

1z0-883-fixed version2&1z0-883:

1.

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: 1-8

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	Goerge

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";

Answer:E

2.

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.

Answer:D

3.

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 ('bon'@'localhost') does not exist

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

A.

Execute `SELECT * FROM mysql.routines WHERE DEFINER='bob@localhost';`.

B.

Execute `SHOW ROUTINES WHERE DEFINER='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.

Answer:C

4.

When designing an InnoDB table, identify an advantage of using the BIT datatype Instead of one of the integer datatypes.

A.

BIT columns are written by InnoDB at the head of the row, meaning they are always the first to be retrieved.

B.

Multiple BIT columns pack tightly into a row, using less space.

C.

BIT (8) takes less space than eight TINYINT fields.

D.

The BIT columns can be manipulated with the bitwise operators &, |, ~, ^, <<, and >>. The other integer types cannot.

Answer:C

5.

ROW-based replication has stopped working. You investigate the error log file and find the following entries:

2013-08-27 14:15:47 9056 [ERROR] Slave SQL: Could not execute Delete_rows event on table test.t1; Can't find record in 't1', Error_code: 1032; handler error

HA_ERR_KEY_NOT_FOUND; the event's master log 56_master-bin. 000003, end_log_pos 851, Error_code: 1032

2013-08-27 14:15:47 9056 [warning] Slave: Can't find record in 't1' Error_code: 1032

2013-08-27 14:15:47 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_masterbin. 000003' position 684

Why did you receive this error?

A.

The slave SQL thread does not have DELETE privileges to execute on test.t1 table.s

B.

The table definition on the slave -litters from the master.

C.

Multi-threaded replication slaves can have temporary errors occurring for cross database updates.

D.

The slave SQL thread attempted to remove a row from the test.t1 table, but the row did not exist.

Answer:D

6.

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 database?

A.

```
Mysql> USE sakila; LOAD DATA INFILE 'sakila2013.sql';
```

B.

```
Shell> mysql -u root -p sakila sakila2013.sql
```

C.

```
Shell> mysql import -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
```

Answer:BD

7.

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 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="1146"

SQLTEXT="select user,host from users"/>

E.

NAME="Error"

STATUS="0"

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

Answer:A

B.

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

8.

Which query would you use to find connections that are in the same state for longer than 180 seconds?

A.

SHOW FULL PROCESSLIST WHERE Time > 180;

B.

SELECT * FROM INFORMATION_SCHEMA.EVENTS WHERE STARTS < (DATE_SUB (NOW (), INTERVAL 180 SECOND));

C.

SELECT * FROM INFORMATION_SCHEMA.SESSION_STATUS WHERE STATE < (DATE_SUB (NOW (), INTERVAL 180 SECOND));

D.

SELECT * FROM INFORMATION_SCHEMA.PROCESSLIST WHERE TIME > 180;

Answer:D

9.

A database exists as a read-intensive server that is operating with `query_cache_type = DEMAND`.

The database 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 singlethreaded nature.

D.

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

Answer:C

10.

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 parameter for the login-path. The password is replaced with stars.

D.

The command prints the encrypted entry for the login-path. The is only possible to see if an entry exists.

Answer:C

11.

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.

Answer:A.B

12.

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.

Answer: A.C.

13.

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.

Answer: B.

14.

You execute the following statement in a Microsoft Windows environment. There are no conflicts in the path name definitions.

C: \> mysql -install Mysql56 -defaults -file = C : \my -opts.cnf

What is the expected outcome?

A.

Mysqld acts as an MSI installer and installs the Mysql 5.6 version, with the c: \my-opts.cnf configuration file.

B.

Mysql is installed as the Windows service name Mysql56, and uses c: \my-opts.cnf as the configuration file

C.

An error message is issued because -install is not a valid option for mysql.

D.

A running Mysql 5.6 installation has its runtime configuration updated with the server variables set in c: \my-opts.cnf.

Answer: B.

15.

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

Answer: D.F.

16.

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

Answer: A.B.D.E.

17.

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.

Answer: C.D.

18.

You install a copy of Mysql 5.6.13 on a brand new Linux server by using 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_bd` post-installation script used `--random-password`.

Answer:D.

19.

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 in 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.

Answer:C.

20.

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

Answer: A.C.E

21.

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.

Answer: A.C.D.

22.

Consider the query:

```
Mysql> SET @run = 15;
```

```
Mysql> EXPLAIN SELECT objective, stage, COUNT (stage)
```

```
FROM iteminformation
```

```
WHERE run=@run AND objective='7.1'
```

```
GROUP BY objective,stage
```

```
ORDER BY stage;
```

Id	Select_type	Table	Type	Possible_keys	Key	Key_len	Ref	Rows	Extra
1	SIMPLE	Iteminformation	Ref	Run,run_2	Run_2	5	Const	355	Using where

The iteminformation table has the following indexes;

```
Mysql> SHOW INDEXES FROM iteminformation:
```

Table	Non_unique	Key_name	Seq_in_index	Column_name	collation	cardinality
Iteminformation	0	Run	1	Run	A	NULL
Iteminformation	0	Run	2	Name	A	NULL
Iteminformation	1	Run_2	1	Run	A	20
Iteminformation	1	Run_2	2	Stage	A	136

This query is run several times in an application with different values in the WHERE clause in a growing data set.

What is the primary improvement that can be made for this scenario?

A.

Execute the run_2 index because it has caused a conflict in the choice of key for this query.

B.

Drop the run_2 index because it has caused a conflict in the choice of key for this query.

C.

Do not pass a user variable in the WHERE clause because it limits the ability of the optimizer to use indexes.

D.

Add an index on the objective column so that it can be used in both the WHERE and GROUP BY operations.

E.

Add a composite index on (run,objective,stage) to allow the query to fully utilize an index.

Answer:E

23.

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

Answer:A.B.E.

24.

Which three statements are characteristic of the MEMORY storage engine?

A.

Each table is represented on disk as an .frm file.

B.

Each table has a corresponding .MYI and .MYD file.

C.

It can support foreign keys.

D.

