CHAPTER – IV

INDICATIONS OF THE QUR'AN RELATING TO ASTRONOMY

SECTION-I	:	**THE ORIGIN OF THE UNIVERSE**
SECTION-II	:	**THE EVOLUTION AND STRUCTURE OF THE UNIVERSE**
SECTION –III	:	**THE FATE OF THE UNIVERSE**
SECTION-IV	:	**THE EARTH AND THE NATURE OF THE HEAVENLY BODIES**
SECTION-V	:	THE CONCEPT OF TIME , RELATIVITY AND SPACE EXPLORATION

In Surah Al-Anbiâ, verse No.33, the Qur'an proclaims:

وَهُوَ ٱلَّذِى خَلَقَ ٱلَّيْلَ وَٱلنَّهَارَ وَٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ فِى فَلَكٍ يَسْبَحُونَ

٣٣

It is he Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along, each in its rounded course.(21:33)

* Picture source: Internet

INDICATIONS OF THE QUR'AN RELATING TO ASTRONOMY

Astronomy is the scientific study of the universe and heavenly bodies, their motion, relative positions and nature etc i.e. it is the scientific study beyond the earth's atmosphere. Its various branches are astrometry, celestial mechanics, astrophysics and cosmology etc. It investigates about the physical states, composition, evolution and nature of the matters which constitutes the universe. When we look at the night sky and wonder thinking the vastness of the space and artistry of nature, we think about Astronomy and it is said that astronomy is the oldest branch of science. After the invention of telescope, by Galileo Galilee in seventeenth century (1609 C.E), the concept of modern astronomy developed. With the telescopes, radio astronomy, artificial satellites and also space probes scientists of the present day world have got the knowledge about how galaxies are born from spinning clouds of gas and dust and how stars die in nuclear explosion.[1]

The Qur'an is a very important source of knowledge for the science of astronomy, though it was revealed about 1000 years before the invention of telescope and consequent upon the starting of modern science. There are lots of revelations in the Qur'an, which indicates on the different aspects of celestial bodies. The Qur'an in its different revelations refers on the earth, the sun, the moon, planets, stars, solar system, galaxy etc. It also refers about the characters of the heavenly bodies such as their creation, motion, brightness, gravitation, and even ultimate fate. With a view to inviting humankind to reflect upon the credibility of Allah, the Almighty, the Creator of the universe, it gives various indications having wide coverage on the creation, structure and evolution of the universe. The scientific indications on the various aspects of the different branches of astronomy specially, cosmology is available in the Qur'an. The scientific knowledge of the modern age is far advanced which is beyond the imagination of the people of seventh century.

To draw the attention of the people towards the greatness of His creation, Allah the Almighty time and again has referred the creation, motion of the heavenly bodies and the natural phenomenon shown by them. As such, though the Qur'an is not a book of astronomy there are many verses in it, which indicate about the modern discoveries on the astronomical science.

To comprehend the scientific indications of the Quran on Astronomical Science one should make serious study of the above revelations and also other revelations. To make the study systematically, the different revelations of the Qur'an having some relations with each other have been brought under a few sections.

As stated earlier, to study the scientific indications of the Qur'an, we have to keep in mind that the Qur'an is not book of science or a treatise on astronomy. However, there are many revelations in the Qur'an which seems to be miraculous in nature, being revealed in seventh century through a letterless man Hazrat Muhammad (Pbuh), the great prophet of the religion of Islam.

It is astonishing to note that the Qur'an in seventh century refuted the credibility of another subject called astrology and encouraged the mankind to engage their wisdom for the study of astronomy (in Arabic called *Ilm al-hay'ah*). According to the Islamic jurisprudence study of astronomy is lawful, as the same is useful in daily life of human being such as predicting the beginning of the months and also seasons, determining direction for navigation and prayers.

The starting and ending of holy month of Ramadan is also found to be decided easily by the use of astronomical knowledge. The early Islamic rulers called *Caliphs* encouraged the study of Astronomy. The Caliph Al-Mansur of Baghdad established a grand observatory as well as a library to promote the study of astronomy. Many medieval Muslim astronomers like al-Farabi, Ibn al-Haytham, Avicenna, al-Biruni, Averroes refuted the principles of astrology.

It is to be noted that astrology is the study of the so called influence of the movements of stars, planets etc on the natural occurrences on the earth as well as the fate of human life. Islamic Theologians considered astrology as unlawful, since knowledge of one's fate or future is lying with Allah, the Omniscient only .The Qur'an proclaims the followings:

۞ وَعِندَهُۥ مَفَاتِحُ ٱلْغَيْبِ لَا يَعْلَمُهَآ إِلَّا هُوَ ۚ وَيَعْلَمُ مَا فِى ٱلْبَرِّ وَٱلْبَحْرِ ۚ وَمَا
تَسْقُطُ مِن وَرَقَةٍ إِلَّا يَعْلَمُهَا وَلَا حَبَّةٍ فِى ظُلُمَٰتِ ٱلْأَرْضِ وَلَا رَطْبٍ وَلَا
يَابِسٍ إِلَّا فِى كِتَٰبٍ مُّبِينٍ ﴿٥٩﴾

With Him are the keys of the Unseen, the treasures that none knoweth but He. He knoweth whatever there is on the earth and in the sea. Not a leaf doth fall but with His knowledge; there is not a grain in the darkness (or depth) of the earth, nor anything fresh or dry (green or withered), but is (inscribed) in a Record clear (to those who can read). (06:59)[2]

The Qur'an further proclaims:

وَسَخَّرَ لَكُمُ ٱلَّيۡلَ وَٱلنَّهَارَ وَٱلشَّمۡسَ وَٱلۡقَمَرَۖ وَٱلنُّجُومُ مُسَخَّرَٰتُۢ بِأَمۡرِهِۦٓۗ
إِنَّ فِي ذَٰلِكَ لَأٓيَٰتٖ لِّقَوۡمٖ يَعۡقِلُونَ ١٢

He has made subject to you the Night and the Day; the Sun and the Moon; and the Stars are in subjection by His command: verily in this are Signs for men who are wise. (16:12)[3]

قُل لَّا يَعۡلَمُ مَن فِي ٱلسَّمَٰوَٰتِ وَٱلۡأَرۡضِ ٱلۡغَيۡبَ إِلَّا ٱللَّهُۚ وَمَا يَشۡعُرُونَ أَيَّانَ
يُبۡعَثُونَ ٦٥

Say None in the heavens and earth, except Allah, knows what is hidden: nor can they perceive when they shall be raised up (for judgment). (27:65)[4]

Thus, it is seen that the basic philosophy of the Qur'an is against the principle of astrology. Since, astrology is found to be unscientific and based on ideas not acceptable to rational thinking of human knowledge, it is astonishing to think that how the Qur'an refuted such ideas in the age of scientific darkness in the world.

References:

1. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter***; Kitab Bhavan, New Delhi,p23
2. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
3. *Ibid*
4. *Ibid*

SECTION – I

THE ORIGIN OF THE UNIVERSE

The term 'Universe' is very important one which includes our planet, the earth and everything on it, our solar system, light, matter and all forms of energy and radiation etc. The Qur'an in many of its revelations have indicted about the origin of the universe, its structure and evolution which is studied as cosmology. Actually, cosmology is a branch of astronomy that deals with the origin, structure and evolution of the universe as a subject. Throughout the human history man searched for explanation of the mystery of creation, existence, and evolution of the universe. The same has been attempted in various religious books in different ages. Some revelations of the Qur'an reflect towards the mystery of creation to draw the attention of the humankind.

In the Qur'an cosmos is referred to in many places with different terminologies. In some places as 'heavens and the earth', other places as only 'heavens' or 'firmaments' and in some other places in singular form as 'heaven', 'firmament', 'sky'. It is found that such references are made in 310 revelations out of which in 190 in plural form.[5] Some findings of modern cosmological science such as (a) The Big Bang Theory (b) The Expanding Universe Theory and (c) The relativity of Time etc have been found to be reflected in the Holy Qur'an which was revealed to Hazrat Muhammad (Pbuh) more than 1400 years ago. Many verses of the Qur'an emphasize the importance of the creation of the universe. People are frequently invited to give serious attention on how God has created the earth and the heavens and everything between them.

4.1.1. THE CREATION OF THE UNIVERSE

There are many revelations in the Qur'an which indicate about the creation of the universe. However, there is no continuous description available there about the creation of the universe in any particular chapter, rather there are passages scattered in various chapters which indicate about various aspects of the creation of the universe. To get a clear idea on the concept of creation indicated by the Qur'an, at first the relevant revelations from the Qur'an are required to be brought together in some systematic order.

It is felt that the Qur'an has no intention to give a comprehensive description on the creation of the universe and as such, the revelations relevant to the creation of universe are indicative in it and only to draw attention of humankind to realize the Greatness of Allah. The Qur'an indicates that the universe has been created by Allah in six stages or phases

4.1.1.1. UNIVERSE WAS CREATED BY A COMMAND OF ALLAH

According to the Qur'an Allah is the originator of the heavens and the earth. He originated the same with a command. Allah created the universe with His own power. Since He can do whatever He wishes and as such the creation of the universe is nothing but His will. When He wishes to do something He just commands 'Be and it is '. The Qur'an proclaims:

إِنَّمَا قَوْلُنَا لِشَيْءٍ إِذَآ أَرَدْنَٰهُ أَن نَّقُولَ لَهُۥ كُن فَيَكُونُ ﴿٤٠﴾

For to anything which We have willed, We but say 'Be' and it is (16:40)[6]

بَدِيعُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضِ ۖ وَإِذَا قَضَىٰٓ أَمْرًا فَإِنَّمَا يَقُولُ لَهُۥ
كُن فَيَكُونُ ﴿١١٧﴾

'The Originator of the heavens and the earth: when He decreeth a matter, he saith to it : 'Be' and it is.(02:117)[6(a)]

Here the originator of the heavens and the earth is Allah. He has created originally i.e from nothing, as there was nothing before His creation.

إِنَّمَا قَوْلُنَا لِشَيْءٍ إِذَآ أَرَدْنَٰهُ أَن نَّقُولَ لَهُۥ كُن فَيَكُونُ ﴿٤٠﴾

Verily! Our Word unto a thing when We intend it, is only that We say unto it: "Be!" – and it is. (16:40)[7]

More revelations in English translation:

.... Glory be to Him! When He decreeth a thing, is only that He Saith unto it only, Be! And it is. (19:35)[8]

But His command, When He intendeth a thing, is only that He saith unto it, Be! and it is (36:81).[9]

The Arabic term *KUN* is the key word here. The word is a derivative of *KANA* which means 'to be, to become'. So the meaning of KUN is imperative and it means an order 'Be it'. Thus, the universe has been created by the command of Allah. This may be called 'Big Bang' in the language of science.[10] The Qur'an further proclaims:

وَهُوَ ٱلَّذِى خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ بِٱلْحَقِّ ۖ وَيَوْمَ يَقُولُ كُن فَيَكُونُ ۚ قَوْلُهُ
ٱلْحَقُّ ۚ وَلَهُ ٱلْمُلْكُ يَوْمَ يُنفَخُ فِى ٱلصُّورِ ۚ عَٰلِمُ ٱلْغَيْبِ وَٱلشَّهَٰدَةِ ۚ وَهُوَ
ٱلْحَكِيمُ ٱلْخَبِيرُ ﴿٧٣﴾

It is He Who created the heavens and the earth with truth; the day He said, "Be," behold it is. His Word is the Truth. His will be the dominion the day trumpet will be blown. He knoweth the Unseen as well as that which is Open. For He is the Wise, well acquainted (with all things). (06:73)[11]

The above revelations clearly indicate that the universe has a beginning and it came into being as an act of creation by Allah. There are revelations scattered over the Qur'an which deal with different aspects of creation and to get a clear idea on the successive events regarding creation presented in it, the relevant revelations are required to be brought together. The following revelations may be considered in this regard.

إِنَّا كُلَّ شَىْءٍ خَلَقْنَٰهُ بِقَدَرٍ ﴿٤٩﴾

وَمَآ أَمْرُنَآ إِلَّا وَٰحِدَةٌ كَلَمْحٍۭ بِٱلْبَصَرِ ﴿٥٠﴾

Verily, all things have We created in proportion and measure. And Our Command is but a single Word, - like the twinkling of an eye. (54:49-50)[12]

The above verses indicate that the time required for *FATAQ (21:30) i*.e separation of elements was very very small and it is compared with twinkling of an eye i.e fraction of a second. Scientists opined that the time required for the splitting of the original mass was less than a second. So, this is very much relevant with the command of Allah which is compared with the twinkling of the eye.

The Qur'anic concept of creation of the universe is very interesting as well as reasonable. According to this divine book the universe was created and established phase wise.

4.1.1.2. ORIGIN OF UNIVERSE FROM SINGULARITY

According to the Qur'an, the universe has a beginning as it has been created by God. Heavens i.e heavenly bodies and earth have been originated by God. The Qur'an proclaims:

بَدِيعُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضِ ۖ أَنَّىٰ يَكُونُ لَهُۥ وَلَدٌ وَلَمْ
تَكُن لَّهُۥ صَٰحِبَةٌ ۖ وَخَلَقَ كُلَّ شَىْءٍ ۖ وَهُوَ بِكُلِّ شَىْءٍ عَلِيمٌ
١٠١

He is the Originator of the heavens and the earth. How can He have children, when He has no wife? He created all things and He is the All-Knower of everything.(06:101)[13]

Here the meaning of the term *badi* means creator, originator, maker of new creation[14] It is found in the Qur'an that the heavens and the earth had been formed from a state of nothingness. The Qur'an indicates that the universe has been created by Allah from a single mass i.e origin of the universe was from singularity. The basic process of the creation of the universe has been indicted in the Qur'an. The Qur'an states:

أَوَلَمْ يَرَ ٱلَّذِينَ كَفَرُوٓا۟ أَنَّ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَٰهُمَا ۖ
وَجَعَلْنَا مِنَ ٱلْمَآءِ كُلَّ شَىْءٍ حَىٍّ ۖ أَفَلَا يُؤْمِنُونَ ٣٠

Do not the Unbelievers see that the heavens and the earth were joined together (as one unit of creation), before we clove them asunder? We made from water every living thing, will they not then believe? (21:30)[15]

In order to understand the significance of the above revelation, the meaning of the terms 'Ratq' and Fataq' are to be found out. The term ***ratq*** in Arabic signifies the action of fusing or binding together whereas the term ***fatq*** in Arabic means action of breaking, diffusing, separating, tearing apart the structure of ***ratq***.[16] So this verse implies that at the beginning everything was concentrated in an extremely dense state of matter which is called as Primordial Fire Ball and later on , things were separated may be through a huge explosion which modern cosmology put forward in the same idea as **Big Bang Theory** of creation. As it suddenly burst, it resulted in the creation of different stages of the creation and later on different galaxies were formed.

From the above verse it is evident that the heavens i.e heavenly bodies including the earth were united and the earth was created taking a part of that single mass. The Big Bang Theory was first proposed in 1950 by Ralph Alpher, Hans Bethe and George Gamow. According to this theory the universe at the beginning was in the super condensed form.

About this verse, world famous scholar Dr. Gary Miller says that this verse is exactly the subject of the scientific research that won the **Noble Prize in 1973** and was about the theory of the 'Great Explosion'.[17] According to this theory, the universe was the result of a great explosion that leads to the formation of the universe with its skies and the planets.

This indicates about the creation of the earth from the Sun or Sun like heavenly bodies. It unambiguously states about the unity of all creation at the start and subsequent division of the universe. The following revelations though already have been mentioned may considered again.

Verily, all things have We created in proportion and measure, And Our Command is but a single Word,- like the twinkling of an eye. (54:49-50)[18]

This revelation indicates that the process of first creation was held in no time and begins from a single hot dense point which has near similarity with the Big Bang Theory of creation of the universe.

Modern science advocates that the **Big Bang theory** is the only rational and acceptable explanation of the beginning of the universe. Before the Big Bang there was almost a state of nothingness, since the whole matter was concentrated in to a singularity. This singularity has indication of divine power which modern science admits. So, it is very surprising that the Qur'an in 7th century indicated about the beginning of the universe from singularity refuting the basic contention of most of the then philosophers that matter has no beginning and it is eternal.[19]

4.1.1.3. THE EARTH WAS CREATED IN TWO PERIODS

It has already been mentioned that the universe was created in different phases or stages as per knowledge revealed in the Qur'an. The Qur'an has mentioned about two periods in connection with creation of the earth. The Qur'an proclaims:

۞ قُلْ أَئِنَّكُمْ لَتَكْفُرُونَ بِالَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنِ وَتَجْعَلُونَ
لَهُ أَندَادًا ۚ ذَٰلِكَ رَبُّ الْعَالَمِينَ ﴿٩﴾

Say: it is that ye deny Him Who created the earth in two Days? And do ye join equals with Him? He is the Lord of (all) the Worlds. (41: 09)[20]

Here the Qur'an has specifically mentioned that the earth was created in two days. Actually, the day mentioned here is not a day comprising of 24 ours. Rather, it implies a long period. As we know the concept of day and night or a day comprising of 24 hours was developed only after the creation of the earth. Where there is no earth no day can exist. Therefore, it is obvious that the day referred here is most probably a long time period of time.

4.1.1.3.1. THE EARTH WAS MADE HABITABLE IN FOUR PERIODS:

Soon after the creation of the earth, certainly it was not habitable for living beings. So after the initial creation of the earth, it was made habitable in four long periods. In this regard the Qur'an proclaims:

وَجَعَلَ فِيهَا رَوَٰسِيَ مِن فَوۡقِهَا وَبَٰرَكَ فِيهَا وَقَدَّرَ فِيهَآ أَقۡوَٰتَهَا فِيٓ أَرۡبَعَةِ أَيَّامٖ سَوَآءٗ لِّلسَّآئِلِينَ ١٠

He set on the (earth), mountains standing firm, high above it, and bestowed blessings on the earth, and measured therein its sustenance in four Days, alike for (all) who asks. (41:10)[21]

The above verse indicate that the in order to make the earth habitable for living creatures four very long periods were required. It is learnt from Geology that for development of the earth habitable for life (plants and animals) four geological eras are recorded by the scientists. These are Pre-Cambrian Era (600 to 3300 million years), Paleozoic Era (230 to 600 million years), Mesozoic Era (63 to 230 millions of years) and Cenozoic Era (Recent times to 63 million years). So this is a very interesting coincidence of science with the Qur'an![22]

4.1.1.4. THE HEAVENS AND THE EARTH WERE CREATED IN SIX PERIODS

From the previous discussion it was clear that as per the Qur'an the earth was created in two periods of creation or two phases of long long periods. In other verses the Qur'an declares that the heavens and the earth were created in six periods of creation. The Quran proclaims:

وَلَقَدۡ خَلَقۡنَا ٱلسَّمَٰوَٰتِ وَٱلۡأَرۡضَ وَمَا بَيۡنَهُمَا فِي سِتَّةِ أَيَّامٖ وَمَا مَسَّنَا مِن لُّغُوبٖ ٣٨

*We created the heavens and the earth and all between them in **Six days**, nor did any sense of weariness touch Us. (50:38)*[23]

There are more verses regarding this matter as mentioned below:

وَهُوَ ٱلَّذِى خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ فِى سِتَّةِ أَيَّامٍ وَكَانَ عَرْشُهُۥ عَلَى ٱلْمَآءِ
لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلًا ۗ وَلَئِن قُلْتَ إِنَّكُم مَّبْعُوثُونَ مِنۢ بَعْدِ ٱلْمَوْتِ
لَيَقُولَنَّ ٱلَّذِينَ كَفَرُوٓا۟ إِنْ هَٰذَآ إِلَّا سِحْرٌ مُّبِينٌ ﴿٧﴾

*He it is who created the heavens and the earth in **six Days** – and His Throne was over the Waters- that He might try you, which of you is best in conduct. But if you were to say to them:" You shall indeed be raised up after death; those who disbelieve would be sure to say, "This is nothing but obvious sorcery!"(11: 07)*[24]

This ayah suggest that before the creation of the heavens and the earth there existed something like water or gas which was encompassed by the creator.

