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1.Undangan untuk mengirim artikel 9 November 2023



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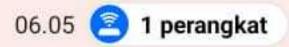
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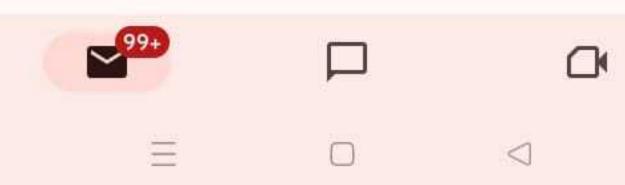
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Figh Subject Exam Questions Analysis: Is it Based on HOTS?

Abstract

In the context of Bloom's Taxonomy, higher-order thinking skills are at levels C4 to C6. In the 2013 curriculum, subject teachers are directed to make questions based on high-level thinking skills. The purpose of this study was to identify item levels based on Bloom's cognitive domain and determine the quality of the items made by the teacher. The numbers of questions studied were 440 items in the form of multiple-choice and essays in the Fiqh subject at Junior High Boarding School Serang. This study uses a descriptive qualitative method to analyze document data in the form of Fiqh questions, and then a quantitative approach is also used to analyze the quality of the questions from the available student answer data as many as 450 students on 40 Essay and 400 multiple-choice items. Document data were analyzed logically using Bloom's Taxonomy theory approach. While the data analysis of student answers was analyzed using Item Response Theory (IRT) model 1 parameter Logistics or commonly called the Rasch Model. The results showed that the questions made by the Fiqh teacher were generally still at a low level (C1 and C2). While the item test shows that the item items tend to be more dominant in the moderate category, all items are categorized as fit, and the item reliability is categorized as good.

Keywords: Evaluation, Thinking Skills, Fiqh

1. Introduction

The quality of a country's education, one of which is measured by the achievement or ranking of the Program for International Student Assessment (PISA) organized by member countries of the Organization for Economic Cooperation and Development (OECD). International average, Indonesia has a score below the international average score of 400. International average scores in reading, math and science are 487, 489, and, 489.



Source: PISA: Programme for International Student Assessment 2021

Fiqh as a branch of Islamic religious knowledge is closely related to aspects of PISA assessment. There are not a few differences or views on problems in the science of figh that require extensive reading. In the science of figh, we will get material or concepts related to mathematics,

namely the concept of inheritance and zakat. While the connection with science, among others, in determining the feast or the beginning of the fasting month using astrology technology.

To close the gap with other countries, the government, through the Ministry of Education and Culture, uses standard questions based on the Program for International Student Assessment (PISA) standards. The ability to think at a higher level is one of the typical PISA questions. As a result, the Ministry of Education and Culture adopted Bloom's revision according to Anderson in the 2013 curriculum, beginning with the level of knowing, understanding, applying, analyzing, evaluating, and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new (Sanjaya & Hidayat, 2022). This procedure necessitates the use of reasoning abilities. The ability to think critically is essential in the learning process. As a result, thinking skills are inextricably linked to the student learning process. Teachers who consistently teach pupils to think will have a favorable impact on the advancement of student education. Thinking at a higher level is one of the efforts to train students' talents.

Higher-order of Thinking Skills (HOTS) is a thinking ability that not only requires the ability to remember but requires other higher abilities, such as the ability to think creatively and critically. Students who are often trained in HOTS can improve student performance and reduce student weaknesses.

Higher-order thinking skills that occupy the top level of the cognitive hierarchy Bloom's Taxonomy is the meaning of Higher-order Thinking Skills (Ramos et al., 2013). According to Resnick (1987), higher order thinking skills are complex thinking processes in describing the material, making inferences, building representations, analyzing, and building relationships involving the most basic mental activities.

In Bloom's Taxonomy, Higher-order thinking skills start from the level of analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). Students can be said to have reached the HOTS level of thinking, if they can understand and actively integrate their experiences into new knowledge. Students will get used to exploring their thinking skills if they are supported by active learning which will skillfully hone their cognitive, affective and psychomotor competencies. Through learning outcomes in the form of valuable facts, students can maximize their thinking processes, both understanding, analyzing, concluding and applying in the real world. According to Anderson & Krathwohl (2001), the thought process develops so that it must be stated with a verb. Likewise, it is necessary to revise the hierarchy of thinking in Bloom's Taxonomy. Changes in the dimensions of thinking also need to be done so that they become remembered, understand, apply, analyze, evaluate, and create. In the cognitive domain they term factual, conceptual, procedural and metacognitive at every level of the thinking process.

The main purpose of education is to produce individuals who think critically and creatively, this can be done by asking effective teachers in the classroom (Wang & Wang, 2011). The form of questions asked must be able to stimulate students' minds to provide solution ideas to improve higher-order thinking skills. This higher-order thinking ability must be trained by the teacher in the learning process and then the results are assessed using an assessment instrument that includes questions that must have HOTS characteristics (Mustahdi, 2019). The goal is to improve higher-order thinking skills more effectively.

According to Resnick (1987), the characteristics of HOTS questions are non-algorithmic, contain complex elements, allow for more than one solution, involve a variety of decision-making and interpretations, apply various criteria and require various kinds of effort. The application of HOTS-based assessment is in line with learning that minimizes recall skills, but must consider the skills to transfer one idea to another, process and apply information, look for relationships from various dissimilar information, solve problems using information, examine concepts and concepts information critically. HOTS questions are applied as a measure of higher-order thinking skills,

not just questions that are more difficult than memorization questions. From a knowledge point of view, HOTS questions usually measure not only factual, conceptual, and procedural dimensions but also metacognitive

Metacognitive as a thinking dimension represents the skills of connecting more than one dissimilar idea, interpreting, problem-solving, discovering new ideas, expressing opinions (reasoning), and choosing the right attitude (Anderson, 2015). In the statement (Anderson & Krathwohl, 2001), 2 methods can be used for writing HOTS questions, namely: 1) measuring the material used as a question with the cognitive domain of high thinking, namely analyze, evaluate and create; 2) Create questions by providing stimuli such as sources or reading materials for text, paragraphs, photos, pictures, graphics, cases, tables, formulas, lists of symbols/words, films, examples or sound recordings

According to Setiawati et al., (2018), the characteristics of HOTS questions are 1) Measuring higher-order thinking skills including the ability to solve unfamiliar problems, the ability to evaluate strategies used to solve problems from different perspectives and find models new solutions that are different from the previous methods; 2) Based on contextual problems. HOTS questions are assessment instruments based on real situations in everyday life, where students are expected to be able to apply learning concepts in class to solve problems. Contextual problems faced by the world community today are related to various aspects of people's lives ranging from social, political, economic, cultural, religious, information technology and other aspects of life.

Several studies include Aziz (2015); Bhattacharya & Mohalik (2021); Gupta & Mishra (2021); Hanifah (2019); Nadlir & Alfiyah (2018) and Sarah et al., (2021) state that students will understand a concept if they have higher-order thinking skills. Problems with high-level thinking skills must be developed by the teacher to solve problems that exist in students' lives. Critical thinking is very necessary for the midst of the 4.0 revolution era. Therefore, Islamic education (PAI) teachers, especially fiqh teachers, should change their way of thinking about the importance of exploring and stimulating students to think at a higher level.

Figh is one of the subjects that necessitate critical thinking because it is concerned with the dynamics of human life. The distribution of Figh material is tailored to its nature as a product, process, and scientific attitude, with the intention that students may develop a scientific attitude as well. The use of various learning models, such as project-based learning, problem-based learning, and discovery learning, provides teachers with the option to carry out learning activities at the HOTS level.

The HOTS-characterized assessment model has been widely developed and applied in formal schools from elementary, secondary and tertiary levels (Widana, 2017). The development of an assessment model with HOTS characteristics is also one of the focuses of the agenda of the Directorate of Islamic Education at the Ministry of Religion in the implementation of the assessment of Islamic Religious Education, including fiqh subjects.

Improving the quality of the question instruments in the assessment of Islamic Education is an important thing and needs to be done. This is in line with efforts to develop student competencies to not only understand and know a form of knowledge or information but further than that, students are expected to have analytical and problem-solving abilities to various existing problems.

The purpose is to identify the level of the cognitive domain in the evaluation questions of Fiqh subjects. This is important to do as an evaluation for teachers and related parties to see how far the implementation of HOTS-based questions is according to the direction of the Ministry of Education and the Ministry of Religion to catch up with other countries. This paper has specificity in terms of the object being analyzed, namely the questions of groups of fiqh subjects compiled

by educators in Islamic boarding schools who have not been as much involved in question writing training activities as teachers in formal schools.

In the context of fiqh subjects, HOTS-based questions can train students' abilities in analytical and critical thinking (Sismarwoto, 2020). Because many problems of human life related to fiqh problems require critical analysis and this is included in the level of high-level thinking (Zafi, 2020). Improving the quality of the question instrument in fiqh assessment is an important thing and needs to be done. This is in line with efforts to develop students' competencies to not only understand and know a form of knowledge or information but further, than that, students are expected to have analytical and problem-solving skills on various problems related to fiqh (Ahmad & Sukiman, 2019).

Method

This research method is a qualitative descriptive method by describing qualitative data obtained from the field. The research was conducted at Junior High Boarding School Serang. The data obtained is data in the form of fiqh subject questions for the last 3 years, namely the 2019/2020, 2020/2021 and 2021/2022 school years. The data obtained are document data and are available in schools. The number of questions available at the school is 200 questions in the form of multiple-choice and essays.

For analysis, we read and re-examined all the questions received, then we examined each item using Bloom's Taxonomy review table guide based on Bloom's cognitive theory. For review item categories based on Bloom's cognitive theory can be seen in table 1.

ITEM	LEVEL					
	LOTS	MOTS		HOTS		
	C1	C2	C3	C4	C5	C 6
1						
2						
Indicator:						
C1: Recall, me	ention, define					
C2: Explain ideas/concepts						
C3: Using the information on a different domain						
C4: Specify aspects/elements						

Table 1. Review item categories based on Bloom's cognitive

C5: Take your own decisions

C6: Create your own ideas

In determining the level of Bloom's taxonomy, 2 experts in the field of Islamic education subjects and one expert in the field of educational measurement were involved. To see the quality of the questions made by the figh teacher, an analysis of the items was carried out using the Item Response Theory model 1 Parameters Logistics (PL) analysis or commonly referred to as the Rasch Model. The aspects tested are related to the level of difficulty, item fit, and the reliability of the questions. All item analysis using Winstep Software.

Results

Description of Higher-Level Thinking Skills in the Evaluation of Fiqh Subjects

The following describes the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily tests and semester exams.

Evaluation of the 2019/2020 Academic Year

To find out the dominant thinking level category in the daily test questions for the 2019/2020 academic year, pay attention to table 1 below.

Cognitive Domain Level	Frequency (Item)	Percentage
C1	9	90%
C2	-	-
C3	1	10%
C4	-	-
С5	-	-
C6	-	-

Table 2. HOTS or LOTS Analysis of Daily Test Questions

Data Source: Results of research data

Based on Table 2, it shows that there are 10 daily test questions in the form of essays, there are 9 or 90% of questions that fall into the C1 category (remembering), as for the form of the questions as follows

Mention the conditions for the sacrificial animal and aqiqah!
What is the meaning of Aqiqah?
What is the Law of Qurban?
What is the law of Aqiqah?
What is the meaning of Qurban according to the term?

Figure 1. Example of daily test questions for category C1.

The form of the questions above fall into the C1 category (remembering) is a person's ability to recall or recognize names, terms, ideas, symptoms, formulas (Hidayat, 2012). The questions in the table above only ask students to mention the law of Qurban and Aqiqah write down the meaning of *qurban* and *aqiqah* where the questions above are only limited to the level of testing the knowledge possessed by students. 1 (10%) questions that fall into the C3 category (applying), one form of the question is as follows.

Explain the steps in slaughtering sacrificial animals according to Islamic law !

Figure 2. Daily test questions for category C3

Application is a person's ability to apply or use general ideas, procedures or methods, principles, formulas, theories in new and concrete situations (Hidayat, 2012). Things that are *Sunnah* in the slaughter of sacrificial animals in life whereas this matter is included in the category of application. As for the categories C2, C4, C5, C6 (understanding, analysis, evaluation, creating) in the daily test questions, no one has been included in that category.

In the even-mid semester exam questions for the 2018/2019 academic year, the level of thinking ability is described in the following table.

Cognitive Domain	Frequency	Percentage
C1	12	80%
C2	2	13.33%
С3	1	6.67%
C4	-	-
С5	-	-
C6	-	-

Table 3. HOTS or LOTS analysis on mid-semester test questions

Data Source: Results of research data

Based on Table 3, it shows that there are 10 mid-semester test questions, there are 12 or 80% of the questions that fall into the C1 category (remembering), and whose form is as follows.

- 1. What are the Fard of hajj?
- 2. What are the obligations of a hajj?
- 3. What is the definition of sadaqah jariyah?
- 4. What is the verse of the Qur'an about the obligation of Haj

Figure 3. Mid-Semester Exam Questions for C1 category

The form of this question is included in the C1 category (remembering) because it only asks students to mention the Pillars of Hajj, the meaning of Hajj, the meaning of alms, the arguments for the implementation of the pilgrimage, where these questions are still at the level of knowledge possessed by students. 2 (13.33%) questions that fall into the category C2 (understanding). The form of an example question is as follows.

- 1. What can eliminate the reward of sadaqah jariyah!
- 2. What is the difference between a bribe and a gift?

Figure 4. Mid-Semester Exam Questions for C2 category

The form of the question in the Figure 4 asks students to describe things that can eliminate the reward of alms. Then one question that falls into the C3 applying category, as for the form of the question, is as follows.

Sadaqah is sunnah muakkad, but sadaqah can become obligatory. When does sadaqah become obligatory? an example of the application of sadaqah becomes mandatory!

Figure 5. Mid-Semester Exam Questions for the C3 category

This form of question asks students to give the concept of applying alms to be mandatory for someone. As for the categories C4, C5, C6 (analysis, evaluation, creation) in the Mid-semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory of odd semester test questions, to find out the dominant thinking level category, pay attention to the following table.

ntage
6%
70/0
70/0
-
-
-
-

Table 4. HOTS or LOTS analysis on odd	l semester test questions
---------------------------------------	---------------------------

Data Source: Researcher's data processing

Based on Table 4, it shows that there are 15 Semester test questions in the form of Essays, there are 13 (86.6%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

- 1. What are the rules of fasting in Islam?
- 2. What is the purpose of Ramadan fasting?
- 3. What is the meaning of prostration of gratitude and prostration of recitation!
- 4. Fasting is one of the five pillars of Islam?

Figure 6. Odd semester test questions for category C1

The form of the question in Figure 6 is in the C1 category because it only asks students to write down the mandatory fasting requirements, the meaning of fasting, the meaning of prostration of gratitude and prostration of recitation, understanding of fasting *kafarat*, and mentioning the *nisab* of gold and goats. These questions are still in the category of knowledge possessed by students. One question that falls into the category C2 (Understanding), the form of the question is as follows.

1. What are the differences and similarities between sujud syukur and sujud tilawah!

Figure 7. Odd semester test questions for category C2

This form of question asks students to make comparisons about the similarities and differences between prostration of gratitude and prostration of recitation. Then 1 question that is included in the C3 category (application), the form of the question is as follows.

1. Abdul Aziz will pay his zakat fitrah with a family of 5 people, zakat fitrah for the year 1436 H is worth 4 liters of rice. Calculate the amount of zakat fitrah that must be issued by Abdul Aziz and to whom is the zakat handed over?

Figure 8. Odd semester test questions for category C3

The form of the question in the Figure8 asks students to provide the concept of applying *aqiqah* in life. As for the categories C4, C5, C6 (analyzing, assessing and creating) in the semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on even semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	290	58%
C2	180	36%
C3	30	6%
C4	-	-
С5	-	-
C6	-	-

Table 5. HOTS or LOTS analysis on even semester test questions

Data Source: Results of research data

Based on Table 5, it shows that there are 500 item test questions in the form of multiple choice, there are 29 (58%) questions that fall into the C1 category (remembering), where the sample questions are as follows.

1.	Aqiqah is held on
	a. 7th day before birth
	b. 7th day after birth
	c. 7th day after death
	d. 7th day after birth or according to the ability to carry it out
2.	The law of consuming the flesh of a dead animal that is not slaughtered in the name of Allah is
	a. Sunnah
	b. Mbah
	c. Makruh
	d. Haram
3.	The provisions of Aqiqah are slaughtering
	a. 5 goats for a baby boy and 4 goats for a baby girl
	b. 4 goats for a baby boy and 3 goats for a baby girl
	c. 3 goats for a baby boy and 2 goats for a baby girl
	d. 2 goats for a baby boy and 1 goat for a baby girl
4.	The time for slaughtering the Qurban is after the Eid prayer on the
	a. 10,11,12,13 Shawwal
	b. 10,11,12,13 Dzulqaidah
	c. 10,11,12,13 Shafar
	d. 10,11,12,13 Dzulhijjah
5.	The history of being ordered to sacrifice begins with the event
	a. Prophet Ishmael slaughtered Ibrahim
	b. Prophet Ibrahim slaughtered Ishmael
	c. Siti Maryam gave birth to Prophet Isa
	d. Thanksgiving for the appointment of Ibrahim as a prophet
	Q Even semester test questions for category C1

Figure 9. Even semester test questions for category C1

The form of the question in the picture above is included in the C1 category because it only asks students to choose an answer that is in accordance with the question that is only limited to the knowledge possessed by the student. There are 18 (36%) questions that fall into the C2 (Understanding) category, the form of the questions is as follows.

- 1. The difference between Aqiqah and Qurban is....
 - a. Aqiqah is prescribed once in a lifetime while Qurban is prescribed every year
 - b. Aqiqah is prescribed every year while Qurban is prescribed once in a lifetime
 - c. Aqiqah 1 goat while Qurban 2 goats
 - d. Aqiqah should not be delayed (must be cash) while Qurban can be postponed until whenever there is an opportunity
- 2. Qurban is a social worship because....
 - a. Watched by many people
 - b. The animal came from someone else
 - c. Most of the meat is distributed to the community
 - d. People can be attracted to sacrifice

Figure 10. Even semester test questions for category C3

This form of question asks students to compare what is the difference between aqiqah and qurban. Then 2 (4%) questions that fall into the C3 category (Applying), one form of the question.

- 1. Slaughter tools are required to be sharp, this is meant is....
 - a. To get a lot of rewards
 - b. To get a lot of meat
 - c. To reduce the level of pain in slaughtered animals
 - d. To reduce too much blood
- 2. Chicken that is run over by a halal vehicle is consumed if....
 - a. The vehicle that hit him belongs to a Muslim
 - b. The chicken is a wild chicken
 - c. The chicken died before it was slaughtered
 - d. The chicken was slaughtered before it died

The form of this question asks students to choose an answer that is in accordance with the concept of applying the slaughtering tools used in life. Furthermore, there are no questions that fall into the categories C4, C5, C6 (analyze, evaluate, create).

Evaluation of the 2020/2021 Academic Year

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on the semester test questions, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	340	68%
C2	150	30%
C3	10	2%

 Table 6. HOTS or LOTS analysis on semester test questions

C4	-	-
С5	-	-
C6	-	-

Data Source: Results of research data

Based on Table 6, it shows that there are 500 item test questions. There are 34 (68%) questions that fall into the C1 category (remembering) which one example of the form of the question is as follows.

 According to the language of Qurban means a. Approach
b. Which brings you closer
c. Which is close to
d. Closer
2. Sacrificial meat can be divided into
a. 2
c. 4
b. 3
d. 5
3. Sacrifice may be performed on any of the following dates <i>except</i>
a. 9 Dzulhijjah
c. 12 Dzulhijjah
b. 11 Dzulhijjah
d. 13 Dzulhijjah
a. 13 Dzumijjan

Figure 12. Semester test questions for category C1

The form of the question in the Figure 12 is in the C1 category (knowledge) because it only asks students to mention about qurban and prayer. 15 or 30% of questions that fall into the C2 category (understanding), the form of the question is as follows.

- 1. What is meant by property consists of 2 types, namely: 1) assets in the form of goods, 2) assets in the form of benefits. Give an example of each!
- 2. Below is a form of buying and selling that is legal but prohibited, *except*...
 - a. Buying items that have been selected by others
 - b. Buying stuff to hoard
 - c. Buying an item with a known price
 - d. Buying and selling that contains elements of deception

Figure 13. Semester test questions for category C2

The form of the question on Figure 13 asks students to give an example of what is meant by property. Then students are also asked to choose the appropriate answer to the question by using their understanding to choose the right answer. Then there are no questions that fall into the C3 category (applying).

The form of the question in the Figure 14 asks students to tell the history of the ordering of the Qurban which is intended to test how the thinking skills possessed by the students are whether they are able to tell the history of the order of the Qurban properly and correctly. As for categories

C4, C5, (analysis, evaluation) in the semester test questions, no one has been included in that category.

Evaluation of the 2021/2022 Academic Year

The following will describe the categories of questions that fall into the category of highlevel thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily test questions, to find out the dominant thinking level category, pay attention to the following table .

Cognitive Domain	Frequency	Percentage
C1	33	82.5%
C2	5	12.5%
С3	2	5%
C4	-	-
С5	-	-
C6	-	-

Table 7. HOTS or LOTS analysis on daily test questions

Data Source: Results of research data

Based on Table 7, it shows that there are 35 daily test questions in the form of multiple choices, there are 33 (82.5%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

1.	To mark that the obligatory congregational prayer will soon begin is
	a. Adhan
	b. Drum beating
	c. Iqamah
	d. The arrival of the imam at the mosque
2.	Prayer is the main worship of the first time will be held accountable in the
	hereafter. The language of prayer means
	a. Do'a
	b. Forgiveness
	c. Ties
	d. Resignation

Figure 15. Daily test questions for category C1

The form of the question in the Figure 15 is in the C1 category because it only asks students to provide an understanding of prayer in language, when is the time for congregational prayer to start, and the conditions for the validity of prayer, so that these questions are included in the Knowledge category. There are 5 (12.5%) questions that fall into the C2 category (understanding), the form of the question is.

Arif puts a bucket of water made of metal under the hot sun, so that the water becomes
warm when used for washing. The law of purification with water is
a. Haram
b. Makruh
c. Mubah
d. Sunnah

Figure 16. Daily test questions for category C2

This form of question asks students to understand the context of the question and then gives an answer that is in accordance with the sound of the question. Then there are no questions that fall into the C3 category (applying), while for the C4, C5, C6 categories in the daily test questions, no one is included in that category.

Based on Bloom's Taxonomy theory on semester test questions, the dominant thinking level categories can be seen in the following table.

Cognitive Domain	Frequency	Percentage
C1	24	80%
C2	6	20%
C3	-	-
C4	-	-
C5	-	-
C6	-	-

Data Source: Results of research data

Based on Table 8, it shows that there are 30 semester test questions, there are 24 or 80% of the questions that fall into the C1 category, whose sample questions are as follows.

1.	Sadaqah is better given to
	a. Servant
	b. Orphans
	c.Ibn Sabil
	d. Poor
2.	The amount of zakat fitrah is
	a. 2.5 kg
	b. 3.1 Liter
	c.3.1 kg
	d. a and c are correct
3.	Gratitude according to language means
	a. Du'a
	b. Reading
	c.Thank you
	d. Hole

Figure 17. Semester test questions for category C1

The form of the question above is included in the C1 category because it only asks students to provide understandings about the learning material. There are 6 or 20% questions that fall into the C2 category. For categories C3, C4, C5, C6 (application, analysis, evaluation, creation) in the semester test questions, no one has been included in that category.

QUALITY OF ITEM

This study, the determination of the quality of the items is determined by the level of difficulty, item fit, reliability and validity. The following are the results of the analysis of the quality of the items.

Item Difficulty Index

Based on the results of data analysis, the results of the difficulty items on the item measure output results. The difficulty level of the items can be grouped by combining the logit mean and the Standard Deviation (SD). This value is useful for identifying groups of items (separation).

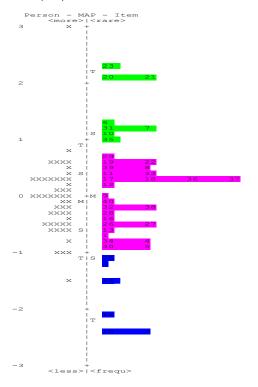


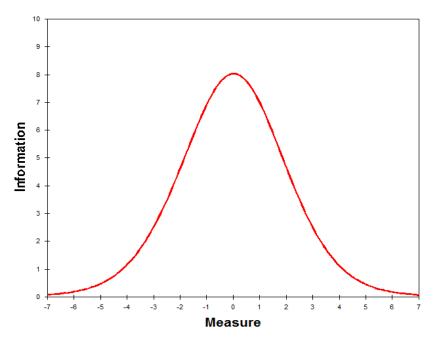
Figure 18. Wright-Item Map

Note:

- Green Color Items: Difficult Items
- Pink Color Items: Medium Items
- Blue Color Items: Easy Items

Figure 1 show, that items 16 and 2 are categorized as easy and item 23 is categorized as difficult. Items 16 and 2 are C1 level items, while 23 items are C3 level items. There are 6 items (15%) categorized as easy, 8 items (20%) categorized as difficult items and the remaining 26 items (65%) categorized as moderate. This information is corroborated by the information function test graph below.

Test Information Function



Graph 1. Tes Information Function

Based on graph 1, it can be concluded that the 40 item questions given to students indicate items that are suitable/appropriate to determine the level of students' abilities that are only. Graph 1 also shows that the peak of the function is relatively high, so this provides information that the reliability of measurements made by figh teachers is high.