It cannot contain text or BLOB columns.

E.

Table contents are not saved if the server is restarted.

F.

It can support transactions

Answer: A.D.E.

25.

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"  
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 kate was successful.

E.

A connection failed due to authentication being unsuccessful.

Answer: B.E.

26.

Consider the Mysql Enterprise Audit plugin.

Which statement is true when you identify a connection event that has used external authentication?

A.

The attribute "STATUS" is set to the string EXTERNAL_AUTH.

B.

The attribute "PRIV_USER" contains the username.

C.

The event type that is given in the attribute "NAME" is EXTERNAL_AUTH.

D.

There is no differentiation between native and external authentication events.

E.

External authentication is managed through external auditing logs.

F.

The "PROXY_PRIV" user shows a username if external authentication is used.

Answer:E

27.

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 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';
```

Answer:A.

28.

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 it enabled.

C.

There is a constant overhead regardless of settings and workload.

D.

The overhead depends on the settings of the Performance Schema.

Answer: B

29.

Which statement is true about 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.

Answer: B.

30.

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.

Answer: B.D.

31.

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.

Answer: B.

32.

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

Answer: A.B.

33.

The InnoDB engine has a feature known as clustered indexes.

Which three statements are true about clustered indexes as used in InnoDB?

A.

A primary key must exist for creation of a clustered index.

B.

A primary key is used as a clustered index.

C.

A clustered index is a grouping of indexes from different tables into a global index for faster searching.

D.

If no indexes exist, a hidden clustered index is generated based on row IDs.

E.

A clustered index provides direct access to a page containing row data.

F.

The first unique index is always used as a clustered index and not a primary key.

G.

A clustered index allows fulltext searching within InnoDB,

Answer: B.D.E.

34.

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

Answer:C.F.

???

E.

Installing Mysql on the application server, and running the database and application on the same server

35.

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)

Answer:D.

36.

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 implement it natively.

Answer: B, D.

? ?

E.

Partitioning is only available for those storage engines that implement it natively.

37.

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

Which command would you execute from a Mysql prompt?

A.

```
STOP SLAVE;  
SETGTID_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;
```

Answer:B.

? ?

A.

```
STOP SLAVE;  
SETGTID_NEXT="aaa-bbb-ccc-ddd-eee: 3";  
BEGIN;  
COMMIT;  
SET GTID_NEXT="AUTOMATIC";  
START SLAVE
```

38.

User A issues the command:

LOCK TABLES pets READ;

Which command can User B execute against the pets table?

A.

UPDATE pets...

B.

SELECT....FROM pets

C.

INSERT INTO pets...

D.

ALTER TABLE pets...

Answer:B.

39.

When backing up a replication slave, which three should also be backed up in addition to data?

A.

The master.info and relay.info files

B.

The relay log files

C.

The relay index file

D.

Mysql.slave_master_info table

E.

Mysql.slave_relay_log_info table

F.

Mysql.slave_worker_info table

Answer:A.B.C.

40.

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

Answer: C.D.F.

?????

A.

Shell> pkill -u mysql mysqld_safe

41.

What are two methods of taking a binary backup of a Mysql Server using InnoDB storage engine?

A.

Mysql Enterprise Backup

B.

Mysqldump with – binary-data option

C.

Mysqldumpslow

D.

File system snapshots

E.

Mysqldumpslow

Answer:A.C.

? ?

D.

File system snapshots

42.

Consider the following table:

```
CREATE TABLE 'game' (  
  'id' int (10) unsigned NOT NULL AUTO_INCREMENT,  
  'keyword' 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  
g01305 VALUES LESS THAN (TO_DAYS ('2013-05-01 00:00:00') ),  
gMORES VALUES LESS THAN (MAXVALUE) );
```

B.

```
ALTER TABLE games  
ADD PARTITION g201350 VALUES LESS THAN (TO_DAYS ('2013-05-01 00:00:00') );
```

C.

```
ALTER TABLE games  
COALESCE PARTITION (gMORES)  
INTO  
g01305 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 PARTITION gMORES,
ADD PARTITION
g201305 VALUES LESS THAN (TO_DAYS ('2013-05-01 00:00:00' ) ),
gMORES VALUES LESS THAN (MAXVALUE) );
```

Answer:A.

43.

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 separate directories on the same physical disk for log files and data files

C.

Placement of InnoDB log files and datadir on separate physical disks

D.

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

E.

Use of `delay_key_write=ON` for batch index update

Answer: C.D.E.

44.

You want a record of all queries that are not using indexes.
How would you achieve this?

A.

By enabling the Slow Query Log because all queries that are not using indexes will be logged automatically

B.

By enabling the Error Log because not using indexes is an error

C.

By enabling the Slow Query Log and using the `– log-queries-not-using-indexes` option

D.

By enabling the Error Log and using the `– log-queries-not-using-indexes` option

Answer:C.

45.

The validate_password plugin is loaded and displays the following settings in global variables:

Mysql> SHOW VARIABLES LIKE 'validate_password%';

Variable_name	Value
Validate_password_dictionary_file	
Validate_password_length	8
Validate_password_mixed_case_count	1
Validate_password_number_count	2
Validate_password_policy	MEDIUM
Validate_password_special_char_count	1

When attempting to set your password, you get the following error:

Mysql> SET PASSWORD = PASSWORD ('Hoverl@%');

ERROR 1819 (HY000): Your password does not satisfy the current policy requirements

What is the cause of the error?

A.

The password is eight characters long, but needs to exceed validate_password_length to be valid.

B.

All of the MEDIUM password policy requirements have not been honored.

C.

The password matches a substring Hover as a dictionary word.

D.

The password does not match the validate_password_number_count requirement.

E.

There is no dictionary file defined, so password validation cannot work as expected.

Answer:D.

46.

You attempt to connect to a Mysql Server by using the mysql 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

Answer:C.

47.

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.

Mysql, mysqld.safe, and mysql.server reside in different locations but are all symlinked to the same script.

Answer:A.

48.

Which three statements describe how the strict SQL mode provides added security?

A.

It rejects statements that try to insert out-of-range values

B.

It rejects invalid dates.

C.

It limits the operations that the server can perform.

D.

It rejects queries that produce out-of-range values.

E.

It rejects dates with zero day or month values.

Answer: A.B.E.

49.

Following a server crash, the automatic recovery of InnoDB fails.
How would you begin to manually repair the InnoDB tables?

A.

Start the server with the `– innodb_force_recovery` option set to a non-zero value.

B.

Start the server as usual, and then execute the `REPAIR TABLE` command.

C.

Start the server as usual, and then execute the `CHECK TABLE` command.

D.

Start the server with the `– innodb_recover_options` option set to `FORCE`.

Answer:A

50.

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 privilege to limit remote authentication

D.

Setting – mysql_secure_configuration to enable paranoid mode

E.

Using SSL when transporting data over remote networks

Answer:A.C.E.

51.

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_LOG_FILE = hostname-relay-bin.00004

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_LOG_FILE = 'hostname-relay-bin.00004', 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;

Answer: B.

A??

52.

A user has deleted the 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	NO
gtid_mode	NO

You have identified that the DELETE statement to skip has the Global Transaction Identifier (GTID) 'dbbe7da-fe25-11e2-b6c7-0800274aa49e:5' and you replay the binary log with:

