

CHAPTER VI.

EDUCATION, UNIVERSITIES, DEVELOPMENT OF ARTS AND SCIENCE.

History—Geography—Botany—Science—Astronomy and Astrology—
Mathematics and Trigonometry—Natural History and Mineralogy—
Works on Sociology and Agriculture—Medicine.

At the advent of Islam, there were very few men in Mecca who could read and write. Arab education was restricted to poetry, oratory, and a primitive form of astronomy, *kāhana* or augury. There were as many as over twenty places where annual fairs were held during particular seasons, like the *jatras* in India. These places had temples and people from different parts of the country used to assemble, worship and transact personal business, selling their goods and buying noted manufactures of the different places brought together there and settle other affairs. Among these places, Hajar was in Bahrein Islands,²⁹ Oman in South-East Arabia, San'a, Almushaqqar Shihr, Duba, Adan and Suhar in the South-West, Rabiya in the South, Doumatul-jandal, Zul-majaz, Mino, Nilat, Badr, and Hubasha in Central and West Arabia. The most important among these was Ukaz near Tāif, close to Mecca. Here, among other places, the poets used to meet and recite their verses. The annual fair in this place continued for 21 days beginning from the 1st of *Zul-qadah*. The professional story-tellers in the Islamic period used to narrate old legends,

²⁹ Also called Aval Islands, a group of islands in the Iranian Gulf. The most important of these is Bahrein, 33 miles long and 10 miles broad. Manamet, the capital, has a good harbour. The Islands are chiefly famous for their pearl fisheries, which employ during the season some 1,000 boats each manned with from 8 to 60 men. The annual value of pearls is estimated at upwards of £900,000. Since 1867, the Islands have been under British protection. They are inhabited mostly by Arabs.

for which they were paid by the audience. There were such narrators at the time of the Prophet, describing the heroic deeds of not only Arab warriors, but also the Iranian legendary hero Rustam and, perhaps, stories of great men belonging to the Roman and Greek nations were also included. The Prophet did not encourage poets, condemned story-tellers and abolished the gathering at Ukaz, but recommended and even persuaded his followers to acquire knowledge which has been repeatedly praised in the *Quran*, as for instance, in passages like the following :—

“We have given Abraham’s children the book and wisdom” (Chap. IV-54).

“Certainly God conferred a benefit upon the believers by raising among them a messenger and recites to them His communication and purifies and teaches wisdom.”

“Are those, who have knowledge, on an equality with those who have no knowledge?”

The Prophet is reported to have said:—

“To seek knowledge is duty for every Muslim man and woman.”

“Seek knowledge though if it is in China.”

There was no school in Medina or Mecca, but those who wanted to acquire knowledge, used to make a journey either to Syria or to Iran and Mesopotamia. The first known philosopher and physician of Mecca had studied medicine and philosophy in the college of Junde-Shahpur in South-West Iran. It was due to the recommendation of the Prophet that his young companions began to study under non-Muslims of Medina, and left their children under the care of a few learned men, who were available in that city. Therefore, among the next generation, there were a considerable number of literate young men. When the Muslims conquered Egypt, Syria and Iran, and came into contact with the civilized inhabitants of those countries, which had centres of learning, like those at Alexandria, Antioch, Edessa, Harran, Cæsarea and Junde-Shahpur and other places in Iran, and an established system of educa-

tion, the Arabs remained indifferent to them for a short time. They were content with the study of the *Quran*. The second Khalif appointed a number of learned men to lecture in mosques in the new cantonments of Kufa, Basra, Damascus and other places on Islamic teaching. These were called *Qass*, which means narrators, but instead of old legendary stories as told in Pre-Islamic days, they recited from the *Quran* and traditions of the Prophet. In this way, the mosque became not only a place for worship but also a centre of education. The number of such lecturers increased and became the nucleus of a future mosque *madrasas*. The Umayyad Khalifs had taken interest in some branches of science known to foreign nations. Moawiya, the first Khalif of the Umayyad dynasty, was fond of hearing legendary stories and his grandson Khaled was interested in logic and alchemy. Before the end of the Umayyad rule, Muslims had begun to study history, geography and astronomy, besides tradition, philosophy and theology. The Abbasid rule proved itself the golden period of Muslim learning. By this time, mosques had become places for public lectures not only on theology and tradition but also on other branches of art and science. Regular lectures were delivered by learned men. Basra and Kufa became two great centres of learning but were soon superseded by Baghdad. The poet and traveller Nasir Khusroe writes in the 5th century that the mosque at Cairo was daily visited by about five thousand men, to hear lectures on various subjects, but the main subjects of study were the *Quran*, tradition and theology. The system of teaching was based upon free lectures and discussions on the old dialectic method in vogue. A famous lecturer could find hundreds of pupils and thousands of people for his audience. Admission generally was free and without any restriction whatever. The Abbasid Khalifs not only encouraged learning but also enjoined public discussions and founded schools where, besides Arabic literature, theology, philology, grammar, rhetoric, mathematics, physics, astrology, astronomy

and other branches of science were studied. There was no regular system of education nor a fixed syllabus, each professor having his own method of teaching and syllabus. Besides the mosque and the buildings adjoining shrines, there were other places endowed by the wealthier classes, and in some cases the teacher's own house, where learned men delivered their lectures. The education given in the early Abbasid period bore some resemblance to contemporary church education in Europe. Charlemagne the Great, King of the Franks, who came to the throne in 768 A.D. and died in 814 A.D., is considered to have been one of the most capable rulers Europe has known. His contemporary Hārūn-al-Rashīd was the Khalif of the Muslim Empire. Hārūn ascended the throne in 786 A.D. Both of these distinguished rulers in the West and the East were great patrons of learning and reigned over vast Empires. In Europe, the scriptures were the final authority for everything and even philosophy and science had to be reconciled with Christian theology. So with the Muslims, the *Quran* and Islamic teaching were the bases for everything. The book language of Europe was Latin and the Pope was the spiritual head. Among Muslims, Arabic became the *lingua franca* and the Khalif gradually lost his temporal supremacy and held the same position as the Roman Popes did, especially after the loss of their temporal authority. Arabic was unknown to the great mass of illiterate peasants and the poor classes. In Iran and Central Asia, a few scholars who studied were benefited, while the majority remained ignorant. Muslim society in this period was, in the limits covered by the Islamic Empire, as in contemporary Europe, divided into three classes. The nobility and the military, among whom the rulers were included, passed their time in hunting, amusing themselves, fighting and plundering each other. The learned men, theologians and merchants formed the middle class but formed a great minority; but the third class, who were in the majority, worked as cultivators and labourers, and under the heels of the two higher