

**MINISTRY OF THE HIGHER AND SECONDARY SPECIAL  
EDUCATION OF THE REPUBLIC OF UZBEKISTAN**

**MINISTRY OF PUBLIC HEALTH OF THE REPUBLIC OF UZBEKISTAN**

**TASHKENT MEDICAL ACADEMY**

**CHAIR OF SOCIAL SCIENCES**

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**MODERN TECHNOLOGY STUDYING**

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**F. S. Atamuratova, F.S. Umarova**

**CASE - STUDY**

**ON THE SUBJECT: "SPIRITUALITY QUESTIONS IN PHILOSOPHICAL  
THOUGHT OF THE PEOPLE OF CENTRAL ASIA"**

**Educational and methodical grant**

Tashkent - 2015

**"CONFIRM"**

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Prof. ....Tishaev O.R.

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Educational-methodical manual

Tashkent – 2015

Case-study by "Spirituality Basics" on a subject: "Spirituality questions in philosophical thought of the people of Central Asia" is made according to the Standard training program of "Spirituality basics" and contains the pedagogical summary, educational and methodical material, methodical instructions to students, version of the analysis and solution of a case, a training case technology on practical occupation.

Methodical recommendations are assigned for 2<sup>nd</sup> year students of treatment, medical-preventive, medical-pedagogical and Higher educated nurses business TMA, preparation for seminar classes.

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Case-study in the subject "Spirituality Bases" on a subject: "Spirituality questions in philosophical thought of the people of Central Asia" it is discussed and approved on meeting of the chair of the social sciences (report №5 of 25 December, 2014), on CMC (report №4 from 26 December, 2014).

Head of the department  
social sciences

prof. Narkulov D. T.

Chairman CMC  
Socially - the humanities

dos. Abdullaeva R.M.

## **I. CASE**

### **Teaching abstract**

**Subject:** "Spirituality bases"

**Theme:** "Spirituality questions in philosophical thought of the people of Central Asia"

**Purpose of this case:** disclosure of essence of the concepts "Renaissance", "East Renaissance", "Western Renaissance"; features of spirituality during an era of East Renaissance; contribution of representatives of East Renaissance to system of universal culture; values and roles historical heritage of scientists and thinkers of the medieval East for a modern civilization, and also in education of younger generation.

**The solution of the** offered case will allow students to reach the following educational results:

- to reveal essence of the concept "Renaissance";
- to list common features of East and Western Renaissance;
- to list characteristic features of East Renaissance;
- to give a general characteristic to early and late East Renaissance;
- to analyse an invaluable contribution to development of universal thought of scientists-Encyclopaedists Abu Reykhan Beruni, Abu Ali ibn Sino, Ahmad Fergani, Mahomed Muso Al Horezmi, Abu Nasr Farabi, Alisher Navoi, etc.
- to reveal historical value of heritage of scientists of East Renaissance for a world civilization.

**The list of preknowledge** and abilities which the student for the successful solution of a case has to possess,

*The student has to know:*

- definition of the concepts "Renaissance", "East Renaissance";
- a role and value of the Great Silk Way in East Renaissance;
- influence of religion Islam on blossoming of spiritual culture during an era of East Renaissance;
- huge influence of Ancient Greek culture on development of science and culture in the east;
- other historical prerequisites of formation of East Renaissance;
- enduring value of historical scientific heritage of scientists and thinkers of the medieval East.

*The student has to be able:*

- to analyze a contribution to development of a civilization of scientists, philosophers, thinkers, poets and public figures of scientific and cultural rise in the IX-XII centuries and the XIV-XV centuries in Central Asia;
- to reveal a problem of careful preservation and promoting of intellectual property of mankind.

*The student has to possess:*

- communicative skills;
- skills of participation in discussion.

**Sources of obtaining information:**

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18. Belyaev E.S. Arabs, Islam and the Arab caliphate in the early Middle Ages. 2nd prod. M, 1966.
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**The characteristic** of a case according to typological signs: this case belongs to category room, plot less. The situation in it is stated in the mode of the past to the present. It is an organizational and institutional case. It the average sizes structured. The educational task is presented in the form of questions.

**On the didactic purposes** the case belongs to category to the analysis and an assessment illustrating a problem, the decision or concepts, training. This case can be used on discipline of "A spirituality basis".

## **Maintenance of a case**

### **Introduction**

1. Concept "Renaissance" and its main signs.
2. Central Asia center of high spirituality and thinking of the East.
3. Contribution of thinkers of an era of the Renaissance to a world civilization.

### **Introduction**

Our country which was located at the intersection of various civilizations on the Great Silk way, connecting the East and the West, since ancient times is famous for great scientists and thinkers. They made an invaluable contribution to development of a world civilization.

The thoughts which are a fruit and the boundless genius of our great ancestors of one thousand and one thousand works, unique manuscripts on history, literature, art, ethics, philosophy, medicine, mathematics, chemistry, astronomy, architecture and other spheres is an invaluable spiritual property of our people. As the President of our country Islam Karimov noted, in the world the people seldom meet such rich heritage, "We by right are proud of our such great thinkers who admired the whole world, as the first-ever algorithm and algebra which introduced in science decimal system of calculation, concepts Mahomed Musa al-Horezmi, scientists-Encyclopaedists Ahmad al-Fergani, Abu Raykhan Beruni, the founder of medical science Abu Ali ibn Sino who created perfect grammar of the Arabic language Mahmoud Zamakhshari, the author of the astronomical table with the indication of the movement more than one thousand stars Mirzo Ulugbek and others. Boundless pride of our ancestors urges us to live with feeling of high advantage, to be in anything and inferior to nobody, worthy descendants of these great people".

At the initiative of the head of our state in the city of Samarkand" the international scientific conference "Historical Heritage of Scientists and Thinkers of the Medieval East, Its Role and Value for a Modern Civilization" (on May 15-16, 2014) was held. Participants of a forum discussed and exchanged opinions and experiment on questions of scientific, historical and philosophical heritage of scientists and thinkers of the Medieval East, their huge contribution to formation and development of astronomy, mathematics, geography, geodesy, medicine, pharmacology, chemistry, mineralogy and other sciences.

In days of independence interest in studying of this enormous spiritual heritage even more increased. In our country the international scientific and cultural cooperation is widely adjusted, the large scientific conferences devoted to this subject are held. Anniversaries of our great scientists and thinkers, the ancient cities were internationally celebrated. Under the leadership of the head of our state sacred places of worship of our great ancestors are restored and equip with modern conveniences. Special attention to revival and preservation of national spiritual heritage, to development of science and education is paid.

The international scientific conference is bright confirmation of more and more increasing high attention, respect and interest in scientific heritage of great ancestors.

**Main objective of this case:** to provide theoretical development of a contribution of scientists and thinkers of East Renaissance to world spirituality.

**The expected results of educational activity:** contribution of spiritual and moral experience of great ancestors to spiritual enrichment of youth, their education in the spirit of patriotism and humanity.

**For the successful solution of a case** it is necessary to have knowledge of "Renaissance", Ancient Greek philosophy and science, religion Islam, development factors to science and culture in the Medieval East, in Central Asia particulars.

### **1. Concept "Renaissance" and its main signs**

Term "Renaissance" - The Renaissance (the XIV-XVI centuries), marked by great opening and inventions, revived philosophy and art of Ancient Greece and Rome, contacted the blossoming of culture in Europe which began in Italy, and then thrown to other countries - France, England, Germany, Russia more often. However the Renaissance in Central Asia began almost that for five hundred years earlier, than the European Renaissance.

East Renaissance – revival of cultural and cultural wealth, rapid development of science and philosophy, literature and art in Central Asia in IX, XII-XV centuries.

It is natural that when it is about Renaissance in Central Asia, it is necessary to consider the important factor connected with religion. It is known that Islam was the spiritual base of everything that was available in social political life of society.

Distinction between the Western and East Renaissance: 1. In the West the Renaissance was in XIV-XVII of centuries, and in the east it shares for 2 periods. It: The early Renaissance – the IX-XII centuries and the Late Renaissance – the XIV-XV centuries 2. If in the Western Renaissance there is a fight for feudalism and religion, in the east we don't keep the sharp resolution of this problem

Common features of East and Western Renaissance is an antiquity, "revival", development of applied sciences, and also an ensiklopedichnost.

Early Vostochny Renaissance of the IX-XII centuries. In it the period Bukhara, Samarkand, Merv, Urgench, Fergana become the centers of culture of Moverannakhr.

During this era large libraries which scientists used were created. At that time great scientists lived and created: Ibn Musa Horezmi, Ahmad Fergani, al-Farabi, Abu Raykhan Beruni, Abu Ali ibn Xing, Mahmoud of Kashgaria, Rudaki, etc.