Item Difficulty Index	Item	Measure (Logit)	Model S.E
Difficult	23,20,21,20,6,7,31,10,35	+2.32 - 1.05	0.53 - 0.34
Moderate	29,19,22,39,8,32,11,18,17,36,3	+0.720.93	0.32 - 0.32
	7,12,9,40,32,38,28,16,26,27,13		
	,1,34,4,30,5		
Easy	25,3,24,14,2,15	-1.092.39	0.32 - 0.48

Table 9. Item Statistics: Measure Order

Item Fit

The quality of item fit is to see whether the items function normally in measuring or not. To measure the quality of items used criteria referring to the opinions of Boone et al., (2014) and Bond & Fox (2015) namely: Outfit Mean Square (MNSQ): 0.5 < MNSQ < 1.5; Outfit Z-Standard (ZSTD): -2.0 < ZSTD < +2.0; and Point Measure Correlation (Pt Measure Corr): 0.4 < Pt Measure Corr < 0.85. Table 10 shows the items fit.

|-----|ENTRY TOTAL TOTAL MODEL| INFIT | OUTFIT |PT-MEASURE |EXACT MATCH| | |NUMBER SCORE COUNT MEASURE S.E. |MNSQ ZSTD|MNSQ ZSTD|CORR. EXP.| OBS% EXP%| Item |

