

**THE EFFECT OF HIGHER-ORDER THINKING SKILLS
(HOTS)-BASED ASSESSMENT ON THE DEVELOPMENT
OF STUDENTS' CRITICAL AND CREATIVE THINKING
SKILLS AT SMA AL-AZHAR MANDIRI PALU**



A THESIS

*Submitted as a Partial Fulfillment of the Requirements for the Master Degree of
Islamic Education Department (M.Pd.) at Postgraduate of State Institute for
Islamic Studies (IAIN) Palu*

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DECLARATION

With full awareness, I declare that the thesis entitled "**The Effect of Higher-Order Thinking Skills (HOTS)-based Assessment on The Development of Students' Critical and Creative Thinking Skills at SMA Al-Azhar Mandiri Palu**" is genuinely my original work. If someday it is proven as a duplication, imitation, or written by someone else in whole or part, then the thesis and degree acquired will be void.

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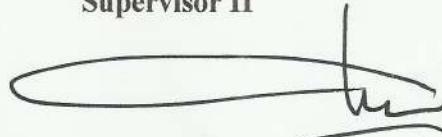
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TRANSLITERATION GUIDELINE

Transliteration of Arabic Latin in this thesis using transliteration guidelines based on the joint decision by Minister of Religious Affairs and the Minister of Education and Culture of Republic Indonesia No. 158 of 1987 and No. 0543b/U/1987, which generally can be described, as follows:

A. Alphabet

ا	= a	ز	= z	ق	= q
ب	= b	س	= s	ك	= k
ت	= t	ش	= sy	ل	= l
ث	= ts	ص	= sh	م	= m
ج	= j	ض	= dl	ن	= n
ح	= h	ط	= th	و	= w
خ	= kh	ظ	= zh	ه	= h
د	= d	ع	= ‘	ء	= ’
ذ	= dz	غ	= gh	ئ	= y
ر	= r	ف	= f		

B. Long Vocal

Vowel length (a)	= ָ
Vowel length (i)	= ֵ
Vowel length (u)	= ֶ

C. Diphthong Vocal

أو	= aw
أي	= ay
ؤ	= ֻ
ئي	= ֵ

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18. Thesis Consultation Book
19. Research Documentation
20. Curriculum Vitae

ABSTRACT

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Title : THE EFFECT OF *HIGHER-ORDER THINKING SKILLS* (HOTS)-BASED ASSESSMENT ON THE DEVELOPMENT OF STUDENTS' CRITICAL AND CREATIVE THINKING SKILLS AT SMA AL-AZHAR MANDIRI PALU

This research is motivated by the lack of application of HOTS (*Higher-Order Thinking Skills*) based assessment in Islamic Education subjects, while on the other hand, the purpose of education in the 21st century expects students to be able to develop critical and creative thinking skills in all subjects.

This thesis's objective was to determine the significant effect of *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' critical and creative thinking skills at SMA Al-Azhar Mandiri Palu.

This thesis was quantitative research, where the data was nominal and aims to test the hypothesis. The sample in this research amounted to 80 people, who were taken using the Slovin formula. Data collection techniques through questionnaires and documentation. The collected research data were processed using the Statistical Product and Service Solution computer program (SPSS 25) and analyzed using a simple linear regression analysis model.

The results prove that HOTS-based assessment significantly affects the development of students' critical and creative thinking skills at SMA Al-Azhar Mandiri Palu. These results were acquired after testing the hypothesis between the X variable (HOTS-based assessment) on the Y₁ variable (critical thinking skills) and the Y₂ variable (creative thinking skills). Where the t_{statistics} value of the Y₁ variable was 6,098, and the t_{statistics} value of the Y₂ variable was 5,879 were greater compared to the t_{table} value, which is 1,990. So the hypothesis Ha, which reads "There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' critical and creative thinking skills at SMA Al-Azhar Mandiri Palu," is accepted. Also, based on the results obtained through the simple linear regression equation model shows that the regression coefficient value of variable X (HOTS-based assessment) has a positive effect on variable Y₁ (critical thinking skills) and variable Y₂ (creative thinking skills).

This research implication was that the teachers could be more committed to implementing HOTS-based assessments because it can ease the teachers to improve students' critical and creative thinking skills. The students no longer accept knowledge for granted, but they deepen the knowledge by analyzing, linking, determining differences with other knowledge they have received and identifying that knowledge's novelty.

ABSTRAK

Nama : Farhah Utami
NIM : 02.11.09.18.008
Judul : PENGARUH PENILAIAN BERBASIS HOTS (*HIGHER-ORDER THINKING SKILLS*) TERHADAP PENGEMBANGAN KETERAMPILAN BERPIKIR KRITIS DAN KREATIF PESERTA DIDIK DI SMA AL-AZHAR MANDIRI PALU

Penelitian tesis ini dilatar belakangi oleh minimnya penerapan penilaian berbasis HOTS (*Higher-Order Thinking Skills*) pada mata pelajaran Pendidikan Agama Islam (PAI), sementara disisi lain tujuan pendidikan pada abad 21 ini mengharapkan peserta didik untuk bisa mengembangkan keterampilan berpikir kritis dan kreatifnya dalam semua mata pelajaran.

Tesis ini membahas tentang “Pengaruh Penilaian berbasis HOTS (*Higher-Order Thinking Skills*) Terhadap Pengembangan Keterampilan Berpikir Kritis dan Kreatif Peserta Didik di SMA Al-Azhar Mandiri Palu”. Fokus permasalahan dalam penelitian ini adalah untuk mengetahui apakah penilaian berbasis HOTS secara signifikan mempengaruhi pengembangan keterampilan berpikir kritis dan kreatif peserta didik di SMA Al-Azhar Mandiri Palu.

Jenis penelitian ini adalah penelitian kuantitatif, datanya bersifat nominal dan bertujuan untuk menguji hipotesis yang telah ditetapkan. Sampel dalam penelitian ini berjumlah 80 orang, yang diambil dengan menggunakan rumus *Slovin*. Data penelitian yang telah terkumpul diolah dengan menggunakan bantuan program komputer SPSS (*Statistical Product and Service Solution*) dan dianalisis dengan model analisis regresi linear sederhana.

Hasil data menunjukkan bahwa penilaian berbasis HOTS secara signifikan mempengaruhi pengembangan keterampilan berpikir kritis dan kreatif peserta didik di SMA Al-Azhar Mandiri Palu. Hasil ini didapatkan setelah dilakukan pengujian hipotesis antara variable X (Penilaian berbasis HOTS) terhadap variable Y₁ (Keterampilan berpikir kritis) dan variabel Y₂ (Keterampilan berpikir kreatif). Dimana nilai T_{hitung} variabel Y₁ yaitu 6,098 dan nilai T_{hitung} variabel Y₂ yaitu 5,879 lebih besar dibandingkan nilai t_{tabul} yaitu 1,990. Maka hipotesis H_a yang menyatakan “Terdapat pengaruh yang signifikan antara penilaian berbasis HOTS terhadap pengembangan keterampilan berpikir kritis dan kreatif peserta didik di SMA Al-Azhar Mandiri Palu” **diterima**. Selain itu juga dari hasil yang diperoleh melalui model persamaan regresi linear sederhana menunjukkan bahwa nilai koefisien regresi variabel X (penilaian berbasis HOTS) memberikan pengaruh yang positif terhadap variable Y₁ (Keterampilan berpikir kritis) dan variabel Y₂ (Keterampilan berpikir kritis).

Implikasi penelitian ini adalah guru-guru menjadi lebih berkomitmen dalam menerapkan penilaian berbasis HOTS karena hal tersebut akan memudahkan guru dalam mengembangkan keterampilan berpikir kritis dan kreatif peserta didik. Peserta didik tidak lagi menerima pengetahuan begitu saja, tetapi mereka memperdalam pengetahuan tersebut dengan menganalisis, menghubungkan, dan menentukan perbedaan dengan pengetahuan lain yang mereka sudah terima dan mengidentifikasi kebaruan dari pengetahuan tersebut.

CHAPTER I

INTRODUCTION

A. Background of the Research

Thinking is a mercy and a gift from Allah SWT. The ability to think is an inherent nature of every human being. With the ability to think Allah SWT distinguishes and increases the degree or position of man from all of His creations. Therefore, Allah SWT commanded man to think. In QS. Al-Imran verse 190-191, Allah SWT reminds man about the priority of thinking.

إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَالْخَلَافِ الَّذِي وَالنَّهَارُ لَآيَاتٍ لِّأُولَئِي الْأَلْبَابِ {190} الَّذِينَ يَذْكُرُونَ اللَّهَ قِيَامًا وَقُعُودًا وَعَلَى جُنُوبِهِمْ وَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَذَا بَاطِلًا سُبْحَانَكَ فَقِنَا عَذَابَ النَّارِ {191}

Meaning:

"Indeed, in the creation of the heavens and the earth and the alternation of the day and night, there are signs for people of reason. 'They are' those who remember Allah while standing, sitting, and lying on their sides, and reflect on the creation of the heavens and the earth 'and pray', "Our Lord! You have not created 'all of' this without purpose. Glory be to You! Protect us from the torment of the Fire."¹

The verse above signifies that there are signs for those who think and contemplate the creation of the heavens and the earth. Man is required to think as well as contemplate, not just understanding, but must think about who created it,

¹Ahmad Hatta, *Tafsir Qur'an Perkata Dilengkapi dengan Asbabun Nuzul & Terjemah*, (Mataram: Maghfirah Pustaka, 2010), 75.

for whom it was created, and the use of its creation. Hence, man is expected to embrace the ability to think critically and creatively.

However, in Islam, thinking critically and creatively has limits that cannot be violated by man. Students can think and contemplate everything concerning Allah SWT's creatures but do not ever think and ponder Allah SWT's substance and essence. Because if they think about Allah SWT's substance and essence, it could lead to an assumption that Allah SWT is similar to the creatures they have seen, such as having hands like humans, consuming food and drink like humans. Therefore, teachers must train students to think critically and creatively, according to Islam's boundaries. Especially in the 21st century, students should be aware of what could be classified as knowledge and the reliable means of knowledge.