The late Renaissance (the XIV-XV centuries) was the period connected with a name of the outstanding statesman Amir Timur. For spiritual life of this period the appeal to secular and religious sciences, aspiration to studying of the nature, an eminence of human reason to studying of the nature, an eminence of human reason

of its abilities, high moral qualities of the person, the sermon of humanistic, universal qualities are characteristic.

## **2. Central Asia center of high spirituality and thinking of the East.**

Central Asia in the Middle Ages had the developed agricultural production, municipal economy, diversified craft, ancient statehood, rich material and spiritual culture. Distribution here of own sogdiysky, urkhunsky, horezmiysky writing, art, ceramics, architecture, wall painting, various musical instruments testifies to it.

In Central Asia since IV-V centuries to replace not really developed slaveholding relations the feudal came. It led to that spiritual life of the shattered feudal states became the extremely conservative and amorphous, differed in pessimistic tendencies and rigid restrictions. Lack of the large centralized states, uniform ideology which would rally the people living in the territory of Central Asia allowed Arabs to win these lands rather quickly. The Arab gains united the people with various traditions, beliefs and outlook, gave a new impulse to development of feudal relations of production in the seized territories, created conditions for an exchange of achievements of scientific thought and, finally, to blossoming of spiritual culture. In this regard pertinently to remind that the Renaissance began, first of all, in the central cities of the Arab caliphate.

Central Asia since IX century actively studied ancient Ancient Greek philosophy, science, literature and art. Doctrines of thinkers of antiquity served the main of blossoming of science and philosophy in the east during the considered period. The creative heritage of Platon and his followers, Gnosticism, the idealistic and mystical parties of philosophy of Aristotle strongly affected east scientists and even theologians who throughout a long time were engaged in the translations of works of Ancient Greek thinkers. Therefore in views, outlook of thinkers of the East of an era of the IX-XV centuries on fundamental problems of science, art, literature, philosophy influence of antique tradition is strong. The comments written by Central Asian scientists for works of Ancient Greek thinkers in the field of astronomy, medicine, mathematics played a salutary role. But it were not simply reviews of works of thinkers of antiquity, in them judgments and views of east scientists are accurately shown. In them new scientific approach and quite original thoughts that was creative development of achievements of antique thinkers is looked through, and in certain cases scientists of the East acted as opponents of Ancient Greek scientists.

Thus, the Ancient Greek culture had huge impact on development of science and culture in the east. In some cases works of poets and writers of Central Asia borrowed Ancient Greek subject. So in A. Dzhami "Hirodnomai Iskandari" Alisher's works Navoi "Saddi Iskandary" images of the great commander of Ancient Greece Alexander of Macedon are created. In Central Asia the greatest achievements in political, economic and spiritual life of society are result of the Renaissance. During this period in essence, jurisprudence, new literature and art, medicine and philosophy, new esthetic consciousness were created political. The problem of the person for the first time was so sharply put by figures of the Renaissance and everything that was reached, served development of the person.



This era needed the creators and the history gave them. Scientific feat which was made Fergani, Farabi, Firdausi, Abu Ali ibn Xing, Beruni, Ulugbek, Dzhami still surprises people and their discoveries make pride of our national culture. The natural-science and philosophical opening they made revolution in human consciousness.

### **3. Contribution of thinkers of an era of the Renaissance to a world civilization.**

The period of Early East Renaissance (the IX-XII centuries) – the bright page in the history of scientific and cultural life not only the people of Central Asia, but also all Middle East.

During this period Bukhara, Samarkand, Merv, Urgench, Fergana become the centers of culture of Maverannakhr. Strengthening of the centralized management at Samanidakh promoted that the next governors and nomads stopped plundering and ruining the country, the developing karavanny trade promoted a cultural exchange with many European and east countries.

Big development during this period was gained by science. It developed in close interaction from the Middle Eastern. Many Central Asian scientists went to study to Baghdad and other large scientific centers. So, for example, al – Horezmi wrote big scientific work, working in observatory of the Caliph Mamun in Baghdad.

Scientists of Central Asia made the significant contribution not only in Middle Eastern, but also in world science. There was a special type of educational institution – madrasah, so characteristic for all Muslim East subsequently.

Protection of poetry, to literature and science was characteristic feature of policy the samanidskikh of governors. During this era large libraries which scientists used were created. At that time great scientists lived and created: Ibn Musa Horezmi, Ahmad Fergani, al – Farabi, Abu Raykhan Beruni, Abu Ali ibn Xing, Mahmoud Koshgari, Rudaki, etc.

Mahomed ibn Musa of al Horezmi (782 – 850) – the founder of algebra. The name of this section of mathematics is taken from its work "The Book about Restoration and Opposition" in which rules of actions with algebraic sizes are provided and the way of the solution of the equations of the first and second degree is given.

Works of al – Horezmi "Astronomical tables", "The treatise about a sundial", works on geography "Drawing up maps), stories, etc., translated into Latin, had fruitful impact on development of medieval scientific thought in the countries of the East and West.

Al-Horezmi is creativity top the book about "Al-dzhabre and a shaft-mukabale" where bases of elementary algebra (830 g) are stated. It by tradition of that time is devoted Baghdad to the Caliph Mamun. In the preface the scientist wrote: "I made this small composition of the easiest and useful calculation in science and besides such that is required constantly to people in cases of inheritance, hereditary duties, at sections of property, in trials, in trade and in all

business relationship, cases of measurement of lands, carrying out channels, geometrical calculations and other different subjects".

The book consists of three parts:

1. Ways of the solution of the equations.
2. Measurement and solution of geometrical tasks.
3. The solution of the tasks connected with wills.

From the point of view of Al-Horezmi, algebra – science about the equations. As experts recognize, to Al-Horezmi the equation of a little noticeable role in mathematics didn't play, decided occasionally. There was no standard method of their decision. Therefore, to it there was no algebra as sciences.

Ahmad Fergani – the astronomer (IX century). His most known compositions are "The book about the heavenly movements" and "The science arch about stars". In them the astronomical data which are based on the principles of the Greek school are collected. "The science arch about stars" consists of thirty sections telling about the movement of heavenly bodies moon phases, astronomical constants.

Abu Raykhan Beruni (973 – 1048) became history of science as the scientist – the Encyclopaedist. He created more than 150 works devoted to almost all branches of knowledge. Its works "Science about stars", "India", "Monuments of the past generations", "Chronology of the ancient people", "Maksudova of the table", "Comets", "Researches", "Geodesy", etc. are most known.

According to Biruni, stars - an uncountable set, however the majority of them we don't see. There are 1017 stars, visible with the naked eye. On brightness they share on six classes. The brightest stars belonging to the first class is 15, stars of the second class which are slightly weaker, than stars of the first class – 45, stars of the third class - the 207, fourth class - the 475, fifth class – the 218 and sixth – 57.

He dealt with issues of arithmetics, algebra, geometry, the theory of numbers, solved many applied problems connected with astronomy, geodesy, cartography, geography, chronology etc.

At Beruni the geography has close connection with geology. One of its important works on geology and geography is the book: "Specification of borders of the occupied world for determination of distances between settlements" ("Takhdid nakhait").

The huge contribution was made by Biruni in mineralogy. Its major work in this branch of science is "Mineralogy" which shares on two parts: about minerals – jewels and about metals.

Beruni's works didn't lose the value so far. Interests of thought of Beruni of education. In many works he claims that only knowledge and work improve the person. I assigned a leading role in formation of the person Beruni to work. He emphasized that only work forms high human qualities.

Abu Nasr Mahomed ibn Mahomed of al – Farabi (870 – 950) – the outstanding philosopher and the scientist, one of the brightest figures in the history of world culture – left an indelible trace in science and philosophy of that time. To

it the honorary title of "the second teacher" is given, "teacher" in the Muslim East called Aristotle.

Al – Farabi created more than 100 works. Among them special value "Philosophy sources" have, "The treatise about reason", "The treatise about statehood", etc. I gained wide popularity of Farabi in connection with promotion of Ancient Greek philosophy by it – Aristotle, Platon, Euclide's doctrines.

One of the most interesting aspects of philosophical system of Farabi is its doctrine about knowledge to which he pays much attention in many works – "Philosophical questions and answers to them", "Essence of wisdom", "Comment", "Civil policy", "About the beginnings of existence of forms and accidents", etc. In these works such questions as emergence of human knowledge and its attitude towards reality, knowledge of objective reality, degree of cognoscibility of the world, a form and types of knowledge, feature of sensory and rational perception, relationship concrete and abstract in knowledge, interrelation of a body and soul, etc. are taken up.

By consideration of a problem of knowledge of Farabi proceeds from natural-science achievements of the era and uses the knowledge in the field of medicine, physiology, mathematics, astronomies, philology and other sciences. He considers a knowledge problem as part of the general problem of clarification of essence of the person.

