，wechat: cjc44020

欢迎加入qq群: 120242978 (mysql ocp讨论群)



“人生苦短，我求包养”

芬达 的赞赏码

