

July 2018

* Astronomy:

Astronomy, Astrology

and mathematics form the three main divisions of गणित. The movements of the stars and planets were studied from very early period and their influence on the weather, the plant life and human life were also recognised and studied. This resulted in the development of Astronomy and astrology. Calculations of the celestial beings and working out their positions gave rise to the science of mathematics. The construction of altars <sup>↓
गणित</sup> in different shapes for various sacrifices made geometry a part of Brahmanical rites. As regards ~~at~~ astrology and astronomy, the ancient Indians attained some progress independently but soon they came under the influence of the

Greek astronomy and astrology. The works on

Varahamihira, the great Indian astronomer who died in 587 A.D. has mentioned आश्विन, देवल, गर्ग, बृहस्पति, नाटक and पराशर as the early astronomers but their works are available only in fragments. गार्ग्यशंहिता was known to the Greeks who came along with Alexander but it is now lost for us, having probably being carried away by the Greeks.

Aryabhata who wrote the आर्यभट्टियम् in 499 A.D. is the earliest of the Indian astronomers whose works had been preserved. 33 stanzas in his work are on mathematics while

other were astronomical in content.
He held that the earth was a

sphere and it rotated on
its own axis. His stanzas
on mathematics to considerable
progress of the Indians in that
field.

Varahamihira who died in
587 A.D. is the ^{great} author
in Indian astronomy and
astrology. His great work सिद्धान्तिका
gives an account of the

five schools of astronomy called

- ① पौनगवसिद्धान्त
- ② रोमकसिद्धान्त
- ③ वैशलिषसिद्धान्त
- ④ सूर्यसिद्धान्त
- and ⑤ वशिष्ठसिद्धान्त.