The person, according to Farabi, is a wreath of development of the nature and on the sincere qualities differs from other fauna. However the person as creation of the nature doesn't come off it, and by all bonds is connected with it though as it was already told above, his soul on an initial origin is connected with the heavenly soul having non-material essence. The act of emergence of the person Farabi reads out, on the one hand, as natural continuation of the general development of the nature, and from another – qualitatively new stage in the course of an emanation.

The doctrine of Farabi about a subject, the contents and classification of sciences, and also its theory of knowledge were one of the largest achievements of medieval science played a big role in development of scientific thought and systematization of scientific knowledge.

Huge value of the doctrine of Farabi consists also that it supplies with the exhaustive and comprehensive information on all branches of knowledge existing in the medieval East and submits some kind of encyclopedia of sciences.

Each science, across Farabi, studies certain parties, substances, a certain group or properties of material bodies; sciences differ from each other, first of all, in object of studying. In the scientific researches of Farabi in comparison with Aristotle is more consecutive. If Aristotle excessively opposes "the first philosophy" as science about essence (i.e. metaphysics) to all other concrete sciences studying separate properties of life, Farabi puts metaphysics on one of the last places – after pedagogical (science about language and logic), mathematical and natural (i.e. after concrete) sciences and considers a metaphysics subject as the general, abstract, abstract.

Besides, Farabi allocates in separate group of science, the studying features of informative abilities of the person, - science about language, to logician, calling them "pedagogical sciences" and by that emphasizing their difference from the sciences studying properties of objectively existing natural bodies. The similar group testifies to a subtlety of supervision, to deep knowledge of Farabi and its scientific approach to the studied subject. Classification of sciences of Farabi played a progressive role and long time kept the value. And in this area of Farabi I had a number of followers who represented various branches of sciences both in the east, and in the West.

For creation of harmonious logical system – kullit – Farabi received the special title "al-Mantiki" ("Logical"). He wrote comments to all compositions of Aristotle logically. He not only knew the maintenance of each of them, but also for the first time and medieval philosophy brought them into system. Attaches great value of Farabi to consideration of the main logical forms: concepts, judgments, conclusions. It divides logic into eight sections.

Farab was one of the first thinkers of the medieval East who developed the doctrine about features and structure of public life. It divided city-states on virtuous, or ideal, and not virtuous, or ignorant.

On Farabi, original freedom and equality have to reign in the societies which reached perfection. Residents of such city elect to themselves the head whom can always displace. The head of such city proceeds in the activity from the principles of justice, equality and the general benefit.

In general the doctrine of Farabi, being synthesis of cultural and scientific achievements of the IX-X centuries, reflected in itself strong and weaknesses of the time and played a huge role in further development of scientific and philosophical thought not only in the east, but also in the West.

Other not less outstanding thinker of the period of early East Renaissance is Abu Ali ibn Xing (980 – 1037).

In the east of this scientist called amī – the Sheikh – the Spiritual Mentor or are – Rice – the Head; it had one more honorary title – Hudzhat of al – Haque, i.e. Authority of Truth. In the West, in the medieval – Christian Europe, it was known as Avicenna.

Scientific activity of Ibn Cynna captured all areas of medieval knowledge. He created a huge number of the compositions relating to medicine, mathematics, astronomy, chemistry, physics, music, psychology, logic and philosophy. His compositions gained wide popularity in the east, and then and in the West.

As the original scientist-Encyclopaedist it with great success was engaged in all areas of science of the era. Over 450 names of its works are mentioned in various sources, and remained more than 200. From them about 150 compositions are devoted to philosophical, world outlook problems, 40 medicine, 50-other sciences. Its largest works are the "Book of healing" consisting of 22 volumes, "The book of knowledge", "The book of rescue", "A canon of medical science" which was the main source of knowledge of medicine within six centuries for doctors of the East and West. Doctors use many data from this book and today.

Already at eighteen-year age of Ibn Xing enjoyed big authority among physicians of Bukhara of that time, I accepted patients and quite successfully I treated them. But, despite great success achieved in the field of medicine it wasn't satisfied with the knowledge. The scientist with exclusive keenness and tension continues to study philosophical sciences independently.

At its order there were works on philosophies in the Arabic language on which it with a great interest studied Ancient Greek philosophy, getting acquainted with works of her best representatives on the translations extended then in the Middle East. Especially he was fond of Aristotle's works.

As testifies itself Ibn Xing, he considered Aristotle's "Metaphysics" forty times, the text knew by heart, but he managed to penetrate into essence of her ideas only with the help of the comment of Abu Nasr Farabi. Replenishment of knowledge of the young scientist was promoted by the well-known library of the samanidsky emir Nukh ibn Mansura.

The scientist carried out the second half of the life in Iran, in the cities of Hamadan and Isfahan where it, known as the skilled doctor, by order of the governor Shams a hell – Daulya Abu Takhira was appointed his vizier. It was the most fruitful period of scientific creativity of Abu Ali ibn Cynna. Here it started working on the works "Book of Healing" and "Medicine Canon".

Hamadan and to move to Isfahan it compelled to leave because of political intrigues, even being ground in fortress, continues the scientific work. In such situation he creates the scientific work "It Is Scarlet — Hadayat" ("The treatise about the correct way"), the novel "About Haya, Yakzan's Son" and the book on medicine "Al – Kulandzh" ("The book about gripes").

Having unbound, Ibn Xing again is engaged in scientific work in Isfahan. In this city it finished the filosofsy encyclopedia "am-Schiff" ("The book of healing") and "Danishnam" ("The book of knowledge").

Abu Ali Ibn Xing died on June 18, 1037. The scientist was buried in Hamadan.

In the history of science the name, costs Ibn Cynna in the same row with such giants of human thought as great doctors of antiquity Hippocrates and Galen as the ingenious Greek thinker Aristotle.

It is known that many opening were included forever into science and received practical confirmation some centuries later, in a century of a microscope, the telescope, biological chemistry, experimental physiology. Some scientific messages in the field of human anatomy, herbs and now deserve a close attention, especially because in our country the great value is attached to use of medicinal herbs in traditional medicine.

Ibn Xing the first data on meningitis, an apopleksiya, stomach ulcer, pleurisy that gives the grounds to assume belong that despite a religious ban, it made secret openings. He long before the invention of a microscope stated offers on existence of microbes in input and therefore recommended to boil water.

Abulkasim Firdousi (934 – 1020) collected legends, fairy tales, national legends and myths. Having collected extensive data on the past of the Iranian people, he started their statement in verses. Called the poem of Firdousi "Shakhnam".

I saw the main task of the poem of Firdousi in that on the basis of display of the heroic past of the people to wake him patriotic feelings.

Rudaki Abdullah Jafar – the outstanding poet of the X century was the incomparable master of a kasyda and the author of several poems: "Also Dimna", "Sindbad – Nam", "Rare sprouts", "Rotation of the sun", etc. heated. The part of its works reached us in small fragments, others didn't remain absolutely. However even the parts of huge poetic heritage of Rudaki which reached us testify to his bright talent, expressiveness of its poetic diction of picturesqueness of the images imprinted by it.

Yusuf Balasaguni (apprx. 1021-?) – author of a remarkable monument of Turkic writing, Poem "Science how to Be Happy".

Abu – Bakr – Narshakhi (899 – 959) – one of famous historians of the samanidsky period. In 40 – x years of the IX century he writes in the Arabic language "History of Bukhara". Here data on the Arab gain of Central Asia, revolts of Abruya and Mukanna, distribution of Islam and replacement of local pagan religion are of special interest.

The second stage of East Renaissance (the XIV-XV centuries) which was shown only in Central Asia, the period connected with a name of the outstanding statesman Amir Temur was. In the XIV century Temur creates the strong centralized state, rise in agriculture and craft is observed, development of science and culture rises by new level. During this period, as well as during an era of early East Renaissance, interest in ancient art grows.

During this period the whole cohort of outstanding scientists, thinkers, poets – preachers of high humanistic national universal values moves forward.

Mahomed Taragay Ulugbek (1394 – 1449) – outstanding scientific HU of century, Amir Temur's grandson being the governor of Transoxiana, I paid much attention to science and culture.

As well as many thinkers of that time, Ulugbek was the Encyclopaedist. Its scientific interests lay in the field of mathematics, astronomy, geometry, chemistry, history and other sciences. In formation of views of the thinker Platon, Aristotle, Ptolemaeus, Horezmi, Fergani's works, Farabi, Beruni, Ibn Cynna, etc. played a role.

The madrasah constructed by Ulugbek on a plan of his creator had to become the higher school with obligatory teaching mathematics, astronomy, philosophy and literature. Ulugbek dreamed of that here scientific debates, discussions were arranged. From the first days it and began to be called — Ulugbek's madrasah. In science there can't be secrets, it shouldn't know neither borders, nor hostility, the educated governor considered. Trade and science are urged to make the countries allies. But these thoughts contradicted philosophy of his well-known grandfather. After long thoughts Ulugbek came to a conclusion that the stronger and profound knowledge, the is stronger than communication with the countries of the East and the West, the it is less than reasons for wars. The mankind needs the world and wellbeing. One person without another can't make anything. To do to nobody without friends. In madrasah the youth will study, he considered, acquiring knowledge. Great Rudaki told: "Knowledge — a torch of

human soul, knowledge — the weapon protecting you from the evil". Samarkand has to become the center of science, art, literature and by that to deserve respect of the whole world.

One of the largest observatories of the Middle Ages constructed by Ulugbek near Samarkand about 1430. Its remains opened by V. M. Vyatkin in 1908 were dug finally out by V. A. Shishkin in 1948. Ruins of the lower part of a wall of the round building with a diameter about 46 m which contained the grandiose marble sextant (perhaps a quadrant) with a radius of 40,2 m established in the meridian plane are found. Only the lower part of an arch of the tool of 32 °, divided into degrees remained. The tool is installed in the neck about 2 m wide which is cut down in the rock tran- and 11 m in depth. The part it towered over an earth surface. It consisted of two parallel stone arches revetted with marble slabs of the corresponding curvature. It was used for definition of astronomical constants and coordinates of the Sun, the Moon and planets at the moments of their passing through a meridian. Stars were observed by tools didn't remain) the smaller sizes. The major work executed on observatory, so-called "New astronomical tables" ("Zidzh-i dzhedid-and Guragoni") contains a statement of theoretical fundamentals of astronomy the catalog of provisions of 1018 stars (prod. in Oxford in 1665), defined for the first time after Gipparkh and with an accuracy remaining unsurpassed before supervision Silently to Braga. The catalog of stars, planetary tables, and also definition of an inclination of an ecliptic to the equator, a year progression and duration of tropical year were of great importance for development of astronomy. Ulugbeka observatory was destroyed soon after Ulugbek's death in 1449.

In observatory and Ulugbek's madrasah many famous scientists - Jamsheed Kashi (1385-1436) worked, Ali Kushchi, etc. Jamsheed Kashi published more than 10 books on astronomies, 3 large works on mathematics, among them the special place is taken "Arithmetics key", "The treatise about a circle".

Ali Kushchi was one of the most talented scientists of astronomical school of Ulugbek. He is the author of many works on astronomy, mathematics, logic, literature and other branches of science. Among them it "The treatise on astronomy" - one of the best works of that time. Here Kushchi's thoughts of heavenly telakhrasstoyaniye between them contain. The largest mathematical composition of Kushchi – the treatise "Mukhammadiya".

Alisher Navoi (1441 – 1501) great Uzbek poet, the thinker and the statesman, was born in Herat. Navoi studied at school together with future governor of Khurasan Hussein Baykara. In 1469 Hussein Baykara occupied a throne in Herat, and 1472 Navoi is appointed the vizier. On this post it proved as large public and the statesman.

Being the man of means, Navoi spent the riches for a construction of hospitals, bridges, mosques, madrasah, irrigational constructions. Much he made and for development of science and culture, was the patron of poets and scientists.

Navoi lived and Temuridov created boards (1370-1506) in recent years. Therefore in its works the public spirit, pressing problems of an era is strong. In 1490-1501 Navoi created the most main lyrical, public and philosophical and

scientific works. Alisher Navoi creativity and on volume it is huge. The volume of six of its poems make about 60000 lines (misr). In 1483-85 Navoi created the work "Hamsa" ("Pyateritsa") consisting of the following poems: "Hayrat is scarlet-abrar" ("Confusion just"), "Farkhad va Shirin", "Layli va Mazhnun", "Sabjai sayar" ("Seven planets"), "Saddi Iskanderi" ("Iskander's Wall"). They were created on the basis of tradition of a hamsapisiyeh - creation of a pyateritsa (five poems). The work Navoi of "Hams" is the first work in this genre created in Turkic language. It proves, as in Turkic language it is possible to create such volume work. And actually, Navoi seeks to prove, as in chagataysky (old Uzbek) language it is possible to create work which can stand flush with work from the Persian-Tajik literature. And it quite proves it through the pyateritsa. Navoi tries forces almost in all widespread genres of literature of the Muslim East and shows that it has the voice, style.

Navoi expresses the sufiysky views in poems "Layli Va Mazhnun", "Farkhad and Width", "Hayrat Is Scarlet-abrar". The Sufiysky subject in its poems rises by all-philosophical level. At the same time, in these poems in the agenda topical worldly problems through humanist views of the poet are put. In two other poems from "Hams" Navoi - "Sabjai sayar" and "Saddi Iskanderi" comes out on top the problems connected with the governor. It is known that Navoi was close to the yard Temuridov and had opportunity somehow to affect the governor and the friend Husayn Baykara. And therefore Navoi expressed the ideas provided to H. Baykara in the mentioned poems: inconstancy of the world and imperial throne; duties of the governor in the relation to the people... In tradition of a hamsapisiyeh of "Hams" Alisher Navoi differs in the in public and political character, originality. Abd (1414-1492) having read Dzhami's are Rahman "Hamsa" Navoi highly appreciated it very much.

During all life Navoi created a huge number of lyrical works. He in 1498 ended drawing up the collection of all its verses, and created four sofas collections under the name "Hazain Is Scarlet-maoni" ("A treasury of thoughts"). All verses from this collection have volume more than 50000 lines. Thus Navoi wrote verses in 16 genres from the existing 21 genres of literature of the Muslim East. Navoi collected the verses written in the Persian language under the name "Divani Fanny". He wanted to compete and with the Persian poets. If to count only quantity of the verses written in a genre I gazat from above-mentioned collections, their volume makes 3150 units. It is possible to claim that Navoi takes the central place, at least, quantity of the verses created by it. Besides, Navoi collected the kasida in the Persian language and created two collections: "Sitta zaruriya" ("Six need") and "Fusuli of an arba" ("Four seasons of year").

Alisher Navoi through the poetry brought the Uzbek (chagataysky) literature to a new high rank. His lyric poet much more surpasses the Uzbek literature in extensiveness of subject and a variety of genres to him.

Navoi created also scientific works. It is possible to refer works about comparison of the Persian and Turkic languages "Mukhakamat Is Scarlet-lugatayn" ("Dispute of two languages") to their number (1499); on literary criticism "Madzhalis is scarlet-nafais" ("Meeting refined"), according to the theory of an



aruz "Mezan is scarlet-avzan" ("Scales of the sizes"), according to the theory of a genre of a muamm (charade) "Mufradat". Besides, he created treatises on historical subject "Tarikhi of a muluka Adzham" ("History of the Iranian tsars"), "Tarikhi an anbiya ba a hukama" ("History of prophets and wise men"). I collected the art letters in the collection "Munshaat". Its memoirs: the biography Abd Ar-Rakhmana Dzhami - "Hamsat is scarlet-mutakhayyirin" ("Pyateritsa distraught") (1494), "Halati Sayyid Hassan Ardasher" ("the Biography Sayyid Hassan Ardasher"), "Halati Pakhlavan Mahomed" ("Pakhlavan Mahomed's Biography"). Navoi is the latest work "Makhbub is scarlet-kulub" (1500). In it his latest, highest views of society and policy are expressed. Apparently heritage Navoi on subject and on a genre is various. Its works with HVV. and to this day serve development of the Uzbek literature. For centuries of its work were object of imitation and enthusiasm.

In opinion Navoi, the person wishing to become happy has to show interest in terrestrial life, subordinate to himself forces of nature, work and to be engaged in self-improvement.

In the socially – political views Navoi attached great value to purpose of the state to country government questions, affairs and acts of the governor to his relation to the given.

In opinion Navoi, in the head of state has to stand the educated governor who fairly treats the citizens, to care of their wellbeing, thinks of prosperity of the country.

Navoi sang of true friendship between people, opposing it to hostility, deception, ignorance, hypocrisy and other moral defects. The main characters in works Navoi – representatives of various people: Iskander (Alexander) – the Greek, Medzhnun – the Arab, Width – the Armenian, Shopur – the Iranian, Farkhad – the Turkoman, etc.

Ideas Navoi about friendship and a brotherhood of the people were directed against violence, cruelty and contentions.

Socially – philosophical ideas Navoi are penetrated by deep rationalism and humanity and directed on service to the person, searches of the fair and reasonable device of public life.

The great thinker and the humanist Abdurrahman Dzhami (1414 - 1492) was born in the village of Hardzhird in the district Dzham near Herat. In Dzhami's childhood I studied grammar of the native, and also Arabic language. In Samarkand he listened to Kaza's lectures – Rumi and Hodge's back of Ali Samarkandi on geometry, algebra and astronomy. Noting uncommon talent of the poet, Kaza – Rumi's back I spoke: "Since there is Samarkand, through waters of Amu Darya such capable and clever young man as Dzhami to our coast" (Radzhabov M. Abdurakhmon Dzhami and the Tajik philosophy of HU of an eyelid didn't pass. – Dushanbe, 1968. With 167).

In further Dzhami becomes the pupil of the sheikh Saaddin of Kashgaria (mind. 1456), the nakshbandiya studies. Subsequently it completely accepts the basic rules of the doctrine a nakshbandiya and becomes one of prominent theorists and figures of this award.

Dzhami was versatile, encyclopedically educated scientist. He well knew geometry, astronomy, cosmography, mathematics, the Arabic language, philosophy, ethics, rhetoric. In formation of his poetic talent the big role was played by acquaintance to Alisher Navoi who called Dzhami the teacher.

Dzhami, expressing a pantheistical view of the world, calls god the creator, the prime cause of all real. God is eternal, the rest – passing. The real and imaginary world of Dzhami calls a form, and god – the contents. God and the world can't exist the friend without friend. Without god the world would turn into chaos and a disorder.

In the center of the humanistic concept of Dzhami there was a person. The poet approved informative opportunities of the person, a personal freedom justice, diligence, generosity, truthfulness, modesty and other human qualities.

Great Uzbek poet, thinker, historian and statesman; founder of a dynasty and empire of baburid. Babur was born in Andijan (14 Febvre. 1483), son of the governor of Fergana, great-grandson Temur. Babur in 1494 became the governor of Fergana, in 1526 in India founded the centralized state of baburid (in world history I entered as "the empire of great Moguls"), which lived to a gain (1848) of British. I died in Agra (26 Dec. 1530) Poetic heritage of Babur many-sided and richly. Lyrical works are collected in "The Kabulsky sofa" (1519), then in "The Indian sofa" (1529-30). He wrote verses in more than 10 genres of east lyrics. Its private life, environment and historical events are reflected in its poems. The basis of poetry of Babur is made by verses of the love and lyrical contents. Skill of the poet is expressed in original literary style and skillful use most of means of expression of Turkic language. Well-known "Baburnam" Temuridov, fight for creation of the great power (an event of 1494-1529) testifies to history great. Are stored in Institute of Oriental studies of AN bolet 10 hand-written options "Baburnam". On the basis of what баъъровед Porso Shamsiyev comparing some manuscripts, I published the critical text (1960) ingenious works. Later the Japanese scientist I. Mano too prepared for printing the critical text "Baburnam" (1994). The text "Baburnam" was also published by N. Ilminsky (1847), Beverizh (1905), Fitrat (fragments, 1928), P. Shamsiyev (1960). It was translated on Persian (1586), Dutch (1705), English (1826), into French (1871), on Turkish (1940), into Russian (1942) languages. Among scientific works the special place is taken by "The treatise about an aruza" (1523-25) where it was considered the theory of east metrics аъъ. Babur enriched the theory of prosody with new provisions and generalizations, developed classification of its types and options. In 1521. it was written the philosophical and religious work "Mubayyin" where 5 bases of Islamic Sharia are stated, also same I wrote the book about a nalogoblazheniye of "Mubayyinu-l-zakot". Its nachuny prizvedeniye "Harb look for" ("Military science"), "Musika of an ilma" ("Science about music") is still not found. Babur on the basis of the Arab graphics made "Hatti Bobury" ("Babur's Letter") suitable Turkic phonetics the alphabet copied the Koran, separate works of Babur. He was also engaged in a literary translation, a verse translated a religious and philosophical prozvedeniye of "Volidiya" ("The treatise parental") the largest shaykh of a Naqshbandi award of Sufism Hodzhi Akhror of Valya.

Pertinently to emphasize that in Maverannakhr art of a miniature was very developed. Kamoliddin Bekhzod's creativity which is worthy any praise is in this regard characteristic. The English researcher Hilda Hukhem highly spoke of Bekhzod's creativity. She in the work "Master of Seven Constellations" (1995) wrote so: "It is possible to call the fifteenth century an era of the timuridsky Renaissance, and Herat became the birthplace of bleyatyashchy school of miniature painters and the most outstanding of which was Bekhzod". Together with Bekhzodh created Mirak Nakkosh, we Mow Ali, Mahmoud Muzakhhub, Shah Muzaffar and others. For them creative approach in which transition from mythology and a fantasy to real life is traced is characteristic. It was positively reflected on the maintenance of the represented subjects and objects.

According to classification of experts, all heritage of this period shares on the following groups: portraits, vital sketches, a landscape, drawings on walls of majestic buildings, drawings in art proizveniye and others. For example, the miniatures decorating "Shakhsnam" of Firdavsi and "The anthology of the Iranian poets".

At early age of Bekhzod Alisher Navoi noticed and gave all help. Bekhzod founded the school and still his creativity takes a special place in east painting. Its works – Hussein Baykar's portraits, Shaybaniykhana, drawings on Saajdi's works "Bustan", Bottoms of "Hams" reached us. These works of the great artist miniature painter are stored in libraries of London, Tehran, Kabul, St. Petersburg, Tashkent.

During this period big development was gained also by art of a calligraphy and art of creation of graceful books.

During this period of printing houses didn't exist yet. Books were created manually. The calligrapher, the carver of paper, the bookbinder, the draftsman and the artist participated in creation of the book.

Our ancestors in this type of culture were unsurpassed skillful masters. The glory of the Samarkand, Bukhara paper extended for the whole world. This culture gained further development in the period of timurid.

Pertinently to remind of such great calligrapher as Sultan Ali Mashkhadi. For its works in the field of a calligraphy he was called "The tsar of a calligraphy" and "The admirer of books". B1461-1466 years it copied compositions Bottoms, Hafiz, Navoi. We were reached by 50 works of poets of the East copied by it.

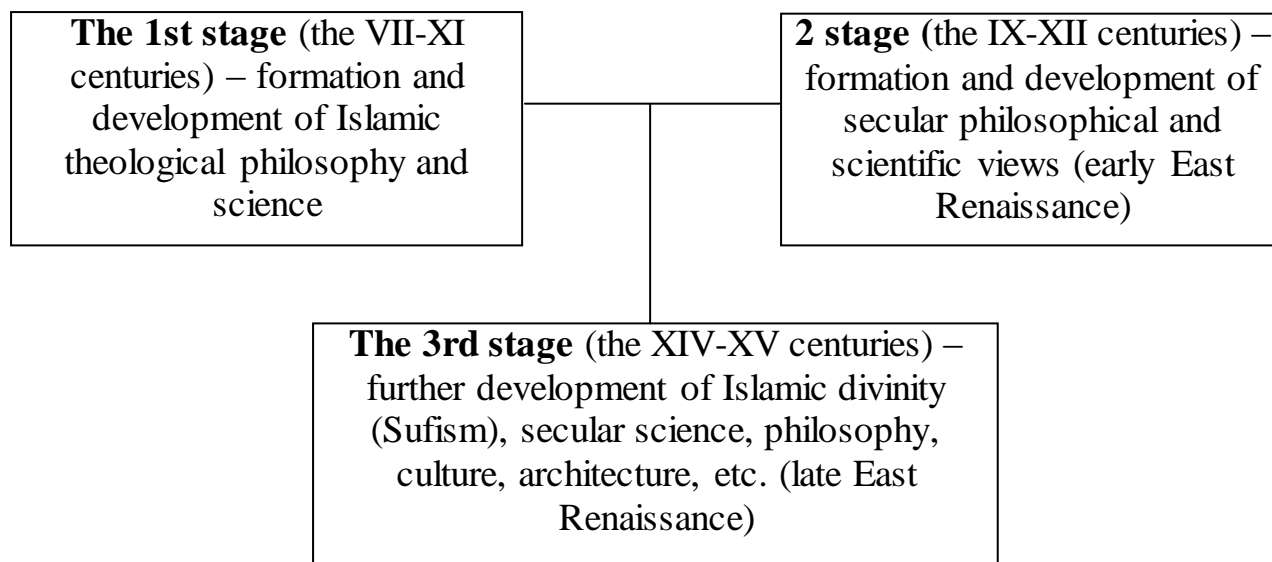
Amir Temur and temurida attached great value to development art of music. Amir Timur's palaces and timurid were the center of concentration of musicians and singers who were engaged in creativity and became famous for the songs and melodies. Abdukadir Nayi, Shakhnuli Gidzhzhaki, Ustod Shadi's creativity and others makes pride of our musical history and spiritual heritage.

Also during this period the special attention was paid to development of the humanities, in particular history. Historical works of Nizamiddin Shafi "Zafarnom", H.Abra "Zubdat the at-tavorikh", Sharofiddin Ali Yazdi of "Zafarnom", Abdurazzaka Samarkandi "Matla a mustache-sajdayn", Hondamira "Habibas-siyar", Ibn Arabshakh "Adzhoyib ul-Makdur fi of a tarikha Timur" and others make reliable sources of studying of history of Amir Timur and his descendants.

On the basis of the above it is possible to claim that the culture of an era of Amir Timur and the Timurids is one of key stages in development of world culture, and takes a worthy place in the history of mankind.

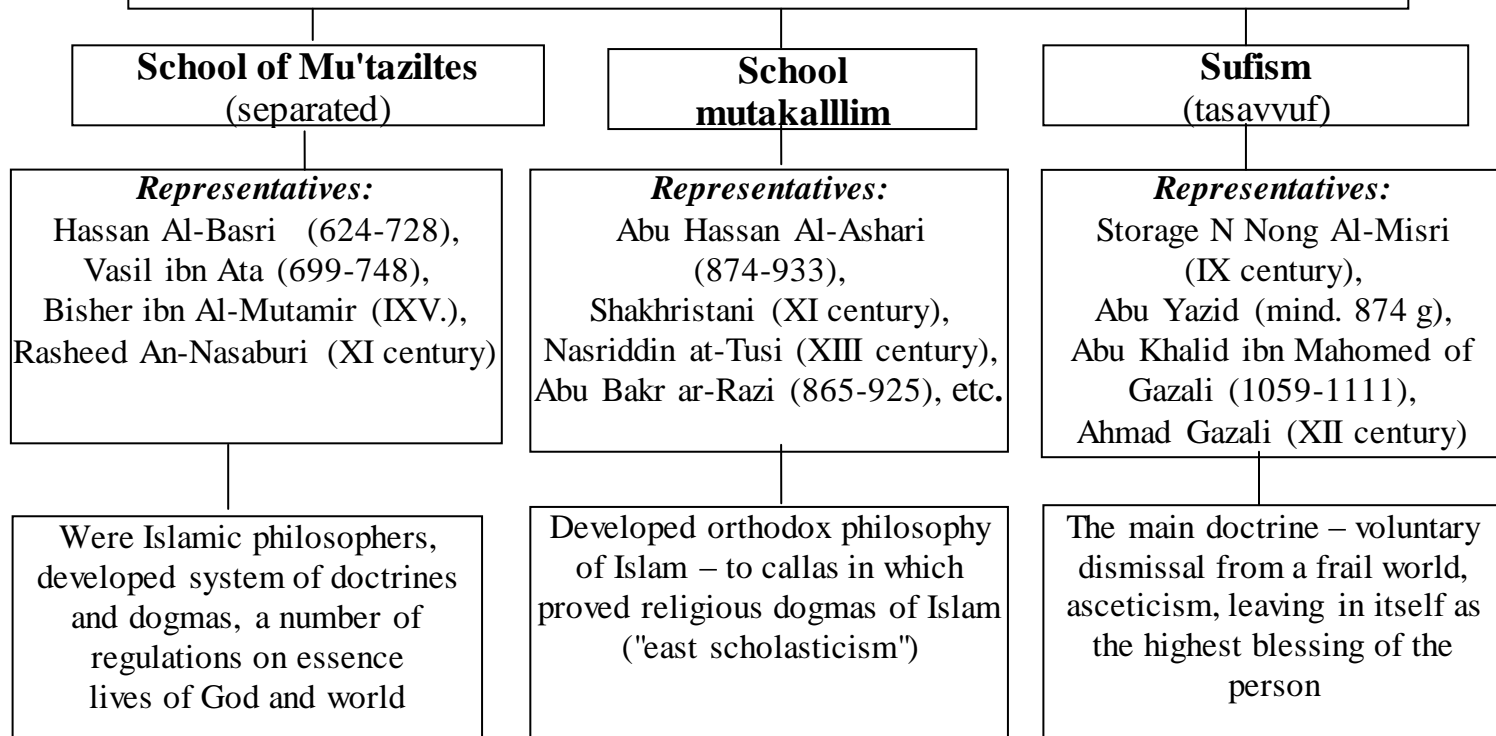
## Appendix 1

### Stages of formation and development of divinity, philosophy and science of the Muslim East Middle Ages era

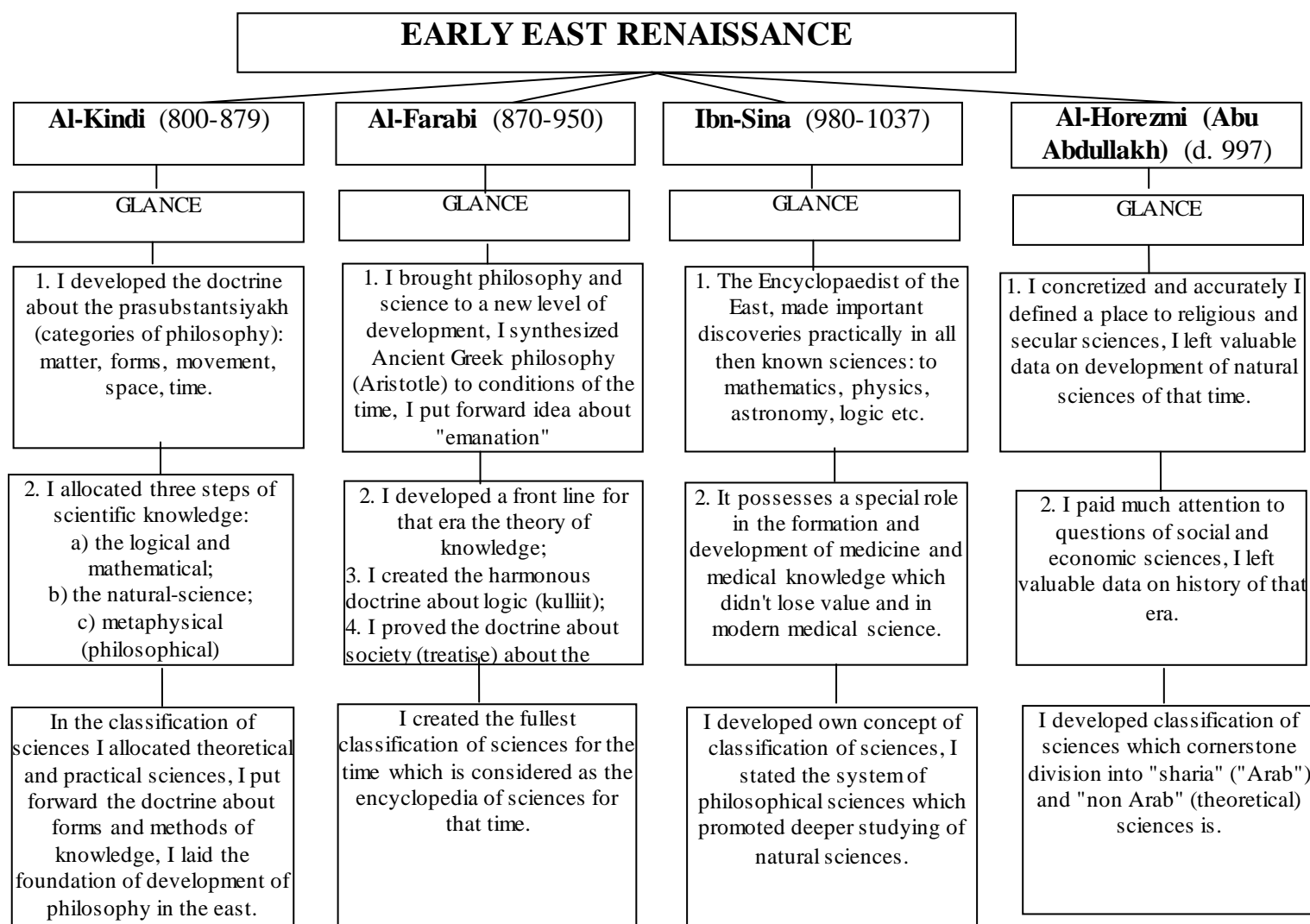


## Appendix 2

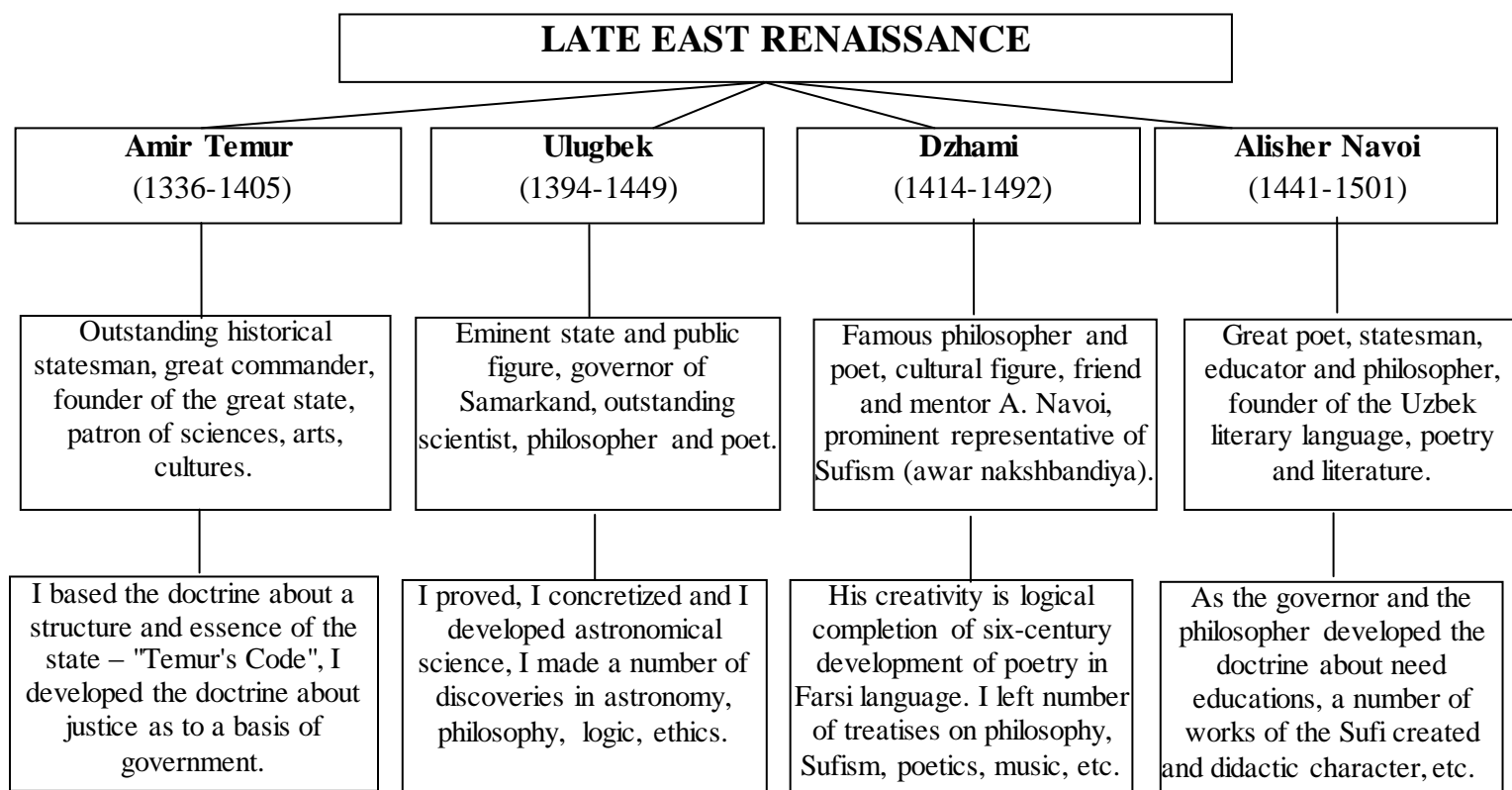
### Main directions of Islamic religious philosophy (the VII-XI centuries)



## Appendix 3



## Appendix 4



### Questions for discussion of a case:

1. What factors had impact on development of East Renaissance?
2. What contribution of thinkers of East Renaissance to world philosophy, science and culture?
3. Why our state pays special attention to careful preservation, enrichment and enhancement of the historical, cultural and intellectual heritage?
4. What role and value of the held international scientific conference "Historical Heritage of Scientists and Thinkers of the Medieval East, Its Role and Value for a Modern Civilization" in the city of Samarkand" (on May 15-16, 2014)?

## II. METHODOICAL INSTRUCTIONS TO THE STUDENT

**Problem:** Analysis of essence of the concepts "Renaissance", "East Renaissance", contribution of representatives of East Renaissance to system of universal culture; values and roles historical heritage of scientists and thinkers of the medieval East for a modern civilization, and also in education of younger generation.

### The instruction to independent work of students about a case-study

Work stages	Recommendations and councils
1. Acquaintance with a case	At first examine a case. Reading, don't try to analyze a situation at once.
2. Acquaintance with the set situation	Once again attentively read information. Allocate those paragraphs which seemed to you important. List the facts stated in the description of a situation.
3. Identification, formulation and justification of a key problem	In what the main problem consists? 1. What role of East Renaissance for a world civilization? 2. How the cultural heritage of ancestors promotes spiritual improvement of the person and society?
4. Analysis of a situation	Establish, at what level the problem is solved. Answer a question: how it is possible to use heritage of ancestors in education of younger generation?
5. Choice and justification of ways and cures of a problem	Show and prove problem solutions.

Issue results of work with a case in a written thesis form:

### **Requirements to written work**

1. Work has to be written in a thesis form on one party of paper of the standard A4 format (no more 2kh sheets).
2. Work registration:
  - on the first page the surname, a name and group of the student has to be written at the upper right;
  - below in the middle name of a subject of a case;
  - further results of work with a case in a thesis form

### **Performance evaluation criteria with case (individual extracurricular and classroom work)**

#### **Indicators and evaluation criteria self-extracurricular work writing**

Name of a student	Indicators and evaluation criteria (in basis points)			
	1. Identified, formulated and analyzed Rowan key problem (max. 6)	2. Defined levels of solving the problem (max.4)	3. Identified and justified solution to the problem (max.10)	in total (max. - 20)
1.				
2.				

#### **Indicators and criteria for evaluation of classroom work (discussion)**

Name of a student	Indicators and evaluation criteria (in basis points)				
	Sequence, logic, clarity of presentation, argumentation in discussion (max.1)	proposed conjugated the alternatives to address the problem (max.1, 5)	a clear statement of conclusions (max. 0,4)	Activity during the discussion (max. 0,5)	Total: (max. - 3,4)
1.					
2.					

### III. CASE - TECHNOLOGY OF TRAINING AT THE SEMINAR

#### Model of learning technology

Quantity students: no more than 25	Time – 2 hours
The form of a lesson	Seminar on fixing and expansion of knowledge
The structure of a lesson	1. Concept "Renaissance", Western and East Renaissance, their similar and distinctive features. 2. High development of spirituality of Central Asia in the IX-XII century. 3. Late Renaissance and its main representatives.
<i>Purposes of educational occupation:</i> to fix and deepen knowledge of East Renaissance and of his representatives.	
<i>Pedagogical tasks:</i> - to fix and deepen knowledge of a subject; - to create ability independently to formulate, make the generalizing conclusion; - to develop communicative skills.	<i>Results of educational activity:</i> The student has to: - to distinguish the Western and East Renaissance; - to list peculiar features of East Renaissance; - to give the characteristic to early and late East Renaissance; - to analyse questions of spirituality of representatives of East Renaissance.
<i>Training methods</i>	Case – study
<i>Tutorials</i>	Sheets for presentation.
<i>Forms of education</i>	<i>Individual, work in groups</i>
<i>Training conditions</i>	<i>Standard audience</i>
<i>Monitoring and assessment</i>	<i>Supervision, quiz, presentation, ball assessment</i>

#### Technological card of a seminar

Stage of a work	The content of activity	
	teacher	students
1 stage. Introduction to educational occupation (10 min.)	1.1. Reports a subject, the purpose and questions of a case.	1.1. Listen
2 stage. Main stage (70 min.)	2.1. Reports that the case was distributed for 4 groups in advance. 2.2. Declares the beginning of work in groups. Controls, directs the course of educational activity. 2.3. Will organize process of presentation, collective discussion and	2.1. Listen 2.2. Listen 2.3. Make presentation of results of work. Listen and estimate performances of



	mutually evaluation of the work of groups. 2.4. Asks in addition questions of quiz, additional questions and tests (Appendix 1, 2, 3). 2.5. Comments on the reached results.	other groups. 2.4. Answer questions. 2.5. Collectively discuss the performed task.
3 stage. The final (10 min.)	3.1. Sums up the results of work of groups. Notes the reached results of educational activity, encourages active participants.	3.1. Listen.

## Appendix 1

**Table of "Quiz":**

№	Questions	Answers
1.	What works were written by Abu Raykhan Beruni?	
2.	What branches of sciences was engaged in Al - Horazmi?	
3.	What contribution made Abu Ali Ibn Sina in medicine?	
4.	About what spiritual qualities tells Farabi in the works?	
5.	What inventions were made by Ahmad al-Fergani?	
6.	On what moral principles Farabi in the works stops?	
7.	What spiritual principles the governor on views Alisher Navoi has to own?	
8.	What works art of a miniature were written by K. Bekhzod?	
9.	Call historians of East Renaissance	
10.	Whose name connected the period of the Late Renaissance?	

## Appendix 2

### Additional questions:

1. How spirituality problems in Al-Farabi's philosophy are covered?
2. Tell about the benefit of the personality, a family and the state in the doctrine of Ibn Sina.
3. Ideal of the person in creativity of A. Navoi.
4. What has to be the ideal governor according to A. Navoi?
5. Tell about the Virtuous City in Al-Farabi's doctrine.
6. What does Z.M. Babur in the works about the Homeland write?