One more revelation is:

ٱلَّذِى خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ وَمَا بَيْنَهُمَا فِى سِتَّةِ
أَيَّامٍ ثُمَّ ٱسْتَوَىٰ عَلَى ٱلْعَرْشِ ٱلرَّحْمَٰنُ فَسْـَٔلْ بِهِۦ خَبِيرًا
﴿٥٩﴾

*He Who created the heavens and the earth and all that is between in **six days**, then He established Himself on the Throne: Allah Most Gracious: ask thou, then, about Him of any acquainted (with such things) (25:59)*[25]

The creation of the Heavens and the earth in **six days** has been mentioned in other revelation also. (English translation)

*Your Guardian Lord is Allah, Who created the Heavens and the earth in **six Days**, then he settled Himself on the Throne..... (07:54)*[26]

*Verily your Lord is Allah, who created the heavens and the earth in **six days**, and then He established himself on the Throne, regulating and governing all things. No intercessor (can pleased with Him) except after His leave (hath been obtained). This is Allah your Lord; Him therefore serves ye; will not receive admonition? (10:03)*[27]

*It is Allah who has created the heavens and the earth, and all between them in **six Days**, then he established himself on the Throne .... (32:04)*[28]

*He it is Who created the heavens and the earth in **six Days**, then He established Himself on the Throne. He knows what enters within the earth and what comes down from heavens and what comes forth out of it. What comes down from heaven and what mounts up to it. And He is with you whatsoever ye may be and Allah sees well all that ye do. (57: 04)*[29]

The above verses indicate that creation as well as development of universe was taken place in six *Yaum*. Conventionally *Yaum* refers to seven days of a week relating to rising and setting of the sun. Therefore, the term *Yaum* having plural as *Ayyam* generally means day and plural days. However, there are other meanings of the term *Ayyam* as ages, eras, long periods of time, aeons.[30]

Thus, the Qur'an has mentioned that the universe was created in six long periods in Arabic *Sittati Ayyam*. In other revelations, the Qur'an also indicates about the meaning of *Yaum* as long periods, the ranges of which vary from one thousand years to fifty thousands in reckoning of human world. The Qur'an proclaims:

وَيَسْتَعْجِلُونَكَ بِٱلْعَذَابِ وَلَن يُخْلِفَ ٱللَّهُ وَعْدَهُۥ ۚ وَإِنَّ يَوْمًا عِندَ رَبِّكَ
كَأَلْفِ سَنَةٍ مِّمَّا تَعُدُّونَ ﴿٤٧﴾

*Yet they ask thee to hasten on the Punishment! But Allah will not fall in His promise. Verily a **Day** in the sight of thy Lord is like a thousand years of your reckoning. (22:47)*[31]

One more verse in English translation may be considered:

He directs the affairs from the heavens to the earth: then it ascends unto Him, on a Day the measure of which is a thousand years of your reckoning. (32:05)[32]

In another verse the Qur'an has mentioned the length of one Y***aum*** as fifty thousand years of our reckoning on the earth. The Qur'an proclaims:

تَعْرُجُ ٱلْمَلَٰٓئِكَةُ وَٱلرُّوحُ إِلَيْهِ فِى يَوْمٍ كَانَ مِقْدَارُهُۥ خَمْسِينَ أَلْفَ سَنَةٍ ﴿٤﴾

*The angels and the Spirit ascend unto Him in a **Day** the measure where of is (as) fifty thousand years. (70:04)*[33]

In the above verses one point may be noted that creations of heavens are always mentioned first, though side by side creation of earth is mentioned separately. This approach may be termed as an indication about the creation of the heavenly bodies along with earth as special planet with special arrangement for survival of life on it. Moreover, it is also understood that ***Yaum*** means period of time and not a day of twenty four hours since before the creation of the earth, the sun, the moon it was not possible to count day relating with sunrise and sunset.

Thus, it is clear that as per indications of the Qur'an the universe was created in six stages and the period of each stage may be very long and even thousands or millions of years.

4.1.1.4.1: THE HEAVENS WERE FURNISHED IN TWO PERIODS

After the completion of the creation of the earth, Allah started to give the shape of the heavenly bodies and well arranged them in seven firmaments in two periods. In this regard the Qur'an proclaims:

ثُمَّ ٱسْتَوَىٰٓ إِلَى ٱلسَّمَآءِ وَهِىَ دُخَانٌ فَقَالَ لَهَا
وَلِلْأَرْضِ ٱئْتِيَا طَوْعًا أَوْ كَرْهًا قَالَتَآ أَتَيْنَا طَآئِعِينَ ﴿١١﴾

فَقَضَىٰهُنَّ سَبْعَ سَمَٰوَاتٍ فِى يَوْمَيْنِ وَأَوْحَىٰ فِى كُلِّ سَمَآءٍ أَمْرَهَا ۚ وَزَيَّنَّا
ٱلسَّمَآءَ ٱلدُّنْيَا بِمَصَٰبِيحَ وَحِفْظًا ۚ ذَٰلِكَ تَقْدِيرُ ٱلْعَزِيزِ ٱلْعَلِيمِ ﴿١٢﴾

Then he turned to the sky and it had been (as) smoke: He said to it and to the earth:' Come ye together, willingly or unwillingly'. They said: 'We come (together), in willing obedience. So, He completed them as seven firmaments in two Days, and He assigned to each heaven its duty and command. We adorned the lower heaven with lights and (provided it) with guard. Such is the Decree of (Him) the Exalted in Might, Full of knowledge (41: 11-12)[34]

Thus, it is indicated that before creation of the different planets, stars etc heavenly bodies everything was gaseous and seven heavens were created in two long phases. Here the word seven is indicative only it may be used for many. It may be noted that this verse indicates the formation of many heavens, the time taken in the formation of the heavens, and then it states about the mandate i.e system and order or command for natural laws. Lastly it mentions about the nearest heaven i.e our universe which contains innumerable stars appears as light and including others our earth, the planet where we live. The Qur'an also mentions about the guard, that means the earth is protected by the atmosphere from the effect any other heavenly bodies say meteors etc.

4.1.1.5. CREATION FROM A GASEOUS MASS

From the revelation in the Qur'an, it is learnt that during the process of creation of the universe at a certain stage the heavens or entire things had been cloud of smoke i.e it was gaseous from which later on the stars; planets, galaxies etc were created on the command of God. The Qur'an states:

ثُمَّ ٱسْتَوَىٰٓ إِلَى ٱلسَّمَآءِ وَهِىَ دُخَانٌ فَقَالَ لَهَا
وَلِلْأَرْضِ ٱئْتِيَا طَوْعًا أَوْ كَرْهًا قَالَتَآ أَتَيْنَا طَآئِعِينَ ﴿١١﴾

Then he turned to the sky and it had been (as) smoke: He said to it and to the earth: "Come ye together, willingly or unwillingly". They said: "We come (together), in willing obedience". (41:11)[35]

The Arabic word ***'dukhan'*** means smoke, fume, vapor etc. It is very interesting to have such revelation in Qur'an which about fourteen hundred years ago indicated that during the creation of the universe at one stage everything was gaseous and perhaps the earth, the sun, the moon, stars, planets, galaxies etc were formed from a gaseous mass which resembles with smoke. This has the resemblance with Nebular Theory of origin of solar system.

Creation of the earth and other heavenly bodies is not alike. Because for the earth four long periods were required to make it habitable for the human being. So, one should not mix the creation of earth with other heavenly bodies. Mankind is still in the dark about the existence of life in other planets or even about the existence of a habitable planet in the universe.

From the above descriptions it is clear that the Qur'an indicates that the universe was created in different stages starting from a singularity. The formation of planets and stars were occurred perhaps in the last stage.

4.1.1.6. THE UNIVERSE WAS CREATED IN BALANCE

The Qur'an in many revelations has mentioned that the universe was created with full balance i.e cosmic balance, so that every where there is system and order. In Surah Al-Jumar, verse No.05, the Qur'an states:

خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ بِٱلْحَقِّ ۖ يُكَوِّرُ ٱلَّيْلَ عَلَى ٱلنَّهَارِ وَيُكَوِّرُ ٱلنَّهَارَ
عَلَى ٱلَّيْلِ ۖ وَسَخَّرَ ٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ يَجْرِى لِأَجَلٍ مُّسَمًّى ۗ أَلَا هُوَ ٱلْعَزِيزُ
ٱلْغَفَّٰرُ ﴿٥﴾

He created the heavens and the earth in true (proportions). He makes the Night overlap the Day and the Day overlap the Night. He has subjected the sun and the moon (to His laws): each one follows a course for a time appointed, is not He the Exalted in Power – He Who forgives again and again? (39:05)[36]

In another verse, the Qur'an has mentioned:

خَلَقَ ٱللَّهُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ بِٱلْحَقِّ ۚ إِنَّ فِى ذَٰلِكَ لَءَايَةً لِّلْمُؤْمِنِينَ ﴿٤٤﴾

Allah created the heavens and the earth in truth: verily in that is a Sign for those who believe.(29:44)[37]

English translations of more verses are:

Verily, all things have We created in proportion and measure. (54:49)[38]

He has created the heavens and the earth with truth; far is He above having the partners they ascribe to Him! (16:03)[39]

He has created the heavens and the earth with truth, and has given you shape and made your shapes beautiful. And to Him is the final return.(64:03)[40]

And We created not the heavens and the earth, and all between them, but for just ends. And the Hour is surely coming (when this will be manifest). So overlook (any human faults) with gracious forgiveness.(15:85)[41]

The cosmic balance is well known by the modern science is the true proportion as mentioned in the Qur'an. The following verse also indicates about the cosmic balance.

Seest thou not that Allah has made subject to you (men) all that is on the earth and the ships that sail through the sea by His command? He withholds the sky from falling on the earth except by His leave; for Allah is the Most Kind and Most Merciful to man. (22:65)[42]

Here the heaven indicates the whole celestial sphere every part of which is held in proper position by the will of Allah. The idea has been communicated to human being mentioning as parables for easy understanding of the people of that time.

4.1.1.7: THE UNIVERSE WAS CREATED WITH POWER OR MIGHT

It is very surprising that the Qur'an further reveals that the universe was built with power or might. According to Einstein's theory of mass energy equivalence ($E=mc^2$) energy stored or acquired by a body equals mass multiplied by the square of the velocity of light and as such it may be said that matter is a form of energy or mass is created with energy. Because of the large magnitude of velocity of light, there is enormous amount of energy stored in the atom of matter. Thus the matter and energy and the forces present in the universe are all 'might` or 'power'. [43] The Qur'an proclaims:

وَٱلسَّمَآءَ بَنَيۡنَٰهَا بِأَيۡيْدٖ وَإِنَّا لَمُوسِعُونَ ﴿٤٧﴾

With power did We construct the heavens, and verily We are expanding the vastness of the space thereof (51:47)[44]

The power or might in the above revelation corresponds to the idea that the nucleus of an atom is formed with energy. This revelation also indicates about release of tremendous amount of energy at the initial creation of universe through occurrence of Big Bang. Thus the holy Qur'an has given indication on a very fundamental and modern concept of science.

4.1.2. HIS THROWN WAS ON THE WATER

In one revelation, the Qur'an mentions that when the universe was created, the thrown of God was on water or at one stage of creation, everything was aqueous. In chapter 11, verse No. 07, the Qur'an proclaims:

وَهُوَ ٱلَّذِى خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ فِى سِتَّةِ أَيَّامٍ وَكَانَ عَرْشُهُۥ عَلَى ٱلْمَآءِ
لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلًا ۗ وَلَئِن قُلْتَ إِنَّكُم مَّبْعُوثُونَ مِنۢ بَعْدِ ٱلْمَوْتِ
لَيَقُولَنَّ ٱلَّذِينَ كَفَرُوٓا۟ إِنْ هَٰذَآ إِلَّا سِحْرٌ مُّبِينٌ ﴿٧﴾

He it is who created the heavens and the earth in ***six Days*** *– and His Throne was over the Waters- that He might try you, which of you is best in conduct… …. …. …. .(11: 07)*[45]

Here the important terms to be noted are 'His thrown was on water'. To explain the same the meaning of the word '*Arsh*' and '*Maa'* is required to be explored in all context suitable to the verse. *Arsh* means Throne of God, of a king, Might, Power, pavilion *Maa* means water, liquid, fluid, and juice.[46] This statement is perhaps parenthetical one, which preferably implies that at one stage, the seat of the authority of the creator of the universe was spread over the aqueous matters.

4.1.3. EXISTENCE OF MULTI UNIVERSE

A few revelations of the Qur'an indicate that there is more than one universe or earth. The Qur'an in different revelations has indicated on the existence of multi universe. The following revelations may be considered.

ٱلْحَمْدُ لِلَّهِ رَبِّ ٱلْعَٰلَمِينَ ﴿٢﴾

Praise be to Allah, the Cherisher and Sustainer of the Worlds. (01:02)[47]
In another verse the same message is given:

وَٱلْحَمْدُ لِلَّهِ رَبِّ ٱلْعَٰلَمِينَ ﴿١٨٢﴾

And Praise to Allah, the Lord and Cherisher of the Worlds (37:182)[48]

The Arabic term used here ***Aalamin*** is plural form of ***Aalam*.** The dictionary meaning of the term ***Aalam*** is world, universe, cosmos and since ***Aalamin*** is the plural form of ***Aalam*** it is clear that as per Quran that there are many worlds or universes or cosmos. However, as per another dictionary, [49] here the words ***Aalamin*** means three species of rational creatures viz. men, jinn and angels.

Lord of the Worlds' appears seventy three times in the Qur'an.[50] When the Qur'an was revealed, it was impossible to think that there were a number of planets and or galaxies besides the earth where we live. Now with the invention of telescope and scientific advancement it is known that besides our earth there other planets and numbers of huge galaxies making the creation of God almost unimaginable to humankind. Stephen Hawking, a living cosmologist of our time in his book, 'Black holes and Baby Universes and other Essays' mentions about the multiplicity or plurality of the universes.

4.1.4. INTERSTELLAR GALACTIC MATERIAL

The Qur'an indicates about inter stellar galactic materials. The following verse of the Qur'an may be considered;

ٱلَّذِى خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ وَمَا بَيْنَهُمَا فِى سِتَّةِ
أَيَّامٍ ثُمَّ ٱسْتَوَىٰ عَلَى ٱلْعَرْشِ ٱلرَّحْمَٰنُ فَسْـَٔلْ بِهِۦ خَبِيرًا
﴿٥٩﴾

He Who created the heavens and the earth and all that is between in six days, then He established Himself on the Throne: Allah Most Gracious: ask thou, then, about Him of any acquainted (with such things) (25:59)[51]

One more revelation in English translation may be considered in this regard.

It is Allah who has created the heavens and the earth, and all between them in six Days, then he established himself on the Throne: ye have none, besides Him, to protect or intercede (for you): will ye not then receive admonition? (32:04)[52]

This matter has been reflected in many other revelations such as (15:86), (43:85), (44: , 7, 38), (46:03), (50:38), (78:37).

The existence of the matter between the heavens and the earth may be called interstellar galactic matter was discovered by science in 1920, but Qur'an indicated about the same hundreds of years ago.

4.1.5. FEATURES OF THE THEORY OF CREATION IN THE QUR'AN

The followings may be taken as features of the indications regarding creation of the universe as available in the Qur'an.

(a) The universe was created and was not in existence for ever as suggested by steady state theory of the universe which states that the universe is static and unchanging. (b) It was not come into existence by chance or by an accident, instead it was the design of a creator. (c) The creation and evolution was occurred gradually in different phases, (d) Creation out of an initially single mass that subsequently split up, (e) The creation process takes six long periods or epochs (e) There is continuous expansion of the universe, (f) Interlocking of creation stages (g) Existence of intermediary creation between heavens and the earth, (f) Plurality of the heavens and the earths. (g) The Qur'an is silent about any probable historical date which will indicate about the age of the earth.[53]

Moid Siddiqui in his book ***'The Creation Mystery: Qur'an and Science'*** very nicely mentions, "*Qur'an does not provide a unified description of the Creation. In stead of a continuous narration, there are passages dispersed all over the holy book which deal with certain aspects of Creation and provide information on the successive events making its development in correspondence with the text of relevance.*"

From the in-depth study of the Qur'an, it is clear that the universe was created much before the creation of man on earth and the Qur'an has not given any integrated indications, from where any doubt may arise about the creation of the universe, the earth and its natural contents, that all were taken place simultaneously. Rather it indicates that there are natural processes of different stages of entire creation.

It is no doubt an astonishing fact that in sixth century the Qur'an mentioned about the different phases of the creation which seems to be a scientific approach of the Qur'an in stead of mentioning mythological belief prevalent at that time. Stephen Hawking in his world famous book, A BRIEF HISTORY OF TIME remarks as '*So long as the universe had a beginning, we could suppose it had a creator.*'

References:

5. Siddiqui Moid (2009): ***Creation Mystery : Quran and science***, Adam Publishers & Distributors, New Delhi , p4
6. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

6(a). *Ibid*

7. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
8. *Ibid*
9. *Ibid*
10. Siddiqui Moid (2009): ***Creation Mystery : Quran and science***, Adam Publishers & Distributors, New Delhi , p39
11. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
12. Ibid
13. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran
14. (1) Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi ,(2) Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic***: Spoken Language Services, Inc., New York, (3) Fatouhi Faiz and Duraid (2005) : ***Kalimatul Qur'an*** A Dictionary of the Quranic words; Kitab Bhavan, New Delhi
15. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
16. Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic***: Spoken Language Services, Inc., New York,

17. Gary Miller : ***The Amazing Quran*** (e book)
18. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
19. http://www.quranmiracles.com/articles.asp?id=2
20. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
21. Ibid
22. Anees-u-din Mir (1999): ***THE UNIVERSE seen through the QURAN***; Attique Publishers, Toronto, Canada, pp 57-60.
23. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
24. Ibid
25. Ibid
26. Ibid
27. Ibid
28. Ibid
29. Ibid
30. Bucaille Maurice (2006)**:** ***The Bible, The Qur'an & Science***, printed and published in India by Adam Publishers & Distributors, New Delhi,pp204-206
31. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
32. Ibid
33. Ibid
34. Ibid
35. Ibid
36. Ibid
37. Ibid
38. Ibid
39. Ibid
40. Ibid
41. ibid
42. Ibid
43. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter*****;** Kitab Bhavan, New Delhi,pp 48 & 50
44. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran
45. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
46. (1) Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic****:* Spoken Language Services, Inc., New York, (2) Hava. J.G (2010): ***Arabic English Dictionary*** (for advanced learners); Goodword Books, New Delhi

47. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
48. Ibid
49. Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi ,(2) Cowan J. Milton (1977):
50. Kazi Mazhar (Dr.) (2008) : ***160 Miracles and Mysteries of the Qur,an*** ; Islamic Book Service, Dargyganj, New Delhi -2, P25

51. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
52. Ibid
53. Siddiqui Moid(2004): ***The Quranic Cosmology***, The eternal Truth; Kitab Bhavan , New Delhi, P56 and Bucaille Maurice (2006)**: *The Bible, The Qur'an & Science***, printed and published in India by Adam Publishers & Distributors, New Delhi,p142

SECTION – II

THE EVOLUTION AND STRUCTURE OF THE UNIVERSE

The effect of the creation of universe is still continuing and it may be termed as the process of evolution of the universe. The Qur'an has mentioned some indications which are important for the consideration of scientific community for detailed exploration. For instance, the Qur'an has mentioned that there is no pillar to keep the heavens in their respective positions at a time when people believed in different myths about such matters of scientific importance. The following revelations of the Qur'an in English translation may be considered:

Allah is He Who raised the heavens without any pillars that ye can see; then He established Himself on the Throne. He has subjected the sun and the moon! Each one runs (its course) for a term appointed. He doth regulate all affairs, explaining the Signs in detail that ye may believe with certainty in the meeting with your Lord (13:02)[54]

It is We who have set out constellations in heavens and made them fair-seeming to (all) beholders (15:16)[55]

Thus, there are many indications in the Qur'an which are related to evolutionary process of the universe and importance for consideration regarding its existence.

