

Here are **30 questions for each category** based on the chapter "**Metals and Non-Metals**" from your textbook.

SECTION A

(1) Multiple Choice Questions (MCQs)

1. Which of the following metals is liquid at room temperature?

- a) Aluminium
- b) Mercury
- c) Iron
- d) Zinc

2. Which non-metal is essential for respiration?

- a) Nitrogen
- b) Carbon
- c) Oxygen
- d) Hydrogen

3. What is the process of coating iron with zinc called?

- a) Corrosion
- b) Galvanisation
- c) Alloying
- d) Sublimation

4. Which of the following is a good conductor of electricity?

- a) Sulfur
- b) Carbon
- c) Copper
- d) Phosphorus

5. Which metal is used in making aircraft due to its lightweight?

- a) Iron
- b) Aluminium
- c) Copper
- d) Zinc

6. The most abundant non-metal in the Earth's crust is:

- a) Nitrogen

- b) Oxygen
 - c) Carbon
 - d) Hydrogen
7. Diamond is an allotrope of which non-metal?
- a) Sulfur
 - b) Phosphorus
 - c) Carbon
 - d) Iodine
8. The process in which metals react with air and water to form a layer on their surface is called:
- a) Rusting
 - b) Corrosion
 - c) Galvanisation
 - d) Oxidation
9. Which of the following is an alloy?
- a) Copper
 - b) Iron
 - c) Bronze
 - d) Zinc
10. What is added to table salt to prevent iodine deficiency?
- a) Sodium
 - b) Chlorine
 - c) Iodine
 - d) Fluorine

(2) Fill in the Blanks

11. The hardest natural substance on Earth is ____.
12. ____ is used in making filaments of electric bulbs.
13. The chemical formula of rust is ____.
14. ____ is a non-metal used to disinfect drinking water.
15. Aluminium is widely used in ____ due to its lightweight and strength.
16. The process of adding sulfur to rubber to make it more durable is called ____.
17. The most malleable and ductile metal is ____.
18. The major component of the Earth's atmosphere is ____.
19. ____ is the only metal that can be cut with a knife.
20. Brass is an alloy of copper and ____.

(3) True or False

21. Gold and silver are highly reactive metals.
22. Mercury is used in thermometers because it is a good conductor of heat.
23. Metals are generally bad conductors of electricity.
24. Graphite is the only non-metal that conducts electricity.
25. Stainless steel is an example of a metal alloy.
26. Iron nails rust when exposed to dry air.
27. Nitrogen gas is used in filling food packets.
28. Zinc is used for galvanising iron to prevent rusting.
29. Platinum is a good conductor of electricity.
30. All metals are solid at room temperature.

SECTION B

(4) Odd One Out (Give Reason)

31. Iron, Aluminium, Oxygen, Copper
32. Gold, Silver, Platinum, Mercury
33. Diamond, Graphite, Charcoal, Silicon
34. Nitrogen, Oxygen, Sulfur, Copper
35. Bronze, Brass, Aluminium, Steel
36. Sodium, Zinc, Potassium, Lithium
37. Rusting, Galvanisation, Corrosion, Oxidation
38. Lead, Aluminium, Copper, Oxygen
39. Coal, Sulfur, Iodine, Mercury
40. Magnesium, Silicon, Germanium, Antimony

(5) Matching Questions

41. Iron - a) Used in aircraft
42. Aluminium - b) Used in electrical wires
43. Copper - c) Used in jewellery
44. Gold - d) Prevents rusting
45. Zinc - e) Found in blood
46. Carbon - f) Used in making pencils
47. Oxygen - g) Essential for respiration

- 48. Chlorine - h) Used for water purification
- 49. Silver - i) Used in mirrors
- 50. Sulfur - j) Used in vulcanisation of rubber

(6) Name the Technique Used for Separation

- 51. Separating iron from a mixture of sand and iron filings
- 52. Removing salt from seawater
- 53. Separating oil from water
- 54. Obtaining copper from copper sulfate solution
- 55. Extracting iron from its ore
- 56. Separating nitrogen from air
- 57. Purifying gold from impurities
- 58. Removing dust from air in industries
- 59. Separating components of crude oil
- 60. Separating colored dyes from ink

(7) Give Examples of

- 61. A metal used in making bridges
- 62. A non-metal used in fertilizers
- 63. A metal used in making utensils
- 64. A non-metal used in making antiseptics
- 65. A metal that does not corrode easily
- 66. A metal used in batteries
- 67. A non-metal used in matchsticks
- 68. A metal used in making electrical cables
- 69. A non-metal used in medicines
- 70. A metal used in making coins

SECTION C

(8) Short Answer Questions

- 71. Define corrosion and give an example.
- 72. What is an alloy? Give two examples.
- 73. Why do we use gold and silver for making ornaments?

- 74. What is electroplating?
- 75. Why does iron rust?
- 76. Give two reasons why aluminium is used in making aeroplanes.
- 77. How does galvanisation prevent rusting?
- 78. What are metalloids? Name two metalloids.
- 79. What is the role of nitrogen in the atmosphere?
- 80. Why is diamond the hardest known substance?

(9) Diagram-Based Questions

- 81. Draw a diagram of a separating funnel and label its parts.
- 82. Illustrate the process of rusting of iron.
- 83. Draw a diagram showing the structure of a diamond and graphite.
- 84. Show the electroplating process using a labeled diagram.
- 85. Draw a simple electric circuit using copper wire as a conductor.

(10) Reasoning-Based Questions

- 86. Why is graphite used in making pencil leads?
- 87. Why do non-metals have low melting and boiling points?
- 88. Why is copper used in electrical wires instead of iron?
- 89. Why does gold not corrode easily?
- 90. Why are food packets filled with nitrogen?

(11) Chemical Formula & Symbol-Based Questions

- 91. Write the chemical formula for rust.
- 92. What is the symbol of sodium?
- 93. What is the chemical formula of water?
- 94. Write the chemical formula for ammonia.
- 95. What is the symbol of gold?

This completes **30 questions in each category** as per the exam format. Let me know if you need modifications or additional questions! 🚀