In the 21st century, technologies are developing rapidly and affecting human life. It has even become a fundamental necessity in human life. Technological advances allow for automation to occur almost in all fields. According to Tjandrawinata, new technologies and approaches that combine the physical, digital, and biological worlds will fundamentally change the life patterns and human interactions.² It indicates that in the 21st century challenges human beings to be able to respond to various changes quickly and effectively. Therefore, the first step in confronting the 21st century challenges is to increase the quality and competency of human resources by developing their critical and creative thinking skills through education.

²Raymond R. Tjandrawinata, "Industri 4.0: Revolusi Industri Abad Ini dan Pengaruhnya Pada Bidang Kesehatan dan Bioteknologi, *Medicinus Journal*, Vol. 29, No. 1, April 2016, 33.

Education facilitates human beings to be able to develop their identity so thus forming the character of human beings who has faith and devoted to God Almighty, morality noble, healthy, knowledgeable, competent, creative, independent, and become a democratic and responsible citizen. Especially in Islamic education, teachers are expected to create students who are religious and have a noble character, namely students who are knowledgeable, diligent in worship, intelligent, productive, honest, fair, ethical, disciplined, tolerant (tasamuh), maintain personal and social harmony, and develop a religious culture in the school community.³

In simple terms, education can be interpreted as an effort to help students develop their full potential as a provision of living that suits the needs of the era, so that there is no gap between reality and ideality and able to become adaptive and dynamic human being.

As mandated in Undang-Undang Republik Indonesia, Number 20 the year 2003 on National Education System (SISDIKNAS) Chapter 1 Article 1 Paragraph 1 stated that:

Education means conscious and well-planned effort in creating a learning environment and learning process so that learners will be able to develop their full potential for acquiring spiritual and religious strengths, develop self-control, personality, intelligence, moral and noble character, and skills that one needs for himself, for the community, for the nation, and for the State.⁴

³Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 22 Tahun 2006 Tentang Standar Isi

⁴Undang-Undang Republik Indonesia Number 20 the Year 2003 on National Education System, 6.

Getting the ball rolling, educational institutions need a curriculum as a guideline in conducting educational operational activities that lead to the development of students' self-potential. Curriculum as a means of achieving national education goals is actively developed by the demands of changes and developments that occur in society. So the curriculum will continue to experience changes and revisions, as in the case with the 2013 curriculum, which has just undergone improvements.

Based on Permendikbud No. 59, the year 2014 concerning the 2013 curriculum stated that one of the bases of curriculum improvements was the presence of internal and external challenges. External challenges related to the current globalization and various issues such as environmental issues, technological and information advancements, industries advancements, culture, and the development of international education. Therefore, to face this increasingly complex challenge, education is expected to equip students to possess the essential skills in this 21st century.

According to Trilling and Fadel in Hendraman, there are three types of skills that students must have in the 21st century, namely: Learning Skills, Literacy Skills, and Life Skills. Learning skills comprise of Critical Thinking, Creative Thinking, Collaborating, and Communicating. Literacy skills consist of Information Literacy, Media Literacy, and Technology Literacy. Life skills include Flexibility, Initiative, Social Skills, Productivity, and Leadership.⁵

⁵Hendraman, "Challenges for 21st Century Learning in Indonesia", *Proceeding: The Fourth International Conference on Education and Language*, Bandar Lampung University, May 2016, 21.

Anies Baswedan said that creating students who have skills in the 21st century is a challenge to education in Indonesia. Therefore, he categorized the skills into three, as shown below:

1. Character Quality (How students adapt to the dynamic environment); Devotion, Integrity, Respectful, Curiosity, Initiative, Persistent, Adaptability, Leadership, Social and Cultural Awareness.
2. Basic Literacy (How students implement basic Literacy in daily life); Reading and Writing Literacy, Numeracy, Scientific Literacy, ICT Literacy, Financial Literacy, Cultural and Civic Literacy.
3. Competency (How students solve complex problems); Critical Thinking & Problem Solving, Creativity and Innovation, Communication, and Collaboration.⁶

So it is evident that education in Indonesia is expected to improve the learning and assessment process that can result in the development of the underlying potential of students. So, the students can thrive and be able to face challenges in the current era.

In connection with challenges and demands of life, the 2013 curriculum was designed with various improvements. Improvements include content standards by reducing irrelevant material and enriching the needs of students to think critically and analytically according to international standards. While on the assessment standards by adapting international standard assessment models that provided space on the development of assessment instruments in measuring higher-order thinking skills.⁷ Based on improvements that have been made, the learning and assessment process in the 2013 curriculum is expected to assist the students in improving their higher-order thinking skills.

⁶Ibid.

⁷Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan, *Modul Penyusunan Soal Higher-Order Thinking Skills (HOTS)*, (Jakarta, 2017), 1.

Higher-order thinking skills are the ability to think that is not merely memorizing information or knowledge. In connection with this statement, Baker in Mohamed added that the higher-order skills cover all intellectual activity that does not just recall information.⁸ Higher-order thinking skills are the ability to think more complex where someone can critically analyze, connect and develop the acquired information so that he can make decisions precisely in resolving the problems he faced.

Higher-order thinking skills are thinking skills needed by the students in the 21st century because as time goes by, science will develop relentlessly, and live competition will be tighter. The students were expected to be ready to compete and be able to adjust to these changes and also can continue to develop their potential so that they become skilled in analyzing a problem and can make a decision quickly and accurately.

Hence, it takes a Higher-Order Thinking Skills (HOTS)-based learning. Learning that is no longer limited to obtaining knowledge, but learning where the teacher should be able to explore and develop students' basic potential leading to higher-level thinking skills. So students can have critical and creative thinking skills. Also, the learning process must be performed in a fun, challenging, and inspiring way so that students are motivated to participate actively.

Helmawati also added that:

Higher-order thinking skills-based learning should be performed interactively, fun, inspiring, challenging, motivating students to actively

⁸Razmawaty Mohamed and Othman Lebar, "Authentic Assessment in Assessing Higher-Order Thinking Skills", *International Journal of Academic Research in Business and Social Sciences*, Vol. 7, No. 2, Malaysia, 2017, 469.

participate, as well as providing sufficient space for the initiative, creativity, and independence in accordance with the talents, interests, and physical and psychological development of students.⁹

Corresponds to the 2013 curriculum learning paradigm, namely how teachers can implement learning with a scientific approach and put students at the centre of the learning process so they can create an active, collaborative, participatory learning, and able to stimulate students' critical and analytical thinking skills. As for the learning models that can be used in HOTS-based learning consist of Discovery or Inquiry Learning; Problem-Based Learning; and Project-Based Learning. Therefore, teachers must optimize the implementation of scientific approach and learning models so that HOTS-based learning objectives can be achieved.

To measure the success of HOTS-based learning objectives are achieved, it requires a HOTS-based assessment. HOTS-based assessment instruments were developed based on higher-order thinking skills indicators, namely, analyzing (C4), evaluating (C5), and creating (C6).¹⁰ The teachers are expected to get the students accustomed to answering HOTS questions so that their critical and creative thinking skills can thrive also intensify their competitiveness. By implementing HOTS-based assessment, the teachers can equip the students to have several competencies required in the 21st century.

In 2018 the Ministry of Education and Culture issued a policy that in the National Examination the HOTS-based questions would be included, besides that

⁹Helmawati, *Pembelajaran dan Penilaian Berbasis HOTS (Higher Order Thinking Skills)*, (Bandung: Remaja Rosdakarya, 2019), 149.

¹⁰Pipit Pudji Astutik, *HOTS Berbasis PPK dalam Pembelajaran Tematik*, (Surabaya: Pustaka Media Guru, 2018), 6.

in the 2019 SBMPTN and the CPNS test also used HOTS-based items. It means that every educational institution should implement HOTS-based assessment. However, reality shows many schools that have not implemented HOTS-based assessment. Although the learning process has led to the development of students higher-order thinking skills, yet in applying HOTS-based assessments, some teachers felt difficult while drafting HOTS-based questions. It is because there has not been evenly held a workshop or training on drafting HOTS-based questions. Besides, there are some among the teachers who think that by implementing HOTS-based assessments, students will have trouble while answering the problem and causing decreased performance. Therefore, teachers should be prepared with changes that will continue to occur along with the development of the time because teachers count on producing qualified students who can face the challenges of the 21st century.

SMA Al-Azhar Mandiri Palu is one of the schools that has implemented HOTS-based learning and assessment. The observation result shows that the school has implemented learning models that lead to the development of students' higher-order thinking skills. In the learning process, teachers combining the scientific approach with learning models such as Discovery or Inquiry Learning; Problem-Based Learning; and Project-Based Learning which are characteristic of HOTS-based learning. HOTS-based assessment over and above has been implemented in each subject. Teachers train their students with questions to measure students' ability to memorizing the information, analyzing, evaluating,

and solving the problem, so that the teacher recognizes the development of students' thinking skills.

Based on these conditions, the author was motivated to find out how influential HOTS-based assessment on the development of students' critical and creative thinking skills at SMA Al-Azhar Mandiri Palu.

B. Research Questions

Based on the background description, the main problem in this research is "Is there any effect of higher-order thinking skills (HOTS)-based assessment on the development of students' critical and creative thinking skills in SMA Al-Azhar Mandiri Palu?". Based on that, the author elaborates it in two problem formulations, namely as follows:

1. Is there any significant effect of higher-order thinking skills (HOTS)-based assessment on the development of students' critical thinking skills in SMA Al-Azhar Mandiri Palu ?
2. Is there any significant effect of higher-order thinking skills (HOTS)-based assessment on the development of students' creative thinking skills in SMA Al-Azhar Mandiri Palu ?

C. Objectives of the Research

Following formulations of the problem that has been described, the purposes of this research are namely as follows:

1. To know the significant effect of higher-order thinking skills (HOTS)-based assessment on the development of students' critical thinking skills in SMA Al-Azhar Mandiri Palu.
2. To know the significant effect of higher-order thinking skills (HOTS)-based assessment on the development of students' creative thinking skills in SMA Al-Azhar Mandiri Palu.

D. Significance of the Research

The benefits that can be drawn from this research are as follows:

1. Theoretically, this research is expected as one of the authors' contributions in enriching knowledge and insight about the effect of higher-order thinking skills (HOTS)-based assessment on the development of students' critical and creative thinking skills, as well as expected to be an additional source of references and an input material for the development of higher-order thinking skills (HOTS)-based assessments' theory and also critical and creative thinking skills' theory, both through formal, non-formal and informal educational pathways.
2. Practically, this research is expected to:
 - a. The teachers, as information in developing students' critical and creative thinking skills through higher-order thinking skills (HOTS)-based assessment to improve and develop students who

can face the 21st century's challenges and can think critically and creatively according to Islam's boundaries.

- b. The author, the existence of this research will increase authors' knowledge and experience about the urgent need to implement higher-order thinking skills (HOTS)-based assessment, particularly in Islamic studies. Because nowadays, the implementation of HOTS-based assessment only applies in math, physics, chemistry, etc. While in Islamic studies, almost none.

E. Thesis Outline

This thesis consists of five chapters; each chapter has its discussion but closely interrelated between one chapter and the others. As for the thesis outline used in this thesis are as follows:

In the first chapter, the author presents the introduction that provides a general picture of the entire contents of the research that consists of the background, research questions, objectives of the research, significance of the research, as well as the thesis outline.

In the second chapter, the author presents a literature review that will use as a theoretical reference in this research. It consists of four subchapters that begin with previous studies, then continued to discuss the conceptual description of *Higher-Order Thinking Skills* (HOTS)-based assessments and thinking skills that comprise of critical thinking skills and creative thinking skills. Then continued to discuss the theoretical framework and hypotheses of the research.

In the third chapter, the author presents the research methods. It consists of eight subchapters namely research paradigm and approach, time and place of the research, population and samples, research variables, operational definitions, research instruments, data collection technique, and finally data analysis technique.

Furthermore, in the fourth chapter, the author will explain the results and discussion of research that consist of a general description of SMA Al-Azhar Mandiri Palu, respondents' data descriptions, research instrument test, and analysis of frequency distribution, and discussion of research results.

As a closing chapter, chapter five describes this research's conclusions and suggestions as a reference for future improvement.

CHAPTER II

LITERATURE REVIEW

A. Previous Studies

As a material of the literature review, the author describes three previous studies related to the problems that will be examined in this research. The author will show the differences and similarities of these studies. By presenting the previous studies, it can facilitate the author in determining the systematic steps during the research arrangement both in terms of theory and concept also it can be used as a benchmark and reference during the writing process. Three previous studies that have similarities are as follows:

First, a thesis was written by Nur Astuti Puspaningtyas with the title “*Peningkatan Higher Order Thinking Skills (HOTS) Melalui Strategi Pembelajaran Peningkatan Kemampuan Berpikir (SPPKB) pada Pembelajaran Ekonomi Kelas X SMK Muhammadiyah 1 Wates*” in 2018. This study aimed to find out: (1) the effectiveness of the implementation of TAELS in Economics learning in Grade X of SMK Muhammadiyah 1 Wates on the improvement of HOTS, and (2) whether the implementation of TAELS in Economics learning in Grade X of SMK Muhammadiyah 1 Wates was better than the conventional learning method. This was a quasi-experimental study. The results showed that (1) the implementation of the TAELS learning model was effective in improving HOTS in Economics learning, and (2) the results of ANCOVA indicated that the implementation of TAELS in Economics learning in Grade X of SMK

Muhammadiyah 1 Wates was better than that of the conventional learning model. Students who learn through the TAELS learning model got a higher improvement of HOTS than those students who learn through the lecture learning models.¹

Apart from the differences that lie in the location, theme, objectives, substance, and type of research. This previous study is more focused on student's higher-order thinking skills (HOTS) who experience improvement through implementing the Thinking Ability Enhancement Learning Strategy (TAELS) learning model. Whereas in this Research, the author focuses more on how influential the higher-order thinking skills (HOTS)-based assessment on the development of student's critical and creative thinking skills. As for the similarities are to study the correlation between higher-order thinking skills (HOTS) and thinking skills.

Second, a study by Lindawati, Antomi Saregar, and Yuberti with the title "*Pengembangan Instrumen Authentic Assessment untuk Mengukur Higher-Order Thinking Skills Peserta Didik*" in 2016. This study aimed to produce an authentic assessment instrument to measure student's higher-order thinking skills (HOTS) at grade X of SMA/MA in Physics subject, which categorized eligible to be used. It was an R&D (Research and Development) type of research and used the development steps of Borg and Gall adopted by Sugiono. Based on the result of validation by 8 expert lecturers and 3 teachers, it produced an authentic assessment instrument to measure student's higher-order thinking skills (HOTS)

¹Nur Astuti Puspaningtyas, "Peningkatan Higher Order Thinking Skills (HOTS) Melalui Strategi Pembelajaran Peningkatan Kemampuan Berpikir (SPPKB) pada Pembelajaran Ekonomi Kelas X SMK Muhammadiyah 1 Wates", *Skripsi Tidak Diterbitkan*, (Yogyakarta: Jurusan Pendidikan Ekonomi, Fakultas Ekonomi, Universitas Negeri Yogyakarta, 2018), 8.

at grade X of SMA/MA in Physics subject that is eligible to be used. The percentage of each validator was 77.03% assessment eligibility with an eligible category, 82.5% material eligibility with a very eligible category, 85.5% media eligibility with a very eligible category, and 94.4% language eligibility with a very eligible category.²

Based on the description, it can be concluded that this previous study more focused on producing authentic assessment instrument that is eligible to be used in measuring students' higher-order thinking skills. While this research is a type of quantitative research that focuses more on finding out how much the percentage of higher-order thinking skills-based assessments affect the development of students' critical and creative thinking skills. As for its similarity is to focus on higher-order thinking skills-based assessment. That's why this previous study became a reference for the author in determining the indicators of higher-order thinking skills-based assessment.

Third, a study by Binti Muchsini with the title "Integration of Higher-Order Thinking Skills in Assessment Instrument Accounting Computer at Higher Education" in 2015. This study aimed to know the feasibility and effectiveness of the integration of higher-order thinking skills on an instrument of assessment observed from critical thinking skills. This study used the experimental research method. The result of this research showed that the assessment instrument which

²Lisnawati, et al., "Pengembangan Instrumen Authentic Assessment untuk Mengukur Higher Order Thinking Skills (HOTS) Peserta Didik", *Prosiding: Seminar Nasional Pendidikan*, (Bandarlampung: Fakultas Keguruan dan Ilmu Pendidikan, Universitas Lampung, 28 Mei 2016), 140.

integrated with higher-order thinking skills is declared feasible to used and effective to measure critical thinking skills.³

The difference is that this previous study focused more on the effectiveness of using assessment instruments integrated with higher-order thinking skills in measuring students' critical thinking skills. In comparison, this research focuses not only on students' critical thinking skills but also on student's creative thinking skills. As for its similarity is to focus on the effect of higher-order thinking skills-based assessment on students' critical thinking skills.

Simply the differences and similarities between previous studies and this research can be seen in the table below.

**Table 2.1
Previous Studies**

No.	Name of Researcher, Title and Year of Research	Similarity	Difference	Originality of Research
1.	Nur Astuti Puspaningtyas, <i>Peningkatan Higher-Order Thinking Skills (HOTS) Melalui Strategi Pembelajaran Peningkatan Kemampuan Berpikir (SPPKB) pada Pembelajaran Ekonomi Kelas X SMK Muhammidayah 1 Wates, 2018.</i>	Study on the correlation between higher-order thinking skills (HOTS) and thinking skills	Study on student's higher-order thinking skills (HOTS) who experience improvement through implementing the Thinking Ability Enhancement Learning Strategy (TAELS) learning model	The effect of higher-order thinking skills (HOTS)-based assessment on the development of student's critical and creative thinking skills
2.	Lindawati, Antomi	The similarity is Producing		

³Binti Muchsini, "Integration of Higher Order Thinking Skills in Assessment Instrument Accounting Computer at Higher Education", *Proceeding: International Conference on Teacher Training and Education*, (Surakarta: Faculty of Teacher Training and Education, Sebelas Maret University, 2015), 332.

	Saregar, dan Yuberti, <i>Pengembangan Instrumen Authentic Assessment untuk Mengukur Higher-Order Thinking Skills Peserta Didik</i> , 2016.	to focus on higher-order thinking skills-based assessment	authentic assessment instrument that is eligible to be used in measuring students' higher-order thinking skills	
3.	Binti Muchsini, <i>Integration of Higher-Order Thinking Skills in Assessment Instrument Accounting Computer at Higher Education</i> , 2015.	Study on the effect of higher-order thinking skills-based assessment on students' critical thinking skills	Study on the effectiveness of using assessment instruments integrated with higher-order thinking skills in measuring students' critical thinking skills	

According to the table and description above, it shows that the three studies contribute to the author in researching because each of those studies discussed the components of higher-order thinking skills-based assessment, so it became the basis of authors' thoughts in seeing the interrelationship between higher-order thinking skills-based assessment and its effect on developing students' thinking skills.

B. Conceptual Description

1. Higher-Order Thinking Skills (HOTS)-based Assessment

Assessment is one of the components of the learning process. It conducted to measure and evaluate the success or the failure of a learning process. Based on Permendikbud No. 23 of 2016, assessment is the process of gathering and processing information to measure the achievement of students' learning outcomes.⁴

⁴Peraturan Menteri Pendidikan dan kebudayaan Republik Indonesia Nomor 23 Thaun 2016 Tentang Standar Penilaian Pendidikan Bab 1, Pasal 1, Ayat 2, 2.

