Oracle 1Z0-883

MySQL 5.6 Database Administrator

QUESTION NO: 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: A
Explanation:

QUESTION NO: 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 pi and p3 partitions are removed and the table definition is changed.

Answer: D
Reference:

https://dev.mysql.com/doc/refman/5.5/en/partitioning-management.html

QUESTION NO: 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
Explanation: The processlist table has only the connected session info. The mysql.proc and information_schema.routines has the SP/routines and functions info including the definer and
definition code.

QUESTION NO: 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: B
Explanation:

QUESTION NO: 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_master-bin. 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
Explanation:

QUESTION NO: 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> mysqlimport –u root –p sakila sakila2013.sql
D. Shell> mysql –u root -p –e 'use sakila; source sakila2013.sql'
E. Shell> mysql –u root –p –silent < sakila2013.sql

Answer: B,D
Explanation: C: If you need to restore a database that already exists, you'll need to use mysqlimport command. The syntax for mysqlimport is as follows:

mysqlimport -u [uname] -p[pass] [dbname] [backupfile.sql]

E: Basic syntax to restore:
mysql -u root -p[root_password] [database_name] < dumpfilename.sql

Reference: How to Back Up and Restore a MySQL Database

QUESTION NO: 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
Explanation:

QUESTION NO: 8

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

A. SHOW FULL PROCESSLIST WHEER Time > 180;
B. SELECT * FROM INFORMATION_SCHEMA.EVENTS SHERE 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

Explanation: The show processlist cannot use where clause.
mysql> show full processlist where time>0;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'where time>0' at line 1

QUESTION NO: 9

A database exists as a read-intensive server that is operating with query_cachek_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 single-threaded nature.
D. The average resultset of a query is increasing due to an increase in the number of users requiring SQL statement execution.

Answer: C

Explanation:

QUESTION NO: 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 you 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
Explanation:

QUESTION NO: 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 LOGE 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
Explanation: A: To safely purge binary log files, follow this procedure:

B: Syntax:
PURGE { BINARY | MASTER } LOGS
{ TO 'log_name' | BEFORE datetime_expr }

Reference: 13.4.1.1 PURGE BINARY LOGS Syntax

QUESTION NO: 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,D
Explanation: A (not B): InnoDB uses a special lock called the table-level AUTO-INC lock for inserts into tables with AUTO_INCREMENT columns.
D (Not E): This lock is normally held to the end of the statement (not to the end of the transaction), to ensure that auto-increment numbers are assigned in a predictable and repeatable order for a given sequence of INSERT statements.

Reference: 14.6.5.2 Configurable InnoDB Auto-Increment Locking

http://dev.mysql.com/doc/refman/5.6/en/innodb-auto-increment-configurable.html

QUESTION NO: 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.cav' 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
Reference: http://dev.mysql.com/doc/mysql-security-excerpt/5.5/en/audit-log-plugin-logging-control.html

QUESTION NO: 14

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

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

Answer: B
Explanation:

QUESTION NO: 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_watis_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,E
Explanation: D: To avoid unpredictable results if you make timer changes, use TRUNCATE TABLE to reset Performance Schema statistics.

Example:
As with other aggregate tables within Performance Schema, you can reset the statistics within the digest table with:
TRUNCATE TABLE performance_schema.events_statements_summary_by_digest;

Reference: 22.2.3.1 Performance Schema Event Timing

http://dev.mysql.com/doc/refman/5.5/en/performance-schema-timing.html

QUESTION NO: 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,C,D,E
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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-advaced' 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: B
Explanation:

QUESTION NO: 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: D
Reference: http://dev.mysql.com/doc/refman/5.6/en/sha256-authentication-plugin.html

QUESTION NO: 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: C,D,E
Explanation:

QUESTION NO: 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 configuration with the longer password hash.

Answer: A,C,D
Reference: http://prefetch.net/blog/index.php/2006/06/18/securing-mysql-installations-with-mysql_secure_installation/

QUESTION NO: 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 is 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: B
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation: B: <IP>

A string representing the client IP address. This element appears only if the <NAME> value is Connect, Change user, or Query.

Example:

<IP>127.0.0.1</IP>

E: ERROR 1045 (28000): Access denied for user

QUESTION NO: 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: C
Explanation:

QUESTION NO: 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_METEICS WHERE HOST=' 192.168.1.15';

Answer: A
Explanation:

QUESTION NO: 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: D
Explanation:

QUESTION NO: 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
Reference: http://dev.mysql.com/doc/refman/5.5/en/flush.html

QUESTION NO: 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
Reference: http://dev.mysql.com/doc/refman/5.6/en/backup-methods.html

QUESTION NO: 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
Explanation:

QUESTION NO: 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_pendign _jobs_size_max limit
E. Execution of FULSH TABLES WITH READ LOCK

Answer: A,B
Reference: http://dev.mysql.com/doc/refman/5.1/en/slave-logs-relaylog.html

QUESTION NO: 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,G
Reference: http://dev.mysql.com/doc/refman/5.0/en/innodb-index-types.html

QUESTION NO: 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: E,F
Explanation:

QUESTION NO: 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: C
Explanation:

QUESTION NO: 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 implements it natively.

