### Origin of the Earth

The origin of the earth is currently believed to have been about 4,600,000,000 years ago. This beginning, or zero time, in geological history is marked by the formation of a solid crust. The age of earth is judged by the age of the oldest moon rocks, meteorites, tenestrial lead and the rate of retreat of galaxies.

There are, however, different theories with regard to the origin of the earth: Georges De Button's theory based on the assumption of a collision between a huge comet and the sun; Emanuels Kant's theory of gaseous mass; nebular theory of Laplace; Chamberlain-Moulton's planetismal hypothesis; tidal hypothesis of Jeans and Jeffreys; inter­stellar dust hypothesis of Otto Schmidst; Fasenkov's hy­pothesis; Binary star hypothesis by Russel and Littleton; and nova hypothesis by Hoyle and Littleton.

While most theories believe the earth to have evolved into a partly solid structure, beginning in a gaseous state and going through a liquid state, some other theories propose earth's origin to have been in form of a dust cloud, containing aggre­gation of dust particles-a process perhaps furthered by gravitational force. With the progress of aggregation, higher terrestrial elements moved towards the top while the heavier ones gravitated below. Transformation of earth into a cooling body from the original hot state and, on the other hand, warming of the earth eventually, beginning as a cold body, are yet other issues in the debate about the origin of earth.

**GEOLOGICAL VIEW**

Geology deals with the origin, composition and history of the earth. The various stages of earth's history are classified by using terms for division of time and/or terms applying to strata accumulated during the various periods. The 'time terms' are Era, Period, Epoch and Age. Their corresponding 'strata terms' are Group, System, Series, Stage or Formation.

An outline of the earth's history is given in the form of a chart on the next page.
The Archaeozoic and Proterozoic eras, the earliest and longest period of earth's history, are also called Precam­brian time. In the Archaeozoic era, continents are believed to have taken shape and grown, even as oceans and' atmosphere were formed. Rocks of this era contain the earliest fossils, some three-and-a-h.alf billion years old. These fossils are of primitive bacteria and cyanobacteria. Fossils of the first animals-worms, jellyfish, corals-appear in rocks about 700 million years old, i.e., in the Proterozoic era.

Towards the end of the Palaeozoic era, the Appalachian geosyncline disappeared and the Appalachian Mountains were built up as a result of the collision of the North American plate with the Eurasian, African and South American plates to form Pangaea. This supercontinent included India, Australia and Antarctica. In the Ordovician Period occurred a great flood which covered vast areas of North America, besides creating large shallow seas.
The cretaceous period of the Mesozoic era gets its name from creta, the Latin word for chalk.

The Mesozoic era began with most continents exposed as land.
During the Triassic and Jurassic periods, Pangaea brok. apart to form Laurasia and Gondwanaland. In the Creta. ceous period, the continents we know today were bein~ formed as Laurasia broke up to form Eurasia and Nortl
America, while Gondwanaland broke up into Africa, Ant arctica, Australia, India and South America.
In the Cenozoic era, the European Alps, Andes ani Himalaya mountain ranges were formed. Many volcanoe erupted across western North America, Greenland ani India, forming coverings of lava. The individual continents in the Pleistocene epoch, glaciers covered much of , earth and then melted. The wide variety of plants a animals that we know today came into existence dwi the Cenozoic era.

**MYTHS and LEGENDS OF ORIGIN OF THE EARTH**

It was told that that in the beginning, there was no earth or man. There was only the Sky and the Sea. Both of equal prowess, they exist one above or below the other. The only thing in between them was a small bird.

The bird was flying endlessly, until, he got bored and tired. The Sky was above him, but he can’t reach it; below him was the Sea, but he can’t land on it.

So the bird thought deeply. And then he swooshed, and scooped and splashed water from the Sea. He continued with his splashing until water reached the Sky above.

The Sky was furious. He didn’t want the waters to flood him, and he noticed that the Sea now was also mad.

All the Sky thought of was creating rocks and then throwing them. And so he did. The Sky created rocks and he threw them down, which landed on the Sea.

The bird was satisfied. He landed on those rocks and then made a nest.

The Sky commanded the bird to never disturb him and the Sea again.

… But then the bird noticed something floating on the water. He ignored it but the bamboo shaft bumped him and hurt him. He got so furious so he pecked and pecked the bamboo until… it split into two.

From the first half sprung a man, and from the second, a woman. Strength and Beauty. They were our first parents, and from them, the rest of the world began…