The word ‘assess’ means number or letter, which symbolizes the extent of students’ ability shown on the tested material following the predetermined indicators.⁵ Thus, assessment is the process of giving or determining the grade of students based on specific criteria. By conducting the assessment, the teacher as a maintainer of learning activities who monitors students’ progress knows the extent of their abilities. Further, assessment results illustrate the success rate of education and also facilitate teachers, parents, students, and governments in determining the steps or efforts to improve the quality of the learning process and outcomes.

Assessment of learning outcomes includes three aspects, namely affective, cognitive, and psychomotor.⁶ The three elements belong to the national standards for the graduate qualification that must be achieved. In connection with the national educational objectives, students are targeted to have these aspects.

Besides aiming to achieve the three aspects, assessment in education needs adjustment to the development and necessity of learning outcomes. To improve and control the quality of student learning outcomes assessment, the government has compiled an Educational Assessment Standard that is useful as a basis for assessing student learning outcomes.

Educational Assessment Standards are criteria regarding the scope, objectives, significances, principles, mechanisms, procedures, and assessment instruments of student learning outcomes used as a basis in assessing student

⁵Modul Pengembangan Profesi Guru PAI, “Konsep dan Penerapan Pengukuran, Penilaian, Tes, dan Evaluasi Pembelajaran”, (Gorontalo: PLPG Rayon LPTK-FTIK IAIN Sultan Amay, 2014), 3.

⁶Helmawati, *Pembelajaran dan Penilaian Berbasis HOTS (Higher Order Thinking Skills)*, (Bandung: Remaja Rosdakarya, 2019), 213

learning outcomes on primary and secondary education.⁷ Thus, providing the value of students learning outcomes must be determined in accordance with the educational assessment standards that have been set.

An assessment is conducted consistently, systematically, and programmatically using tests and non-test in written or oral form, performance observation, attitude measurement, project assignment, portfolio, and self-assessment.⁸ Assessment should be implemented effectively. Therefore, the collection of information that will be used to measure the achievement of student learning outcomes must be complete and accurate to produce accurate decisions.

Assessment is not only focused on learning outcomes but also on the learning process. Many people thought that assessment conducted only to measure students learning outcomes, thus assessment considered as a separate activity from the learning process.⁹ An assessment is conducted through three approaches, namely *Assessment of Learning*, *Assessment for Learning*, and *Assessment as Learning*.

Assessment of learning is an assessment conducted after the learning process is complete. This assessment intends to determine the achievement of learning outcomes after students have finished the learning process. *Assessment for learning* is an assessment conducted during the learning process and used as a basis for improving the teaching and learning processes so that teachers can give feedback on the students' learning process, monitor progress, and determine the learning progress, also teachers can be used as feedback to improve their performance. *Assessment as learning* also conducted during the learning process. The difference is in

⁷Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 23 Tahun 2016 Tentang Standar Penilaian Pendidikan Bab 1, Pasal 1, Ayat 1, 2.

⁸Helmawati, *Pembelajaran dan Penilaian*, 213.

⁹Direktorat Jenderal Guru dan Tenaga Kependidikan Kementerian Pendidikan dan Kebudayaan, *Buku Penilaian Berorientasi Higher-Order Thinking Skills*, (Jakarta, 2019), 5.

this assessment involves students actively, for example, evaluating themself and between friends.¹⁰

Implementing assessments through these approaches impact both sides it improves students' abilities in educators' competence during the learning process. In the assessment, educators can monitor and evaluate the process, learning progress, and improve students learning outcomes continuously.

Following challenges and demands of life, students are expected to have three required competency groups in the 21st century, namely:

- a) Have a good character that includes faith and piety, curiosity, never give up, social and cultural sensitivity, able to adapt, and have high competitiveness,
- b) Have several competencies that include critical and creative thinking, problem-solving, collaboration, and communication, as well as
- c) Mastering literacy includes thinking skills using knowledge sources in print, visual, digital, and auditory form.¹¹

In addition, according to Trilling and Fadel in Hendraman there are four important and necessary skills for education in the 21st Century, namely critical thinking, creative thinking, collaborating, and communicating.¹² Related to the development of education at the international level, the 2013 curriculum was designed with various improvements.

Improvements in the 2013 curriculum include content standards by reducing irrelevant material and enriching the needs of students to think critically and analytically according to international standards. While on the assessment

¹⁰Ibid., 6.

¹¹Direktorat Pembinaan SMA Ditjen Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan, *Modul Penyusunan Higher-Order Thinking Skills (HOTS)*, (Jakarta, 2017), 18.

¹²Hendraman, "Challenges for 21st Century Learning in Indonesia, *Proceeding: The Fourth International Conference on Education and Language*, Bandar Lampung University, May 2016, 21.

standards are by adapting international standard models that provided space on the development of assessment instruments in measuring higher-order thinking skills.¹³ Based on the facts above, the learning and assessment system needs to change.

Assessment is expected to encourage the improvement of critical thinking, creativity, and build self-reliance of students in solving problems. However, students' critical and creative thinking skills can be achieved if they possess higher-order thinking skills. In accordance with Widihastuti, who stated that "by having higher-order thinking skills, students will be able to think critically, creatively, solve problems, make decisions, and have good character".¹⁴

Thus, it can be inferred that students need to be equipped with higher-order thinking skills so that they can prepare themselves on facing all challenges in the 21st century. To find out the extent of students' higher-order thinking skills, then it takes higher-order thinking skills-based assessment. By presenting higher-order thinking skills (HOTS)-based assessments, teachers can train students to hone their skills and abilities under the demands of the 21st century competencies.

a. Definition of Higher-Order Thinking Skills (HOTS)

Higher-Order Thinking Skills (HOTS) is the ability to think at a higher level in the cognitive level hierarchy of Bloom's taxonomy.¹⁵ In connection with

¹³Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan, *Modul Penyusunan Soal Higher-Order Thinking Skills (HOTS)*, (Jakarta, 2017), 1.

¹⁴Widihastuti, "Model Penilaian untuk Pembelajaran Abad 21 (Sebuah Kajian untuk Mempersiapkan SDM Kritis dan Kreatif)", *Prosiding Seminar Nasional Pengembangan SDM Kreatif dan Inovatif untuk Mewujudkan Generasi Emas Indonesia Berdaya Saing Global*, Universitas Negeri Yogyakarta, 2015, 78.

¹⁵Pipit Pudji Astutik, *HOTS Berbasis PPK dalam Pembelajaran Tematik*, (Surabaya: Pustaka Media Guru, 2018), 6.

this statement, Baker in Mohamed added that the higher-order skills cover all intellectual activity that does not just recall information.¹⁶

Thomas and Thorne in Hanifah also argued that higher-order thinking skills are thinking on a level that is higher than memorizing facts or repeating exactly. HOTS takes thinking to higher levels than restating the points and required students to do something with the events such as understand them, infer from them, connect them to other circumstances and concept, categorize them, manipulate them, put them together in new or novel, and apply them as we seek a solution to new problems.¹⁷

Following the statement above, Tran Vui in Anjani also stated that higher-order thinking skills occur when a person takes new information and stored in memory and interrelates or rearranges and extends this information to achieve a purpose or possible answers in perplexing situations.¹⁸

King et. Al in Widana defines higher-order thinking skills as a critical thinking skill, logical, reflective, metacognitive, and creative. These capabilities develop when people have unfamiliar problems, uncertainties, or new phenomenon that requires solutions that have never resolved.¹⁹

¹⁶Razmawaty Mohamed and Othman Lebar, “Authentic Assessment in Assessing Higher-Order Thinking Skills”, *International Journal of Academic Research in Business and Social Sciences*, Vol. 7, No. 2, Malaysia, 2017, 469.

¹⁷Nurdinah Hanifah, “Pengembangan Instrumen Penilaian Higher-Order Thinking Skills (HOTS) di Sekolah Dasar”, *Prosiding Seminar Nasional: Membangun Generasi Emas 2045 yang Berkarakter dan Melek IT*, Vol. 1, No. 1, Tahun 2019, 4.

¹⁸Yulida Fery Anjani, “Analisis Kemampuan Berpikir Tingkat Tinggi Menurut Teori Anderson dan Krathwohl pada Peserta Didik Kelas XI Bilingual Class System MAN 2 Kudus pada Pokok Bahasan Program Linier”, *Skripsi Tidak Diterbitkan*, (Semarang: Jurusan Pendidikan Matematika, Fakultas Sains dan Teknologi, Universitas Islam Negeri Walisongo, 2017), 17.

¹⁹I Wayan Widana, “Higher-Order Thinking Skills Assessment (HOTS)”. *Journal of Indonesian Student Assessment and Evaluation*, Vol. 3, No. 1, February 2017, 35.

Brookhart practically defined higher-order thinking skills using three term, namely HOTS as a transfer, HOTS as critical thinking, and HOTS as problem-solving.

HOTS as a transfer means students can apply the knowledge and skills they develop during their learning to new contexts. So higher-order thinking is conceived as students being able to relate their learning to other elements beyond those they were thought to associate with it. *HOTS as critical thinking* means students can apply wise judgment or produce a reasoned critique and make sound decisions on their own without prompting from teachers. *HOTS as problem-solving* means students can solve problems in their life and work creatively. This includes solving new problems that they define themselves, creating something new as the solution.²⁰

Based on the viewpoint of the experts above, it can be concluded that higher-order thinking skills are the ability to think that is not merely memorizing information or knowledge. Higher-order thinking skills are the ability to think more complex where someone can critically analyze, connect and develop the acquired information so that he can make decisions precisely in resolving the problems he faced.

Benjamin S. Bloom first introduced the term Higher-Order Thinking Skills in 1956 through his book entitled *Taxonomy of Educational Objectives: The Classification of Educational Goals*.²¹ Bloom's taxonomy has become the initial reference in achieving educational goals. Until now, Bloom's taxonomy revision is believed as an authentic taxonomy for curriculum development, learning, and assessment so that it is used as an indicator of Graduates Competency Standards

²⁰Susan M. Brookhart, *How to Assess Higher-Order Thinking Skills in Your Classroom*, (Virginia: Alexandria, 2010), 4-8.

²¹Pajar Purnomo, *Penilaian Pembelajaran HOTS (Higher-Order Thinking Skills)*, (Cilacap: Candradimuka Pers, 2019), 34.

in Indonesia.²² Bloom classified learning objectives into three domains that consist of the cognitive, affective, and psychomotor domains. Each domain contained competence that categorized from the lowest level to the highest level.

In 2001, Lorin Anderson and David Krathwohl revised Bloom's taxonomy to be more adaptive to 21st century learning by proposing another taxonomy that will meet curriculum designers, teachers, and students' needs. Anderson and Krathwohl modified the original terminology by changing Bloom's categories from nouns to verbs.²³ It's because taxonomy needs to reflect an active and dynamic process of thinking. Thus, the use of verbs is effective than nouns.²⁴

Besides, Anderson and Krathwohl renamed the knowledge category into remembering, comprehension into understanding and synthesis into creating categories. They also changed the order of synthesis and placed it at the top of the triangle under the name creating.²⁵

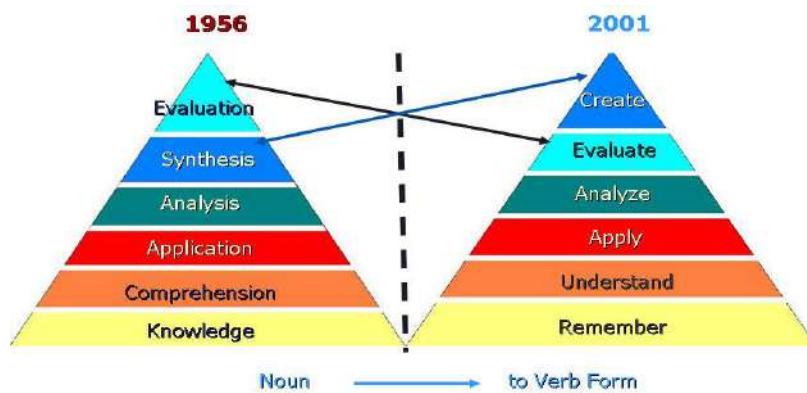


Figure 2.1 The Revised Bloom's Taxonomy by Anderson and Krathwohl

²²Helmawati, *Pembelajaran dan Penilaian*, 157.

²³Basuki & Hariyanto, *Asesmen Pembelajaran*, (Bandung: Remaja Rosdakarya, 2016), 12-14.

²⁴Astutik, *HOTS Berbasis PPK*, 7.

²⁵Afnan Darwazeh, "A Revision to the Revised Bloom's Taxonomy", *The 38th Annual Proceedings of the Association for Educational Communications and Technology*, Vol. 2, 205, 221.

Knowledge is the result of thinking rather than the process, so it is renamed into remembering that shows an initial level of the thinking process. Evaluating placed after analyzing, then creating placed as a synthesis substitute, and its position is at the highest level.²⁶ It shows that Anderson and Krathwohl placed a hierarchy from a simple thinking process into a complicated and difficult thinking process.

Therefore, the hierarchy of students' thinking skills based on Bloom's taxonomy revised by Anderson and Krathwohl, consists of two categories, namely lower-order thinking skills (LOTS) and higher-order thinking skills (HOTS). LOTS include the ability to remember, understand, and apply. While HOTS set the ability to analyze, evaluate, and create.

In this connection, Yousef put forward Newman's opinion to differentiate between the two categories of skills, it concludes that the lower skill requires simple applications and routine steps. In contrast, higher-order thinking skills challenge students to interpret, analyze, or manipulate information.²⁷ Yousef also said that "educators consider higher-order thinking skills as high order thinking that occurs when the student obtains new knowledge and stores it in his memory, then this knowledge is correlated, organized, or evaluated to achieve a specific purpose".²⁸ It indicates that higher-order thinking cannot be separated from lower-order thinking. Lower-order thinking is the basis for higher-order thinking.

²⁶Helmawati, *Pembelajaran dan Penilaian*, 144.

²⁷Yousef Abosalem, "Assessment Techniques and Student's Higher-Order Thinking Skills", *International Journal of Secondary Education*, Vol. 4, No. 1, 2016, 2.

²⁸Ibid.

Besides revising the dimensional structure of cognitive processes, Anderson and Krathwohl also added one dimension, namely the knowledge dimension. The levels in the knowledge dimension include factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge.²⁹ Anderson and Krathwohl described the difference between the cognitive process dimensions and the knowledge dimensions by the words. The cognitive process dimensions used verbs to reflecting a certain process, while the knowledge dimensions used nouns to reflect the object of the process implemented.³⁰

The addition of this dimension is conducted to balance the concept of the learning process in the 21st century, which is an active and constructive learning process. Students are emphasized to recognize and select the information or knowledge and construct their understanding of the information to involve in meaningful learning. Besides, with both dimensions, it is easy for educators to formulate indicators of higher-order thinking skills in education.

Based on Bloom's taxonomy revised by Anderson and Krathwohl, the following are indicators for measuring students' higher-order thinking skills, which include:

1) *Analyze*

Breaking materials or concepts into parts, determining how the parts relate to one another and an overall structure or purpose.³¹ When one is analyzing, he

²⁹Helmawati, *Pembelajaran dan Penilaian*, 145.

³⁰Purnomo, *Penilaian Pembelajaran*, 50.

³¹Desy Nur Fakhomah and Melati Sri Utami, "Pre-Service English Teacher Perception About Higher-Order Thinking Skills (HOTS) in the 21st Century Learning", *International Journal of Indonesian Education and Teaching*, Vol. 3, No. 1, January 2019, 42.

can illustrate this mental function by creating spreadsheets, surveys, charts, or diagrams, or graphic representations. The analyzing process takes in differentiating, organizing, and attributing, as well as being able to distinguish between the components or parts.

- a) Differentiating is the ability to determine and discover which parts are essential.
- b) Organizing is the ability to determine how one element matches the other and can determine the function of that element in a full section.
- c) Attributing is the ability to see from different angles and values held.³²

2) *Evaluate*

Making judgments based on criteria and standards.³³ Critique, recommendations, and reports are the products that can be created to demonstrate the processes of evaluation. In the revised taxonomy, evaluating comes before creating as it is often a necessary part of the precursory behavior before creation. The evaluating process takes in checking and critiquing.

- a) Checking is the ability to see consistency between processes and outcomes.

³²Tea Tasia Wiwin, et al., “Analysis of Students’ Higher-Order Thinking Skills in Solving The Contextual Problem”, *Proceedings: The 5th International Conference on Research, Implementation, & Education of Mathematics and Sciences*, 2018, 227.

³³Lorin W. Anderson and David R. Krathwohl, *A Taxonomy for Learning, Teaching, and Assessing; A Revision of Bloom’s Taxonomy of Educational Objectives*, (New York: Longman Inc., 2001), V.

b) Critiquing is the ability to see inconsistencies between outcomes and external criteria.³⁴

3) *Create*

Putting elements together to form a coherent or functional whole; organizing elements into a new pattern or structure.³⁵ This process is the most difficult in the revised taxonomy because creating requires users to put parts in a new way or synthesize into something new and different. The creation process takes in generating, planning, and producing.

- a) Generating is the ability to generate an alternative hypothesis based on criteria.
- b) Planning is the ability to design a procedure to achieve a particular goal.
- c) Producing is the ability to create a product or something new.³⁶

Therefore in measuring students' higher-order thinking skills, teachers need to use these indicators.

b. Characteristic of Higher-Order Thinking Skills (HOTS)-based Assessment

Higher-Order Thinking Skills (HOTS)-based assessment is highly recommended to be used in both classroom assessments and school exams. To facilitate teachers in preparing HOTS-based assessment, the following characteristics of HOTS-based assessment are described as follows:

³⁴Wiwin, et al., "Analysis of Students, 227.

³⁵Anderson and Krathwohl, *A Taxonomy for Learning, V.*

³⁶Wiwin, et. al., "Analysis of Students, 227.

1) Measuring Higher-Order Thinking Skills

Higher-order thinking skills are one of the essential competencies required by every student in the 21st century. Hence in the learning process, teachers give students the space to discover the concept of knowledge in activities that encourage them to build creativity and critical thinking.

Higher-order thinking skills include the ability to solve problems, critical thinking, creative thinking, argument, and decision-making abilities. So, the level of difficulty in the item is not the same as higher-order thinking skills. For example: to find out the meaning of an unusual word may have a very high level of difficulty. Still, the ability to answer the problem does not include higher-order thinking skills.³⁷ Thus, the items of HOTS-based assessment are not necessarily items that have a high level of difficulty.

2) Based on Contextual Issues

HOTS-based assessments load questions based on real situations in daily life. The problems are related to environmental issues, global issues, health issues, economic issues, education issues, and the utilization of science and technology in various aspects of life. The question could stimulate students to connect their knowledge in different situations. There are five characteristics of contextual assessments, abbreviated as REACT, namely:

Relating: The assessment is directly related to the context of real-life experiences.

Experiencing: The assessment emphasized on exploration, discovery, and creation.

³⁷Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan, *Modul Penyusunan Soal Higher-Order Thinking Skills (HOTS)*, (Jakarta, 2017), 3-4.

Applying: The assessment demand students' ability to apply the knowledge gained in the classroom to solve real problems.

Communicating: The assessment demand students' ability to communicate the conclusion.

Transferring: The assessment demand students' ability to transform the concepts of knowledge in class into new situations or context.³⁸

Therefore, students are expected to solve the problems by implementing, connecting, and integrating the knowledge through contextual-based questions.

3) Using a Diverse Form of Questions

Diverse questions intended to provide more detailed and comprehensive information about students' abilities, guarantee objective principles and describe students' ability the actual circumstances.³⁹ The forms of questions include Multiple-Choice, Complex Multiple-Choice (True/False or Yes/No), Complement Fill, Short Answer, and Description or Essay.

4) Divergent

HOTS-based assessments are divergent because analytical, critical, and creative thinking processes tend to produce unique or different responses for each individual.⁴⁰ So, the questions in HOTS-based assessments must be divergent because it allows students to give various answers based on their thinking processes and viewpoints.

5) Using Multi Representations

HOTS-based assessments generally do not present all information explicitly but compel students to dig out the implied information by themselves. It

³⁸Ibid., 4.

³⁹Modul Pengembangan Profesi Guru PAI, "Konsep dan Penerapan Pengukuran, 6.

⁴⁰Direktorat Jenderal Guru dan Tenaga Kependidikan Kementerian Pendidikan dan Kebudayaan, *Buku Penilaian Berorientasi Higher-Order Thinking Skills*, (Jakarta, 2019), 40.

needs critical in selecting and sorting the necessary information. Therefore, HOTS-based assessment instruments use a variety of representations, such as verbal (sentence form), visual (pictures, charts, graphs, tables, including videos), symbolic (symbols, icons, initials, cues), and mathematic (numbers, formula, equation).⁴¹

In addition, Widiastuti also stated the characteristics of HOTS-based assessment which include:

- 1) The assessment process is integrated with the learning process and is ongoing.
- 2) The assessment process involves four elements, namely sharing learning goals & success criteria, using effective questioning, self-assessment & self-reflection, and feedback.
- 3) The assessment process aims to improve and develop higher-order thinking skills, students' positive attitudes and behaviors, and to improve learning quality.
- 4) The assessment process focuses on developing the ability to apply, analyze, evaluate, and create so that students can think critically, providing logical, analytical, and systematic reasons, solving problems and making decisions quickly and precisely, and creating new products.
- 5) Teachers can provide problems to students as discussion material and problem-solving so that they can stimulate thinking activities.
- 6) The assessment process conducted through discussion, field activities, practicum, compiling practicum reports, and self-assessment.
- 7) HOTS-based assessments can increase students' learning motivation.
- 8) The assessment process also involves students conducting self-assessment and self-reflection on their ability conditions in mastering the material they have learned.
- 9) HOTS-based assessments provide feedback that can correct mistake or clarify a mistakes to students.⁴²

Based on the characteristics of HOTS-based assessment outline, HOTS-based assessments system integrates into the learning process. It leads to the development of higher-order thinking skills, namely the ability to think critically,

⁴¹Ibid., 41.

⁴²Widiastuti, "Model Penilaian untuk, 84-85.

logically, systematically, analytically, evaluatively, and creatively. So that students are accustomed to working on HOTS-based questions.

c. Steps of Compiling Higher-Order Thinking Skills (HOTS)-based Assessment

In developing HOTS-based assessments, teachers are required to master the teaching materials, have skills in writing questions, and creativity in choosing the stimulus used in questions according to the situations and conditions in their surroundings. Because, in compiling HOTS-based assessments, teachers need to determine the competencies they measure and formulate materials as the basic questions. A correct stimulus accompanies the question in a particular context based on the expected skills. Besides, the content with high reasoning is always unavailable in the textbook.⁴³ The following steps to compile HOTS-based assessments are as follows:

1) Analyzing Basic Competencies

Teachers individually or through a KKG/MGMP forum can analyze the basic competencies to be created into HOTS-based questions. Before analyzing the basic competencies, teachers determine the basic competencies based on their level because some of the basic competencies can be formed into HOTS-based question models. Basic competencies on the cognitive level of C4 (Analyze), C5 (Evaluate), and C6 (Create) can be compiled into HOTS-based questions. While the basic competencies on the cognitive level of C1 (Remember), C2

⁴³Direktorat Jenderal Guru dan Tenaga Kependidikan Kementerian Pendidikan dan Kebudayaan, *Buku Penilaian Berorientasi Higher-Order Thinking Skills*, (Jakarta, 2019), 47.

(Understand), and C3 (Apply) cannot be directly compiled into HOTS-based questions.⁴⁴

2) Compiling the Grid of Questions

The grids of compiling HOTS questions aim to assist teachers in writing HOTS items. In general, these grids are necessary to guide teachers in a) Select the basic competencies for HOTS questions; b) Determine the scope of materials related to the basic competencies; c) Formulate an indicator of the problems; d) Determine the question number; e) Determine the cognitive level; and f) Determine the questions form.⁴⁵

3) Choosing Interesting and Contextual Stimuli

The stimulus needs to be arranged interestingly because it will encourage students to read the stimulus. An interesting stimulus is generally new because it has never been read by students, while contextual stimulus means that it suits the reality in daily life, encourages students to read, and teachers can choose the stimulus with a grid of questions.⁴⁶

4) Writing Items According to the Questions Grid.

Writing HOTS items has the same rules as writing items in general. In the construction and language aspects are relatively unvaried, while the difference lies in the material aspects. Then each item must be written on the question card and based on the questions grid.⁴⁷

⁴⁴Ibid., 48.

⁴⁵Ibid., 50.

⁴⁶Ibid., 51.

⁴⁷Ibid.

5) Create a Scoring Guideline or an Answer Key

HOTS items require a scoring guideline or an answer key. Scoring guidelines are made for the essay form items. While the answer key is needed for multiple-choice items, complex multiple choices (true/false, yes/no), and short or complementary fill.⁴⁸

Also, while compiling questions use the 5W1H formula, which is What, Who, Why, When, Where, and How.⁴⁹ However, some of the question words can hone higher-order thinking skills such as why, how, how-to, give reasons, in what ways, and how to act.⁵⁰ Furthermore, teachers allow elaborating on a combination of cognitive and knowledge dimensions.

d. The Role of Higher-Order Thinking Skills (HOTS)-based Assessment

Besides aiming to measure higher-order thinking skills. The HOTS-based assessment has many benefits for the development of students' learning skills. The HOTS-based assessment also has a role as follows:

1) Prepare Competencies of Students in the 21st Century

Assessments conducted by the educational unit are expected to equip students to have several competencies needed in the 21st century.⁵¹ Due to HOTS-based assessment, training activities need to overcome various issues in daily life to build critical thinking, creative thinking, and self-confidence skills.

⁴⁸Ibid.

⁴⁹Helmawati, *Pembelajaran dan Penilaian*, 230-231.

⁵⁰Astutik, *HOTS Berbasis PPK*, 15.

⁵¹Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan, *Modul Penyusunan Soal Higher-Order Thinking Skills (HOTS)*, (Jakarta, 2017), 18.

2) Cultivate a Sense of Love and Care for Regional Progress

Teachers expected to develop HOTS questions creatively according to the situation and condition in their environment. Various cases that occur in the area can be arranged as a contextual stimulus.⁵² Thus, the stimulus in HOTS questions become thought-provoking because it can be seen and perceived directly by the students. So they have the motivation to take part in solving the various cases in their area.

3) Increasing Students' Learning Motivation

The knowledge that students' have learned in the classroom supposed to be directly related to problem-solving in society. So that students can perceive the lesson that they have obtained in the classroom is useful to assist them merge into society. The challenges in the society can be used as a contextual and interesting stimulus in HOTS-based assessment, and it can increase students' motivation to learn.⁵³

4) Enhance the Quality of Assessment

An assessment that has a good quality will enhance the quality of education.⁵⁴ By accustoming students to answer HOTS questions, it is expected that students think critically and creatively as well as have the competitiveness needed in the future.

⁵²Ibid.

⁵³Ibid., 19.

⁵⁴Ibid.

2. Thinking Skills

Essentially, thinking is a mercy and a gift from Allah swt with that He distinguishes and increases the degree or position of man from all of His creations. In QS. Ar-Rum verse 8, Allah swt reminds man about the priority of thinking.

أَوْلَمْ يَتَكَبَّرُوا فِي أَنفُسِهِمْ مَا خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا
بِالْحَقِّ وَأَجَلٌ مُسَمٌّ وَإِنَّ كَثِيرًا مِنَ النَّاسِ بِلِقَاءِ رَبِّهِمْ لَكَافِرُونَ {8}

Meaning:

“Do they not contemplate within themselves? Allah has not created the heavens and the earth and what is between them except in truth and for a specified term. And indeed, many of the people in (the matter of) the meeting with their Lord, are disbelievers.”⁵⁵

From the verse above, it indicates that humans are commanded to think.

Based on the *Great Dictionary of the Indonesian Language*, thinking means using common sense to consider and decide something.⁵⁶ According to Riyanto thinking is:

A condition that lies in the relationship between a persons' knowledge and is controlled by reason. So reason as a force that controls the mind. In other words, thinking means placing a relationship between the parts of knowledge (including all concepts, ideas, and understanding that human beings have acquired) obtained by humans.⁵⁷

Praja in Helmawati also defines thinking as a mental activity to achieve knowledge. Through the senses that exist on the body, humans can receive

⁵⁵ Ahmad Hatta, *Tafsir Qur'an Perkata Dilengkapi dengan Asbabun Nuzul & Terjemah*, (Mataram: Maghfirah Pustaka, 2010), 405.

⁵⁶ Departement Pendidikan dan Kebudayaan, *Kamus Besar Bahasa Indonesia*, (Jakarta: Balai Pustaka, 2010), 767.

⁵⁷ Riyanto, *Psikologi Pendidikan*, (Malang: Universitas Muhammadiyah Malang, 2010), 57.

information stored in the brain. The information becomes knowledge, and knowledge is useful to optimize the functionality of reason.⁵⁸ Reason serves to distinguish between the wrong and the right as well as analyze something whose ability relies heavily on the breadth of one's experience. Helmawati also added that:

Thinking processes are sequences of mental events that occur naturally or are planned and systematic in the context of space, time, and media used, as well as produce a change in the objects that affect it. Thinking processes are the events of mixing, matching, combining, swapping, and ordering previous concepts, perceptions, and experiences.⁵⁹

Based on the definitions of some of the experts above, it can be concluded that thinking is a mental activity that occurs in a planned manner of considering and deciding something by connecting the ideas or concepts. Thus, thinking skills are the ability or intelligence in connecting and developing ideas or concepts precisely as a basis for making decisions.

In the educational world, the process of thinking and its classification have been widely discussed by experts. The best-known classification or taxonomy in education is Bloom's Taxonomy. In the late 90^s, the taxonomy was revised by Lorin Anderson and David Krathwohl and published in 2001. In the revised of Bloom's Taxonomy, six stages of the thinking process are classified as follows:⁶⁰

a. Remember

⁵⁸Helmawati, *Pembelajaran dan Penilaian*, 100.

⁵⁹Ibid., 99.

⁶⁰Anderson and Krathwohl, *A Taxonomy for Learning*, IV-V.

Remember is a thinking process that retrieves relevant knowledge from students' long-term memory. Remember means recognizing or recalling facts and concepts. The remembering processes consist of recognizing and recalling.

b. Understand

Understand is a process of constructing meaning from instructional meaning, including oral, written, and graphic communication. Students will find it easier to understand a thing if the new knowledge they have obtained is integrated with the schemes and frameworks that they have previously identified. This process emphasizes students to construct their own meaning. The understanding processes consist of interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.

c. Apply

Apply means to pursue or use a procedure in a given situation. Apply is the process of using certain procedures or work methods to do exercise or resolve a problem. The applying processes consist of executing and implementing.

d. Analyze

Analyze is the process of breaking material into its constituent parts and determine the correlation of the parts and an overall structure or purpose. The analyzing processes consist of differentiating, organizing, and attributing.

e. Evaluate

Evaluate means make judgments based on certain criteria and standards. The criteria used in evaluating are quality, efficiency, and consistency. The

evaluating standards are both quantitative and qualitative. The evaluating processes consist of checking and critiquing.

f. Create

Create means combine disparate elements to form a coherent or functional whole. So that students can create new products by reorganizing elements into a new pattern or structure. The creating processes consist of generating, planning, and producing. These processes are usually coordinated with students' learning experiences.

The six stages in the taxonomy are used as a basis for compiling educational objectives, tests, and curriculum as well as to facilitate teachers to understand, organize, and implement the educational objectives. Through these stages, thinking skills can be defined as cognitive processes that separate into concrete steps and used as thinking guidelines.

Thinking skills are one of the essential factors that a teacher should notice. Teachers, as educators should guide students to experience the process of thinking from lower-level to higher-level. Notably, in the 21st century, students are required to have higher-order thinking skills optimally as individuals and society members who are critical, independent, and productive.⁶¹

According to Krulik and Rudnik in Agustyaningrum, generally thinking skills consist of four levels, namely recall thinking, basic thinking, critical

⁶¹Pusat Penilaian Pendidikan Badan Penelitian dan Pengembangan kementerian Pendidikan dan Kebudayaan, *Panduan Penulisan Soal HOTS*, (Jakarta: Pusat Penelitian Pendidikan, 2019), 3.

thinking, and creative thinking.⁶² The last two levels of thinking are critical and creative, which are called higher-order thinking processes. Therefore, this research will focus on critical thinking skills and creative thinking skills.

a. Critical Thinking Skills

The word ‘critical’ is derived from the Greek word *kritikos*, which means discernment, the ability to judge, or decision making. Critical thinking requires learning *how* to think rather than simply *what* to think.⁶³ Being critical means giving a fair and unbiased opinion of something.⁶⁴ Regarding that, Lau said in Prasetyawan that critical thinking is thinking clearly and rationally. It involves thinking precisely and systematically, and following the rules of logic and scientific reasoning, among other things.⁶⁵

Dacey and Kenny in Desmita also defined critical thinking is the ability to think logically, to apply this logical thinking to the assessment of situations, and to make good judgments and decisions.⁶⁶ Wijaya also added that critical thinking

⁶²Nina Agustyaningrum, “Mengembangkan Keterampilan Berpikir Tingkat Tinggi dalam Pembelajaran Matematika SMP”, *PYTHAGORAS: Jurnal Program Studi Pendidikan Matematika*, Vol. 4, No. 1, 2015, 41.

⁶³Judith A. Boss, *Think: Critical Thinking and Logic Skills for Everyday Life*, (New York: McGraw-Hill Education, 2016), 6.

⁶⁴John Butterworth and Geoff Thwaites, *Thinking Skills: Critical Thinking and Problem Solving*, (Cambridge: Cambridge University Press, 2013), 7.

⁶⁵Enggar Prasetyawan, “Effectiveness of CTL and Discovery Approach Viewed from Students’ Achievement, Critical Thinking Ability, and Math Anxiety”, *PYTHAGORAS: Jurnal Pendidikan Matematika*, Vo. 13, No. 2, 2018, 169.

⁶⁶Desmita, *Psikologi Perkembangan Peserta Didik*, (Bandung: PT. Remaja Rosdakarya, 2010), 153.

skills are processes to analyze ideas or concepts in a more specific way, distinguish sharply, choose, identify, review, and develop them more perfectly.⁶⁷

Based on the definitions of some of the experts above, it can be concluded that critical thinking is a thinking ability that enables a person to identify, analyze, and assess ideas or problems rationally, fairly, and specifically in making sensible and precise decisions. Critical thinking is one of the higher-order thinking processes that can be used in the formation of students' conceptual systems.

Critical thinking emphasizes rational or sensible thinking and reflective so it can achieve the decision-making process. A critical thinker attempt to develop the possibilities of various answers based on the analytical results and information from a problem.

Critical thinking is an essential skill to be developed in the educational world. Teachers are expected to implement a learning process that can activate and develop students' critical thinking skills through learning. The first thing to do is understanding the aspects which are related to the conception of critical thinking.

Critical thinking is characterized by being fair and open-minded, active and informed, skeptical and independent.⁶⁸ Critical thinkers look at issues and problems in the real world, with their fuzziness and contradictions, and offer relevant, practical, and sharp insights into them. It's a skill that lets students distinguish right from wrong, choose the business policy and construct a

⁶⁷Cece Wijaya, *Pendidikan Remedial; Sarana Pengembangan Mutu Sumber Daya Manusia*, (Bandung: PT. Remaja Rosdakarya, 2010), 72.

⁶⁸Butterworth and Thwaites, *Thinking Skills*, 12.

compelling case for action. Critical thinking isn't about learning and an endless series of 'facts'. Instead, it encourages students to develop their in-built thinking skills by making them active.⁶⁹

Critical thinking skills should be developed from an early age so that when students faced a problem in learning, they can solve it well and achieve maximum learning outcomes. Aside from that, through critical thinking skills, students can distinguish which opinions are relevant and irrelevant as well as able to make conclusions by considering the data and facts.

Practically critical thinking is a process whereby all knowledge and skills are deployed in solving problems that arise, make decisions, analyze all assumptions and conduct investigations or research based on data and information. So that it can produce the desired information or conclusions.

According to Ennis in Julita, there are six basic elements of critical thinking skills known with the acronym FRISCO, which are as follows:

- 1) *Focus* means focusing on decision making from existing problems.
- 2) *Reason* means provides rational and logical reasons for the decisions taken.
- 3) *Inference* means making conclusions based on convincing evidence by identifying various arguments or assumptions and looking for alternative solutions, as well as considering the situation and evidence.
- 4) *Situation* means understands the key problems that cause a situation or circumstances by comparing it with the actual situation.

⁶⁹Martin Cohen, *Thinking Skills for Dummies*, (Chichester: John Wiley & Sons, Ltd., 2015), 20.

- 5) *Clarity* means provides an explanation of the meaning of the terms used.
- 6) *Overview* means conducting a thorough re-examination to determine the accuracy of the decision that has been taken.⁷⁰

Students who are said to be critical thinkers have certain characteristics, such as the following:

- 1) Willing to admit that the information and knowledge he has is still lacking, wrong, or not supported by real facts or evidence and strong reasons, or in other words, he wants to acknowledge other people's more rational ideas;
- 2) Tends to attempts to solve problems or find solutions;
- 3) Able to show criteria in analyzing a problem;
- 4) Able to be an active listener and give rational feedback afterwards;
- 5) Patiently refrain from commenting or evaluating before obtaining clear and complete facts, data, and information to draw conclusions.
- 6) Willing to reject information if not supported by clear arguments, data, and facts.⁷¹

Ennis in Zubaidah also added the characteristics of critical thinking skills as follows:

- 1) Seek a clear statement of the theory or question
- 2) Seek reasons
- 3) Try to be well-informed
- 4) Use credible sources and mention them
- 5) Take into account the total situation
- 6) Try to remain relevant to the main point
- 7) Keep in mind the original and basic concern
- 8) Look for alternatives
- 9) Be openminded; consider seriously other points of view and withhold judgment when the evidence and reason are insufficient

⁷⁰Julita, "Mengembangkan Kemampuan Berpikir Kritis Matematik Melalui Pembelajaran Pencapaian Konsep", *Proceeding: Seminar Nasional Pendidikan Matematika*, Bandung, November 2014, 6.

⁷¹Siti Zubaidah, "Berpikir Kritis: Kemampuan Berpikir Tingkat Tinggi yang Dapat Dikembangkan Melalui Pembelajaran Sains", *Proceeding: Seminar Nasional Sains*, Januari 2010, 9.

- 10) Take a position and change a position when the evidence and reason are sufficient to do so
- 11) Seek as much precision as the subject permits
- 12) Deal in an orderly manner with the parts or a complex whole
- 13) Be sensitive to the feelings, level of knowledge, and degree of sophistication of others.⁷²

Based on the characteristics described above, teachers can distinguish which students already have critical thinking skills from those who do not yet have them. In addition to the characteristics mentioned above, in this research, there are also indicators used as a reference to measure students' critical thinking skills stated by Ennis in Sakti, as follows:

- 1) Elementary Clarification with subcategories:
 - a) Identifying or formulating a question;
 - b) Analyzing arguments;
 - c) Asking and answering questions of clarification or challenge.
- 2) Basic Support with subcategories:
 - a) Judging the credibility of a source;
 - b) Observing and judging observation reports.
- 3) Inference with subcategories:
 - a) Deducing and judging deductions;
 - b) Inducing and judging inductions;
 - c) Making and judging value judgments.
- 4) Advanced Clarification with subcategories:
 - a) Clarification defining terms and judging definitions;
 - b) Identifying assumptions.
- 5) Strategy and Tactics with subcategories:
 - a) Deciding on an action;
 - b) Interacting with others.⁷³

Based on the indicators described above, it indicates that Ennis classifies 12 indicators of critical thinking skills into five groups. Thus the indicators that are used to measure students' critical thinking skills in this research consist of five

⁷²Zubaidah, "Berpikir Kritis: Kemampuan Berpikir, 5.