**Solve tests:**

**1. Outstanding representatives of science of an era of East Renaissance:**

- a) Farabi, Horezmi, Fergani, Beruni, Ibn Sina
- b) Pavlov, Amir Temur
- c) Mirzo Ulugbek, Alisher Navoi
- d) Leonardo to Vinci, Newton

**2. When and by whom was it entered into science concept an era of East Renaissance?**

- a) in the 14th century, the Italian researcher
- b) in the 16th century, the Italian researcher
- c) in the 14th century, the French researcher
- d) in the 15th century, the Uzbek researcher

**3. That thinkers of Central Asia since IX century studied:**

- a) architecture of Ancient Greece
- b) doctrines of the predecessors
- c) philosophy of Ancient China
- d) Ancient Greek philosophy, literature and art

**4. Which of east scientists was named the second Aristotle:**

- a) Beruni
- b) Farabi
- c) Ibn Sina
- d) Fargoni

**5. Call common features of East and Western Renaissance:**

- a) development of religion
- b) development of architecture
- c) art development
- d) development of applied sciences

**6. Which of East scientists created "Nilometr"?**

- a) Beruni
- b) Farab
- c) Fergani
- d) Al – Horezmi

**IV. VERSION OF THE ANALYSIS AND SOLUTION OF THE CASE**

**1. What factors had impact on development of East Renaissance?**

The scientific heritage created in the period of the Middle Ages in the territory of present Central Asia, ingenious opening of scientists and thinkers of the medieval East, despite distinctions of languages, an ethnic origin and geography, belongs to a uniform world civilization and is universal property.

It should be noted that with inclusion in structure of the Arab caliphate Central Asia began to play an active role in his political, social and economic and cultural life. In general almost identical distribution and a level of development in this region of knowledge were one more of distinctive features of their specifics. Emergence of new scientific knowledge or a certain system of classification of

sciences in one place became known and found the reflection in other regions of the huge space called by the Muslim East. It also promoted broader coverage of the different countries and testified to rather high level of development of sciences in all countries entering it. All this, naturally, was promoted also by development of a problem of its classification. Development of science in all countries went in general equally: in North Africa and Central Asia, Spain and in the Caucasus.

Emergence of such historical phenomenon as East Renaissance, was not the casual, but natural phenomenon. Studying of characteristic signs of epoch-making changes in the history of a world civilization, and prerequisites promoting their formation shows that they, as a rule, are a single combination of a number of decisive factors, among which:

- rough raising of culture and education, medicine, literature, art, architecture;
- emergence of schools of sciences, inflow and generation of talents in the medieval East, first of all in Central Asia;
- the stable state providing a sustainable development of economy, formation of the developed system of trade, the workmanship, agricultural production providing financial, material and other types of resources for purposeful active support of scientists and their schools of sciences;
- a demand from society of those and or other scientific researches, creations of painting, literature and art;
- the developed education system, selection and encouragement of gifted youth which generated continuous inflow to scientific and creative schools of new talents. Not incidentally, during these periods universities and other educational institutions are created, expansion of literacy among the population and studying of literary works is encouraged.

Important component of development of science and culture is the cultural exchange between the countries and the people, existence of dialogue between civilizations that provides their mutual enrichment with ideas and the accumulated knowledge. The great silk way, this major international transport artery of antiquity operating throughout more many centuries became one their major factors of formation and successful development of East Renaissance. Stay at intersections of the main caravan tracks of the intellectual centers of the region – Khorezm, Bukhara, Samarkand – created conditions for an intensive intercivilization cultural and scientific exchange.

The great silk way served as the conductor for fast distribution of technologies and innovations (production of silk, porcelain, gunpowder and paper), crops and agro technologies, achievement of culture, architecture. A special role I played mutual enrichment of the countries of the region scientific knowledge, and of the Great silk way to Europe data on activity, and then and scientific works of great thinkers of the medieval East arrived.

## **2. What contribution of thinkers of East Renaissance to world philosophy, science and culture?**

At the beginning of the IX century in Baghdad at the Caliph al-Majmune of the blossoming reached the House of wisdom (Al-hikma Bite) — Academy of

Sciences of the East of that time with big library book-depository and observatories for astronomical supervision. A significant amount of scientists from different regions of the caliphate where much attention was paid to studying of scientific achievements of Greece and India was involved in scientific and translation activity there. Here also natives of Central Asia, outstanding minds of the time — Mahomed ibn Musa al Horezmi, Ahmad ibn Mahomed al Fergani, Habash al Hasib Marvazi and others worked.

The big contribution to development of spirituality of the people of the East, development of sciences about Islam were brought by such scientists as the Imam al Bukhari, the Imam of at-Termiz, al Ashjari, al Maturidi, Burkhaniddin al Marginani. The intensive development of natural sciences, philosophical thought, literature, art, ethics which began during the early period of Islam led them to high level in the tenth century. By this time scientists — natives of Central Asia improved science about language and its grammar, terminology on philosophy. They created science of fundamentals of fiqh (law), science about fiqh and its different laws. Scientists and thinkers enriched with outstanding achievements world mathematical thought, namely: formation of independent mathematical sciences, that is allocated algebra as the separate science independent of account science, and also showed huge interest in exact measurement of perimeter of the globe by the methods, applied a new solution of the problem of division of a corner into three equal parts. During the same period big development was gained by such sciences as history, literature, music and other humanitarian knowledge.

As indicator of intensive raising of spiritual life emergence of a huge number of treatises on different branches of science can serve in the countries of the Middle East, and also Central Asia during this period: to natural sciences, philosophy, law and humanitarian knowledge. It was the era of such great scientists-Encyclopaedists, titans of thought, poets, as Mahomed ibn Musa al Horezmi, Abu Yaqub al Kindi, Abu Bakr ar-Razi, Abu Nasr al Farabi, Abu Raykhan Beruni, Abu Ali ibn Sino, Mahmud al Kashgari.

New — in comparison with Ancient Greek — the stage of development of science in Central Asia caused change of the maintenance of physiophilosophy. The analysis of scientific heritage of Abu Raykhan Beruni, Abu Ali ibn Sino and other outstanding scientists of Central Asia and the Middle East shows that the physiophilosophy by their time already passed a way from once uniform undifferentiated system of knowledge to philosophical judgment of the world which is based on achievements of the separate already developed sciences. During their era was considered that each outstanding scientist has to be the philosopher therefore it is obliged to know fundamentals of all sciences, but at the same time it has to be and the researcher, the expert in the directions elected by him. Because the person couldn't catch with exhaustive completeness all complex of scientific knowledge at the new level of their development already.

Outstanding achievements of scientists and great creations of thinkers of the medieval East gave a powerful spur scientific culturally to raising of the huge region of the world, their invaluable contribution to development of sciences and all world civilization are recognized as world community as the era of East

Renaissance which had beneficial influence on processes of the Renaissance in Europe and other regions of the world.

### **3. Why our state pays special attention to careful preservation, enrichment and enhancement of the historical, cultural and intellectual heritage?**

The deep respect for the history, the saved-up experience, the created intellectual potential, makes a basis of both material, and spiritual progress of any state.

In the performance the President Islam Karimov notes: "When I address to our youth, always I speak: yes, we have the right to be proud of our great ancestors. But at the same time we have to develop and enrich this heritage, make the worthy contribution to this invaluable treasury".

In Uzbekistan in days of independence huge work on studying and promoting of scientific heritage of great scientists and thinkers of the medieval East, practical development by modern science of their East Renaissance is carried out, in the country very much attention is paid to a development of education and sciences, it became one of the most important priorities of a state policy. Gives the impressive results recognized as the world community created in Uzbekistan the complete system of continuous education meeting the modern requirements and the international standards.

### **4. What role and value of the held international scientific conference "Historical Heritage of Scientists and Thinkers of the Medieval East, Its Role and Value for a Modern Civilization" in the city of Samarkand" (on May 15-16, 2014)?**

Big and appreciation activities of the modern scientific different countries for studying and dissemination of knowledge about priceless scientific heritage of the medieval East thanks to which treasure of human thought of the past become available to present generations deserve.

The factors and prerequisites which created opportunities and incentives for formation and development of "East Renaissance" don't lose the relevance and now, moreover, their value amplifies taking into account the increasing complexity and scales of scientific researches, penetration of modern high technologies into all spheres of economy and public life.

The deep judgment and use of achievements of development of science and culture of that period will allow to realize the most important axiom of today's world in a new way: The XXI century is a century of knowledge and intellectual work, and the example of their great intellectual and spiritual and moral feat – to serve the younger generation as a sample in the course of their scientific researches.

The held international forum and its results will give a new powerful impulse further deepened by researches and promoting on truth of priceless scientific heritage of great scientists and thinkers of the medieval East, will promote disclosure of relevance and a demand of the discoveries made by them for modern science and progress.