1.	When a scan tool is connected to a vehicle with high speed CAN communication, the scan tool becomes?
a.	Part of the PCM interface only
b.	A Node on the CAN network
C.	A tool to read codes and data ONLY if the vehicle has a PCM module
d.	All the above
2.	If you have to probe the actual terminal of a module to test the circuit, it is NOT important what size probe you use.
	a. T
	b. F
3.	What year was high speed CAN required on all passenger and light duty vehicles sold in the US?
	a. 2003
	b. 2004
	c. 2007
	d. 2008
4.	A "high-speed" Graphing Meter or lab scope should be used to detect high speed CAN activity?
	a. T
	b. F

5. Which modules typically use high speed CAN communication?

a. Antitheft and cruise control

- b. PCM and ABS
- c. HVAC (Heating/AC) and SRS (Air Bag)
- d. All the Above
- 6. During an MPI, your scan tool could not communicate with the vehicle. What might cause this?
 - a. The scan tool is not compatible
 - b. The BUS circuits are shorted or open
 - C. A bad module on the BUS
 - d. All the above
- 7. A high speed CAN BUS network includes two 120 ohm resistors wired in parallel between the high and low side of the BUS circuits and located at each end of the 2 wires. What should the total resistance of the two resistors be when measured between the high and low side of the BUS wires?
 - a. 240 +/- 12 ohms
 - b. 240 +/-6 ohms
 - C. 60 +/- 12 ohms
 - d. 60 +/- 3 ohms
- 8. If the narrow side (on rectangular terminals) or round diameter of a module's harness terminal measures .024", what diameter should your test probe be in thousands?
 - a. .033
 - b. .029
 - C. .025
 - d. .023

- In order to determine if the BUS circuits are arranged in a loop, star or combination pattern, would you typically
 - a. look in the owner's manual.
 - b. look up appropriate wiring diagrams in the Direct Tech or Alldata.
 - C. look at the under-hood information label.
 - d. look up factory TSB's.
- 10. The first step in diagnosing a communication related trouble code is.
 - a. Check power and grounds at all the modules on the BUS.
 - b. Replace the suspect module.
 - C. Look for known issues in TSB's, Identifix, Alldata, etc.
 - d. Obtain a wiring diagram from Alldata, Direct tech, etc.

- 11. On vehicles where the modules are connected to the BUS circuits in a star pattern, some vehicles allow you to unplug each module from the BUS at the shorting bar or star connector.
 - a. T
 - b. F
- 12. Which module uses a single 60 ohm termination resistor on the high speed Diagnostic CAN C BUS?
 - a. The ABS module
 - b. The HVAC (Heat/AC) Module
 - c. CCN (Cabin Controller Node)

d	. TIPM	(Total	Integrated	Power	Module)	

13. On some vehicles, one of the termination resistors may be found
a. Behind the dash
b. Next to the radio
C. Near the fuel tank
d. All of the above.
14. A technician back-probes a high speed Can BUS circuit with a graphing meter or DVOM and sees activity with the key on engine off. This means the BUS is not open or shorted.
a. T
b. F
15. The same tech checks out another vehicle the same way as he did in question 14. But this time he does not see any BUS activity. This usually indicates a shorted BUS circuit or a bad module on the BUS. a. T
b. F
16. A scan tool is the best tool for diagnosing a CAN bus shorted to ground.
a. T
b. F

17. A pre-CAN equipped Chrysler in the shop has both SCI and PCI serial bus connections at the DLC. Technician says a SCI bus may be the bus the scan is communicating on. Technician B says the PCI bus may be the bus the tool is communicating on. Which technician is correct?
a. Technician A only
b.Technician B only
C. Both Technicians A and B
d.Neither Technicians A or B
18. A late model Dodge with a Diagnostic CAN C bus displays "No Communications" on a scan tool when the tech tries to read PCM codes but can communicate with the HVAC. Technician A says a faulty TIPM is the most likely cause. Technician B says the TIPM is the least likely problem. Which technician is correct?
a. Technician A Only b. Technician B Only c. Both Technicians A and B d. Neither Technicians A or B
19. A vehicle utilizing a bus with a loop wiring configuration requires open circuits in the wiring before a module will no longer communicate.
a. 2b. 4c. 1d. Opens will not cause a communication loss
20. J1850 PCI serial buses on Chrysler, Dodge and Jeep are 2 wire buses.a. Tb. F

- 21. A 2008 Dodge R2500 with a 6.7 Turbo Diesel engine has the MIL light on. Codes P006e for Turbo Boost Control Module Supply Voltage Too Low and code U010c for Lost Communication with Turbo Boost Control Module are reported. Which technician is most correct?
 - A. Tech A says to diagnose the U010c code first.
 - B. Tech B says to diagnose the P006e code first.
 - 22. What is considered the normal baud rate (bytes/sec) of a high speed CAN network.
 - a. 33 kbytes/sec
 - b. 330 kbytes/sec
 - c. 500 kbytes/sec
 - d. 550 kbytes/sec
 - 23. If you use a high speed Graphing Meter or Lab Scope, you can interpret the actual data being sent across the CAN BUS network.

T or F

- 24. During an MPI inspection, you r scanner displayed NO COMMUNICATION. Your scanner has communicated with similar vehicle in the past. What should you write in the trouble code section of the MPI report?
- a. no communication, unable to read codes

- b. no communication, possible wiring, power-ground or module issue
- c. no communication?
 - d. no communication, needs diagnoses
- 25. The most likely cause of an intermittent communication code could be.
- a. low battery voltage
- b. loose connections
- c. electrical interference
- d. all the above

Answer Key:

1 b, 2 b, 3 d, 4 a, 5 b, 6 d, 7 d, 8 d, 9 b, 10 c, 11 a, 12 d, 13 d, 14 a, 15 b, 16 b, 17 c, 18 b, 19 a, 20 b, 21 b, 22 c, 23 b, 24 b, 25 d