

17. Explain the Series of mission to the planet Mars planned recently by various countries.

Enthusiasm to explore the space has grown enormously among the world community which was visible by the launch of Hope Mars mission by UAE to become a first arab nation to explore the space.

Various missions to Mars have been planned in the July month because of the favourable position of Mars and earth in their orbits with least distance between them for a particular period.

→ Hope Mars Mission, 1<sup>st</sup> Interplanetary mission by UAE which was successfully launched from Japan. The mission will make studies about the Martian atmosphere for the first time to understand about

its decaying nature. It will be a orbital mission with the targeted operation for 1 Martian year (687 days)

→ Tianwen - 1, landing mission by China to study about the geology and topography of the Mars, additionally they will make a study on climate and environment of Mars. Beauty of the mission is the landing site will be decided only after the study by its orbiter through a high resolution camera.

→ Perseverance rover, planned mission of NASA to study about the past life on Mars and Suitable habitable conditions on the red planet. The mission will make analysis of favourable factors for the upcoming manned mission.

\* Combined studies of these missions will give a deep understandability about the planet thus cooperation among the players to deeper extent about the studies is the need of the hour.

\* India, a successful orbital launcher to the planet (Mangalyan) should keep watch about the developments and propel its space strength by launching unexpected missions in the future (nearby).