```
Mysqldbinnlog --exclude-gtids='dbbe07da-fe25-11e2-b6c7-0800274aa49e:5' binlog.00000.2 | mysql
```

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

What is the reason for this?

A.

Mysqldbinnlog 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.

Answer: B

?????

B.

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

53.

You have been notified that the 'apps' . 'reports' table has been accidentally truncated.

You have 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 databases 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.

Answer:A.

54.

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 server 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

Answer: A.

This is `ON` if the server permits only local (non-TCP/IP) connections. On Unix, local connections use a Unix socket file. On Windows, local connections use a named pipe or shared memory. This variable can be set to `ON` with the `--skip-networking` option.

55.

Which two requirements would lead towards a high availability solution?

A.

When uptime is critical

B.

When data must be refactored

C.

When application concurrency is static

D.

When data loss is unacceptable

E.

When application is a single point of failure

Answer:A.D.

56.

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 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.

Answer:D.

? ? ?

B.

It is shared-nothing architecture.

57.

You have enabled the Slow Query Log for a short period.

When you process the Slow Query Log, you receive the following snip of output:

Count: 100 Time=0.22a (22s) Lock=0.00s (0s) Rows=0.0 (0), root[root] @localhost

```
CREATE TABLE 't1' (id serial,id0 varchar(N) unique key,intco1l INT (N)
,intco12 INT(N) ,intco13 INT(N) ,intco14 INT(N) ,intco15 INT(N)
,charcol1 VARVHAR(N) ,charcol2 VARCHAR(N) charcol3 VARCHAR (N)
,charcol4 VARVHAR(N) ,charcol5 VARCHAR(N) charcol6 VARCHAR (N)
,charcol7 VARVHAR(N) ,charcol8 VARCHAR(N) charcol9 VARCHAR (N) .charcol 10 VACHAR
(N) )
```

Count: 64000 Time=0.02s (1213s) Lock=0.00s (6s) Rows=1.0 (64000), root [root]@ localhost

```
SELECT intocl1, intco12, intco13, intco14, intco15, intco16,intco17, intco18
,intcol9, intcol10, charcol1, charcol2, charcol3, charcol4, charcol5, charcol6
,charcol7, charcol8, charcol9, charcol10 FROM t1 WHERE id = 's'
```

Count: 1 Time=0.02s (0s) Lock=0.00s (0s) Rows=1.0 (1) agent [agent] @localhost

```
SELECT Select_priv, Repl_client_priv, Show_db_priv, Super_priv,
Process_priv FROM mysql.user WHERE CONCAT (user, 's', host) = CURRENT_USER ()
```

Count: 48000 Time=0.02s (778s) Lock=0.00 (3s) Rows=1.0 (48000), root[root]@localhost

```
SELECT intocl1,intcol2,intcol3, intcol4, intcol5, charcol1, charcol2, charcol3
,charcol4, charcol5, charcol6, charcol7, charcol8, charcol9, charcol10 FROM t1 WHERE id = 's'
```

You want to tune the query such that it provides the greatest overall time savings.

Which query will accomplish this?

A.

```
CHEATE TABLE 't1' (id serial, id0 varchar (N) unique key, intcol1 INT (N)
,intcol2 INT (N), intcol3 INT(N) ,intcol4 INT(N), intcol5 INT(N), charool1 VARCHAR
(N)
,charcol2 VARCHAR (N), charcol3 VARCHAR(N), charcol4 VARCHAR(N), charcol5 VARCHAR
(N)
,charcol6 VARCHAR (N), charcol7 VARCHAR(N), charcol8 VARCHAR(N), charcol9 VARCHAR
(N)
,charcol10 VARCHAR (N);
```

B.

```
SELECT intcol1, intcol2, intcol3, intcol4, intcol5, intcol6, intcol7, intcol8, intcol9,
Intcol10, intcol11, intcol12, intcol13, intcol14, intcol15, intcol16, intcol17, intcol18, intcol19,
charcol10
FROM t1
WHERE id = 's';
```

C.

```
SELECT Select_priv, Repl_client_priv, Show_db_priv, Super_priv, Process_priv
```

```
FROM mysql.user  
WHERE CONCAT (user,'s', host) = CURRENT_USER();
```

D.

```
SELECT intcol1, intcol2, intcol3, intcol4, intcol5, charcol1, charcol2, charcol3, charcol4,  
charcol5, charcol6, charcol7, charcol8, charcol9, charcol10  
FROM t1  
WHERE id = 's';
```

Answer:A.

58.

Review the definition of the phone_list view.

```
CHEATE 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	--

1 row in set (0.00 sec)

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' , 'x1234' , '555-8888');
```

B.

```
INSERT INTO employee_phone (emp_id, phone_no, type) VALUES (1, '555-8888','mobile');
```

C.

