

Qur'an Addresses Science and Technology

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I. INTRODUCTION

In the Name of Allah, the Most Beneficent, the Most Merciful. All praises and adornment are due to Him alone, Who, is without partner, relatives, adviser nor assistance. Who, in His infinite wisdom and mercy sent down the Qur'an as a source of guidance and mercy to humanity? Wherein, both believers and unbelievers benefits directly or indirectly. May the peace, blessing and mercy of Allah be on the Chosen Servant of Allah Muhammad, who was sent too as a Mercy to the world and also onto his household, companions and those who tread his path till the Day of Accountability?

Islam as a religion which Allah established on earth through the Prophets (A.S.) evolves throughout the existence of man on earth. Series of divine Scriptures were revealed for the guidance of mankind. But human beings in their own nature, tends to manipulate the messages of Allah to suit their whims after the demise of their messengers. But Allah in His wisdom, planned to safeguard the Last Testament (Qur'an) to be the test of all time and generations due its universality.

Qur'an as the last message left nothing out. It deals with every aspects of human endeavor. Allah mentioned this in the Qur'an when He said:

وَمَا مِنْ دَابَّةٍ فِي الْأَرْضِ وَلَا طَائِرٍ يَطِيرُ بِجَنَاحَيْهِ إِلَّا أُمَمٌ أَمْثَالُكُمْ مَا فَرَّطْنَا فِي الْكِتَابِ مِنْ شَيْءٍ ثُمَّ إِلَىٰ رَبِّهِمْ يُحْشَرُونَ

*There is not a moving (living) creature on earth, nor a bird that flies with its two wings, but are communities like you. We have neglected nothing in the Book, then unto their Lord they (all) shall be gathered.*¹

Having said this, people are bound to ask series of questions on the above quoted verse. For example, people may ask Is the Qur'an not a book of Theology? What did the Qur'an say about telecommunication? What did it say on Biology, what did it say about Chemistry, Botany, what did it say...? goes on and on in thousands of things and ideas.

Few verses are enough in replying the numerous questions to this regard. It is either one is not able to grasp the idea of what is in the Qur'an or he has no knowledge of the Qur'anic content. In the first place Allah mentioned in the glorious Qur'an:

وَالْأَنْعَامَ خَلَقَهَا لَكُمْ فِيهَا دِفْءٌ وَمَنَافِعُ وَمِنْهَا تَأْكُلُونَ وَلَكُمْ فِيهَا جَمَالٌ حِينَ تُرِيحُونَ وَحِينَ تَسْرَحُونَ وَتَحْمِلُ أَثْقَالَكُمْ إِلَىٰ بَلَدٍ لَّمْ تَكُونُوا بِالْغَيْبِ إِلَّا بِشِقِّ الْأَنْفُسِ إِنَّ رَبَّكُمْ لَرَّءُوفٌ رَّحِيمٌ وَالْخَيْلَ وَالْبِغَالَ وَالْحَمِيرَ لِتَرْكَبُوهَا وَزِينَةً وَيَخْلُقُ مَا لَا تَعْلَمُونَ

And the cattle, He has created them for you; in them there is warmth (warm clothing), and numerous benefits, and of them you eat. And wherein is beauty for you, when you bring them home in the evening, and as you lead them forth to pasture in the morning. And they carry your loads to a land that you could not reach except with great trouble to yourselves. Truly, your Lord is full of Kindness, Most Merciful. And (He has created) horses, mules and donkeys, for you to ride and as an adornment. And He creates (other) things of which you have no knowledge.²

And in another verse Allah said:

وَمَا أَرْسَلْنَا قَبْلَكَ إِلَّا رَجَالًا نُوحِي إِلَيْهِمْ فَاسْأَلُوا أَهْلَ الذِّكْرِ إِنْ كُنْتُمْ لَا تَعْلَمُونَ

“And We sent not before you (O Muhammad SAW) but men to whom We inspired, so ask the people of the Reminder (Scriptures - the Taurat (Torah), the Injeel (Gospel)) if you do not know.”³

From the verses quoted above, one will see that the issue on means of transportation is mentioned by Allah in accordance to their level of development and understanding. But at the end of His statement, He said that He creates things in which you know not. Allah in His wisdom does not discuss in detail something which is incompatible with one's level and knowledge. Even now, the verse shows that many things which Allah creates are not compatible with our present level and knowledge. For example, if we are to be told now that a time shall come when you only press a gadget and then you find yourself in the place you intend to reach without going through the rigor of travelling through the road or plane. We may not accept such presumption until when such thing is developed. Therefore, Allah round all things He creates by saying “and He creates (other) things you know not”⁴

The second quoted verse above also showed that whatever one need to know on earth has been revealed to His prophets before this time. And He has bestowed the knowledge of things to different people in accordance to one's discipline. Thus, He said “you should ask the people of the Reminder (of knowledge) if you do not know.”

¹- Qur'an, 6:38

²- Qur'an, 16:5-8

³- Qur'an, 21:7

⁴- Qur'an, 16:8

For instance, if one wants to know about mechanical aspect, such person should go direct to a mechanic because the Glorious Qur'an has directed you to do so. This applies to any aspects of our worldly physical and spiritual things.

This study therefore, tried to treat some of the verses that directly or indirectly reflect on scientific ideas as treated by Muslim scholars. This will enlighten those who thought and believed that Qur'an is an ancient Book that doesn't match the present age of Science and Technology. Implying that at the end of reading through this paper, they will submit to the Al-Mighty Creator and Designer of everything that existed in the past, in existence now and that which will be in existence in the future. It will also instill in them (the believers) in the suitability of the Qur'an to all ages and generation till the end of time. The work is arranged into subject heading beginning with conceptual definitions as follows: -

II. CONCEPTUAL DEFINITIONS

QUR'AN: Koran (Quran) The Sacred Scripture of Islam. According to tradition, the divine revelations given to Mohammed (d. 632 AD) were preserved by his followers and collected as Koran under the third caliph, Uthman (d. 656 AD). Written in classical Arabic. They are arranged in 114 *suras* or chapters according to length. The longer ones come first. Admonitions to worship God alone and legal prescriptions predominate. The Koran is one of the main sources of comprehensive system of Islamic Law. Although the revelations were given to Mohammed piecemeal, Muslims believe that they exist complete in a heavenly book.⁵

SCIENCE: According to Longman Dictionary: "Is the knowledge about the world especially based on examining, testing and proving facts."⁶

TECHNOLOGY: refers to new machines, equipment and ways of doing things that are based on modern knowledge about Science and computer.⁷

With the above definitions, technology could be viewed as tools of carrying out scientific findings. In other words, it is a simplified way in carrying out practical development of scientific findings in form of production. When we view these scientific findings critically, we will find out that it carries out enquiry on any existing things or activities on how such thing could be known or improved upon.

Qur'an Addresses both Science and Technology in the sense that it speaks concerning aspects of Science and Technology. It does not mean that Qur'an is solely the book for Sciences and Technology but rather, it touches some of their aspect in order to guide man to Allah and to make the world subservient to himself in a view to establish his role of servanthood to his Lord (By worshipping Him alone).

