

8.3 Acid Deposition

Question Paper

Course	DPIB Chemistry
Section	8. Acids & Bases
Topic	8.3 Acid Deposition
Difficulty	Easy

Time allowed: 20
Score: /10
Percentage: /100

Question 1

Which gas is present in the largest proportion in the exhaust fumes of a car engine?

- A. carbon monoxide
- B. carbon dioxide
- C. water vapour
- D. nitrogen

[1 mark]

Question 2

Oxides of nitrogen are released into the atmosphere in car engine exhaust fumes.

Which environmental problem below is **not** made worse by these exhaust fumes?

- A. photochemical smog
- B. the hole in the ozone layer
- C. the corrosion of buildings
- D. acidification of lakes

[1 mark]

Question 3

Which of the following is true?

- A. Acid rain is caused by carbonic acid
- B. Acid rain turns universal indicator red
- C. Wet acid deposition includes snow and fog
- D. Catalytic converters remove oxides of sulfur from car exhausts

[1 mark]

Question 4

What is the colour of universal indicator paper in rain water?

- A. Red
- B. Blue
- C. Yellow
- D. Green

[1 mark]

Question 5

A sample of acid rain water is tested and found to be pH 4. How does its hydrogen ion concentration compare to pure water?

- A. 1000 times more concentrated
- B. 3 times more concentrated
- C. 1000 times less concentrated
- D. 3 times less concentrated

[1 mark]

Question 6

What happens to the oxidation state of sulfur when it becomes sulfuric acid in acid rain?

- A. It changes from 0 to -2
- B. It changes from 0 to +4
- C. It changes from 0 to +6
- D. It changes from -2 to +6

[1 mark]

Question 7

One equation for the formation of acid rain from nitrogen dioxide is shown below.



What type of reaction is this?

- A. Oxidation
- B. Reduction
- C. Redox
- D. Acid-base

[1 mark]

Question 8

Which of the following are used in catalytic converters?

- I. Ceramic
 - II. Palladium
 - III. Platinum
- A. I and II only
 - B. I and III only
 - C. II and III only
 - D. I, II and III

[1 mark]

Question 9

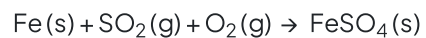
A sample of rainwater is tested and found to be pH 6. Which of the following is **not** true?

- A. The sample is acidic
- B. The rainwater is acid rain
- C. Blue litmus would turn red in the sample
- D. The rain water is impure

[1 mark]

Question 10

Iron structures can be damaged by dry deposition such as the equation below:



Which is true?

- I. Iron is oxidised
- II. Sulfur is oxidised
- III. This is a neutralisation reaction

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

[1 mark]