```
UPDATE phone_list SET cell_name '555-8888' WHERE first_name= 'John' and last_name= 'Doe';
```

D.

```
UPDATE employee_phone SET phone_no= '555-8888' where emp_id=1;
```

Answer:B.

59.

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-gtid=ALL bin.00010 bin.00011 bin.00012 | mysql
```

Answer: B.

60.

Which MySQL utility program should you use to process and sort the slow Query log based on query time or average query time?

A.

Mysqslslow

B.

Mysqldumpslow

C.

Mysqlshow

D.

Mysqldump

E.

Mysqlaccess

Answer: B.

61.

Which High Availability solution can provide a consistent, time-delayed (for example, one hour) snapshot of the live production database?

A.

MySQL Replication

B.

Distributed Replication Block Device

C.

Windows Server Failover Clustering

D.

MySQL Cluster

Answer:A.

62.

You adjust a default configuration to the following `/etc/my.cnf` on a Linux installation:

```
[mysqld]
```

```
Log-bin
```

```
Binrylog_format=ROW
```

You do not notice the spelling error in `binrylog_format` and restart your production server.

How does the MySQL server behave with incorrectly spelled options?

A.

Mysqld uses internal configuration versioning and reverts to the previous configuration.

B.

When using `mysql_config_editor` for configuration adjustments, it detects incorrect syntax and typing mistakes.

C.

The `mysqld_safe` script skips the unknown variable and starts using the remaining configuration changes.

D.

Mysqld prints to the error log about an unknown variable, and then exits.

Answer:D.

63.

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	38	96931638913
22	Thread/sql/slave_worker	7	0
23	Thread/sql/slave_worker	0	0
24	Thread/sql/slave_worker	346730	7262131209667
25	Thread/sql/slave_worker	597127	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.

Answer:C.D.

64.

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 mysqld before creating the temporary table.

Answer: B.E.

65.

What are three facts about backups with mysqldump?

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

Answer:A.B.D.

66.

In a test database, you issue the SELECT ... INTO OUTFILE statement to create a file with your t1 table data.

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
```

D.

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

E.

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

Answer:A.D.

67.

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.

Answer: B.C.

68.

You are creating a new server with the same accounts as an existing server. You do this by importing a mysqldump file of the mysql database.

You test whether the import was successful by using the following commands:

Mysql> select user, host, password from mysql.user;

User	Host	Password
Root	Localhost	*18403566DC82A134D9CD07C9F0013F464C17A9E1
Root	127.0.0.1	*18403566DC82A134D9CD07C9F0013F464C17A9E1
Admin	%	*5B8085869D3AF31A59941D3EA57317EA6412D95C

9 rows in set (0.00 sec)

Mysql> show grants for 'admin'@'%';

ERROR 1141 (42000): There is no such grant defined for user 'admin' on host '%'

Which command will fix this issue?

A.

CREATE USER 'admin' @'%';

B.

GRANT USAGE ON *.* TO 'admin'@'%';

C.

FLUSH PRIVILEGES;

D.

FLUSH HOST CACHE;

E.

UPDATE mysql.user SET Create_user_priv = 'Y' WHERE user= 'admin';

Answer:C.

69.

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.

Answer:F.

70.

Which statement is true about the log-output variable?

A. It is a static variable and can be set only at MySQL server startup.

B.

It enables and starts the General Query Log.

C.

It sets the target location for the binary logs generated by the MySQL server.

D.

It specifies output destinations for the slow and General Query logs.

Answer:D.

71.

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:

```
[mysqld]
```

```
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-r-- 1 mysql mysql 744G Aug 26 14:34 ibdata1
```

```
-rw-rw-r-- 1 mysql mysql 480M Aug 26 14:34 ib_logfile0
```

```
-rw-rw-r-- 1 mysql mysql 480M Aug 26 14:34 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;
```

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=Barramcuda;
```

```
Mysql> ALTER TABLE data_current ROW_FORMAT=COMPRESSED KEY_BLOCK_SIZE=8;
```

```
Mysql> ALTER TABLE data_history ROW_FORMAT=COMPRESSED KEY_BLOCK_SIZE=8;
```

Answer:C.

72.

What is true regarding InnoDB locking?

A.

InnoDB row locks may be escalated to page or table-level locks.

B.

InnoDB only uses row locks, not page or table-level locks,

C.

InnoDB uses row and table-level locks, but row locks are not escalates,

D.

InnoDB locks only those rows that are updated.

E.

InnoDB uses row-level or table-level locks depending on the number of rows affected.

Answer:E.

73.

Consider the MySQL Enterprise Audit plugin.

On attempting to start the MySQL service after a crash, notice the following error:

[ERROR] Plugin 'audit_log' init function returned error.

In the audit log file, you notice the final entry:

...

```
<AUDIT_RECORD  
TIMESTAMP="2013-07-09T02:12:35"  
NAME="Connect"  
CONNECTION_ID="98"  
STATUS="0"  
USER="Kate"  
PRIV_USER="kate"  
OS_LOGIN=""  
HOST="localhost"  
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.

Answer:D.

74.

A general purpose MySQL instance is configured with the following options:

- log-slow-queries
- long-query-time=,0001
- log-slow-admin-queries
- general-log
- log-bin
- binlog-format=STATEMENT
- innodb-flush-log-at-trx-commit=1

Which three statements are true?

A.

The General Query Log records more data than the Binary Log.

B.

The binary Log records more data than the General Query Log.

C.

The Slow Query Log records more data than the General Query Log.

D.

The General Query Log records more data than the Slow Query Log.

E.

The Slow Query Log records more data than the Binary Log.

F.

The Binary Log records more data than the Slow Query Log.

Answer:A.D.E.

75.

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.

Answer: A.D.

Distributed Replicated Block Device (DRBD) is another high-availability solution. It works by replicating a block device from a primary server to a secondary server at the block level.

76.

A MySQL replication slave is set up as follows:

User 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.tl; 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_masterbin.000003' position 496

What are two possible causes for this error to occur?

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.

Answer: A, E.

77.

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 check 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.

Answer:A.C.

78.

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.

Answer: B.D.

79.

MySQL is installed on a Linux server and has the following configuration:

[mysqld]

User=mysql

Datadir=/data/mysql

As the 'root' user, 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 file cannot be owned by it.

D.

The mysqld process requires all permissions within datadir to be the same.

Answer: B.

80.

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.

Answer: B.

81.

A user executes the statement;
PURGE BINARY LOGS TO 'mysql-bin.010';
What is the result?

A.

It deletes all binary log files, except 'mysql-bin.010'.

B.

It deletes all binary log files up to and including 'mysql-bin.010'.

C.

It deletes all binary log files before 'mysql-bin.010'.

D.

It deletes all binary log files after 'mysql-bin.010'.

Answer: C.

82.

You have table 'apps','userdata' on server that uses MyISAM storage engine. You want to transfer this data to server but use InnoDB engine instead.

You execute the following commands:

ServerB commands:

```
Shell> mysqldump -u root -h server --no-data apps userdata | mysql -u root -p apps
```

```
Shell> mysql -u root -p -h server -e 'ALTER TABLE 'apps','userdata' ENGINE=InnoDB;'
```

```
Shell> mysqldump -u root -p -h server --no-create-info --order-by-primary apps userdata | mysql  
- u root -p apps
```

What effect does the --order-by-primary argument have on the mysqldump command?

A.

It exports tables with the most indexes first to assist with import speeds.

B.

It ensures that unique indexes have no conflicts when the data is dumped.

C.

It orders by primary key to assist in speeding up importing to InnoDB tables.

D.

It must be specified so index data is dumped correctly when --on-create-info is used.

Answer:C.

83.

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

Answer:A.C.

84.

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.

Answer: C.

85.

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_PERMANENT 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.

Answer: B.C.

86.

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

A.

SHOW CREATE 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';

Answer:A.C.D.

87.

You examine the output of SHOW GLOBALSTATUS 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

Answer:D.E.

88.

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` option.

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.

Answer:D.

89.

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

Answer:BD.

90.

Which three are properties of the MyISAM storage engine?

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

Answer: B.E.G.

91.

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

An example of the start of one row of data:

'GREEN01020495888331993-12-10/2...'

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.

Answer: D.

??A

92.

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	10
Max_user_connections	10

8 rows in set (0.00 sec)

A look at the user privileges shows:

GRANT... TO 'bob'@'%', example.com' WITH MAX_USER_CONNECTIONS 0;

GRANT... TO 'key'@'%', 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.

Connect_timeout is too small to allow a connection to occur.

Answer:D.

93.

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

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.

Answer: C.

??

D.

It shows how many bytes will be used from each index row.

94.

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 operation 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 get allocated globally, and are never freed.

Answer: A.B.C.

95.

Which three tasks can be performed by using the performance Schema?

A.

Finding queries that are not using indexes

B.

Finding rows that are locked by InnoDB

C.

Finding client connection attributes

D.

Finding the part of a code in which a single query is spending time

E.

Finding the size of each table

Answer:A.C.B.

96.

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

Answer:A.

97.

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

Answer:D.

98.

Which three data components are needed for point-in-time recovery?

A.

The error log

B.

The backup log

C.

The general query log

D.

Binary logs

E.

The data backup

F.

Configuration files

Answer: D.E.F.

99.

While reviewing the MySQL error log, you see occasions where MySQL has exceeded 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

Answer:A

100.

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.

Answer:C.D.

??

A.

Binary backups are usually faster than text backups.

MySQL题目

101.

You execute mysqmmamin shutdown on a MySQL server that is described as follows .

- . IT is running with both active anri idle client connections.
- . It has ope transactions against InnoDB.
- . It has active multi- row insects into MyISAM engine tables.
- . .innodb_fast_shutdownis set to 1.

What are three effects of Shutting down the server by using a mysqladmin shutdown command?

- A Connectionthat have an oven transaction are rolled back.
- B Connecttons with statements running against MyISAM tables wait For completion.
- C New cilient connections are not accepted after shutdown is initiated.
- D Connections are accepted during the shutdown process hecause a graceful shutdown can take large amounts of time.
- E Partia updates may occur for non-transactional tables.

Answer:ACE

102.

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

Answer:ABC

103.

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 Cext searching.
- D T-TELE indexes, which optimize data and index storage In memory.
- E R-TREE indexes, which provide GIS data Indexinp.

Answer:AB

104.

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 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.

Answer: BD

105.

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

```
GRANT SELECT,UPDATE,DELETE ON word.*to 'ioe'@'example.com'
```

What is the outcome?

- 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.

Answer: B

106.

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 users.
- E It records every statement received by the server.

Answer: AE

107.

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 performance_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 The Performance Schema is enabled by default.

Answer: ABD

108.

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 dump.
- . 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

Answer: ABF

109.

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.c
8945	stage/sql/init	90045000	8944	mysqld.c
8946	stage/sql/checking permissions	4729000	8944	sql_pars
8947	stage/sql/opening tables	52657000	8944	sql_base
8948	stage/sql/init	57268000	8944	sql_sele
8949	stage/sql/system lock	22860000	8944	lock.cc
8950	wait/lock/table/sql/handler	1581660	8949	handler.
8951	wait/lock/table/sql/handler	2139156	8949	thr_lock
8952	wait/synch/mutex/mysys/THR_LOCK::mutex	294408	8951	thr_lock
8953	stage/sql/optimizing	17927000	8944	sql_optim
8954	stage/sql/statistics	349445000	8944	sql_optim
8955	wait/io/table/sql/handler	302137776	8954	handler.c
8956	wait/synch/mutex/mysys/THR_LOCK::mutex	219240	8954	thr_lock
8957	stage/sql/preparing	6961000	8944	sql_optim
8958	stage/sql/executing	735000	8944	sql_execu
8959	stage/sql/sending data	14572000	8944	sql_execu
8960	stage/sql/end	1327000	8944	sql_selec
8961	stage/sql/query end	3387000	8944	sql_parse
8962	stage/sql/closing tables	6128000	8944	sql_parse
8963	stage/sql/freeing items	29857000	8944	sql_parse
8964	stage/sql/cleaning up	1187000	8944	sql_parse

Which statement is true about the output?

- A The query did not find its table in the table definition cache.
- B The events with event_id=8945 is a child of the event_id=8944
- C the query read data from the data from the buffer pool
- D The time the query took is the sum of all timer_wait values.

Answer: D

110.

You will configure a MySQL Server to act as a replication master

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

Answer:BC

111.

.choose two

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?

X 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;`

X 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.

Answer:BE

112.

choose two

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 tables locks?

A) Avoid using the FLUSH TABLES WITH READ LOCK statements.

X B) Start MySQL with the `--skip_external_locks` option.

C) Change the tables to use the InnoDB storage engine.

X D) Start MySQL with `--innodb_table_lock = 0`

E) Use a slave for large reporting job.

Answer:BC

113.

choose the best answer

You want to lock the three MyISAM tables a, b, and c.

