In the present day scientific world, the science Development is providing human progress Opportunities for solving human life problems, escalating population, depleting resources and increasing aspirations, the lone torch bearer of human hope and prosperity is science and technology which is widely accepted plays a crucial role in the development of nation's socio-economic status. This ringing the bell to make alert everyone welcoming challenges with proper actions.

I heartily welcome the publication of this book and would like to appreciate the team members involved in bringing out such a beautiful form with all its contents.

Dr. Alireza Haghpeima

Chapter:………..

**RELIGION AND SCIENCE**

 The German physicist Albert Einstein said that science without religion was lame, and religion without science was blind. One thing I have learned in a long life: that all our science, measured against reality, is primitive and childlike — and yet it is the most precious thing we have. The question over whether science and religion can exist or co-exist has been going on since the creation of mankind and continues to divide opinion even today.

1.I am convinced that evolution and religious beliefs need not be in contradiction. Indeed, if science and religion are properly understood, they cannot be in contradiction because they concern different matters. Science and religion are like two different windows for looking at the world. The two windows look at the same world, but they show different aspects of that world. Science concerns the processes that account for the natural world: how planets move, the composition of matter and the atmosphere, the origin and adaptations of organisms. Religion concerns the meaning and purpose of the world and of human life, the proper relation of people to the Creator and to each other, the moral values that inspire and govern people’s lives. Apparent contradictions only emerge when either the science or the beliefs, or often both, trespass their own boundaries and wrongfully encroach upon one another’s subject matter.

**Francisco Ayala, biologist, University of California, Irvine**

2.Observe: science and religion \*do\* coexist. The first scientists were clergymen. Today, religious institutions from universities to the Vatican Observatory support professional science. And the proportion of scientists who are themselves believers mirrors the fraction in the general population. Science is based on the religious assertion that Creation is orderly, free from the interference of nature gods, and worthy of study. So who continues to push this myth of a “conflict”? What is their agenda?

**Jesuit Brother Guy Consolmagno, astronomer at the Vatican Observatory**

3.Religion and science are like oil and water. They might co-exist, but they can never mix to produce a homogeneous medium. Religion and science are fundamentally incompatible. They disagree profoundly on how we obtain knowledge of the world. Science is based observation and reasoning from observation. Religion assumes that human beings can access a deeper level of information that is not available by either observation or reason. The scientific method is proven by its success. The religious method is refuted by its failure.

**Victor J. Stenger, Emeritus Professor of Physics, University of Hawaii**

4.Personally I’m not religious at all, but I have religious scientists as friends and they seem to manage just fine. I think those people are more likely to take some religious things a bit less literally though, like a religious geologist probably wouldn’t think that the Earth and everything else was actually made by God 6000 years ago, since their science tells them that the Earth is 4.5 billion years old.

**Grant Kennedy, astrophysicist, University of Cambridge**

5.Science and religion are not at odds. Science is simply too young to understand. Whether or not you believe in God, you must believe this: when we as a species abandon our trust in a power greater than us, we abandon our sense of accountability. Faiths, all faiths, are admonitions that there is something we cannot understand, something to which we are accountable. With faith we are accountable to each other, to ourselves, and to a higher truth. Religion is flawed, but only because man is flawed. Science tells me God must exist. My mind tells me I will never understand God. And my heart tells me I am not meant to.

**Dan Brown, author of Angels & Demons**

6.Science is not only compatible with spirituality; it is a profound source of spirituality. When we recognize our place in an immensity of light-years and in the passage of ages, when we grasp the intricacy, beauty, and subtlety of life, then that soaring feeling, that sense of elation and humility combined, is surely spiritual. So are our emotions in the presence of great art or music or literature, or acts of exemplary selfless courage such as those of Mohandas Gandhi or Martin Luther King, Jr. The notion that science and spirituality are somehow mutually exclusive does a disservice to both.

**The late Carl Sagan, American astrophysicist**

7.From religion comes a man’s purpose; from science, his power to achieve it. Sometimes people ask if religion and science are not opposed to one another. They are: in the sense that the thumb and fingers of my hands are opposed to one another. It is an opposition by means of which anything can be grasped.

**The late William H. Bragg, British physicist**

8.Religion and science are indeed incompatible. Religion and science both offer explanations for why life and the universe exist. Science relies on testable empirical evidence and observation. Religion relies on subjective belief in a creator. Only one explanation is correct. The other must be discarded. Explanations require evidence. None exists for a creator outside the human mind, whereas the evidence for evolution and the origins of life mounts every day. In the face of this u evidence, religious belief in a divinity is no more viable than belief in the now-proverbial Flying Spaghetti Monster.

**Lorna Salzman, American environmental activist**

9.There is a fundamental difference between religion, which is based on authority, and science, which is based on observation and reason. Science will win because it works. I believe the universe is governed by the laws of science. The laws may have been decreed by God, but God does not intervene to break the laws. When you look at the vast size of the universe, and how insignificant and accidental human life is in it, the existence of a God seems most implausible.

**Physicist Stephen Hawking**

**INTRODUCTION**

 **A**mongst us, human beings, none is completely devoid of the innate feeling - even from time to time - that there is a Creating God behind this universe. Such a feeling may be frustrating and people may be prevented from responding to it by the teachings they get as a result of their belonging to a particular environment, their indulgence in earthly life and cheap pleasure naturally, the Almighty Creator should differ from us in all respects:

**“And unto Him the like is not” (Ash-Shûrâ: 11)** **The Qur’ân.**

Most people could not be easily induced by this sincere feeling of the existence of the Creator to follow the right path leading to Him. Thus, Allâh [God’s name in Islâm] sent Prophets and Messengers – Allâh’s prayer and peace be upon them – with Divine support in the form of miracles suitable to their environment, until the advent of the last of His messengers, Prophet Muhammad, who emerged after the maturity of the human thinking when the age of science was immanent; Allâh supported him with the Qur’ân to be an Eternal Miracle.

 Evidently, nothing can remain forever on earth as an eternal miracle except a unique book. The inimitable elocution and teachings of such a book must be conspicuous and convincing at all stages of civilization. The Qur’ân is the only book which fulfils such conditions. The very beginning of the revelation was an outstanding signal for the acquisition of knowledge and a forerunner of giving it its due dignity:

 **“Read in the name of thy Master Who created; reated man from a clot; read and thy Lord is Most Generous; Who taught by the pen; taught man what** **he knew not”.**

**he knew not”. (Al- ‘Alaq: 1-5) The Qur’ân.**

 At the different stages of the revelation, the Qur’ân pointed out that knowledge meant all branches of science.

**“But it is clear signs in the hearts of those whom (the knowledge) has reached”;**

**(Al- ‘Ankabût : 49) The Qur’ân.**

 In fact, a great number of the Qur’anic verses are cosmic verses which reveal the signs of the Almighty Creator in the universe. This is only natural, since He Who created the universe is He Who supported Prophet Muh ammad by the Glorious Qur’ân [Allâh’s Own Words] to be the Eternal Miracle. For example, we read:

**“Assuredly, in the Heavens and the Earth are signs for the believers; and in the creation of yourselves and living beings He disperses on Earth are signs to the firm in faith;**

**and in the variation of night and day and the sustenance which Allâh sends down from the Heaven, whereby He gives life to the Earth after its death, and in sending winds in their ways are signs for a people of discernment”**

**(Al-Jâthiyah : 3-5) The Qur’ân.**

 Many verses need comment, or detailed explanation on correct scientific basis, by means of specialists before one can realize how far they prove to be miraculous in the age of science. The following are examples of my comments on a scientific basis on verses of this type.

**SOME COMMENTS**

**BASED ON ASTRONOMY**

1. **“With power and skill did We construct the Heavens and indeed We expand them”.**

**(Adh-Dhariyât : 47) The Qur’ân.**

Comments on this verse passed by three scientifically correct phases, each of which suited its own age of civilization.

A — The verse was at first explained by saying that inspire of the almost unlimited amounts of matter and radiation comprised the universe and form it, Almighty Allâh has more and more of them. Certainly this is true and fair.

B — The verse, also, declares a fact that has been established gradually by actual observation. Thus, the progress in manufacturing telescopes within the last two centuries, and the recent use of radio telescopes, extended our scope of vision from the solar system [5 light hours in diameter], to the Milky Way [100,000 light years in diameter], to the other galaxies such as Andromeda [750,000 light years far], to quasars and pulsars [billions of light-years far]. Such galaxies are so remote from us that they appear as mere light spots in the Heavens. This is in spite of the fact that each galaxy is formed of millions and millions of stars. Miraculously enough Almighty Allâh says in the Qur’ân :

2. **“Indeed I could swear by the sites of the stars and it is a great oath if you are aware of them.”**

**(Al-Wâqi‘ah : 75-76) The Qur’ân.**

C — Finally, a third meaning of the verse : “With power and skill did We construct the Heavens and indeed we expand them”, is obviously that the universe expands. However, the expansion of the universe has been established by observation. Galaxies are receding away from us (the Milky Way) at speeds which are proportional to their distances from us. Also, the expansion of the universe has been shown to be an outstanding result of the Theory of Relativity.

 Amongst the outstanding services which the Earth’s atmosphere renders to life in general is that it contains the oxygen on which this life depends. The amounts of this oxygen, together

with the total atmosphere pressure decrease rapidly with elevation. If we assume that the total oxygen at the Earth’s surface is 20 units, then at the height of 10 kilometers from the surface it becomes equal to 2 units only, and at a height of 30 kilometers it will be 0.2 units only.

 Any one who happens to ascend vertically up in the atmosphere will soon feel that he needs more and more air to inhale. This means that he will feel the need to a wider breast to inhale the proper amount of oxygen. This fact was first stated by the

Qur’ân which says:

**3. “That whom He willeth to leave straying, He makes his breast close and constricted as if he has to rise up in the**

**sky”.**

**(Al-An ‘âm: 125) The Qur’ân.**

 It is worth mentioning in passing, however, that the Qur’ânic verses related to astronomy are numerous, and we have to give brief comments on a limited number of verses chosen to represent various branches of astronomy.

 Man always tried to solve the mystery of the origin of life. As far back as the history of human thought can be traced, there is evidence of this problem. Even the greater problem of the origin of the universe can be traced back, and according to the cosmogonies developed by primitive societies, the birth of the universe was a problem of generation on a gigantic scale, resulting from a monstrous principal egg!

Strangely enough, this is also the modern accepted theory! However, there is a verse in the Qur’ân which says :

**“Do not the infidels see that the heavens and the Earth were joined together as one unit before We split them apart and that We made of water every living thing?”**

**(Al-Anbiyâ’: 30) The Qur’ân.**

 The main difficulty in such studies arises from the fact that the connection between theory and observation is so slight that it is always liable to break down. Bold statements and imaginary theories are always ready to fill in the gaps of our present ignorance.

 Another main difficulty arises from the fact that science ignores entirely the relations between the Creator and the creation, and has nothing to do with things beyond the scoped matter and radiation, such as spirits or the hereafter.

 As regards the first difficulty, the Qur’ân says:

**“I made them not to witness the creation of the heavens and the Earth nor their own creation, nor choose I wicked leaders who do not carry out My orders”.**

**(Al-Kahf : 51) The Qur’ân.**

About the second difficulty, the Qur’ân says:

**“Say: Their knowledge is restricted only to things which are apparent to them — either directly or indirectly — during their lives on Earth, but surely they care not to think**

**of the Hereafter”.**

**(Ar-Rûm : 7) The Qur’ân.**

**CONCLUSION AND REMARKS**

 By science is meant all branches of knowledge. It includes studies concerned with the universe and subjects under which fallthe modern sciences such as biology, chemistry, physics, astronomy, meteorology and geology. The Qur’ân, which is the Book of Muslims, raises high the prestige and value of these sciences and encourages people to study them for the general good. The most sublime reference in this respect and most outstanding reality in this connection is that the very first verses of the Qur’ân as revealed by Allâh (God) gave incentive to gain knowledge and to glorify it. The very beginning of the Revelation was actually a signal for the dawn of the age of science and a forerunner of giving knowledge its due dignity. Thus the first verse of the Book says in Sûrat Al ‘Alaq:

**“Read in the name of Allâh (God) the Creator, who created man from a clot. Read and your Master is Most Generous, who taught by the pen, taught man what he knew not”.**

**(Al- ‘Alas: 1-5) The Qur’ân.**

 The Qur’an explains in succession at different stages of the Revelation, the meaning of science and education, and points out to the importance of studying the universe, its matter, energy, and living creatures. These are the sciences by which man gains faith and fear of Allah, in addition to gaining power. For example, we refer to the following verses:

**1. “Those of His servants only who are possessed of knowledge**

**fear Allâh. Surely Allâh is Mighty, Forgiving”.**

**2. “Indeed in the heavens and the earth there are signs for**

**the believers”.**

**3. “And of His signs is the creation of the heavens and the**

**earth and the diversity of your tongues and colors.**

**Surely, there are signs in this for the learned”.**

**4. “Have you any knowledge, if so you would bring it forth**

**to us? You only follow a conjecture”.**

**5. “Say: Are those who know and those who know not,**

**alike?”**

 Other verses not only speak highly of science and scientists, but also draw our attention and direct us to pursue knowledge and discover the secrets of the universe. It is a fact that the scientific renaissance, was due to gathering correct observationsو but the observations in physics are measured and expressed based on mathematical statistics and probabilities, and they cannot describe the reality of the world. In the early principles of quantum mechanics, this nature of statistics and probabilities of the theory is well evident and performing sound experiments. Physical laws are nothing but interpretations of phenomena in the material world.

 Although we do not claim absolute authenticity of such laws, yet we agree that they represent the largest possible amount of authenticity and precision. In the light of growing accuracy

in observation, scientists introduce, from time to time, amendments or generalizations in some of the physical laws so as to bring them closer to what we may call (fact), or to make

them more useful.

This means that continuous observations are to be made concerning earth and heavenly bodies, and this is exactly what the Qur’ân ordains, as there are verses that mean:

**1. “Say: Go through in the earth and thus see how creation began”, declaring that the history of our earth is written on the rocks of its crust.**

**2. “See they not the clouds how they are created? and the sky how it is raised high?”**

**3. “Do they not consider the kingdom of the heavens and the earth and what things Allâh has created?”**

**4. “Say: Bring forth your proof, provided you are right”. Such verses, as well as many others, show that in Islâm it is not wise for the people to have mere fantasy as the basis of their religious ideologies or scientific theories. Any conclusion, which has no support of experience or clear evidence, will not do. In so doing, they will be like those who deduce the properties of matter or explain natural phenomena without making observations or carrying experiments, or those who inherit beliefs without subjecting them to text in order to find out right from wrong.**

 The Qur’ân, describing such people, says: “And when itis said to them come to that which Allâh has revealed and to the Messenger, they say: Sufficient for us is that wherein we found our fathers. What! Even though their fathers knew nothing and had no guidance”?

 Another important point concerning the fact that science in the message of Islâm becomes evident and clear when we see how the Book describes, with scientific precision and accuracy,

matters pertaining to the universe. This shows, unmistakably, the authenticity and truth of the Revelation. It, also, urged Muslims and encouraged them to take interest in science during the so-called middle-ages or dark ages. In this way, many famous Muslim Scientists arose. In astronomy, for example, the activities and discoveries of the following Muslim Astronomers and Mathematicians cannot be forgotten:

**Thabet Ben Qorra**

**El-Bairouny**

**El-Battany**

**Ebn Younis**

**Al-Khalily**

**Gamshid**

**Al-Khouarazmy**

**Prof. Abdus Salam, winner of the Nobel Prize in Elementary Particle Physics**

**Mohammad Abdus Salam NI(M) SPk (/sæˈlæm/; pronounced [əbd̪ʊs səlaːm]; 29 January 1926 – 21 November 1996) was a Pakistani theoretical physicist and a Nobel Prize laureate. He shared the 1979 Nobel Prize in Physics with Sheldon Glashow and Steven Weinberg for his contribution to the electroweak unification theory.**

 The Pakistani physicist's work led to the discovery of the Higgs boson, but he was disowned in his home country for his faith. Abdus salam took the theory of unity of forces from belief in Allah.

 According to modern physics, four fundamental forces exist in nature. Electromagnetic interaction is one of these. The weak interaction—responsible, for example, for the beta decay of nuclei—is another. Thanks to contributions made by Abdus Salam, Sheldon Glashow, and Steven Weinberg in 1968, these two interactions were unified to one single, called electroweak. The theory predicted, for example, that weak interaction manifests itself in “neutral weak currents” when certain elementary particles interact. This was later confirmed.

**what the reader may gain through divine inspiration** and through logical mental judgement are, in Islâm, the proper channels leading to «faith». Faith in the unseen Based on the concept of physics, we need to define hidden variables in order to define a non-probabilistic theory unlike quantum mechanics. Until the end of her life, Einstein did not accept this probabilistic property of quantum mechanics and considered it to be caused by the imperfection of human knowledge and believed that Schrödinger's quantum mechanics is only an incomplete description of the reality of the existing world. In quantum mechanics, what is observed by the measuring instrument is not the reality of what is being measured, but the interaction of the measuring device with the quantity being measured, in other words, the frequency of measurement creates a disturbance in the quantity being measured, and if according to The definition of physics, the result of measurements must be mathematical numbers. These numbers cannot accurately show the nature of the quantity, but are only a disturbed approximation of reality, and only by defining an infinite number of unknown variables and currently undefined in physics can be It added to the precision of the theory and the uncertainty and nature of possibilities moved the theory towards certainty. This is the same faith in what cannot be seen in order to achieve the truth of what exists in reality. Materialism in the common sense means nonbelief in

 Allâh as Creator of the material universe. Some materialists relate creation to what they refer to as mere «accident»!

Needless to say that our belief in Allâh, the Creator, means mainly to made us go, through the various fields of life and capabilities, in some way as Allâh does in dealing with the universe

 The censured and spiteful meaning of «materialism» is to believe that nothing exists beyond the material structure of the universe. And our question to the materialist is, has he been able to provide an accurate interpretation of the reality and concept of matter by cutting the connection between the creator and nature? The answer of quantum mechanics to this very important question is "no" This means that something, properly governed by fixed physical laws, can be brought into existence by absolutely nothing at the very beginning! Surely within the material structure of the universe, matter itself occupies the place where our hands and minds can meet the creator (Allâh).

About the same drawback in human senses and knowledge, the Qur’ân also says:

**“Verily, We proposed to the Heavens and to the Earth and to the mountains to bear the responsibility of knowledge, but they refused the burden, and they feared to receive it. Man undertook to bear it, but has proved to be unjust and senseless!”**

**(Al-Ahzâb : 72) The Qur’ân.**

 However, we, Muslims, know that Allâh is the Creator. He is not subjected to our physical laws, as in quantum mechanics, the state of any physical system at any moment can only be expressed probabilistically, so how can it accurately describe the state of the next moment of the system according to the previous moment? In the theory based on God's creation, it is Allah who creates the world at every moment based on the truth, and basically, access to divine wisdom through the relationships between events and probabilities in the world of physics and its principles is only possible by suspicion creator “ Allah” is above the detection of our senses.,

 In the light of this brief introduction, we no longer forgetthat our knowledge can be received from two sources:

 The first source is the Glorious Qur’ân, and the second source is the established scientific studies or facts. In Islâm,there is no contradiction in any information gained from the two

sources.

 The proper scientific way leading to a proper understanding of the origin of things on Earth is to collect fossils.

**“Say : go and travel through the Earth and see how Allâh did originate creation.”**

**(Al- ‘Ankabût: 20) The Qur’ân.**

 We can explain this verse scientifically by saying: “go and travel through the Earth” in order to study its crust, and to collect fossils from here and there, and remains of organisms that lived throughout the ages. By adopting this scheme, I can say that as far as the present types of the living organisms or species can be traced back throughout the ages, it has been found that no vital change occurred in them. In other words, man remained as man and was created as man. There is no evolution from one species to another, but mere development due to acclimatization, such as change in color, or adaptation due to environment. Study of these things leads to an understanding of the origin of life.

 In other words, evidence of things throughout the ages is recorded on the rocks of these ages in the form of fossils, or berried things that can be carefully studied and traced back.

 The last conclusion of this chapter is The conclusion that I will mention at the end of this chapter is that not only is there no conflict between science and religion, but in the not too distant future, physics will give way to a theory based on the creation of the creator or Allah, a theory that Responding to the need of today's philosophers of physics to provide a complete and accurate description and not probabilities of the current, future, and past state of physical systems and ultimately the world of creation, faith is only in the shadow of the introduction of hidden and indefinable variables with the concepts that until now physicists have limited themselves. It has been suggested that the descriptions that are limited to the quantities that can be described in mathematics have finally led to an imprecise and therefore incomplete description of the truth of the world.

**CREATION THEORY**

*The world is the manifestation of the presence and creation from moment to moment of the Creator or Allah.*