

# Introduction to Palaeontology

GE3

Dept. of Geology

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# Geology

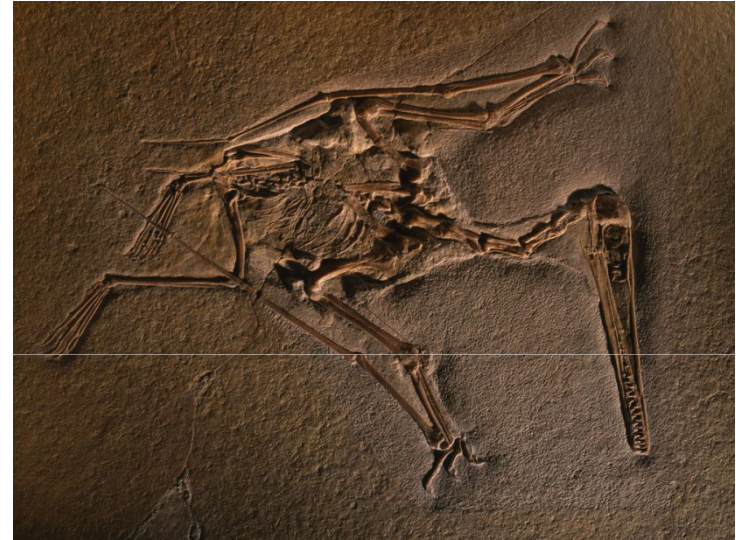
- Also known as 'geoscience' or 'Earth science', geology is the study of the structure, evolution and dynamics of the Earth and its natural mineral and energy resources.
- Geology investigates the processes that have shaped the Earth through its 4500 million year history and uses the rock record to unravel that history.

# Palaeontology

- Palaeontology is a branch of geology which deals with earlier life through fossil record.
- Palaeontology is the study of prehistoric species, mostly ones that are extinct. It focuses primarily on fossil data, using a variety of physical, chemical and biological techniques to analyse them.

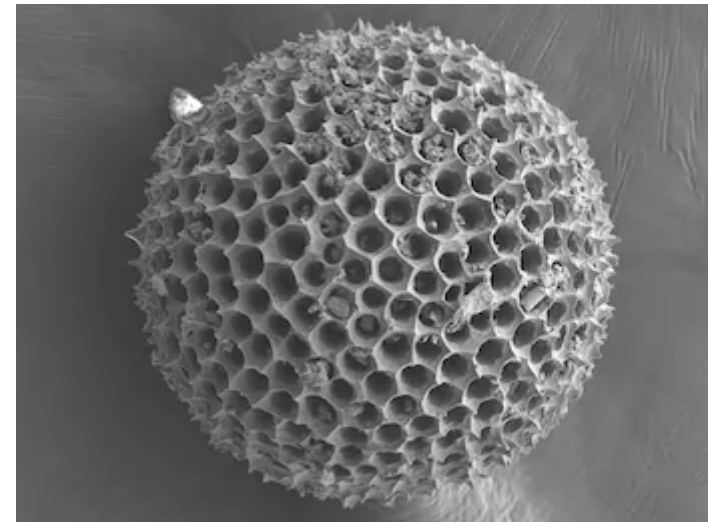
# Fossil

- **Fossil** is a remnant, impression, or trace of an animal or plant of a past geologic age that has been preserved in Earth's crust.



# Type of fossil:

- According to size-
  - i) Macro fossil – Those are visible in hand specimen
  - ii) Micro fossil- Those are visible only under microscope.

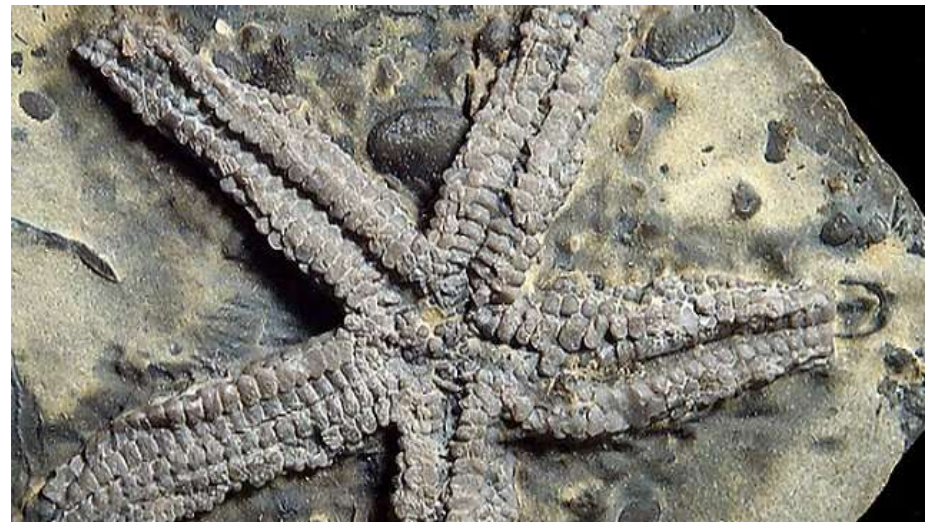


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# Type of fossil:

- According to nature- i) Plant fossil  
ii) Animal fossil



# Type of fossil:

- According to preservation:
  - i) Body fossil
  - ii) Trace fossil

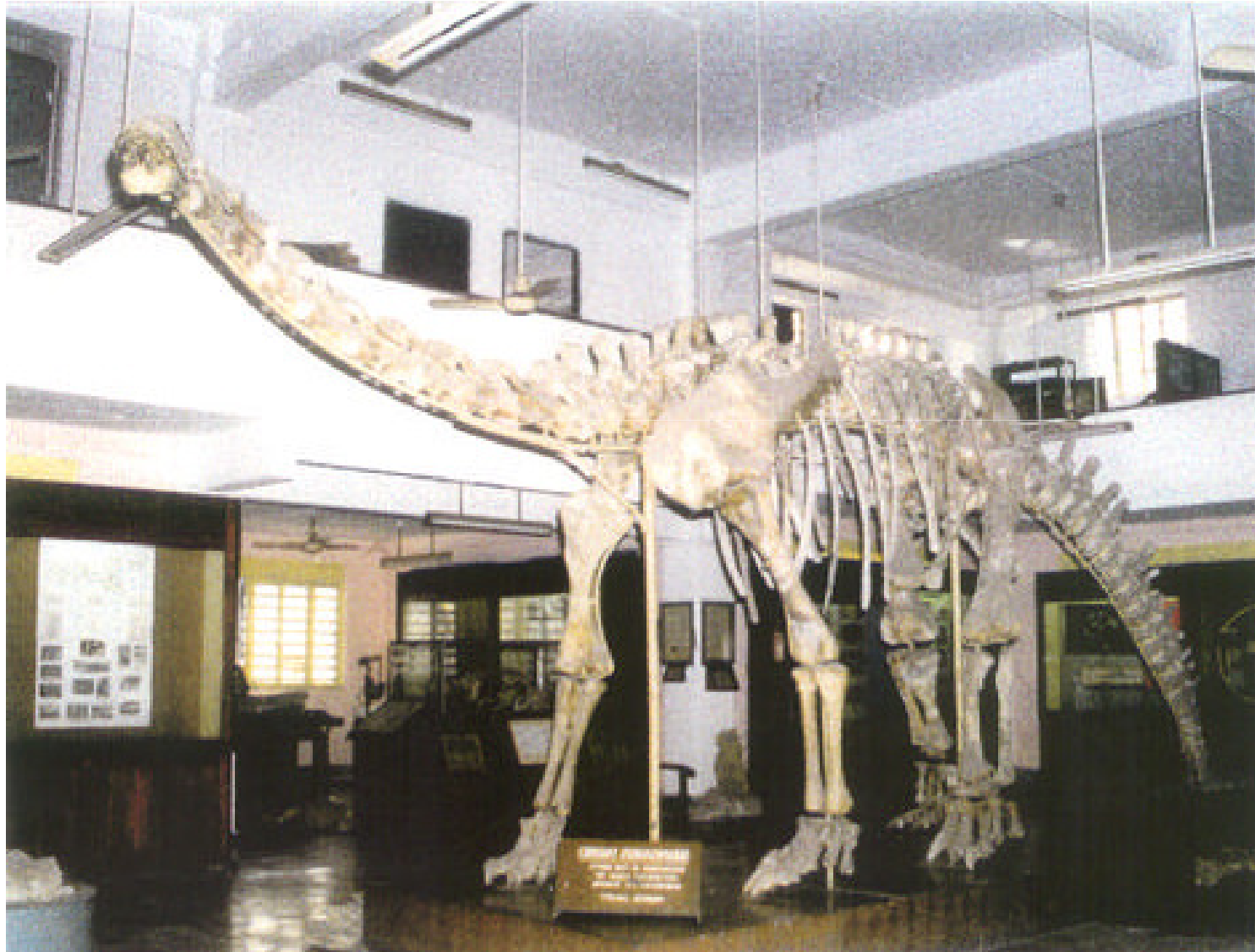




# Mode of Preservation of fossils:







## Molds and Casts are the Most Common Types of Fossils

- A **mold** is a hollow area in sediment in the shape of an organism or part of an organism. A mold forms when the organism is buried in sediment. Later, water may deposit minerals and sediment into a mold, forming a cast.
- A **cast** is a solid copy of the shape of an organism.

