

### (3) Petrification

- In petrification the animal undergoes a certain amount of mineralization.
- The degree of mineralization is greater in case of older fossils.
- The actual tissues are gradually replaced, molecule for molecule by the minerals.
- Minerals involved in petrification are silica, iron pyrites and oxides, magnesite, sulfur etc.
- Petrified muscles of old shark and bones of mesozoic dinosaurs and other vertebrates are good examples of this type of fossilization.

### (4) Preservation of foot prints and Trails.

- Foot prints (tracks) are recorded in muddy environments, where wet sand and mud receive impressions of the feet of vertebrates and T.Y.Z. (A)-19.
- These impressions are covered by sediments before they are eroded or washed out.
- Trails are the irregular markings of animals recorded on the soft sediment beneath the surface water.
- Movements of crustaceans or urchins have also been recorded as trails.

## (5) Natural Moulds and Casts :

### (a) Moulds

- Mould is the imprint fossil. It is formed by the hardening of the surrounding material in which the organism was buried.
- Finally a cavity is formed which retains the exact form of the organism.

### (b) Casts

- Often the moulds are filled in with mineral matter, so that a natural cast of the object is formed.
- It differs from the petrification in that it retains the form of the organism but not its structure.

### (6) Coprolites

- Sometimes, the unvoided intestinal contents remain preserved as fossils.
- They are called coprolites.
- They are usually nodular or contorted in shape and phosphatic in composition. Examples: Coprolite of Carboniferous Salamanders from Mazon Creek and Illinois.