Class VI

COMPREHENSION PASSAGE

Fossils – Clues to the Past

The Earth has no diary written in human language, yet it preserves an astonishing account of its past. Much of this account lies concealed beneath layers of rock. Fossils are among the most valuable pieces of this hidden record. They are not merely old bones or shells; they may be impressions, footprints, burrows, pollen grains or other traces left behind by organisms that lived long ago. Their real significance lies in the information they preserve.

The formation of a fossil is an unlikely event. When an organism dies, its remains are usually broken down by weather, water, bacteria or other organisms. For fossilisation to occur, the remains or traces generally need to be protected from rapid destruction, often by being buried beneath sediment. Over thousands or millions of years, pressure and chemical changes may transform the surrounding material. Minerals can gradually replace parts of the original remains, creating a stone-like record of something that once lived.

A footprint presents a particularly interesting case. It may preserve no bone or flesh, yet it can reveal evidence of movement. The depth, shape and arrangement of footprints may provide clues about the size of an animal, the way it travelled and, in some cases, whether several animals moved together. Such evidence must nevertheless be interpreted cautiously because the surface on which the footprint was made could also have affected its appearance.

The rock surrounding a fossil is often almost as important as the fossil itself. Different layers of sedimentary rock were formed under different conditions and at different times. By examining these layers, scientists can place fossils within a broader environmental and chronological context. Fossilised pollen, for instance, may indicate the kinds of vegetation that once existed in an area. A change in the types of fossils found in successive layers may suggest changes in climate, habitat or living organisms.

Yet fossils cannot answer every question. The fossil record contains gaps because countless organisms disappeared without leaving recognisable traces. Consequently, scientists rarely treat one discovery as final proof. They compare fossils with rocks, geological evidence and other discoveries before forming explanations.

A tiny fossil may therefore possess enormous scientific value. It is not valuable simply because it is ancient. Its importance comes from its ability to provide evidence, challenge assumptions and help reconstruct a world that no human witnessed. Fossils remind us that the planet we know today is only one chapter in a much longer story.

Based on your understanding of the passage answer the following questions :

1. The opening description of Earth as having “no diary written in human language” primarily suggests that— (1)

a) Earth has failed to preserve information about its past

b) natural evidence can function as a record even without written language

c) written records are less reliable than fossils

d) fossils contain complete information about ancient life

2. Select the words from the passage that are closest in meaning to: (1)

Very large or significant in effect

3. Select the words from the passage that are opposite in meaning to: (1)

a) Recognisable

4. Find the analogy and provide appropriate answer for the followings from the passage : (1)

Fossil : Ancient life :: Rock layer : _____

5. Footprint : Movement :: Pollen : _____ (1)

6.A scientist discovers a footprint that is unusually deep on one side. The evidence is not sufficient to conclude that the animal had an uneven body structure. Support this statement using the passage. 2

7. A fossil discovery contradicts an earlier explanation about an ancient environment. The discovery should not immediately be dismissed. Justify this position using ideas from the passage. 2

8. Assertion (A): A fossil cannot always be used as complete evidence of the organism's life. (1)

Reason ® : Many organisms disappear without leaving recognisable fossil traces.

a) Both A and R are true, and R is the correct explanation of A.

b) Both A and R are true, but R is not the correct explanation of A.

c) A is true, but R is false.

d) A is false, but R is true.