```
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.

Answer:A

114.

Choose two

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.
- X 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.
- X F) It determines the ceiling for a relay log and truncates to max_binlog_size.

Answer:AC

115.

Choose two

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	Assum
THREAD_ID	bigint(20)unsigned	No		NULL		e that
EVENT_ID	bigint(20)unsigned	NO		NULL		all
END_EVENT_ID	bigint(20)unsigned	YES		NULL		consu
EVENT_NAME	Varchar(128)	No		NULL		mers
SOURCE	Varchar(64)	YES		NULL		and
TIMER_START	bigint(20)unsigned	YES		NULL		instru
TIMER_END	bigint(20)unsigned	YES		NULL		ments
TIMER_WAIT	bigint(20)unsigned	YES		NULL		are
...						enable
NESTING_EVENT_ID	bigint(20)unsigned	YES		NULL		and
NESTING_EVENT_TYPE		YES		NULL		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.

X 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.

X E) A connection can find its events with SELECT * FROM ... WHERE THREAD_ID = CONNECTION_ID().

Answer:AB

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116.

You enable binary logging on My SQL 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 TEMPDS database
- D) All updates to all databases
- E) All updates, except to the PERFORMANCE_SCHEMA database

Answer: E

All updates to all databases

117.

A My SQL Server is configured as follows:

[myaqlid]

Default-authentication-pluqin=sha256_password

Examine the output from the following SET PASSWORD statement

```
Mysql>SET PASSWORD FOR 'ADAM '@ 'localhost' +PASSWORD('R@d3laid3')
```

ERROR 1827(HY000):The password hash doesn't have the excepted format.

Check if the correct password algorithm is being used with the PASSWORD() function.

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 excepts a raw sha256 formatted string with the PASSWORD() function.

C) The sha256_password plugin must be used with old_passwords=2 set.

D) The sha256_password plugin uses AUTHENTICATION_ATRING() function to set account passwords.

Answer:C

118.

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 on InnoDB tables
- E) To repair table structure problems.

Answer:AC

119.

What does the Performance Schema provide?

- A) auto-tuning based on settings and ongoing workload
- B) Insight into the internal working of MY SQL
- C) Recommendations for schema changes
- D) A text-based version of MYSQL Enterprise Monitor

Answer:B

120.

How does the InnoDB storage engine handle deadlocks when they are detected?

- A) The affected transaction 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 roll back.
- E) The `innodb_locks_unsafe_for_binlog` setting determines which transaction is rolled back.

Answer: A

121.

In a test database, you issue the SELECT...INTO OUTFILE statement to create a file with your t1 table data.

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`

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

E) `Mysql>INSERT INTO t1 VALUES FROM' /tmp/t1.sql`

Answer:AD

122.

You are installing a MY SQL server on a fresh installation of Linux by using the MY SQL 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 toll
- E) Prompting a user to set the MY SQL root user password

Answer:ABC

123.

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.

Answer:B

124.

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 problem?

- A) Execute `SELECT * FROM mysql.routines WHERE DEFINER='bob@localhost';`
- B) Execute `SHOW ROUTINES WHERE DEFINER='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 the other ERROR 1449 messages.

Answer: C

125.

Given the result of the following query:

```
Mysql>SELECT Host,User FROM mysql.user;
```

Host	User
.....	
Example.com	Kate
Localhost	mike
%	mike
db.example.com	
.....	

A client connection is established with the username mike from host db.example.com. However,when trying to execute queries,it is found that the privileges are insufficient.

You investigate further by executing the command:

```
Mysql>SELECT CURRENT_USER();
```

What is the name returned from the executed command?

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

Answer:D

126.

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.

Answer: D

127.

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 instance 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 no match the excepted 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)--deafults-file=/etc/mysql/instance2.cnf

E)--backup-instance=/var/lib/mysql/instance2

Answer:D

128.

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 master and re-establish replication.
- D) It deletes all binary log files whose contents have been sent to slave servers.

Answer: A

129.

Which three are properties of the MYISAM storage engine?

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

Answer: BEG

130.

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 bu using the .NET Connector's load balancing capabilities

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

Answer:D

131.

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

Answer: BD

??C

132.

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.

Which statement id true?

A)This prevent mysql from staring 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 prevent 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

Answer: C

133.

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.00011 bin.00012

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

Answer: B.

134.

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

Answer:A.C

135.

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

Answer: ACD

136.

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 server of the server runtime configuration
- D) Allowing client accounts to take over the account of another user

Answer: AC

137.

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

Answer:ADE

138.

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

Answer: B, D.

139.

Assume that you are starting a MYSQL server with the command:

```
/user/local/bin/mysql--defaults-file=$HOME/mysql/my.cnf--extra--default--file=$HOME/mysql/extra-my.cnf
```

Which set of configuration option 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

Answer:A

140.

