**Assignments on AI and Logic Programming (PC-CS593)**

**(Problems on Prolog)**

**Assignment 3 :**

1. In our Solar system Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune are moving around the Sun about elliptical orbits.

Moon is moving around the Earth. Phobos and Deimos are moving around the Mars.

Ganymede, Callisto, Io, and Europa are 4 major cosmic objects are moving around the Jupiter. Pandora, Janus, Epimetheus, Mimas, Iapetus, Phoebe, Tethys and Telesto are major cosmic objects moving around the Saturn. Miranda, Ariel, Umbriel, Titania, and Oberon are major moons of the Uranus. Triton, Despina, Galatea, Halimede, Hippocamp, Laomedeia, Larissa, Naiad, Nereid, Neso, Proteus, Psamathe, Sao and Thalassa are major moons of Neptune (Information from [www.science.nasa.gov](http://www.science.nasa.gov)).

Derive the following from the above information:

i) Planet

ii) Satellite

iii) All major satellites of Jupiter.

(Use the basic relations move and star only)