Test Plan for Tesla.com Website with 5 Subtasks:

1. Manual Testing of the Website:
   * Navigation and User Interface Testing: Verify the functionality of links, buttons, navigation menus, and other interface elements.
   * Functionality Testing: Test the core features of the website, such as car search, model details viewing, test drive requests, car booking and purchase, price inquiry, dealer search, and other key features.
   * Form Testing and Data Validation: Validate form inputs, including required fields, data validation, error handling, and confirmation messages.
   * Responsiveness Testing: Ensure that the website displays and functions correctly on different devices and screen resolutions, including desktops, tablets, and mobile devices.
   * Security Testing: Check for security measures in place, such as protection against vulnerabilities and proper handling of user data.
2. Automated Testing of the Website:
   * Automation of Core Scenarios: Develop automated test scripts to execute core user scenarios, such as car search, form filling, car booking and purchase, and other key functions.
   * Cross-Browser Testing: Run automated tests on different browsers, such as Chrome, Firefox, Safari, and others, to ensure compatibility and consistent functionality across platforms.
   * Performance Testing: Execute automated performance tests to measure page load time, server response time, and other performance metrics.
3. API Testing of the Website:
   * Availability and Functionality Testing of APIs: Test the availability and functionality of the APIs used in the Tesla.com website.
   * API Method and Parameter Testing: Validate different API methods, parameter passing, error handling, and response verification.
   * API Security Testing: Check for API security measures, such as authentication mechanisms and access control.
4. Website Performance Testing:
   * Performance Tool Utilization: Use performance testing tools such as Lighthouse, GTMetrix, or others to evaluate the performance of the website.
   * Performance Test Execution: Run performance tests to measure page load time, server response time, resource utilization, and other performance metrics.
   * Identification of Performance Bottlenecks and Optimization: Analyze the performance test results, identify performance bottlenecks, and suggest optimization measures.
5. Security Testing of the Website:
   * SSL Certificate Verification: Ensure the presence and proper configuration of SSL certificates for secure communication between the client and server.
   * Vulnerability Testing: Perform vulnerability testing for common security vulnerabilities like XSS, CSRF, SQL injections, and others.
   * User Data Handling and Protection: Verify the proper handling and protection of sensitive user data, such as personal information and payment details.
   * Compliance with Security Standards: Check the website's compliance with security standards and OWASP recommendations.