*CONSTRUCTION:-*

*The construction of RUHI will begin from 2020and will take a period of 50 years and will function from 2075.This will cost $60 billion and will involve more than 5,500 peoples and countless other automation.*

*PLANETARY BASE:-*

*Planetary bases play an important role in the NASA project .We have decided to incorporate our bases in :-*

*MARS:-*

*Important minerals like Magnesium , Aluminium , Silicon , Iron ,Oxygen etc ..... can be extracted from Martian base which is really necessary . Minerals can be extracted from martian meteorites[ SNC’s shergottites  ,  nakhlites and  chassignites ] . Hydrogen can be taken from the water  and hydrated minerals. We can attain carbon from carbon dioxide [CO2] as well as dry ice present in atmosphere. Less abundant minerals like titanium, chromium , manganese , sulphur, phosphorus , sodium and chlorine can also be attained.*

*JUPITER:-*

*The surface of  Jupiter has abundant Hydrogen and  nearly one tenth of  the atmosphere of Jupiter is made up of Helium .A small  fraction of atmosphere contains compounds such as   fraction of atmosphere contains compounds such as ammonia , sulphur , methane &water vapour.*

*The surface of Jupiter or the bottom of the atmosphere, is the point where the scientists have calculated that the first atmospheric pressure = 1 bar as same as in earth.*

*The troposphere of Jupiter is made up of ammonia , ammonia hydrosulphide and water.*

*Europa is the smallest of the four gallilean  moons orbiting Jupiter. It is the primarily made  up of  silirate rocks and water . ice crust and probably has an Iron  nickel core.*

*LIFE:-*

*The final population of RUHI will be containing 38000 people and will be provided with the facilities like radiation protection , gravity , atmosphere , water , sunlight , etc... and these things will be provided from asteroids , Jupiter , mars , moons of Jupiter. These supplies will undergo continuous recycling.*

*TRANSPORTATION:-*

*Transportation inside as well as outside the space colony will be through advanced technological vehicles .these transport will be carried out through the docks using vehicles propelled by MPD ,VASIMR VX 200 , and propellants like Helium-3 and Atomic Hydrogen .Docking ports will be specially designed for docking in the space settlement.*

*ELECTRICITY:-*

*Electricity plays a major role in our life as well as in our space colony.*

*Electricity will be produced through solar panels, fluorine thorium  reactors ,etc... these things will be explained clearly in the following chapters.*

*HUMAN FACTORS:-*

*The whole population of RUHI will be the immigrants of earth. 2 tori  and 6 quarter tori will be set up for the residence of RUHI. An earth like environment will be set up for the people of the pace settlement. An dittoed administration and human factors like earth will be set up for the people to cope up with the atmosphere at RUHI.*

*COMMUNICATION:-*

*The communication of RUHI with earth, moons of Jupiter, Jupiter, mars is utmost essential for RUHI. For communication purposes, a network of satellites called the RUHI Info Communication System. This network will allow for communication between long distances. Spacio phones will the primary phones used in RUHI.*

*ECONOMY:-*

*The economy of RUHI will primarily have the metals extracted from the planets as well as the asteroids. These metals will be auctioned and this will be the primary sector.*

*STRUCTURE:-*

*RUHI has a unique and innovative structure. The residential structure has been aptly named the “Mongrel” Torus due to its novel design .it was inspired through living organisms and many other things. it has a miner in the top and bottom. 2 full torus in the centre and 2 half torus in the top and bottom held by a long cylindrical tori in the centre. A stability ring is placed in both the sides , where in which in the centre is a docking port in either sides. 2 communication grid is placed in either sides of the docking port near both the docking ports.*

*1.2WHY RUHI ?*

*After a long struggle  to propose an appropriate and suitable name for our project  , we thought of the name of a flower RUHI which is consider greatly for its style of blooming .As it was inspirational and made us think of our asteroid miner . As we think of our asteroid miner , we remember the quote 'where flower blooms , so does hope'. The flower ruhi blooms in spectacular and elegant  way, we compare it to the way how our asteroid miner opens.*

*LOCATION:-*

*We have decided to construct RUHI on the surface of Mars,  during its beginning stage (the Martian base will be constructed first) we attain the resources from the Martian base. Then RUHI will be boosted to the JUPITER ORBIT and it will take its place on the L1 point on the Jupiter orbit.*