

Summary Quiz (Chapter 39)

- Which of the following elements can react with oxygen to form an ionic compound?
A. Sodium
B. Silicon
C. Phosphorus
D. Chlorine
- X is a Period 3 element. The oxide of X reacts vigorously with water to form an alkaline solution. A pale blue precipitate forms when the alkaline solution is added to copper(II) sulphate solution. What is X?
A. Na
B. Mg
C. P
D. Cl
- Which of the following substances contain(s) delocalized electrons at room temperature and pressure?
(1) Aluminium (2) Phosphorus (3) Neon
A. (1) only
B. (2) only
C. (1) and (3) only
D. (2) and (3) only
- Which of the following statements concerning oxygen and sulphur are correct?
(1) At room temperature, sulphur can conduct electricity while oxygen cannot.
(2) The van der Waals' forces between the sulphur molecules are stronger than that between the oxygen molecules.
(3) They have simple molecular structures.
A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
- Which of the following statements concerning aluminium oxide are correct?
(1) It reacts with dilute hydrochloric acid.
(2) It reacts with sodium hydroxide solution.
(3) It is a white solid at room temperature.
A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
- Which of the following is the correct increasing order for the melting points of the oxides?
A. $\text{Na}_2\text{O} < \text{P}_4\text{O}_{10} < \text{SO}_2$
B. $\text{P}_4\text{O}_{10} < \text{Na}_2\text{O} < \text{SO}_2$
C. $\text{P}_4\text{O}_{10} < \text{SO}_2 < \text{Na}_2\text{O}$
D. $\text{SO}_2 < \text{P}_4\text{O}_{10} < \text{Na}_2\text{O}$
- Which of the following oxides have a giant structure?
(1) Al_2O_3 (2) SiO_2 (3) P_4O_{10}
A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
- Which of the following substances has a simple molecular structure?
A. Lithium
B. Boron
C. Nitrogen
D. Silicon

14. Which of the following statements concerning Period 3 elements is correct?
A. The melting point of elements increases across the period.
B. Electrical conductivity increases across the period.
C. None of them is liquid at room temperature and pressure.
D. All solid elements have giant metallic structures.
15. Which of the following elements contains discrete diatomic molecules?
A. Argon
B. Phosphorus
C. Sulphur
D. Oxygen
16. Which of the following oxides dissolve(s) in water to form acidic solution(s)?
(1) Na_2O (2) SO_2 (3) Cl_2O
A. (1) only B. (2) only
C. (1) and (3) only D. (2) and (3) only
17. Which of the following oxides can dissolve in water and form alkaline solution(s)?
(1) Al_2O_3 (2) MgO (3) P_4O_{10}
A. (1) only B. (2) only
C. (1) and (3) only D. (2) and (3) only
18. Which of the following oxides reacts with dilute hydrochloric acid?
A. Cl_2O B. SiO_2
C. SO_2 D. MgO
19. Which of the following statements concerning sulphur dioxide are correct?
(1) It is soluble in water.
(2) It is one of the air pollutants which causes acid rain.
(3) It is an amphoteric oxide.
A. (1) and (2) only B. (1) and (3) only
C. (2) and (3) only D. (1), (2) and (3)
20. Which of the following oxides are covalent in nature?
(1) MgO (2) SiO_2 (3) SO_2
A. (1) and (2) only B. (1) and (3) only
C. (2) and (3) only D. (1), (2) and (3)

The End

Suggested Answer

1.	A	6.	D	11.	D	16.	D
2.	A	7.	A	12.	A	17.	B
3.	A	8.	C	13.	D	18.	D
4.	C	9.	D	14.	C	19.	A
5.	D	10.	B	15.	D	20.	C