

Taking the Certification Test

Each question has **only one correct answer**. Please record all answers on this answer sheet. The order of the questions in the test roughly follows the order of topics covered in class. All questions are equally weighted. A passing score is 90%.

Returning the Certification Test

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

Option 2: E-mail the answers to all questions to training@yaskawa.com. Be sure to include all of the contact information listed on the answer sheet.

Option 3: Mail the answer sheet to **Yaskawa Technical Training Services** at the address shown on the bottom of this page.

Receiving Your Score

When the test is taken during the training class, you will receive your score in class as soon as it can be graded. When taken as a CLEP test, receive your score from Technical Training Services by sending an email to training@yaskawa.com or by calling Karen Kolacki at 847-887-7228. In either case, you may review your answers only if a passing score is received.

Answer Sheet:

- | | | | | |
|----------|-----------|-----------|-----------|-----------|
| 1. _____ | 6. _____ | 11. _____ | 16. _____ | 21. _____ |
| 2. _____ | 7. _____ | 12. _____ | 17. _____ | 22. _____ |
| 3. _____ | 8. _____ | 13. _____ | 18. _____ | 23. _____ |
| 4. _____ | 9. _____ | 14. _____ | 19. _____ | |
| 5. _____ | 10. _____ | 15. _____ | 20. _____ | |

24.

25.

Contact Information:

Name: _____ Title: _____

Company: _____ Email: _____

Address: _____

Phone Number: _____ Fax number: _____

Supervisor's Name/ Title: _____

Test Date: _____

QUESTIONS

1. ODVA stand for what?
 - a. On-Line Device Voltage Assembly
 - b. Open DeviceNet Vendors Association
 - c. Organization of Developers and Value Adders
 - d. Nothing

2. Yaskawa sells complete DeviceNet Networks.
 - a. True
 - b. False

3. The DeviceNet master always controls the Drive's Run command.
 - a. True
 - b. False

4. It is important to use ODVA certified cables on a DeviceNet network.
 - a. True
 - b. False

5. An Object defines what?
 - a. Class, Instance, and Assembly.
 - b. MAC ID and network baud rate.
 - c. Class, Instance, and Attribute.
 - d. Where assemblies are mapped in the scanner.

6. What voltage is used on a DeviceNet bus?
 - a. 5 VDC
 - b. 12 VDC
 - c. 24 VDC
 - d. 120 VAC

7. Which one of the following is not true about Explicit Messaging?
 - a. Unlike polled messages, they are non-repeating.
 - b. They are extremely easy to use.
 - c. All Yaskawa DeviceNet options except gateways support them.
 - d. They can be used to change a Drive parameter setting via the network.

8. All DeviceNet networks should use single point grounding techniques.
 - a. True
 - b. False

9. The same assemblies are available in all Yaskawa DeviceNet solutions.
 - a. True
 - b. False

10. The CAN_L and CAN_H pair of an ODVA certified DeviceNet cable are which color?
 - a. Black and Red
 - b. Blue and White

11. What is the ODVA website address?
 - a. www.odva.com
 - b. www1.odva.us.gov
 - c. www.odva.org
 - d. www.odva.net

12. A DeviceNet master must be a PLC.
- a. True
 - b. False
13. Which Yaskawa DeviceNet solution allows for assemblies to be set via parameter?
- a. CM059
 - b. CM054
 - c. V7N
 - d. CM053
14. A DeviceNet configuration tool can be used to do which of the following?
- a. It can be the network ground point.
 - b. Be the scanner on the network.
 - c. Map assembly information in the scanner.
 - d. Set the network baud rate.
15. Which is not a reason to use a CM059?
- a. Can be used for multiple different Drive models.
 - b. Assembly for controlling the Drives digital outputs.
 - c. Allows using the 3CN port for another option board.
 - d. Is able to be configured for a Master that uses Idle Mode.
16. To replace an EDS file, just overwrite it.
- a. True
 - b. False
17. All output assemblies are 4 bytes.
- a. True
 - b. False
18. The Gateway used as part of the GPD506/P5 DeviceNet solution translates between which two protocols?
- a. DeviceNet and Modbus RTU
 - b. DeviceNet and Ethernet
 - c. DeviceNet and Modbus Plus
 - d. RS-232 and RS-485
19. When using the DeviceNet master to set the Drive's speed command it may be necessary to set the following parameter in the Drive:
- a. Reference Source (b1-01 or n004).
 - b. Frequency Reference Display Units (o1-03 or n035).
 - c. Frequency Reference Resolution/Unit (n152).
 - d. All of the above.

20. What makes the V7N unique?
- a. One of the few Drives in the market with built-in DeviceNet.
 - b. The most assemblies of any Yaskawa DeviceNet solution.
 - c. The only Yaskawa DeviceNet solution with the DeviceNet LEDs.
 - d. The only Drive to be able to work with a master in Idle Mode.
21. Which of the following is NOT true regarding grounding procedures?
- a. Ground the option card to the Drive.
 - b. Use single-point grounding procedures.
 - c. Use multiple ground loops to insure an adequate earth ground.
 - d. The network power supply and the Drive should be grounded to the same point.
22. The network drain/shield wire should never be attached to a Yaskawa DeviceNet board.
- a. True
 - b. False
23. EDS files must be registered one at a time.
- a. True
 - b. False
24. What two options are there for using a V7 Drive on a DeviceNet network?
25. What would the new name for the EDS file for a 480Vac 18 kW F7 that is using a CM056 board with version 2.11 firmware?