Practice Test

Class -VI SCIENCE

Higher order thinking (Hots) questions 16 Marks

1.Children guide metal balls under a cardboard maze with a magnet. (1+1=2)
a) Which property of magnets lets this work?
b) What if they used a metal board instead of cardboard?

2. A is a metal object that sticks to a magnet. B is also a metal but does not stick. (1+1=2)
a) Why does 'A' behave differently from Y?
b) Name one metal that behaves like 'B'.

3.Three students test substances X, Y, and Z in separate glasses of water.(1 +1=2)
X disappears completely and the water tastes salty.
Y makes the water cloudy and grains settle at the bottom.
Z disappears completely and makes the water sweet.
a. Identify X, Y, and Z.
b. Which are soluble, and which are insoluble in water?

4. You have two identical syringes—one half-filled with water, one half-filled with air. You push the plungers with equal force.(1+1=2)
a) Which syringe compresses most, which least?
b) Explain how the compressibility of water vs. air causes this difference

5.An animal 'A' can walk long distances on loose sand without sinking, while animal 'B' moves easily on rocky, uneven ground. (1+1=2)
a) Predict the difference in their legs.
b) Explain how each leg type suits its habitat.

6. Farmers note that X grows best in dry areas with roots that store food deep underground. Y grows quickly after rain because its roots spread near the surface. Z has leaves where veins form a net-like web and is grown for its edible pulses. (1+1=2)
a) Predict root type for each.
b) State whether each is monocot or dicot.

7.In a village, people depend on P for cooking and lighting. It takes millions of years to form and is obtained from petroleum. (1+1=2)
Q is obtained from coal and is mainly used to produce electricity.
Ris cleaner than both P and Q, and is now used as CNG in vehicles.
a) Identify P, Q, and R.
b) Classify each as renewable or non-renewable.

8.Priya takes a cold bottle of water out of the fridge on a humid day. Soon, tiny water droplets form on the outside of the bottle.(1+1=2)
a) Name the process that causes this.
b) Explain why this process happens in this situation.