Answer: C,D
Explanation:

QUESTION NO: 37

You are using CTIDS in replication. You need to skip a transaction with the CTID of aaa-bbb-ccc-ddd-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
Reference: http://blog.secaserver.com/2011/11/resync-mysql-masterslave-replication/

QUESTION NO: 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
Explanation:

QUESTION NO: 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,E
Reference: http://dev.mysql.com/doc/refman/5.0/en/replication-solutions-backups-rawdata.html

QUESTION NO: 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
Explanation:

QUESTION NO: 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. Mysqlhotcopy
D. File system snapshots
E. Mysqldumpslow

Answer: A,B
Reference: http://dev.mysql.com/doc/refman/5.5/en/innodb-backup.html

QUESTION NO: 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 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. ALTHER TABLE games
DROP PATITION gMORES,
ADD PARTITION
g201305 VALUES LESS THAN (TO_DAYS ('2013-05-01 00:00:00')),
gMORES VALUES LESS THAN (MAXVALUE));

Answer: B
Explanation:

QUESTION NO: 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
Explanation: C (not A, not B): Use separate
disk Not A: Using symbolic links
This means that, for MyISAM tables, you symlink the index file and data files from their usual location in the data directory to another disk (that may also be striped). This makes both the seek and read times better, assuming that the disk is not used for other purposes as well.

Reference: 8.11.3 Optimizing Disk I/O

QUESTION NO: 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
Reference: http://dev.mysql.com/doc/refman/5.0/en/slow-query-log.html

QUESTION NO: 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_passoword_number_count requirement.
E. There is no dictionary file defined, so password validation cannot work as expected.

Answer: B
Explanation:

QUESTION NO: 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' connot 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
Reference: http://planet.mysql.com/entry/?id=34077

QUESTION NO: 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
mysql_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
Explanation:

QUESTION NO: 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,C,E
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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,B,C
Explanation:

QUESTION NO: 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: A
Explanation:

QUESTION NO: 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 gtid_mode	NO 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:

Mysqlbinlog – exclude-gtides=’ 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. Mysqlbinlog ignores arguments to – exclude-gtids-it means ignore all events with GTIDs.
B. The server keeps track of which GTIDs have already been executed and skips those.
C. Enforce_gtid_consistency is set to ON.
D. Gtid_mode must be set to AUTO during point in time recoveries.

Answer: B
Explanation:

QUESTION NO: 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'
. 'reportys' table.

Answer: A
Explanation:

QUESTION NO: 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
Explanation: https://dev.mysql.com/doc/refman/5.6/en/resetting-permissions.html
under section - **B.5.4.1.3 Resetting the Root Password: Generic Instructions**

QUESTION NO: 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,E
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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,intcaoll 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
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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-gtide=ALL bin.00010 bin.00011 bin.00012 | mysql

Answer: A
Explanation:

QUESTION NO: 60

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

A. Mysqlslow
B. Mysqldumpslow
C. Mysqlshow
D. Mysqldump
E. Mysqlaccess

Answer: B
Reference: http://dev.mysql.com/doc/refman/5.0/en/mysqldumpslow.html

QUESTION NO: 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
Explanation:

QUESTION NO: 62

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

[mysqld

] Loq-

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
Explanation:

QUESTION NO: 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: A,C
Explanation: * To see which instruments have been executed the most times or have taken the most wait time, sort the events_waits_summary_global_by_event_name table on the COUNT_STAR or SUM_TIMER_WAIT column, which correspond to a COUNT(*) or SUM(TIMER_WAIT) value, respectively, calculated over all events

* slave_parallel_workers
Sets the number of slave worker threads for executing replication events (transactions) in parallel. Setting this variable to 0 (the default) disables parallel execution. The maximum is 1024.

Reference: 22.1 Performance Schema Quick Start ; 17.1.4.3 Replication Slave Options and Variables

QUESTION NO: 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_INENTORY.OLD_INVENTORY and restart mysqld before creating the temporary table.

Answer: D,E
Explanation:

QUESTION NO: 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,D,E
Explanation:

QUESTION NO: 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
Explanation: A: SELECT ... INTO OUTFILE is the complement of LOAD DATA INFILE.

D: You can also load data files by using the mysqlimport utility; it operates by sending a LOAD DATA INFILE statement to the server.

Note:
SELECT ... INTO OUTFILE writes the selected rows to a file. Column and line terminators can be specified to produce a specific output format.

Reference: 13.2.8.1 SELECT ... INTO Syntax; 13.2.6 LOAD DATA INFILE Syntax

QUESTION NO: 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: C,D
Explanation:

QUESTION NO: 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
Reference: http://lists.mysql.com/mysql/218268

QUESTION NO: 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: D
Explanation: The table_open_cache variable was simply not set high enough.

Reference: MySQL Performance: Table Open Cache in 5.6

QUESTION NO: 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 sever.
D. It specifies output destinations for the slow and General Query logs.

