

CHAPTER I

INTRODUCTION

A. Research Background

Islamic Astronomy (*‘Ilm al-Falak*) is a rarer science.¹ The reason is that experts of Islamic Astronomy have died, such as KH. Muḥammad Maṣṣūr ibn ‘Abdulḥamīd from Jakarta, KH. ‘Abduljalīl from Kudus, KH. ‘Abdurraḥīm from Yogyakarta, KH. Zubair ‘Umar al-Jailanī from Salatiga, Turaiḥān al-Juhrī al-Sharafī from Kudus, Muḥammad Khalīl from Gresik, KH. Ma’ṣūm ibn ‘Alī from Gresik, Sa’adoeddin Djambek etc.

Scarcity of institutions making Islamic Astronomy as education curriculum is another reason that it is truly a rare science.² Although they exist, they do not examine it comprehensively. Most of them are classical education groups, such as Islamic schools and Islamic boarding schools.³ Their syllabuses are from some classical books of Islamic Astronomy such as *Sullam al-Nayyirain fī Ma’rifat al-Ijtima’ wa al-Kusufain, al-Khalāṣah al-Wafiyyah* etc.⁴ Their methods just learn those classical books without learning comprehensively.⁵

¹ Paper “*Pengembangan Kurikulum Ilmu Falak Di PTAI (Belajar Pada Prodi AS Konsentrasi Ilmu Falak IAIN Walisongo)*” presented by Ahmad Izzuddin in the national seminar of development of Islamic astronomy and the meeting of lecturers of Islamic astronomy all over Indonesia held by Shariah Faculty of Walisongo State Institute for Islamic Studies on Tuesday to Wednesday, 2 to 3 of December 2009 in Walisongo State Institute for Islamic Studies, p. 1

² Ibid

³ Ibid

⁴ Ahmad Izzuddin, *Fiqh Hisab Rukyah, Menyatukan NU dan Muhammadiyah dalam Penentuan Awal Ramadhan, Idul Fitri, dan Idul Adha*, Yogyakarta: Logung Pustaka, ed. I, 2003, p. 65

⁵ Paper “*Pengembangan Kurikulum Ilmu Falak Di PTAI*”, Op. Cit., p. 2

Those classical books are either masterwork of Indonesian scholars studied in the Middle East, such as *al-Khalāṣah al-Wafīyyah* book written by KH. Zubair ‘Umar al-Jailanī⁶ or Indonesian scholars’ masterwork, which is their study results from experts of Islamic Astronomy studied from scholars studied in the Middle East, such as *Sullam al-Nayyirain fī Ma’rifat al-Ijtima’ wa al-Kusufain*⁷ written by KH. Muḥammad Manṣūr ibn ‘Abdulḥamīd Damirī al-Batawī.

The other classical books are the books of Islamic Astronomy imitating *al-Khalāṣah al-Wafīyyah* written by KH. Zubair ‘Umar al-Jailanī. They are *Nūr al-Anwār* written by Abū Saif al-Mujāb Nūr Aḥmad, *al-Maksūf* written by Aḥmad Ṣāliḥ Maḥmūd Jauhary, *Kalender Menara Kudus* written by Turaiḥān al-Juhrī al-Sharafī, and *Ittifāq Dzāt al-Bain* written by Muḥammad Zubair ‘Abdulkarīm.⁸ Although they are classified into *Ḥisāb Ḥakīkī Taḥqīqī* method⁹, they need to be learned comprehensively. By

⁶ His Islamic astronomy teacher in Mecca was ‘Umar ḥamdan by reviewing the book entitled *al-Maḥḍa’ al-Sa’id* written by Ḥusain Zaid al-Miṣra and *al-Manāḥij a- Hamīdiyyah* written by ‘Abdulḥamid al-Murshy. Both of them are the modification results of *Tabril Magesty* discovered by Claudius Ptolomeus. Ahmad Izzuddin, “Zubaer Umar Al-Jaelani, Dalam Sejarah Pemikiran Hisab Rukyah di Indonesia,” Individual Research, Semarang, IAIN Walisongo Semarang, 2002, p. 63

