

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 call 800-927-5292, dial 4 for product training. In either case, you may review your answers only if a passing score is received.

Answer Sheet:

1. _____ 6. _____ 11. _____ 16. _____
 2. _____ 7. _____ 12. _____ 17. _____
 3. _____ 8. _____ 13. _____ 18. _____
 4. _____ 9. _____ 14. _____ 19. _____
 5. _____ 10. _____ 15. _____

20.

	Words for Input	Words for Output
Basic Data		
Extended Data 1		
Extended Data 2		

21.

22.

23.

24.

25.

Contact Information:

Name: _____ Title: _____

Company: _____ Email: _____

Address: _____

Phone Number: _____ Fax number: _____

Supervisor's Name/ Title: _____

Yaskawa Salesperson's Name
(if Distributor) _____

Yaskawa Distributor
(if End User) _____

Test Date: _____

QUESTIONS

1. What is the maximum number of devices on a RS-485 segment?
 - a. Depends on the type of device
 - b. 32 plus a Repeater
 - c. 32 or less
 - d. 32 plus two Repeaters

2. There can be more than one Master on a Profibus network.
 - a. True
 - b. False

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

4. With the Extended Data 1 format the Profibus Master can write to four non-consecutive Drive parameters.
 - a. True
 - b. False

5. The types of Profibus that Yaskawa options for are?
 - a. Only Profibus-DP.
 - b. Profibus-DP and Profibus-PA.
 - c. Only Profibus-PA.
 - d. All available forms of Profibus.

6. Using the Basic Data format the Profibus Master can specify to the Drive?
 - a. RUN Operation commands
 - b. Frequency Reference
 - c. Torque Reference
 - d. All of the above

7. Which one of the following don't need a network address?
 - a. Yaskawa Drives with Profibus option cards .
 - b. Profibus Masters.
 - c. Optical Link Modules and Repeaters.
 - d. Computers running the network configuration software.

8. A single GSD file covers all Yaskawa Drive Profibus option cards.
 - a. True
 - b. False

9. Profibus-DP networks must be assembled using only RS-485 specified copper wire.
 - a. True
 - b. False

10. Active termination must be used on Profibus networks using baud rates above 1.5 Mbps?
- a. True
 - b. False
11. What is the Profibus Organization website address?
- a. www.odva.com
 - b. www.profibus.org
 - c. www.profibusorg.net
 - d. www.profibus.de
12. A Profibus master must be a PLC.
- a. True
 - b. False
13. Which Yaskawa Profibus solution has hardware switches for setting the network address?
- a. CM061
 - b. CM067
 - c. Both of the above.
14. Profibus network wiring should?
- a. Be run at least four inches away from any high voltage wiring.
 - b. Not use a mixture of fiber optic and RS-485 wiring.
 - c. Always be ANSI-95 purple.
 - d. Be determined by the network baud rate.
15. When configuring the Yaskawa Profibus-DP option board with COM PROFIBUS the Slave station type that will be shown is?
- a. PROFIBUS-DP INTER.
 - b. CM061 or CM067.
 - c. YASKAWA VS-DRIVE.
 - d. None of the above.
16. There is no Profibus-DP option for the GPD506/P5 Drive.
- a. True
 - b. False
17. The type of software tool used to configure the network is usually determined by the manufacturer of the Network master.
- a. True
 - b. False
18. The recommended network addresses that can be set into a Yaskawa Profibus-DP option board are?
- a. 0 through 127
 - b. 3 through 127
 - c. 3 through 126
 - d. 3 through 99

19. Signal reflections can be caused by all of the following except:
 - a. Duplicate addresses on the network.
 - b. Improper stub or drop lines.
 - c. Poor segment termination.
 - d. Using less than 1 meter of cable between network devices.

20. How many words of data are used for Input and Output messages for each of the data formats?

21. What is the normal operation state of the four LEDs on the CM061 and CM067?

22. Where should the GSD file be copied to for it to be usable by the Configuration Tool?

23. Which of the data formats (Basic, Extended 1, and Extended 2) does not allow the Master to change or read a Drive parameter over the network?

24. What two RS-485 limitations may force use of multiple segments to be used on a network instead of one long segment?

25. What is a repeater?