$ \begin{bmatrix} 20 & 6 & 47 & 2.07 & .48 \\ 1.16 & .6 \\ 2.03 & 2.0 \\ A & 32 & 48 & .82 & .32 \\ 1.16 & 1.3 \\ 1.22 & 1.6 \\ B & .03 & .21 \\ 61.7 & 67.2 \\ 4 \\ 3 & 36 & 49 & -1.17 & .33 \\ 1.09 & 1.0 \\ 1.16 & 1.4 \\ D & .16 \\ 2.7 & .50 & 63.4 \\ 11 \\ 19 & 48 & .37 & .31 \\ 1.09 & .34 \\ 1.02 & .21 \\ 1.13 & .71 \\ E & .27 & .30 \\ 75.0 & 75.0 \\ 35 \\ 40 & 25 & 49 & .10 & .30 \\ 1.01 & 1.5 \\ 1.12 & 1.7 \\ F & 1.3 & .24 \\ 52.1 & 59.4 \\ 40 \\ 21 & 6 & 50 & 2.14 & .48 \\ 1.02 & .21 \\ 1.10 & .4 \\ 6 & .36 & .39 \\ 89.8 & 89.8 \\ 21 \\ 34 & 30 & 46 &76 & .32 \\ 1.09 & .8 \\ 1.09 & .71 \\ 1.3 & .24 \\ 52.1 & 59.4 \\ 40 \\ 21 & 6 & 50 & 2.14 & .48 \\ 1.02 & .21 \\ 1.09 & .71 \\ 1.3 & 22 \\ 60.0 & 66.0 \\ 34 \\ 17 & 20 & 49 & .32 & .30 \\ 1.07 & .8 \\ 1.07 & .71 \\ 1.9 & .24 \\ 51. & 22 \\ 52.6 & 63.3 \\ 53. \\ 106 & .71 \\ 1.05 & .51 \\ 1.02 & .27 \\ 59.6 & 63.3 \\ 33 \\ 16 & 28 & 48 & .44 & .30 \\ 1.06 & .71 \\ 1.05 & .61 \\ 1.07 & .21 \\ 1.7 & .23 \\ 61.7 & .33 \\ 1.03 & .31 \\ 1.04 & .41 \\ 1.05 & .41 \\ N & .16 & .21 \\ 62.5 & 66.1 \\ 1 \\ 6 & 11 & 49 & .127 & .36 \\ 1.03 & .21 \\ .49 & .10 \\ 33 & 104 & .41 \\ P.18 & .21 \\ 62.5 & 66.1 \\ 1 \\ 6 & 11 & 49 & .127 & .36 \\ 1.03 & .21 \\ .49 & .01 \\ 33 & 104 & .41 \\ P.18 & .21 \\ 62.5 & 66.1 \\ 1 \\ 6 \\ 10 & 12 & 49 & .48 & .30 \\ 1.02 & .31 \\ 1.01 & .1 \\ 1.00 & .31 \\ 7.17 & .71 \\ 71 \\ 71 & .71 \\ 71 & .71 \\ 71 & .71 \\ 71 & .71 \\ 71 & .71 \\ 71 & .71 \\ 72 & .50 \\ .27 & .30 \\ .98 & -31 \\ .98 & -21 \\ 2.2 & .27 \\ 53.6 & 64.8 \\ 39 \\ 15 \\ 45 & 50 \\ -2.39 \\ .48 \\ .99 \\ .1 \\ .98 & -11 \\ .28 \\ .26 & 22 \\ 24 & 9 \\ .48 \\ .27 \\ .30 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ -31 \\ .98 \\ .98 \\ .98 \\ .91 \\ 11 \\ .98 \\ .98 \\ .98 \\ .91 \\ .1 \\ .1 \\ .88 \\ .98 \\ .98 \\ .91 \\ .1 \\ .1 \\ .1 \\ .88 \\ .98 \\ .91 \\ .1 \\ .1 \\ .1 \\ .1 \\ .1 \\ .1 \\ .$		• 				++++++
$ \begin{bmatrix} 4 & 32 & 48 & -82 & .32 & 1.16 & 1.3 & 1.22 & 1.6 & B .03 & .21 & 61.7 & 67.2 & 4 & \\ 3 & 36 & 49 & -1.17 & .33 & 1.00 & .5 & 1.21 & 1.2 & C .08 & .19 & 75.0 & 73.2 & 3 & \\ 11 & 19 & 48 & .37 & .31 & 1.09 & 1.0 & 1.16 & 1.4 & D .16 & .27 & 5.0 & 63.1 & 1 & \\ 35 & 13 & 49 & 1.02 & .34 & 1.02 & .2 & 1.13 & .7 & E .27 & .30 & 75.0 & 75.0 & 35 & \\ 40 & 25 & 49 &10 & .30 & 1.10 & 1.5 & 1.12 & 1.7 & F .13 & .24 & 52.1 & 59.4 & 40 & \\ 21 & 6 & 50 & 2.14 & .48 & 1.02 & .2 & 1.10 & .4 & G .36 & .39 & 89.8 & 89.8 & 21 & \\ 34 & 30 & 46 &76 & .32 & 1.09 & .8 & 1.07 & .7 & 1.13 & .22 & 60.0 & 66.0 & 34 & \\ 38 & 25 & 46 &23 & .31 & 1.08 & 1.1 & 1.07 & .10 & 1.6 & .24 & 51.1 & 60.0 & 38 & \\ 17 & 20 & 49 & .32 & .30 & 1.07 & .8 & 1.07 & .7 & 1.19 & .26 & 56.3 & 62.5 & 17 & \\ 19 & 16 & 47 & .63 & .32 & 1.05 & .5 & 1.06 & .5 & K .23 & .29 & 65.2 & 67.5 & 19 & \\ 33 & 19 & 48 & .34 & .30 & 1.06 & .7 & 1.05 & .6 & M .17 & .23 & 61.7 & 61.3 & 31 & 1 & 47 & 1.21 & .36 & .95 & -2 & 1.05 & .3 & 0.36 & .32 & 78.2 & 31 & \\ 1 & 32 & 49 & .75 & .31 & 1.03 & .3 & 1.04 & .4 & 1.8 & .21 & 62.5 & 66.1 & 1 & \\ 6 & 11 & 49 & 1.27 & .36 & 1.02 & .3 & 1.01 & .1 & R .25 & .27 & 59.6 & 64.9 & 8 & \\ 26 & 29 & 49 & .48 & .30 & 1.02 & .3 & 1.01 & .1 & R .25 & .27 & 59.6 & 64.9 & 8 & \\ 26 & 29 & 49 & .48 & .30 & 1.02 & .3 & 1.01 & .1 & R .21 & .22 & 54.2 & 61.18 & 26 & 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 1.00 & .1 & T .30 & .31 & 77.1 & 77.1 & 10 & \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 &1 & r .80 & .78 & 88 & 39 & 15 & 48 & 39 & 15 & 48 & 30 & 98 &3 & .98 &2 & r .26 & 63.8 & 61.1 & 12 & \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & .98 & .21 & .30 & .28 & 63.8 & 64.8 & 39 & \\ 14 & 24 & 8 &27 & .30 & .96 &1 & .91 &2 & .33 & .25 & 60.4 & 50.9 & 28 & \\ 27 &$		20	6	47	2.07	I. I
$ \begin{bmatrix} 3 & 36 & 49 & -1.17 & .33 & 1.06 & .5 & 1.21 & 1.2 & C & .08 & .19 & 75.0 & 73.2 & 3 \\ 11 & 19 & 48 & .37 & .31 & 1.09 & 1.01 & 1.16 & 1.4 & D & .16 & .27 & 59.6 & 63.4 & 111 \\ 35 & 13 & 49 & 1.02 & .34 & 1.02 & .2 & 1.13 & .7 & F & .27 & .30 & 75.0 & 75.0 & 35 \\ 40 & 25 & 49 & -1.0 & .30 & 1.10 & 1.5 & 1.12 & 1.7 & F & .13 & .24 & 52.1 & 59.4 & 40 \\ 21 & 6 & 50 & 2.14 & .48 & 1.02 & .2 & 1.10 & .4 & G & .36 & .39 & 89.8 & 89.8 & 21 & 1 \\ 34 & 30 & 46 &76 & .32 & 1.09 & .8 & 1.09 & .7 & H & .13 & .22 & 60.0 & 66.0 & 34 \\ 38 & 25 & 46 &23 & .31 & 1.08 & 1.1 & 1.07 & .10 & 1.16 & .24 & 51.1 & 60.0 & 38 & 1 \\ 17 & 20 & 49 & .32 & .30 & 1.07 & .8 & 1.07 & .7 & 1.19 & .26 & 56.3 & 62.5 & 17 & 1 \\ 19 & 16 & 47 & .63 & .32 & 1.05 & .5 & 1.06 & .5 & K & .23 & .29 & 65.2 & 67.5 & 19 & 1 \\ 33 & 19 & 48 & .38 & .31 & 1.06 & .6 & 1.05 & .5 & L & .21 & .27 & 59.6 & 63.3 & 33 \\ 16 & 28 & 48 & .44 & .30 & 1.06 & .7 & 1.05 & .6 & M & .17 & .23 & 61.7 & 61.5 & 16 & 1 \\ 30 & 33 & 49 & .85 & .31 & 1.04 & .4 & 1.05 & .4 & N & .16 & .21 & 62.5 & 66.1 & 1 & 1 \\ 6 & 11 & 49 & .27 & .36 & 1.03 & .3 & 1.04 & .4 & P & .18 & .21 & 62.5 & 66.1 & 1 & 1 \\ 6 & 11 & 49 & 1.27 & .36 & 1.03 & .3 & 1.04 & .4 & P & .18 & .21 & 62.5 & 66.1 & 1 & 1 \\ 6 & 11 & 49 & 1.27 & .36 & 1.03 & .3 & 1.04 & .4 & P & .18 & .21 & 62.5 & 66.1 & 1 & 1 \\ 8 & 18 & 48 & .47 & .31 & 1.03 & .3 & 1.04 & .1 & R & .25 & .27 & 59.6 & 64.8 & 39 & 1 \\ 15 & 45 & 50 &239 & .48 & .99 & .1 & .98 & .1 & .13 & .12 & 89.8 & 89.8 & 15 & 1 \\ 28 & 26 & 48 & .27 & .30 & .98 & .3 & .98 & .21 & r.26 & .24 & 66.0 & 59.9 & 28 & 128 \\ 29 & 16 & 49 & .72 & .32 & .98 & .3 & .98 & .21 & r.26 & .24 & 66.0 & 59.9 & 28 & 128 \\ 29 & 16 & 49 & .72 & .32 & .98 & .3 & .98 & .21 & r.26 & .24 & 66.0 & 59.9 & 28 & 128 \\ 29 & 16 & 49 & .72 & .32 & .98 & .3 & .98 & .21 & r.26 & .24 & 66.0 & 59.9 & 28 & 128 \\ 21 & 12 & 21 & 48 & .18 & .30 & .98 & .3 & .98 & .21 & r.26 & .24 & 66.0 & 59.9 & 28 & 128 \\ 21 & 21 & 48 & .18 & .30 & .98 & .3 & .98 & .21 & r.26 & .24 & 66.0 & 59.9 & 28 & 12 \\ 21 & 2$						
$ \begin{bmatrix} 11 & 19 & 48 & .37 & .31 1.09 & 1.0 1.16 & 1.4 D .16 & .27 59.6 & 63.4 11 35 & 13 & 49 & 1.02 & .34 1.02 & .2 1.13 & .7 E .27 & .30 75.0 & 75.0 35 40 & 25 & 49 & .10 & .30 1.10 & 1.5 1.12 & 1.7 F .13 & .24 52.1 & 59.4 40 21 & 6 & 50 & 2.14 & .48 1.02 & .2 1.10 & .4 G .36 & .39 & 89.8 & 89.8 21 34 & 30 & 46 & .76 & .32 1.09 & .8 1.09 & .7 H .13 & .22 60.0 & 66.0 34 38 & 25 & 46 & .23 & .31 1.08 & 1.1 1.07 & 1.0 1.16 & .24 51.1 & 60.0 38 17 & 20 & 49 & .32 & .30 1.07 & .8 1.07 & .7 J .19 & .26 56.3 & 62.5 17 19 & 16 & 47 & .63 & .32 1.05 & .5 1.06 & .5 K .23 & .29 65.2 & 67.5 19 33 & 19 & 48 & .38 & .31 1.06 & .6 1.05 & .5 K .23 & .29 65.2 & 67.5 30 33 & 19 & .48 & .34 1.00 & .7 1.05 & .6 M .17 & .23 61.7 & 61.5 16 30 & 33 & 49 & .85 & .31 1.04 & .4 1.05 & .4 N .16 & .21 62.5 & 67.8 30 31 & 11 & 47 & 1.21 & .36 .95 & .2 1.05 & .3 O.36 & .32 78.3 & 78.2 31 1 & 32 & 49 & .75 & .31 1.03 & .3 1.04 & .4 P.18 & .21 62.5 & 66.1 1 6 & 11 & 49 & 1.27 & .36 1.03 & .2 .99 & .0 Q .30 & .32 79.2 & 79.1 6 8 & 18 & 48 & .47 & .31 1.03 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 26 & 29 & 49 & .48 & .30 1.02 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 26 & 29 & 49 & .48 & .30 1.02 & .3 1.01 & .1 R .26 & .27 63.8 & 64.8 39 1 5 & 45 & 50 & .2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 28 & 26 & 48 & .27 & .30 .98 & .3 .98 & .2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .32 .98 & .1 .98 & .1 g .30 & .28 70.8 & 68.8 29 12 & 14 & 8 & 18 & .30 & .98 & .3 .98 & .2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .33 & .39 & .2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .33 & .39 & .3 .98 & .2 r .26 & .24 66.0 & 59.9 28 22 & 16 & 49 & .72 & .33 & .39 & .3 .98 & .2 r .28 & .66 & .86 & .61 12 13 & 30 & .99 & .5 & .3 & .98 & .2 r .48 & .78 & .71 & .7$	İ	3				
$ \begin{bmatrix} 35 & 13 & 49 & 1.02 & .34 1.02 & .2 1.13 & .7 E .27 & .30 75.0 & 75.0 35 40 & 25 & 49 &10 & .30 1.10 & 1.5 1.12 & 1.7 F .13 & .24 52.1 & 59.4 40 21 & 6 & 50 & 2.14 & .48 1.02 & .2 1.10 & .4 G .36 & .39 89.8 & 89.8 21 34 & 30 & 46 &76 & .32 1.09 & 8 1.09 & .7 H .13 & .22 60.0 & 60.0 34 38 & 25 & 46 &23 & .31 1.08 & 1.1 1.07 & 1.0 1.16 & .24 51.1 & 60.0 38 17 & 20 & 49 & .32 & .30 1.07 & .8 1.07 & .7 J .19 & .26 56.3 & 62.5 17 19 & 16 & 47 & .63 & .32 1.05 & .5 1.06 & .5 K .23 & .29 65.2 & 67.5 19 33 & 19 & 48 & .38 & .31 1.06 & .6 1.05 & .5 L .21 & .27 59.6 & 63.3 33 16 & 28 & 48 & .44 & .30 1.06 & .7 1.05 & .6 M .17 & .23 61.7 & 61.5 16 30 & 33 & 49 &85 & .31 1.04 & .4 10.5 & .4 N .16 & .21 62.5 & 67.8 30 31 & 11 & 47 & 1.21 & .36 .95 &2 1.05 & .3 O .36 & .32 78.3 & 78.2 31 1 & 32 & 49 & .75 & .31 1.03 & .3 1.04 & .4 P .18 & .21 62.5 & 66.1 1 6 & 11 & 49 & 1.27 & .36 1.03 & .2 .99 & .0 Q .30 & .32 79.2 & 79.1 6 8 & 18 & 48 & .47 & .31 1.03 & .3 1.01 & .1 S .21 & .22 54.2 & 61.8 26 10 & 12 & 49 & .14 & .35 1.01 & .1 10 & .1 T .30 & .31 77.1 & 77.1 10 39 & 18 & 48 & .48 & .31 1.00 & .0 .98 &1 t .28 & .27 63.8 & 64.8 39 15 & 45 & 50 & -2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 28 & 26 & 48 &27 & .30 .98 &3 .98 &2 r .26 & .24 & 60.0 & 59.9 28 29 & 16 & 49 & .72 & .32 .98 &1 .98 & .1 s .13 & .12 89.8 & 89.8 15 12 & 21 & 48 & .18 & .30 .98 &3 .98 &2 r .26 & .24 & 60.0 & 59.9 28 29 & 16 & 49 & .72 & .30 .98 &3 .98 &2 r .26 & .24 & 60.5 & 66.1 1 1 1 13 & 30 & 49 &56 & .30 .97 &3 .94 &5 n .31 & .27 58.7 & 62.8 18 23 & 5 & 47 & 2.33 & .53 .96 & -1 .90 & .1 m .47 & .42 91.3 & 91.3 23 7 & 11 & 48 & 1.25 & .36 .96 & -1 .91 & .31 .37 & .32 78.7 & 78.7 7 37 & 21 & 50 & .27$	1	1	19			
$ \begin{bmatrix} 21 & 6 & 50 & 2.14 & .48 & 1.02 & .2 & 1.10 & .4 & G & .36 & .39 & 89.8 & 89.8 & 21 & 1 \\ 34 & 30 & 46 &76 & .32 & 1.09 & .8 & 1.09 & .7 & H & .13 & .22 & 60.0 & 66.0 & 34 & 1 \\ 38 & 25 & 46 &23 & .31 & 1.08 & 1.1 & 1.07 & .10 & I.16 & .24 & 51.1 & 60.0 & 38 & 1 \\ 17 & 20 & 49 & .32 & .30 & 1.07 & .8 & 1.07 & .7 & J & .19 & .26 & 56.3 & 62.5 & 17 & 1 \\ 19 & 16 & 47 & .63 & .32 & I & .05 & .5 & I & .06 & .5 & I & .23 & .29 & .52 & .67.5 & 19 & 1 \\ 33 & 19 & 48 & .38 & .31 & 1.06 & .6 & I & .05 & .5 & I & .21 & .27 & 59.6 & 63.3 & 33 & 1 \\ 16 & 28 & 48 &44 & .30 & 1.06 & .7 & 1.05 & .6 & M & .17 & .23 & 61.7 & 61.5 & 16 & 1 \\ 30 & 33 & 49 &85 & .31 & I & .04 & .4 & I & .05 & .4 & N & .16 & .21 & 62.5 & 67.8 & 30 & 1 \\ 31 & 11 & 47 & 1.21 & .36 & 1.95 &2 & I & .05 & .36 & .36 & .32 & 78.2 & 78.1 & 1 \\ 1 & 32 & 49 &75 & .31 & I & .03 & .31 & .01 & .1 & R & .21 & 62.5 & 61.1 & 1 \\ 6 & 11 & 49 & 1.27 & .36 & I & .03 & .31 & .01 & .1 & R & .21 & 62.5 & 64.9 & I \\ 1 & 12 & 49 &75 & .31 & I & .03 & .31 & .01 & .1 & R & .25 & .27 & 59.6 & 64.9 & I \\ 26 & 29 & 49 &48 & .30 & I & .02 & .31 & .101 & .1 & R & .25 & .27 & 59.6 & 64.9 & I \\ 10 & 12 & 49 & 1.14 & .35 & I & .01 & .1 & I & .26 & .27 & 53.6 & 64.8 & 39 \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & I & .28 & .27 & 63.8 & 64.8 & 39 \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & I & .28 & .28 & 89.8 & 15 \\ 28 & 26 & 48 & -27 & .30 & .98 & -3 & .98 & -21 & .26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 & -1 & .98 & .1 & I & .30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 & -3 & .98 & .21 & .26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .75 & .30 & .98 & -3 & .98 & .21 & .28 & .66 & .63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .94 &51 & .31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & -1 & .91 & .31 & .37 & .32 & 78.7 & 7 & 7 & 1 \\ 37 & 21 & 50 & .27 & .30 & .96 & -5 & .95 & .51 & .31 & .26 & 69.4 & 61.6 & 37 & 1 \\ 32 & 26 & 50 &16 & .29 & .94 & -9 & .93 & .91 & .9$						
$ \begin{bmatrix} 34 & 30 & 46 &76 & .32 & 1.09 & .8 & 1.09 & .7 & H & .13 & .22 & 60.0 & 66.0 & 34 \\ 38 & 25 & 46 &23 & .31 & 1.08 & 1.1 & 1.07 & 1.0 & I.16 & .24 & 51.1 & 60.0 & 38 \\ 17 & 20 & 49 & .32 & .30 & 1.07 & .8 & 1.07 & .7 & J. 19 & .26 & 56.3 & 62.5 & I7 & I \\ 19 & 16 & 47 & .63 & .32 & 1.05 & .5 & I.06 & .5 & K & .23 & .29 & 65.2 & 67.5 & I9 & I \\ 33 & 19 & 48 & .38 & .31 & 1.06 & .6 & I.05 & .5 & I21 & .27 & 59.6 & 63.3 & 33 \\ 16 & 28 & 48 & .44 & .30 & 1.06 & .7 & I.05 & .6 & M & .17 & .23 & 61.7 & 61.5 & I & 6 \\ 30 & 33 & 49 & .85 & .31 & I.04 & .4 & I.05 & .4 & N & .16 & .21 & 62.5 & 67.8 & 30 & I \\ 31 & 11 & 47 & 1.21 & .36 & .95 & .2 & I.05 & .3 & [O & .36 & .32 & 78.3 & 78.2 & 31 & I \\ 1 & 32 & 49 & .75 & .31 & I.03 & .3 & I.04 & .4 & P & .18 & .21 & 62.5 & 66.1 & I & I \\ 6 & 11 & 49 & 1.27 & .36 & I.03 & .2 & .99 & .0 & Q & .30 & .32 & 79.2 & 79.1 & 6 & I \\ 8 & 18 & 48 & .47 & .31 & I.03 & .3 & I.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & R & I \\ 26 & 29 & 49 & .48 & .30 & I.02 & .3 & I.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & R & I \\ 26 & 29 & 49 & .48 & .30 & I.02 & .3 & I.01 & .1 & R & .25 & .27 & 63.8 & 64.8 & 39 & I \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 &1 & I & 28 & .27 & 63.8 & 64.8 & 39 & I \\ 28 & 26 & 48 & .27 & .30 & .98 &3 & .98 &2 & I & .26 & .24 & 66.0 & 59.9 & 28 & I \\ 29 & 16 & 49 & .72 & .32 & .98 &3 & .98 &2 & I & .26 & .24 & 66.0 & 59.9 & 28 & I \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 & .1 & .31 & .12 & .98 & .88 & 15 & I \\ 23 & 5 & 47 & 2.33 & .51 & .96 &1 & .90 &1 & m & 47 & .42 & 91.3 & 91.3 & 23 & I \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 & .31 & .37 & .32 & .62 & .46 & .66.7 & .78 & .7 & I \\ 37 & 21 & 50 & .27 & .30 & .96 & .5 & .95 & .5 & k & .31 & .26 & 69.4 & 61.6 & 37 & I \\ 32 & 26 & 50 &16 & .29 & .94 & .9 & .93 & .9 & J & .30 & .24 & 67.3 & 59.7 & 32 & I \\ 22 & 17 & 49 & .61 & .31 & .93 & .6 & .90 & .77 & i & .35 & .28 & 68.8 & 66.9 & 22 & I \\ 36 & 20 & 48 & .29 & .31 & .93 & .8 & .91 &9 & h & .37 & .32 & 60.4 & 59.8 & 9 & I $						
$ \begin{bmatrix} 38 & 25 & 46 &23 & .31 1.08 & 1.1 1.07 & 1.0 1.16 & .24 51.1 & 60.0 38 17 & 20 & 49 & .32 & .30 1.07 & .8 1.07 & .7 J .19 & .26 56.3 & 62.5 17 19 & 16 & 47 & .63 & .32 1.05 & .5 1.06 & .5 K .23 & .29 65.2 & 67.5 19 33 & 19 & 48 & .38 & .31 1.06 & .6 1.05 & .5 L .21 & .27 59.6 & 63.3 33 16 & 28 & 48 & .44 & .30 1.06 & .7 1.05 & .6 M .17 & .23 61.7 & 61.5 16 30 & 33 & 49 & .85 & .31 1.04 & .4 1.05 & .4 N .16 & .21 62.5 & 67.8 30 31 & 11 & 47 & 1.21 & .36 .95 &2 1.05 & .3 O .36 & .32 78.3 & 78.2 31 1 & 32 & 49 & .75 & .31 1.03 & .3 1.04 & .4 P .18 & .21 62.5 & 66.1 1 6 & 11 & 49 & 1.27 & .36 1.03 & .2 .99 & .0 Q .30 & .32 79.2 & 79.1 6 8 & 18 & 48 & .47 & .31 1.03 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 26 & 29 & 49 & .48 & .30 1.02 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 10 & 12 & 49 & 1.14 & .35 1.01 & .0 .98 & .1 c.28 & .27 63.8 & 64.8 39 15 & 45 & 50 & -2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 28 & 26 & 48 & .27 & .30 .98 & .3 .98 & .2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .32 .98 & .1 .98 & .1 g .30 & .28 70.8 & 68.8 29 12 & 21 & 48 & 1.8 & .30 .98 & .3 .98 & .2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .32 .98 & .1 .98 & .1 g .30 & .28 70.8 & 68.8 29 12 & 21 & 48 & 1.8 & .30 .98 & .3 .98 & .2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .32 .98 & .1 .98 & .1 g .31 & .37 & .37 & .78.7 7 37 & 21 & 50 & .27 & .30 .96 & .5 .95 & .5 k .31 & .26 63.8 & 61.1 12 13 & 30 & 49 & .56 & .30 .97 & .3 .96 & .3 .92 & .22 .26 & 63.8 & 61.9 22 36 & 20 & .48 & .29 & .31 .93 & .6 .90 & .7 i .35 & .28 68.8 & 66.9 22 36 & 20 & .48 & .29 & .31 .93 & .6 .90 & .7 i .35 & .28 68.8 & 66.9 22 36 & 20 & .48 & .29 & .31 .93 & .6 .90 & .7 i .35 & .28 68.8 & 66.9 22 36 & 20 & .48 & .93 & .39 .9 h .34 & .27 $						
$ \begin{bmatrix} 17 & 20 & 49 & .32 & .30 \\ 1.07 & .8 \\ 1.07 & .7 \\ 1.19 & .26 \\ 5.2$					23	
$ \begin{bmatrix} 19 & 16 & 47 & .63 & .32 & 1.05 & .5 & 1.06 & .5 & K .23 & .29 & 65.2 & 67.5 & 19 & \\ 33 & 19 & 48 & .38 & .31 & 1.06 & .6 & 1.05 & .5 & L .21 & .27 & 59.6 & 63.3 & 33 & \\ 16 & 28 & 48 &44 & .30 & 1.06 & .7 & 1.05 & .6 & M .17 & .23 & 61.7 & 61.5 & 16 & \\ 30 & 33 & 49 &85 & .31 & 1.04 & .4 & 1.05 & .4 & N .16 & .21 & 62.5 & 67.8 & 30 & \\ 31 & 11 & 47 & 1.21 & .36 & .95 &2 & 1.05 & .3 & O .36 & .32 & 73.8 & 78.2 & 31 & \\ 1 & 32 & 49 &75 & .31 & 1.03 & .3 & 1.04 & .4 & P .18 & .21 & 62.5 & 66.1 & \\ 6 & 11 & 49 & 1.27 & .36 & 1.03 & .2 & .99 & .0 & Q .30 & .32 & 79.2 & 79.1 & 6 & \\ 8 & 18 & 48 & .47 & .31 & 1.03 & .3 & 1.01 & .1 & S .21 & .22 & 54.2 & 61.8 & 26 & \\ 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 1.00 & .1 & T .30 & .31 & 77.1 & 77.1 & 10 & \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 &1 & t .28 & .27 & 63.8 & 64.8 & 39 & \\ 12 & 48 & .48 & .31 & 1.00 & .0 & .98 &2 & r .26 & .24 & 66.0 & 59.9 & 28 & \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 & .1 & s .13 & .12 & 89.8 & 15 & \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r .26 & .24 & 66.0 & 59.9 & 28 & \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 & .1 & .37 & .32 & 78.7 & 78.7 & \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .94 &5 & n .31 & .27 & 58.7 & 62.8 & 18 & \\ 23 & 5 & 47 & 2.33 & .53 & .96 & -1 & .91 &3 & .37 & .32 & 78.7 & 78.7 & \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & k .31 & .26 & 63.4 & 61.1 & 12 & \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .94 &5 & n .31 & .27 & 70.2 & 62.0 & 36 & \\ 22 & 17 & 49 & .61 & .31 & .93 & .6 & .90 &7 & .35 & .28 & 68.8 & 6.9 & 22 & \\ 36 & 20 & 48 & .29 & .31 & .93 & .8 & .91 &9 & h .34 & .27 & 70.2 & 62.0 & 36 & \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & g .33 & .25 & 60.4 & 59.8 & 9 & \\ 27 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & f .3$						
$ \begin{bmatrix} 33 & 19 & 48 & .38 & .31 & 1.06 & .6 & 1.05 & .5 & L.21 & .27 & 59.6 & 63.3 & 33 \\ 16 & 28 & 48 &44 & .30 & 1.06 & .7 & 1.05 & .6 & M.17 & .23 & 61.7 & 61.5 & 16 & 1 \\ 30 & 33 & 49 &85 & .31 & 1.04 & .4 & 1.05 & .4 & N & 16 & .21 & 62.5 & 67.8 & 30 & 1 \\ 31 & 11 & 47 & 1.21 & .36 & .95 &2 & 1.05 & .3 & O & 36 & .32 & 78.3 & 78.2 & 31 & 1 \\ 1 & 32 & 49 &75 & .31 & 1.03 & .3 & 1.04 & .4 & P & 18 & .21 & 62.5 & 66.1 & 1 & 1 \\ 6 & 11 & 49 & 1.27 & .36 & 1.03 & .2 & .99 & .0 & Q & .30 & .32 & 79.2 & 79.1 & 6 & 1 \\ 8 & 18 & 48 & .47 & .31 & 1.03 & .3 & 1.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R & .25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 48 & .27 & .30 & .98 &3 & .98 &2 & r & .26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 & .1 & s & .13 & .12 & 89.8 & 89.8 & 15 \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r & .26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 & .1 & g & .30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & r & .26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & 0 & .25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n & .31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .91 &3 & 1.37 & .32 & 78.7 & 78.7 & 7 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 & .51 & s & .31 & .26 & 69.4 & 61.6 & 37 & 1 \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 & 1 & .34 & .27 & 70.2 & 62.0 & 36 \\ 19 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & g & .33 & .25 & 60.4 & 59.8 & 9 \\ 27 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & f & .32 & .22 & 12 & 89.8 & 89.8 & 2 \\ 14 & 42 & 48 & .211 & .44 & .91 & -2 & .78 & -51 & .35 & $						1 15 1 1
$ \begin{bmatrix} 16 & 28 & 48 &44 & .30 & 1.06 & .7 & 1.05 & .6 & M.17 & .23 & 61.7 & 61.5 & 16 \\ 30 & 33 & 49 &85 & .31 & 1.04 & .4 & 1.05 & .4 & N.16 & .21 & 62.5 & 67.8 & 30 \\ 31 & 11 & 47 & 1.21 & .36 & .95 &2 & 1.05 & .3 & O.36 & .32 & 78.3 & 78.2 & 31 \\ 1 & 32 & 49 &75 & .31 & 1.03 & .3 & 1.04 & .4 & P.18 & .21 & 62.5 & 66.1 & 1 \\ 6 & 11 & 49 & 1.27 & .36 & 1.03 & .2 & .99 & .0 & Q.30 & .32 & 79.2 & 79.1 & 6 \\ 8 & 18 & 48 & .47 & .31 & 1.03 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 100 & .1 & T.30 & .31 & 77.1 & 77.1 & 10 \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 &1 & t.28 & .27 & 63.8 & 64.8 & 39 \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & s.13 & .12 & 89.8 & 89.8 & 15 \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r.26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &1 & q.30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & r.26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &2 & r.26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &2 & r.26 & .63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & 0.25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 & .51 & n.31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & -1 & .91 &3 & 1.37 & .32 & 78.7 & 78.7 & 7 \\ 37 & 21 & 50 & .77 & .30 & .96 & -5 & .95 & .51 & s.31 & .26 & 69.4 & 61.6 & 37 \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 & 1.30 & .24 & 67.3 & 59.7 & 32 \\ 22 & 17 & 49 & .61 & .31 & .93 &6 & .90 &7 & 1 & .35 & .28 & 68.8 & 66.9 & 22 \\ 36 & 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & h.34 & .27 & 70.2 & 62.0 & 36 \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & [$						
$ \begin{bmatrix} 30 & 33 & 49 &85 & .31 1.04 & .4 1.05 & .4 N .16 & .21 62.5 & 67.8 30 \\ 31 & 11 & 47 & 1.21 & .36 .95 &2 1.05 & .3 O .36 & .32 78.3 & 78.2 31 \\ 1 & 32 & 49 &75 & .31 1.03 & .3 1.04 & .4 P .18 & .21 62.5 & 66.1 1 \\ 6 & 11 & 49 & 1.27 & .36 1.03 & .2 .99 & .0 Q .30 & .32 79.2 & 79.1 6 \\ 8 & 18 & 48 & .47 & .31 1.03 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 \\ 26 & 29 & 49 &48 & .30 1.02 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 \\ 26 & 29 & 49 &48 & .30 1.02 & .3 1.01 & .1 S .21 & .22 54.2 & 61.8 26 \\ 10 & 12 & 49 & 1.14 & .35 1.01 & .1 1.00 & .1 T .30 & .31 77.1 & 77.1 10 \\ 39 & 18 & 48 & .48 & .31 1.00 & .0 .98 &1 t .28 & .27 63.8 & 64.8 39 \\ 15 & 45 & 50 & -2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 \\ 28 & 26 & 48 & -27 & .30 .98 &3 .98 &2 r .26 & .24 66.0 & 59.9 28 \\ 29 & 16 & 49 & .72 & .32 .98 &1 .98 & .1 q .30 & .28 70.8 & 68.8 29 \\ 12 & 21 & 48 & .18 & .30 .97 &3 .96 &3 o .25 & .22 66.7 & 63.1 13 \\ 18 & 19 & 47 & .35 & .31 .97 &3 .96 &3 o .25 & .22 66.7 & 63.1 13 \\ 18 & 19 & 47 & .35 & .31 .97 &3 .96 &3 o .25 & .22 66.7 & 63.1 13 \\ 37 & 21 & 50 & .27 & .30 .96 &5 .95 &5 k .31 & .26 69.4 & 61.6 37 \\ 32 & 26 & 50 &16 & .29 .94 &9 .93 &9 j .30 & .24 67.3 & 59.7 32 \\ 22 & 17 & 49 & .61 & .31 .93 &6 .90 &7 i .35 & .28 68.8 & 66.9 .22 \\ 36 & 20 & 48 & .29 & .31 .93 &8 .91 &9 h .34 & .27 70.2 & 62.0 36 \\ 9 & 23 & 49 & .05 & .30 .93 & -1.1 .94 &2 g .33 & .25 60.4 & 59.8 9 \\ 27 & 30 & 50 &51 & .30 .91 & -1.0 & 89 & -1.2 f .32 & .22 61.2 & 62.2 27 \\ 2 & 45 & 50 & -2.39 & .48 .91 & -1 .86 &2 e .22 & .12 & 89.8 & 89.8 2 \\ 14 & 42 & 48 &211 & .44 &1 & .47 & .73 & -1.2 b .35 & .17 & 79.2 & 79.1 24 \\ 25 & 36 & 50 & -1.09 & .32 .83 & -1.2 .77 & -1.4 $						
$ \begin{bmatrix} 31 & 11 & 47 & 1.21 & .36 & .95 & .2 & 1.05 & .3 & 0.36 & .32 & 78.3 & 78.2 & 31 \\ 1 & 32 & 49 & .75 & .31 & 1.03 & .3 & 1.04 & .4 & P.18 & .21 & 62.5 & 66.1 & 1 \\ 6 & 11 & 49 & 1.27 & .36 & 1.03 & .2 & .99 & .0 & Q.30 & .32 & 79.2 & 79.1 & 6 \\ 8 & 18 & 48 & .47 & .31 & 1.03 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 & .48 & .30 & 1.02 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 1.00 & .1 & T.30 & .31 & 77.1 & 77.1 & 10 \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 & .1 & t.28 & .27 & 63.8 & 64.8 & 39 & 1 \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & t.28 & .27 & 63.8 & 64.8 & 39 & 1 \\ 28 & 26 & 48 & .27 & .30 & .98 & .3 & .98 & .2 & t.26 & .24 & 66.5 & 5.9 & 28 & 12 \\ 29 & 16 & 49 & .72 & .32 & .98 & .1 & .98 & .1 & q.30 & .28 & 70.8 & 68.8 & 29 & 1 \\ 12 & 21 & 48 & .18 & .30 & .98 & .3 & .98 & .2 & p.28 & .26 & 63.8 & 61.1 & 12 & 13 \\ 30 & 49 & .56 & .30 & .97 & .3 & .96 & .25 & .22 & 66.7 & 63.1 & 13 & 18 \\ 19 & 47 & .35 & .31 & .97 & .3 & .94 & .51 & n.31 & .27 & 58.7 & 62.8 & 18 & 12 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 & .1 & m.47 & .42 & 91.3 & 91.3 & 23 & 17 & 11 & 48 & 1.25 & .36 & .96 & .1 & .91 & .31 & .37 & .32 & 78.7 & 78.7 & 7 & 1 \\ 37 & 21 & 50 & .27 & .30 & .96 & .5 & .95 & .51 & s.31 & .26 & 69.4 & 61.6 & 37 & 13 \\ 32 & 26 & 50 & .16 & .29 & .94 & .9 & .93 & .91 & .30 & .24 & 67.3 & 59.7 & 32 & 12 \\ 22 & 17 & 49 & .61 & .31 & .93 & .6 & .90 & .71 & i.35 & .28 & 68.8 & 66.9 & 22 & 13 \\ 36 & 20 & 48 & .29 & .31 & .93 & .8 & .91 & .91 & h.34 & .27 & 70.2 & 62.0 & 36 & 19 \\ 9 & 23 & 49 & .05 & .30 & .93 & .11 & .91 & .1.2 & g.33 & .25 & 60.4 & 59.8 & 9 & 1 \\ 27 & 30 & 50 & .51 & .30 & .91 & .10 & .89 & .1.2 & f.32 & .22 & 61.2 & 62.2 & 27 & 12 \\ 2 & 45 & 50 & -2.39 & .48 & .91 &11 & .86 & .21 & e.22 & .12 & 89.8 & 89.8 & 2 & 14 & 42 & 48 & .2.11 & .44 & .91 &2 & .78 & .51 & d.25 & .14 & 87.2 & 87.2 & 14 & 15 \\ 5 & 33 & 48 & .93 & .32 & .85 & .1.2 & .81 & .1.3 & .36 & .30 & .20 & 72.3 & 68.9 & 5 & 12 \\ - & & & $						