⁷ *Sullam al-Nayyirain fī Ma’rifat al-Ijtima’ wa al-Kusufain* is an Islamic astronomy book written by Muḥammad Manṣūr ibn ‘Abdulḥamīd Damirī al-Batawī. It is the result of his studying with Ḥabīb ‘Uthmān. This book was first published in 1344 H/ 1925 AD by Borobudur printing in Batavia. Muhyiddin Khazin, *Ilmu Falak Dalam Teori dan Praktik*, Yogyakarta: BUANA PUSTAKA, ed. III, p. 30

⁸ Ahmad Izzuddin, “Zubaer Umar Al-Jaelani,” Op. Cit., p.70 -71 and 77

⁹ According to the result of “Seminar Sehari Hisab Rukyah” on April 27, 1992 in Tugu, Bogor, West Java that *Ḥisāb Ru’yah* methods in Indonesia are classified based on their level accuracy. First, The *Ḥisāb Ru’yah* method, which has low-level accuracy (*Ḥisāb Ḥaqīkī Taqrībī*), such as *Sullam al-Nayyirain fī Ma’rifat al-Ijtima’ wa al-Kusufain* written by KH. Muḥammad Manṣūr ibn ‘Abdulḥamīd Damirī al-Batawī, *Tadzkiarah al-Ikhwān* written by Aḥmad Dahlan Semarang, *al-Qawā’id al-Falakiyyah* written by ‘Abdulfath, *al-Shams wa al-Qamar* written by Anwār Kathīr, *Risālah al-Qamarain* written by Nawāwī Muḥammad, *Shams al-Hilāl* written by

learning them comprehensively, the students of Islamic Astronomy can do new penetration for getting the more accurate calculation result in Islamic Astronomy.

Those classical books provide kinds of practical manuals using position data of both Sun and Moon for worships necessity of Islam.¹⁰ It is natural because the worships of Islam, such as praying, tithe (*zakāt*), and fasting have relevance with Sun's position and Moon's position.¹¹ In fact, because most of those were written in Arabic Language, most students who learn *'Ilm al-Falak* consider that it is very difficult to be learned.¹² Therefore, there are just few people learning this science.

As the practical manuals for worship necessities of Islam, the study scope of Islamic Astronomy is narrower.¹³ It just learns about the calculation of prayer times, sacred direction (*Qibla*), regulation of the calendar, and eclipses. This is the description of study of Islamic Astronomy's type in

Abū Saifu al-Mujāb Nūr Aḥmad, etc. *Second*, The *Ḥisāb Ru'yah* method, which has the high-level accuracy but it is the classical method (*Ḥisāb Haqīkī Taḥqīqī*), such as *al-Khalāṣah al-Wafīyyah* written by KH. Zubair 'Umar al-Jailanī, *al-Maṭla' al-Sa'īd* written by Ḥusain Zaid, *Nūr al-Anwār* written by Abū Saifu al-Mujāb Nūr Aḥmad etc. *Third*, The *Ḥisāb Ru'yah* method, which has the high-level accuracy but it is the contemporary method, such as *Almanak Nautika* created by Indonesia Navy for Hydro Oceanography Agency, *Ephimeris* by Ministry of Religious Affairs, *Islamic Calender* created by Muhammad Ilyas, etc. Read Ahmad Izzuddin, *Ilmu Falak Praktis (Metode Hisab Rukyat Praktis dan Solusi Permasalahannya)*, Kamala Grafika: Semarang, 2006, p. 135-136

¹⁰ Paper "Pengembangan Kurikulum Ilmu Falak Di PTAI" Loc. Cit

¹¹ The examples are determining the qamariyah months by observing the moon's position, determining the prayer times by observing the sun's position, determining the Qibla direction by calculating the position of sun shadow, and determining the eclipses by calculating the positions of both sun and moon. Slamet Hambali, *Ilmu Falak, Penentuan Awal Waktu Shalat dan Arah Kiblat Seluruh Dunia*, Semarang: Program Pascasarjana IAIN Walisongo Semarang, ed. I, 2011, p. 6

