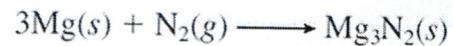
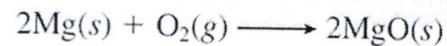
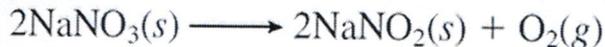




Answer all questions

Q1: A: Semiconductors are elements that normally are not conductors, but will conduct electricity. Give two types of semiconductors and how it work.

B: Give practical use the following chemical reaction :



(10 mark for each branch)

Q2: choose the correct answer for the following questions:

1. Iron ore is called? (bauxite, haematite, malachite, ferrotite)
2. Which statement is TRUE: (iron is obtained from its ore by oxidation using electrolysis, iron is obtained from its ore by reduction using carbon, aluminium is obtained from its ore by oxidation using electrolysis)
3. In which reaction does an oxidation and a reduction produce the same product?
 (iron(III) oxide + carbon monoxide \implies iron + carbon dioxide,
 calcium carbonate + silicon dioxide \implies calcium silicate + carbon dioxide,
 carbon dioxide + carbon \implies carbon monoxide, carbon + oxygen \implies carbon dioxide)
4. A mineral from which a metal can be extracted, is called?
 (rock, mixture, an ore, compound)

(10 mark)

Q3: A: Give the mineral name and chemical composition for the following metal:

(Lead, Mercury, Zinc, Chromium, Tin).

B: Draw the relationship between the group elements and Atomic radius.

C: What does recycling mean, and what are the advantage for recovering?

(5 mark for each branch)

Q4: Give short answer for General Questions:

1. What is an Ore?
2. What is the Difference between an Ore and a Mineral?
3. Name a Source of Metals other than Ores?
4. When is Carbon used for Extraction?
5. Why is Limestone used in the Blast Furnace?
6. Is Cast Iron brittle?
7. Is Copper a Good Conductor of Electricity?
8. Why is Aluminum Resistant to Corrosion?
9. Why is Titanium not extracted by Electrolysis?
10. How can Adding Metals change the Properties of an Alloy?

(15 mark)


 Examiner

Dr. Mohammed Abdulrazzaq

Wishing you success

Head of department