You execute `mysqladmin shutdown` on a MySQL server that is describe 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 amount of time

E) Partial updates may occur for non-transactional tables

Answer: ACE

141.

```
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
```

```
->      )events
```

```
->WHERE event_name<> 'idle' AND thread_id=287
```

```
-> ORDER BY event_id
```

Event_id	Event_name	Timer_wait	Nesting_event_id	source
8944	State, emt/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/op	52657000	8944	Sql_base.cc

	ening tables			:4911
8948	Stage/sql/in it	57268000	8944	Sql_select. cc:1050
8949	Stage/sql/Sy stem lock	22860000	8944	Lock. cc:304
8950	Wait/lock/ta ble/sql/hand ler	1581660	8949	Handler. cc: 7718
8951	Wait/lock/ta ble/sql/hand ler	2139156	8949	Thr_lock. c: 556
8952	Wait/synch/m utex/mysys. T HR_lock:mute x	294408	8951	Thr_lock. cc :558
8953	Stage/sql/op timizing	17927000	8944	Sql_optimiz er. cc:138
8954	Stage/sql/st atistics	349445000	8954	Sql_opyomiz er. cc:381
8955	Wait/io/tabl e/sql/handle r	302137776	8954	Handler. cc: 2734

8956	Wait/synch/mutex/mysys/THR_lock:mutex	219240	8954	Thr_lock.c:856
8957	Stage/sql/preparing	6961000	8944	Sql_optimizer.cc:500
8958	Stage/sql/executeing	735000	8944	Sql_executor.cc:110
8959	Stage/sql/Sending data	14572000	8944	Sql_executor.cc:187
8960	Stage/sql/ended	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 child of 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

Answer:D

146.

Which two methods can be used to specify custom options for a MYSQL server that is running as a Windows service?

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)Configuration options on the Window service options tab of the MySQL Installer GUI

Answer:BD

147.

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

Answer:C

148.

Consider the MYSQL Enterprise Audit plugin.

On attempting to start the MYSQL service a crash,you notice the following error:

{ERROR} plugin 'audit_log' init function returned error.

In the audit log file,you notice the final entry:

....

<AUDIT_RECORD

TIMESTAMP="2013-07-09T02:12:35"

NAME="Connect"

CONNECTION_ID="98"

STATUS="0"

USER="KATE"

PRIV_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

Answer: D

149.

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_Remaining_Delay:NULL
```

```
Slave_SQL_Running_State:Slave has all relay log;waiting for the slave 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.

Answer:B

150.

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 cache index blocks for InnoDB tables only

E)It cache index blocks for all storage engine tables

Answer:AC

151.

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

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

The operation completed without error.

What is the states of this backup and operation required before it is ready 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=Prepare Backup

Operation=apply-log

E) Backup State=Prepared Backup

Operation -validate

Answer:B

152.

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

Answer:ABD

153.

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.

Answer:B

154.

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**.

mysqld.server is a wrapper for **mysqld_safe**.

B **mysqld** is a shell script that **mysql.server**.

mysqld_safe causes the server to start up in data recovery mode.

mysqld.server is the server.

C **mysqld** is the server.

mysqld_safe causes the server to start up in data recovery mode.

mysqld.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.

Answer:A

155.

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 LOG FILE=hostname-relay-bin.0004

.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_LOG_FILE='hostname-relay-bin.0004',RELAY_LOG_POS=1383;

C STOP SLAVE;CHANGE MASTER TO RELAY_LOG_FILE='hostname-relay-bin.0004',RELAY_LOG_POS=1383;

D STOP SLAVE;SET GLOBAL master_delay=0;START SLAVE;

Answer: B

156.

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 Replication Block Device(ORBD) and MSQL

C Windows Cluster and MYSQL

D Solaris Cluster and MYSQL

E MYSQL NDB Cluster

Answer:ABE

157.

Assume that you want to know which MYAQL 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 by the MYSQL Server and compare them with default values.

B Check the command-line options provided for the MYSQL Server and compara 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 compara the result with default values.

Answer:CD

158.

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 use 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 natura.

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

Answer:C

159.

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

Answer:D

160.

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 scan 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

Answer:ACE

161.

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_accwss program

B Run the mysql_sucure_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.

Answer: B

162.

Consider the following:

```
Mysql>EXPLAIN SELECT FROM CITY WHERE CountryCode='USA'/G
```

```
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 querying

C whether you are using any indexes in your query

D if it is possible for you to include any indexes in your query

Answer:A

163.

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

A SHOW CREATE 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';

Answer:A.C.D.

164.

You want to dump only data from the userdata table.

Which mysqldump command argument is required to accomplish this?

A— table=userdata in order to dump only the data from the userdata table

B— data-only as this specifies that only data is to be dump

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

D— no-create-info to skip writing CREATE TABLE statements

Answer:D.

165.

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

How is this accomplished?

A InnoDB locks the rows accessed during the transaction.

B InnoDB uses rollback segments to reconstruct updated rows.

C InnoDB does not write commits to the datafiles until earlier transactions commit.

D InnoDB uses the redo logs to recreate data that has changed.

E InnoDB stores updates in the doublewrite buffer.

Answer: C

166.

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_attrx_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 files and data files

D placement of InnoDB log files and `datadir` on separate physical disks

E allocation of RAM to the buffer pool such that more of the data can fit in RAW

F use of `delay_key_write=ON` For batch index updates

Answer: D.E.F

167.

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'('key', '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 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 g201305 VALUES LESS THAN (TO_DAYS('2013-05-01 00:00:00')),
```

```
Gmores 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 PARTITION (gMORES)
```

```
INTO
```

```
G201305 VALUES LESS THAN (TO_DAYS('2013-05-01 00:00:00')),
```

```
Gmores LESS THAN(MAXVALUE));
```

D ALTER TABLE games

```
SPLIT PARTITION (gMORES)
```

```
INTO
```

```
G201305 VALUES LESS THAN (TO_DAYS('2013-05-01 00:00:00')),
```

```
Gmores LESS THAN(MAXVALUE));
```

E ALTER TABLE games

```
DROP PARTITION (gMORES),
```

```
ADD PARTITION
```

```
g201305 VALUES LESS THAN (TO_DAYS('2013-05-01 00:00:00')),
```

```
Gmores LESS THAN(MAXVALUE));
```

Answer:A

168.