¹² Ahmad Izzuddin, *Zubaer Umar al-Jaelani*, Op. Cit., p. 76

¹³ Paper "Pengembangan Kurikulum Ilmu Falak Di PTAI," Op. Cit., p. 3

Indonesia. Syafiq Mughni¹⁴ argued that experts of Islamic Astronomy had been glued to the classical theory during the old order government to the new order government. The proof was the minimum research results in Islamic Astronomy.¹⁵ Therefore, at that time, the thought in Islamic Astronomy had been around the sanctification (*pensakralan*).¹⁶ It made Islamic Astronomy a static science.¹⁷

The sanctification occurred in not only Islamic Astronomy, but also *Mu'āmalah*, *Siyāsah* and *Uṣūl al-Fiqh*. It occurred in the first six centuries of *Hijriyyah*. The first century was the end expansion of Islam. Then, the end of the third century was the deadline for perfection and reliability of the Islamic thought development. The next three centuries (after the first three centuries) was the time for the intellectual development of Islam and then it made some conflicts, which gave rise to several groups in Islam. Therefore, during the first six centuries, it was the emergence of Islam in the science. Then, it amended fully until reaching a certain peak point and finally, it got decline totally.¹⁸

¹⁴ Chairman of the Central Executive Muhammadiyah period 2010-2015, and The Regional Chairman of Muhammadiyah of East Java period 2005-2010

¹⁵ Paper “*Studi Falak Kontemporer*” written by SusiknanAzhari. This paper was presented in Book Discussion Event “Great Thinkes” of Gadjah Mada University Pascasarjana on November 12, 2009. Read www.pasca.ugm.ac.id/v2.1/news/id/68.

¹⁶ Ibid

¹⁷ As Amin Abdullah’s statement that almost all of activities of knowledge both natural sciences, social science and religious science gets into shifting paradigm. Therefore, if a science does not get into shifting paradigm, it is static. Ibid

¹⁸ Muhammad al-Bahiy, *Alam Pikiran Islam dan Perkembangannya*, translated by Al-Yasa’ Abu Bakar from “*Al-Fikr Al-Islamiy Fi Tathauwurihi*,” PT Bulan Ibntang: Jakarta, ed. I, 1987, p. 20-21 and 24

Actually, the institutions making Islamic Astronomy as an education curriculum are not only Islamic schools and Islamic boarding schools but also all of colleges of Islamic religion (PTAI) all over Indonesia, which have shariah faculty. Nevertheless, in 1995 when Andi Rosyandiah took hold of Director General of Ministry of Religious Affairs, Islamic Astronomy was dismissed from the national curriculum¹⁹ because of human resources scarcity.²⁰ Therefore, the development of Islamic Astronomy was hampered.

As a college of Islamic religion, Walisongo State Institute for Islamic Studies (IAIN) of Semarang is trying to apply a different model of the study of Islamic Astronomy in cooperation with Directorate of *Diniyyah* Education and Boarding School in order to develop Concentration of Islamic Astronomy (KIF). As the expectation of former Director General of Islamic Society Guidance (Prof. Nazaruddin Umar), Semarang is expected to be a development beacon of Islamic Astronomy in Indonesia. It is because Walisongo State Institute for Islamic Studies is seriously focusing on the development of Islamic Astronomy in Indonesia. He said,

"Saat ini hanya Institut Agama Islam Negeri (IAIN) Walisongo Semarang yang cukup fokus untuk benar - benar mengembangkan keilmuan falak. Ini merupakan yang pertama dan satu - satunya di Indonesia, bahkan di Asia Tenggara. Hal ini wajar karena di Semarang dan Jawa Tengah banyak terdapat para ahli falak."²¹

¹⁹ Susiknan Azhari, *Pembaharuan Pemikiran Hisab di Indonesia, Studi atas Pemikiran Saadod'ddin Djambek*, Yogyakarta: Pustaka Pelajar Offset, Ed. I, 2002.