4.2.1. THE EXISTENCE OF THE UNIVERSE

After creation in due proportion Allah ordained natural laws to get a universe with required stability. For the existence and sustenance of man on the earth Allah has subjected the day and night i.e the earth, the sun, the moon and stars all in the service of mankind. The Qur'an proclaims:

وَسَخَّرَ لَكُمُ ٱلَّيۡلَ وَٱلنَّهَارَ وَٱلشَّمۡسَ وَٱلۡقَمَرَۖ وَٱلنُّجُومُ مُسَخَّرَٰتُۢ بِأَمۡرِهِۦٓۗ
إِنَّ فِي ذَٰلِكَ لَأٓيَٰتٖ لِّقَوۡمٖ يَعۡقِلُونَ ١٢

He has made subject to you the Night and the Day; the Sun and the Moon; and the stars are in subjection by His Command: verily in this are Signs for men who are wise. (16:12)[56]

Everything in the universe is established under some rules developed by the Creator and functioning under His Command.

There are more revelations represented in English translation only.

It is Allah Who sustains the heavens and the earth, lest they cease (to function) and if they should fail there is none-not one- can sustain them thereafter. Verily He is Most forbearing, Oft-Forgiving. (35:41)[57]

And among His Signs is this that Heaven and the earth stand by His command: then when He calls you, by a single call, from the earth, behold, ye (straightway) come forth. (30:25).[58]

The verse does not tell that the heaven and the earth is stationary, rather it means that these are in existence and functioning under the laws of Allah in their fixed courses. The entire universe is in existence by the command of Allah does not mean that different heavenly bodies are stand still and are not moving. These verses have actually parabolic meaning.[59]

4.2.1.1. GRAVITATIONAL FORCE IN THE UNIVERSE

Sir Isaac Newton in 1687 C.E put forward the idea of universal laws of gravitation, which was acceptable as an explanation of the movement of the planets around in their respective orbits.[60] There is a force which controls the balance among the heavenly bodies and helps to avoid any collision in spite of the movement of each in its respective orbit. The Qur'an proclaims:

۞ إِنَّ ٱللَّهَ يُمْسِكُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ أَن تَزُولَا ۚ وَلَئِن زَالَتَآ إِنْ أَمْسَكَهُمَا مِنْ
أَحَدٍ مِّنۢ بَعْدِهِۦٓ ۚ إِنَّهُۥ كَانَ حَلِيمًا غَفُورًا ﴿٤١﴾

Lo! Allah graspeth the heavens and the earth that they deviate not, and if they were to deviate there is not one that could grasp them after Him. Lo! He is ever Clement, Forgiving. (35:41)[61]

Here the important terms are *Yumsiku, Tazula derivative of Zāla.* The word *Yumsiku* means withhold and *Zāla* meaning getting lost or going away. So, in scientific point of view there are two forces one force of attraction due to gravitational force towards the sun and other as repulsive force acting outward direction. But Allah has given balance between the two and thus the equilibrium between the forces maintains balance in the universe.[62] Thus, all heavenly bodies as well as our earth have been swimming in their respective orbit and are in great stability in the individual motion.

In another verse also the Qur'an proclaims:

وَٱلسَّمَآءَ رَفَعَهَا وَوَضَعَ ٱلْمِيزَانَ ۝٧

And the sky He hath uplifted; and He hath set the measure (55:07)[63]

We know that the balance among different heavenly bodies in the universe is because of the presence of the gravitational force. One more revelation in English translation is for consideration in this regard.

And among His Signs is this that the heaven and the earth stand by His command .... (30:25)[64]

This verse indicates that the different heavenly bodies are kept separated from each other and they have been kept in balance with some measure say force of gravitation, i.e by command of Allah or Allah has created physical constants like velocity of light, speed and composition of electrons in the structure of an atom etc.
Gravitational force has been existed since creation, though Sir Isaac Newton (1642 -1727 C.E) was first to clarify it through mathematical formulas. So, Newton's discovery established that the heavens and the earth are established under a natural law.

4.2.1.2. THE ORBITS IN THE UNIVERSE

The Qur'an specifies that the heavens are full of paths or orbits. The following verse 7 of the Surah *Az-Zariat*, may be noted.

وَٱلسَّمَآءِ ذَاتِ ٱلْحُبُكِ ۝٧

By the Sky with (its) numerous paths (51:07)[65]
Here the word *Hubuki* means ways or tracks, especially, the paths of the stars.[66]

Another revelation for consideration:

وَهُوَ ٱلَّذِى خَلَقَ ٱلَّيۡلَ وَٱلنَّهَارَ وَٱلشَّمۡسَ وَٱلۡقَمَرَۖ كُلٌّ فِى فَلَكٍ يَسۡبَحُونَ ﴿٣٣﴾

It is he Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along in its own orbit. (21:33)[67]

To understand the meaning of the above revelations it is required to know the suitable meaning of the two terms: one ***yasbahu*n** which has root as ***sabaha*** and the term ***Falaq****. Sabaha* means to swim, to float, to roll onwards and *falaq* means celestial sphere, celestial body, astronomy, orbit of a celestial body.[68] As such the Qur'an indicates every celestial body has been running in its own orbit. Before the discovery of Law of Planetary Motion by German astronomer Johannes Kepler (1571- 1630 C.E), the scientific world was in the dark regarding the orbit of every celestial body. The matter regarding orbital motion in its own orbit by each celestial body has been confirmed in the following revelation at chapter 36, verse No.40.

لَا ٱلشَّمۡسُ يَنۢبَغِى لَهَآ أَن تُدۡرِكَ ٱلۡقَمَرَ وَلَا ٱلَّيۡلُ سَابِقُ ٱلنَّهَارِۚ وَكُلٌّ فِى فَلَكٍ يَسۡبَحُونَ ﴿٤٠﴾

It is not permitted to the Sun to catch up the Moon, nor can the Night outstrip the Day, each (just) swims along in (its own) orbit (according to Law) (36:40).[69]

This verse indicates that though the force of attraction of the Sun is much larger than the Moon, it cannot attract the moon towards itself to catch and the because of rotational motion of the earth on its axis the night cannot outstrip the day.[70]

4.2.2. THE EXPANSION OF THE UNIVERSE

Till second decade of the twentieth century, scientific community, who attempted to explain natural phenomena of the universe, was at dark about the expanding universe and the fact of creation of the universe from singularity. But the Quran in 7th century indicated that the universe has a beginning, as it was created by God with might i.e by release of tremendous energy in a sudden explosion like situation which is now called Big Bang and the effect of the explosion is still continuing leading to the continuous expansion of the universe. The Qur'an proclaims:

وَٱلسَّمَآءَ بَنَيۡنَٰهَا بِأَيۡيْدٖ وَإِنَّا لَمُوسِعُونَ ﴿٤٧﴾

The heaven, We have built it with power, and verily We are expanding it (51:47)[71]

Here 'Heavens' as the translation of *Sama* and means extra terrestrial world.[72] This is a scientifically proved fact that the universe is created from singularity with a big bang and is steadily expanding. This has laid down the foundation of widely accepted Big Bang theory of creation of universe and theory of Expanding Universe.

The word heavens as stated in the above verse have been mentioned at various places in the Qur'an indicating space and universe. In the year 1929 A.D American Astronomer Edwin Hubble observing red shifts in the light wavelength emitted by galaxies pointed out that the galaxies are not steady and rather they are moving away from each other. That means, the universe is constantly expanding[73] which leads to the acceptance of expanding universe theory in the scientific world. The relationship between distance and red shift is known as Hubble's Law. The actual rate of expansion is known as Hubble's constant.[74] .This implies that at earlier time objects would have been closer and it indicates a time when everything was fused together and density was infinitesimally small. This idea motivates the concept of the beginning of the universe in the realm of science. [75]

It has more been confirmed with assumption of cosmic background radiation by two other American scientists, George Gamow and his student Ralph Adler which was finally proved by Arno Penzias and Robert Wilson who detected a uniform microwave radiation as a residual thermal energy throughout the universe.[76] It is very interesting as well as astonishing that when people could not imagine about telescope and any scope of scientific observation of the space, the Qur'an mentioned the fact of constant expansion of the universe very wisely.

Stephen Hawking in his book **THE THEORY OF EVERYTHING, THE ORIGIN AND FATE OF THE UNIVERSE** has remarked: *If the universe is expanding, there may be physical reasons why there had to be a beginning. One could still believe that God created the universe at the instant of the big bang*.

In fact, it is very surprising that how Muhammad (Pbuh) living in desert was aware of the expansion of the universe long before its scientific discovery in 1920s.

4.2.3. THE QUR'ANIC MODEL OF THE UNIVERSE

It is known to us that the first Model of the universe was designed by Greek Philosopher Aristotle (384-322 BC) and it was geocentric model i.e he published that the concept of a universe with the earth at the centre with its stationary position and the sky is fixed around the earth within which, the sun, the moon , stars are moving. This model was further developed by Greek Astronomer Claudius Ptolemy, who lived in Alexandria in 2nd century published his famous work ***Almagest***. He also believed that the earth is stationary at the centre of the universe. Such concept about the universe was prevalent for hundreds of years. Later on in sixteenth century (1543 A.D) Polish astronomer Nicholas Copernicus first gave the idea of heliocentric universe i.e instead of earth the sun is fixed at the centre of the universe. After the discovery of telescope by Galileo, he first let the people know that there is nothing stationary in the universe. In 1687 Isaac Newton discovered that all heavenly bodies are moving in the in the universe in their respective orbit.

However, from a serious study of the different revelations of the Qur'an it becomes clear that the Qur'an approves neither geocentric model nor heliocentric model of the universe. Rather, it indicates a separate model of the universe which is in conformity with the modern scientific model of the universe. The Qur'an states that the sun is

moving towards a destination fixed for it. In chapter 36 verse 38 the Qur'an proclaims:

وَٱلشَّمۡسُ تَجۡرِي لِمُسۡتَقَرّٖ لَّهَاۚ ذَٰلِكَ تَقۡدِيرُ ٱلۡعَزِيزِ ٱلۡعَلِيمِ ٣٨

And the Sun runs towards a resting place, for him; that is the decree of (Him), the Exalted in Might, the All-knowing (36:38)[77]

Moreover, the Quran proclaims (English translation):

It is he Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along each in its rounded course. (21:33)[78]

It is not permitted to the Sun to catch up the Moon, nor can the Night outstrip the Day: each (just) swims along in(its own) orbit (according to Law). (36:40)[79]

From these revelations it is indicated that the sun has been running in its orbit towards a place appointed for him by Allah, the Almighty. That is the sun has been running independently and the earth as well as the moon is following the sun along with their motion in their respective orbits.

It has been discovered that the Sun is moving in the Milky Way galaxy in its own orbit at a speed of 250 K.M. per second and it approaching towards a target called Solar Apex.

Thus the Qura'nic model of the universe has the following special characters:[80]

1. The earth and all heavenly bodies are moving in their respective orbits.
2. The moon, the earth and the sun has their respective orbit. They are moving around their respective centre, such as the moon movers around the earth, the earth moves around the sun, the sun moves around its centre in the Milky Way galaxy.
3. The Sun is also moving towards a destination now called solar apex.
4. The earth has also axial rotation which results in alteration of day and night on the earth.

It is very interesting to note that Qur'anic model of the universe is fully in conformity with modern scientific theories.

4.2.3.1. THE COMPUTER UNIVERSE

The Qur'an describes that Allah, the Almighty has established universe in such way that as if it is a computer system which has been installed by the creator and functioning according to His Command. The Qur'an proclaims

ٱلَّذِى لَهُۥ مُلْكُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضِ وَلَمْ يَتَّخِذْ وَلَدًا وَلَمْ يَكُن لَّهُۥ شَرِيكٌ
فِى ٱلْمُلْكِ وَخَلَقَ كُلَّ شَىْءٍ فَقَدَّرَهُۥ تَقْدِيرًا ﴿٢﴾

He to Whom belongs the dominion of the heavens and the earth: no son has He begotten, Nor has He a partner in His dominion: It is Who created all things and ordered them in due proportions. (25:02)[81]

There are more revelations for consideration (English translation):

Glorify the name of Thy Guardian- Lord Most High, Who hath created and further, given order and proportion, Who hath measured, and granted guidance. (87:01-03)[82]

With Him are the keys of the Unseen, the treasure that none knoweth but He. He knoweth what ever there is on the earth and in the sea. Not a leaf doth fall but with His knowledge: there is not a grain in the darkness (or depths) of the earth, nor anything fresh or dry (green or withered), but is (inscribed) in a Record clear (to those who can read).(06:59)[83]

It is He Who created the heavens and the earth with truth; the day He saith, "Be," behold! It is. His word is the Truth..... ... (06:73)[84]

Allah doth blot out or confirm what He pleaseth; with Him is the Mother of the Book (13:39)[85]

The above verses clearly indicate that the creation of the universe was done in planned way, so that it function orderly and systematically as like the man made computer works. In fact, it is possible to explain the various aspects of our universe comparing it with a computer system.[86] Simply, if we consider the fusion reaction which has been going on in the sun since it starts its functioning, it is clear that its function is a controlled one and as such it is not exploding, in spite of constant fusion reaction is going on. Even our human brain works as like a computer works.

Prof P.A. Wahid in his book '*The Computer Universe: A Scientific Rendering of the Holy Qur'an'* has tried to show human body as the hard ware and human spirit as the soft ware. The angels as intelligent robots performing many divine works, the living cells are regarded as biochips, the human being, a conscious, intelligent and free willed robot of Allah and the Qur'an as Divine soft ware for human guidance.

4.2.4. INNUMARABLE HEAVENS IN HARMONY IN SPACE

In many of the revelations, the Qur'an declares that there are seven heavens in respect of the earth. The Qur'an proclaims:

فَقَضَىٰهُنَّ سَبْعَ سَمَٰوَاتٍ فِى يَوْمَيْنِ وَأَوْحَىٰ فِى كُلِّ سَمَآءٍ أَمْرَهَا ۚ وَزَيَّنَّا
ٱلسَّمَآءَ ٱلدُّنْيَا بِمَصَٰبِيحَ وَحِفْظًا ۚ ذَٰلِكَ تَقْدِيرُ ٱلْعَزِيزِ ٱلْعَلِيمِ ﴿١٢﴾

So, He completed them as seven firmaments in two Days, and He assigned to each heaven its duty and command. We adorned the lower heaven with lights and (provided it) with guard. Such is the Decree of (Him) the Exalted in Might, Full of knowledge. (41: 12)[87]

ٱلَّذِى خَلَقَ سَبْعَ سَمَٰوَٰتٍ طِبَاقًا ۖ مَّا تَرَىٰ فِى خَلْقِ ٱلرَّحْمَٰنِ مِن تَفَٰوُتٍ ۖ
فَٱرْجِعِ ٱلْبَصَرَ هَلْ تَرَىٰ مِن فُطُورٍ ﴿٣﴾

Who hath created seven heavens in harmony. Thou (Muhammad) cannot see any fault to the Beneficent One's creation; then look again: cannot thou see any rift? (67:03)[88]

Two more revelations in English translation are as follows:

It is We Who have set out constellations in the heavens and made them fair-seeming to (all) beholders; (15:16)[89]

By the heaven, holding mansions of the stars (85:01)[90]

To understand the significance of the above verses we must have to know the actual meaning of *Sama* in Arabic which has the plural form as *Samawat*. The dictionary meaning of *Sama* is heaven, sky, and firmament. The meaning of this term in the Qur'an depends upon its place of application. It means sky or space in different modes as per needs of description. Sometimes it implies the sky that we see with our naked eye near to the earth where clouds are seen, and at other places it means the space with the Moon, the Sun, a few planets and many times innumerable stars and only blue and endless blue, nothing else. So with a naked eye we can not define any heaven in physical form. Moreover, we know that rain water falls from the sky which first accumulates as clouds in the sky. The Qur'an also refers so in the following verses (English translation).

And We send the fecundating winds, then cause the rain to descend from the sky, therewith providing you with water (in abundance), though ye are not the guardians of the stores. (15:22)[91].

That sends down (from time to time) rain from the sky in due measure:- and We raise to life therein land that is dead; even so will ye be raised (from the dead) (43:11)[92]

And He it is Who sends the Winds as heralds of glad tidings, going before His Mercy, and We send down pure water from the sky, -(25:48)[93]

From the above three verses it is clear that rain comes down from the sky is the space near our earth. But the earlier mentioned verses indicate about the existence of different heavens in space. There is a number of heavens which is mentioned in Arabic as *Sab-a* , the dictionary meaning is seven . How we can imagine that there are exactly seven numbers of heavens above our earth? Many commentators of early ages of the Qur'an thought that Allah has created seven heavens, one above the others with the earth at the centre of the universe with lowest heaven adorned with lamps like stars. Such idea is of Ptolemaic astronomy which is later on found to be not correct and discarded. Some commentators have the opinion that seven heavens referred is seven major planets of the solar system, with the earth is eight and their orbits being seven heaven or tracts.[94] However, Dr. Maurice Bucaille in his famous book 'The Bible The Qur'an and Science' has mentioned as follows:

'The number 7 is used 24 times throughout the Qur'an for various numerical quantities. It often carries the meaning of 'many' although we donot know exactly why this meaning of the figure was used. The Greeks and Romans also seem to have used the number 7 to mean an undefined idea of plurality.'

It is felt that Dr. Bucaille is right in his approach regarding the application of sab-a i.e. seven. The Qur'an has not mentioned any other figure regarding number of skies, where as in case of creation and development of the universe it uses the numbers like 2, 4. and 6. Moreover, the word *Tibaqa*, means in keeping with or in conformity with, consistent with.[95] Thus, we can make hypothesis that there are many heavens beyond the earth which are created in conformity with each other or simply they are in harmony. Besides solar system, there are many galaxies in the universe as discovered by Astronomers world wide which we cannot see by our naked eye. It is presumed that there may be different galaxies one away from the other staring from our Milky Way.

The universe was created in many layers of massive structure like galaxies. These are created and established with weak forces where as small structure like atoms are created with strong forces. The formation of different cosmological bodies is because of the force of gravity in the universe.[96]

So this may be an indication towards the various galaxies of the expanding universe. However, Dr. Haluk Nurbaki in his book VERSES *FROM THE HOLY QUR'AN AND THE FACTS OF SCIENCE* has explained the sevenfold heavens mentioned in the Qur'an as seven magnetic fields surrounding the earth towards the infinity of space . However, it is felt that the modern world will have to wait more to know the actual mystery of the heavens proclaimed by the Qur'an.

