Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions: For each test item, indicate your response by circling the correct answer(s).**

1. CMS are used to identify periods of excess emissions, assess control equipment efficiency, and monitor control equipment operation.
   1. True
   2. False
2. CMS are used to measure which of the following pollutant parameters? Select all that apply.
3. Mercury​
4. Hydrogen Chloride
5. Stack Flow Rate
6. Particulate matter
7. \_\_\_\_\_\_\_\_\_\_ systems condition the sample gas before analysis.
8. In-situ
9. Opacity
10. Dilution extractive
11. Source level extractive
12. Opacity is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. The percentage of light that is attenuated by an optical medium
14. The percentage of light that is transmitted through an optical medium
15. Predictive emission monitoring systems (PEMS) use\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. The continuous measurement of selected plant parameters and plant operating conditions
17. A software-based system of mathematical models to determine the pollutant emissions
18. Both a and b
19. A continuous emission rate monitoring system (CERMS) is used when which of the following is required?
20. Gas concentrations
21. Mass emission rate
22. Both a and b
23. What are the important factor(s) for the installation of CEMS? Select all that apply.
24. Accessibility
25. Representativeness
26. Sufficient distance from flow disturbances
27. Protection from weather and vibration
28. Performance specifications are designed to evaluate the installed continuous monitoring systems (CMS) performance\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
29. Over an extended period of time
30. At the time of, or soon after, installation and whenever specified in the regulations
31. Performance specifications for CMS are contained in Appendix F of 40 CFR, Part 60 – New Source Performance Standards.
32. True
33. False
34. The source owner or operator is responsible for calibrating, maintaining, and operating the CMS properly.
35. True
36. False
37. Under performance specification 2, the relative accuracy test audit, or RATA, must be passed prior to installation of the CEMS.
38. True
39. False
40. During the PS-2 7-day CD test, most plants must be operating more than \_\_\_\_\_\_\_% of normal plant load.
41. 50
42. 75
43. The plant does not have to be operating for this test
44. No operating load is specified
45. Gas chromotography is a commonly used technology for which of the following performance specifications? Select all that apply.
46. PS-1 (opacity)
47. PS-5 (TRS)
48. PS-7 (H2S)
49. PS-9 (GC)
50. PS-18 (HCl)
51. The observer of an audit should move the CEMS analyzers in order to be able to verify their model and serial numbers.
52. True
53. False
54. Which of the following activities should be done to prepare for an onsite visit? ​Select all that apply.
55. Review records (e.g., monitoring plans, RATA, etc.)​
56. Check data availability reports​
57. Be prepared to provide technical advice or consulting on the operation of the monitors
58. Make note of any data errors or issues​
59. Review previous audits​
60. Review performance specifications and QA procedures, where relevant​
61. ​The following examples represent using CMS as credible evidence when it is **not** the compliance method:

* Using CMS data to initiate and support enforcement cases alleging emissions violations
* Using CMS data when it is out-of-control, or not capturing valid data
* Using CMS data to provide a basis to issue a Section 114 request for compliance method data
* When there is no compliance method specified, use CMS data to enforce operation and maintenance, monitoring, recordkeeping, and recording requirements

1. True
2. False