²⁰ An interview with Slamet Hambali who is a senior lecturer of Islamic Astronomy in Shariah Faculty of Walisongo State Institute for Islamic Studies on April 17, 2012.

²¹ "For the moment, Walisongo State Institute for Islamic Studies is the only colleges, which focuses to development Islamic Astronomy study assuredly. It is the only one in Indonesia, even in Southeast Asian. It is fair because Semarang, Central Java has many experts of Islamic Astronomy." <http://nasional.kompas.com/read/2009/12/02/02384697/> accessed on April 12, 2012

According to that statement, the writer is interested to research deeply and examine carefully about the study of Islamic Astronomy's model applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies. The writer assumes that this research is important to know both epistemology and praxis of the Study of Islamic Astronomy, especially in Walisongo State Institute for Islamic Studies. By knowing both of them, this research will describe the study of Islamic Astronomy's model, which should be applied in the study of Islamic Astronomy in Indonesia. In addition, this research will express whether the study of Islamic Astronomy in Walisongo State Institute for Islamic Studies has agreed with the development of Islamic Astronomy.

B. Statement of the Problems

Concluding the background described above, this research will be formulated into some main problems in the form of several questions as mentioned below:

1. How is the epistemology of the study of Islamic Astronomy applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies?
2. How is the praxis of the study of Islamic Astronomy applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies?

C. Aim and Significance Research

Based on the problems formulated above, this research has some specific purposes. These purposes are:

1. To know how the epistemology of the study of Islamic Astronomy applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies.
2. To know how the praxis of the study of Islamic Astronomy applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies.

In addition, this research has also some significance mentioned below:

1. As the input information for evaluating whether the study of Islamic Astronomy at Walisongo State Institute for Islamic Studies has corresponded for the epistemology of Islamic Astronomy or has not.
2. It gives the significance to know whether the study of Islamic Astronomy at Walisongo State Institute for Islamic Studies has agreed with people's need or has not.
3. It gives the significance both theoretically and practically for development of Islamic Astronomy in the fieldwork.
4. As an information data for the next researches.

D. Preview of Literature

In this phase, this research is going to search some literature or sources from books, which are generally about the Islamic Astronomy studies and especially about the Study of Islamic Astronomy at Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies. In addition, some sources and information from journals, articles, magazines or other previous researches are also important to be served. These sources will make the research easier and solve the problems of this research.

The aim of previewing the literature in this research is to describe the relationship between the writer's research and the researches done by some other researchers before. It is possible if this research is same with the previous researches. By previewing some literatures, the writer hopes there is

no repetition or even a plagiarism that should be avoided in any scientific research. Moreover, the aim of previewing literature is to differentiate this research and other previous researches, because there are many possibilities of resemblance in the contents.

As far as the writer observation, there is no special detail research, which discusses about the Study of Islamic Astronomy model at Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies. Although there are some researches about the Study of Islamic Astronomy, especially the Study of Islamic Astronomy in Shariah Faculty of Walisongo State Institute for Islamic Studies. Those researches only discuss about a concept of that.

Some researches related to this research are:

1. Paper "*Pengembangan Kurikulum Ilmu Falak Di PTAI (Belajar Pada Prodi AS Konsentrasi Ilmu Falak IAIN Walisongo)*" written by Dr. Ahmad Izzuddin, M.Ag.

This paper presented by Dr. Ahmad Izzuddin, M.Ag in the Islamic Astronomy development national seminar and the meeting of Islamic Astronomy lecturers all over Indonesia held by Shariah Faculty of Walisongo State Institute for Islamic Studies on Tuesday to Wednesday, 2 to 3 of December 2009.

Izzuddin explains about the background of Shariah Faculty's attempt to develop the Study of Islamic Astronomy in the form of Islamic Astronomy Concentration. In addition, he also describes the Concentration

of Islamic Astronomy 's curriculum and some laboratory devices of Shariah Faculty.