Qur'an addresses sciences in the following ways:

Allah called the attention of man to verify the divine authority/nature of the Qur'an by asking those who are or may be disputing on this to bring the like of the Qur'an if they are in doubt. And Allah categorically showed human being that they will never and ever be able to bring even a Surah (a chapter) of its kind. So scientists accept theory to be factual only when such theory is given out for test and verification. Therefore, Allah has given out this theory to the whole world for 1,439 years now without any scientist being able to disapprove it as in the following verses:

وَإِنْ كُنْتُمْ فِي رَيْبٍ مِمَّا نَزَّلْنَا عَلَىٰ عَبْدِنَا فَأْتُوا بِسُورَةٍ مِثْلِهِ وَادْعُوا شُهَدَاءَكُمْ مِنْ دُونِ اللَّهِ إِنْ كُنْتُمْ صَادِقِينَ فَإِنْ لَمْ تَفْعَلُوا وَلَنْ تَفْعَلُوا فَاتَّقُوا النَّارَ الَّتِي وَقُودُهَا النَّاسُ وَالْحِجَارَةُ أُعِدَّتْ لِلْكَافِرِينَ

"23. And if you (Arab pagans, Jews, and Christians) are in doubt concerning that which We have sent down (i.e. the Quran) to Our slave (Muhammad Peace be upon him), then produce a Soorah (chapter) of the like thereof and call your witnesses (supporters and helpers) besides Allah, if you are truthful.

24. But if you do it not, and you can never do it, then fear the Fire (Hell) whose fuel is men and stones, prepared for the disbelievers.⁸

For the fact that no human being is able to disapprove the above challenge for the past 1,439 years after the Hijra till date, it showed the divine nature of the Qur'an which acts as the best miracle amongst the various miracle of the holy Prophet (pbuh).

Allah therefore established the scientific steps in detecting true knowledge which is the offering of any theory for criticism and investigation in order to confirm or reject such theory. This step is one of the principles of science.

It should be noted that knowledge is classified into two which are:

- i- The knowledge communicated by Allah to the various prophets (A.S.) as revelation to human beings which deals with man in particular and the universe in general-referred to as RELIGION
- ii- The knowledge acquired by man through his own inquiry, observation and experimental efforts which deals with the whole universe including himself-referred to as SCIENCE

And both categories of knowledge own their sources from Allah, The Creator of everything. This is evident in the following verses:

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ لَا تَأْخُذُهُ سِنَّةٌ وَلَا نَوْمٌ لَهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْفَهُمْ وَلَا يُحِيطُونَ بِشَيْءٍ مِنْ عِلْمِهِ إِلَّا بِمَا شَاءَ وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ وَالْأَرْضَ وَلَا يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ

⁵ - Encyclopedia, Macmillan, 1999, p.684

⁶ - Longman, (2005). *Dictionary of Contemporary English*, (4th Eds) England, Edinburgh, p. 1467

⁷ - Longman, *ibid*, p. 1704

⁸ - Qur'an, 2:23-24

255. Allah! La ilaha illa Huwa (none has the right to be worshipped but He), the Ever Living, the One Who sustains and protects all that exists. Neither slumber, nor sleep overtake Him. To Him belongs whatever is in the heavens and whatever is on earth. Who is he that can intercede with Him except with His Permission? He knows what happens to them (His creatures) in this world, and what will happen to them in the Hereafter. And they will never compass anything of His Knowledge except that which He wills. His Kursi extends over the heavens and the earth, and He feels no fatigue in guarding and preserving them. And He is the Most High, the Most Great.⁹

الَّذِي عَلَّمَ بِالْقَلَمِ عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ.

Who has taught (the writing) by the pen (the first person to write was Prophet Idrees (Enoch)), has taught man that which he knew not.¹⁰

With the above quoted verses one will observe that all sources of knowledge emanated from Allah-The Wise. Therefore, human beings only act as sources of inquiry to the sources in order to develop in accordance to the level of such age and their advancement.

The verses also indicated that all the categories of knowledge were gotten directly or indirectly from Allah through the intellect, intelligence and all human faculties for observation and manipulation which are bestowed on him by Allah.

Both knowledge existed in the Qur'an. The first deals in the recognition of Allah as A Worthy Being of worship and obedient to His rules and regulation. The latter is to allow him explore his environment and make use of it.

Moreover, all this signs are to enable human being to know the existence of The Creator as stated by the early philosophers contained in the following statement:

Johannes Kepler related that he engaged in science to delve the Creator's works, while Isaac Newton, another great scientist, stated that the main thrust behind his interest in science was his wish to have a better sense and knowledge of God.¹¹

Allah called the attention of man to sciences in various verses of the Qur'an on various subjects and matters. Below are some of the numerous sciences contained in the Glorious Qur'an.

Physics (Big Bang Theory: Creation of the Universe):

According to 'Big-Bang' theory, the whole universe is a one big mass (Primary Nebula). Then there was a 'Big Bang' (Secondary Separation) which resulted in the formation of the Galaxies. These then divided to form stars, planet, the sun, the

moon, etc. the origin of the universe was unique and the probability of it occurring by 'chance' is zero.¹²

Zakir pointed out the following verse to assert to the true situation of the universe:

أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ

Have not those who disbelieve known that the heavens and the earth were joined together as one united piece, then We parted them? And We have made from water every living.¹³

Do they not see that the heavens and the earth were joined together, i.e. in the beginning they were all one piece, attached to one another and piled up on top of one another, then He separated them from one another, and made the heavens seven and the earth seven, placing the air between the earth and the lowest heaven. Then He caused rain to fall from the sky and vegetation to grow from the earth. He says:¹⁴

With the above verse, it could be observed that the Qur'an have stated the 'Big Bang' theory 1,439 years ago which was just verified few years back by the modern scientists.

Astronomy (Gaseous Mass before Creation of the Earth):

The Scientists postulated that there existed celestial matter initially in form of gaseous matter before galaxies in the Universe were formed. This is in agreement with the smoke Allah mentioned in the following verse as stated by Zakir.¹⁵

ثُمَّ اسْتَوَىٰ إِلَى السَّمَاءِ وَهِيَ دُخَانٌ فَقَالَ لَهَا وَلِلْأَرْضِ ائْتِيَا طَوْعًا أَوْ كَرْهًا قَالَتَا أَتَيْنَا طَائِعِينَ

Then He Istawa (rose over) towards the heaven when it was smoke, and said to it and to the earth: "Come both of you willingly or unwillingly." They both said: "We came, willingly."¹⁶

Allah is great. Look at the verse above which is in much congruent with the scientific postulation above on the issue of the existence of gaseous matter before the galaxies.

The Structure of the Earth:

In the early times, people thought and believed that the earth is flat. For centuries people were afraid to venture out too far, lest they should fall off the edge. Sir Francis Drake was the first person who proved that the earth is spherical when he sailed around it in 1597¹⁷

And it was also learnt that the earth is a rocky globe 8,000 miles in diameter, completes one rotation about its axis in 23 hours and 56 minutes. Due to this rotation, when one half faces the sun, the opposite half is in darkness, giving rise to

¹² - Zakir, N. (2001), The Qur'an & Modern Science: compatible or incompatible, Saba Islamic Media Kuala Lumpur. (page 8)

¹³ - Qur'an, 21:30

¹⁴ - Umar, I.K, (d. 774 AH), *Tafsir al-Qur'an al-Azeem: Ibn Kathir*, p. 3196

¹⁵ - Zakir, N. op cit, page 9

¹⁶ - Qur'an, 41:11

¹⁷ - Zakir, N. op cit. page 10

⁹ - Qur'an, 2:255

¹⁰ - Qur'an, 96:4-5

¹¹ - Haruna, Y. (2004), The Qur'an Leads The Way To Science, Published in Istanbul/ Turkey.

the alternation of day and night. The earth takes 365 days, 6 hours, 46 minutes and 48 seconds i.e. one year for one complete revolution around the sun/ the axis of the earth is inclined 23½ degree towards the planet of its orbit. This inclination of the axis is the well-known cause of change in sessions. The Qur'an on this subject states:¹⁸

﴿خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ بِالْحَقِّ يُكَوِّرُ اللَّيْلَ عَلَى النَّهَارِ وَيُكَوِّرُ النَّهَارَ عَلَى اللَّيْلِ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ كُلٌّ يَجْرِي لِأَجَلٍ مُّسَمًّى أَلَا هُوَ الْعَزِيزُ الْغَفَّارُ﴾

He has created the heavens and the earth with truth. He makes the night to go in the day and makes the day to go in the night. And He has subjected the sun and the moon. Each running (on a fixed course) for an appointed term. Verily, He is the All-Mighty, the Oft-Forgiving.¹⁹

Dr. Aneesuddin analyzed these verses above as followed:

“Alternation of the day and night and variation of sessions are regarded as some of the signs for a people who understand the causes for these changes-rotation and revolution of the earth and inclination of its axis. Indirectly Scientists are invited to reflect on this arrangement and the causes for these changes, and through this reflection gauge the greatness of the CREATOR.”²⁰

The above explanation of Aneesuddin is enough to show the scientific nature of these verses in relation to the structure of the earth.

The Moon:

The moon is a satellite which is comparatively a small celestial body circulating around a planet. Moon acts as a satellite of the earth. It revolves around the earth and also rotates about its axis in 28 days with respect to the earth and 29½ days with respect to the sun. The moon is said to be 2,000 miles in diameter and is 250,000 miles away from the earth. The moon-light is the reflected light of the sun.²¹

This acts between the moon and the sun as related in the Quran more than 1,437 years ago are contained in the following verses.

﴿وَالشَّمْسُ وَضُحَاهَا وَالْقَمَرُ إِذَا تَلَّهَا وَالنَّهَارُ إِذَا جَلَّاهَا وَاللَّيْلُ إِذَا يَغْشَاهَا﴾

And by the sun and its brightness; And by the moon as it follows it (the sun); and by the day as it shows up (the sun's) brightness; And by the night as it conceals it (the sun);²²

Mujahid said: the moon as Talaha means that it follows the sun. al 'Awfi reported from Ibn 'Abbas that he said 'By the moon as it Talaha' "It follows the day..."²³

﴿وَالشَّمْسُ تَجْرِي لِمُسْتَقَرٍّ لَهَا ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ وَالْقَمَرَ قَدَرْنَا مَنَازِلَ حَتَّىٰ عَادَ كَالْعُرْجُونِ الْقَدِيمِ لَا الشَّمْسُ يَنْبَغِي لَهَا أَنْ تُدْرِكَ الْقَمَرَ وَلَا اللَّيْلُ سَابِقُ النَّهَارِ وَكُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

38. And the sun runs on its fixed course for a term (appointed). That is the Decree of the All-Mighty, the All-Knowing.

39. And the moon, We have measured for it mansions (to traverse) till it returns like the old dried curved date stalk.

40. It is not for the sun to overtake the moon, nor does the night outstrip the day. They all float, each in an orbit.²⁴

All the above quoted verses are self-explanatory to this subject. All the verses explained the relationship between the moon and the sun and each's function to the earth. This is the more reason for human being to accept the Qur'an as a divine revelation which deals with all aspects of human endeavor. Verses 1-4 of Surat Ash-Shams above showed the relationship of the moon and the sun, while the rest explained how they causes day and night which we used in counting our days/night, weeks, months and years.

The Rotation of the Sun:

For long time the European philosophers and Scientists believed that the earth stood still in the center of the universe and every other body including the sun moved round it. While the West believed in the geocentric concept of Ptolemy in the second century B.C. but Heliocentric Theory was propounded in 1512 by Nicholas Copernicus which asserted then that the sun is motionless at the center of the solar system with the planets revolving round it.²⁵

In 1609, Yohannus Keppler a German Scientist published a book known as 'Astronomia' where he concluded that as the planet move in elliptical orbits around the sun, they also rotate upon their axis at irregular speeds. This knowledge paved way for the Western Scientists to be able to explain correctly many of the mechanisms of the solar system including the sequence of night and day.²⁶

But the holy Qur'an has established the actual movement of the heavenly bodies long ago with the following verses among others.

﴿هُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ كُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

And He it is Who has created the night and the day, and the sun and the moon, each in an orbit floating.²⁷

﴿لَا الشَّمْسُ يَنْبَغِي لَهَا أَنْ تُدْرِكَ الْقَمَرَ وَلَا اللَّيْلُ سَابِقُ النَّهَارِ وَكُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

It is not for the sun to overtake the moon, nor does the night outstrip the day. They all float, each in an orbit.²⁸

¹⁸ - Aneesuddin (1999), *The Universe Seen Through The Qur'an*, A Attique Publisher Inc, Canada

¹⁹ - Qur'an, 39:5

²⁰ - Aneesuddin, (1999), op cit page 21

²¹ - *ibid*,

²² - Qur'an, 91:1-4

²³ - Umar, I.K. (d. 774 AH), *Tafsir al-Qur'an al-Azeem*, op. cit, p.494

²⁴ - Qur'an 36:38-40

²⁵ - Zakir, N. op cit, page 13

²⁶ - Zakir, N. op cit,

²⁷ - Qur'an, 21:33

²⁸ - Qur'an 36:40

Sometimes, the day grows shorter and the night longer, and sometimes vice versa, one takes from the length of the other. Similar was also mentioned in (Q57:6)²⁹

According to Zakir, "The 'fixed place' towards which the sun travels, carrying with it the solar system, has been located by modern astronomy. It has been given a name, the Solar Apex. The solar system is indeed moving in space towards a point situated in the constellation of Hercules (alpha Lyrae) whose exact location is firmly established."³⁰

Chemistry (The Existence of Subatomic Particles):

In the whole world, human being believed that the smallest thing on earth is an atom. And that there is nothing that is smaller than it. Both the Arabs and the Western believed that atom is the smallest particle on earth. According to Zakir, "The Theory of 'Atomism' was widely accepted. This theory was originally proposed by the Greek, in particular by a man called Democritus, who lived about 23 centuries ago."³¹

The above statement means that both the Western and the Arabs all accept this Theory of Atomism before the light of the Qur'an proved to the Arabs in particular and the world in general that there is a particle smaller than an atom as could be observed in the following verse which according to Zakir, said that "In recent times, modern science has discovered that it is possible to split even an atom. That the atom can be split further is a development of 20th century"³²

﴿وَقَالَ الَّذِينَ كَفَرُوا لَا تَأْتِينَا السَّاعَةُ قُلْ بَلَىٰ وَرَبِّي لَتَأْتِيَنَّكُمْ عَالِمِ الْغَيْبِ لَا يَعْزُبُ عَنْهُ مِثْقَالُ ذَرَّةٍ فِي السَّمَاوَاتِ وَلَا فِي الْأَرْضِ وَلَا أَصْغَرَ مِنْ ذَلِكَ وَلَا أَكْبَرَ إِلَّا فِي كِتَابٍ مُّبِينٍ﴾

Those who disbelieve say: "The Hour will not come to us." Say: "Yes, by my Lord, it will come to you." (Allah, He is) the All-Knower of the unseen, not even the weight of an atom (or a small ant) or less than that or greater, escapes from His Knowledge in the heavens or in the earth, but it is in a Clear Book (AlLauh AlMahfooz).³³

Allah The Most High in His Greatness knows every single thing on earth and in the heaven and whatever is between them either small or large. With His Knowledge, He established the subatomic particle theory in the Qur'an 1,437 years ago which was confirmed recently by the Scientists. This showed the divine nature of the Qur'an.

Biology (Every Living Thing Is Made Up Of Water):

Allah teaches human kind the nature of the sources of His creatures; he informed man that all animals were created from water. Prior to this age, the knowledge of human beings in this respect are in vague. It was just of recent when there is advancement in science, do we know that cytoplasm, the basic substance of the cell is made of 80% water. According to

Zakir, "Modern research has also revealed that most organisms consist of 50% to 90% water and that every living entity requires water for its existence,"³⁴

Below verse speaks in this direction.

﴿أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ﴾

Have not those who disbelieve known that the heavens and the earth were joined together as one united piece, then We parted them? And We have made from water every living thing. Will they not then believe?³⁵

So how can it be appropriate to worship anything else beside Him or to associate others in worship with Him. Do they not see that the heavens and the earth were joined together, i.e. in the beginning they were all one piece, attached to one another and piled up on top of one another, then He separated them from one another, and made the heavens seven and the earth seven, placing the air between the earth and the lowest heaven. Then He caused rain to fall from the sky and vegetation to grow from the earth.³⁶

With this revealing truth of universal life being revealed by Allah, Qur'an has therefore established and laid down foundation for sciences. While the present scientist only carries out enquiries and experiments to confirm them.

Embryology (Alaq (Aleech-Like Substance):

There is some aspect of human existence in whose true and reality of its nature could only be known by The Almighty Creator. Such areas include embryology of human beings. The exact position and the place of the fetus is only known to Allah. And because of the richness of the Qur'anic sciences, it was reported below that the Saudi Arabians carry out some experiments by compiling all Qur'anic verses that relate to embryology to be ascertained by the best in the field. The following are the excerpts.

"A few years ago, a group of men in Riyadh, Saudi Arabia collected all of the verses in the Quran which discuss embryology - the growth of the human being in the womb. They said, "Here is what the Quran says. Is it the truth?" In essence, they took the advice of the Quran: "Ask the men who know." They chose, as it happened, a non-Muslim who is a professor of embryology at the University of Toronto. His name is Keith Moore, and he is the author of textbooks on embryology - a world expert on the subject. They invited him to Riyadh and said, "This is what the Quran says about your subject. Is it true? What can you tell us?"

While he was in Riyadh, they gave him all the help that he needed in translation and all of the cooperation for which he asked. And he was so surprised at what he found that he changed his textbooks. In fact, in the second edition of one of

²⁹ - Umar, I.K, (d. 774 AH), *Tafsir al-Qur'an al-Azeem*, op. cit, p. 457

³⁰ - Zakir, N. op cit, page 15

³¹ - Zakir, N. op cit, page 20

³² - Zakir, N. ibid,

³³ - Qur'an, 34:3

³⁴ - Zakir, N. op cit page 35

³⁵ - Qur'an, 21:30

³⁶ - Umar, I.K, (d. 774 AH), *Tafsir al-Qur'an al-Azeem*, op. cit, p. 3196.

his books, called Before We Are Born... in the section about the history of embryology, he included some material that was not in the first edition because of what he found in the Quran was ahead of its time and that those who believe in the Quran know what other people do not know.³⁷

He continued this explanation as follows:

I had the pleasure of interviewing Dr. Keith Moore for a television presentation, and we talked a great deal about this - it was illustrated by slides and so on. He mentioned that some of the things that the Quran states about the growth of the human being were not known until thirty years ago. In fact, he said that one item in particular - the Quran's description of the human being as a **"leech-like clot"** ('alaqah) [Ghafir 40:67] - was new to him; but when he checked on it, he found that it was true, and so he added it to his book. He said, "I never thought of that before," and he went to the zoology department and asked for a picture of a leech. When he found that it looked just like the human embryo, he decided to include both pictures in one of his textbooks.³⁸

The following verses are some of the verses on embryology:

(اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ)

1. Read! In the Name of your Lord, Who has created (all that exists),
2. Has created man from a clot (a piece of thick coagulated blood).³⁹

The sex determinant is also mentioned in conjunction with its creation in the verses below:

(الَّذِي خَلَقَ مِنْ نَفْسٍ وَاحِدَةٍ خَلْقًا مُمْتَلًا فَجَعَلَ مِنْهُ الذَّكَرَ وَالْأُنثَىٰ)

37. Was he not a Nutfah (mixed male and female discharge of semen) poured forth?
38. Then he became an Alaqa (a clot); then (Allah) shaped and fashioned (him) in due proportion.
39. And made him in two sexes, male and female.⁴⁰

Protection of the fetus in three veils which is unknown to humanity until just of recent is also mentioned in the following verse. This was also confirmed by Prof. Keith Moore.⁴¹

(خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ ثُمَّ جَعَلَ مِنْهَا رُوحَهَا وَأَنْزَلَ لَكُمْ مِنَ الْأَنْعَامِ ثَمَانِيَةَ أَزْوَاجٍ يَخْلُقْكُمْ فِي بُطُونِ أُمَّهَاتِكُمْ خَلْقًا مِنْ بَعْدِ خَلْقٍ فِي ظُلُمَاتٍ ثَلَاثٍ ذَلِكُمْ اللَّهُ رَبُّكُمْ لَهُ الْمُلْكُ لَا إِلَهَ إِلَّا هُوَ فَأَلْهَىٰ نُصْرَتُكُمْ)

He creates you in the wombs of your mothers, creation after creation in three veils of darkness; such is Allah your Lord.

His is the kingdom, La ilaha illa Huwa (none has the right to be worshipped but He). How then are you turned away?⁴²

And concerning embryonic stages, Allah mentioned the following verses of the holy Qur'an which is more elaborate than that of present embryonic developments taught in our Biology classes.

(وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سُلَالَةٍ مِنْ طِينٍ ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ ثُمَّ خَلَقْنَا النُّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظَامًا فَكَسَوْنَا الْعِظَامَ لَحْمًا ثُمَّ أَنْشَأْنَاهُ خَلْقًا آخَرَ فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ)

12. And indeed We created man (Adam) out of an extract of clay (water and earth).

13. Thereafter We made him (the offspring of Adam) as a Nutfah (mixed drops of the male and female sexual discharge) (and lodged it) in a safe lodging (womb of the woman).

14. Then We made the Nutfah into a clot (a piece of thick coagulated blood), then We made the clot into a little lump of flesh, then We made out of that little lump of flesh bones, then We clothed the bones with flesh, and then We brought it forth as another creation. So blessed be Allah, the Best of creators.⁴³

When we observe all the quoted verses above we will observe that they all centered on embryology ranging from its consummation period, gestation, sex determinant, protective veils and its stages of development which forced Prof. Johnson to say:

If we describe the embryo as a complete creation, then we are only describing that part which is already created. If we describe it as an incomplete creation, then we are only describing that part which is not yet created. So, is it a complete creation or an incomplete creation? There is no better description of this stage of embryogenesis than the Qur'anic description, "partly formed and partly unformed",⁴⁴ as in the following verses:

(يَا أَيُّهَا النَّاسُ إِنْ كُنْتُمْ فِي رَيْبٍ مِنَ الْبَعْثِ فَإِنَّا خَلَقْنَاكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ مِنْ مُضْغَةٍ مُخَلَّفَةٍ وَغَيْرِ مُخَلَّفَةٍ لِنُبَيِّنَ لَكُمْ وَيُرَىٰ فِي الْأَرْحَامِ مَا نُشَاءُ إِلَىٰ أَجَلٍ مُسَمًّى ثُمَّ نَحْنُ نُخْرِجُكُمْ طِفْلًا ثُمَّ لِتَبْلُغُوا أَشُدَّكُمْ وَمِنْكُمْ مَنْ يُتَوَفَّىٰ وَمِنْكُمْ مَنْ يُرَدُّ إِلَىٰ أَرْذَلِ الْعُمُرِ لِكَيْلَا يَعْلَمَ مِنْ بَعْدِ عِلْمٍ شَيْنًا وَتَرَىٰ الْأَرْضَ هَامِدَةً فَإِذَا أَنْزَلْنَا عَلَيْهَا الْمَاءَ اهْتَزَّتْ وَرَبَتْ وَأَنْبَتَتْ مِنْ كُلِّ رَوْحٍ بِهِيجٍ)

O mankind! If you are in doubt about the Resurrection, then verily! We have created you (i.e. Adam) from dust, then from a Nutfah (mixed drops of male and female sexual discharge i.e. offspring of Adam), then from a clot (a piece of thick coagulated blood) then from a little lump of flesh, some formed and some unformed (miscarriage), that We may make (it) clear to you (i.e. to show you Our Power and Ability to do what We will). And We cause whom We will to remain in the wombs for an appointed term, then We bring you out as

³⁷ - Gary, M. (1992), The Amazing Qur'an . Darul-Islam, Abdul-Qasim Publishing House (AQP) www.islamhouse.com page 14

³⁸ - Gary, M. (1992), ibid, page 14-15

³⁹ - Qur'an, 96:1-2

⁴⁰ - Qur'an, 75:37-39

⁴¹ - Zakir, N. op cit page 56

⁴² - Qur'an, 39:6

⁴³ - Qur'an, 23:12-14

⁴⁴ - Zakir, N. op cit page 61

infants, then (give you growth) that you may reach your age of full strength...⁴⁵

In connection of the evidence of the power of Allah and His Oneness, Allah tells us that He is the Creator of what is in the heavens and earth, and what is between them. He is the Sovereign and Controller alternating the night and day⁴⁶

With the above verses and the commentary of the specialist on these subject, one would without no doubt accept the Qur'an as a divine book sent as a mercy to the world to educate human beings on his duty towards his Lord and at the same time make use of the scientific information therein for his benefit through the use of the intellect bestowed on him by The Almighty Designer of the everything.

Agricultural Science:

Allah made mentioned on the sources of our food through the rain which He provided to the earth to sustain us. The reason of providing us with all this needs is to recognize Him and worship Him alone. The following verses is in this direction:

﴿يَا أَيُّهَا النَّاسُ اعْبُدُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ وَالَّذِينَ مِنْ قَبْلِكُمْ لَعَلَّكُمْ تَتَّقُونَ الَّذِي جَعَلَ لَكُمْ الْأَرْضَ فِرَاشًا وَالسَّمَاءَ بِنَاءً وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَ بِهِ مِنَ الثَّمَرَاتِ رِزْقًا لَكُمْ فَلَا تَجْعَلُوا لِلَّهِ أَنْدَادًا وَأَنْتُمْ تَعْلَمُونَ﴾

21. O mankind! Worship your Lord (Allah), Who created you and those who were before you so that you may become Al-Muttaqoon (the pious – see V.2:2).

22. Who has made the earth a resting place for you, and the sky as a canopy, and sent down water (rain) from the sky and brought forth therewith fruits as a provision for you. Then do not set up rivals unto Allah (in worship) while you know (that He Alone has the right to be worshipped).⁴⁷

(And sends down for you water (rain) from the sky) meaning, through the clouds, when they need the rain. Hence, Allah caused the various types of vegetation and fruits to grow as a means of sustenance for people and their cattle. Allah reiterated this bounty in various parts of the Qur'an. There is another Ayah that is similar to this Ayah (2:22), that is, Allah's statement in (Q 40:64).⁴⁸

Mathematics:

The most difficult calculation on the surface of the earth is on fractions. Fraction system of calculation was introduced to the world 1,437 years ago when there is none in the world that even dream about it. The following verses centered on this aspect:

﴿يُوصِيكُمُ اللَّهُ فِي أَوْلَادِكُمْ لِلذَّكَرِ مِثْلُ حَظِّ الْأُنثَيَيْنِ فَإِنْ كُنَّ نِسَاءً فَوْقَ اثْنَتَيْنِ فَلَهُنَّ ثُلُثَا مَا تَرَكَ وَإِنْ كَانَتْ وَاحِدَةً فَلَهَا النِّصْفُ وَلِأَبَوَيْهِ لِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ مِمَّا تَرَكَ إِنْ كَانَ لَهُ وَلَدٌ فَإِنْ لَمْ يَكُنْ لَهُ وَلَدٌ وَوَرِثَهُ أَبَوَاهُ فَلِأُمِّهِ الثُّلُثُ فَإِنْ كَانَ لَهُ إِخْوَةٌ فَلِأُمِّهِ السُّدُسُ مِنْ بَعْدِ وَصِيَّةٍ يُوصِي بِهَا أَوْ دَيْنٍ آبَاؤُكُمْ وَأَبْنَاؤُكُمْ لَا تَدْرُونَ أَلَيْسَ

أَقْرَبُ لَكُمْ نَفْعًا فَرِيضَةٌ مِنَ اللَّهِ إِنْ اللَّهُ كَانَ عَلِيمًا حَكِيمًا وَلَكُمْ نِصْفُ مَا تَرَكَ أَزْوَاجُكُمْ إِنْ لَمْ يَكُنْ لَهُنَّ وَلَدٌ فَإِنْ كَانَ لَهُنَّ وَلَدٌ فَلِكُمُ الرُّبْعُ مِمَّا تَرَكَنَّ مِنْ بَعْدِ وَصِيَّةٍ يُوصِي بِهَا أَوْ دَيْنٍ وَلَهُنَّ الرُّبْعُ مِمَّا تَرَكَنَّ إِنْ لَمْ يَكُنْ لَكُمْ وَلَدٌ فَإِنْ كَانَ لَكُمْ وَلَدٌ فَلَهُنَّ الثُّمُنُ مِمَّا تَرَكَنَّ مِنْ بَعْدِ وَصِيَّةٍ يُوصِي بِهَا أَوْ دَيْنٍ وَإِنْ كَانَ رَجُلٌ يُورِثُ كَلَالَةً أَوْ امْرَأَةٌ وَلَهُ أَخٌ أَوْ أُخْتٌ فَلِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ فَإِنْ كَانُوا أَكْثَرَ مِنْ ذَلِكَ فَهُمْ شُرَكَاءُ فِي الثُّلُثِ مِنْ بَعْدِ وَصِيَّةٍ يُوصِي بِهَا أَوْ دَيْنٍ غَيْرِ مُضَارٍ وَصِيَّةٍ مِنَ اللَّهِ وَاللَّهُ عَلِيمٌ حَلِيمٌ﴾

11. Allah commands you as regards your childrens (inheritance); to the male, a portion equal to that of two females; if (there are) only daughters, two or more, their share is two thirds of the inheritance; if only one, her share is half. For parents, a sixth share of inheritance to each if the deceased left children; if no children, and the parents are the (only) heirs, the mother has a third; if the deceased left brothers or (sisters), the mother has a sixth. (The distribution in all cases is) after the payment of legacies he may have bequeathed or debts. You know not which of them, whether your parents or your children, are nearest to you in benefit, (these fixed shares) are ordained by Allah. And Allah is Ever All-Knowing, All-Wise.

12. In that which your wives leave, your share is a half if they have no child; but if they leave a child, you get a fourth of that which they leave after payment of legacies that they may have bequeathed or debts. In that which you leave, their (your wives) share is a fourth if you leave no child; but if you leave a child, they get an eighth of that which you leave after payment of legacies that you may have bequeathed or debts. If the man or

woman whose inheritance is in question has left neither ascendants nor descendants, but has left a brother or a sister, each one of the two gets a sixth; but if more than two, they share in a third; after payment of legacies he (or she) may have bequeathed or debts, so that no loss is caused (to anyone). This is a Commandment from Allah; and Allah is Ever All-Knowing, Most-Forbearing.⁴⁹

The following and the last honorable Ayah in this Surah contain the knowledge of Al-Fara'id, inheritance. The knowledge of Al-Fara'id is derived from these three Ayat and clear ahadiths which explain them. Learning this knowledge is encouraged, especially the specific things mentioned in the Ayat Ibn `Uyaynah said; "Knowledge of Al-Fara'id was called half of knowledge, because it effects all people."⁵⁰

Before these verses was revealed there is no single human being on earth that knows anything of this form. And this law of inheritance brought series of mathematical calculations i.e. Lowest Common Multiples (LCM).

Technology

Technology is as old as man himself on earth. The first man on earth Adam was the first person whom Allah bestowed the knowledge of everything on. And it was also for his sake that

⁴⁵ - Qur'an, 22:5

⁴⁶ - Umar, I.K. (d. 774 AH), *Tafsir al-Qur'an al-Azeem, op. cit.*, p. 360

⁴⁷ - Qur'an, 2:21-22

⁴⁸ - Umar, I.K. (d. 774 AH), *Tafsir al-Qur'an al-Azeem, op. cit.*, p. 119

⁴⁹ - Qur'an, 4:11-12

⁵⁰ - Umar, I.K. (d. 774 AH), *Tafsir al-Qur'an al-Azeem, op. cit.*, p. 981

the first information concerning this earth was done when Allah informed the Angels on His intention to create a vicegerent on earth. Both knowledge and information are part of technology which were later built upon through various generations till date. And it will continue improvement in the future generations till the end of human race on earth. Allah said in the Qur'an concerning information to the Angels:

﴿وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيفَةً قَالُوا أَتَجْعَلُ فِيهَا مَنْ يُسُودُ فِيهَا وَيَسْفِكُ الدِّمَاءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ﴾

And (remember) when your Lord said to the angels: "Verily, I am going to place (mankind) generations after generations on earth."⁵¹

﴿وَعَلَّمَ آدَمَ الْأَسْمَاءَ كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ فَقَالَ أَنْبِئُونِي بِأَسْمَاءِ هَؤُلَاءِ إِنْ كُنْتُمْ صَادِقِينَ قَالُوا لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ﴾

31. And He taught Adam all the names (of everything) , then He showed them to the angels and said, "Tell Me the names of these if you are truthful."

32. They (angels) said: "Glory be to You, we have no knowledge except what you have taught us. Verily, it is You, the All-Knower, the All-Wise."⁵²

And after this episode of Allah's test on the Angels, He elevated Adam above them by commanding Adam to display his knowledge. Which he did and earn the respect to be accorded to him by all the Angels.

33. He said: "O Adam! Inform them of their names," and when he had informed them of their names, He said: "Did I not tell you that I know the Ghaib (unseen) in the heavens and the earth, and I know what you reveal and what you have been concealing?"⁵³

It should be understood that the first assignment took by Adam was on knowledge of things and their functions (Technology). And the first thing commanded on Prophet Muhammad was on knowledge and its source (Technology).

That of Adam have been seen in the above verses. That of Prophet Muhammad (pbuh) during his first encounter with Jibril in Cave Hira in which he was declared as a Prophet are on the first five verses revealed to him which are as follows:

﴿اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ اقْرَأْ وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلَّمَ بِالْقَلَمِ عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ﴾

1. Read! In the Name of your Lord, Who has created (all that exists),

2. Has created man from a clot (a piece of thick coagulated blood).

3 Read! And your Lord is the Most Generous,

4. Who has taught (the writing) by the pen (the first person to write was Prophet Idrees (Enoch)),

⁵¹ - Qur'an, 2:30

⁵² - Qur'an, 2:31-32

⁵³ - Qur'an, 2:33

5. Has taught man that which he knew not.⁵⁴

With this background, we have to look at information technology as contained in some verses in accordance with Allah's information to the Angels about his intention to create a vicegerent and information given to Adam concerning names of things and their functions. This will be treated with most of the supportive verses of the Qur'an to both.

Information technology have made the whole world to become a global village in which distance does not matter in the case of communication. Transferring of pictures, images, films and texts can be sent with few seconds to be accessed by the recipient. Shaikh Mohd Saifullah asserted the following:

Information and communication technology, or ICT for short, is a technology that has changed the way we live in today's world. It would be difficult to imagine conducting our daily affairs without reliance on ICT. This technology has expedited communication between people as well as increasing the capability of data processing and storage. In other words, in this era catalysed by ICT, the geographical and political boundaries, physical distance and time difference have been rendered immaterial. People can now communicate in real time regardless of time zones and distance between them. In short, the boundaries of time and space have been torn down by ICT. As a result, we now have a global village whose interaction and communication go beyond race, religion, culture and nation. For Muslims, this is hardly surprising as the concept of global village has been mentioned in the Quran in the oft-quoted verse:⁵⁵

﴿يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُمْ مِنْ ذَكَرٍ وَأُنثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارَفُوا إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَتْقَاكُمْ إِنَّ اللَّهَ عَلِيمٌ خَبِيرٌ﴾

"O mankind! We created you from a single (pair) of a male and a female, and made you into nations and tribes, that ye may know each other (not that ye may despise each other). Verily the most honoured of you in the sight of God is (he who is) the most righteous of you. And God has full knowledge and is well-acquainted (with all things)."⁵⁶

This does not start without foundation. In fact, apart from that of Adam and Angels above, it was stated that "...Some of the earliest and primitive manifestations of communication technology were the hieroglyphs used by the ancient Egyptians, the use of pigeons to send messages by the Chinese, and the use of smoke signals by the native Americans..."⁵⁷

There are some verses which acts as foundation for the ICT during different time and ages of the world. We are going to see the verses as follows.

⁵⁴ - Qur'an, 96:1-5

⁵⁵ - Mohd, S.M.S, Motivation For Using Information And Communication Technology (ICT) In Da'awah, page 63.

<http://ejum.fsktm.um.edu.my/article/1246>. Retrieved on 8/5/2016

⁵⁶ - Qur'an, 49:13

⁵⁷ - Mohd, S.M.S, op cit, page 64

Prophet Sulayman commandment of the wind and his control over it through communication:

﴿وَلِسُلَيْمَانَ الرِّيحَ عَاصِفَةً تَجْرِي بِأَمْرِهِ إِلَى الْأَرْضِ الَّتِي بَارَكْنَا فِيهَا وَكُنَّا بِكُلِّ شَيْءٍ عَلِيمِينَ﴾

And to Sulaiman (Solomon) (We subjected) the wind strongly raging, running by his command towards the land which We had blessed. And of everything We are the All-Knower.⁵⁸

Prophet Sulayman controlled the shayatin while they worked for him:

﴿وَمِنَ الشَّيَاطِينِ مَنْ يُغْوِصُونَ لَهُ وَيَعْمَلُونَ عَمَلًا دُونَ ذَلِكَ وَكُنَّا لَهُمْ حَافِظِينَ﴾

And of the Shayatin (devils) (from the jinns) were some who dived for him, and did other work besides that; and it was We Who guarded them.⁵⁹

Communication between Sulayman and the Hoopoe on the technological design of the Queen of Sheba's chair could also be viewed below:

﴿فَمَكَثَ غَيْرَ بَعِيدٍ فَقَالَ أَحَطْتُ بِمَا لَمْ نَحْطُ بِهِ وَجِئْتُكَ مِنْ سَبَإٍ بِنَبَأٍ يَقِينٍ إِنِّي وَجَدْتُ امْرَأَةً تَمْلِكُهُمْ وَأُوتِيَتْ مِنْ كُلِّ شَيْءٍ وَلَهَا عَرْشٌ عَظِيمٌ وَجَدْتُهَا وَقَوْمَهَا يَسْجُدُونَ لِلشَّمْسِ مِنْ دُونِ اللَّهِ وَزَيَّنَ لَهُمُ الشَّيْطَانُ أَعْمَالَهُمْ فَصَدَّهُمْ عَنِ السَّبِيلِ فَهُمْ لَا يَهْتَدُونَ أَلَا يَسْجُدُوا لِلَّهِ الَّذِي يُخْرِجُ الْخَبْءَ فِي السَّمَاوَاتِ وَالْأَرْضِ وَيَعْلَمُ مَا تُخْفُونَ وَمَا تُعْلِنُونَ اللَّهُ لَا إِلَهَ إِلَّا هُوَ رَبُّ الْعَرْشِ الْعَظِيمِ قَالَ سَتُنظرُ أُصْدَقْتُ أَمْ كُنْتُ مِنَ الْكَاذِبِينَ أَذْهَبَ بِكِتَابِي هَذَا فَأَلْقِيهِ إِلَيْهِمْ لَمْ يَرْوُلْ عَنْهُمْ فَأَنْظُرْ مَاذَا يَرْجِعُونَ﴾

22. But the hoopoe stayed not long, he (came up and) said: "I have grasped (the knowledge of a thing) which you have not grasped and I have come to you from Saba (Sheba) with true news.

23. "I found a woman ruling over them, and she has been given all things that could be possessed by any ruler of the earth, and she has a great throne.

24. "I found her and her people worshipping the sun instead of Allah, and Shaitan (Satan) has made their deeds fair-seeming to them, and has barred them from (Allahs) Way, so they have no guidance,"

25. Al-La (this word has two interpretations) (A) (As Shaitan (Satan) has barred them from Allahs Way) so that they do not worship (prostrate before) Allah, or (B) So that they may worship (prostrate before) Allah, Who brings to light what is hidden in the heavens and the earth, and knows what you conceal and what you reveal.

26. Allah, La ilaha illa Huwa (none has the right to be worshipped but He), the Lord of the Supreme Throne!

27. (Sulaiman (Solomon)) said: "We shall see whether you speak the truth or you are (one) of the liars.

28. "Go you with this letter of mine, and deliver it to them, then draw back from them, and see what (answer) they return."⁶⁰

(And she has a great throne) meaning, a tremendous chair adorned with gold and different kinds of jewels and pearls. The historians said, "This throne was in a great, strong palace which was high and firmly constructed. In it there were three hundred and sixty windows on the east side, and a similar number on the west, and it was constructed in such a way that each day when the sun rose it would shine through one window, and when it set it would shine through the opposite window. And the people used to prostrate to the sun morning and evening. This is why the hoopoe said: (I found her and her people worshipping the sun instead of Allah, and Shaytan has made their deeds fair seeming to them, and has prevented them from the way,) meaning, from the way of truth⁶¹

Sulayman heard the statement of ant while on his way with his armies:

﴿حَتَّىٰ إِذَا أَتَوْا عَلَىٰ وَادِ النَّمْلِ قَالَتْ نَمْلَةٌ يَا أَيُّهَا النَّمْلُ ادْخُلُوا مَسَاكِنَكُمْ لَا يَحْطِمَنَّكُمْ سُلَيْمَانُ وَجُنُودُهُ وَهُمْ لَا يَشْعُرُونَ فَتَبَسَّمَ ضَاحِكًا مِنْ قَوْلِهَا وَقَالَ رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَىٰ وَالِدَيَّ وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ وَأُدْخِلْنِي بِرَحْمَتِكَ فِي عِبَادِكَ الصَّالِحِينَ﴾

18. Till, when they came to the valley of the ants, one of the ants said: "O ants! Enter your dwellings, lest Sulaiman (Solomon) and his hosts crush you, while they perceive not."

19. So he (Sulaiman (Solomon)) smiled, amused at her speech and said: "My Lord! Inspire and bestow upon me the power and ability that I may be grateful for Your Favours which You have bestowed on me and on my parents, and that I may do righteous good deeds that will please You, and admit me by Your Mercy among Your righteous slaves."⁶²

All the above verses stated clearly how human being is able to communicate with even other animals and creatures with full understanding. So with this, Information and Communication Technology has been in existence as the Qur'an addresses it in the verses above amongst other verses.

