with Column-II:

a)Bird's wings	1) Inspired aircraft Design
b) Water Cycle	2) Evaporation and precipitation
c) Metals	3) Sundial
d) Shadow	4) Good conductor of Electricity

Section E:

Assertion and Reason (2 × 1 = 2 Marks)

Directions: Mark (A) if both are true and R is correct explanation,
(B) if both are true but R is not the explanation,
(C) if A is true but R is false,
(D) if A is false but R is true.

5) Assertion (A): Water condenses faster when heated.
Reason (R): Heat gives energy to water molecules to escape into air.

6) Assertion (A): A weathering of rock is an irreversible change.
Reason (R): Weathering occurs due to action of wind and water.

Section F:

Short Answer Questions (3 × 1 = 3 Marks)

7) How are shadows formed?

8) Define eclipse.

9) Why burning of wood is irreversible change?

Section G:

Long Answer Questions (3 × 2=6 Marks)

9) How does understanding the properties of different materials help in everyday life?

10) Scientific experiments and observations can lead to a deeper understanding of the environment and human activities. Justify this statement

11) How human activities affect the environment?

Section H:

12) Case Study (5 × 1 = 5 Marks)

Read the following passage and answer the questions that follow:

"Some changes are slow such as rocks breaking into pebbles while others are fast like burning a candle. Combustion, cooking and rusting are examples of irreversible changes. On the basis of reversibility, changes can be categorized into two types: Reversible changes, where a substance can be restored to its initial state, and Irreversible changes, where it cannot be restored."

a) Give one example of a slow change mentioned in the text.

b) Name two examples of irreversible changes provided in the passage.

c) Define a reversible change based on the text.

d) Is the ripening of fruit a reversible or irreversible change?

e) Which type of change is combustion?