$ \begin{bmatrix} 1 & 32 & 49 &75 & .31 1.03 & .3 1.04 & .4 P .18 & .21 62.5 & 66.1 1 \\ 6 & 11 & 49 & 1.27 & .36 1.03 & .2 .99 & .0 Q .30 & .32 79.2 & 79.1 6 \\ 8 & 18 & 48 & .47 & .31 1.03 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 \\ 26 & 29 & 49 &48 & .30 1.02 & .3 1.01 & .1 R .25 & .27 59.6 & 64.9 8 \\ 10 & 12 & 49 & 1.14 & .35 1.01 & .1 1.00 & .1 T .30 & .31 77.1 & 77.1 10 \\ 39 & 18 & 48 & .48 & .31 1.00 & .0 .98 &1 t .28 & .27 63.8 & 64.8 39 \\ 15 & 45 & 50 & -2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 \\ 28 & 26 & 48 &27 & .30 .98 &3 .98 &2 r .26 & .24 66.0 & 59.9 28 \\ 29 & 16 & 49 & .72 & .32 .98 &1 .98 &1 q .30 & .28 70.8 & 68.8 29 \\ 12 & 21 & 48 & .18 & .30 .98 &3 .98 &2 p .28 & .26 63.8 & 61.1 12 \\ 13 & 30 & 49 &56 & .30 .97 &3 .96 &3 o .25 & .22 66.7 & 63.1 13 \\ 18 & 19 & 47 & .35 & .31 .97 &3 .94 &5 n .31 & .27 58.7 & 62.8 18 \\ 23 & 5 & 47 & 2.33 & .53 .96 & .1 .90 &1 m .47 & .42 91.3 & 91.3 23 \\ 1 & 7 & 11 & 48 & 1.25 & .36 .96 &1 .91 &3 1.37 & .32 78.7 & 78.7 7 \\ 37 & 21 & 50 & .27 & .30 .96 &5 .95 &5 k .31 & .26 69.4 & 61.6 37 \\ 32 & 26 & 50 &16 & .29 .94 &9 .93 &9 j .30 & .24 67.3 & 59.7 .32 \\ 22 & 17 & 49 & .61 & .31 .93 &6 .90 &7 i .35 & .28 68.8 & 66.9 22 \\ 36 & 20 & 48 & .29 & .31 .93 &8 .91 &9 h .34 & .27 70.2 & 62.0 .36 \\ 9 & 23 & 49 & .05 & .30 .93 & -1.1 & .96 &2 e .22 & .12 89.8 & 89.8 2 \\ 27 & 30 & 50 &51 & .30 .91 & -1.0 .89 & -1.2 f .32 & .22 61.2 & 62.2 .27 \\ 2 & 45 & 50 & -2.39 & .48 .91 & -1 .86 &2 e .22 & .12 89.8 & 89.8 2 \\ 24 & 39 & 49 & .153 & .36 .84 &7 .73 & -1.2 b .35 & .17 79.2 & 79.1 24 \\ 5 & 33 & 48 &93 & .32 .85 & -1.2 .81 & -1.3 c .36 & .20 72.3 & 68.9 5 \\ 24 & 39 & 49 & -1.53 & .36 .84 &7 .73 & -1.2 b .35 & .17 9.2 & 71.1 24 \\ 25 & 3$						
$ \begin{bmatrix} 6 & 11 & 49 & 1.27 & .36 & 1.03 & .2 & .99 & .0 & 0 & .30 & .32 & 79.2 & 79.1 & 6 \\ 8 & 18 & 48 & .47 & .31 & 1.03 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & R.25 & .27 & 59.6 & 64.9 & 8 \\ 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 1.00 & .1 & T.30 & .31 & 77.1 & 77.1 & 10 \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 &1 & t.28 & .27 & 63.8 & 64.8 & 39 \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & s. 13 & .12 & 89.8 & 89.8 & 15 \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r.26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &1 & q.30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & p.28 & .26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & [o.25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n & .31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m.47 & .42 & 91.3 & 91.3 & 23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & 78.7 & 78.7 & 7 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 & .51 & k & .31 & .26 & 69.4 & 61.6 & 37 \\ 32 & 26 & 50 &16 & .29 & .94 & .9 & .93 & .91 & .91 & .34 & .27 & 70.2 & 62.0 & 36 \\ 9 & 23 & 49 & .05 & .30 & .93 &11 & .91 &3 & [3.37 & .32 & 59.7 & 32 &] \\ 27 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & [3.3 & .25 & 60.4 & 59.8 & 9 &] \\ 27 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & [3.2 & .22 & 61.2 & 62.2 & 27 &] \\ 2 & 45 & 50 & -2.39 & .48 & .91 & -1 & .86 &2 & [e .22 & .12 & 89.8 & 89.8 & 2 &] \\ 14 & 42 & 48 & -2.11 & .44 & .91 &2 & .78 &5 &] d .25 & .14 & 87.2 & 87.2 & 14 &] \\ 5 & 33 & 48 &93 & .32 & .85 & -1.2 & .81 & -1.3 & [c .36 & .20 & 72.3 & 68.9 & 5 &] \\ 24 & 39 & 49 & -1.53 & .36 & .84 &7 & .73 & -1.2 & [b .35 & .17 & 79.2 & 79.1 & 24 &] \\ 25 & 36 & 50 & -1.09 & .32 & .83 & -1.2 & .77 & -1.4 & [a .37 & .19 & 73.5 & 71.8 & 25 &] \\ \hline \hline \hline \hline \hline \\ \hline \hline \hline \hline \hline \\ \hline \hline \hline \hline \hline \hline$	İ	1	32	49		
$ \begin{bmatrix} 8 & 18 & 48 & .47 & .31 1.03 & .3 1.01 & .1 R.25 & .27 59.6 & 64.9 8 \\ 26 & 29 & 49 & .48 & .30 1.02 & .3 1.01 & .1 S.21 & .22 54.2 & 61.8 26 \\ 10 & 12 & 49 & 1.14 & .35 1.01 & .1 1.00 & .1 T .30 & .31 77.1 & 77.1 10 \\ 39 & 18 & 48 & .48 & .31 1.00 & .0 .98 &1 t .28 & .27 63.8 & 64.8 39 \\ 15 & 45 & 50 & -2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 \\ 28 & 26 & 48 &27 & .30 .98 &3 .98 &2 r .26 & .24 66.0 & 59.9 28 \\ 29 & 16 & 49 & .72 & .32 .98 &1 .98 &1 q .30 & .28 70.8 & 68.8 29 \\ 12 & 21 & 48 & .18 & .30 .98 &3 .98 &2 p .28 & .26 63.8 & 61.1 12 \\ 13 & 30 & 49 &56 & .30 .97 &3 .96 &3 o .25 & .22 66.7 & 63.1 13 \\ 18 & 19 & 47 & .35 & .31 .97 &3 .94 &5 n .31 & .27 58.7 & 62.8 18 \\ 23 & 5 & 47 & 2.33 & .53 .96 & .1 .90 &1 m .47 & .42 91.3 & 91.3 23 \\ 7 & 11 & 48 & 1.25 & .36 .96 &1 .91 &3 1.37 & .32 78.7 & 78.7 7 \\ 37 & 21 & 50 & .27 & .30 .96 &5 .95 &5 k .31 & .26 69.4 & 61.6 37 \\ 32 & 26 & 50 &16 & .29 .94 &9 .93 &9 j .30 & .24 67.3 & 59.7 32 \\ 22 & 17 & 49 & .61 & .31 .93 &6 .90 &7 i .35 & .28 68.8 & 66.9 22 \\ 36 & 20 & 48 & .29 & .31 .93 &8 .91 &9 h .34 & .27 70.2 & 62.0 36 \\ 9 & 23 & 49 & .05 & .30 .93 & -1.1 .91 & -1.2 g .33 & .25 60.4 & 59.8 9 \\ 27 & 30 & 50 &51 & .30 .91 & -1.0 .89 & -1.2 f .32 & .22 61.2 & 62.2 .27 \\ 2 & 45 & 50 & -2.39 & .48 .91 &1 .86 &2 e .22 & .12 89.8 & 89.8 2 \\ 14 & 42 & 48 & -2.11 & .44 .91 &2 .78 &5 d .25 & .14 87.2 & 87.2 14 \\ 5 & 33 & 48 &93 & .32 .85 & -1.2 .81 & -1.3 c .36 & .20 72.3 & 68.9 5 \\ 24 & 39 & 49 & -1.53 & .36 .84 &7 .73 & -1.2 b .35 & .17 79.2 & 79.1 24 \\ 25 & 36 & 50 & -1.09 & .32 .83 & -1.2 .77 & -1.4 a .37 & .19 73.5 & 71.8 25 \\+++-+++++++$	İ	6	11	49		
$ \begin{bmatrix} 26 & 29 & 49 &48 & .30 & 1.02 & .3 & 1.01 & .1 & S .21 & .22 & 54.2 & 61.8 & 26 & \\ 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 1.00 & .1 & T .30 & .31 & 77.1 & 77.1 & 10 & \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 &1 & t .28 & .27 & 63.8 & 64.8 & 39 & \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & s .13 & .12 & 89.8 & 89.8 & 15 & \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r .26 & .24 & 66.0 & 59.9 & 28 & \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &1 & q .30 & .28 & 70.8 & 68.8 & 29 & \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & p .28 & .26 & 63.8 & 61.1 & 12 & \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & o .25 & .22 & 66.7 & 63.1 & 13 & \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n .31 & .27 & 58.7 & 62.8 & 18 & \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m .47 & .42 & 91.3 & 91.3 & 23 & \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & .37 & .32 & 78.7 & 78.7 & 7 & \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & k .31 & .26 & 69.4 & 61.6 & 37 & \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 & j .30 & .24 & 67.3 & 59.7 & 32 & \\ 22 & 17 & 49 & .61 & .31 & .93 &6 & .90 &7 & i .35 & .28 & 68.8 & 66.9 & 22 & \\ 36 & 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & h .34 & .27 & 70.2 & 62.0 & 36 & \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & g .33 & .25 & 60.4 & 59.8 & 9 & \\ 27 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & f .32 & .22 & 61.2 & 62.2 & 27 & \\ 2 & 45 & 50 & -2.39 & .48 & .91 &1 & .86 &2 & e .22 & .12 & 89.8 & 89.8 & 2 & \\ 14 & 42 & 48 & -2.11 & .44 & .91 &2 & .78 &5 & d .25 & .14 & 87.2 & 87.2 & 14 & \\ 5 & 33 & 48 &93 & .32 & .85 & -1.2 & .81 & -1.3 & c .36 & .20 & 72.3 & 68.9 & 5 & \\ 24 & 39 & 49 & -1.53 & .36 & .84 &7 & .73 & -1.2 & b .35 & .17 & 79.2 & 79.1 & 24 & \\ 25 & 36 & 50 & -1$	İ	8	18	48		
$ \begin{bmatrix} 10 & 12 & 49 & 1.14 & .35 & 1.01 & .1 & 1.00 & .1 & T.30 & .31 & 77.1 & 77.1 & 10 \\ 39 & 18 & 48 & .48 & .31 & 1.00 & .0 & .98 &1 & t. 28 & .27 & 63.8 & 64.8 & 39 \\ 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & s. 13 & .12 & 89.8 & 89.8 & 15 \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r.26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 & .1 & q. 30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 & .2 & r.26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & o. 25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .96 &3 & o. 25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n & .31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m & .47 & .42 & 91.3 & 91.3 & 23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & 78.7 & 78.7 & 7 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & k & .31 & .26 & 69.4 & 61.6 & 37 \\ 32 & 26 & 50 &16 & .29 & .94 & .9 & .93 &9 & j & .30 & .24 & 67.3 & 59.7 & 32 \\ 22 & 17 & 49 & .61 & .31 & .93 &6 & .90 &7 & i & .35 & .28 & 68.8 & 66.9 & 22 \\ 36 & 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & h & .34 & .27 & 70.2 & 62.0 & 36 \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & g & .33 & .25 & 60.4 & 59.8 & 9 \\ 27 & 30 & 50 &51 & .30 & .91 &10 & .89 & -1.2 & f & .32 & .22 & 61.2 & 62.2 & 27 & 1 \\ 2 & 45 & 50 & -2.39 & .48 & .91 &1 & .86 &2 & e & .22 & .12 & 89.8 & 89.8 & 2 & 1 \\ 14 & 42 & 48 & -2.11 & .44 & .91 &2 & .78 &5 & d & .25 & .14 & 87.2 & 87.2 & 14 & 1 \\ 5 & 33 & 48 &93 & .32 & .85 & -1.2 & .81 & -1.3 & c & .36 & .20 & 72.3 & 68.9 & 5 & 1 \\ 24 & 39 & 49 & -1.53 & .36 & .84 &7 & .73 & -1.2 & b & .35 & .17 & 79.2 & 79.1 & 24 & 1 \\ 25 & 36 & 50 & -1.09 & .32 & .83 & -1.2 & .77 & -1.4 & a & .37 & .19 & 73.5 & 71.8 & 25 & 1 \\+++++$		26	29	49	48	
$ \begin{bmatrix} 39 & 18 & 48 & .48 & .31 1.00 & .0 .98 &1 t .28 & .27 63.8 & 64.8 39 15 & 45 & 50 & -2.39 & .48 .99 & .1 .98 & .1 s .13 & .12 89.8 & 89.8 15 28 & 26 & 48 &27 & .30 .98 &3 .98 &2 r .26 & .24 66.0 & 59.9 28 29 & 16 & 49 & .72 & .32 .98 &1 .98 &1 q .30 & .28 70.8 & 68.8 29 12 & 21 & 48 & .18 & .30 .98 &3 .98 &2 p .28 & .26 63.8 & 61.1 12 13 & 30 & 49 &56 & .30 .97 &3 .96 &3 o .25 & .22 66.7 & 63.1 13 18 & 19 & 47 & .35 & .31 .97 &3 .94 &5 n .31 & .27 58.7 & 62.8 18 23 & 5 & 47 & 2.33 & .53 .96 & .1 .90 &1 m .47 & .42 .91.3 & .91.3 .23 7 & 11 & 48 & 1.25 & .36 .96 &1 .91 &3 1.37 & .32 78.7 & 78.7 7 37 & 21 & 50 & .27 & .30 .96 &5 .95 &5 k .31 & .26 69.4 & 61.6 37 32 & 26 & 50 &16 & .29 .94 &9 .93 &9 j .30 & .24 67.3 & 59.7 32 22 & 17 & 49 & .61 & .31 .93 &6 .90 &7 i .35 & .28 68.8 & 66.9 22 36 & 20 & 48 & .29 & .31 .93 &8 .91 &9 h .34 & .27 70.2 & 62.0 36 9 & 23 & 49 & .05 & .30 .91 & -1.0 .89 & -1.2 f .32 & .22 61.2 & 62.2 27 2 & 45 & 50 & -2.39 & .48 .91 &1 .86 &2 e .22 & .12 89.8 & 89.8 2 14 & 42 & 48 & -2.11 & .44 .91 &2 .78 & -5 d .25 & .14 87.2 & 87.2 14 5 & 33 & 48 &93 & .32 .85 & -1.2 .81 & -1.3 c .36 & .20 72.3 & 68.9 5 24 & 39 & 49 & -1.53 & .36 .84 &7 .73 & -1.2 b .35 & .17 79.2 & 79.1 24 25 & 36 & 50 & -1.09 & .32 .83 & -1.2 .77 & -1.4 a .37 & .19 73.5 & 71.8 25 + ++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++++++ ++ +++++++++++++++++-++$	1	0	12	49		
$ \begin{bmatrix} 15 & 45 & 50 & -2.39 & .48 & .99 & .1 & .98 & .1 & s .13 & .12 & 89.8 & 89.8 & 15 \\ 28 & 26 & 48 &27 & .30 & .98 &3 & .98 &2 & r .26 & .24 & 66.0 & 59.9 & 28 \\ 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &1 & q .30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & p .28 & .26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & 0 .25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n .31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m .47 & .42 & 91.3 & 91.3 & 23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & 78.7 & 78.7 & 7 & \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & k .31 & .26 & 69.4 & 61.6 & 37 & \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 & j & .30 & .24 & 67.3 & 59.7 & 32 & \\ 22 & 17 & 49 & .61 & .31 & .93 &6 & .90 &7 & j & .35 & .28 & 68.8 & 66.9 & 22 & \\ 36 & 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & h .34 & .27 & 70.2 & 62.0 & 36 & \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & g .33 & .25 & 60.4 & 59.8 & 9 & \\ 27 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & f .32 & .22 & 61.2 & 62.2 & 27 & \\ 2 & 45 & 50 & -2.39 & .48 & .91 &2 & .78 &5 & d .25 & .14 & 87.2 & 87.2 & 14 & \\ 5 & 33 & 48 &93 & .32 & .85 & -1.2 & .81 & -1.3 & c .36 & .20 & 72.3 & 68.9 & 5 & \\ 24 & 39 & 49 & -1.53 & .36 & .84 &7 & .73 & -1.2 & b .35 & .17 & 79.2 & 79.1 & 24 & \\ 25 & 36 & 50 & -1.09 & .32 & .83 & -1.2 & .77 & -1.4 & a .37 & .19 & 73.5 & 71.8 & 25 & \\++++++++++$	1 3	39	18	48	.48	
$ \begin{bmatrix} 29 & 16 & 49 & .72 & .32 & .98 & .1 & .98 & .1 & q. 30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 & .3 & .98 & .2 & p. 28 & .26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 & .56 & .30 & .97 & .3 & .96 & .3 & o. 25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 & .3 & .94 & .5 & n. 31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 & .1 & m. 47 & .42 & 91.3 & 91.3 & 23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 & .1 & .91 & .3 & 1.37 & .32 & 78.7 & 78.7 & 7 & \\ 37 & 21 & 50 & .27 & .30 & .96 & .5 & .95 & .5 & k. 31 & .26 & 69.4 & 61.6 & 37 & \\ 32 & 26 & 50 & .16 & .29 & .94 & .9 & .93 & .9 & j & .30 & .24 & 67.3 & 59.7 & 32 & \\ 22 & 17 & 49 & .61 & .31 & .93 & .6 & .90 & .7 & i & .35 & .28 & 68.8 & 66.9 & 22 & \\ 36 & 20 & 48 & .29 & .31 & .93 & .8 & .91 & .9 & h & .34 & .27 & 70.2 & 62.0 & 36 & \\ 9 & 23 & 49 & .05 & .30 & .93 & .1.1 & .91 & .12 & g & .33 & .25 & 60.4 & 59.8 & 9 & \\ 27 & 30 & 50 & .51 & .30 & .91 & .10 & .89 & .1.2 & f & .32 & .22 & 61.2 & 62.2 & .27 & \\ 2 & 45 & 50 & -2.39 & .48 & .91 &1 & .86 & .2 & e & .22 & .12 & 89.8 & 89.8 & 2 & \\ 14 & 42 & 48 & .211 & .44 & .91 & .2 & .78 & .5 & d & .25 & .14 & 87.2 & 87.2 & 14 & \\ 5 & 33 & 48 & .93 & .32 & .85 & -1.2 & .81 & -1.3 & c & .36 & .20 & 72.3 & 68.9 & 5 & \\ 24 & 39 & 49 & .1.53 & .36 & .84 & .7 & .73 & -1.2 & b & .35 & .17 & 79.2 & 79.1 & 24 & \\ 25 & 36 & 50 & -1.09 & .32 & .83 & -1.2 & .77 & -1.4 & a & .37 & .19 & 73.5 & 71.8 & 25 & \\$	1	5	45	50	-2.39	
$ \begin{bmatrix} 29 & 16 & 49 & .72 & .32 & .98 &1 & .98 &1 & q. 30 & .28 & 70.8 & 68.8 & 29 \\ 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & p. 28 & .26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & o. 25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n. 31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m. 47 & .42 & .91.3 & .91.3 & 23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & .78.7 & .78.7 & .7 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & k. 31 & .26 & 69.4 & 61.6 & 37 & \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 &9 &38 & .68.8 & 66.9 & 22 & \\ 36 & 20 & 48 & .29 & .31 & .93 &6 & .90 &7 & & .35 & .28 & 68.8 & 66.9 & 22 & \\ 36 & 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & h. 34 & .27 & .70.2 & 62.0 & 36 & \\ 9 & 23 & 49 & .05 & .30 & .93 & .1.1 & .91 & .12 & .12 & .33 & .25 & 60.4 & 59.8 & 9 & \\ 27 & 30 & 50 &51 & .30 & .91 & .10 & .89 & .1.2 & .12 & .83 & .89.8 & 2 & \\ 14 & 42 & 48 & .211 & .44 & .91 &2 & .78 &5 &5 &5 & .14 & .87.2 & .87.2 & 14 & \\ 5 & 33 & 48 &93 &32 &85 & .1.2 &81 & .1.3 & c36 & .20 & .72.3 & .68.9 & 5 & \\ 24 & 39 & 49 & .1.53 &36 &84 &7 &73 & .1.2 & .5 &17 & .79.2 & .79.1 & 24 & \\ 25 & 36 & 50 & -1.09 &32 &83 & .1.2 & .77 & .1.4 &37 & .19 & .73.5 & .71.8 & .25 & \\$	2	28	26	48	27	
$ \begin{bmatrix} 12 & 21 & 48 & .18 & .30 & .98 &3 & .98 &2 & p. 28 & .26 & 63.8 & 61.1 & 12 \\ 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & o. 25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n. 31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m. 47 & .42 & .91.3 & .91.3 & .23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & .78.7 & .77 & .78.7 & .77 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 & .58 & .31 & .26 & 69.4 & 61.6 & .37 & .32 & .26 & 50 &16 & .29 & .94 &9 & .93 & .98 & .91 & .26 & 69.4 & 61.6 & .37 & .32 & .26 & 50 &16 & .29 & .94 &9 & .93 & .98 & .28 & 68.8 & 66.9 & .22 & .22 & .17 & .49 & .61 & .31 & .93 &6 & .90 &78 & .38 & .28 & .68.8 & 66.9 & .22 & .22 & .36 & 20 & .48 & .29 & .31 & .93 &8 & .91 &98 & .34 & .27 & .70.2 & .20.8 & .36 & .30 & .93 & -1.1 & .91 & -1.28 & .33 & .25 & .60.4 & .59.8 & .91 & .91 & .34 & .27 & .70.2 & .20.8 & .91 & .92 & .34 & .91 & .93 &8 & .91 & .91 & .32 & .23 & .23 & .25 & .24 & .29 & .32 & .36 & .36 & .36 & .20 & .23 & .26 & .20 & .23 & .28 & .24 & .25 & .26 & .25 & .14 & .27 & .73 & .12 & .28 & .26 & .25 & .14 & .27 & .27 & .24 & .25 & .36 & .50 & .1.09 & .32 & .38 & .1.2 & .77 & .1.4 & .37 & .19 & .73 & .71.8 & .25 & .24 & .39 & .49 & .1.53 & .36 & .34 & .71 & .73 & .1.2 & .35 & .171 & .73 & .71.8 & .25 & .24 & .39 & .49 & .1.53 & .36 & .34 & .77 & .73 & .1.2 & .35 & .171 & .191 & .124 & .25 & .25 $	2	29	16	49	.72	
$ \begin{bmatrix} 13 & 30 & 49 &56 & .30 & .97 &3 & .96 &3 & 0.25 & .22 & 66.7 & 63.1 & 13 \\ 18 & 19 & 47 & .35 & .31 & .97 &3 & .94 &5 & n & .31 & .27 & 58.7 & 62.8 & 18 \\ 23 & 5 & 47 & 2.33 & .53 & .96 & .1 & .90 &1 & m & .47 & .42 & .91.3 & .91.3 & .23 \\ 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & .78.7 & .78.7 & .7 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & k & .31 & .26 & 69.4 & 61.6 & .37 & .32 & .26 & 50 &16 & .29 & .94 &9 & .93 &9 & .93 & .24 & 67.3 & 59.7 & .32 \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 & .93 & .24 & 67.3 & 59.7 & .32 & .22 \\ 36 & 20 & 48 & .29 & .31 & .93 &6 & .90 &7 & i & .35 & .28 & 68.8 & 66.9 & .22 & .22 \\ 36 & 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & h & .34 & .27 & .70.2 & 62.0 & .36 & .93 \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & .28 & .2$	1	2	21	48	.18	
23 5 47 2.33 .53 .96 .1 .90 1 m .47 .42 91.3 91.3 23] 7 11 48 1.25 .36 .96 1 .91 3 1.37 .32 78.7 78.7 7] 37 21 50 .27 .30 .96 5 .95 5 k .31 .26 69.4 61.6 37] 32 26 50 16 .29 .94 9 .93 9 j .30 .24 67.3 59.7 32] 22 17 49 .61 .31 .93 9 j .30 .24 67.3 59.7 32] 36 20 48 .29 .31 .93 9 h .34 .27 70.2 62.0 36] 9] 27 30 50 51 .30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2	1	3	30	49	56	.30 .973 .963 0.25 .22 66.7 63.1 13
$ \begin{bmatrix} 7 & 11 & 48 & 1.25 & .36 & .96 &1 & .91 &3 & 1.37 & .32 & 78.7 & 78.7 & 7 & 7 \\ 37 & 21 & 50 & .27 & .30 & .96 &5 & .95 &5 & 18.31 & .26 & 69.4 & 61.6 & 37 & 132 \\ 32 & 26 & 50 &16 & .29 & .94 &9 & .93 &9 & 130 & .24 & 67.3 & 59.7 & 32 & 122 \\ 22 & 17 & 49 & .61 & .31 & .93 &6 & .90 &7 & 18.35 & .28 & 68.8 & 66.9 & 22 & 136 \\ 20 & 48 & .29 & .31 & .93 &8 & .91 &9 & 18.34 & .27 & 70.2 & 62.0 & 36 & 190 \\ 9 & 23 & 49 & .05 & .30 & .93 & -1.1 & .91 & -1.2 & 19.33 & .25 & 60.4 & 59.8 & 9 & 127 & 30 & 50 &51 & .30 & .91 & -1.0 & .89 & -1.2 & 17.32 & .22 & 61.2 & 62.2 & 27 & 128 \\ 2 & 45 & 50 & -2.39 & .48 & .91 &1 & .86 &2 & e.22 & .12 & 89.8 & 89.8 & 2 & 144 & 42 & 48 & -2.11 & .44 & .91 &2 & .78 &5 & 13.2 & .21 & 89.8 & 89.8 & 2 & 144 & 42 & 48 & -2.11 & .44 & .91 &2 & .78 &5 & 13.2 & .21 & 89.8 & 89.8 & 2 & 144 & 42 & 48 & -9.3 & .32 & .85 & -1.2 & .81 & -1.3 & c.36 & .20 & 72.3 & 68.9 & 5 & 124 & 39 & 49 & -1.53 & .36 & .84 &7 & .73 & -1.2 & b .35 & .17 & 79.2 & 79.1 & 24 & 125 & 36 & 50 & -1.09 & .32 & .83 & -1.2 & .77 & -1.4 & a .37 & .19 & 73.5 & 71.8 & 25 & 14 & 14.48 & .23.6 & 48.5 & .00 & .34 & 1.00 & .0 & 1.01 & .1 & 14 & 69.5 & 70.1 & 14 & 14.48 & .23.6 & 48.5 & .00 & .34 & 1.00 & .0 & 1.01 & .1 & 14 & .49.5 & .48.5 & .00 & .34 & 1.00 & .0 & 1.01 & .1 & .48.5 & .48.5 & .00 & .34 & 1.00 & .0 & 1.01 & .1 & .48.5 & .48.5 & .00 & .34 & 1.00 & .0 & 1.01 & .1 & .48.5 &$	j 1	8	19	47	.35	.31 .973 .945 n .31 .27 58.7 62.8 18
37 21 50 .27 .30 .96 5 .95 5 k .31 .26 69.4 61.6 37 32 26 50 16 .29 .94 9 .93 9 j .30 .24 67.3 59.7 32 22 17 49 .61 .31 .93 6 .90 7 i .35 .28 68.8 66.9 22 36 20 48 .29 .31 .93 8 .91 9 h .34 .27 70.2 62.0 36 9 23 49 .05 .30 .93 -1.1 .91 12 g.33 .25 60.4 59.8 9 27 30 50 51 .30 .91 1 .86 2 e.22 .12 89.8 89.8 2 14 42 48 -2.11 .44 .91 2 .78 .5 d.25	2	23	5	47	2.33	.53 .96 .1 .901 m .47 .42 91.3 91.3 23
32 26 50 16 .29 .94 9 .93 9 j .30 .24 67.3 59.7 32 j 22 17 49 .61 .31 .93 6 .90 7 j i.35 .28 68.8 66.9 22 j 36 20 48 .29 .31 .93 8 .91 9 h<.34	İ	7	11	48	1.25	.36 .961 .913 1.37 .32 78.7 78.7 7
22 17 49 .61 .31 .93 6 .90 7 i .35 .28 68.8 66.9 22 36 20 48 .29 .31 .93 8 .91 9 h .34 .27 70.2 62.0 36 9 23 49 .05 .30 .93 -1.1 .91 2 g.33 .25 60.4 59.8 9 27 30 50 51 .30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27 2 45 50 -2.39 .48 .91 1 .86 2 e.22 .12 89.8 89.8 2 14 42 48 -2.11 .44 .91 2 .78 .5 d .25 .14 87.2 87.2 14 5 33 48 93 .32 .85 -1.2 .81 -1.3 c .36 .20	1 3	37	21	50	.27	.30 .965 .955 k.31 .26 69.4 61.6 37
36 20 48 .29 .31 .93 8 .91 9 h .34 .27 70.2 62.0 36 9 23 49 .05 .30 .93 -1.1 .91 -1.2 g .33 .25 60.4 59.8 9 27 30 50 51 .30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27 2 45 50 -2.39 .48 .91 1 .86 2 e .22 .12 89.8 89.8 2 14 42 48 -2.11 .44 .91 2 .78 5 d .25 .14 87.2 87.2 14 5 33 48 93 .32 .85 -1.2 .81 -1.3 c .36 .20 72.3 68.9 5 24 39 49 -1.53 .36 .84 7 .73 -1.2 b .35 .17 </td <td>1 3</td> <td>32</td> <td>26</td> <td>50</td> <td>16</td> <td>.29 .949 .939 j .30 .24 67.3 59.7 32</td>	1 3	32	26	50	16	.29 .949 .939 j .30 .24 67.3 59.7 32
9 23 49 .05 .30 .93 -1.1 .91 -1.2 g .33 .25 60.4 59.8 9 9 27 30 50 51 .30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27 1 2 45 50 -2.39 .48 .91 1 .86 2 e.22 .12 89.8 89.8 2 1 14 42 48 -2.11 .44 .91 2 .78 5 d .25 .14 87.2 87.2 14 1 5 33 48 93 .32 .85 -1.2 .81 -1.3 c .36 .20 72.3 68.9 5 1 24 39 49 -1.53 .36 .84 7 .73 -1.2 b .35 .17 79.2 79.1 24 1 25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a .37 .1	2	22	17	49	.61	.31 .936 .907 i .35 .28 68.8 66.9 22
27 30 50 51 .30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27 2 45 50 -2.39 .48 .91 1 .86 2 e.22 .12 89.8 89.8 2 14 42 48 -2.11 .44 .91 2 .78 5 d .25 .14 87.2 87.2 14 5 33 48 93 .32 .85 -1.2 .81 -1.3 c .36 .20 72.3 68.9 5 24 39 49 -1.53 .36 .84 7 .73 -1.2 b .35 .17 79.2 79.1 24 25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25	3	36	20	48	.29	.31 .938 .919 h .34 .27 70.2 62.0 36
2 45 50 -2.39 .48 .91 1 .86 2 e.22 .12 89.8 89.8 2 14 42 48 -2.11 .44 .91 2 .78 5 d.25 .14 87.2 87.2 14 5 33 48 93 .32 .85 -1.2 .81 -1.3 c.36 .20 72.3 68.9 5 24 39 49 -1.53 .36 .84 7 .73 -1.2 b.35 .17 79.2 79.1 24 25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a.37 .19 73.5 71.8 25		9	23	49		
14 42 48 -2.11 .44 .91 2 .78 5 d .25 .14 87.2 87.2 14 14 5 33 48 93 .32 .85 -1.2 .81 -1.3 c .36 .20 72.3 68.9 5 14 24 39 49 -1.53 .36 .84 7 .73 -1.2 b .35 .17 79.2 79.1 24 14 25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25 14	2	27	30	50	51	.30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27
5 33 48 93 .32 .85 -1.2 .81 -1.3 c .36 .20 72.3 68.9 5 24 39 49 -1.53 .36 .84 7 .73 -1.2 b .35 .17 79.2 79.1 24 25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25		2	45	50	-2.39	.48 .911 .862 e .22 .12 89.8 89.8 2
24 39 49 -1.53 .36 .84 7 .73 -1.2 b .35 .17 79.2 79.1 24 1 25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25 1	1	4	42	48	-2.11	.44 .912 .785 d.25 .14 87.2 87.2 14
25 36 50 -1.09 .32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25 + + + + + + MEAN 23.6 48.5 .00 .34 1.00 .0 1.01 .1 69.5 70.1				48		
	2	24	39	49		
MEAN 23.6 48.5 .00 .34 1.00 .0 1.01 .1 69.5 70.1	2	25	36	50		
	-				48.5	.00 .34 1.00 .0 1.01 .1 69.5 70.1