Answer: D
Explanation:

QUESTION NO: 71

The 'allplicationdb' 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> is -1 /var/lib/mysql/

-rw-rw---- 1 mysql mysql 744G Aug 26 14:34 ibdata1

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

-rw-rw---- 1 mysql mysql 480M Aug 26 14:34 ib_logfile1

…

You attempt to free space from ibdata1 by taking a mysqldump of the data_archive table and

storting 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_repors 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 GLOBLE innodb_file_per_table=1; Mysql>
SET GLOBLE 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

Explanation:

QUESTION NO: 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
Reference: http://dev.mysql.com/doc/refman/5.0/en/table-locking.html

QUESTION NO: 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_fiush= ON.
D. Move or rename the existing audit.log file.

Answer: D

Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation: A:
* Replication cannot use Unix socket files. You must be able to connect to the master MySQL server using TCP/IP.

D: Time Delayed replication is however something quite helpful for some environments.
Though DRBD also could be extended to support one if needed.

Not B: DRBD (Distributed Replication Block Device), one of the leading solutions for MySQL HA (High Availability), offering users:

/ An end-to-end, integrated stack of mature and proven open source technologies, fully supported by Oracle;
/ Automatic failover and recovery for service continuity;
/ Mirroring, via synchronous replication, to ensure failover between nodes without the risk of losing committed transactions;
/ Building of HA clusters from commodity hardware, without the requirement for shared-storage.

QUESTION NO: 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_pas 653,

Error_code: 1062

2013-08-27 13:55:44 9056 [Warning] Salve: Duplicate entry '3' for key 'PRIMARY'

Error_code: 1062

2013-08-27 13:55:44 9056 [ERROR] Error running query, slave SQL thread aborted. Fix the problem, and restart the slave SQL thread with "SLAVE START", We stopped at log '56_master-bin.000003' position 496

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 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 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
Explanation:

QUESTION NO: 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
Explanation: A: Modes affect the SQL syntax MySQL supports and the data validation checks it performs. This makes it easier to use MySQL in different environments and to use MySQL together with other database servers.

C: To change the SQL mode at runtime, set the global or session sql_mode system variable using a SET statement:

SET GLOBAL sql_mode = 'modes';
SET SESSION sql_mode = 'modes';

Note: The MySQL server can operate in different SQL modes, and can apply these modes differently for different clients, depending on the value of the sql_mode system variable. DBAs can set the global SQL mode to match site server operating requirements, and each application can set its session SQL mode to its own requirements.

Reference: 5.1.7 Server SQL Modes

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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: C
Explanation:

QUESTION NO: 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-in.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
Reference: http://dev.mysql.com/doc/refman/5.5/en/purge-binary-logs.html

QUESTION NO: 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
Explanation:

QUESTION NO: 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,B
Reference: http://dev.mysql.com/doc/refman/5.1/en/privileges-provided.html

QUESTION NO: 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
Explanation:

QUESTION NO: 85

Consider the MySQL Enterprise Audit plugin,

You add the following lines to the my.cnf configuration tile:

[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

Explanation: * B C(not F): --plugin-load=plugin_list
This option tells the server to load the named plugins at startup. The option value is a semicolon-separated list of name=plugin_library pairs. Each name is the name of the plugin, and plugin_library is the name of the shared library that contains the plugin code. Each library file must be located in the directory named by the plugin_dir system variable. For example, if plugins named myplug1 and myplug2 have library files myplug1.so and myplug2.so, use this option to load them at startup:

shell> mysqld --plugin-load="myplug1=myplug1.so;myplug2=myplug2.so"

* not A, not D: To control the activation of the audit_log plugin, use this option: --audit-log[=value]
Valid Values: ON, OFF, FORCE, FORCE_PLUS_PERMANENT

This option controls how the server loads the audit_log plugin at startup. It is available only if the audit log plugin has been previously registered with INSTALL PLUGIN or is loaded with --plugin-load.

--audit-log=FORCE_PLUS_PERMANENT tells the server to load the plugin and prevent it from being removed while the server is running.

Reference: 6.3.12.6 Audit Log Plugin Options and System Variables; 5.1.3 Server Command Options

QUESTION NO: 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
Explanation:

QUESTION NO: 87

You examine the output of SHOW GLOBAL STATUS and notice that the value of Created_tmp_disk_tables is consistently increasing.

Which two variables would likely fix this issue?

A. Table_open_cache
B. Table_open_cache_instancs
C. Table_definition_cache
D. Tmp_table_size
E. Max_heap_table_size
F. Max_tmp_tables

Answer: D,E
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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 additional columns are defined on either server.
E. The master database cannot have more columns than the slave. Only the slave deatbase can have more columns.

Answer: B,D
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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 SUBSTER () 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: A
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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: D
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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,B,C
Explanation:

QUESTION NO: 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
Reference: http://dev.mysql.com/doc/refman/4.1/en/mysqldump.html

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation:

QUESTION NO: 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
Explanation: