

CT.Sigma-7.01.eLM

Student Name: _____

Company Name: _____

Address: _____

Phone: _____

Email: _____

Test Date: _____

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Certification Test

CT.Sigma-7.01.eLM



Taking the Test

- The purpose of this test is to validate the learning experience corresponding to the applicable eLearning Module. It is recommended to preview the questions before viewing the module, and answer them as the module progresses.
- The test is open book. You may use any website, manuals, software, demo, etc. The test must be taken individually; you may not contact another person for help.
- Each question has only one correct answer unless otherwise noted. Please clearly record all answers on the answer sheet. All questions are equally weighted. A passing score is 90%.

Returning the Test

- Please return **only the first page** of the test (the answer sheet) with completed answers and contact information.

Option 1: Fax the answer sheet to **Yaskawa Technical Training Services** at **(847) 887-7185**.

Option 2: e-mail a scan, photo, or edited pdf of the answer sheet with all answers and contact information to training@yaskawa.com.

Receiving Your Score

You may review your answers only if a passing score is received. You will receive a system-generated email with your score. Please allow up to 5 business days.

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1. The increase in velocity loop bandwidth for Sigma-7 provides which of the following?
 - A. Better Settling Time
 - B. Increased Response Time
 - C. Higher Motor Load Capacity
 - D. A and B
 - E. A and C
2. Sigma-7 provides Tuning-less operation for loads with inertia ratios up to _____.
 - A. 20:1
 - B. 30:1
 - C. 40:1
 - D. None of the above
3. What is the result of the increase in encoder resolution?
 - A. Path Following
 - B. Higher Resolution than Competitors
 - C. Faster Motion Profiles
 - D. Increased efficiency
 - E. A and D
 - F. A, B and E
4. How many notch filters can Sigma-7 support?
 - A. Six
 - B. Five
 - C. Four
 - D. Three
5. What types of applications benefit from Ripple Compensation?
 - A. Part Inspection
 - B. Lamination
 - C. Pick and Place
 - D. A and B
 - E. B and C
6. Which of the following are different when upgrading from Sigma-5 to Sigma-7 motors?
 - A. Shaft Size
 - B. Length of Motor
 - C. Mounting Dimensions
 - D. Motor Windings
 - E. B and C
 - F. B and D

7. What is the protection rating of Sigma-7 motors?
 - A. IP57
 - B. IP65
 - C. IP66
 - D. IP67
 - E. IP68
8. Which of the following are advantages of the Sigma-7 dual-axis amplifiers?
 - A. Reduced wiring
 - B. Larger capacity
 - C. Reduced size compared to single axis amplifier
 - D. Regenerative Capability
 - E. A and C
 - F. A and D
9. What Communication protocols are supported on Sigma-7?
 - A. Mechatrolink II
 - B. Mechatrolink III
 - C. EtherNet/IP
 - D. Modbus RTU
 - E. EtherCat
 - F. B and D
 - G. A and B
 - H. B and E
 - I. C and E
10. What Improvements have been made to Sigma-7 that help with monitoring and troubleshooting?
 - A. Alarm Trace
 - B. Service Life Monitors
 - C. Ripple Compensation
 - D. A and B
 - E. B and C
11. Which Sigma-5 cables can be used with Sigma-7?
 - A. Motor Cables
 - B. Encoder Cables
 - C. A and B
 - D. None of the above