Based on the table above, it shows that all items have been in accordance with the item suitability criteria. All items are in the range or interval of Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. This illustrates that there are no misconceptions among students about the item questions and there are no items that need to be changed or replaced.

Reliability Item

According to (Linacre, 2002), the item reliability index means that the difficulty of the item is the same for other samples that have equal permissibility. The acceptability index of the item was 0.80 (Bond & Fox, 2015). However, in this study, the acceptable trustworthiness value was 0.70 because it was sufficient (Boone et al., 2014), the reliability value 0.70. Reliability can prove that the sample is sufficient (Bond & Fox, 2015). The results of the reliability analysis of the items shown in the statistical summary can be seen on Table 11.

Table 11. Summary of Measured Item

TOTAL SCORE C	MODEL INFIT OUTFIT COUNT MEASURE ERROR MNSQ ZSTD MNSQ ZSTD
S.D. 10.4 1 MAX. 45.0 1 MIN. 5.0 4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
REAL RMSE .3	5 TRUE SD 1.05 SEPARATION 2.98 Item RELIABILITY .90 .35 TRUE SD 1.05 SEPARATION 3.03 Item RELIABILITY .90

Table 11 shows the results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Discussion *

Higher order thinking skills are critical, logical, reflective, metacognitive and creative thinking skills. All of these skills are active when a person faces unusual problems, uncertainties, questions, and choices. The successful application of these skills is contained in valid explanations, decisions, appearances and products according to the context of existing knowledge and experience and the continued development of these or other intellectual skills (Ahmad & Sukiman, 2019); Gupta & Mishra, 2021).

Bloom's taxonomy is often used to write learning outcomes, because it provides a readymade structure and list of verbs. It can be said that the correct use of verbs is the key to successful writing of learning outcomes. Cognitive realm is a realm that includes mental (brain) activities. According to Bloom, all efforts concerning brain activity are included in the cognitive realm. In the cognitive domain, there are six levels of thinking processes, starting from the lowest level (C1) to the highest level (C6).

According to the findings of the investigation, the questions in fiqh subjects are still at the cognitive level C1 to C3. C1 controls the cognitive level with a substantially higher percentage than the other cognitive levels, namely 74.5%. While just 22% of questions are at the cognitive level of

C2, 3% are at C3, and 0.5% is at C6. At cognitive levels C5 and C6, there were no questions. At cognitive levels C5 and C6, there were no questions. Because the teacher's assessment mainly stresses recognizing or recalling facts at levels C4 and C5, students are accustomed to having knowledge at this level. Based on this percentage, it is possible to conclude that the learning evaluation questions in figh disciplines do not have good proportions.

The content of HOTS in fiqh matters is very important considering the atmosphere of human civilization is entering the 5.0 era. The Covid-19 pandemic that has hit various countries, including Indonesia, requires HOTS to filter the rapid flow of incoming information. If the HOTS from C1 to C6 – especially C6 – are not included in school questions, it is not impossible that students will become a generation that is paralyzed cognitively, affectively and psychometrically. In this context, the implementation of HOTS in school questions finds its significance point.

Based on previous research, teacher learning evaluation questions are expected to be able to create questions that can cause students to reach the stage of high-level thinking, so that students not only have the ability to remember the lessons that have been given, but they are also expected to be able to create something new. This can be good to both him-self and the environment

By paying attention to the test questions that have been analyzed by researchers in accordance with Bloom's Taxonomy theory, it can be seen that the thinking skills possessed by students based on the test questions given are still in the category of low-order thinking skills because they are still in the knowledge category, understanding and application. While the questions that fall into the category of analysis, synthesis and evaluation are still very few. So it is hoped that in the future teachers will make learning evaluation questions that further hone the thinking skills possessed by students, not only at the stage of knowledge, understanding and application should be at the stage of analysis, synthesis and evaluation

In the 2013 curriculum, it is expected that students can have the ability to think not only at the limit of knowledge but must come to creating or evaluating, so that teachers should also be able to make questions that can train students' thinking skills and can achieve high-level thinking skills. The 2013 curriculum has adopted Bloom's revision according to Anderson starting from the level of knowing, understanding, applying, analyzing, evaluating and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new.

The curriculum used in Junior High Boarding School Serang is the 2013 curriculum, which is expected to improve the ability and ways of thinking critically or high-level thinking for students (Hidayat et al., 2021; Mulianah & Hidayat, 2021). Students are expected to have the ability to think not only at the level of knowing, understanding and applying where the level of this way of thinking based on Bloom's Taxonomy is included in the category of low-level thinking, but students are expected to have high-level thinking skills (analyze, synthesize, and evaluate). So that the teacher is expected to be able to make questions that can hone the thinking skills possessed by students so that students can achieve high-level thinking skills, namely up to the evaluation stage.

The results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Conclusion *

Based on the fiqh exam questions at Junior High Boarding School Serang which became the focus of the author's research, it shows that the questions are still standardized on C1 and C2, where the questions have not been directed at higher-order thinking skills. So from these questions it can be seen that students are still at the stage of low order thinking skills. Meanwhile, the analysis of the quality of the items using the Rasch Model analysis showed that the items tended to be at a moderate level (65%). The tested items also met the item criteria based on the Outfit Mean Square

(MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. Reliability items are also categorized as good. The questions made by the figh teacher are still not as expected, namely leading to HOTS-based tests.

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3. Bukti konfirmasi review 13 November 2023

Figh Subject Exam Questions Analysis: Is it Based on HOTS?

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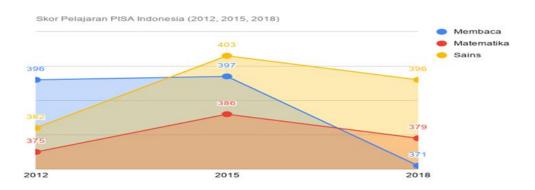
Abstract

In the context of Bloom's Taxonomy, higher-order thinking skills are at levels C4 to C6. In the 2013 curriculum, subject teachers are directed to make questions based on high-level thinking skills. The purpose of this study was to identify item levels based on Bloom's cognitive domain and determine the quality of the items made by the teacher. The numbers of questions studied were 440 items in the form of multiple-choice and essays in the Fiqh subject at Junior High Boarding School Serang. This study uses a descriptive qualitative method to analyze document data in the form of Fiqh questions, and then a quantitative approach is also used to analyze the quality of the questions from the available student answer data as many as 450 students on 40 Essay and 400 multiple-choice items. Document data were analyzed logically using Bloom's Taxonomy theory approach. While the data analysis of student answers was analyzed using Item Response Theory (IRT) model 1 parameter Logistics or commonly called the Rasch Model. The results showed that the questions made by the Fiqh teacher were generally still at a low level (C1 and C2). While the item test shows that the item items tend to be more dominant in the moderate category, all items are categorized as fit, and the item reliability is categorized as good.

Keywords: Evaluation, Thinking Skills, Fiqh

1. Introduction

The quality of a country's education, one of which is measured by the achievement or ranking of the Program for International Student Assessment (PISA) organized by member countries of the Organization for Economic Cooperation and Development (OECD). International average, Indonesia has a score below the international average score of 400. International average scores in reading, math and science are 487, 489, and, 489.



Source: PISA: Programme for International Student Assessment 2021

Fiqh as a branch of Islamic religious knowledge is closely related to aspects of PISA assessment. There are not a few differences or views on problems in the science of figh that require extensive reading. In the science of figh, we will get material or concepts related to mathematics, namely the concept of inheritance and zakat. While the connection with science, among others, in determining the feast or the beginning of the fasting month using astrology technology.

To close the gap with other countries, the government, through the Ministry of Education and Culture, uses standard questions based on the Program for International Student Assessment (PISA) standards. The ability to think at a higher level is one of the typical PISA questions. As a result, the Ministry of Education and Culture adopted Bloom's revision according to Anderson in the 2013 curriculum, beginning with the level of knowing, understanding, applying, analyzing, evaluating, and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new (Sanjaya & Hidayat, 2022). This procedure necessitates the use of reasoning abilities. The ability to think critically is essential in the learning process. As a result, thinking skills are inextricably linked to the student learning process. Teachers who consistently teach pupils to think will have a favorable impact on the advancement of student education. Thinking at a higher level is one of the efforts to train students' talents.

Higher-order of Thinking Skills (HOTS) is a thinking ability that not only requires the ability to remember but requires other higher abilities, such as the ability to think creatively and critically. Students who are often trained in HOTS can improve student performance and reduce student weaknesses.

Higher-order thinking skills that occupy the top level of the cognitive hierarchy Bloom's Taxonomy is the meaning of Higher-order Thinking Skills (Ramos et al., 2013). According to Resnick (1987), higher order thinking skills are complex thinking processes in describing the material, making inferences, building representations, analyzing, and building relationships involving the most basic mental activities.

In Bloom's Taxonomy, Higher-order thinking skills start from the level of analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). Students can be said to have reached the HOTS level of thinking, if they can understand and actively integrate their experiences into new knowledge. Students will get used to exploring their thinking skills if they are supported by active learning which will skillfully hone their cognitive, affective and psychomotor competencies. Through learning outcomes in the form of valuable facts, students can maximize their thinking processes, both understanding, analyzing, concluding and applying in the real world. According to Anderson & Krathwohl (2001), the thought process develops so that it must be stated with a verb. Likewise, it is necessary to revise the hierarchy of thinking in Bloom's Taxonomy. Changes in the dimensions of thinking also need to be done so that they become remembered, understand, apply, analyze, evaluate, and create. In the cognitive domain they term factual, conceptual, procedural and metacognitive at every level of the thinking process.

The main purpose of education is to produce individuals who think critically and creatively, this can be done by asking effective teachers in the classroom (Wang & Wang, 2011). The form of questions asked must be able to stimulate students' minds to provide solution ideas to improve higher-order thinking skills. This higher-order thinking ability must be trained by the teacher in the learning process and then the results are assessed using an assessment instrument that includes questions that must have HOTS characteristics (Mustahdi, 2019). The goal is to improve higher-order thinking skills more effectively.

According to Resnick (1987), the characteristics of HOTS questions are non-algorithmic, contain complex elements, allow for more than one solution, involve a variety of decision-making and interpretations, apply various criteria and require various kinds of effort. The application of HOTS-based assessment is in line with learning that minimizes recall skills, but must consider the skills to transfer one idea to another, process and apply information, look for relationships from various dissimilar information, solve problems using information, examine concepts and concepts information critically. HOTS questions are applied as a measure of higher-order thinking skills, not just questions that are more difficult than memorization questions. From a knowledge point of view, HOTS questions usually measure not only factual, conceptual, and procedural dimensions but also metacognitive

Metacognitive as a thinking dimension represents the skills of connecting more than one dissimilar idea, interpreting, problem-solving, discovering new ideas, expressing opinions (reasoning), and choosing the right attitude (Anderson, 2015). In the statement (Anderson & Krathwohl, 2001), 2 methods can be used for writing HOTS questions, namely: 1) measuring the material used as a question with the cognitive domain of high thinking, namely analyze, evaluate and create; 2) Create questions by providing stimuli such as sources or reading materials for text, paragraphs, photos, pictures, graphics, cases, tables, formulas, lists of symbols/words, films, examples or sound recordings

According to Setiawati et al., (2018), the characteristics of HOTS questions are 1) Measuring higher-order thinking skills including the ability to solve unfamiliar problems, the ability to evaluate strategies used to solve problems from different perspectives and find models new solutions that are different from the previous methods; 2) Based on contextual problems. HOTS questions are assessment instruments based on real situations in everyday life, where students are expected to be able to apply learning concepts in class to solve problems. Contextual problems faced by the world community today are related to various aspects of people's lives ranging from social, political, economic, cultural, religious, information technology and other aspects of life.

Several studies include Aziz (2015); Bhattacharya & Mohalik (2021); Gupta & Mishra (2021); Hanifah (2019); Nadlir & Alfiyah (2018) and Sarah et al., (2021) state that students will understand a concept if they have higher-order thinking skills. Problems with high-level thinking skills must be developed by the teacher to solve problems that exist in students' lives. Critical thinking is very necessary for the midst of the 4.0 revolution era. Therefore, Islamic education (PAI) teachers, especially fiqh teachers, should change their way of thinking about the importance of exploring and stimulating students to think at a higher level.

Figh is one of the subjects that necessitate critical thinking because it is concerned with the dynamics of human life. The distribution of Figh material is tailored to its nature as a product, process, and scientific attitude, with the intention that students may develop a scientific attitude as well. The use of various learning models, such as project-based learning, problem-based learning, and discovery learning, provides teachers with the option to carry out learning activities at the HOTS level.

The HOTS-characterized assessment model has been widely developed and applied in formal schools from elementary, secondary and tertiary levels (Widana, 2017). The development of an assessment model with HOTS characteristics is also one of the focuses of the agenda of the Directorate of Islamic Education at the Ministry of Religion in the implementation of the assessment of Islamic Religious Education, including fiqh subjects.

Improving the quality of the question instruments in the assessment of Islamic Education is an important thing and needs to be done. This is in line with efforts to develop student competencies to not only understand and know a form of knowledge or information but further than that, students are expected to have analytical and problem-solving abilities to various existing problems. The purpose is to identify the level of the cognitive domain in the evaluation questions of Fiqh subjects. This is important to do as an evaluation for teachers and related parties to see how far the implementation of HOTS-based questions is according to the direction of the Ministry of Education and the Ministry of Religion to catch up with other countries. This paper has specificity in terms of the object being analyzed, namely the questions of groups of fiqh subjects compiled by educators in Islamic boarding schools who have not been as much involved in question writing training activities as teachers in formal schools.

In the context of fiqh subjects, HOTS-based questions can train students' abilities in analytical and critical thinking (Sismarwoto, 2020). Because many problems of human life related to fiqh problems require critical analysis and this is included in the level of high-level thinking (Zafi, 2020). Improving the quality of the question instrument in fiqh assessment is an important thing and needs to be done. This is in line with efforts to develop students' competencies to not only understand and know a form of knowledge or information but further, than that, students are expected to have analytical and problem-solving skills on various problems related to fiqh (Ahmad & Sukiman, 2019).

Method

This research method is a qualitative descriptive method by describing qualitative data obtained from the field. The research was conducted at Junior High Boarding School Serang. The data obtained is data in the form of fiqh subject questions for the last 3 years, namely the 2019/2020, 2020/2021 and 2021/2022 school years. The data obtained are document data and are available in schools. The number of questions available at the school is 200 questions in the form of multiple-choice and essays.

For analysis, we read and re-examined all the questions received, then we examined each item using Bloom's Taxonomy review table guide based on Bloom's cognitive theory. For review item categories based on Bloom's cognitive theory can be seen in table 1.

Table 1. Review nem categories based on bloom's cognitive						
ITEM	LEVEL					
	LOTS MOTS		HOTS			
	C1	C2	C3	C 4	C5	C 6
1						
2						

Table 1. Review item categories based on Bloom's cognitive

Indicator:

C1: Recall, mention, define

C2: Explain ideas/concepts

C3: Using the information on a different domain

C4: Specify aspects/elements

C5: Take your own decisions

C6: Create your own ideas

In determining the level of Bloom's taxonomy, 2 experts in the field of Islamic education subjects and one expert in the field of educational measurement were involved. To see the quality of the questions made by the figh teacher, an analysis of the items was carried out using the Item Response Theory model 1 Parameters Logistics (PL) analysis or commonly referred to as the Rasch Model. The aspects tested are related to the level of difficulty, item fit, and the reliability of the questions. All item analysis using Winstep Software.

Results

Description of Higher-Level Thinking Skills in the Evaluation of Fiqh Subjects

The following describes the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily tests and semester exams.

Evaluation of the 2019/2020 Academic Year

To find out the dominant thinking level category in the daily test questions for the 2019/2020 academic year, pay attention to table 1 below.

Cognitive Domain Level	Frequency (Item)	Percentage
C1	9	90%
C2	-	-
C3	1	10%
C4	-	-
C5	-	-
C6	-	-

Table 2. HOTS or LOTS Analysis of Daily Test Questions

Data Source: Results of research data

Based on Table 2, it shows that there are 10 daily test questions in the form of essays, there are 9 or 90% of questions that fall into the C1 category (remembering), as for the form of the questions as follows

	Mention the conditions for the sacrificial animal and agigah!
	What is the meaning of Aqiqah?
	What is the Law of Qurban?
	What is the law of Aqiqah?
	What is the meaning of Qurban according to the term?
I	

Figure 1. Example of daily test questions for category C1.

The form of the questions above fall into the C1 category (remembering) is a person's ability to recall or recognize names, terms, ideas, symptoms, formulas (Hidayat, 2012). The questions in the table above only ask students to mention the law of Qurban and Aqiqah write down the meaning of *qurban* and *aqiqah* where the questions above are only limited to the level of testing the knowledge possessed by students. 1 (10%) questions that fall into the C3 category (applying), one form of the question is as follows.

Explain the steps in slaughtering sacrificial animals according to Islamic law !

Figure 2. Daily test questions for category C3

Application is a person's ability to apply or use general ideas, procedures or methods, principles, formulas, theories in new and concrete situations (Hidayat, 2012). Things that are *Sunnah* in the slaughter of sacrificial animals in life whereas this matter is included in the category

of application. As for the categories C2, C4, C5, C6 (understanding, analysis, evaluation, creating) in the daily test questions, no one has been included in that category.

In the even-mid semester exam questions for the 2018/2019 academic year, the level of thinking ability is described in the following table.

Cognitive Domain	Frequency	Percentage
C1	12	80%
C2	2	13.33%
C3	1	6.67%
C4	-	-
C5	-	-
C6	-	-

Table 3. HOTS or LOTS analysis on mid-semester test questions

Data Source: Results of research data

Based on Table 3, it shows that there are 10 mid-semester test questions, there are 12 or 80% of the questions that fall into the C1 category (remembering), and whose form is as follows.

- 1. What are the Fard of hajj?
- 2. What are the obligations of a hajj?
- 3. What is the definition of sadaqah jariyah?
- 4. What is the verse of the Qur'an about the obligation of Haj

Figure 3. Mid-Semester Exam Questions for C1 category

The form of this question is included in the C1 category (remembering) because it only asks students to mention the Pillars of Hajj, the meaning of Hajj, the meaning of alms, the arguments for the implementation of the pilgrimage, where these questions are still at the level of knowledge possessed by students. 2 (13.33%) questions that fall into the category C2 (understanding). The form of an example question is as follows.

- 1. What can eliminate the reward of sadaqah jariyah!
- 2. What is the difference between a bribe and a gift?

Figure 4. Mid-Semester Exam Questions for C2 category

The form of the question in the Figure 4 asks students to describe things that can eliminate the reward of alms. Then one question that falls into the C3 applying category, as for the form of the question, is as follows.

Sadaqah is sunnah muakkad, but sadaqah can become obligatory. When does sadaqah become obligatory? an example of the application of sadaqah becomes mandatory!

Figure 5. Mid-Semester Exam Questions for the C3 category

This form of question asks students to give the concept of applying alms to be mandatory for someone. As for the categories C4, C5, C6 (analysis, evaluation, creation) in the Mid-semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory of odd semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	13	86.6%
C2	1	6.7%
C3	1	6.7%
C4	-	-
C5	-	-
C6	-	-

Table 4. HOTS or LOTS analysis on odd semester test questions

Data Source: Researcher's data processing

Based on Table 4, it shows that there are 15 Semester test questions in the form of Essays, there are 13 (86.6%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

- 1. What are the rules of fasting in Islam?
- 2. What is the purpose of Ramadan fasting?
- 3. What is the meaning of prostration of gratitude and prostration of recitation!
- 4. Fasting is one of the five pillars of Islam?

Figure 6. Odd semester test questions for category C1

The form of the question in Figure 6 is in the C1 category because it only asks students to write down the mandatory fasting requirements, the meaning of fasting, the meaning of prostration of gratitude and prostration of recitation, understanding of fasting *kafarat*, and mentioning the *nisab* of gold and goats. These questions are still in the category of knowledge possessed by students. One question that falls into the category C2 (Understanding), the form of the question is as follows.

1. What are the differences and similarities between sujud syukur and sujud tilawah!

Figure 7. Odd semester test questions for category C2

This form of question asks students to make comparisons about the similarities and differences between prostration of gratitude and prostration of recitation. Then 1 question that is included in the C3 category (application), the form of the question is as follows.

1. Abdul Aziz will pay his zakat fitrah with a family of 5 people, zakat fitrah for the year 1436 H is worth 4 liters of rice. Calculate the amount of zakat fitrah that must be issued by Abdul Aziz and to whom is the zakat handed over?

Figure 8. Odd semester test questions for category C3

The form of the question in the Figure8 asks students to provide the concept of applying *aqiqah* in life. As for the categories C4, C5, C6 (analyzing, assessing and creating) in the semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on even semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	290	58%
C2	180	36%
C3	30	6%
C4	-	-
C5	-	-
C6	-	-

Table 5. HOTS or LOTS analysis on even semester test questions

Data Source: Results of research data

Based on Table 5, it shows that there are 500 item test questions in the form of multiple choice, there are 29 (58%) questions that fall into the C1 category (remembering), where the sample questions are as follows.

1.	Aqiqah is held on
	a. 7th day before birth
	b. 7th day after birth
	c. 7th day after death
	d. 7th day after birth or according to the ability to carry it out
2.	The law of consuming the flesh of a dead animal that is not slaughtered in the name of Allah is
	a. Sunnah
	b. Mbah
	c. Makruh
	d. Haram
3.	The provisions of Aqiqah are slaughtering
	a. 5 goats for a baby boy and 4 goats for a baby girl
	b. 4 goats for a baby boy and 3 goats for a baby girl
	c. 3 goats for a baby boy and 2 goats for a baby girl
	d. 2 goats for a baby boy and 1 goat for a baby girl
4.	The time for slaughtering the Qurban is after the Eid prayer on the
	a. 10,11,12,13 Shawwal
	b. 10,11,12,13 Dzulqaidah
	c. 10,11,12,13 Shafar
	d. 10,11,12,13 Dzulhijjah
5.	The history of being ordered to sacrifice begins with the event
	a. Prophet Ishmael slaughtered Ibrahim
	b. Prophet Ibrahim slaughtered Ishmael
	c. Siti Maryam gave birth to Prophet Isa
	d. Thanksgiving for the appointment of Ibrahim as a prophet

The form of the question in the picture above is included in the C1 category because it only asks students to choose an answer that is in accordance with the question that is only limited to the knowledge possessed by the student. There are 18 (36%) questions that fall into the C2 (Understanding) category, the form of the questions is as follows.

1.	The difference between Aqiqah and Qurban is a. Aqiqah is prescribed once in a lifetime while Qurban is prescribed every year b. Aqiqah is prescribed every year while Qurban is prescribed once in a lifetime c. Aqiqah 1 goat while Qurban 2 goats
	d. Aqiqah should not be delayed (must be cash) while Qurban can be postponed until whenever there is an opportunity
2.	Qurban is a social worship because a. Watched by many people b. The animal came from someone else c. Most of the meat is distributed to the community d. People can be attracted to sacrifice

Figure 10. Even semester test questions for category C3

This form of question asks students to compare what is the difference between aqiqah and qurban. Then 2 (4%) questions that fall into the C3 category (Applying), one form of the question.

1.	Slaughter tools are required to be sharp, this is meant is a. To get a lot of rewards
	b. To get a lot of meatc. To reduce the level of pain in slaughtered animalsd. To reduce too much blood
2.	Chicken that is run over by a halal vehicle is consumed ifa. The vehicle that hit him belongs to a Muslimb. The chicken is a wild chickenc. The chicken died before it was slaughteredd. The chicken was slaughtered before it died

The form of this question asks students to choose an answer that is in accordance with the concept of applying the slaughtering tools used in life. Furthermore, there are no questions that fall into the categories C4, C5, C6 (analyze, evaluate, create).

Evaluation of the 2020/2021 Academic Year

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on the semester test questions, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	340	68%

Table 6. HOTS or LOTS analysis on semester test questions

C2	150	30%
C3	10	2%
C4	-	-
C5	-	-
C6	-	-

Data Source: Results of research data

Based on Table 6, it shows that there are 500 item test questions. There are 34 (68%) questions that fall into the C1 category (remembering) which one example of the form of the question is as follows.

 According to the language of Qurban means a. Approach
b. Which brings you closer
c. Which is close to
d. Closer
2. Sacrificial meat can be divided into
a. 2
c. 4
b. 3
d. 5
3. Sacrifice may be performed on any of the following dates <i>except</i>
a. 9 Dzulhijjah
c. 12 Dzulhijjah
b. 11 Dzulhijjah
d. 13 Dzulhijjah

Figure 12. Semester test questions for category C1

The form of the question in the Figure 12 is in the C1 category (knowledge) because it only asks students to mention about qurban and prayer. 15 or 30% of questions that fall into the C2 category (understanding), the form of the question is as follows.

- 1. What is meant by property consists of 2 types, namely: 1) assets in the form of goods, 2) assets in the form of benefits. Give an example of each!
- 2. Below is a form of buying and selling that is legal but prohibited, *except*...
 - a. Buying items that have been selected by others
 - b. Buying stuff to hoard
 - c. Buying an item with a known price
 - d. Buying and selling that contains elements of deception

Figure 13. Semester test questions for category C2

The form of the question on Figure 13 asks students to give an example of what is meant by property. Then students are also asked to choose the appropriate answer to the question by using their understanding to choose the right answer. Then there are no questions that fall into the C3 category (applying). The form of the question in the Figure 14 asks students to tell the history of the ordering of the Qurban which is intended to test how the thinking skills possessed by the students are whether they are able to tell the history of the order of the Qurban properly and correctly. As for categories C4, C5, (analysis, evaluation) in the semester test questions, no one has been included in that category.

Evaluation of the 2021/2022 Academic Year

The following will describe the categories of questions that fall into the category of highlevel thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily test questions, to find out the dominant thinking level category, pay attention to the following table .

Cognitive Domain	Frequency	Percentage
C1	33	82.5%
C2	5	12.5%
C3	2	5%
C4	-	-
C5	-	-
C6	-	-

Table 7. HOTS or LOTS analysis on daily test questions

Data Source: Results of research data

Based on Table 7, it shows that there are 35 daily test questions in the form of multiple choices, there are 33 (82.5%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

1.	To mark that the obligatory congregational prayer will soon begin is
	a. Adhan
	b. Drum beating
	c. Iqamah
	d. The arrival of the imam at the mosque
2.	Prayer is the main worship of the first time will be held accountable in the
	hereafter. The language of prayer means
	a. Do'a
	b. Forgiveness
	c. Ties
	d. Resignation

Figure 15. Daily test questions for category C1

The form of the question in the Figure 15 is in the C1 category because it only asks students to provide an understanding of prayer in language, when is the time for congregational prayer to start, and the conditions for the validity of prayer, so that these questions are included in the Knowledge category. There are 5 (12.5%) questions that fall into the C2 category (understanding), the form of the question is.

Arif puts a bucket of water made of metal under the hot sun, so that the water becomes
warm when used for washing. The law of purification with water is
a. Haram
b. Makruh
c. Mubah
d Sunnah

```
Figure 16. Daily test questions for category C2
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This form of question asks students to understand the context of the question and then gives an answer that is in accordance with the sound of the question. Then there are no questions that fall into the C3 category (applying), while for the C4, C5, C6 categories in the daily test questions, no one is included in that category.

Based on Bloom's Taxonomy theory on semester test questions, the dominant thinking level categories can be seen in the following table.

Cognitive Domain	Frequency	Percentage
C1	24	80%
C2	6	20%
C3	-	-
C4	-	-
С5	-	-
C6	-	-

Table 8. HOTS or LOTS analysis on semester test questions

Data Source: Results of research data

Based on Table 8, it shows that there are 30 semester test questions, there are 24 or 80% of the questions that fall into the C1 category, whose sample questions are as follows.

1. Sadaqah is better given to
a. Servant
b. Orphans
c.Ibn Sabil
d. Poor
2. The amount of zakat fitrah is
a. 2.5 kg
b. 3.1 Liter
c.3.1 kg
d. a and c are correct
3. Gratitude according to language means
a. Du'a
b. Reading
c.Thank you
d. Hole

Figure 17. Semester test questions for category C1

The form of the question above is included in the C1 category because it only asks students to provide understandings about the learning material. There are 6 or 20% questions that fall into the C2 category. For categories C3, C4, C5, C6 (application, analysis, evaluation, creation) in the semester test questions, no one has been included in that category.

QUALITY OF ITEM

This study, the determination of the quality of the items is determined by the level of difficulty, item fit, reliability and validity. The following are the results of the analysis of the quality of the items.

Item Difficulty Index

Based on the results of data analysis, the results of the difficulty items on the item measure output results. The difficulty level of the items can be grouped by combining the logit mean and the Standard Deviation (SD). This value is useful for identifying groups of items (separation).

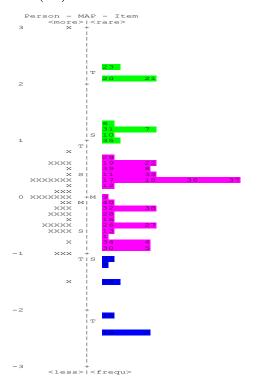


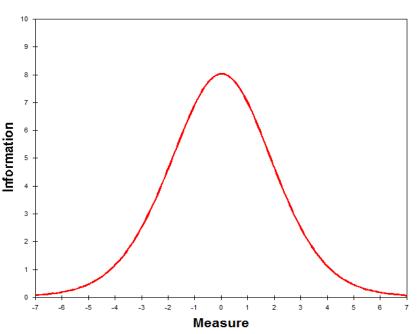
Figure 18. Wright-Item Map

Note:

- Green Color Items: Difficult Items
- Pink Color Items: Medium Items
- Blue Color Items: Easy Items

Figure 1 show, that items 16 and 2 are categorized as easy and item 23 is categorized as difficult. Items 16 and 2 are C1 level items, while 23 items are C3 level items. There are 6 items (15%) categorized as easy, 8 items (20%) categorized as difficult items and the remaining 26 items

(65%) categorized as moderate. This information is corroborated by the information function test graph below.



Test Information Function

Graph 1. Tes Information Function

Based on graph 1, it can be concluded that the 40 item questions given to students indicate items that are suitable/appropriate to determine the level of students' abilities that are only. Graph 1 also shows that the peak of the function is relatively high, so this provides information that the reliability of measurements made by figh teachers is high.

Item Difficulty Index	Item	Measure (Logit)	Model S.E
Difficult	23,20,21,20,6,7,31,10,35	+2.32 - 1.05	0.53 - 0.34
Moderate	29,19,22,39,8,32,11,18,17,36,3 7,12,9,40,32,38,28,16,26,27,13 ,1,34,4,30,5	+0.720.93	0.32 - 0.32
Easy	25,3,24,14,2,15	-1.092.39	0.32 - 0.48

Table 9. Item Statistics: Measure Order

Item Fit

The quality of item fit is to see whether the items function normally in measuring or not. To measure the quality of items used criteria referring to the opinions of Boone et al., (2014) and Bond & Fox (2015) namely: Outfit Mean Square (MNSQ): 0.5 < MNSQ < 1.5; Outfit Z-Standard (ZSTD): -2.0 < ZSTD < +2.0; and Point Measure Correlation (Pt Measure Corr): 0.4 < Pt Measure Corr < 0.85. Table 10 shows the items fit.

EXAC	CT M	ATCF	I	TAL MODEL INFIT OUTFIT PT-MEASURE DUNT MEASURE S.E. MNSQ ZSTD MNSQ ZSTD CORF
EXP.	OBS%	% ΕΣ	XP%]	
20	6			.48 1.16 .6 2.03 2.0 A .11 .40 89.1 89.1 20
4	32			.32 1.16 1.3 1.22 1.6 B .03 .21 61.7 67.2 4
3	36		-1.17	
11	19	48	.37	
35	13	49	1.02	.34 1.02 .2 1.13 .7 E .27 .30 75.0 75.0 35
40	25	49	10	.30 1.10 1.5 1.12 1.7 F.13 .24 52.1 59.4 40
21	6	50	2.14	.48 1.02 .2 1.10 .4 G .36 .39 89.8 89.8 21
34	30	46	76	.32 1.09 .8 1.09 .7 H .13 .22 60.0 66.0 34
38	25	46	23	.31 1.08 1.1 1.07 1.0 I .16 .24 51.1 60.0 38
17	20	49	.32	.30 1.07 .8 1.07 .7 J .19 .26 56.3 62.5 17
19	16	47	.63	.32 1.05 .5 1.06 .5 K .23 .29 65.2 67.5 19
33	19	48	.38	.31 1.06 .6 1.05 .5 L.21 .27 59.6 63.3 33
16	28	48	44	.30 1.06 .7 1.05 .6 M .17 .23 61.7 61.5 16
30	33	49	85	.31 1.04 .4 1.05 .4 N .16 .21 62.5 67.8 30
31	11	47	1.21	.36 .952 1.05 .3 0 .36 .32 78.3 78.2 31
1	32	49	75	.31 1.03 .3 1.04 .4 P .18 .21 62.5 66.1 1
6	11	49	1.27	.36 1.03 .2 .99 .0 Q .30 .32 79.2 79.1 6
8	18	48	.47	.31 1.03 .3 1.01 .1 R .25 .27 59.6 64.9 8
26	29	49	48	.30 1.02 .3 1.01 .1 S .21 .22 54.2 61.8 26
10	12	49	1.14	.35 1.01 .1 1.00 .1 T .30 .31 77.1 77.1 10
39	18	48	.48	.31 1.00 .0 .981 t.28 .27 63.8 64.8 39
15	45	50	-2.39	.48 .99 .1 .98 .1 s.13 .12 89.8 89.8 15
28	26	48	27	.30 .983 .982 r.26 .24 66.0 59.9 28
29	16	49	.72	.32 .981 .981 q.30 .28 70.8 68.8 29
12	21	48	.18	.30 .983 .982 p.28 .26 63.8 61.1 12
13	30	49	56	.30 .973 .963 0.25 .22 66.7 63.1 13
18	19	47	.35	.31 .973 .945 n .31 .27 58.7 62.8 18
23	5	47	2.33	.53 .96 .1 .901 m .47 .42 91.3 91.3 23
7	11	48	1.25	.36 .961 .913 1.37 .32 78.7 78.7 7
37	21	50	.27	.30 .965 .955 k.31 .26 69.4 61.6 37
32	26	50	16	.29 .949 .939 j .30 .24 67.3 59.7 32
22	17	49	.61	.31 .936 .907 i .35 .28 68.8 66.9 22
36	20	48	.29	.31 .938 .919 h .34 .27 70.2 62.0 36
9	23	49	.05	.30 .93 -1.1 .91 -1.2 g .33 .25 60.4 59.8 9
27	30	50	51	.30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27
2	45	50	-2.39	.48 .911 .862 e .22 .12 89.8 89.8 2
14	42	48	-2.11	.44 .912 .785 d.25 .14 87.2 87.2 14
5	33	48	93	
24	39	49	-1.53	.36 .847 .73 -1.2 b .35 .17 79.2 79.1 24
25	36	50	-1.09	.32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25

| S.D. 10.4 1.1 1.11 .06 |.08 .7 |.20 .8 | |11.1 10.0 |

Based on the table above, it shows that all items have been in accordance with the item suitability criteria. All items are in the range or interval of Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. This illustrates that there are no misconceptions among students about the item questions and there are no items that need to be changed or replaced.

Reliability Item

According to (Linacre, 2002), the item reliability index means that the difficulty of the item is the same for other samples that have equal permissibility. The acceptability index of the item was 0.80 (Bond & Fox, 2015). However, in this study, the acceptable trustworthiness value was 0.70 because it was sufficient (Boone et al., 2014), the reliability value 0.70. Reliability can prove that the sample is sufficient (Bond & Fox, 2015). The results of the reliability analysis of the items shown in the statistical summary can be seen on Table 11.

TOTAL MODEL INFIT OUTFIT SCORE COUNT MEASURE ERROR MNSQ ZSTD MNSQ ZSTD
MEAN 23.6 48.5 .00 .34 1.00 .0 1.01 .1 S.D. 10.4 1.1 1.11 .06 .08 .7 .20 .8 MAX. 45.0 50.0 2.33 .53 1.16 1.5 2.03 2.0 MIN. 5.0 46.0 -2.39 .29 .83 -1.2 .73 -1.4
REAL RMSE .35 TRUE SD 1.05 SEPARATION 2.98 Item RELIABILITY .90 MODEL RMSE .35 TRUE SD 1.05 SEPARATION 3.03 Item RELIABILITY .90 S.E. OF Item MEAN = .18

 Table 11. Summary of Measured Item

Table 11 shows the results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Discussion *

Higher order thinking skills are critical, logical, reflective, metacognitive and creative thinking skills. All of these skills are active when a person faces unusual problems, uncertainties, questions, and choices. The successful application of these skills is contained in valid explanations, decisions, appearances and products according to the context of existing knowledge and experience and the continued development of these or other intellectual skills (Ahmad & Sukiman, 2019); Gupta & Mishra, 2021).

Bloom's taxonomy is often used to write learning outcomes, because it provides a readymade structure and list of verbs. It can be said that the correct use of verbs is the key to successful writing of learning outcomes. Cognitive realm is a realm that includes mental (brain) activities. According to Bloom, all efforts concerning brain activity are included in the cognitive realm. In the cognitive domain, there are six levels of thinking processes, starting from the lowest level (C1) to the highest level (C6). According to the findings of the investigation, the questions in fiqh subjects are still at the cognitive level C1 to C3. C1 controls the cognitive level with a substantially higher percentage than the other cognitive levels, namely 74.5%. While just 22% of questions are at the cognitive level of C2, 3% are at C3, and 0.5% is at C6. At cognitive levels C5 and C6, there were no questions. At cognitive levels C5 and C6, there were no questions. Because the teacher's assessment mainly stresses recognizing or recalling facts at levels C4 and C5, students are accustomed to having knowledge at this level. Based on this percentage, it is possible to conclude that the learning evaluation questions in figh disciplines do not have good proportions.

The content of HOTS in fiqh matters is very important considering the atmosphere of human civilization is entering the 5.0 era. The Covid-19 pandemic that has hit various countries, including Indonesia, requires HOTS to filter the rapid flow of incoming information. If the HOTS from C1 to C6 – especially C6 – are not included in school questions, it is not impossible that students will become a generation that is paralyzed cognitively, affectively and psychometrically. In this context, the implementation of HOTS in school questions finds its significance point.

Based on previous research, teacher learning evaluation questions are expected to be able to create questions that can cause students to reach the stage of high-level thinking, so that students not only have the ability to remember the lessons that have been given, but they are also expected to be able to create something new. This can be good to both him-self and the environment

By paying attention to the test questions that have been analyzed by researchers in accordance with Bloom's Taxonomy theory, it can be seen that the thinking skills possessed by students based on the test questions given are still in the category of low-order thinking skills because they are still in the knowledge category, understanding and application. While the questions that fall into the category of analysis, synthesis and evaluation are still very few. So it is hoped that in the future teachers will make learning evaluation questions that further hone the thinking skills possessed by students, not only at the stage of knowledge, understanding and application should be at the stage of analysis, synthesis and evaluation

In the 2013 curriculum, it is expected that students can have the ability to think not only at the limit of knowledge but must come to creating or evaluating, so that teachers should also be able to make questions that can train students' thinking skills and can achieve high-level thinking skills. The 2013 curriculum has adopted Bloom's revision according to Anderson starting from the level of knowing, understanding, applying, analyzing, evaluating and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new.

The curriculum used in Junior High Boarding School Serang is the 2013 curriculum, which is expected to improve the ability and ways of thinking critically or high-level thinking for students (Hidayat et al., 2021; Mulianah & Hidayat, 2021). Students are expected to have the ability to think not only at the level of knowing, understanding and applying where the level of this way of thinking based on Bloom's Taxonomy is included in the category of low-level thinking, but students are expected to have high-level thinking skills (analyze, synthesize, and evaluate). So that the teacher is expected to be able to make questions that can hone the thinking skills possessed by students so that students can achieve high-level thinking skills, namely up to the evaluation stage.

The results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Conclusion *

Based on the fiqh exam questions at Junior High Boarding School Serang which became the focus of the author's research, it shows that the questions are still standardized on C1 and C2, where the questions have not been directed at higher-order thinking skills. So from these questions it can be

seen that students are still at the stage of low order thinking skills. Meanwhile, the analysis of the quality of the items using the Rasch Model analysis showed that the items tended to be at a moderate level (65%). The tested items also met the item criteria based on the Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. Reliability items are also categorized as good. The questions made by the figh teacher are still not as expected, namely leading to HOTS-based tests.

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Figh Subject Exam Questions Analysis: Is it Based on HOTS?

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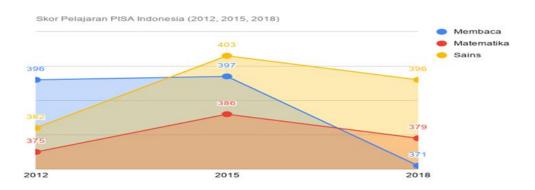
Abstract

In the context of Bloom's Taxonomy, higher-order thinking skills are at levels C4 to C6. In the 2013 curriculum, subject teachers are directed to make questions based on high-level thinking skills. The purpose of this study was to identify item levels based on Bloom's cognitive domain and determine the quality of the items made by the teacher. The numbers of questions studied were 440 items in the form of multiple-choice and essays in the Fiqh subject at Junior High Boarding School Serang. This study uses a descriptive qualitative method to analyze document data in the form of Fiqh questions, and then a quantitative approach is also used to analyze the quality of the questions from the available student answer data as many as 450 students on 40 Essay and 400 multiple-choice items. Document data were analyzed logically using Bloom's Taxonomy theory approach. While the data analysis of student answers was analyzed using Item Response Theory (IRT) model 1 parameter Logistics or commonly called the Rasch Model. The results showed that the questions made by the Fiqh teacher were generally still at a low level (C1 and C2). While the item test shows that the item items tend to be more dominant in the moderate category, all items are categorized as fit, and the item reliability is categorized as good.

Keywords: Evaluation, Thinking Skills, Fiqh

1. Introduction

The quality of a country's education, one of which is measured by the achievement or ranking of the Program for International Student Assessment (PISA) organized by member countries of the Organization for Economic Cooperation and Development (OECD). International average, Indonesia has a score below the international average score of 400. International average scores in reading, math and science are 487, 489, and, 489.



Source: PISA: Programme for International Student Assessment 2021

Fiqh as a branch of Islamic religious knowledge is closely related to aspects of PISA assessment. There are not a few differences or views on problems in the science of figh that require extensive reading. In the science of figh, we will get material or concepts related to mathematics, namely the concept of inheritance and zakat. While the connection with science, among others, in determining the feast or the beginning of the fasting month using astrology technology.

To close the gap with other countries, the government, through the Ministry of Education and Culture, uses standard questions based on the Program for International Student Assessment (PISA) standards. The ability to think at a higher level is one of the typical PISA questions. As a result, the Ministry of Education and Culture adopted Bloom's revision according to Anderson in the 2013 curriculum, beginning with the level of knowing, understanding, applying, analyzing, evaluating, and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new (Sanjaya & Hidayat, 2022). This procedure necessitates the use of reasoning abilities. The ability to think critically is essential in the learning process. As a result, thinking skills are inextricably linked to the student learning process. Teachers who consistently teach pupils to think will have a favorable impact on the advancement of student education. Thinking at a higher level is one of the efforts to train students' talents.

Higher-order of Thinking Skills (HOTS) is a thinking ability that not only requires the ability to remember but requires other higher abilities, such as the ability to think creatively and critically. Students who are often trained in HOTS can improve student performance and reduce student weaknesses.

Higher-order thinking skills that occupy the top level of the cognitive hierarchy Bloom's Taxonomy is the meaning of Higher-order Thinking Skills (Ramos et al., 2013). According to Resnick (1987), higher order thinking skills are complex thinking processes in describing the material, making inferences, building representations, analyzing, and building relationships involving the most basic mental activities.

In Bloom's Taxonomy, Higher-order thinking skills start from the level of analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). Students can be said to have reached the HOTS level of thinking, if they can understand and actively integrate their experiences into new knowledge. Students will get used to exploring their thinking skills if they are supported by active learning which will skillfully hone their cognitive, affective and psychomotor competencies. Through learning outcomes in the form of valuable facts, students can maximize their thinking processes, both understanding, analyzing, concluding and applying in the real world. According to Anderson & Krathwohl (2001), the thought process develops so that it must be stated with a verb. Likewise, it is necessary to revise the hierarchy of thinking in Bloom's Taxonomy. Changes in the dimensions of thinking also need to be done so that they become remembered, understand, apply, analyze, evaluate, and create. In the cognitive domain they term factual, conceptual, procedural and metacognitive at every level of the thinking process.

The main purpose of education is to produce individuals who think critically and creatively, this can be done by asking effective teachers in the classroom (Wang & Wang, 2011). The form of questions asked must be able to stimulate students' minds to provide solution ideas to improve higher-order thinking skills. This higher-order thinking ability must be trained by the teacher in the learning process and then the results are assessed using an assessment instrument that includes questions that must have HOTS characteristics (Mustahdi, 2019). The goal is to improve higher-order thinking skills more effectively.

According to Resnick (1987), the characteristics of HOTS questions are non-algorithmic, contain complex elements, allow for more than one solution, involve a variety of decision-making and interpretations, apply various criteria and require various kinds of effort. The application of HOTS-based assessment is in line with learning that minimizes recall skills, but must consider the skills to transfer one idea to another, process and apply information, look for relationships from various dissimilar information, solve problems using information, examine concepts and concepts information critically. HOTS questions are applied as a measure of higher-order thinking skills, not just questions that are more difficult than memorization questions. From a knowledge point of view, HOTS questions usually measure not only factual, conceptual, and procedural dimensions but also metacognitive

Metacognitive as a thinking dimension represents the skills of connecting more than one dissimilar idea, interpreting, problem-solving, discovering new ideas, expressing opinions (reasoning), and choosing the right attitude (Anderson, 2015). In the statement (Anderson & Krathwohl, 2001), 2 methods can be used for writing HOTS questions, namely: 1) measuring the material used as a question with the cognitive domain of high thinking, namely analyze, evaluate and create; 2) Create questions by providing stimuli such as sources or reading materials for text, paragraphs, photos, pictures, graphics, cases, tables, formulas, lists of symbols/words, films, examples or sound recordings

According to Setiawati et al., (2018), the characteristics of HOTS questions are 1) Measuring higher-order thinking skills including the ability to solve unfamiliar problems, the ability to evaluate strategies used to solve problems from different perspectives and find models new solutions that are different from the previous methods; 2) Based on contextual problems. HOTS questions are assessment instruments based on real situations in everyday life, where students are expected to be able to apply learning concepts in class to solve problems. Contextual problems faced by the world community today are related to various aspects of people's lives ranging from social, political, economic, cultural, religious, information technology and other aspects of life.

Several studies include Aziz (2015); Bhattacharya & Mohalik (2021); Gupta & Mishra (2021); Hanifah (2019); Nadlir & Alfiyah (2018) and Sarah et al., (2021) state that students will understand a concept if they have higher-order thinking skills. Problems with high-level thinking skills must be developed by the teacher to solve problems that exist in students' lives. Critical thinking is very necessary for the midst of the 4.0 revolution era. Therefore, Islamic education (PAI) teachers, especially fiqh teachers, should change their way of thinking about the importance of exploring and stimulating students to think at a higher level.

Figh is one of the subjects that necessitate critical thinking because it is concerned with the dynamics of human life. The distribution of Figh material is tailored to its nature as a product, process, and scientific attitude, with the intention that students may develop a scientific attitude as well. The use of various learning models, such as project-based learning, problem-based learning, and discovery learning, provides teachers with the option to carry out learning activities at the HOTS level.

The HOTS-characterized assessment model has been widely developed and applied in formal schools from elementary, secondary and tertiary levels (Widana, 2017). The development of an assessment model with HOTS characteristics is also one of the focuses of the agenda of the Directorate of Islamic Education at the Ministry of Religion in the implementation of the assessment of Islamic Religious Education, including fiqh subjects.

Improving the quality of the question instruments in the assessment of Islamic Education is an important thing and needs to be done. This is in line with efforts to develop student competencies to not only understand and know a form of knowledge or information but further than that, students are expected to have analytical and problem-solving abilities to various existing problems. The purpose is to identify the level of the cognitive domain in the evaluation questions of Fiqh subjects. This is important to do as an evaluation for teachers and related parties to see how far the implementation of HOTS-based questions is according to the direction of the Ministry of Education and the Ministry of Religion to catch up with other countries. This paper has specificity in terms of the object being analyzed, namely the questions of groups of fiqh subjects compiled by educators in Islamic boarding schools who have not been as much involved in question writing training activities as teachers in formal schools.

In the context of fiqh subjects, HOTS-based questions can train students' abilities in analytical and critical thinking (Sismarwoto, 2020). Because many problems of human life related to fiqh problems require critical analysis and this is included in the level of high-level thinking (Zafi, 2020). Improving the quality of the question instrument in fiqh assessment is an important thing and needs to be done. This is in line with efforts to develop students' competencies to not only understand and know a form of knowledge or information but further, than that, students are expected to have analytical and problem-solving skills on various problems related to fiqh (Ahmad & Sukiman, 2019).

Method

This research method is a qualitative descriptive method by describing qualitative data obtained from the field. The research was conducted at Junior High Boarding School Serang. The data obtained is data in the form of fiqh subject questions for the last 3 years, namely the 2019/2020, 2020/2021 and 2021/2022 school years. The data obtained are document data and are available in schools. The number of questions available at the school is 200 questions in the form of multiple-choice and essays.

For analysis, we read and re-examined all the questions received, then we examined each item using Bloom's Taxonomy review table guide based on Bloom's cognitive theory. For review item categories based on Bloom's cognitive theory can be seen in table 1.

Table I. Rev	iew nem catego	nes based on	Diooni s cogi			
ITEM			LEV	'EL		
	LOTS	MC	OTS		HOTS	
	C1	C2	C3	C 4	C5	C 6
1						
2						

Table 1. Review item categories based on Bloom's cognitive

Indicator:

C1: Recall, mention, define

C2: Explain ideas/concepts

C3: Using the information on a different domain

C4: Specify aspects/elements

C5: Take your own decisions

C6: Create your own ideas

In determining the level of Bloom's taxonomy, 2 experts in the field of Islamic education subjects and one expert in the field of educational measurement were involved. To see the quality of the questions made by the figh teacher, an analysis of the items was carried out using the Item Response Theory model 1 Parameters Logistics (PL) analysis or commonly referred to as the Rasch Model. The aspects tested are related to the level of difficulty, item fit, and the reliability of the questions. All item analysis using Winstep Software.

Results

Description of Higher-Level Thinking Skills in the Evaluation of Fiqh Subjects

The following describes the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily tests and semester exams.

Evaluation of the 2019/2020 Academic Year

To find out the dominant thinking level category in the daily test questions for the 2019/2020 academic year, pay attention to table 1 below.

Cognitive Domain Level	Frequency (Item)	Percentage
C1	9	90%
C2	-	-
C3	1	10%
C4	-	-
C5	-	-
C6	-	-

Table 2. HOTS or LOTS Analysis of Daily Test Questions

Data Source: Results of research data

Based on Table 2, it shows that there are 10 daily test questions in the form of essays, there are 9 or 90% of questions that fall into the C1 category (remembering), as for the form of the questions as follows

	Mention the conditions for the sacrificial animal and agigah!
	What is the meaning of Aqiqah?
	What is the Law of Qurban?
	What is the law of Aqiqah?
	What is the meaning of Qurban according to the term?
I	

Figure 1. Example of daily test questions for category C1.

The form of the questions above fall into the C1 category (remembering) is a person's ability to recall or recognize names, terms, ideas, symptoms, formulas (Hidayat, 2012). The questions in the table above only ask students to mention the law of Qurban and Aqiqah write down the meaning of *qurban* and *aqiqah* where the questions above are only limited to the level of testing the knowledge possessed by students. 1 (10%) questions that fall into the C3 category (applying), one form of the question is as follows.

Explain the steps in slaughtering sacrificial animals according to Islamic law !

Figure 2. Daily test questions for category C3

Application is a person's ability to apply or use general ideas, procedures or methods, principles, formulas, theories in new and concrete situations (Hidayat, 2012). Things that are *Sunnah* in the slaughter of sacrificial animals in life whereas this matter is included in the category

of application. As for the categories C2, C4, C5, C6 (understanding, analysis, evaluation, creating) in the daily test questions, no one has been included in that category.

In the even-mid semester exam questions for the 2018/2019 academic year, the level of thinking ability is described in the following table.

Cognitive Domain	Frequency	Percentage
C1	12	80%
C2	2	13.33%
C3	1	6.67%
C4	-	-
С5	-	-
C6	-	-

Table 3. HOTS or LOTS analysis on mid-semester test questions

Data Source: Results of research data

Based on Table 3, it shows that there are 10 mid-semester test questions, there are 12 or 80% of the questions that fall into the C1 category (remembering), and whose form is as follows.

- 1. What are the Fard of hajj?
- 2. What are the obligations of a hajj?
- 3. What is the definition of sadaqah jariyah?
- 4. What is the verse of the Qur'an about the obligation of Haj

Figure 3. Mid-Semester Exam Questions for C1 category

The form of this question is included in the C1 category (remembering) because it only asks students to mention the Pillars of Hajj, the meaning of Hajj, the meaning of alms, the arguments for the implementation of the pilgrimage, where these questions are still at the level of knowledge possessed by students. 2 (13.33%) questions that fall into the category C2 (understanding). The form of an example question is as follows.

- 1. What can eliminate the reward of sadaqah jariyah!
- 2. What is the difference between a bribe and a gift?

Figure 4. Mid-Semester Exam Questions for C2 category

The form of the question in the Figure 4 asks students to describe things that can eliminate the reward of alms. Then one question that falls into the C3 applying category, as for the form of the question, is as follows.

Sadaqah is sunnah muakkad, but sadaqah can become obligatory. When does sadaqah become obligatory? an example of the application of sadaqah becomes mandatory!

Figure 5. Mid-Semester Exam Questions for the C3 category

This form of question asks students to give the concept of applying alms to be mandatory for someone. As for the categories C4, C5, C6 (analysis, evaluation, creation) in the Mid-semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory of odd semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	13	86.6%
C2	1	6.7%
C3	1	6.7%
C4	-	-
C5	-	-
C6	-	-

Table 4. HOTS or LOTS analysis on odd semester test questions

Data Source: Researcher's data processing

Based on Table 4, it shows that there are 15 Semester test questions in the form of Essays, there are 13 (86.6%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

- 1. What are the rules of fasting in Islam?
- 2. What is the purpose of Ramadan fasting?
- 3. What is the meaning of prostration of gratitude and prostration of recitation!
- 4. Fasting is one of the five pillars of Islam?

Figure 6. Odd semester test questions for category C1

The form of the question in Figure 6 is in the C1 category because it only asks students to write down the mandatory fasting requirements, the meaning of fasting, the meaning of prostration of gratitude and prostration of recitation, understanding of fasting *kafarat*, and mentioning the *nisab* of gold and goats. These questions are still in the category of knowledge possessed by students. One question that falls into the category C2 (Understanding), the form of the question is as follows.

1. What are the differences and similarities between sujud syukur and sujud tilawah!

Figure 7. Odd semester test questions for category C2

This form of question asks students to make comparisons about the similarities and differences between prostration of gratitude and prostration of recitation. Then 1 question that is included in the C3 category (application), the form of the question is as follows.

1. Abdul Aziz will pay his zakat fitrah with a family of 5 people, zakat fitrah for the year 1436 H is worth 4 liters of rice. Calculate the amount of zakat fitrah that must be issued by Abdul Aziz and to whom is the zakat handed over?

Figure 8. Odd semester test questions for category C3

The form of the question in the Figure8 asks students to provide the concept of applying *aqiqah* in life. As for the categories C4, C5, C6 (analyzing, assessing and creating) in the semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on even semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	290	58%
C2	180	36%
C3	30	6%
C4	-	-
C5	-	-
C6	-	-

Table 5. HOTS or LOTS analysis on even semester test questions

Data Source: Results of research data

Based on Table 5, it shows that there are 500 item test questions in the form of multiple choice, there are 29 (58%) questions that fall into the C1 category (remembering), where the sample questions are as follows.

1.	Aqiqah is held on
	a. 7th day before birth
	b. 7th day after birth
	c. 7th day after death
	d. 7th day after birth or according to the ability to carry it out
2.	The law of consuming the flesh of a dead animal that is not slaughtered in the name of Allah is
	a. Sunnah
	b. Mbah
	c. Makruh
	d. Haram
3.	The provisions of Aqiqah are slaughtering
	a. 5 goats for a baby boy and 4 goats for a baby girl
	b. 4 goats for a baby boy and 3 goats for a baby girl
	c. 3 goats for a baby boy and 2 goats for a baby girl
	d. 2 goats for a baby boy and 1 goat for a baby girl
4.	The time for slaughtering the Qurban is after the Eid prayer on the
	a. 10,11,12,13 Shawwal
	b. 10,11,12,13 Dzulqaidah
	c. 10,11,12,13 Shafar
	d. 10,11,12,13 Dzulhijjah
5.	The history of being ordered to sacrifice begins with the event
	a. Prophet Ishmael slaughtered Ibrahim
	b. Prophet Ibrahim slaughtered Ishmael
	c. Siti Maryam gave birth to Prophet Isa
	d. Thanksgiving for the appointment of Ibrahim as a prophet

The form of the question in the picture above is included in the C1 category because it only asks students to choose an answer that is in accordance with the question that is only limited to the knowledge possessed by the student. There are 18 (36%) questions that fall into the C2 (Understanding) category, the form of the questions is as follows.

1.	The difference between Aqiqah and Qurban is a. Aqiqah is prescribed once in a lifetime while Qurban is prescribed every year b. Aqiqah is prescribed every year while Qurban is prescribed once in a lifetime c. Aqiqah 1 goat while Qurban 2 goats
	d. Aqiqah should not be delayed (must be cash) while Qurban can be postponed until whenever there is an opportunity
2.	Qurban is a social worship becausea. Watched by many peopleb. The animal came from someone elsec. Most of the meat is distributed to the communityd. People can be attracted to sacrifice

Figure 10. Even semester test questions for category C3

This form of question asks students to compare what is the difference between aqiqah and qurban. Then 2 (4%) questions that fall into the C3 category (Applying), one form of the question.

1.	Slaughter tools are required to be sharp, this is meant is a. To get a lot of rewards
	b. To get a lot of meatc. To reduce the level of pain in slaughtered animalsd. To reduce too much blood
2.	Chicken that is run over by a halal vehicle is consumed ifa. The vehicle that hit him belongs to a Muslimb. The chicken is a wild chickenc. The chicken died before it was slaughteredd. The chicken was slaughtered before it died

The form of this question asks students to choose an answer that is in accordance with the concept of applying the slaughtering tools used in life. Furthermore, there are no questions that fall into the categories C4, C5, C6 (analyze, evaluate, create).

Evaluation of the 2020/2021 Academic Year

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on the semester test questions, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	340	68%

Table 6. HOTS or LOTS analysis on semester test questions

 C2	150	30%
C3	10	2%
C4	-	-
С5	-	-
C6	-	-

Data Source: Results of research data

Based on Table 6, it shows that there are 500 item test questions. There are 34 (68%) questions that fall into the C1 category (remembering) which one example of the form of the question is as follows.

 According to the language of Qurban means a. Approach
b. Which brings you closer
c. Which is close to
d. Closer
2. Sacrificial meat can be divided into
a. 2
c. 4
b. 3
d. 5
3. Sacrifice may be performed on any of the following dates <i>except</i>
a. 9 Dzulhijjah
c. 12 Dzulhijjah
b. 11 Dzulhijjah
d. 13 Dzulhijjah

Figure 12. Semester test questions for category C1

The form of the question in the Figure 12 is in the C1 category (knowledge) because it only asks students to mention about qurban and prayer. 15 or 30% of questions that fall into the C2 category (understanding), the form of the question is as follows.

- 1. What is meant by property consists of 2 types, namely: 1) assets in the form of goods, 2) assets in the form of benefits. Give an example of each!
- 2. Below is a form of buying and selling that is legal but prohibited, *except*...
 - a. Buying items that have been selected by others
 - b. Buying stuff to hoard
 - c. Buying an item with a known price
 - d. Buying and selling that contains elements of deception

Figure 13. Semester test questions for category C2

The form of the question on Figure 13 asks students to give an example of what is meant by property. Then students are also asked to choose the appropriate answer to the question by using their understanding to choose the right answer. Then there are no questions that fall into the C3 category (applying). The form of the question in the Figure 14 asks students to tell the history of the ordering of the Qurban which is intended to test how the thinking skills possessed by the students are whether they are able to tell the history of the order of the Qurban properly and correctly. As for categories C4, C5, (analysis, evaluation) in the semester test questions, no one has been included in that category.

Evaluation of the 2021/2022 Academic Year

The following will describe the categories of questions that fall into the category of highlevel thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily test questions, to find out the dominant thinking level category, pay attention to the following table .

Cognitive Domain	Frequency	Percentage
C1	33	82.5%
C2	5	12.5%
C3	2	5%
C4	-	-
C5	-	-
C6	-	-

Table 7. HOTS or LOTS analysis on daily test questions

Data Source: Results of research data

Based on Table 7, it shows that there are 35 daily test questions in the form of multiple choices, there are 33 (82.5%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

1.	To mark that the obligatory congregational prayer will soon begin is
	a. Adhan
	b. Drum beating
	c. Iqamah
	d. The arrival of the imam at the mosque
2.	Prayer is the main worship of the first time will be held accountable in the
	hereafter. The language of prayer means
	a. Do'a
	b. Forgiveness
	c. Ties
	d. Resignation

Figure 15. Daily test questions for category C1

The form of the question in the Figure 15 is in the C1 category because it only asks students to provide an understanding of prayer in language, when is the time for congregational prayer to start, and the conditions for the validity of prayer, so that these questions are included in the Knowledge category. There are 5 (12.5%) questions that fall into the C2 category (understanding), the form of the question is.

Arif puts a bucket of water made of metal under the hot sun, so that the water becomes
warm when used for washing. The law of purification with water is
a. Haram
b. Makruh
c. Mubah
d Sunnah

```
Figure 16. Daily test questions for category C2
```

This form of question asks students to understand the context of the question and then gives an answer that is in accordance with the sound of the question. Then there are no questions that fall into the C3 category (applying), while for the C4, C5, C6 categories in the daily test questions, no one is included in that category.

Based on Bloom's Taxonomy theory on semester test questions, the dominant thinking level categories can be seen in the following table.

Cognitive Domain	Frequency	Percentage
C1	24	80%
C2	6	20%
C3	-	-
C4	-	-
С5	-	-
C6	-	-

Table 8. HOTS or LOTS analysis on semester test questions

Data Source: Results of research data

Based on Table 8, it shows that there are 30 semester test questions, there are 24 or 80% of the questions that fall into the C1 category, whose sample questions are as follows.

1. Sadaqah is better given to
a. Servant
b. Orphans
c.Ibn Sabil
d. Poor
2. The amount of zakat fitrah is
a. 2.5 kg
b. 3.1 Liter
c.3.1 kg
d. a and c are correct
3. Gratitude according to language means
a. Du'a
b. Reading
c.Thank you
d. Hole

Figure 17. Semester test questions for category C1

The form of the question above is included in the C1 category because it only asks students to provide understandings about the learning material. There are 6 or 20% questions that fall into the C2 category. For categories C3, C4, C5, C6 (application, analysis, evaluation, creation) in the semester test questions, no one has been included in that category.

QUALITY OF ITEM

This study, the determination of the quality of the items is determined by the level of difficulty, item fit, reliability and validity. The following are the results of the analysis of the quality of the items.

Item Difficulty Index

Based on the results of data analysis, the results of the difficulty items on the item measure output results. The difficulty level of the items can be grouped by combining the logit mean and the Standard Deviation (SD). This value is useful for identifying groups of items (separation).

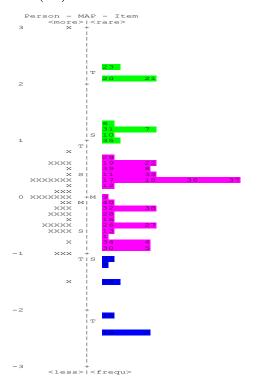


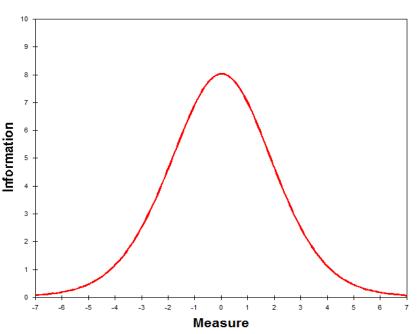
Figure 18. Wright-Item Map

Note:

- Green Color Items: Difficult Items
- Pink Color Items: Medium Items
- Blue Color Items: Easy Items

Figure 1 show, that items 16 and 2 are categorized as easy and item 23 is categorized as difficult. Items 16 and 2 are C1 level items, while 23 items are C3 level items. There are 6 items (15%) categorized as easy, 8 items (20%) categorized as difficult items and the remaining 26 items

(65%) categorized as moderate. This information is corroborated by the information function test graph below.



Test Information Function

Graph 1. Tes Information Function

Based on graph 1, it can be concluded that the 40 item questions given to students indicate items that are suitable/appropriate to determine the level of students' abilities that are only. Graph 1 also shows that the peak of the function is relatively high, so this provides information that the reliability of measurements made by figh teachers is high.

Item Difficulty Index	Item	Measure (Logit)	Model S.E				
Difficult	23,20,21,20,6,7,31,10,35	+2.32 - 1.05	0.53 - 0.34				
Moderate	29,19,22,39,8,32,11,18,17,36,3 7,12,9,40,32,38,28,16,26,27,13 ,1,34,4,30,5	+0.720.93	0.32 - 0.32				
Easy	25,3,24,14,2,15	-1.092.39	0.32 - 0.48				

Table 9. Item Statistics: Measure Order

Item Fit

The quality of item fit is to see whether the items function normally in measuring or not. To measure the quality of items used criteria referring to the opinions of Boone et al., (2014) and Bond & Fox (2015) namely: Outfit Mean Square (MNSQ): 0.5 < MNSQ < 1.5; Outfit Z-Standard (ZSTD): -2.0 < ZSTD < +2.0; and Point Measure Correlation (Pt Measure Corr): 0.4 < Pt Measure Corr < 0.85. Table 10 shows the items fit.

EXAC	CT M	ATCI	H	TAL MODEL INFIT OUTFIT PT-MEASURE DUNT MEASURE S.E. MNSQ ZSTD MNSQ ZSTD CORF
	OBS%	% ΕΣ	XP%]	
20	6			.48 1.16 .6 2.03 2.0 A .11 .40 89.1 89.1 20
4	32			.32 1.16 1.3 1.22 1.6 B .03 .21 61.7 67.2 4
3	36	49	-1.17	
11	19	48	.37	
35	13	49	1.02	.34 1.02 .2 1.13 .7 E .27 .30 75.0 75.0 35
40	25	49	10	.30 1.10 1.5 1.12 1.7 F.13 .24 52.1 59.4 40
21	6	50	2.14	.48 1.02 .2 1.10 .4 G .36 .39 89.8 89.8 21
34	30	46	76	.32 1.09 .8 1.09 .7 H .13 .22 60.0 66.0 34
38	25	46	23	.31 1.08 1.1 1.07 1.0 I .16 .24 51.1 60.0 38
17	20	49	.32	.30 1.07 .8 1.07 .7 J .19 .26 56.3 62.5 17
19	16	47	.63	.32 1.05 .5 1.06 .5 K .23 .29 65.2 67.5 19
33	19	48	.38	.31 1.06 .6 1.05 .5 L.21 .27 59.6 63.3 33
16	28	48	44	.30 1.06 .7 1.05 .6 M .17 .23 61.7 61.5 16
30	33	49	85	.31 1.04 .4 1.05 .4 N .16 .21 62.5 67.8 30
31	11	47	1.21	.36 .952 1.05 .3 O .36 .32 78.3 78.2 31
1	32	49	75	.31 1.03 .3 1.04 .4 P .18 .21 62.5 66.1 1
6	11	49	1.27	.36 1.03 .2 .99 .0 Q .30 .32 79.2 79.1 6
8	18	48	.47	.31 1.03 .3 1.01 .1 R .25 .27 59.6 64.9 8
26	29	49	48	.30 1.02 .3 1.01 .1 S .21 .22 54.2 61.8 26
10	12	49	1.14	.35 1.01 .1 1.00 .1 T .30 .31 77.1 77.1 10
39	18	48	.48	.31 1.00 .0 .981 t .28 .27 63.8 64.8 39
15	45	50	-2.39	.48 .99 .1 .98 .1 s.13 .12 89.8 89.8 15
28	26	48	27	.30 .983 .982 r .26 .24 66.0 59.9 28
29	16	49	.72	.32 .981 .981 q .30 .28 70.8 68.8 29
12	21	48	.18	.30 .983 .982 p .28 .26 63.8 61.1 12
13	30	49	56	.30 .973 .963 0.25 .22 66.7 63.1 13
18	19	47	.35	.31 .973 .945 n .31 .27 58.7 62.8 18
23	5	47	2.33	.53 .96 .1 .901 m .47 .42 91.3 91.3 23
7	11	48	1.25	.36 .961 .913 1.37 .32 78.7 78.7 7
37	21	50	.27	.30 .965 .955 k .31 .26 69.4 61.6 37
32	26	50	16	.29 .949 .939 j .30 .24 67.3 59.7 32
22	17	49	.61	.31 .936 .907 i .35 .28 68.8 66.9 22
36	20	48	.29	.31 .938 .919 h .34 .27 70.2 62.0 36
9	23	49 50	.05	.30 .93 -1.1 .91 -1.2 g .33 .25 60.4 59.8 9
27	30	50	51	.30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27
2	45	50	-2.39	.48 .911 .862 e.22 .12 89.8 89.8 2
14	42	48	-2.11	.44 .912 .785 d.25 .14 87.2 87.2 14
5	33	48	93	
24 25	39 36			.36 .847 .73 -1.2 b.35 .17 79.2 79.1 24
25	36	50		.32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25

| S.D. 10.4 1.1 1.11 .06 |.08 .7 |.20 .8 | |11.1 10.0 |

Based on the table above, it shows that all items have been in accordance with the item suitability criteria. All items are in the range or interval of Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. This illustrates that there are no misconceptions among students about the item questions and there are no items that need to be changed or replaced.

Reliability Item

According to (Linacre, 2002), the item reliability index means that the difficulty of the item is the same for other samples that have equal permissibility. The acceptability index of the item was 0.80 (Bond & Fox, 2015). However, in this study, the acceptable trustworthiness value was 0.70 because it was sufficient (Boone et al., 2014), the reliability value 0.70. Reliability can prove that the sample is sufficient (Bond & Fox, 2015). The results of the reliability analysis of the items shown in the statistical summary can be seen on Table 11.

TOTAL MODEL INFIT OUTFIT SCORE COUNT MEASURE ERROR MNSQ ZSTD MNSQ ZSTD
MEAN 23.6 48.5 .00 .34 1.00 .0 1.01 .1 S.D. 10.4 1.1 1.11 .06 .08 .7 .20 .8 MAX. 45.0 50.0 2.33 .53 1.16 1.5 2.03 2.0 MIN. 5.0 46.0 -2.39 .29 .83 -1.2 .73 -1.4
REAL RMSE .35 TRUE SD 1.05 SEPARATION 2.98 Item RELIABILITY .90 MODEL RMSE .35 TRUE SD 1.05 SEPARATION 3.03 Item RELIABILITY .90 S.E. OF Item MEAN = .18

 Table 11. Summary of Measured Item

Table 11 shows the results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Discussion *

Higher order thinking skills are critical, logical, reflective, metacognitive and creative thinking skills. All of these skills are active when a person faces unusual problems, uncertainties, questions, and choices. The successful application of these skills is contained in valid explanations, decisions, appearances and products according to the context of existing knowledge and experience and the continued development of these or other intellectual skills (Ahmad & Sukiman, 2019); Gupta & Mishra, 2021).

Bloom's taxonomy is often used to write learning outcomes, because it provides a readymade structure and list of verbs. It can be said that the correct use of verbs is the key to successful writing of learning outcomes. Cognitive realm is a realm that includes mental (brain) activities. According to Bloom, all efforts concerning brain activity are included in the cognitive realm. In the cognitive domain, there are six levels of thinking processes, starting from the lowest level (C1) to the highest level (C6). According to the findings of the investigation, the questions in fiqh subjects are still at the cognitive level C1 to C3. C1 controls the cognitive level with a substantially higher percentage than the other cognitive levels, namely 74.5%. While just 22% of questions are at the cognitive level of C2, 3% are at C3, and 0.5% is at C6. At cognitive levels C5 and C6, there were no questions. At cognitive levels C5 and C6, there were no questions. Because the teacher's assessment mainly stresses recognizing or recalling facts at levels C4 and C5, students are accustomed to having knowledge at this level. Based on this percentage, it is possible to conclude that the learning evaluation questions in figh disciplines do not have good proportions.

The content of HOTS in fiqh matters is very important considering the atmosphere of human civilization is entering the 5.0 era. The Covid-19 pandemic that has hit various countries, including Indonesia, requires HOTS to filter the rapid flow of incoming information. If the HOTS from C1 to C6 – especially C6 – are not included in school questions, it is not impossible that students will become a generation that is paralyzed cognitively, affectively and psychometrically. In this context, the implementation of HOTS in school questions finds its significance point.

Based on previous research, teacher learning evaluation questions are expected to be able to create questions that can cause students to reach the stage of high-level thinking, so that students not only have the ability to remember the lessons that have been given, but they are also expected to be able to create something new. This can be good to both him-self and the environment

By paying attention to the test questions that have been analyzed by researchers in accordance with Bloom's Taxonomy theory, it can be seen that the thinking skills possessed by students based on the test questions given are still in the category of low-order thinking skills because they are still in the knowledge category, understanding and application. While the questions that fall into the category of analysis, synthesis and evaluation are still very few. So it is hoped that in the future teachers will make learning evaluation questions that further hone the thinking skills possessed by students, not only at the stage of knowledge, understanding and application should be at the stage of analysis, synthesis and evaluation

In the 2013 curriculum, it is expected that students can have the ability to think not only at the limit of knowledge but must come to creating or evaluating, so that teachers should also be able to make questions that can train students' thinking skills and can achieve high-level thinking skills. The 2013 curriculum has adopted Bloom's revision according to Anderson starting from the level of knowing, understanding, applying, analyzing, evaluating and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new.

The curriculum used in Junior High Boarding School Serang is the 2013 curriculum, which is expected to improve the ability and ways of thinking critically or high-level thinking for students (Hidayat et al., 2021; Mulianah & Hidayat, 2021). Students are expected to have the ability to think not only at the level of knowing, understanding and applying where the level of this way of thinking based on Bloom's Taxonomy is included in the category of low-level thinking, but students are expected to have high-level thinking skills (analyze, synthesize, and evaluate). So that the teacher is expected to be able to make questions that can hone the thinking skills possessed by students so that students can achieve high-level thinking skills, namely up to the evaluation stage.

The results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Conclusion *

Based on the fiqh exam questions at Junior High Boarding School Serang which became the focus of the author's research, it shows that the questions are still standardized on C1 and C2, where the questions have not been directed at higher-order thinking skills. So from these questions it can be

seen that students are still at the stage of low order thinking skills. Meanwhile, the analysis of the quality of the items using the Rasch Model analysis showed that the items tended to be at a moderate level (65%). The tested items also met the item criteria based on the Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. Reliability items are also categorized as good. The questions made by the figh teacher are still not as expected, namely leading to HOTS-based tests.

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5.Bukti konfirmasi artikel accepted 16 November 2023



Dear Author,

We are pleased to inform you that your Manuscript entitled "Fiqh Subject Exam Questions Analysis: Is it Based on HOTS?" has been accepted for publication in Tuijin Jishu/ Journal of Propulsion Technology.

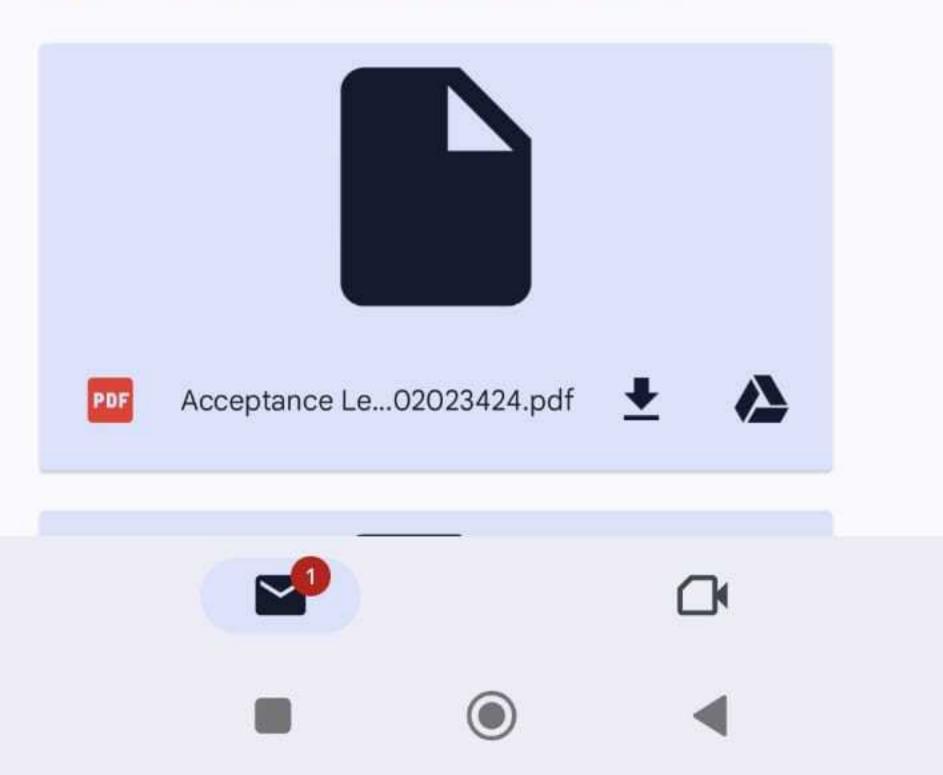
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6. Letter Of Acceptance 16 November 2023



Letter of Acceptance

November 16, 2023 Ref No. JPT 002023424

Dear Authors,

Muhajir Muhajir, Wahyu Hidayat,

Postgraduate Lecturer at Universitas Islam Negeri Sultan Maulana Hasanuddin Banten, Serang, Indonesia.

We are delighted to inform you that your research paper titled "Fiqh Subject Exam Questions Analysis: Is it Based on HOTS?" has been accepted for publication in the *Tuijin Jishu/Journal of Propulsion Technology*. Your paper has undergone rigorous peer review by experts in the field, and we believe that it meets the high standards of our journal.

Congratulations on your remarkable achievement! Your decision to use our journal to exhibit your work has been greatly appreciated. We are pleased to inform you that your paper has been selected for publication in the upcoming issue of the **JPT**.

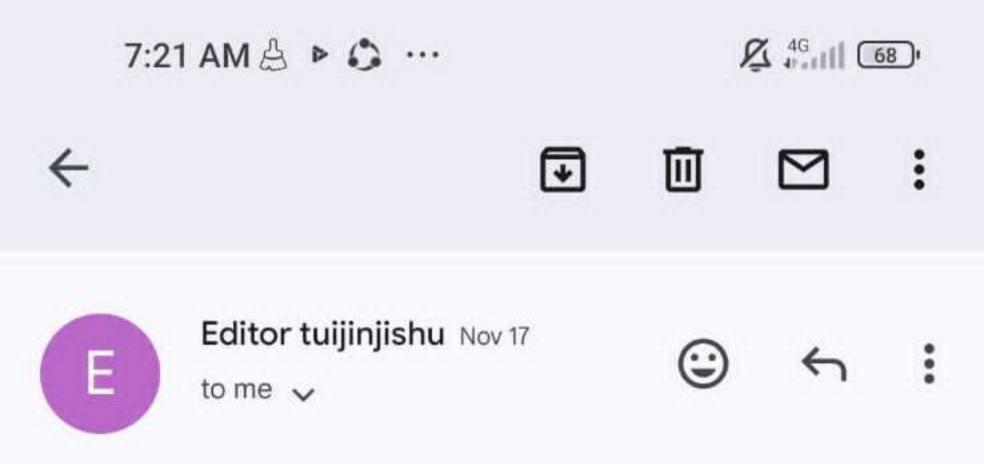
We would like to express our sincere gratitude for your valuable contribution.

Best regards,

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7.Perintah untuk melakukan fee proses ke jurnal 17 November 2023



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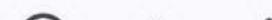
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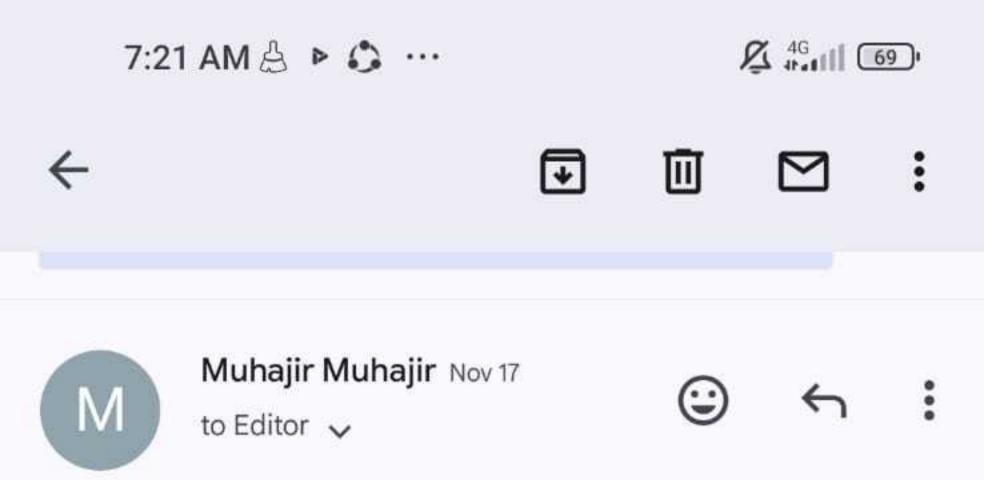
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8.Bukti Finalisasi artikel 17 November 2023



Thank you for the news, I hope this month can be published very soon, is it possible this month the article can be published

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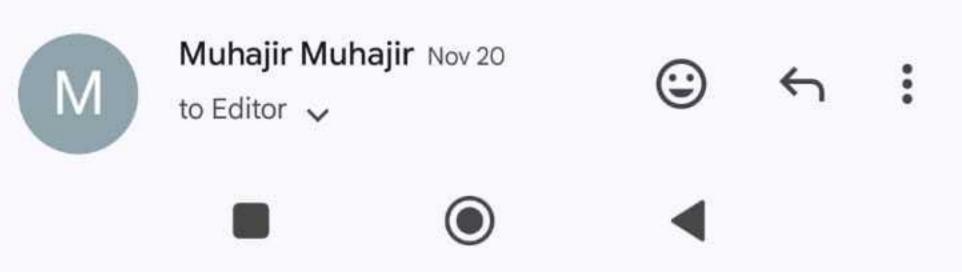
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Figh Subject Exam Questions Analysis: Is it Based on HOTS?

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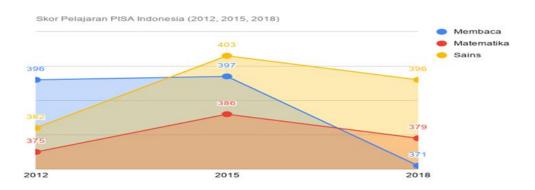
Abstract

In the context of Bloom's Taxonomy, higher-order thinking skills are at levels C4 to C6. In the 2013 curriculum, subject teachers are directed to make questions based on high-level thinking skills. The purpose of this study was to identify item levels based on Bloom's cognitive domain and determine the quality of the items made by the teacher. The numbers of questions studied were 440 items in the form of multiple-choice and essays in the Fiqh subject at Junior High Boarding School Serang. This study uses a descriptive qualitative method to analyze document data in the form of Fiqh questions, and then a quantitative approach is also used to analyze the quality of the questions from the available student answer data as many as 450 students on 40 Essay and 400 multiple-choice items. Document data were analyzed logically using Bloom's Taxonomy theory approach. While the data analysis of student answers was analyzed using Item Response Theory (IRT) model 1 parameter Logistics or commonly called the Rasch Model. The results showed that the questions made by the Fiqh teacher were generally still at a low level (C1 and C2). While the item test shows that the item items tend to be more dominant in the moderate category, all items are categorized as fit, and the item reliability is categorized as good.

Keywords: Evaluation, Thinking Skills, Fiqh

1. Introduction

The quality of a country's education, one of which is measured by the achievement or ranking of the Program for International Student Assessment (PISA) organized by member countries of the Organization for Economic Cooperation and Development (OECD). International average, Indonesia has a score below the international average score of 400. International average scores in reading, math and science are 487, 489, and, 489.



Source: PISA: Programme for International Student Assessment 2021

Fiqh as a branch of Islamic religious knowledge is closely related to aspects of PISA assessment. There are not a few differences or views on problems in the science of figh that require extensive reading. In the science of figh, we will get material or concepts related to mathematics, namely the concept of inheritance and zakat. While the connection with science, among others, in determining the feast or the beginning of the fasting month using astrology technology.

To close the gap with other countries, the government, through the Ministry of Education and Culture, uses standard questions based on the Program for International Student Assessment (PISA) standards. The ability to think at a higher level is one of the typical PISA questions. As a result, the Ministry of Education and Culture adopted Bloom's revision according to Anderson in the 2013 curriculum, beginning with the level of knowing, understanding, applying, analyzing, evaluating, and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new (Sanjaya & Hidayat, 2022). This procedure necessitates the use of reasoning abilities. The ability to think critically is essential in the learning process. As a result, thinking skills are inextricably linked to the student learning process. Teachers who consistently teach pupils to think will have a favorable impact on the advancement of student education. Thinking at a higher level is one of the efforts to train students' talents.

Higher-order of Thinking Skills (HOTS) is a thinking ability that not only requires the ability to remember but requires other higher abilities, such as the ability to think creatively and critically. Students who are often trained in HOTS can improve student performance and reduce student weaknesses.

Higher-order thinking skills that occupy the top level of the cognitive hierarchy Bloom's Taxonomy is the meaning of Higher-order Thinking Skills (Ramos et al., 2013). According to Resnick (1987), higher order thinking skills are complex thinking processes in describing the material, making inferences, building representations, analyzing, and building relationships involving the most basic mental activities.

In Bloom's Taxonomy, Higher-order thinking skills start from the level of analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). Students can be said to have reached the HOTS level of thinking, if they can understand and actively integrate their experiences into new knowledge. Students will get used to exploring their thinking skills if they are supported by active learning which will skillfully hone their cognitive, affective and psychomotor competencies. Through learning outcomes in the form of valuable facts, students can maximize their thinking processes, both understanding, analyzing, concluding and applying in the real world. According to Anderson & Krathwohl (2001), the thought process develops so that it must be stated with a verb. Likewise, it is necessary to revise the hierarchy of thinking in Bloom's Taxonomy. Changes in the dimensions of thinking also need to be done so that they become remembered, understand, apply, analyze, evaluate, and create. In the cognitive domain they term factual, conceptual, procedural and metacognitive at every level of the thinking process.

The main purpose of education is to produce individuals who think critically and creatively, this can be done by asking effective teachers in the classroom (Wang & Wang, 2011). The form of questions asked must be able to stimulate students' minds to provide solution ideas to improve higher-order thinking skills. This higher-order thinking ability must be trained by the teacher in the learning process and then the results are assessed using an assessment instrument that includes questions that must have HOTS characteristics (Mustahdi, 2019). The goal is to improve higher-order thinking skills more effectively.

According to Resnick (1987), the characteristics of HOTS questions are non-algorithmic, contain complex elements, allow for more than one solution, involve a variety of decision-making and interpretations, apply various criteria and require various kinds of effort. The application of HOTS-based assessment is in line with learning that minimizes recall skills, but must consider the skills to transfer one idea to another, process and apply information, look for relationships from various dissimilar information, solve problems using information, examine concepts and concepts information critically. HOTS questions are applied as a measure of higher-order thinking skills, not just questions that are more difficult than memorization questions. From a knowledge point of view, HOTS questions usually measure not only factual, conceptual, and procedural dimensions but also metacognitive

Metacognitive as a thinking dimension represents the skills of connecting more than one dissimilar idea, interpreting, problem-solving, discovering new ideas, expressing opinions (reasoning), and choosing the right attitude (Anderson, 2015). In the statement (Anderson & Krathwohl, 2001), 2 methods can be used for writing HOTS questions, namely: 1) measuring the material used as a question with the cognitive domain of high thinking, namely analyze, evaluate and create; 2) Create questions by providing stimuli such as sources or reading materials for text, paragraphs, photos, pictures, graphics, cases, tables, formulas, lists of symbols/words, films, examples or sound recordings

According to Setiawati et al., (2018), the characteristics of HOTS questions are 1) Measuring higher-order thinking skills including the ability to solve unfamiliar problems, the ability to evaluate strategies used to solve problems from different perspectives and find models new solutions that are different from the previous methods; 2) Based on contextual problems. HOTS questions are assessment instruments based on real situations in everyday life, where students are expected to be able to apply learning concepts in class to solve problems. Contextual problems faced by the world community today are related to various aspects of people's lives ranging from social, political, economic, cultural, religious, information technology and other aspects of life.

Several studies include Aziz (2015); Bhattacharya & Mohalik (2021); Gupta & Mishra (2021); Hanifah (2019); Nadlir & Alfiyah (2018) and Sarah et al., (2021) state that students will understand a concept if they have higher-order thinking skills. Problems with high-level thinking skills must be developed by the teacher to solve problems that exist in students' lives. Critical thinking is very necessary for the midst of the 4.0 revolution era. Therefore, Islamic education (PAI) teachers, especially fiqh teachers, should change their way of thinking about the importance of exploring and stimulating students to think at a higher level.

Figh is one of the subjects that necessitate critical thinking because it is concerned with the dynamics of human life. The distribution of Figh material is tailored to its nature as a product, process, and scientific attitude, with the intention that students may develop a scientific attitude as well. The use of various learning models, such as project-based learning, problem-based learning, and discovery learning, provides teachers with the option to carry out learning activities at the HOTS level.

The HOTS-characterized assessment model has been widely developed and applied in formal schools from elementary, secondary and tertiary levels (Widana, 2017). The development of an assessment model with HOTS characteristics is also one of the focuses of the agenda of the Directorate of Islamic Education at the Ministry of Religion in the implementation of the assessment of Islamic Religious Education, including fiqh subjects.

Improving the quality of the question instruments in the assessment of Islamic Education is an important thing and needs to be done. This is in line with efforts to develop student competencies to not only understand and know a form of knowledge or information but further than that, students are expected to have analytical and problem-solving abilities to various existing problems. The purpose is to identify the level of the cognitive domain in the evaluation questions of Fiqh subjects. This is important to do as an evaluation for teachers and related parties to see how far the implementation of HOTS-based questions is according to the direction of the Ministry of Education and the Ministry of Religion to catch up with other countries. This paper has specificity in terms of the object being analyzed, namely the questions of groups of fiqh subjects compiled by educators in Islamic boarding schools who have not been as much involved in question writing training activities as teachers in formal schools.

In the context of fiqh subjects, HOTS-based questions can train students' abilities in analytical and critical thinking (Sismarwoto, 2020). Because many problems of human life related to fiqh problems require critical analysis and this is included in the level of high-level thinking (Zafi, 2020). Improving the quality of the question instrument in fiqh assessment is an important thing and needs to be done. This is in line with efforts to develop students' competencies to not only understand and know a form of knowledge or information but further, than that, students are expected to have analytical and problem-solving skills on various problems related to fiqh (Ahmad & Sukiman, 2019).

Method

This research method is a qualitative descriptive method by describing qualitative data obtained from the field. The research was conducted at Junior High Boarding School Serang. The data obtained is data in the form of fiqh subject questions for the last 3 years, namely the 2019/2020, 2020/2021 and 2021/2022 school years. The data obtained are document data and are available in schools. The number of questions available at the school is 200 questions in the form of multiple-choice and essays.

For analysis, we read and re-examined all the questions received, then we examined each item using Bloom's Taxonomy review table guide based on Bloom's cognitive theory. For review item categories based on Bloom's cognitive theory can be seen in table 1.

Table I. Rev	iew nem catego	nes based on	Diooni s cogi			
ITEM			LEV	'EL		
	LOTS	MC	OTS		HOTS	
	C1	C2	C3	C 4	C5	C 6
1						
2						

Table 1. Review item categories based on Bloom's cognitive

Indicator:

C1: Recall, mention, define

C2: Explain ideas/concepts

C3: Using the information on a different domain

C4: Specify aspects/elements

C5: Take your own decisions

C6: Create your own ideas

In determining the level of Bloom's taxonomy, 2 experts in the field of Islamic education subjects and one expert in the field of educational measurement were involved. To see the quality of the questions made by the figh teacher, an analysis of the items was carried out using the Item Response Theory model 1 Parameters Logistics (PL) analysis or commonly referred to as the Rasch Model. The aspects tested are related to the level of difficulty, item fit, and the reliability of the questions. All item analysis using Winstep Software.

Results

Description of Higher-Level Thinking Skills in the Evaluation of Fiqh Subjects

The following describes the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily tests and semester exams.

Evaluation of the 2019/2020 Academic Year

To find out the dominant thinking level category in the daily test questions for the 2019/2020 academic year, pay attention to table 1 below.

Cognitive Domain Level	Frequency (Item)	Percentage
C1	9	90%
C2	-	-
C3	1	10%
C4	-	-
C5	-	-
C6	-	-

Table 2. HOTS or LOTS Analysis of Daily Test Questions

Data Source: Results of research data

Based on Table 2, it shows that there are 10 daily test questions in the form of essays, there are 9 or 90% of questions that fall into the C1 category (remembering), as for the form of the questions as follows

	Mention the conditions for the sacrificial animal and agigah!
	What is the meaning of Aqiqah?
	What is the Law of Qurban?
	What is the law of Aqiqah?
	What is the meaning of Qurban according to the term?
I	

Figure 1. Example of daily test questions for category C1.

The form of the questions above fall into the C1 category (remembering) is a person's ability to recall or recognize names, terms, ideas, symptoms, formulas (Hidayat, 2012). The questions in the table above only ask students to mention the law of Qurban and Aqiqah write down the meaning of *qurban* and *aqiqah* where the questions above are only limited to the level of testing the knowledge possessed by students. 1 (10%) questions that fall into the C3 category (applying), one form of the question is as follows.

Explain the steps in slaughtering sacrificial animals according to Islamic law !

Figure 2. Daily test questions for category C3

Application is a person's ability to apply or use general ideas, procedures or methods, principles, formulas, theories in new and concrete situations (Hidayat, 2012). Things that are *Sunnah* in the slaughter of sacrificial animals in life whereas this matter is included in the category

of application. As for the categories C2, C4, C5, C6 (understanding, analysis, evaluation, creating) in the daily test questions, no one has been included in that category.

In the even-mid semester exam questions for the 2018/2019 academic year, the level of thinking ability is described in the following table.

Cognitive Domain	Frequency	Percentage
C1	12	80%
C2	2	13.33%
C3	1	6.67%
C4	-	-
С5	-	-
C6	-	-

Table 3. HOTS or LOTS analysis on mid-semester test questions

Data Source: Results of research data

Based on Table 3, it shows that there are 10 mid-semester test questions, there are 12 or 80% of the questions that fall into the C1 category (remembering), and whose form is as follows.

- 1. What are the Fard of hajj?
- 2. What are the obligations of a hajj?
- 3. What is the definition of sadaqah jariyah?
- 4. What is the verse of the Qur'an about the obligation of Haj

Figure 3. Mid-Semester Exam Questions for C1 category

The form of this question is included in the C1 category (remembering) because it only asks students to mention the Pillars of Hajj, the meaning of Hajj, the meaning of alms, the arguments for the implementation of the pilgrimage, where these questions are still at the level of knowledge possessed by students. 2 (13.33%) questions that fall into the category C2 (understanding). The form of an example question is as follows.

- 1. What can eliminate the reward of sadaqah jariyah!
- 2. What is the difference between a bribe and a gift?

Figure 4. Mid-Semester Exam Questions for C2 category

The form of the question in the Figure 4 asks students to describe things that can eliminate the reward of alms. Then one question that falls into the C3 applying category, as for the form of the question, is as follows.

Sadaqah is sunnah muakkad, but sadaqah can become obligatory. When does sadaqah become obligatory? an example of the application of sadaqah becomes mandatory!

Figure 5. Mid-Semester Exam Questions for the C3 category

This form of question asks students to give the concept of applying alms to be mandatory for someone. As for the categories C4, C5, C6 (analysis, evaluation, creation) in the Mid-semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory of odd semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	13	86.6%
C2	1	6.7%
C3	1	6.7%
C4	-	-
C5	-	-
C6	-	-

Table 4. HOTS or LOTS analysis on odd semester test questions

Data Source: Researcher's data processing

Based on Table 4, it shows that there are 15 Semester test questions in the form of Essays, there are 13 (86.6%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

- 1. What are the rules of fasting in Islam?
- 2. What is the purpose of Ramadan fasting?
- 3. What is the meaning of prostration of gratitude and prostration of recitation!
- 4. Fasting is one of the five pillars of Islam?

Figure 6. Odd semester test questions for category C1

The form of the question in Figure 6 is in the C1 category because it only asks students to write down the mandatory fasting requirements, the meaning of fasting, the meaning of prostration of gratitude and prostration of recitation, understanding of fasting *kafarat*, and mentioning the *nisab* of gold and goats. These questions are still in the category of knowledge possessed by students. One question that falls into the category C2 (Understanding), the form of the question is as follows.

1. What are the differences and similarities between sujud syukur and sujud tilawah!

Figure 7. Odd semester test questions for category C2

This form of question asks students to make comparisons about the similarities and differences between prostration of gratitude and prostration of recitation. Then 1 question that is included in the C3 category (application), the form of the question is as follows.

1. Abdul Aziz will pay his zakat fitrah with a family of 5 people, zakat fitrah for the year 1436 H is worth 4 liters of rice. Calculate the amount of zakat fitrah that must be issued by Abdul Aziz and to whom is the zakat handed over?

Figure 8. Odd semester test questions for category C3

The form of the question in the Figure8 asks students to provide the concept of applying *aqiqah* in life. As for the categories C4, C5, C6 (analyzing, assessing and creating) in the semester test questions, no one has been included in that category.

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on even semester test questions, to find out the dominant thinking level category, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	290	58%
C2	180	36%
C3	30	6%
C4	-	-
C5	-	-
C6	-	-

Table 5. HOTS or LOTS analysis on even semester test questions

Data Source: Results of research data

Based on Table 5, it shows that there are 500 item test questions in the form of multiple choice, there are 29 (58%) questions that fall into the C1 category (remembering), where the sample questions are as follows.

1.	Aqiqah is held on
	a. 7th day before birth
	b. 7th day after birth
	c. 7th day after death
	d. 7th day after birth or according to the ability to carry it out
2.	The law of consuming the flesh of a dead animal that is not slaughtered in the name of Allah is
	a. Sunnah
	b. Mbah
	c. Makruh
	d. Haram
3.	The provisions of Aqiqah are slaughtering
	a. 5 goats for a baby boy and 4 goats for a baby girl
	b. 4 goats for a baby boy and 3 goats for a baby girl
	c. 3 goats for a baby boy and 2 goats for a baby girl
	d. 2 goats for a baby boy and 1 goat for a baby girl
4.	The time for slaughtering the Qurban is after the Eid prayer on the
	a. 10,11,12,13 Shawwal
	b. 10,11,12,13 Dzulqaidah
	c. 10,11,12,13 Shafar
	d. 10,11,12,13 Dzulhijjah
5.	The history of being ordered to sacrifice begins with the event
	a. Prophet Ishmael slaughtered Ibrahim
	b. Prophet Ibrahim slaughtered Ishmael
	c. Siti Maryam gave birth to Prophet Isa
	d. Thanksgiving for the appointment of Ibrahim as a prophet

The form of the question in the picture above is included in the C1 category because it only asks students to choose an answer that is in accordance with the question that is only limited to the knowledge possessed by the student. There are 18 (36%) questions that fall into the C2 (Understanding) category, the form of the questions is as follows.

1.	The difference between Aqiqah and Qurban is a. Aqiqah is prescribed once in a lifetime while Qurban is prescribed every year b. Aqiqah is prescribed every year while Qurban is prescribed once in a lifetime c. Aqiqah 1 goat while Qurban 2 goats
	d. Aqiqah should not be delayed (must be cash) while Qurban can be postponed until whenever there is an opportunity
2.	Qurban is a social worship becausea. Watched by many peopleb. The animal came from someone elsec. Most of the meat is distributed to the communityd. People can be attracted to sacrifice

Figure 10. Even semester test questions for category C3

This form of question asks students to compare what is the difference between aqiqah and qurban. Then 2 (4%) questions that fall into the C3 category (Applying), one form of the question.

1.	Slaughter tools are required to be sharp, this is meant is a. To get a lot of rewards
	b. To get a lot of meatc. To reduce the level of pain in slaughtered animalsd. To reduce too much blood
2.	Chicken that is run over by a halal vehicle is consumed ifa. The vehicle that hit him belongs to a Muslimb. The chicken is a wild chickenc. The chicken died before it was slaughteredd. The chicken was slaughtered before it died

The form of this question asks students to choose an answer that is in accordance with the concept of applying the slaughtering tools used in life. Furthermore, there are no questions that fall into the categories C4, C5, C6 (analyze, evaluate, create).

Evaluation of the 2020/2021 Academic Year

The following will describe the questions that fall into the category of high-level thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on the semester test questions, pay attention to the following table.

Cognitive Domain	Frequency	Percentage
C1	340	68%

Table 6. HOTS or LOTS analysis on semester test questions

 C2	150	30%
C3	10	2%
C4	-	-
С5	-	-
C6	-	-

Data Source: Results of research data

Based on Table 6, it shows that there are 500 item test questions. There are 34 (68%) questions that fall into the C1 category (remembering) which one example of the form of the question is as follows.

 According to the language of Qurban means a. Approach
b. Which brings you closer
c. Which is close to
d. Closer
2. Sacrificial meat can be divided into
a. 2
c. 4
b. 3
d. 5
3. Sacrifice may be performed on any of the following dates <i>except</i>
a. 9 Dzulhijjah
c. 12 Dzulhijjah
b. 11 Dzulhijjah
d. 13 Dzulhijjah

Figure 12. Semester test questions for category C1

The form of the question in the Figure 12 is in the C1 category (knowledge) because it only asks students to mention about qurban and prayer. 15 or 30% of questions that fall into the C2 category (understanding), the form of the question is as follows.

- 1. What is meant by property consists of 2 types, namely: 1) assets in the form of goods, 2) assets in the form of benefits. Give an example of each!
- 2. Below is a form of buying and selling that is legal but prohibited, *except*...
 - a. Buying items that have been selected by others
 - b. Buying stuff to hoard
 - c. Buying an item with a known price
 - d. Buying and selling that contains elements of deception

Figure 13. Semester test questions for category C2

The form of the question on Figure 13 asks students to give an example of what is meant by property. Then students are also asked to choose the appropriate answer to the question by using their understanding to choose the right answer. Then there are no questions that fall into the C3 category (applying). The form of the question in the Figure 14 asks students to tell the history of the ordering of the Qurban which is intended to test how the thinking skills possessed by the students are whether they are able to tell the history of the order of the Qurban properly and correctly. As for categories C4, C5, (analysis, evaluation) in the semester test questions, no one has been included in that category.

Evaluation of the 2021/2022 Academic Year

The following will describe the categories of questions that fall into the category of highlevel thinking skills or questions that fall into the category of low-level thinking skills according to the analysis that has been done based on Bloom's Taxonomy theory on daily test questions, to find out the dominant thinking level category, pay attention to the following table .

Cognitive Domain	Frequency	Percentage
C1	33	82.5%
C2	5	12.5%
C3	2	5%
C4	-	-
C5	-	-
C6	-	-

Table 7. HOTS or LOTS analysis on daily test questions

Data Source: Results of research data

Based on Table 7, it shows that there are 35 daily test questions in the form of multiple choices, there are 33 (82.5%) questions that fall into the C1 category (remembering), the form of the questions is as follows.

1.	To mark that the obligatory congregational prayer will soon begin is
	a. Adhan
	b. Drum beating
	c. Iqamah
	d. The arrival of the imam at the mosque
2.	Prayer is the main worship of the first time will be held accountable in the
	hereafter. The language of prayer means
	a. Do'a
	b. Forgiveness
	c. Ties
	d. Resignation

Figure 15. Daily test questions for category C1

The form of the question in the Figure 15 is in the C1 category because it only asks students to provide an understanding of prayer in language, when is the time for congregational prayer to start, and the conditions for the validity of prayer, so that these questions are included in the Knowledge category. There are 5 (12.5%) questions that fall into the C2 category (understanding), the form of the question is.

Arif puts a bucket of water made of metal under the hot sun, so that the water becomes
warm when used for washing. The law of purification with water is
a. Haram
b. Makruh
c. Mubah
d Suppah

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Figure 16. Daily test questions for category C2
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This form of question asks students to understand the context of the question and then gives an answer that is in accordance with the sound of the question. Then there are no questions that fall into the C3 category (applying), while for the C4, C5, C6 categories in the daily test questions, no one is included in that category.

Based on Bloom's Taxonomy theory on semester test questions, the dominant thinking level categories can be seen in the following table.

Cognitive Domain	Frequency	Percentage
C1	24	80%
C2	6	20%
C3	-	-
C4	-	-
C5	-	-
C6	-	-

Table 8. HOTS or LOTS analysis on semester test questions

Data Source: Results of research data

Based on Table 8, it shows that there are 30 semester test questions, there are 24 or 80% of the questions that fall into the C1 category, whose sample questions are as follows.

1. Sadaqah is better given to
a. Servant
b. Orphans
c.Ibn Sabil
d. Poor
2. The amount of zakat fitrah is
a. 2.5 kg
b. 3.1 Liter
c.3.1 kg
d. a and c are correct
3. Gratitude according to language means
a. Du'a
b. Reading
c.Thank you
d. Hole

Figure 17. Semester test questions for category C1

The form of the question above is included in the C1 category because it only asks students to provide understandings about the learning material. There are 6 or 20% questions that fall into the C2 category. For categories C3, C4, C5, C6 (application, analysis, evaluation, creation) in the semester test questions, no one has been included in that category.

QUALITY OF ITEM

This study, the determination of the quality of the items is determined by the level of difficulty, item fit, reliability and validity. The following are the results of the analysis of the quality of the items.

Item Difficulty Index

Based on the results of data analysis, the results of the difficulty items on the item measure output results. The difficulty level of the items can be grouped by combining the logit mean and the Standard Deviation (SD). This value is useful for identifying groups of items (separation).

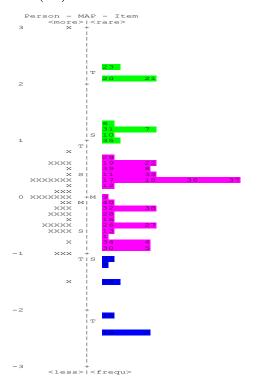


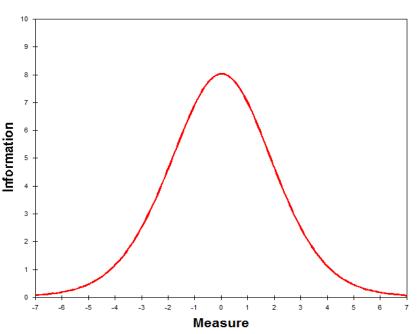
Figure 18. Wright-Item Map

Note:

- Green Color Items: Difficult Items
- Pink Color Items: Medium Items
- Blue Color Items: Easy Items

Figure 1 show, that items 16 and 2 are categorized as easy and item 23 is categorized as difficult. Items 16 and 2 are C1 level items, while 23 items are C3 level items. There are 6 items (15%) categorized as easy, 8 items (20%) categorized as difficult items and the remaining 26 items

(65%) categorized as moderate. This information is corroborated by the information function test graph below.



Test Information Function

Graph 1. Tes Information Function

Based on graph 1, it can be concluded that the 40 item questions given to students indicate items that are suitable/appropriate to determine the level of students' abilities that are only. Graph 1 also shows that the peak of the function is relatively high, so this provides information that the reliability of measurements made by figh teachers is high.

	Item Difficulty Index	Item	Measure (Logit)	Model S.E		
	Difficult	23,20,21,20,6,7,31,10,35	+2.32 - 1.05	0.53 - 0.34		
	Moderate	29,19,22,39,8,32,11,18,17,36,3 7,12,9,40,32,38,28,16,26,27,13 ,1,34,4,30,5	+0.720.93	0.32 - 0.32		
	Easy	25,3,24,14,2,15	-1.092.39	0.32 - 0.48		

Table 9. Item Statistics: Measure Order

Item Fit

The quality of item fit is to see whether the items function normally in measuring or not. To measure the quality of items used criteria referring to the opinions of Boone et al., (2014) and Bond & Fox (2015) namely: Outfit Mean Square (MNSQ): 0.5 < MNSQ < 1.5; Outfit Z-Standard (ZSTD): -2.0 < ZSTD < +2.0; and Point Measure Correlation (Pt Measure Corr): 0.4 < Pt Measure Corr < 0.85. Table 10 shows the items fit.

EXAC	CT M	ATCI	H	TAL MODEL INFIT OUTFIT PT-MEASURE DUNT MEASURE S.E. MNSQ ZSTD MNSQ ZSTD CORF
	OBS%	% ΕΣ	XP%]	
20	6			.48 1.16 .6 2.03 2.0 A .11 .40 89.1 89.1 20
4	32			.32 1.16 1.3 1.22 1.6 B .03 .21 61.7 67.2 4
3	36	49	-1.17	
11	19	48	.37	
35	13	49	1.02	.34 1.02 .2 1.13 .7 E .27 .30 75.0 75.0 35
40	25	49	10	.30 1.10 1.5 1.12 1.7 F.13 .24 52.1 59.4 40
21	6	50	2.14	.48 1.02 .2 1.10 .4 G .36 .39 89.8 89.8 21
34	30	46	76	.32 1.09 .8 1.09 .7 H .13 .22 60.0 66.0 34
38	25	46	23	.31 1.08 1.1 1.07 1.0 I .16 .24 51.1 60.0 38
17	20	49	.32	.30 1.07 .8 1.07 .7 J .19 .26 56.3 62.5 17
19	16	47	.63	.32 1.05 .5 1.06 .5 K .23 .29 65.2 67.5 19
33	19	48	.38	.31 1.06 .6 1.05 .5 L.21 .27 59.6 63.3 33
16	28	48	44	.30 1.06 .7 1.05 .6 M .17 .23 61.7 61.5 16
30	33	49	85	.31 1.04 .4 1.05 .4 N .16 .21 62.5 67.8 30
31	11	47	1.21	.36 .952 1.05 .3 O .36 .32 78.3 78.2 31
1	32	49	75	.31 1.03 .3 1.04 .4 P .18 .21 62.5 66.1 1
6	11	49	1.27	.36 1.03 .2 .99 .0 Q .30 .32 79.2 79.1 6
8	18	48	.47	.31 1.03 .3 1.01 .1 R .25 .27 59.6 64.9 8
26	29	49	48	.30 1.02 .3 1.01 .1 S .21 .22 54.2 61.8 26
10	12	49	1.14	.35 1.01 .1 1.00 .1 T .30 .31 77.1 77.1 10
39	18	48	.48	.31 1.00 .0 .981 t .28 .27 63.8 64.8 39
15	45	50	-2.39	.48 .99 .1 .98 .1 s.13 .12 89.8 89.8 15
28	26	48	27	.30 .983 .982 r .26 .24 66.0 59.9 28
29	16	49	.72	.32 .981 .981 q .30 .28 70.8 68.8 29
12	21	48	.18	.30 .983 .982 p .28 .26 63.8 61.1 12
13	30	49	56	.30 .973 .963 0.25 .22 66.7 63.1 13
18	19	47	.35	.31 .973 .945 n .31 .27 58.7 62.8 18
23	5	47	2.33	.53 .96 .1 .901 m .47 .42 91.3 91.3 23
7	11	48	1.25	.36 .961 .913 1.37 .32 78.7 78.7 7
37	21	50	.27	.30 .965 .955 k .31 .26 69.4 61.6 37
32	26	50	16	.29 .949 .939 j .30 .24 67.3 59.7 32
22	17	49	.61	.31 .936 .907 i .35 .28 68.8 66.9 22
36	20	48	.29	.31 .938 .919 h .34 .27 70.2 62.0 36
9	23	49 50	.05	.30 .93 -1.1 .91 -1.2 g .33 .25 60.4 59.8 9
27	30	50	51	.30 .91 -1.0 .89 -1.2 f .32 .22 61.2 62.2 27
2	45	50	-2.39	.48 .911 .862 e.22 .12 89.8 89.8 2
14	42	48	-2.11	.44 .912 .785 d.25 .14 87.2 87.2 14
5	33	48	93	
24 25	39 26			.36 .847 .73 -1.2 b.35 .17 79.2 79.1 24
25	36	50		.32 .83 -1.2 .77 -1.4 a .37 .19 73.5 71.8 25

| S.D. 10.4 1.1 1.11 .06 |.08 .7 |.20 .8 | |11.1 10.0 |

Based on the table above, it shows that all items have been in accordance with the item suitability criteria. All items are in the range or interval of Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. This illustrates that there are no misconceptions among students about the item questions and there are no items that need to be changed or replaced.

Reliability Item

According to (Linacre, 2002), the item reliability index means that the difficulty of the item is the same for other samples that have equal permissibility. The acceptability index of the item was 0.80 (Bond & Fox, 2015). However, in this study, the acceptable trustworthiness value was 0.70 because it was sufficient (Boone et al., 2014), the reliability value 0.70. Reliability can prove that the sample is sufficient (Bond & Fox, 2015). The results of the reliability analysis of the items shown in the statistical summary can be seen on Table 11.

TOTAL MODEL INFIT OUTFIT SCORE COUNT MEASURE ERROR MNSQ ZSTD MNSQ ZSTD
MEAN 23.6 48.5 .00 .34 1.00 .0 1.01 .1 S.D. 10.4 1.1 1.11 .06 .08 .7 .20 .8 MAX. 45.0 50.0 2.33 .53 1.16 1.5 2.03 2.0 MIN. 5.0 46.0 -2.39 .29 .83 -1.2 .73 -1.4
REAL RMSE .35 TRUE SD 1.05 SEPARATION 2.98 Item RELIABILITY .90 MODEL RMSE .35 TRUE SD 1.05 SEPARATION 3.03 Item RELIABILITY .90 S.E. OF Item MEAN = .18

 Table 11. Summary of Measured Item

Table 11 shows the results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Discussion *

Higher order thinking skills are critical, logical, reflective, metacognitive and creative thinking skills. All of these skills are active when a person faces unusual problems, uncertainties, questions, and choices. The successful application of these skills is contained in valid explanations, decisions, appearances and products according to the context of existing knowledge and experience and the continued development of these or other intellectual skills (Ahmad & Sukiman, 2019); Gupta & Mishra, 2021).

Bloom's taxonomy is often used to write learning outcomes, because it provides a readymade structure and list of verbs. It can be said that the correct use of verbs is the key to successful writing of learning outcomes. Cognitive realm is a realm that includes mental (brain) activities. According to Bloom, all efforts concerning brain activity are included in the cognitive realm. In the cognitive domain, there are six levels of thinking processes, starting from the lowest level (C1) to the highest level (C6). According to the findings of the investigation, the questions in fiqh subjects are still at the cognitive level C1 to C3. C1 controls the cognitive level with a substantially higher percentage than the other cognitive levels, namely 74.5%. While just 22% of questions are at the cognitive level of C2, 3% are at C3, and 0.5% is at C6. At cognitive levels C5 and C6, there were no questions. At cognitive levels C5 and C6, there were no questions. Because the teacher's assessment mainly stresses recognizing or recalling facts at levels C4 and C5, students are accustomed to having knowledge at this level. Based on this percentage, it is possible to conclude that the learning evaluation questions in figh disciplines do not have good proportions.

The content of HOTS in fiqh matters is very important considering the atmosphere of human civilization is entering the 5.0 era. The Covid-19 pandemic that has hit various countries, including Indonesia, requires HOTS to filter the rapid flow of incoming information. If the HOTS from C1 to C6 – especially C6 – are not included in school questions, it is not impossible that students will become a generation that is paralyzed cognitively, affectively and psychometrically. In this context, the implementation of HOTS in school questions finds its significance point.

Based on previous research, teacher learning evaluation questions are expected to be able to create questions that can cause students to reach the stage of high-level thinking, so that students not only have the ability to remember the lessons that have been given, but they are also expected to be able to create something new. This can be good to both him-self and the environment

By paying attention to the test questions that have been analyzed by researchers in accordance with Bloom's Taxonomy theory, it can be seen that the thinking skills possessed by students based on the test questions given are still in the category of low-order thinking skills because they are still in the knowledge category, understanding and application. While the questions that fall into the category of analysis, synthesis and evaluation are still very few. So it is hoped that in the future teachers will make learning evaluation questions that further hone the thinking skills possessed by students, not only at the stage of knowledge, understanding and application should be at the stage of analysis, synthesis and evaluation

In the 2013 curriculum, it is expected that students can have the ability to think not only at the limit of knowledge but must come to creating or evaluating, so that teachers should also be able to make questions that can train students' thinking skills and can achieve high-level thinking skills. The 2013 curriculum has adopted Bloom's revision according to Anderson starting from the level of knowing, understanding, applying, analyzing, evaluating and creating, because the demands of the 2013 curriculum must reach the creative stage, students must continue to be trained to produce something new.

The curriculum used in Junior High Boarding School Serang is the 2013 curriculum, which is expected to improve the ability and ways of thinking critically or high-level thinking for students (Hidayat et al., 2021; Mulianah & Hidayat, 2021). Students are expected to have the ability to think not only at the level of knowing, understanding and applying where the level of this way of thinking based on Bloom's Taxonomy is included in the category of low-level thinking, but students are expected to have high-level thinking skills (analyze, synthesize, and evaluate). So that the teacher is expected to be able to make questions that can hone the thinking skills possessed by students so that students can achieve high-level thinking skills, namely up to the evaluation stage.

The results of the item reliability value, which is 0.90, which means that the reliability of the question is good, which is in the range 0.80 - 0.90. While the Cronbach alpha value is 0.69, which means the reliability value between students and items is categorized as sufficient.

Conclusion *

Based on the fiqh exam questions at Junior High Boarding School Serang which became the focus of the author's research, it shows that the questions are still standardized on C1 and C2, where the questions have not been directed at higher-order thinking skills. So from these questions it can be

seen that students are still at the stage of low order thinking skills. Meanwhile, the analysis of the quality of the items using the Rasch Model analysis showed that the items tended to be at a moderate level (65%). The tested items also met the item criteria based on the Outfit Mean Square (MNSQ), Outfit Z-Standard (ZSTD) and Point Measure Correlation values. Reliability items are also categorized as good. The questions made by the figh teacher are still not as expected, namely leading to HOTS-based tests.

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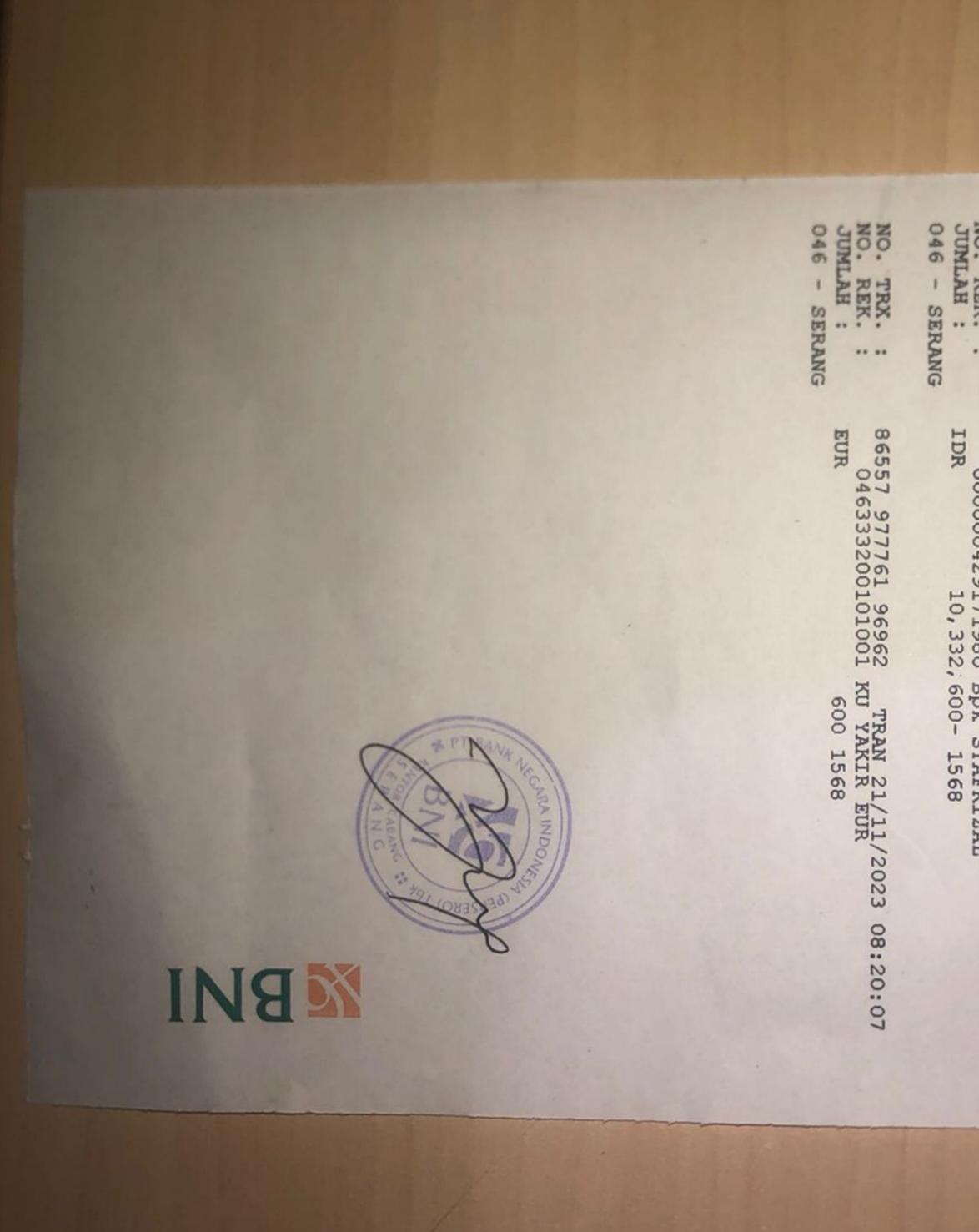
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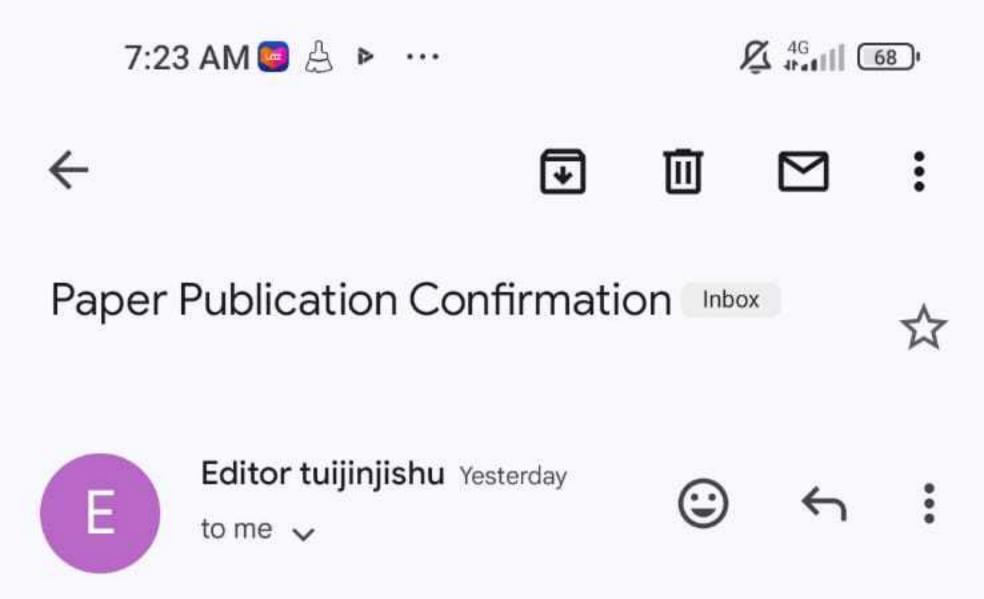
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