Even, the French scientist and Philosopher Blaise Pascal in 1662 C.E imagined different scales of objects in hierarchy of structure in the universe. Astonishingly, he imagined seven structures in ascent to the extremely large. First step: the mountains (10^4m= 10km), Second step: the planets (10^8m =100000 km), Third step : the giant stars (10^{12}m= 6.7 AU), Fourth step: the Solar System (10^{16}m = 1 light-year), Fifth step : the galaxies (10^{20}m = 10000 l.y), Sixth step: the clusters of galaxies (10^{24}m =100 million.l.y) and Seventh step : the visible Universe (1.5×10^{26}m = 15 billion.l.y) [97]

The famous American Astronomer Saul Perlmutter has commented that regarding knowledge of cosmology human beings are still at the stage of a child.[98] And it is rightly pointed out in the Qur'an in the following verse:

وَلِلَّهِ غَيْبُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضِ ۚ وَمَآ أَمْرُ ٱلسَّاعَةِ إِلَّا
كَلَمْحِ ٱلْبَصَرِ أَوْ هُوَ أَقْرَبُ ۚ إِنَّ ٱللَّهَ عَلَىٰ كُلِّ شَىْءٍ قَدِيرٌ
٧٧

To Allah belongeth the Mystery of the heavens and the earth. And the Decision of the Hour (of Judgment) is as the twinkling of an eye, or even quicker: for Allah hath power over all things. (16:77)[99]

4.2.4.1. THERE ARE INNUMERABLE ORBITS IN THE SPACE

The Universe is in great balanced, because all the celestial bodies follow specific paths. Billions of galaxies, each consists of billions of stars, where most of the stars have planets and planets have satellites.[100] The Qur'an proclaims:

وَلَقَدْ خَلَقْنَا فَوْقَكُمْ سَبْعَ طَرَآئِقَ وَمَا كُنَّا عَنِ ٱلْخَلْقِ غَٰفِلِينَ ١٧

We have above created above you, seven path, and are never unmindful of creation (23:17)[101]

Here the term *tarayik* is important. *Tarayik* is the plural of *tarika* which means way, road, path, manner, method, procedure, system, religion etc.[102] So it is justified to have seven i.e many or innumerable orbits in space for the heavenly bodies.

4.2.4.2. THE LOWEST HEAVEN IS BEAUTIFIED AND PROTECTED

The Qur'an has mentioned that out of the innumerable heavens, the lowest heaven, that is which is nearest to the earth is beautified with lamps like bodies and protected the earth from any probable harm from extra-terrestrial space. The Qur'an proclaims:

وَلَقَدْ زَيَّنَّا ٱلسَّمَآءَ ٱلدُّنْيَا بِمَصَٰبِيحَ وَجَعَلْنَٰهَا رُجُومًا لِّلشَّيَٰطِينِ ۖ
وَأَعْتَدْنَا لَهُمْ عَذَابَ ٱلسَّعِيرِ ﴿٥﴾

And verily we have beautified the world's heaven with Lamps, and We have made them missiles for the devils, and for them We have prepared the doom of flame. (67:5)[103]

The above verse indicates that space nearest to the earth has been beautified as is reflected at the eyes of the viewers on the earth. The missiles referred here may be the meteors which when enter earth's atmosphere are ignited because of friction with atmospheric air and looks like missiles from the earth.

4.2.4.3. THE SOLAR SYSTEM

The motion of the sun, the moon and the earth is continued without any interference to let us safe life on the earth. The sun and planets revolving round it along with their respective satellites, comets, asteroids etc together constitute the solar system. The earth revolves round the sun, with an inclination at an angle of 23 degrees and 27 minutes because of which seasons evolve upon the earth. The earth also rotates around its axis; otherwise only the one side of the earth would get sunlight while other side would be in perpetual darkness.[104] The solar system is a part of our Milky Way galaxy.There are indications in the Qur'an about our solar system. The Qur'an proclaims:

إِنَّا زَيَّنَّا ٱلسَّمَآءَ ٱلدُّنْيَا بِزِينَةٍ ٱلْكَوَاكِبِ ﴿٦﴾

Lo! We have adorned the lowest heaven with an ornament, the planets: (37:06)[105]

تَبَارَكَ ٱلَّذِى جَعَلَ فِى ٱلسَّمَآءِ بُرُوجًا وَجَعَلَ فِيهَا سِرَٰجًا وَقَمَرًا مُّنِيرًا
﴿٦١﴾

Blessed is He Who made constellations on the skies, and placed therein a Lamp and a Moon giving light. (25:61)[106]

أَلَمْ تَرَوْا كَيْفَ خَلَقَ اللَّهُ سَبْعَ سَمَاوَاتٍ طِبَاقًا ﴿١٥﴾

وَجَعَلَ الْقَمَرَ فِيهِنَّ نُورًا وَجَعَلَ الشَّمْسَ سِرَاجًا ﴿١٦﴾

See ye not how Allah hath created the seven heavens in harmony; And hath made the moon a light therein and made the sun a Lamp? (71: 15-16)[107]

وَبَنَيْنَا فَوْقَكُمْ سَبْعًا شِدَادًا ﴿١٢﴾

وَجَعَلْنَا سِرَاجًا وَهَّاجًا ﴿١٣﴾

And We have built above you the seven strong (heavens) ;And have appointed a dazzling lamp (78:12- 13)[108]

إِذْ قَالَ يُوسُفُ لِأَبِيهِ يَا أَبَتِ إِنِّي رَأَيْتُ أَحَدَ عَشَرَ كَوْكَبًا
وَالشَّمْسَ وَالْقَمَرَ رَأَيْتُهُمْ لِي سَاجِدِينَ ﴿٤﴾

When Joseph said unto his father: "O my father! Lo! I saw in a dream eleven planets and the sun and the moon, I saw them prostrating themselves to me." (12:04)[109]

The above two verses indicate about the solar system consisting of the Sun, the earth and many other planets. If we consider the last verse furnished above, we find a concept of solar system with eleven planets with the sun and the moon. Considering dwarf planets, we get Mercury, Venus, Earth, Mars, Ceres (dwarf), Jupiter, Saturn, Uranus, Neptune, Pluto (dwarf), Eris (dwarf) as the eleven planets in the solar system [110]

The Qur'an has also given indications on the equilibrium in the solar system. In the sura No.55, verse: 5-7, the Qur'an states:

ٱلشَّمْسُ وَٱلْقَمَرُ بِحُسْبَانٍ ﴿٥﴾

وَٱلنَّجْمُ وَٱلشَّجَرُ يَسْجُدَانِ ﴿٦﴾

وَٱلسَّمَآءَ رَفَعَهَا وَوَضَعَ ٱلْمِيزَانَ ﴿٧﴾

The sun and the moon are made punctual; And the star and the trees adore; And the sky He hath uplifted; and He hath set the measure (55:5-7)[111]

Here the Qur'an indicates about mathematical laws which are prevalent in maintaining the equilibrium among the different heavenly bodies in the solar system. Scientists in seventh century only could have some idea on the subject.In other verses also such indications are available on the equilibrium of the stars and planets.

It is He Who created the night and the day, and the sun and the moon: All (celestial bodies) ***swim*** *along, each in its rounded course (orbit). (21:33)*[112]

It is not permitted to the sun to catch up the moon, nor the night outstrips the day: Each (just) ***swims*** *along in (its own) orbit (according to Law)(36:40)*[113]

These orbital motions of stars and planets are represented by the term *'Sabaha'* which means swimming. Thus, it indicates both the axial motion and forward motion of a heavenly body.

4.2.5. THE SKY HAS NO PILLAR AS BELIEVED

From time immemorial people have a question in mind how the sky is static above the earth and which force is holding it up so as not to fall on the earth. Ancient people believed that the sky is supported on pillars on the boundary of the earth. Even many believed that the sky is dome shaped and rests on the periphery of the dome.

But the Qur'an in seventh century refuted the belief and declared that there was no pillar to keep the sky high above the earth. In this regard the Qur'an proclaims:

ٱللَّهُ ٱلَّذِى رَفَعَ ٱلسَّمَٰوَٰتِ بِغَيْرِ عَمَدٍ تَرَوْنَهَا ۖ ثُمَّ ٱسْتَوَىٰ عَلَى ٱلْعَرْشِ ۖ
وَسَخَّرَ ٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ يَجْرِى لِأَجَلٍ مُّسَمًّى ۚ يُدَبِّرُ ٱلْأَمْرَ
يُفَصِّلُ ٱلْءَايَٰتِ لَعَلَّكُم بِلِقَآءِ رَبِّكُمْ تُوقِنُونَ ﴿٢﴾

Allah is He Who raised the heavens without any pillars that ye can see; then He established Himself on the Throne. He has subjected the sun and the moon! Each one runs (its course) for a term appointed. He doth regulate all affairs, explaining the Signs in detail that ye may believe with certainty in the meeting with your Lord (13:02)[114]

There are more revelations (English translation) to be considered:

He created the heavens without any pillars that ye can see; He set on the earth mountains standing firm, lest it should shake with you; and He scattered through it beasts of all kinds. We send down rain from the sky, and produce on the earth every kind of noble creature, in pairs.(31:10)[115]

To day it is known to all that gravitational forces hold the heavenly bodies apart from each other and as such they do not collide. There is nothing tangible in space which may be said to hold different heavenly bodies together. Certainly, there is a force which is responsible for keeping the heavenly bodies and also to regulate their motion in specific orbits.[116] The following revelations may also be considered:

Do they not look at the sky above them? -How We have made it and adorned it, and there are no flaws in it ? (50:06)[117]

He raised the height thereof and ordered it (79:28)[118]

And We have made the heavens as a canopy well guarded: yet do they turn away from the Signs which these things (point to) ! (21:32)[119]

And the Firmament has He raised high and He has set up the Balance (of justice) (55:07)[120]

4.2.5.1: THE SKY ACTS AS A PROTECTING ROOF FOR THE EARTH

It is very interesting to note that the Qur'an mentions that the sky has been made as a roof for protection of living being on the earth. Here the Qur'an has used a parable and to indicate earth's atmosphere, the sky is mentioned as roof for the earth. The Qur'an proclaims:

وَجَعَلْنَا ٱلسَّمَآءَ سَقْفًا مَّحْفُوظًا ۖ وَهُمْ عَنْ ءَايَٰتِهَا مُعْرِضُونَ ﴿٣٢﴾

We have made the heaven a roof, safe and well guarded. Yet they turn away form its signs. (21:32)[121]

And by the roof raised high (i.e the heaven) (52:05)[122]

And We have made above you seven strong (heavens) (78:12)[123]

And verily we have beautified the world's heaven with lamps, and We have made them missiles for the devils, and for them We have prepared the doom of the flame. (67:05)[124]

These revelations indicate that the earth has been given required protection from the external harms which may happen due to reaching of different types of cosmic radiation on the earth surface. Moreover, the earth has been protected from the affect of solar wind, attack of meteors and asteroids etc. To day it is known as a scientific fact that the earth's atmosphere has been functioning as a protective shield. Every one of us now knows how the ozone layer protects us from the affect of ultraviolet rays; as if, it filters the harmful rays coming towards the earth and allows the rays required for life. Even innumerable meteors big or small enter the atmosphere, but these cannot reach the earth surface as the same burn on the way before reaching the earth surface.[125] Thus, the atmosphere surrounding the earth plays very important, even crucial rule to protect life on the earth. So the atmosphere invariably acts as roof to protect the all the living beings on the earth. So it is amazing to think that the Qur'an mentioned 1400 years ago about the perfect system high above the earth which people could not imagine at that time. As such the Quran rightly declared.

وَمَا خَلَقْنَا ٱلسَّمَآءَ وَٱلْأَرْضَ وَمَا بَيْنَهُمَا لَٰعِبِينَ ﴿١٦﴾

We created not the heavens and the earth and all that is between them for a (mere) play (21:16).[126]

The harmful rays cannot reach the earth penetrating the atmosphere. The ultraviolet rays , the fall of meteors, the cosmic rays, the solar wind, the ultraviolet rays and such other harmful things cannot reach the earth because of different layers of atmosphere certainly acting as strong roof for the living beings on the earth. The atmosphere also retains the heat received from the Sun at night and maintains the earth temperature habitable for life.

To day it is also known that Van Allen Belts caused by magnetic field of the earth also serves as a shield against the harmful radiation and protect us from deadly cosmic and solar radiation. So, the Qur'an rightly mentions that the sky acts as the protecting roof for the earth.

4.2.6. THE WORLD'S SKY

The Quran has mentioned about seven heavens or skies of which lowest heaven that is which is nearest to the earth is adorned with lights and has been made inviolable. In chapter 41, Verse No.12, the Qur'an proclaims:

فَقَضَىٰهُنَّ سَبْعَ سَمَٰوَاتٍ فِى يَوْمَيْنِ وَأَوْحَىٰ فِى كُلِّ سَمَآءٍ أَمْرَهَا ۚ وَزَيَّنَّا
ٱلسَّمَآءَ ٱلدُّنْيَا بِمَصَٰبِيحَ وَحِفْظًا ۚ ذَٰلِكَ تَقْدِيرُ ٱلْعَزِيزِ ٱلْعَلِيمِ ﴿١٢﴾

So, He completed them as seven firmaments in two Days, and He assigned to each heaven its duty and command. We adorned the lower heaven with lights and (provided it) with guard. Such is the Decree of (Him) the Exalted in Might, Full of knowledge (41:12)[127]

Today it is known because of scientific discoveries that the light on the universe is the result of mixture of light created by chemical reactions occurs in the stars and the light on the earth is from the Sun. Here the lower heaven may be regarded as world's sky which is decorated with lamps like stars and vast planets from one corner to the other which is called Milky-way galaxy, since this galaxy is nearest to us as our planet the earth lives in it. There is other galaxy named Andromeda which is 22 lakh light years away from our galaxy. Allah has organized the entire universe with force of gravitation into vast structures like galaxies, solar system, stars etc. Actually we live in Milky Way galaxy that is about one hundred thousand light-years across and it is slowly

rotating and our sun is just an ordinary star near outer edge of the one of the spiral arms of the galaxy.[128]

Actually Allah has created the universe which is inviolable even for speed of light. And thus the universe is boundless. Billions of galaxies are in the observable part of the universe which we refer s world's sky. [129]

The world's sky looks very nice at night as it has been beautified with constellation of stars for the beholders on the earth The Qur'an proclaims.

وَلَقَدْ جَعَلْنَا فِى ٱلسَّمَآءِ بُرُوجًا وَزَيَّنَّـٰهَا لِلنَّـٰظِرِينَ ﴿١٦﴾

Indeed, We have set constellations in the heaven and have beautified them for the beholders. (15:16)[130]

However, the Qur'an does not support any influence of the constellations on the life of the people on the earth as is propagated by followers of astrology.

4.2.7. THE LAYERS OF THE ATMOSPHERE

Today it is known to all that the earth has been surrounded by different layers of atmosphere. The Qur'an proclaims:

هُوَ ٱلَّذِى خَلَقَ لَكُم مَّا فِى ٱلْأَرْضِ جَمِيعًا ثُمَّ ٱسْتَوَىٰٓ إِلَى ٱلسَّمَآءِ
فَسَوَّىٰهُنَّ سَبْعَ سَمَـٰوَٰتٍ ۚ وَهُوَ بِكُلِّ شَىْءٍ عَلِيمٌ ﴿٢٩﴾

It is He Who hath created all things that are on the earth; then He turned to the heavens and made them in to seven firmaments; and of all things He hath perfect knowledge. (02:29)[131]

وَلَقَدْ خَلَقْنَا فَوْقَكُمْ سَبْعَ طَرَآئِقَ وَمَا كُنَّا عَنِ ٱلْخَلْقِ غَـٰفِلِينَ ﴿١٧﴾

W*ho hath created seven heavens in harmony. Thou (Muhammad) cannot see no fault in the Beneficent One's creation; then look again: canst thou see any rifts? (67:03)*[132]

See ye not how Allah has created the seven heavens one above another. (71:15)[133]

From the above verses we get an indication that Allah has created seven or many layers of atmosphere above the earth surface. From modern scientific study it is known that there seven atmospheric layers over the earth. They are Troposphere, Stratosphere, Mesosphere, Ionosphere, Thermosphere, Exosphere and Magnetosphere.[134]

4.2.8. EXISTANCE OF LIFE IN OUTER SPACE AND CONCEPT OF EXOBIOLOGY OR BIOASTRONOMY

Today scientist thinks that life may exist in other places of the universe beyond of our earth and they guess that many of planets of our Milky Way galaxy may have the capability to sustain intelligent life. If there is suitable atmosphere with enough water, the possibility of existence of life can not be out rightly rejected.[135] Some revelations of the Quran indicate that intelligent life exists in outer space. The Qur'an proclaims:

And unto Allah maketh prostration, whatsoever is in the heavens and whatsoever is in the earth, of living creatures and the Angels (also) and they are not proud.. (16:49)[136]

Unto Him belongeth whosoever is in the heavens and the earth. And those who dwell in His presence are not too proud to worship Him, nor do they weary. (21:19)[137]

The seven heavens and the earth; and all beings there in, declare His glory ....(17:44)[138]

The Qur'an states about the existence of life unknown to man such as Angel, Jinn etc. The man on the earth is not aware of about their habitation in the universe. Only Allah, the creator of the universe is aware of the environment and situation in which they live. Since the Quran has mentioned everything has been created for specific purpose. The Following revelation may be considered:

Not without purpose did We create heaven and earth and all that is between them in vain. That is the opinion of those who disbelieve. And woe unto those who disbelieve in Fire (38:27)[139]

And We created not the heavens and the earth and all that is between them, in play (44:38)[140]

The Quran has indicated that there exists life in other planets. The following revelations of the Quran may be considered for explanation:

He saith: 'My Lord knoweth, what is spoken in the heaven and the earth. He is the Hearer, the knower' (21:04)[141]

....While all creatures in the heavens and on the earth have willingly or unwillingly, bowed to His will and to Him shall they all be brought back. (03:83)[142]

From the above verses we get indications that there exists living beings in other places beyond our earth who also praise the creator of the universe as like many man and other living being do on the earth. So besides the earth, there are every possibility of earths or planets like of our earth elsewhere in the vast universe. There are other abodes for living creatures of other forms created by the Almighty.[143] Every one of us heard about UFO and possibility of availability of water in March, Jupiter and other planets leading to the hope of existence of life in such planets. To search life in elsewhere in the space today science of Exobiology or Bioastronomy has been developed. But interestingly the Qur'an more than 1400 years ago indicated about it. Prof Baidyanath Basu in his book 'An Introduction to Astrophysics' has made a notable remark as follows:

The challenge for the discovery of extraterrestrial civilization is a very difficult one, but extremely promising also. The astronomers have accepted the challenge with all sincerity and seriousness. The fate is still unknown. What appears to be a probability now at the fag end of the 20th century may appear as a possibility in the early decades of the approaching 21st century and finally may be realized as certainty in decades to come.