Engineering

Engineering is also another area in which Qur'an addressed. The act of extraction of raw materials and purifying it for use is discussed in the holy Qur'an as follows:

﴿وَعَلَّمْنَاهُ صَنْعَةَ لَبُوسٍ لَكُمْ لِتُحْصِنَكُمْ مِنْ بَأْسِكُمْ فَهَلْ أَنْتُمْ شَاكِرُونَ﴾

And We taught him the making of metal coats of mail (for battles), to protect you in your fighting. Are you then grateful?⁶³

(And We taught him the making of metal coats of mail, to protect you in your fighting.) meaning, the manufacture of

⁵⁸ - Qur'an, 21:81

⁵⁹ - Qur'an, 21:82

⁶⁰ - Qur'an, 27:22-28

⁶¹ - Umar, I.K, (d. 774 AH), *Tafsir al-Qur'an al-Azeem*, op. cit, p. 3685-3686

⁶² - Qur'an, 27:18-19

⁶³ - Qur'an, 21:80

chain-armor. Qatadah said that before that, they used to wear plated armor; he was the first one to make rings of chain-armor. This is like the Ayah: (And We made the iron soft for him. Saying: "Make you perfect coats of mail, and balance well the rings of chain armor.") 34:10-11, meaning, do not make the pegs so loose that the rings (of chain mail) will shake, or make it so tight that they will not be able to move at all. Allah says: (to protect you in your fighting.) meaning, in your battles.⁶⁴

One will wonder at that age that raw materials are processed in to iron sheets and rods to make spears, sword, lances, shields etc. for war and even agriculture. This showed that Allah the Creator of everything in every generation knows the level of development that rhymes with their age.

Transmission of Messages:

In this present day, the world has become a global village whereby distance is no more a problem in sending messages. As we now send images, of pictures, films, text of any kind to anywhere in the world and the recipient download it within a few seconds. This also has its foundation in the Qur'an as could be seen below:

(قَالَ يَا أَيُّهَا الْمَلَأُ أَيُّكُمْ يَأْتِينِي بِعَرْشِهَا قَبْلَ أَنْ يَأْتُونِي مُسْلِمِينَ قَالَ عَفْرَيْتُ مِنَ الْجِنِّ أَنَا آتِيكَ بِهِ قَبْلَ أَنْ تَقُومَ مِنْ مَقَامِكَ وَإِنِّي عَلَيْهِ لَقَوِيٌّ أَمِينٌ قَالَ الَّذِي عِنْدَهُ عِلْمٌ مِنَ الْكِتَابِ أَنَا آتِيكَ بِهِ قَبْلَ أَنْ يَرْزُقَ إِلَيْكَ طَرَفَكَ فَلَمَّا رَأَاهُ مُسْتَقْبِرًا عِنْدَهُ قَالَ هَذَا مِنْ فَضْلِ رَبِّي لِيَبْلُوَنِي أَأَشْكُرُ أَمْ أَكْفُرُ وَمَنْ شَكَرَ فَإِنَّمَا يَشْكُرُ لِنَفْسِهِ وَمَنْ كَفَرَ فَإِنَّ رَبِّي غَنِيٌّ كَرِيمٌ)

38. He said: "O chiefs! Which of you can bring me her throne before they come to me surrendering themselves in obedience?"

39. An Ifreet (strong) from the jinns said: "I will bring it to you before you rise from your place (council). And verily, I am indeed strong, and trustworthy for such work."

40. One with whom was knowledge of the Scripture said: "I will bring it to you within the twinkling of an eye!" then when (Sulaiman (Solomon)) saw it placed before him, he said: "This is by the Grace of my Lord to test me whether I am grateful or ungrateful."⁶⁵

With the above verses, it showed that physical things were transferred from one place to another despite the distance in a few second without the rigor of going through land (Horse, camel or donkey). This is the reason Allah pointed to it by saying: "And He has created (things) you know not"

Medical Sciences (Honey as Medicine):

The issue of medicine is deliberately delayed to this last part of this write up due to its importance to human being. Allah the Most High made a clear medication for ill-health with the use of honey. The following verse is in this direction.

(وَأَوْحَىٰ رَبُّكَ إِلَى النَّحْلِ أَنْ اتَّخِذِي مِنَ الْجِبَالِ بُيُوتًا وَمِنَ الشَّجَرِ وَمِمَّا يَعْرِشُونَ ثُمَّ كُلِي مِنْ كُلِّ الثَّمَرَاتِ فَاسْلُكِي سُبُلَ رَبِّكِ ذُلُلًا يَخْرُجُ مِنْ بَطُونِهَا شَرَابٌ مُخْتَلِفٌ أَلْوَانُهُ فِيهِ شِفَاءٌ لِلنَّاسِ إِنَّ فِي ذَلِكَ لَآيَةً لِقَوْمٍ يَتَفَكَّرُونَ)

68. And your Lord inspired the bee, saying: "Take you habitations in the mountains and in the trees and in what they erect.

69. "Then, eat of all fruits, and follow the ways of your Lord made easy (for you)." There comes forth from their bellies, a drink of varying colour wherein is healing for men. Verily, in this is indeed a sign for people who think.⁶⁶

III. CONCLUSION

As we have seen, we have acknowledged that Qur'an addresses both Science and Technology. It is not that it is a book of Sciences but as the last testament to the whole universe, it ought to address all that are necessary for humanity of all ages in accordance with their level of understanding development. The sciences we are discussing about is not that of evolutionists and materialists. But those Scientists who depends on reality of nature through the recognition of The Creator as the sole realist of everything. Therefore, I intend concluding this right up by the statement of Haruna Yahaya as follows:

No matter how hard evolutionists try to prove the contrary, every scientific discovery points to the existence of God and the -subtleties of His creation. The complex forms of life that suddenly appeared in the Cambrian period are proof of this creation.⁶⁷

REFERENCES

- [1]. Aneesuddin, M.I.R. (1999). *The Universe Seen Through the Qur'an*. Published By A. Attique Publishers Inc, Canada
- [2]. Gary, M. (1992). *The Amazing Qur'an. Dar Al-Islam*. Abdul-Qasim Publishing House (AQPH). www.islamhouse.com. Retrieved on 08/05/2016
- [3]. Haruna, Y. (2004). *The Qur'an Leads The Way To Science*. Global Publishing, Gursel. Mah. Darlaceze Caddesi No: 9 Funya Sk. Eksioglu Is Merkazi B Block D.5 Okmeydani-Istanbul/Turkey
- [4]. Longman. (2005). *Dictionary of Contemporary English*. (4th Eds) England, Edinburgh
- [5]. Mohd, S.M.S. "Quranic Motivation For Using Information And Communication (ICT) In Da'awah. Retrieved on 08/05/2016 <http://ejum.fsktm.um.edu.my/article/1246>. pdf.
- [6]. Umar, I.K, (d. 774 AH), *Tafsir al-Qur'an al-Azeem: Ibn Kathir*. Abridge and Supervised by Safiur-Rahman A. Darussalam, Riyadh.
- [7]. Zakir, N. (2001). *The Qur'an & Modern Science: Compatible Or Incompatible?* First Published By Islamic Research Foundation (IRF) 56/58 Tandel Street (North), Dongri, Mumbai-400 009 (India)

⁶⁴ - Umar, I.K, (d. 774 AH), *Tafsir al-Qur'an al-Azeem, op. cit*, p. 3228-3229

⁶⁵ - Qur'an, 27: 38-40

⁶⁶ - Qur'an, 16:68-69

⁶⁷ - Haruna, Y. op cit page 63