Here's how to set up audit and logging configurations on MySQL securely on Ubuntu in accordance with the CIS benchmarks:

1. Enable Essential Logs:

- **General Query Log:** Enable the general query log (general_log) in the MySQL configuration file (/etc/mysql/my.cnf) to record all client queries received by the server. This log provides valuable information for auditing user activity and troubleshooting database operations.
- **Error Log:** Ensure the error log (log_error) is enabled to capture server errors and warnings. This helps identify potential issues and malfunctions.
- **Slow Query Log (Optional):** Consider enabling the slow query log (slow_query_log) if you suspect performance bottlenecks. This log records queries that take longer than a specified threshold to execute, aiding in performance optimization.

2. Configure Log Locations and Permissions:

- **Dedicated Log Files:** Use separate log files for each type (general, error, slow) to improve manageability and analysis.
- **Secure Log Locations:** Store log files in a secure location with appropriate permissions. Restrict access to authorized users or processes to prevent tampering.

3. Logging Levels (Optional):

- **CIS Benchmarks might recommend specific logging levels** for different logs. This could involve enabling query logging for specific users or queries of interest for enhanced auditing.

4. Log Rotation:

- **Configure Log Rotation:** Set up log rotation to prevent log files from growing infinitely and consuming disk space. Tools like logrotate can be used to automate log rotation, archiving older logs for potential future analysis.

Here's an example configuration for enabling essential logs in my.cnf:

```
[mysqld]
general_log = 1
general_log_file = /var/log/mysql/mysql.log
log_error = /var/log/mysql/error.log
# Adjust slow_query_log and slow_query_log_file if desired
```

Additional Resources:

- CIS MySQL Security Benchmarks (reference security guides that mention these benchmarks): While not directly available online, security guides referencing CIS benchmarks can offer details. Search for "CIS MySQL Security Benchmarks Ubuntu"

- MySQL Documentation on Logging: https://dev.mysql.com/doc/refman/8.3/en/error-log.html
- Ubuntu Documentation on Logrotate: https://linux.die.net/man/8/logrotate

Remember:

- Review the specific CIS benchmarks for your Ubuntu version for detailed recommendations on logging levels and configurations.
- Balance logging needs with performance impact. Excessive logging can add overhead to the database server.
- Regularly review and analyze log files to identify suspicious activity and potential security threats.