References:

54. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
55. *Ibid*
56. Ibid
57. Ibid
58. Ibid
59. Rahman Atowar (2007) : ***Universe and Man (Scientific and Qur'anic Descriptions)***; Adam Publishers & Distributors, New Delhi , p70
60. Basu Biman (2008) : ***Astrology , Sense or Nonsense?*** ; National Book Trust of India,New Delhi , p19
61. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
62. Anees-u-din Mir (1999): ***THE UNIVERSE seen through the QURAN***; Attique Publishers, Toronto, Canada, P31
63. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
64. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
65. Ibid

66. Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi ,

67. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
68. (1) Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi ,(2) Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic***: Spoken Language Services, Inc., New York,

69. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
70. Mia Kazi Jahan (2004): ***Al-Qur'an: The Challenge*** (Mahakash Parba 1 & 2); Madina Publications, Dhaka, Bangladesh , P48

71. Bucaille Maurice (2005) : ***Al-Quran O Adhunik Bigyan*** (Bengali translation of Al-Quran and Modern Science): Lekha Prakashani, Kolkata, p167
72. Ibid
73. Yahyia Harun (2004); ***How Quran Guides Science***, Indian Edition published by Adam Publishers & Distributors, New Delhi,p64

74. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter;*** Kitab Bhavan, New Delhi,p21
75. Hawking Stephen (1988): ***A Brief History of Time,*** Bantam Books ,p9
76. http://www.quranmiracles.com/articles.asp?id=2
77. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
78. Ibid
79. Ibid
80. Mia Kazi Jahan (2004): ***Al-Qur'an: The Challenge*** (Mahakash Parba 1 & 2); Madina Publications, Dhaka, Bangladesh , P33

81. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
82. Ibid
83. Ibid
84. Ibid
85. Ibid
86. Wahid P.A (2007) : ***The COMPUTER UNIVERSE, A scientific rendering of the Holy Qur'an***;Printed and published in India by Adam Publishers & Distributors, New Delhi , p151
87. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
88. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
89. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
90. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
91. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
92. Ibid

93. Ibid
94. Ali M Akbar (1976) : ***Science in the Quran,*** Md. Abu Bakr, The Malik Libray, 34, Banglabazar, Dhaka, pp207-208

95. (1) Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi ,(2) Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic:*** Spoken Language Services, Inc., New York,(3) Hava. J.G (2010): ***Arabic English Dictionary*** (for advanced learners); Goodword Books, New Delhi

96. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter;*** Kitab Bhavan, New Delhi,p53
97. Delsemme Armand (1998): ***Our Cosmic Origins***: Cambridge University Press, UK , pp05-11

98. Rahman Anisur (2003): ***Biswagrantha Qur'an O Adhunik Bigyan***, Mahabismaya !!!; Systek Publications, Dhaka, Bangladesh, pp16-17

99. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2,
100. Yahyia Harun (2004); ***How Quran Guides Science***, Indian Edition published by Adam Publishers & Distributors, New Delhi, p65

101. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2,
102. 1) Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi ,(2) Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic:*** Spoken Language Services, Inc., New York,(3) Hava. J.G (2010): ***Arabic English Dictionary*** (for advanced learners); Goodword Books, New Delhi

103. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
104. http://www.quranmiracles.com/articles.asp?id=27

105. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
106. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
107. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
108. Ibid

109. Ibid

110. Butz Stephen D. (2008): ***Science of Earth Systems***: Thomson Corporation, 5 Maxell Drive, P.O.Box 8007, Clifton Park, NY, USA, p122

111. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

112. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

113. Ibid

114. Ibid

115. Ibid

116. Ansari Zafar Ishaq (1994) : ***Towards understanding the QUR'AN*** ;English version of TAFHIM AL- QUR'AN by Sayyid Abul A'la Mawdudi; Markazi Maktaba Islami, New Delhi , Vol- IV, P219

117. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

118. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

119. Ibid

120. Ibid

121. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran

122. Ibid

123. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

124. Ibid

125. Butz Stephen D. (2008): ***Science of Earth Systems***: Thomson Corporation, 5 Maxell Drive, P.O.Box 8007, Clifton Park, NY, USA, p123

126. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran

127. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

128. Hawking Stephen (2006): ***The Theory of everything*** (The Origin and Fate of the Universe); Jaico Publishing House, Mumbai, Delhi,Bangalore, Kolkata, P16

129. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter;*** Kitab Bhavan, New Delhi,p79

130. Ansari Zafar Ishaq (1994) : ***Towards understanding the QUR'AN*** ;English version of TAFHIM AL- QUR'AN by Sayyid Abul A'la Mawdudi; Markazi Maktaba Islami, New Delhi

131. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

132. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

133. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

134. Krebs Robert E. (2007) : **The Basics of Earth Sciences**; Atlantic Publishers and Distributors (P) Ltd, New Delhi -2, pp209-213

135. Ali M Akbar (1976) : ***Science in the Quran,*** Md. Abu Bakr, The Malik Libray, 34, Banglabazar, Dhaka, pp246-247

136. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

137. Ibid

138. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

139. Ibid

140. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

141. Ibid

142. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

143. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter;*** Kitab Bhavan, New Delhi,p173

SECTION – III

THE FATE OF THE UNIVERSE

The Qur'an clearly mentions that as like creation of the universe a time will come when everything will be destroyed. After that there will be resurrection of all living being. However, the Qur'an has not mentioned any specific time regarding the collapse of the universe. The following verse of the Qur'an may be considered.

كُلُّ مَنْ عَلَيْهَا فَانٍ ﴿٢٦﴾

All that is on the earth will perish. (55:26)[144]

There are more verses which may also be considered (in English translation):

And call not, besides Allah, on another God. There is no god but He. Everything (that exists) will perish except his Face. To Him belongs the Command and to Him will ye (all) be brought back. (28:88)[145]

We created not the heavens and the earth and all that is between them save with truth, and for a term appointed: but those who disbelieve turn away from that whereof they are warned. (46:03)[146]

Do they not reflect in their own minds? Not but in truth and for a term appointed, did Allah create the heavens and the earth, and all between them: yet are there truly many among men who deny the meetings with their Lord (at the Resurrection)! (30:08)[147]

From the verses, it is clear that the universe was created by Allah and it will come to end inevitably. Only the hour for the end of the universe is not indicated in the Qur'an and its knowledge lies with Allah the creator of the universe.So, any theory like steady state theory is not acceptable to the Qur'an.

4.3.1. BIG CRUNCH AS INDICATED IN THE QUR'AN

There is a scientific concept that a time may come when due to gravitational force the expansion of the universe may be stopped and there may be a big crunch. All the compositions of the cosmos that are held by gravitational attraction and rotational motion will be moved backward to collapse. Gravitation counter acts the centrifugal force of rotational or orbital motion, which keeps the two forces in equilibrium. [148] Therefore, till the repulsive force remains stronger, the universe will continue to expand. As such there is every possibility of the opposite happenings. Different revelations in the Qur'an also indicate the possibility of such a situation. Today we know about black holes. It is the collapse of star when the average mass becomes lesser than the critical value; the gravitational force overcomes the repulsive force and the star collapse to convert into a black hole. [149] Likewise, a big crunch for the whole universe is inevitable as per the Qur'an. In chapter 21, verse No.104, the Qur'an proclaims:

يَوْمَ نَطْوِي ٱلسَّمَآءَ كَطَيِّ ٱلسِّجِلِّ لِلْكُتُبِ ۚ كَمَا بَدَأْنَآ أَوَّلَ خَلْقٍ نُّعِيدُهُۥ ۚ
وَعْدًا عَلَيْنَآ ۚ إِنَّا كُنَّا فَٰعِلِينَ ﴿١٠٤﴾

The Day that we roll up the heavens like a scroll rolled up for books (completed)- even as We produced the first Creation, so shall We produce a new one: a promise We have undertaken: truly shall We fulfill it. (21:104)[150]

There is another revelation for consideration (English translation)

No just estimate have they made of Allah, such as is due to Him: on the Day of judgement the whole of the earth will be but His handful, and the heavens will be rolled up in His right-hand: glory to Him! High is He above the Partners they attribute to Him! (39:67)[151]

Here the Qur'an has mentioned a parable to let the man to understand how there will be a big crunch. Everything will go in reverse direction of earlier expansion to have big crunch which is compared with rolling up a scroll to indicate contraction. There will be rolling up of the universe or gravitational collapse into the state of singularity from where Big Bang was held earlier. When this will occur no physical law will remain prevalent since the big crunch will bring the end of all.[152]

We know from Big Bang theory and also from expanding universe theory that after Big Bang there is continuous and endless expansion of the universe created in the Big Bang. In this connection, it may be noted that in 1931 George Lamaitre pointed out that if the outward movement of all galaxies were happened to be stopped and taken towards the backward direction, then they would be presumably meet at a single point of zero volume due to the catastrophic gravitational collapse.[153] As such it is reasonable to consider that the primeval atom or cosmic egg must have concentrated all that is now we get as universe.

If the average density of the universe is less than the critical value, it will continue its expansion and not re-collapse.[154] Moreover, if the gravitational attraction between the different galaxies happens the expansion to be slows down and ultimately stops, the galaxies then will be started to move towards each other and there will be contraction of the universe leading a Big Crunch.[155] This reflects to the idea of a closed universe. Stephen Hawking in his famous book 'A brief History of Time' has remarked:

The universe would expand to a very large size and eventually it would collapse again into what looks like a singularity in real time. Thus, in a sense, we are still all doomed, even if we keep away from black holes. (P148)

4.3.1.1. UNIVERSE WILL BE COLLAPSED WITH A SINGLE BLAST

The Qur'an has categorically mentioned that the universe will come to an end with a very large single burst and everything will be destroyed or destabilized. In the chapter 36, verse No.53, the Qur'an proclaimed:

وَيَوْمَ يُنفَخُ فِى ٱلصُّورِ فَفَزِعَ مَن فِى ٱلسَّمَٰوَٰتِ وَمَن فِى
ٱلْأَرْضِ إِلَّا مَن شَآءَ ٱللَّهُ ۚ وَكُلٌّ أَتَوْهُ دَٰخِرِينَ ﴿٨٧﴾

And the day that the Trumpet will be sounded- then will be smitten with terror those who are in the heavens and those who are on earth, except such as Allah will please (to exempt) and all shall come to Him in utter humility.(27: 87)[156]

There are more revelation in English translation may be considered:

It will be no more than a single Blust, when lo! They will all be brought up before Us! (36:53)[157]

And unto Allah belongeth the unseen of the heavens and the earth and the matter of the Hour (of Doom) is but as a ***twinkling of the eye*** *or it is nearer still. Lo! Allah is able to do all things (16:77)*[158]

The trumpet shall be sounded, when behold! from the sepulchers (men) will rush forth to their Lord! (36:51)[159]

And Our Command is but a single Word- like the twinkling of an eye. (54:50)[160]

Then it will be a single (compelling) cry; and behold, they will begin to see! (37:19)[161]

Then when one blast is sounded on the Trumpet (69:13)[162]

Then when the Trumpet is blown, there will be no more relationships between them that day, nor will one asks after another! (23:101)[163]

The Day when they will hear a (mighty) Blast in (very) truth: that will be the Day of Resurrection. (50:42)[164]

Then watch thou for the Day that the sky will bring forth a kind of smoke (or mist) plainly visible. (44:10)[165]

The above verses indicate about the events to happen, may be millions of years ahead or at any moment in future.[166] It is pertinent to note that the time required for destruction of the universe will be very small to the living being on the earth. Perhaps the Qur'an has only pointed out the very short time required for destruction of the earth where man lives.

4.3.1.2. MOUNTAINS WILL BE UPROOTED AND SCATTERED

With the huge blast the mountains on the earth will be uprooted and will be scattered like clouds pass away. The Qur'an proclaims:

وَيَسْـَٔلُونَكَ عَنِ ٱلْجِبَالِ فَقُلْ يَنسِفُهَا رَبِّى نَسْفًا ﴿١٠٥﴾

They ask thee concerning the Mountains: say," My Lord will uproot them and scattered them as dust.(20:105)[167]

There are more verses in the Qur'an in this respect:

وَبُسَّتِ ٱلْجِبَالُ بَسًّا ﴿٥﴾

فَكَانَتْ هَبَآءً مُّنۢبَثًّا ﴿٦﴾

And the mountains shall be crumbled to atoms, becoming dust scattered abroad (56:05-06)[168]

Thou seest the mountains and thinkest them firmly fixed: but they shall pass away as the clouds pass away (such is) the artistry of Allah who disposes of all things in perfect order for He is well acquainted with all that ye do (27:88)[169]

There are more verses may be considered in English translation:

And the mountains shall vanish as if they were a mirage (78:20)[170]

And the mountains will be like carded wool (101:05)[171]

When the mountains are scattered (to the winds) as dust (77:10)[172]

When the mountains vanish (like a mirage) (81:03) [173]

The above revelations of the Qur'an describe almost vividly the fate of the hills on the dooms day. It states that the mountains will be crashed and hill be destroyed to convert to powdered form and passed away like clouds.

4.3.1.3. EVERYTHING IN THE UNIVERSE WILL BE CHANGED

When the universe will collapse, everything will be changed and too different shapes. The Qur'an proclaims:

يَوْمَ تُبَدَّلُ ٱلْأَرْضُ غَيْرَ ٱلْأَرْضِ وَٱلسَّمَٰوَٰتُ ۖ وَبَرَزُوا۟ لِلَّهِ ٱلْوَٰحِدِ ٱلْقَهَّارِ

﴿٤٨﴾

One day the earth will be changed to a different earth, and so will be the heavens and (men) will be marshalled forth, before Allah, the One, the irresistible.(14:48)[174]

The above verse indicates that after destruction, the new situation of the heavens and the earth will be different that of the present one.

4.3.1.4. SUN AND OTHER STARS WILL LOSE THEIR LIGHT

On the Doomsday the sun and other stars will lose their own light. The Qur'an proclaims:

Then when the stars become dim .When the heaven is cleft asunder (77:08-09)[175]

When the sun (with its spacious light) is folded up, when the stars fall, losing their luster. (81:01-02)[176]

4.3.1.5. THE SUN WILL ENGULF THE MOON

The Sun will possibly be converted to red giant before turning to a black hole and engulf the moon and the earth and even all the planets of the solar system. The matter has been indicated in the Qur'an in the following verses:

At length, when the sight is dazed. (75:07)[177]

And the Moon is buried in darkness. (75:08)[178]

And the Sun and Moon are joined together,- (75:09)[179]

The above verses have reflected the situation of the destruction of the universe. According to recent scientific studies in the last phases of its life, the sun's volume will increase to a very large extent to become a red giant and as a result the nearby planets and their satellites will be merged within it or we may say the sun will engulf the moon and many others.[180]

4.3.1.6. THERE WILL BE TURMOIL EVERYWHERE

Form the different verses in the Qur'an, it may be assumed that there may be a collision of the earth with any celestial object planets or star and the man and other living being will heard an extremely large sound and with this everything will be destroyed and the there will be chaos in the entire universe. The following verse of the Qur'an suggests such situations.

The Day when the sky will become as molten copper (70:08)[181]

When the heaven is cleft asunder (77:09)[182]

When the seas as blazing fire or overflow (81:06)[183]

As the sun will become a red giant and will increase in size, it will come very near to the earth. The result will be destruction of life on the earth and the sea waters on the earth will boil.

When the Sky is cleft asunder .When the Stars are scattered, When the Oceans are suffered to burst forth. (82:01-03)[184]

When the sky is rent asunder (84:01)[185]

And the heavens shall be opened as if there were doors (78:19)[186]

And when the earth is flattened out (84:03)[187]

On the day when the firmament will be in dreadful commotion. (52:09)[188]

When the earth shall be shaken to its depths (56:04)[189]

And the sky will be rent asunder, for it will that Day be flimsy.(69:16)[190]

From the above verses it is observed that the Qur'an has described many situations of the Doomsday. Particularly, it reflects vividly that the main features of the earth as well as other heavenly bodies will be destroyed and the happenings will be like the stages of slow motion picture which will be occurred due to gravitational collapse of the universe. The water in the oceans will be boiled and evaporated. As all the fundamental forces of nature will lose their respective property and the entire universe will be rolled up to a point of singularity as was at the time of the origin.[191] Since at the Big Crunch, the time which always moves in future direction will be reversed and will move in backward direction, there is every possibility of repetition of happenings earlier times, even resurrection of man and appearance early stages of the universe including earth.

4.3.2. REBIRTH OF THE UNIVERSE

After Big Crunch there may be another Big Bang and as such there is possibility of rebirth of the universe including the earth. The Qur'an indicates such situation in many of its revelations. The following verse in English translation has already been mentioned:

The Day that we roll up the heavens like a scroll rolled up for books (completed)- even as We produced the first Creation, so shall We produce a new one: a promise We have undertaken: truly shall We fulfill it. (21:104)[192]

There are such other revelations in English translation may be considered*:*

Or who originates Creation, then repeats it, and who gives you sustenance from heavens and earth? (can there be another) God besides Allah? Say, " Bring forth your argument, if ye are telling the truth! (27:64)[193]

To Him will be your return – of all of you. The promise of Allah is true and sure. It is He who beginneth the process of creation and repeateth it, that He may reward with justice..... (10:04)[194]

See they not that Allah, Who created the heavens and the earth, has power to create the like of them (a new)? Only He has decreed a term appointed, of which there is no doubt. But the unjust refuse (to receive it) except with ingratitude.(17:99)[195]

See they not how Allah originates creation, then repeats it: truly that is easy for Allah (29:19)[196]

Say "Travel through the earth and see how Allah did originate creation, so will Allah produce a later creation : for Allah has power over all things." (29:20)[197]

Is not He Who created the heavens and the earth, able to create the like of them? ....(36:81)[198]

So it is seen that the Qur'an indicates about the recreation of the universe. As is promised by Allah in the Qur'an, after the catastrophic collapse of the physical universe and the earth, new universe and new earth will be created. The collapse and recreation is easy for Allah , the Almighty, the creator of all [199]. After the big crunch, there will be again big bang. As such , the result will be as like an **oscillating universe** i.e endless cycle of cosmic expansion and contraction. [200]

References:

144. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
145. Ibid

146. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an),published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
147. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
148. Anees-u-din Mir (1999): ***THE UNIVERSE seen through the QURAN***; Attique Publishers, Toronto, Canada, P18
149. Siddiqui Moid(2004): ***The Quranic Cosmology***, The eternal Truth; Kitab Bhavan , New Delhi, P111
150. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
151. Ibid
152. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter;*** Kitab Bhavan, New Delhi,p241
153. Ibid, P198
154. Hawking Stephen (1994): ***Black Holes And BABY UNIVERSES*** and other essays, Batnam Books, p133
155. Hawking Stephen (1988): ***A Brief History of Time,*** Bantam Books, p47
156. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
157. Ibid
158. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an),published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
159. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
160. Ibid
161. Ibid
162. Ibid
163. Ibid
164. Ibid
165. Ibid
166. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter;*** Kitab Bhavan, New Delhi,p44
167. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

168. Ibid

169. Ibid

170. Ibid

171. Ibid

172. Ibid

173. Ibid

174. Ibid

175. Ibid

176. Ibid

177. Ibid

178. Ibid

179. Ibid

180. Hawking Stephen (1994): ***Black Holes And BABY UNIVERSES*** and other essays, Batnam Books, p134

181. **Pickthal M.M** (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an),published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi

182. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

183. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran

184. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

185. Ibid

186. Ibid

187. Ibid

188. Ibid

189. Ibid

190. Ibid

191. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter*;** Kitab Bhavan, New Delhi,p197

192. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2

193. Ibid

194. Ibid

195. Ibid

196. Ibid

197. Ibid

198. Ibid

199. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter*;** Kitab Bhavan, New Delhi,pp199-200

200. Ibid,p226

SECTION –IV

THE EARTH AND THE NATURE OF THE HEAVENLY BODIES

The Qur'an tried to bring the attention of people of Arab towards the sky, as they live in desert where most of time in the year the sky remains clear which let the people to see the majesty of Allah in the form of heavenly bodies and their charming natural beauties. The Qur'an in many of its revelations indicated about the earth and the nature of the heavenly bodies. The sun, the moon, stars, planets and other heavenly bodies are mentioned many times in the Qur'an to explain the attributes of God, the creator of the universe before the humankind. The Qur'an proclaims:

إِنَّ رَبَّكُمُ ٱللَّهُ ٱلَّذِى خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ فِى سِتَّةِ أَيَّامٍ ثُمَّ ٱسْتَوَىٰ عَلَى
ٱلْعَرْشِ يُغْشِى ٱلَّيْلَ ٱلنَّهَارَ يَطْلُبُهُۥ حَثِيثًا وَٱلشَّمْسَ وَٱلْقَمَرَ وَٱلنُّجُومَ
مُسَخَّرَٰتٍۭ بِأَمْرِهِۦٓ ۗ أَلَا لَهُ ٱلْخَلْقُ وَٱلْأَمْرُ ۗ تَبَارَكَ ٱللَّهُ رَبُّ ٱلْعَٰلَمِينَ ﴿٥٤﴾

….. … He draweth the night as veil o'er the day, each seeking the other in rapid succession: and the sun, the moon, and the stars, (all) are subservient by his command … .. (07:54)[201]

One more revelation in English translation may also be considered*:*

He has made subject to you the Night and the Day; the Sun and the Moon; and the Stars are in subjection by His command: verily in this are Signs for men who are wise. (16:12)[202]

The Qur'an has made no indications regarding geocentric theory or heliocentric theory of the universe of our solar system. We know that Claudius Ptolemy of Alexandria composed his historical great work on Astronomy viz. Almagest (150 A.D) which was the basic guide book for Islamic and European astronomers until almost 17th century. Almagest was divided in to 13 books. It very clearly advocates about the geocentric, spherical cosmos.[203] Later on, in the early part of 16th century, Polish astronomer and Mathematician Nicholaus Copernicus first provided the concept of helio-centric theory i.e the sun is stationary in the centre of the universe and the earth and other heavenly bodies are moving around it. He postulates the rotation of the earth, its revolution around the sun instead of geocentric model which was prevalent for more than thousand years.