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_threads USING (THREAD_ID)
```

```
->      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_woker	0	0
23	thread/sql/slave_woker	0	0
24	thread/sql/slave_woker	346730	7262131209667
25	thread/sql/slave_woker	597127	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 slave54masterIfullup cannot process the relay log fast enough to use all threads.

D The slave is configured with slave_parallel_wokers=4.

Answer:A

169.

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.

Answer: B.

170.

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.

Answer:BD.

171.

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.

Answer: BD

172.

Consider the OPTIMIZE TABLE command. 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.

Answer:AC

173.

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

You issue the following:

Mysql>begin;

Mysql>update mydate 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 protected by locks?

A one

B one row, and a next-key lock for the supermum

C five

D one row, and a gap-lock

Answer:C

B??

174.

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 separate between servers

Answer:ADF

175.

Which two statements are true about innodb_thread_concurrency?

- A It can be configured dynamically by using SET GLOBAL innodb_thread_concurrency=....
- B A value of 0 serializes all InnoDB 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 InnoDB

Answer:AD

176.

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

Answer:A

177.

Which MySQL utility program should you use to process and sort the Slow Query Log base?

A mysqlslow

B mysqldumpslow

Cmysqlshow

D mysqldump

E mysqlaccess

Answer:B.

178.

Which statement is true about the FLUSH LOGS command?

A It requires the RELOAD,FILE, and OROP 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

Answer:B.

179.

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

Answer: B.

180.

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 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="1146"

SQLTEXT="Error 1146 (42s02): Table 'mysql.users' doesn't exist"/>

E NAME="Error"

STATUS="0"

SQLTEXT="Error 1146 (42s02): Table 'mysql.users' doesn't exist"/>

Answer:A

181.

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

`Mysqldbackup-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 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-info` option

Answer:BC

???

182.

What are three facts about backups with mysqldump?

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

Answer:ABD

183.

A MYSQL instance is running on a dedicated server. Developers access the server from the same network subnet. User 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

Answer: CF

184.

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 Kate was successful

E A connection failed due to authentication being unsuccessful

Answer:BE

185.

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 5.0 to 5.6

B when you upgrade between major versions, for example 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

Answer:AE

186.

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?

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

Answer:AC

187.

Consider the MYSQL Enterprise Audit plugin. Which two event types are the only ones to include the SERVER_ID attribute?

A quit

B query

C noaudit

D shutdown

E audit

F kills

Answer:CE

188.

Which two statements are true about the `mysql_upgrade` command?

A. the `mysql_upgrade` command is a utility that patches `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.

Answer: BD

189.

You have a MYSQL replication setup and you want to atop the SQL thread on the slave.

MySQL>SHOW SLAVE STATUS\G

...

Slave_IO_Running:Yes

Slave_SQL_Running:No

To server 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 point-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

Answer:CD

190.

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

Answer:BD

AD??

191.

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 it enabled

C)There is a constant overhead regardless of setting and workload

D)The overhead depends on the setting of the Performance Schema

Answer:D

192.

Consider the following statement on the RANGE partitioned table:

`ALTER TABLE order 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

Answer: D

193.

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

Answer: A.C.E.

194.

On the 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 to 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) If the data modification is non-deterministic, the query optimizer will have any potential issues

Answer: BC

195.

You want to use `mysqldump` to create a full backup with the following requirements:

It must include all schema and data.

All CREATE Statement must exist in the dump

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 the 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`

Answer: ABF

196.

Consider the two partial outputs of the SHOW GLOBAL,VARIABLES command from a master and slave server;

Master :

Variable_name	name
Connect_timeout	5
Log_bin	ON
Max_connections	100
Shared_memory_base_name	MYSQL
Server_id	2
Tmp_table_size	5242000
Version	5,6,10

Slave :

Variable_name	value
Connect_timeout	5
Log_bin	OFF
Max_connections	10
Shared_memory_base_name	MYSQL5
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 the slave
- D)Server_id id not unique
- E)The shared_memory_base_name variable must match the master

Answer:D

197.

You use --login-path to access a MYSQL server on a linux installation

Which statement is true about the --login-path option 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 sever,the remote server version must be 5.6 or later

Answer:C

198.

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

An example of the start of one row of data:

'GREEN0120195888331993-12-10/2...'

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 are in their own columns.

Answer: D

199.

The MYSQL user 'adam' currently has USAGE permission 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 must need the REOCESS privilege to be able to take a consistent backup while other users are connected

Answer: C

200.

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

Answer:CD

??

201.

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

GRANT SELECT, UPDATE, DELETE ON world.* TO joe@example.com

What is the outcome?

- 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 in first login.

Answer: B

202.

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:

Grant for backupuser@localhost

```
GRANT USAGE ON *.* TO 'backupuser'@'localhost' IDENTIFIED BY PASSWORD '*94BDCEBE19083CE2A1F959FD02F964C7AF4CFC29'
```

```
GRANT DESELECT, 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

Answer: D

203.

You want to start monitoring statistic on the distribution of storage engines that are being used and average sizes of the tables in the various databases.

Some details are as follows:

The MYSQL instance has 400 databases

Each database on an average consists of 25-50tables

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

Answer:B

204.

125.Which hardware storage option, when set up with redundant disks,offers the least stability,availability, ad reliability for MYSQL

A)RAID 5

B)ISCSI

C)SAN(Storage Area Network)

D)NFS(Networked File System)

Answer:D

205.

Choose the best answer

```

...
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 cl ON c.Code = cl.CountryCode WHERE cl.Language =
'ENGLISH' ORDER BY IsOfficial;
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| id | select_type | table | type | possible_keys | key | key_len | ref | rows | Extra |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | SIMPLE | cl | ALL | NULL | NULL | NULL | NULL | 994 | Using where; Using filesort |
| 1 | SIMPLE | c | eq_ref | PRIMARY | PRIMARY | 3 | world.cl.CountryCode | 1 | Using index 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');
- X C) ALTER TABLE 'Country' ADD INDEX 'idx_Lang'('Language')
- D) ALTER TABLE 'CountryLanguage' ADD INDEX 'idx_Offlang'('IsOfficial', 'Language')

Answer:C