Looking at the content of this book, there is a similarity of discussion between this paper and this research. It is about the concept description of the Study of Islamic Astronomy at Concentration of Islamic Astronomy of The Family Law of Shariah Faculty of Walisongo State Institute for Islamic Studies. Nevertheless, this research takes another angle point of this problem. If this paper only tries to describe a concept of it, this research will try to figure its model out based on both epistemology and praxis of it.

2. Paper "*Studi Falak Kontemporer*" written by Prof. Dr. Susiknan Azhari, MA.

This paper presented by Prof. Dr. Susiknan Azhari, MA in Book Discussion Event "Great Thinkers" of Gadjah Mada University Pascasarjana on November 12, 2009. This paper offers the contemporary Islamic Astronomy model by mentioning some its criteria. This paper gives an idea of the ideal Study of Islamic Astronomy model should be developed in Indonesia.

3. Zenith Magazine Edition VI/ Year III/ July 2011, "*Nasib Prodi Falak Setelah Jadi UIN*"

In the main report, this magazine presents two titles, which are "*Sejarah Lahirnya Prodi Falak*" and "*Nasib Prodi Falak Setelah Jadi UIN.*" In the first title, it explains the idea background to organize Islamic

Astronomy Concentration and someone who contributed actively to realize this idea.

4. Zenith Magazine Edition IV/ Year II/ July 2010, "*Ramalan Persembunyian Di Balik Kenyataan*" and Zenith Magazine Edition VII/ Year III/ December 2011, "*Menguak Mitos Gerhana.*"

Both of them provide some information about some discussions of Concentration of Islamic Astronomy . If Zenith Magazine Edition IV/ Year II/ July 2010 provides some information related to the conclusion of the national seminar about Qibla Direction (*Seminar Nasional Menggugat Fatwa MUI No. 3 Tahun 2010 Tentang Arah Kiblat*), Zenith Magazine Edition VII/ Year III/ December 2011 is about Eclipses (*Seminar Nasional Gerhana Antara Mitos dan Sains*). It means that both of those magazines describe about the praxis of the Study of Islamic Astronomy at Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies.

No.	Researches	Year	Title	Finding
1.	Dr. Ahmad Izzuddin, M.Ag's paper	2009	Pengembangan Kurikulum Ilmu Falak Di PTAI (Belajar Pada Prodi AS Konsentrasi Ilmu Falak IAIN Walisongo)	Explaining the study concept of Concentration of Islamic Astronomy (KIF) by descriibng its curriculum and some laboratory devices of Shariah Faculty of Walisongo State Institute for Islamic Studies
2.	Prof. Dr. Susiknan Azhari, MA's paper	2009	Studi Falak Kontemporer	It offers the contemporary Study of Islamic Astronomy model should be developed in Indonesia
3.	Zenith Magazine Edition VI/ Year III/ July 2011	2011	Sejarah Lahirnya Prodi Falak	It explains the idea background to organize Islamic Astronomy Consentration and someone who contributed actively to realize this idea.
4.	Zenith Magazine Edition IV/ Year II/ July 2010	2010	Ramalan Persembunyian Di Balik Kenyataan	It provides some information related to the praxis of the Study of Islamic Astronomy at Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies in the form of some national seminars.
5.	Zenith Magazine Edition VII/ Year III/ December 2011	2011	Menguak Mitos Gerhana	It provides some information related to the praxis of the Study of Islamic Astronomy at Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies in the form of some national seminars.

Table.1.1: Previous Findings

E. Research Methodology

1. Research Category and Approach

The category of this research under the title “The Study of Islamic Astronomy in Indonesia (A Study of the Study of Islamic Astronomy Model at Islamic Astronomy Concentration of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies)” is a *qualitative research*²² and the approach of this research is *historical approach*.

The historical approach is one of the qualitative research approaches, which describes a life history, a thought history, and a history of institution.²³ The purpose of using this approach is to understand deeply the orientation of Concentration of Islamic Astronomy design since it was established until now. Therefore, this research will be able to explain the epistemology used by Shariah Faculty of Walisongo State Institute for Islamic Studies as the basis for developing the Study of Islamic Astronomy on Concentration of Islamic Astronomy (KIF). In addition, this research will also be able to explain how Shariah Faculty of

²² The special characteristics of qualitative research are, *first*, using the naturalistic paradigm technic, *second*, using the relevance criteria (trying to find the certainty and authenticity of data), *third*, the causality question is what happen in the naturalistic background. It is not about what is managed to happen in the situation managed before, *fourth*, the knowledge type used is not the proportional knowledge (the knowledge, which can be stated in the form of language), but the tacit knowledge (knowledge, which can not be stated in the form of knowledge and in the special situation it can be known together by research subject, such as intuition, understanding, feeling), *fifth*, using the ekspansionis ground (it is open and complex), *sixth*, researcher is as data gatherer instrument, *seventh*, the design research can be arranged before doing the research half completely, *eighth*, it has the possibility to change according to conditions in the field and the approach of this research. To know more about the special characteristics of qualitative research, read Lexy J. Moleong, *Metodologi Penelitian Kualitatif*, Bandung: PT Remaja Rosdakarya, Ed. IV, 1993, p. 16 - 21

²³ Compiler team, “Pedoman Penulisan Skripsi” Semarang, Sharia Faculty of Walisongo State Institute for Islamic Studies, 2010, p. 11 and 14.

Walisongo State Institute for Islamic Studies applies that epistemology. Both of them will provide the description of the study model of Concentration of Islamic Astronomy .

2. The Source and Data Type

Considering that the main source and data input of this research is some information of people who are involved directly with the activity observed, so this research is also called *field research*, which has two types of data, primary and secondary source.

The primary data source of this research is the interview results of informers who are involved directly with the activity observed. They are from Ministry of Religious Affairs's team, such as H. Amin Haedari, M. Pd (a former Director of *Diniyyah* Education and Islamic Boarding School of Ministry of Religious Affairs), and Ruchman Bashori, M.Ag (a staff in Directorate of *Diniyyah* Education and Boarding School of Ministry of Religious Affairs).

The interview results of this research is also from team of Walisongo State Institute for Islamic Studies who prepared collaboration with Ministry of Religious Affairs's team in order to open the program of Concentration of Islamic Astronomy in Shariah Faculty. The members of this team are Prof. Dr. H. Abdul Djamil, M.A (Rector of Walisongo State Institute for Islamic Studies, period 2003 – 2007 and 2007 – 2010), Prof. Dr. H. Muhiibn, M.Ag (Rector of Walisongo State Institute for Islamic Studies, period 2011 – 2015), Drs. H. Muhyiddin, M.Ag (Dean of Shariah

Faculty of Walisongo State Institute for Islamic Studies, period 2006 – 2010). Beside, the member of IAIN Walisongo's team are Dr. Musahadi, M.Ag (Dean Assistant I of Shariah Faculty of Walisongo State Institute for Islamic Studies, period 2006 – 2010), Drs. H. Nur Khoirin, M. Ag. (Dean Assistant III of Shariah Faculty of Walisongo State Institute for Islamic Studies, period 2006 – 2010), Drs. Eman Sulaeman, M.H (Former chief of Islamic Astronomy Concentration), Drs. KH. Slamet Hambali, M.Si, and Dr. H. Ahmad Izzuddin, M.Ag. (They are figures as well as senior lecturers of Islamic Astronomy in Shariah Faculty of Walisongo State Institute for Islamic Studies). In addition, this interview is also, for who were involved actively designing the Concentration of Islamic Astronomy's curriculum. They are Drs. KH. Slamet Hambali, M.Si, Dr. H. Ahmad Izzuddin, M.Ag and Drs. Hendro Setyanto, M.Si (an external lecturer of Concentration of Islamic Astronomy in instrumental course)

The secondary data sources of this research are from the books, articles, documents in internet sites, or other written information related to this research.

3. The Method of Data Collection

To collect some data, which are needed in this thesis, this research will use some methods of data collection. They are:

a) Interview

This research will use in-depth interview method to the informants mentioned in the previous discussion by both face to face and the communication media, such as facebook and phone.

Those informants are the actors identified. To find the other informants who have not been identified yet, the writer will ask their names, addresses and other information to them (the informants identified) in order to be found who the next possible informants who can provide more information. It will be done continuously to get the satisfaction from their explanations.²⁴

b) Observation

This research will use the observation method to get some data related to the praxis of Study of Islamic Astronomy on Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies. The writer will join in some discussion, such seminar related to the study topic.

²⁴ Paper “*Mengenal Metodologi Penelitian*”, written by Musahadi. This paper was presented in forum New Students Orientation of Islamic Astronomy Concentration of the Family Law Major of Syariah Faculty of Walisongo State Institute for Islamic Studies on August 9 to 16 2008 at the Islamic Center of the Central Java Religious Affairs Ministry Office, p. 5

c) Documentation

This research will use the documentation method to collect the data related to the study topic. They will be from both the previous researches as mentioned in the preview of literature and other documents, which come from either Ministry of Religious Affairs or Walisongo State Institute for Islamic Studies, such as Memo of Understanding (MoU) of Concentration of Islamic Astronomy , management structure, list of teachers are involved in the study process, scientific products like undergraduate theses, etc.

4. The Method of Data Analyzing

The method of data analyzing, which will be used in this research is content analyzing by descriptive method. The purpose is to describe the phenomenon resulted from some interviews to get a clear explanation or description and facts.

This research will both analyze and expose the data in the narrative description form. In this case, it will research the epistemological foundation of the Study of Islamic Astronomy at Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies. Therefore, this research can give the description of the Study of Islamic Astronomy model applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies.

In addition, this research will find the praxis of Study of Islamic Astronomy of Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies out. It can recognize the meaning of the Study of Islamic Astronomy model applied by it. Thus, it will not only emphasize either the classical texts or the classical behavior but also attend to the realities on the present and the possibilities that will occur in the future.

F. Research Outline

To complete the writing, this thesis is divided into five separate chapters. These chapters are:

CHAPTER I : INTRODUCTION

This chapter explains the background of this research (what causes this research should be done), the problems that should be solved by this research, the purpose and the significance of this research, previewing the literature, research method and the research or writing outline for this thesis.

CHAPTER II : THE STUDY OF ISLAMIC ASTRONOMY (*‘ILM AL-FALAK*) IN INDONESIA

There are two explanations in this chapter. The first explanation is about the general description of Islamic Astronomy (*‘Ilm al-Falak*) by explaining both the definition and scope of Islamic Astronomy (*‘Ilm al-Falak*). The second explanation is about the development of the study of Islamic Astronomy (*‘Ilm al-Falak*) by explaining not only the origin and the treasury of Islamic Astronomy (*‘Ilm al-Falak*) but also the history of it in Indonesia.

CHAPTER III : THE STUDY OF ISLAMIC ASTRONOMY AT CONCENTRATION OF ISLAMIC ASTRONOMY OF FAMILY LAW MAJOR OF SHARIAH FACULTY OF WALISONGO STATE INSTITUTE FOR ISLAMIC STUDIES

The discussions in this chapter are about the history and the institutionalization of Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies.

CHAPTER IV : THE STUDY OF THE ISLAMIC ASTRONOMY'S MODEL APPLIED BY CONCENTRATION OF ISLAMIC ASTRONOMY OF FAMILY LAW MAJOR OF SHARIAH FACULTY OF WALISONGO STATE INSTITUTE FOR ISLAMIC STUDIES

This chapter will explain the result of analyzing the study of Islamic Astronomy's model applied by Concentration of Islamic Astronomy of Family Law Major of Shariah Faculty of Walisongo State Institute for Islamic Studies. This chapter will describe both the epistemology and praxis of the study of Islamic Astronomy applied by it.

CHAPTER V : CLOSING

This chapter will explain the conclusion, suggestion, and closing.