4.4.1. ABOUT THE EARTH

The Qur'an in 7th century provides many revelations concerning the earth. Even the word earth has been mentioned more than 400 times in this great scripture. Actually, by sending different revelations concerning the earth ,God has attracted the attention of humankind to His Signs on the earth. The motions of the earth on its axis, the shape of the earth etc are indicated in the Qur'an. Following revelations in English translation concerning the earth may be considered:

It is He Who hath created all things that are on the earth; then He turned to the heavens and made them in to seven firmaments; and of all things He hath perfect knowledge. (02:29)[204]

And He has set up on the Earth Mountains standing firm, lest it should shake with you; and rivers and ways: that ye may guide yourselves. (16:15)[205]

And Allah has made the earth for you as a carpet (spread out). (71:19)[206]

And the earth We have spread out (like carpets): set thereon mountains firm and immovable: and produced therein all kinds of things in due balance (15:19)[207]

What! Are ye the more difficult to create or the heavens (above)? (Allah) hath constructed it (79:27)[208]

On high hath He raised its canopy, and He hath given it order and perfection.(79:28)[209]

And the earth, moreover that, hath He extended (to wide expanse) (79:30)[210]

These verses imply that after the creation of the night and day, the earth was spread out to make habitable for living creatures and mountains were installed to give the earth surface stability.

4.4.1.1. SHAPE OF THE EARTH

No where in the Qur'an it is mentioned that the Earth is flat and it is not spherical or oval. Before the Europeans, the Arab Scientists could understand that the earth is not flat, rather it is almost spherical as the Qur'an indicates that the earth is round or spherical. At the time of Doomsday the earth will be flattened out. The following verse in chapter 39 may be considered:

خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ بِٱلْحَقِّ ۖ يُكَوِّرُ ٱلَّيْلَ عَلَى ٱلنَّهَارِ وَيُكَوِّرُ ٱلنَّهَارَ
عَلَى ٱلَّيْلِ ۖ وَسَخَّرَ ٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ يَجْرِى لِأَجَلٍ مُّسَمًّى ۗ أَلَا هُوَ ٱلْعَزِيزُ
ٱلْغَفَّٰرُ ﴿٥﴾

He created the heavens and the earth in true (proportions). He makes the Night overlap the Day and the Day overlap the Night. He has subjected the sun and the moon (to His laws): each one follows a course for a time appointed, is not He the Exalted in Power – He Who forgives again and again? (39:05)[211]

The word *Kauara* has different meanings like to roll, roll up, coil, roll into a ball and one of the same is to wind (like turban on the head), to make round any thing on some special thing.[212] The above verse thus indicates that the earth is spherical and is rotating on its axis and for which there is occurrence of day and night on the surface of the earth. Another verse also indicates that the earth is spherical.

وَإِذَا ٱلْأَرْضُ مُدَّتْ ﴿٣﴾

And when the earth is flattened out (84:03)[213]. This implies on the Day of Judgment the earth will be flattened out since it is now spherical in shape. The Qur'an again proclaims:

وَٱلْأَرْضَ بَعْدَ ذَٰلِكَ دَحَىٰهَآ ﴿٣٠﴾

And the earth, after that, hath He extended (to wide expanse) (79:30)[214]

To understand the indication of the above revelation, the meaning of the term ***Daha*** is to be explained. It means *to spread out*, *flatten*, *unroll.*[215] However, in recent Arabic dictionaries the origin of the word is found to be ***Udhiya*** which means ***egg of ostrich'*** that is the earth actually looks like the egg of an ostrich.[216]

During the prophet's time, it was not possible to correctly determine the view of the earth to get its shape. Now it has been possible to get correct idea on the shape of the earth taking photograph from space. But surprising the Qur'an does not contradict with modern science regarding shape of the earth.

4.4.1.2. THE EARTH WAS SPREAD OUT

The Qur'an proclaims that to make the earth habitable to man, it was spread out by Allah, the Almighty. The Qur'an proclaims:

وَٱلْأَرْضَ مَدَدْنَٰهَا وَأَلْقَيْنَا فِيهَا رَوَٰسِىَ وَأَنۢبَتْنَا فِيهَا مِن كُلِّ زَوْجٍۭ بَهِيجٍ

٧

And the earth- We have spread it out, and set thereon mountains standing firm, and produced therein every kind of beautiful growth (in pairs)- (50:07)[217]

Some more revelations in English translation may be considered:

And it is Who spread out the earth, and set there on Mountains standing firm, and (flowing) rivers; and fruit of every kind He made in pairs, two and two: He draweth the Night as a veil over the Day . Behold verily in these things there are Signs for those who consider! (13:03)[218]

By the earth and its (wide) expanse. (91:06)[219]

It is He Who has made the earth manageable for you, so traverse you through its tracts and enjoy of the sustenance which He furnishes: but unto Him is the Resurrection. (67:15)[220]

It is He Who has spread out the earth for (His) creatures. (55:10)[221]

These verses indicate that earlier the earth was constricted and not suitable for habitation of human or animal life. Allah spread out the volume of the earth to such an extension that it becomes habitable to living being. The earth crust was cooled and made it thick and for that purpose Allah created mountains and rivers also. Here spread out does not mean that the earth is flat. Spreading of sheet can be made on a special surface also and in this way the earth crust was spread over the spherical surface of the earth. Though, the surface of the earth appears to us flat, but we can see a small portion of a very large globe which is clear from closing of our vision at the horizon.[222]

4.4.1.3: THE EARTH CRUST WAS MADE CARPET LIKE

The Qur'an indicates that the surface of the or the earth's crust was made a carpet like layer and spread it out so that living beings can move on it and can live an easy life. The Qur'an proclaims.

وَٱلْأَرْضَ مَدَدْنَٰهَا وَأَلْقَيْنَا فِيهَا رَوَٰسِىَ وَأَنۢبَتْنَا فِيهَا مِن كُلِّ شَىْءٍ مَّوْزُونٍ ﴿١٩﴾

And the earth We have spread out (like a carpet); set thereon mountains firm and immovable; and produced therein all kinds of things in due balance. (15:19)[223]

One more revelation in English translation may be considered:

He Who has made for you the earth like a carpet spread out; has enabled you to go about thereby roads ..... (20:53)[224]

The Qur'an wisely described the earth crust as bed or carpet for the living beings. It is known from geology that the inner part of the earth is very hot and is in molten stage. But the outer part has become cool and solid which consists of soil, rocks, sands and even various types of minerals etc. There are fertile lands, forests, deserts, seas etc in the earth's surface. Moreover, there is atmosphere covering the earth crust. So it is as like a bed or carpet to make life easy for living beings on the earth.[225]

The Qur'an emphasized that the earth has been made habitable for the living being including humankind. There are many natural arrangements for the safety of the life on the earth. The Qur'an proclaims:

ٱللَّهُ ٱلَّذِى جَعَلَ لَكُمُ ٱلْأَرْضَ قَرَارًا وَٱلسَّمَآءَ بِنَآءً وَصَوَّرَكُمْ فَأَحْسَنَ صُوَرَكُمْ وَرَزَقَكُم مِّنَ ٱلطَّيِّبَٰتِ ۚ ذَٰلِكُمُ ٱللَّهُ رَبُّكُمْ ۖ فَتَبَارَكَ ٱللَّهُ رَبُّ ٱلْعَٰلَمِينَ ﴿٦٤﴾

Allah , it is Who has made for you, the earth as a dwelling place and the sky as a canopy .... (40:64)[226]

One more verse in English translation may be considered:

Is not He Who made the earth as a fixed abode and has placed rivers in the midst and has placed firm mountains therein..... (27:61)[227]

4.4.2. THE MOTION OF THE EARTH

No where in the Qur'an it is mentioned that the earth is stationary and it is in the centre of the universe. Rather, in many verses the Qur'an has given reasonable indication regarding the motion of the earth. As per modern science the earth has two types of motion; one orbital motion around the sun and the other rotational motion or diurnal motion around its axis. The following verse may be considered.

يُقَلِّبُ ٱللَّهُ ٱلَّيْلَ وَٱلنَّهَارَ ۚ إِنَّ فِى ذَٰلِكَ لَعِبْرَةً لِّأُو۟لِى ٱلْأَبْصَٰرِ ﴿٤٤﴾

It is Allah Who alternates the Night and the Day; verily in these things is an instructive example for those who have vision! (24:44)[228]

In this verse it is indicated that there is an important scientific truth lies here for the man of wisdom. If we think deeply we shall see that Allah has given indication of the rotation of the earth in it. The revelation at chapter 21, verse No.33 may be considered in this regard.

وَهُوَ ٱلَّذِى خَلَقَ ٱلَّيْلَ وَٱلنَّهَارَ وَٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ فِى فَلَكٍ يَسْبَحُونَ

﴿٣٣﴾

And He it is Who has created the night and the day, and the sun and the moon, all (the celestial bodies) swim along, each in its rounded course (21:33)[229]

Here in the above verse after the sun and the moon Arabic term kullu meaning each (singular) is used instead of both which signifies dual number, though generally in Arabic language use of dual number is prevalent. Thus, as the day and night take place on the earth, the third object to signify each should be the earth. So it is clear that like the sun and the moon, the earth also moves in its orbit. The word ***sabaha*** is used to mean 'to float', 'to swim' in respective orbit by each of three.[230]

There are more revelations in English translation for consideration:

It is not permitted to the Sun to catch up the Moon, nor can the night outstrip the day, each (just) swims along in (its own) orbit (according to Law). (36:40)[231]

We know the night and day are occurred on the earth because of its rotational motion. Mentioning the motion of night and day the Qur'an indicates the rotational motion of the earth. Because night and day always relates to the earth and as the verse emphasized on the motion of the day and night also moves in orbit .So, it may be taken as a fact that the Qur'an here indicates about the rotational as well as orbital motion of the earth. The following verse also may be considered for this purpose.

خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ بِٱلْحَقِّ ۖ يُكَوِّرُ ٱلَّيْلَ عَلَى ٱلنَّهَارِ وَيُكَوِّرُ ٱلنَّهَارَ
عَلَى ٱلَّيْلِ ۖ وَسَخَّرَ ٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ يَجْرِى لِأَجَلٍ مُّسَمًّى ۗ أَلَا هُوَ ٱلْعَزِيزُ
ٱلْغَفَّٰرُ ﴿٥﴾

He created the heavens and the earth in true (proportions): He makes the Night overlap the Day, and the Day overlap the Night: He has subjected the sun and the moon (to His law): Each one follows a course for a time appointed. Is not He the Exalted in Power - He Who forgives again and again? (39:05)[232]

Here the Arabic word *'Kauwara'* has different meanings such as 'to roll, to roll up, coil, roll in to a ball, to wind (the tuban), to make round, to curl up etc. So it is justified to accept the meaning which is more useful in explaining the rotation of the day and night and hence the rotation of the earth. The overlapping of the night and the day clearly excludes the rotation of the Sun and hence it indicates the rotation of the earth.

Here the Qur'an first indicates about the perpetual coiling of the night around the day and vice versa i.e day around the night and then it mentions about the motion of the Sun and the Moon. So here is also indication about the rotational motion of the earth.

More revelations in English translation may be considered:

Your Guardian Lord is Allah, Who created the Heavens and the earth in ***six Days****, then he settled Himself on the Throne: He draweth the night as a veil o'er the day, each seeking the other in rapid succession: and the sun, the moon, and the stars, (all) are subserviant by His Command. Verily,His are the creation and the Command, blessed be Allah, the Cherisher and Sustainer (07:54)*[233]

Its night doth He endow with darkness, and its splendour doth He bring out (with light) (79:29)[234]

And He hath made subject to you the sun and the moon, both diligently pursuing their courses; and the Night and the Day hath He (also) made subject to you. (14:33)[235]

These revelations indicate about the motion of the earth making day and night. It is no where mentioned in the Qur'an that the Sun moves round the earth.

4.4.2.1: THE DIURNAL MOTION OF THE EARTH

Though there is no clear intention about the diurnal motion of the earth, the Qur'an has given some indications about the same, as the rotational motion is actually the diurnal motion. The Qu'ran proclaims:

أَلَمْ تَرَ أَنَّ ٱللَّهَ يُولِجُ ٱلَّيْلَ فِى ٱلنَّهَارِ وَيُولِجُ ٱلنَّهَارَ فِى ٱلَّيْلِ وَسَخَّرَ
ٱلشَّمْسَ وَٱلْقَمَرَ كُلٌّ يَجْرِىٓ إِلَىٰٓ أَجَلٍ مُّسَمًّى وَأَنَّ ٱللَّهَ بِمَا تَعْمَلُونَ خَبِيرٌ
٢٩

Seest thou not that Allah merges Night into Day and He merges Day into Night; that He has subjected the sun, and the moon (to his Law), each running its course for a term appointed; and that Allah is well-acquainted with all that ye do? (31:29)[236]

From the above verse and some other verses mentioned earlier, it is clearly seen that these indicate about the diurnal motion of the earth around the sun. Because of axial rotation of the earth the sunlight always falling on the earth is seems to be moving with one side of the earth as day and at the same time other side as night which process is continuously changing as if night is covering the day or the day is removing the night.[237] Moreover, it is here not mentioned that the day and night occur due to motion of the sun or the moon. The night and the day are not any material object, rather these are two phases of time only which can be perceived to be occurred due to rotational motion of the earth.[238]

It has already been discussed that in verse No. 33 of sura Ambia the movement of day, night, the sun, and the moon has been referred and lastly all the celestial bodies are referred. If only the sun and the moon is under reference, dual number should have been used which is very commonly used in Arabic language. But here the movement of day and night has been mentioned separately along with the sun and the moon using plural numbers. Thus it indicates that by mentioning movement of day and night, the Qur'an has indicated about the diurnal motion of the earth as well as its orbital motion.[239] One question may arise that the Quran has mentioned about the motion of the sun and moon, but why not directly mentions the motion of the earth? This is very clear; because as being the observers on the earth we can see the sun and the moon on the sky. If we were in other planet or in space, we also could see the earth as planet in the sky and also could have observed its movement. Thus the Qur'an very wisely let us know the axial motion of the earth with alternate motion of the day and night in a time when people believed that the earth is stationary at the centre of the universe. But surprisingly, the Qur'an no where mentions such ideas though it was revealed more than 1400 years ago.

Dr. Maurice Bucailee in his famous book 'THE BIBLE THE QUE'AN & Science commented as follows:

'The Earth turns on its own axis and the lighting remains the same , so that an area in the form of a half-sphere makes one revolution around the Earth in twenty-four hours while the other half-sphere , that has remained in darkness, makes same revolution in the same time. This perpetual rotation of night and day is quite clearly described in the Qur'an. It is easy for the human understanding to grasp the notion nowadays because we have the idea of the Sun's (relative) immobility and the Earth's rotation.' (P/164)

4.4.2.1.1. THE SEQUENCE OF DAY AND NIGHT

The Quran provides very interesting description of the sequence of the day and night in its different revelations. The Quran proclaims along with the aforesaid revelations:

يُولِجُ ٱلَّيْلَ فِى ٱلنَّهَارِ وَيُولِجُ ٱلنَّهَارَ فِى ٱلَّيْلِ وَسَخَّرَ ٱلشَّمْسَ وَٱلْقَمَرَ كُلٌّ
يَجْرِى لِأَجَلٍ مُّسَمًّى ۚ ذَٰلِكُمُ ٱللَّهُ رَبُّكُمْ لَهُ ٱلْمُلْكُ ۚ وَٱلَّذِينَ تَدْعُونَ
مِن دُونِهِۦ مَا يَمْلِكُونَ مِن قِطْمِيرٍ ﴿١٣﴾

He merges Night into Day and He merges Day into Night, and He has subjected the Sun and the moon (to His Law): each one runs its course for a term appointed. Such is Allah your Lord: to Him belongs all Dominion. And those whom ye invoke besides Him own not a straw. (35:13)[240]

لَا ٱلشَّمْسُ يَنۢبَغِى لَهَآ أَن تُدْرِكَ ٱلْقَمَرَ وَلَا ٱلَّيْلُ سَابِقُ ٱلنَّهَارِ ۚ وَكُلٌّ فِى فَلَكٍ
يَسْبَحُونَ ﴿٤٠﴾

It is not permitted to the Sun to catch up the Moon, nor can the night outstrip the day, each (just) swims along in (its own) orbit (according to Law). (36:40)[241]

خَلَقَ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ بِٱلْحَقِّ ۖ يُكَوِّرُ ٱلَّيْلَ عَلَى ٱلنَّهَارِ وَيُكَوِّرُ ٱلنَّهَارَ
عَلَى ٱلَّيْلِ ۖ وَسَخَّرَ ٱلشَّمْسَ وَٱلْقَمَرَ ۖ كُلٌّ يَجْرِى لِأَجَلٍ مُّسَمًّى ۗ أَلَا هُوَ ٱلْعَزِيزُ
ٱلْغَفَّٰرُ ﴿٥﴾

He created the heavens and the earth in true (proportions): He makes the Night overlap the Day, and the Day overlap the Night: He has subjected the sun and the moon (to His law): Each one follows a course for a time appointed. Is not He the Exalted in Power - He Who forgives again and again? (39:5)[242]

To explain the significance of the above revelation the meaning of the terms *yuliju*, *saabiqu* and *kauwara* are to considered with due importance. As per Hans Wehr Modern written Arabic Dictionary *Yuliju* is derived from *Oalaja* meaning to enter, to penetrate, to interpose; saabiq is derived from sabaq means to be in advance, to go before. The term *KAUWARA* has different meanings such as to roll, to coil, roll into a ball, to wind (the turban), to make round. So here it is said that night is rolled in to the ball shaped (round) earth and then day is rolled into the earth, that means the night and the day is coming on the earth in a sequence.
More revelations in English for consideration:

And He it is Who makes the Night as a Robe for you, and Sleep as Repose and makes the Day (as it were) a Resurrection. (25:47)[243]

He merges Night into Day, and He merges Day into Night, and He has full knowledge of the secrets of (all) hearts. (57:06)[244]

Here one thing is noticeable that the Qur'an has not mentioned the motion of sun as the cause of the alteration of the day and night at time when people as well as scientific community were agreed on the geocentric model of the universe.

4.4.3. PHYSICAL NATURE OF THE SUN AND THE MOON

It is known to all today that the sun and the moon are different from each other not only in terms of size but also in many other ways. The moon has no light of its own and it just reflects the light that receives from the sun. But the sun generates its own light The Qur'an indicates the difference between the sun and the moon about 1400 years ago in some of its divine revelations.

In Sura Al-Furqan, verse No.61 the Quran proclaims:

تَبَارَكَ ٱلَّذِى جَعَلَ فِى ٱلسَّمَآءِ بُرُوجًا وَجَعَلَ فِيهَا سِرَٰجًا وَقَمَرًا مُّنِيرًا

٦١

Blessed is He Who made constellations on the skies, and placed therein a Lamp and a Moon giving light. (25:61)[245]

There are other verses also indicate the same idea about the sun and the moon.

هُوَ ٱلَّذِى جَعَلَ ٱلشَّمْسَ ضِيَآءً وَٱلْقَمَرَ نُورًا وَقَدَّرَهُۥ مَنَازِلَ لِتَعْلَمُوا۟
عَدَدَ ٱلسِّنِينَ وَٱلْحِسَابَ ۚ مَا خَلَقَ ٱللَّهُ ذَٰلِكَ إِلَّا بِٱلْحَقِّ ۚ يُفَصِّلُ ٱلْءَايَٰتِ
لِقَوْمٍ يَعْلَمُونَ ﴿٥﴾

It is He who made the sun to be a shining glory and the moon to be a light (of beauty), and measured out stages for it, that ye might know the number of years and the count (of time)..... .... ,, (10:05)[246]

There are more revelations in English translation may be considered for this purpose:

See ye not how Allah hath created seven heavens in harmony, (71:15)[247]

And made the moon a light in their midst and made the sun as a (Glorious) Lamp? (71:16)[248]

And (have We not) built above you the seven firmaments and placed (therein) a blazing lamp (78:12-13)[249]

There are other verses also indicate the same idea about the sun and the moon.

وَٱلشَّمْسِ وَضُحَىٰهَا ﴿١﴾

By the Sun and his (glorious) splendour;(91:1)[250]

وَٱلْقَمَرِ إِذَا تَلَىٰهَا ﴿٢﴾

By the Moon as she follows him (91:2);[251]

The Quran more than 1400 years ago pointed out that the moon as general light and the sun as a lamp emitting light. In the Quran the sun is regarded as *Siraaj* or *Ziya* and the Moon as Munir or Noor. Morever, the words *Wahhaj* and *Zuhah* also used in respect of the sun.

The word ***diya or Zia*** means brightness, radiation or glow which has the connotation of heat and light. *Siraaj* means a lamp or candle, and *Wahhaja* means to glow, to burn, to blaze; *Zuhaha* means full brightness of the sun that means the sun is an object which emits heat and light through a burning process within itself. *Noor* means steady light, ray of light, *Munir* means shining, radiant. A distinction is made following Arabic Philology between the light produced by the sun and the moon.[252] As the knowledge advances, astronomers discovered that the moon is not a source of light rather it reflects the light falls on it from the sun. The Qur'an very intelligently has used different and suitable words for the sun and the moon more than 1400 years ago.

The Qur'an has never used the same term to mean the light of the sun and the moon. The terms used for the sun are related to producing of heat and light through burning process. But no such terms are used for the moon. The above verses sates that the sun has brightness and the moon follows it. As such there is indication that the moon is depended on the sun for getting light to reflect to the earth. So, there is nothing contradictory in the Qur'an with scientific knowledge in respect of physical nature of the sun and the moon.

4.4.4. THE PLANETS AND THE STARS

Modern Science tells that stars are self-illuminant objects shining by radiation derived from energy sources within themselves. Planets are though heavenly bodies but are revolving in definite orbits. The Qur'an has many revelations regarding the nature and motion of the stars and planets. In the following verses, there is an indication that the solar system may have eleven planets.

إِذْ قَالَ يُوسُفُ لِأَبِيهِ يَٰٓأَبَتِ إِنِّى رَأَيْتُ أَحَدَ عَشَرَ كَوْكَبًا
وَٱلشَّمْسَ وَٱلْقَمَرَ رَأَيْتُهُمْ لِى سَٰجِدِينَ ﴿٤﴾

When Joseph said unto his father, "O my father! Lo! I saw in a dream eleven planets and the sun and the moon, I saw them prostrating themselves unto me!"(12:04)[253]

Here the word used for planet is ***KAWKAB***. However, in some other translation the meaning of the term has been shown as star. But for star other term has been used in the holy Qur'an. The following verse may be considered:

وَهُوَ ٱلَّذِى جَعَلَ لَكُمُ ٱلنُّجُومَ لِتَهْتَدُوا۟ بِهَا فِى ظُلُمَـٰتِ ٱلْبَرِّ وَٱلْبَحْرِ ۗ
قَدْ فَصَّلْنَا ٱلْءَايَـٰتِ لِقَوْمٍ يَعْلَمُونَ ﴿٩٧﴾

It is he Who maketh the stars (as beacons) for you, that ye may guide yourselves, with their help, through the dark spaces of land and sea: We detail Our Signs for the people who know. (06:97)[254]

Blessed is He Who made constellations on the skies, and placed therein a Lamp and a Moon giving light. (25:61)[255]

And (have We not) built over you the seven firmaments ;And place (therein) a blazing lamp (78:12-13)[256]

By the sky, with its constellations. (85:01)[257]

And what will explain to thee what the Night-Visitant is ?- (86:02)[258]
(It is) the star of piercing brightness:- (86:03)[259]

4.4.4.1. THE ZODIAC AND OTHER CONSTELLATIONS

The Qur'an has mentioned about zodiac and other constellations of stars in the space. The Qur'an proclaims:

وَلَقَدْ جَعَلْنَا فِى ٱلسَّمَآءِ بُرُوجًا وَزَيَّنَّـٰهَا لِلنَّـٰظِرِينَ ﴿١٦﴾

Indeed, We have set constellations in the heaven and have beautified them for the beholders. (15:16)[260]

We know that there are twelve zodiac signs and many other constellations in the sky, which are now easily visible with telescope. However, the Qur'an does not admit any influence of the constellation on the life of human being on the earth ,may be individual or group level in any form which astrology advocates.

4.4.5. THE MOTION OF THE HEAVENLY BODIES

As indications given by the Qur'an all celestial bodies runs in its own orbit. The Qur'an has the credit to announce this fact about 1400 yeas ago when the scientific community was in the dark about such idea.

وَهُوَ ٱلَّذِى خَلَقَ ٱلَّيۡلَ وَٱلنَّهَارَ وَٱلشَّمۡسَ وَٱلۡقَمَرَۖ كُلٌّ فِى فَلَكٍ يَسۡبَحُونَ

٣٣

It is he Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along, each in its rounded course.(21:33)[261]

By the sky with (its) numerous paths (51:07)[262]

The above verse clearly indicates that all the celestial bodies including the Sun and the Moon moves in their respective orbit and a deep concentration on the motion of the night and day indicates the rotational motion of the earth on its own axis. However to be more clear the contextual meaning of the terms ***'Falak'*** and '***yasbahun***' are required to be analyzed.

The term *yasbahun* has the origin from *sabaha* which means to swim, to roll onwards, to float, to spread, to praise etc and *Falak* means to be round, the orbit of a celestial body

4.4.5.1. THE MOTION OF THE SUN AND MOON

In the Qur'an the sun and the moon has been given very importance. There is one chapter named the sun and the other chapter named the moon. The Qur'an clearly mentions that the sun is not static. Rather, it has been moving in its own orbit.

وَهُوَ ٱلَّذِى خَلَقَ ٱلَّيۡلَ وَٱلنَّهَارَ وَٱلشَّمۡسَ وَٱلۡقَمَرَۖ كُلٌّ فِى فَلَكٍ يَسۡبَحُونَ

٣٣

It is he Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along, each in its rounded course.(21:33)[263]

Here the term ***KUL*** means each or everything and other tem ***FALAK*** means orbit .This indicates that the sun, the moon etc are not stationery; rather they have been running abiding a regular path fixed for each. As per modern Astronomy the sun is moving in its orbit around the centre of the galaxy. According to calculations made by Astronomers the sun is traveling at very high speed of 250 kilometers

per second in our Milky Way galaxy. The Qur'an very wisely mentioned that every celestial body like the sun, the moons etc are floating in their own orbit. The Qur'an proclaims more:

It is not permitted to the Sun to catch up the Moon, nor can the Night outstrip the Day: each (just) swims along in(its own) orbit (according to Law). (36:40)[264]

The sun and the moon follow courses (exactly) computed. (55:05)[265]

Here one important aspect of the motion of the Sun is to be noted that though the motion of the sun is related with the earth, but it is not dependent on the earth. It is moving in its own orbit in the Milky Way galaxy taking the earth along with and hence, also the moon.

There are more revelation on the motion of the sun and the moon.

And hath made subject to you the sun and the moon, both diligently pursuing their courses; and the Night and the Day hath He (also) made subject to you. (14:33)[266]

.... And has subjected the sun and the moon, each running its course for a term appointed ... . (31:29) (The noble Qur'an)[267]

He has made subject to you the Night and the Day; the sun and the moon; and the stars are in subjection by His Command: verily in this are Signs for men who are wise. (16:12)[268]
.... He has subjected the sun and the moon, each running for a term appointed .... (13:02)[269]

He merges Night into Day and Day into Night, and He has subjected the Sun and the moon (to His Law): each one runs its course for a term appointed. Such is Allah your Lord: to Him belongs all Dominion. And those whom ye invoke besides Him own not a straw. (35:13)[270]

and hence all things are in moving conditions in their respective field and orbit. Therefore, it indicates that the orbit of the earth in solar system and the orbit of the sun is in the galaxy.[271]

4.4.5.1.1: THE LIFE SPAN OF THE SUN

The sun, the earth and the moon all are moving in their respective orbit. But the motion of the sun has special character as it has also a destination, while the earth and the moon are moving just around the sun and the earth respectively. As the sun has a destination it should have an end or consequence when it will reach to its target.

The following verse of the Qur'an gives an indication about the life span or ultimate destination of the sun.

وَٱلشَّمۡسُ تَجۡرِي لِمُسۡتَقَرّٖ لَّهَاۚ ذَٰلِكَ تَقۡدِيرُ ٱلۡعَزِيزِ ٱلۡعَلِيمِ ﴿٣٨﴾

The English translation is :

And the Sun runs unto a resting place for him, that is the Decree of (Him), the Exalted in might, the All-Knowing (36:38)[272]

Here the important to term for consideration is *mustaqar*. The dictionary meaning is abode, dwelling, habitation, residence, resting place. It is now known to scientists that the sun is running at a velocity of 12 miles per second towards a place in the Milk Way known as Solar Apex. When the sun will reach the solar apex it will turn to red giant and ultimately it will be converted to a white dwarf. There after the sun will become invisible i.e it will be lost in dark space. [273] Perhaps this will bring the end of the solar sytem, even the universe .The Qur'an rightly proclaims:

When the sun (with its spacious light) is folded up.(81:01)[274]

This verse indicates that a time will come when the sun will lose its light. As the sun will continue to cool off, ultimately it will become black and cold and will be folded up as per scientific calculation[275]

4.4.5.2. WAXING AND WANNING OF THE MOON (LUNAR PHASES)

We know that the moon is the satellite of the earth and revolves around the earth as well as rotates about it in 29 and ½ days.
The Qur'an in many of its revelation very nicely indicated about the lunar phases which were not possible to imagine 1400 years ago. The following revelations may be considered.

وَٱلۡقَمَرَ قَدَّرۡنَٰهُ مَنَازِلَ حَتَّىٰ عَادَ كَٱلۡعُرۡجُونِ ٱلۡقَدِيمِ ﴿٣٩﴾

And the Moon-We have measured for her stations (to traverse) till she returns like the old (and withered) lower part of date-stalk (`36:39)[276]

More revelations from the Qur'an may be considered :(English translation)

It is He who made the sun to be a shining glory and the moon to be a light (of beauty) , and measured out stages for it, that ye might know the number of years and the count (of time)..... . (10:05)[277]

It is not permitted to the Sun to catch up the Moon, nor can the Night outstrip the Day: Each (just) swims along in (its own) orbit (according to Law). (36:40)[278]

The sun and the moon follow courses (exactly) computed. (55: 05)[279]

The moon appeared to the people on the earth at different positions as like stations measured as indicated in the Qur'an. This is because the moon moves round the earth in its own orbit and from the earth we get its reflected light from its smaller or larger area depending upon its positions during the motion in respect to the earth and the sun.
During the lunar month, it moves round the earth in such way that the area of the moon from which light reflected and reach to earth gradually increases and after full moon it again gradually decreases and looks like a old curved palm tree branch.

4.4.5.3. THERE ARE TWO SOLSTICES

It is known today from Geography that there two solstices i.e two points throughout the year, the tilt of the Earth's axis reaches its maximum angle compared to the Sun, and begins to move back the other direction. This usually happens around 21st June and 21st December every year. In Geographical term these days are known as solstices and on these solstices, the rays of the Sun shine directly on one of the two tropics. During the Solstice in June the rays of the Sun shine directly on the Tropic of Cancer. During the Solstice in December the Sun's rays shine on the Tropic of Capricorn. The Qur'an more than 1400 years ago mentioned about the same. The following verse may be considered:

رَبُّ ٱلْمَشْرِقَيْنِ وَرَبُّ ٱلْمَغْرِبَيْنِ ﴿١٧﴾

(He is) Lord of the two Easts and Lord of two Wests. (55:17)[280]

One more verse may be considered in this regard:

So, I swear by the Lord of all the (three hundred and sixty-five (365)) points of the sunrise and sunset in the east and the west that surely We are able.(70:40)[281]

The Qur'an categorically used the dual numbers for the East and the West. This is very miraculous to think about the Qur'an and how Muhammad (Pbuh) could give ideas of solstices in the dark age of science in Arab Penisula.

However, these revelations may be analyzed in different way from the above. Since the earth is spherical in size and we get two easts and two wests for the same place for two countries.[282]

4.4.6. THE ORBIT OF THE SUN AND THE MOON

When we discuss about the motion of the heavenly bodies, the motion of the Sun and Moon first comes in our mind. It is today known to all without doubt that the moon moves round the earth in about twenty nine days. The Qur'an indicates the motion of the Sun and the Moon in the following verses:

The sun and the moon follow courses (exactly) computed. (55: 05)[283]

And the Sun runs unto a resting place, for him; that is the decree of (Him), the Exalted in Might, the All-knowing .And the Moon,- we have measured for her stations (to traverse) till she returns like the old (and withered) lower part of a date stalk. (36:38- 39)[284]

They ask thee concerning the New Moons. Say: They are but signs to mark fixed periods of time in (the affairs of) men, and for pilgrimage..... (02: 189)[285]

It is he Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along, each in its rounded course.(21:33)[286]

Here the Qur'an indicates that all the celestial bodies, including the sun and the moon moving with its own motion along respective orbit. To explain the content of the verse the meanings of the words one falak and the other yasbahun are very important. As per the Hans Wehr Dictionary of modern written Arabic the word *falak* means celestial sphere, orbit of celestial bodies, circuit, star and the word *yasbahun* has the root *sabaha* which means to swim, to to float, to spread, to praise . Moreover, as per Dictionary of John Penrice *sabaha* also means to roll onwards. Therefore, the Qur'an indicates that all the celestial bodies swim or roll onwards in their respective orbit. When the Qur'an was revealed people has no idea about the floating or swimming of the heavenly bodies. In the following verse the Qur'an has mentioned about the orbit of the sun which is determined for it in the Milky Way galaxy.

Seest thou not that Allah merges Night in to Day and He merges Day in to Night ; that He has subjected the sun and the moon(to His Law), each running its course for a term appointed; and that Allah is well acquainted with all that ye do? (31:29)[287]

He merges Night into Day and He merges Day into Night, and He has subjected the Sun and the moon (to His Law): each one runs its course for a term appointed. Such is Allah your Lord: to Him belongs all Dominion. And those whom ye invoke besides Him own not a straw. (35:13)[288]

And He hath made subject to you the sun and the moon, both diligently pursuing their courses; and the Night and the Day hath He (also) made subject to you. (14:33)[289]

In present day it is known to the scientific community that everything in the universe including the Sun is running .Our solar system is a part of Milky way galaxy. Our galaxy consists of one hundred billions of stars and is like a spiral disc. As such as the galaxy revolves the sun also revolves though its position is far from the centre of the galaxy.

By the sky with (its) numerous paths (51:07)[290]

So verily I call to witness the planets- that recede. (81:15)[291]

From these revelations, it is learnt that there are numerous orbits for the different celestial bodies for their respective motion. The heavenly bodies including the sun and the moon move in perfectly computed orbit with harmony among all.

4.4.7. STARS ARE BEACONS TO GUIDE THROUGH DARKNESS

The Qur'an has mentioned the usefulness of stars for the human being on the earth, though it rejected the concept of any influence of the stars on the life of man as puts forward by astrology, the pseudo science. The Qur'an proclaims:

وَهُوَ ٱلَّذِى جَعَلَ لَكُمُ ٱلنُّجُومَ لِتَهْتَدُوا۟ بِهَا فِى ظُلُمَـٰتِ ٱلْبَرِّ وَٱلْبَحْرِ ۗ
قَدْ فَصَّلْنَا ٱلْءَايَـٰتِ لِقَوْمٍ يَعْلَمُونَ ﴿٩٧﴾

It is He Who maketh the stars (as beacons) for you that ye may guide yourselves, with their help, through the dark spaces of land and sea: We detail Our signs for people who know. (06:97)[292]

4.4.8: INDICATIONS OF THE QUR'AN ABOUT BLACK HOLES

Black hole is a region in space from which no radiation or matter can escape because of its intense gravitational field. Such regions are formed in space when stars collapse.[293] When a star consumes all of its fuel, collapses on itself; ultimately turning into a black hole with infinite density and zero volume having immensely strong magnetic field. Black holes cannot be seen easily even with powerful telescope as because their gravitational pull is so strong that light cannot escape from them. The concept of black hole was first thought by John Michell, a Cambridge man in 1783 C.E. [294] However, the term black hole was first used by an American physicist John Wheeler in 1967.

If we go into deeper meaning of the two verses are of the Qur'an, we find that these have given some indications about the possibility of creation and existence of black holes in space. In chapter (sura) Al-Waqi'a, verse No.75 and 76 the Qur'an states:

فَلَآ أُقْسِمُ بِمَوَٰقِعِ ٱلنُّجُومِ ﴿٧٥﴾

وَإِنَّهُۥ لَقَسَمٌ لَّوْ تَعْلَمُونَ عَظِيمٌ ﴿٧٦﴾

Furthermore I swear by the setting of the stars,-
And that is indeed a mighty adjuration if ye but knew,-
(56:75-76)[295]

The important word here are *Nujum* and *Mawa'qia* . *Nujum* means celestial bodies or stars and *Mawa'qia* means the time or place of falling [296] The term has come from the origin *waqa'a* which means to fall, to drop, to tumble, to happen (Hans Wehr Dictionary) So the translation of the verses may revised as follows:

So, I swear by the place where the stars fall,
And that is indeed a mighty oath, if ye but knew.
(56:75-76)[297]

Here the place where the star falls is emphasized by an oath using the term *mighty*. From the science of Physics today it is known that black hole occurs in space with the death of massive stars whose magnitudes are greater than three times that of the sun.

When they collapse inward, the giant stars posses so immense gravitational force that even light with its great velocity cannot escape . So the entire region appears to be dark and looks like a hole in the space. Afterwards, such black holes attract other stars and planets around with the large gravitational force and as such become place where stars fall. The black holes may be regarded as gates to the other universe. Stephen Hawking in his famous book ***Black holes and Baby universes*** states that if one could pass through a black hole, one might re-emerge anywhere in the universe. The Qur'an has indicated about gates at the haven. The following verses may be noted:

وَلَوْ فَتَحْنَا عَلَيْهِم بَابًا مِّنَ ٱلسَّمَآءِ فَظَلُّوا۟ فِيهِ يَعْرُجُونَ ﴿١٤﴾

لَقَالُوٓا۟ إِنَّمَا سُكِّرَتْ أَبْصَٰرُنَا بَلْ نَحْنُ قَوْمٌ مَّسْحُورُونَ ﴿١٥﴾

Even if We opened out to them a gate from heaven, and they were to continue (all day) ascending therein, (15:14)[298]
They would only say: "Our eyes have been intoxicated: Nay, we have been bewitched by sorcery." (15:15)[299]

One more revelation may be considered:

وَٱلنَّٰزِعَٰتِ غَرْقًا ﴿١﴾

By those who drag forth to destruction (79:01)[300]

Here the important terms are **nazia'a**, and **gariqa'a**. **Nazia'a** means to pull out, to extract, to remove, to take off, to strike etc and **gariqa'a** means to place, dive, immerge, become submerged, sink drawned etc.

From the above revelation we find that there is a similarity in the concept of black hole as reflected in the above revelations. As per theories of Astrophysics none can stop the endless collapse of a massive star core under its own gravity. At present as many as 10 million black holes formed after supernova explosion of massive stars. [301]

4.4.9: CONCEPT OF PULSARS IN THE QUR'AN

The word 'pulsar' has come from the verb to pulse. Stars that emit radio frequency electromagnetic radiation at regular intervals are called pulsars. It has been suggested by scientists that pulsars are neutron stars emitting electromagnetic pulses. There are a few revelations in the Qur'an which perhaps indicates the existence of pulsars. The following revelations of the Qur'an may be considered.

وَٱلسَّمَآءِ وَٱلطَّارِقِ ﴿١﴾

وَمَآ أَدْرَىٰكَ مَا ٱلطَّارِقُ ﴿٢﴾

ٱلنَّجْمُ ٱلثَّاقِبُ ﴿٣﴾

By the Sky and the Night-Visitant (therein):
And what will explain thee what the Night-Visitant is?
(It is) the Star of piercing brightness,-
(86:1-3)[302]

Here the important terms are *tariq* and *saqib*. The dictionary meaning of *tariq* is that which appears by night and that of *saqib* is of piercing brightness.[303] Tariq originates from *Taraqa* which means o knock, to bang, to hammer, to strike with a hammer etc [304]
So the star, the Qur'an has mentioned here may be referred as pulsar as it has the following characters:

(1) It pulsates (knocks), (b) It is a star, (c) It has piercing brightness

References:

201. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
202. Ibid
203. (http://www. britannica.com /EBchecked/topic /16707/ Almagest)

204. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
205. Ibid
206. Ibid
207. Ibid
208. Ibid
209. Ibid
210. Ibid
211. Ibid
212. Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic:*** Spoken Language Services, Inc., New York,
213. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
214. Ibid
215. Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic:*** Spoken Language Services, Inc., New York,
216. Rahman Atowar (2007) : ***Universe and Man (Scientific and Qur'anic Descriptions);*** Adam Publishers & Distributors, New Delhi , p59
217. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
218. Ibid
219. Ibid
220. Ibid
221. Ibid
222. Rahman Atowar (2007) : ***Universe and Man (Scientific and Qur'anic Descriptions);*** Adam Publishers & Distributors, New Delhi , p58
223. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
224. Ibid
225. Rahman Atowar (2007) : ***Universe and Man (Scientific and Qur'anic Descriptions);*** Adam Publishers & Distributors, New Delhi , p55
226. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran
227. Ibid
228. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
229. Ibid
230. http://www.quranmiracles.com/articles.asp?id=27
231. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
232. Ibid
233. Ibid
234. Ibid
235. Ibid
236. Ibid
237. Sadiqullah,A.T.M (2005) & others: ***Al-Quran theke Adhunik Bigyan*** ; Solemaniya Book House, Bangla Bazar, Dhaka , p103
238. Rahman Atowar (2007) : ***Universe and Man (Scientific and Qur'anic Descriptions);*** Adam Publishers & Distributors, New Delhi , p77
239. Rahman Anisur (2003): ***Biswagrantha Qur'an O Adhunik Bigyan***, Mahabismaya !!!; Systek Publications, Dhaka, Bangladesh , p14

240. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
241. Ibid
242. Ibid
243. Ibid
244. Ibid
245. Ibid
246. Ibid
247. Pickthal M.M (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
248. Ibid
249. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
250. Ibid
251. Ibid
252. Hussaini S. waqar Ahmed (1996): ***The Quran for astronomy and Earth Exploration from space*:** Institute of Islamic Sciences, Cupertino, USA,p129
253. Pickthal M.M (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
254. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
255. Ibid
256. Ibid
257. Ibid
258. Ibid
259. Ibid
260. Ansari Zafar Ishaq (1994):T***owards understanding the QUR'AN*** ;English version of TAFHIM AL- QUR'AN by S.A A Mawdudi; Markazi Maktaba Islami, New Delhi
261. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
262. Ibid
263. Ibid
264. Ibid
265. Ibid
266. Ibid
267. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran
268. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
269. Ibid
270. Ibid
271. Siddiqui Moid (2009): ***Creation Mystery : Quran and science***, Adam Publishers & Distributors, New Delhi ,p51
272. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
273. Rahman Atowar (2007) : ***Universe and Man (Scientific and Qur'anic Descriptions)***; Adam Publishers & Distributors, New Delhi , p79
274. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
275. Ali M Akbar (1976) : ***Science in the Quran*,** Md. Abu Bakr, The Malik Libray, 34, Banglabazar, Dhaka, p242

276. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
277. Ibid
278. Ibid
279. Ibid
280. Ibid
281. Al-Hilali Muhammad Taqi-ud-din and Khan Muhammad Muhsin: ***The Noble Qur'an*** *(Arabic Text, English translation with interpretations)*, by, Maktaba Dar-Ul-Quran
282. Sadiqullah,A.T.M (2005) & others: ***Al-Quran theke Adhunik Bigyan*** ; Solemaniya Book House, Bangla Bazar, Dhaka , p54
283. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
284. Ibid
285. Ibid
286. Ibid
287. Ibid
288. Ibid
289. Ibid
290. Ibid
291. Ibid
292. Ibid
293. Yadav Mahendra(1993) : **Dictionary of Science**, Anmol Publications Pvt. Ltd., New Delhi -2
294. Hawking Stephen (1994): ***Black Holes And BABY UNIVERSES*** and other essays, Batnam Books, p105
295. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
296. Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi
297. http://www.quranmiracles.com/articles.asp?id=24
298. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
299. Ibid
300. Pickthal M.M (2002): ***The Meaning of the Glorious Qur'an***, (English translation of the Qur'an) , published in India UBS Publishers' Distributors Pvt. Ltd. New Delhi
301. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter*** ; kitab Bhavan, New Delhi, p207
302. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
303. Penrice John (2008): ***A Dictionary and Glossary of the Qur'an***; Printed and published in India by Adam Publishers & Distributors, New Delhi
304. Cowan J. Milton (1977): **Hans Wehr** : ***A Dictionary of Modern Written Arabic:*** Spoken Language Services, Inc., New York,

SECTION-V

THE CONCEPT OF TIME, RELATVITY AND SPACE EXPLORATION

The concept of time is still a mystery to human being. When the time was started and when it will be ended? There is no specific answer to the scientific community. Only Albert Einstein in his theory of relativity said that the speed of time depends upon the position of the viewer. That is time not absolute, rather it is relative and it depends upon the observer's frame of references The Quran in many of the revelations provides important indications about the concept of time and even relativity. The Qur'an proclaims:

هُوَ ٱلَّذِى جَعَلَ ٱلشَّمْسَ ضِيَآءً وَٱلْقَمَرَ نُورًا وَقَدَّرَهُۥ مَنَازِلَ لِتَعْلَمُوا۟
عَدَدَ ٱلسِّنِينَ وَٱلْحِسَابَ ۚ مَا خَلَقَ ٱللَّهُ ذَٰلِكَ إِلَّا بِٱلْحَقِّ ۚ يُفَصِّلُ ٱلْءَايَٰتِ
لِقَوْمٍ يَعْلَمُونَ ﴿٥﴾

It is He who made the sun to be a shining glory and the moon to be a light (of beauty), and measured out stages for it, that ye might know the number of years and the count (of time)..... ... (10:05)[306]

One more verse in English translation may be considered:

The number of months in the sight of Allah is twelve (in a year)- so ordained by Him the day He created the heavens and the earth... .... (09:36)[305]

Here the concept of month and year relates to the lunar month and year. This is very simple to count and easy to keep records.

4.5.1. RECKONING OF TIME

Regarding reckoning of time the Qur'an has mentioned different revelations as per needs of its deliberation. The following revelation in English translation may be considered:

We have made the Night and the Day as two (of Our) signs: the Sign of the Night have we made dark while the Sign of the Day We have made bright that ye may seek bounty from Lord and that ye may know the number and count of the years: all things have We explained in detail. (17:12)[307]

It is known to the modern world that due to the Law of universal gravitation, everything in the universe is attracted to each other making cosmic balance in the system to have discipline for existence of the heavens and the earth. This force of attraction makes the space curvature. And it is also known that since time is the fourth dimension, the space-time is curved. As such unit of time differs in space time system as discovered by Einstein. Now Stephen Hawking discovered that the time moves slowly near massive body like earth.[308]

4.5.1.1. BOTH THE SUN AND THE MOON HELP FOR RECKONING OF TIME

Today we have clear idea of reckoning of time with help of movements of the Sun and the Moon. The Qur'an before more than 1400 years indicated about the same. The Qur'an states:

فَالِقُ ٱلْإِصْبَاحِ وَجَعَلَ ٱلَّيْلَ سَكَنًا وَٱلشَّمْسَ وَٱلْقَمَرَ حُسْبَانًا ۚ
ذَٰلِكَ تَقْدِيرُ ٱلْعَزِيزِ ٱلْعَلِيمِ ﴿٩٦﴾

He it is that cleaveth the day-break (from the dark): He makes the night for rest and tranquility, and the sun and moon for the reckoning (of time): Such is the judgment and ordering of (Him), the Exalted in Power, the Omniscient (6:96)[309]

Today we have solar year or lunar year in our reckoning time in daily life in the entire earth. We call a day as the time required by the earth to make one rotation on its axis i.e 24 hours and one year a complete revolution by the earth around the sun, i.e 365days + ¼ of a day.

In the desert of Arabian Peninsula it was easy for the people to follow lunar year for reckoning of time instead of solar year. The people living in the desert were well-versed in the observation of the sky. They could tell lunar day of the lunar month observing the phases of the moon.

4.5.2. CONCEPT OF RELATIVITY OF TIME

Some revelations of the Qur'an indicate that the time is not absolute in the universe; rather it is relative as discovered Albert Einstein in the early part of twentieth century. In chapter No.22, Verse No.47, the Qur'an proclaims:

وَيَسْتَعْجِلُونَكَ بِٱلْعَذَابِ وَلَن يُخْلِفَ ٱللَّهُ وَعْدَهُۥ ۚ وَإِنَّ يَوْمًا عِندَ رَبِّكَ
كَأَلْفِ سَنَةٍ مِّمَّا تَعُدُّونَ ﴿٤٧﴾

Yet they ask thee to hasten on the Punishment! But Allah will not fall in His promise. Verily a Day in the sight of thy Lord is like a thousand years of your reckoning. (22:47)[310]

In another revelation the same idea has been revealed: The Qur'an proclaims:

يُدَبِّرُ ٱلْأَمْرَ مِنَ ٱلسَّمَآءِ إِلَى ٱلْأَرْضِ ثُمَّ يَعْرُجُ إِلَيْهِ فِى يَوْمٍ كَانَ مِقْدَارُهُۥٓ
أَلْفَ سَنَةٍ مِّمَّا تَعُدُّونَ ﴿٥﴾

He directs the affairs from the heavens to the earth: then it ascends unto Him, on a Day the measure of which is a thousand years of your reckoning. (32:05)[311]

The above verses clearly indicate that the time measured by us on the earth is not absolute. The Cosmic Day is different from earthly day and one Cosmic Day may be equal to one thousand years in the count of solar day. Even in another verse the Qur'an states that there is Cosmic Day which is equal to fifty thousand years in the count of solar day.

The following verse may be considered:

تَعْرُجُ ٱلْمَلَٰٓئِكَةُ وَٱلرُّوحُ إِلَيْهِ فِى يَوْمٍ كَانَ مِقْدَارُهُۥ خَمْسِينَ أَلْفَ سَنَةٍ
﴿٤﴾

The angels and the Spirit ascend unto Him in a Day the measure where of is (as) fifty thousand years. (70:04)[312]

The above verse implies that there is situation in Cosmos that creates the difference in the range of time for a Cosmic Day in respect to solar day. Today, it is known from theory of relativity that time passes at a slower rate in the fields of greater gravitational force.

There are more revelation s in English translation may be considered:

They see (the Day) indeed as a far- off (event); But We see it(quite) near. (70:06-07)[313]

One day He will gather them together: (It will be) as if they had tarried but an hour of a day: they will recognise each other: assuredly those will be lost who denied the meeting with Allah and refused to receive true guidance.(10:45)[314]

He will say: "What number of years did ye stay on earth? They will say: "We stayed a day or part of a day: but ask those who keep account." (23: 112-113)[315]

It is certainly a matter of astonishment that in 7th century the Qur'an mentioned the relative concept of time when, no people could imagine such an idea as the theory of relativity formulated by Einstein is the first concept of relativity in the scientific world. As indicated in the Qur'an reckoning of time depends upon medium, place and speed of movement. From Einstein's theory it is known that clock which is far massive bodies run faster and clock close to the massive bodies run slower, which occurs because of gravitational time dilation. [316] So, the idea revealed in the Qur'an seems to be inconformity with scientific theory as divine thrown is certainly vary massive in comparison to our earth.

4.5.2.1. CONCEPT OF DAY IN THE QUR'AN

It is very interesting to find that the word *Yawm* means 'a day' is used 365 times in the Qur'an. We know from Geography, that the earth takes 365 days to go round the sun which constitutes a solar year i.e by this time the earth makes 365 rotations around its axis.

It has already been discussed the tem *Yawm*, Plural *Iyyam*, not only refers a day of 24 hours, but also in some cases means a long period of time which may be called a cosmic day.

4.5.3. CONCEPT OF SPACE EXPLORATION

The Qur'an also indicates about the possibility of space exploration and the mankind may be assisted by the God to have the physical experience of moving beyond the earth atmosphere. The Qur'an invites mankind and Jinnkind to penetrate in space as far deep as possible. The Qur'an proclaims:

يَـٰمَعْشَرَ ٱلْجِنِّ وَٱلْإِنسِ إِنِ ٱسْتَطَعْتُمْ أَن تَنفُذُوا۟ مِنْ أَقْطَارِ ٱلسَّمَـٰوَٰتِ
وَٱلْأَرْضِ فَٱنفُذُوا۟ ۚ لَا تَنفُذُونَ إِلَّا بِسُلْطَـٰنٍ ﴿٣٣﴾

O Ye assembly of Jinns and men! if it be ye can pass beyond the zones of the heavens and the earth, pass ye! Not without authority shall be able to pass! (55:33)[317]

Thus in the above verse the Qur'an has given an open invitation to mankind for penetrating the regions in space and to get out of the earths gravitational force.[318] Thus, there is a open invitation to man for traveling in space given in the Qur'an more than fourteen hundred years ago when people could not imagine about such possibility of space exploration. If we go into the deep sense of the verse, we can point out that here the Qur'an has indicated that if mankind or Jinnkind can overcome the earth's gravitational force and any other force in space, they will be able to penetrate into the deep of the space. However, without authority or sanction of the creator; they cannot go beyond earth's atmospheric layers as well as gravitational field. By authority or sanction perhaps it has been indicated towards the knowledge of space science. [319]

Moreover, if the meaning of the term ***sultan*** is taken in a different as available in the dictionary as power, might, strength, dominion, authority etc it may be interpreted in other way. The mankind or Jinnkind may be able to penetrate the space if they only when they have the required technology to acquire escape velocity to overcome earth's attraction of gravitational field.

The Physical capacity of man or Jinn is limited to certain extent and thus it cannot be possible to overcome many barriers. The Qur'an also indicated about the exclaiming experience of space exploration to such an extent that man think that are bewitched by sorcery because of the peculiar feeling in ascending the heavens in space vehicle. The Qur'an proclaims:

وَلَوْ فَتَحْنَا عَلَيْهِم بَابًا مِّنَ ٱلسَّمَآءِ فَظَلُّوا۟ فِيهِ يَعْرُجُونَ ﴿١٤﴾

Even if We opened out to them a gate from heaven, and they were to continue (all day) ascending there in (15:14)[320]

لَقَالُوٓا۟ إِنَّمَا سُكِّرَتْ أَبْصَٰرُنَا بَلْ نَحْنُ قَوْمٌ مَّسْحُورُونَ ﴿١٥﴾

They would only say, "Our eyes have been intoxicated: nay, we have been bewitched by sorcery. (15:15)[321]

Here the peculiar experience of space exploration has been indicated by the Qur'an.

4.5.3.1: ASCENTION OF THE HOLY PROPHET

The Quran has also mentioned about the space visit of the prophet under divine guidance. In chapter 17, verse No.1, the Qur'an proclaims:

سُبْحَٰنَ ٱلَّذِىٓ أَسْرَىٰ بِعَبْدِهِۦ لَيْلًا مِّنَ ٱلْمَسْجِدِ ٱلْحَرَامِ
إِلَى ٱلْمَسْجِدِ ٱلْأَقْصَا ٱلَّذِى بَٰرَكْنَا حَوْلَهُۥ لِنُرِيَهُۥ
مِنْ ءَايَٰتِنَآ ۚ إِنَّهُۥ هُوَ ٱلسَّمِيعُ ٱلْبَصِيرُ ﴿١﴾

Glory to ((Allah)) Who did take His servant for a Journey by night from the Sacred Mosque to the farthest Mosque, whose precincts We did bless,- in order that We might show him some of Our Signs: for He is the One Who heareth and seeth (all things). (17:01)[322]

It is a matter of surprise that when man could not think about the exploration of space, Hazrat Muhammad (Pbuh) made a special tour to the space with the help of divine power. This revelation indicates the possibility of space exploration by the human being. Though a human being, Muhammad (Pbuh) is said to have the origin of light. So, probably by divine will it may be possible for him to make a journey with the speed of light in space.

References:

305. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
306. Ibid
307. Ibid
308. Siddiqui Moid (2004): **The Qur'anic Cosmology**, Kitab Bhavan, daryaganj, New Delhi ,p85
309. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
310. Ibid
311. Ibid
312. Ibid
313. Ibid
314. Ibid
315. Ibid
316. http://en.wikipedia.org/wiki/gravitational-time-dilation
317. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
318. Khan Fateh Ullah (1999): ***God, Universe and Man, the Holy Quran and Hereafter*** ; kitab Bhavan, New Delhi, p48
319. Ali M Akbar (1976) : ***Science in the Quran*,** Md. Abu Bakr, The Malik Libray, 34, Banglabazar, Dhaka, p211
320. Ali Abdullah Yusuf (2008) : **The Meaning of the ILLUSTRIOUS Qur'an** ; Adam Publishers & Distributors, Pataudi House, Darya Ganj, New Delhi -2
321. Ibid
322. IIbid