⁷³Ambar Pangaribowo Sakti, "Implementasi Pembelajaran Terpadu Tipe Shared Untuk Meningkatkan Kemampuan Berpikir Kritis dan Motivasi Belajar Siswa SMK Pada Topik Limbah di Lingkungan Kerja", *Tesis Tidak Diterbitkan*, (Bandung: Universitas Pendidikan Indonesia, 2014), 31.

indicators, namely elementary clarification, basic support, inference, advanced clarification, and strategy & tactics.

The steps of critical thinking stated by Kneedler in Zubaidah include three steps, namely defining and clarifying problems, judging information, and solving problems or drawing conclusions. Specifically, to perform these steps, it required skills called the Twelve Essential Critical Thinking Skills, namely as follows:

- 1) Defining and Clarifying Problems consist of:
 - a) Identifying main issues or problems;
 - b) Comparing similarities and differences;
 - c) Selecting relevant information;
 - d) Formulating the problem
- 2) Judging Information consist of:
 - a) Selecting facts, opinions, and results;
 - b) Checking consistency;
 - c) Identifying assumptions;
 - d) Recognizing possible stereotypical factors;
 - e) Recognizing the possibility of bias, emotion, propaganda, and semantic slanting;
 - f) Recognizing possible differences in value and ideological orientations.
- 3) Solving Problems or Drawing Conclusions consist of:
 - a) Recognizing the necessary data and sufficient data;
 - b) Predicting the consequences that may occur from the decision taken.⁷⁴

Based on the description above, it shows that the process of producing critical thinking can be done in three steps, defining and clarifying problems, judging information, and solving problems or drawing conclusions.

b. Creative Thinking Skills

Etymologically creative means have creativity or creating new things. The term creative is the ability to produce something in the form of new ideas or real work form, whether it is new works form or in combination with things that

⁷⁴Zubaidah, "Berpikir Kritis: Kemampuan Berpikir, 10.

already exist. According to Johnson in Pantiwati, creative thinking is a process to have an original and constructive idea and emphasizes intuitive and rational aspects. Creativity covers the ability, behavior, and process in understanding problems and proposing solutions with divergent strategies or methods.⁷⁵ Hendayani also added Santrock's opinion which states that a creative thinker can think about new ways, unusual, as well as come up with a unique solution.⁷⁶

According to Harlock in Agustyaningrum, creative thinking skills are a person's ability to produce a composition, product, or new idea, and previously unknown to its maker.⁷⁷ Erny also added Munandar's opinion, who defines that creative thinking skills are the ability to find many possible answers to a problem, where the emphasis is on quantity, accuracy, and diversity of answers.⁷⁸

Based on the opinions described above, it is known that creative thinking skills are a person's thinking ability to produce new products or ideas. With new or different ideas, one will be able to perform various solutions and innovations to solve the various real problems he faced. Thus, a person's creative thinking skills will be higher if he can show many possible answers to a problem.

A creative person has full of initiative in assembling and improving things from the old forms into the new forms so that a better and satisfying impression is

⁷⁵Yuni Pantiwati, "Authentic Assessment for Improving Cognitive Skills, Critical-Creative Thinking, and Meta Cognitive Awareness", *Journal of Education and Practice*, Vol. 4, No. 14, 2013, 3.

⁷⁶Eka Hendayani, "Pengembangan Perangkat Pembelajaran Geometri berbasis Learning Trajectory Berorientasi Kemampuan Berpikir Kritis dan Kreatif untuk Siswa SMP", *PYTHAGORAS: Jurnal Pendidikan Matematika*, Vol. 13, No. 2, 2018, 158.

⁷⁷Agustyaningrum, "Mengembangkan Keterampilan Berpikir", 42.

⁷⁸Erny, et al., "Pengaruh Pendekatan Saintifik pada Pembelajaran Matematika Terhadap Kemampuan Pemecahan Masalah dan Kemampuan Berpikir Tingkat Tinggi Siswa Kelas X IPA SMA Negeri 1 Kepahian", *Jurnal Pendidikan Matematika Raflesia*, Vo. 2, No. 1, 2017, 6.

obtained. As stated by Porter and Hemacki in Yuliani et.al. that a creative person always has a curiosity, wants to try adventuring intuitively.⁷⁹ So, creative thinking won't be born suddenly without a high sense of curiosity.

Essentially, every individual has neverending imagination and curiosity. But not all individuals can develop them until they can create new ideas quickly and diversely. Therefore, in the learning process teachers must be able to guide students to develop their creativity. Gibbs in Agustyaningrum also added that creativity could be developed by as follows:

- 1) Encouraging students' confidence;
- 2) Providing opportunities for scientific communication freely and directed;
- 3) Involving students in setting learning objectives and evaluations;
- 4) Providing less stringent and not authoritarian supervision; and
- 5) Engaging students actively and creatively in the overall learning process.⁸⁰

Teachers need to realize the significance of creative thinking skills in the learning process. Students' creative thinking skills will not develop by themselves in line with the development of their age.⁸¹ It can develop well if there is support from the environment and strong encouragement in themselves. Therefore, to

⁷⁹Yuliani, et al., "Keterampilan Berpikir Kreatif pada Siswa Sekolah Menengah di Palangka Raya Menggunakan Pendekatan Saintifik", *Jurnal Pendidikan Fisika dan Keilmuan*, Vol. 3, No. 1, Maret 2017, 50.

⁸⁰Agustyaningrum, "Mengembangkan Keterampilan Berpikir, 42.

⁸¹Miswandi Tendrita, et al., "Pemberdayaan Keterampilan Berpikir Kreatif Melalui Model Remap Think Pair Share", *Proceeding Biology Education Conference*, Vol. 13, No. 1, 2016, 186.

encourage students' potential of thinking, the implementation of learning and assessment should be managed in a planned way to empower students' creative thinking skills.

Creative thinking skills are built by concepts that are already embedded in students, and then the concepts and principles that already exist are applied by students in resolving problems.⁸² To develop students' creative thinking skills, teachers must encourage students to involve themselves in activities that can stimulate their creativity. In addition, teachers should appreciate the creativity of their students by showing their work to other students in order to arouse the interest of other students to be creative. Because thinking creatively can cause many benefits for students. These following are the benefits of creative thinking according to Treffinger quoted by Munawarah, namely:

- 1) Creative thinking can help students to resolve the problem. It's because creative thinking acts as the ability to see a variety of possible solutions to a problem.
- 2) Creative thinking can create the possibility to solve problems that will arise in the future.
- 3) Creative thinking can lead to good benefits in human life to improve the quality of life.
- 4) Creative thinking can lead to great satisfaction and pleasure.⁸³

⁸²Hendri Handoko, "Pembentukan Keterampilan Berpikir Kreatif pada Pembelajaran Matematika Model Savi Berbasis Discovery Strategy Materi Dimensi Tiga Kelas X", *Journal EduMa*, Vol. 6, No. 1, Juli 2017, 87

⁸³Rauzatul Munawarah, "Pengaruh Model Treffinger terhadap Kemampuan Berpikir Kreatif Matematis dan Rasa Ingin Tahu pada Siswa SMP", *Skripsi Tidak Diterbitkan*, (Aceh:

Students with creative thinking skills have an indicator. These are four indicators of creative thinking skills according to Treffinger quoted by Munawarah, namely as follows:⁸⁴

1) Fluency

The ability to generate ideas, ways, suggestions, questions, and alternative answers smoothly within a certain time. For example, a student who thinks smoothly will quickly solve the question he got.

2) Flexibility

The ability to generate various ideas, answers, or question, where the ideas or answers are obtained from different points of view by changing the way of approach and thinking. For example, students can solve one problem in more than one way. With the ability to think flexibly, students can provide various interpretations of a thing as well as express various approaches or solutions to a problem.

3) Originality

The ability to generate phrases, concepts, or ideas to solve issues in an unusual, unique, and new way that is not thought of by others. For example, a student can give different ideas from other friends on an issue. With the ability to think originally, students can not only provide various interpretations, but they can also think of ideas that have never been thought of by others.

Program Studi Pendidikan Matematika, Fakultas Tarbiyah dan Keguruan, Universita Islam Negeri Ar-Raniry Darussalam Banda Aceh, 2018), 28.

⁸⁴Munawarah, "Pengaruh Model Treffinger terhadap Kemampuan Berpikir..., 29-30.

4) Elaboration

The ability to enrich, develop, add, describe, or explain the details of objects, concepts, main ideas, or situations, so it is more interesting. For example, students can elaborate on ideas delivered by himself or his friend. With the ability to think in detail, students can develop or enrich other people's ideas by compiling steps in a detailed way.

Based on the description above, this research will use the four indicators as a reference to measure students' critical thinking skills. As the characteristics of each indicator, namely as follows:

- 1) The characteristics of fluency consist of:
 - a) Generating lots of ideas in solving a problem;
 - b) Provide lots of answers in answering a question;
 - c) Provide a lot of ways or suggestions to do things;
 - d) Work faster and do more than other students.
- 2) The characteristics of flexibility consist of:
 - a) Generating various problem-solving ideas or answers to a question;
 - b) Able to see a problem from a different point of view;
 - c) Presenting a concept in different ways.
- 3) The characteristics of originality consist of:
 - a) Giving a relatively new idea of resolving a problem or giving a different idea from classmates;
 - b) Making unusual combinations of parts or elements.
- 4) The characteristics of elaboration consist of:
 - a) Developing or enriching the ideas of others;
 - b) Adding, styling, or detailing an idea enhances the quality of the idea.⁸⁵

This following are the steps creative thinking processes according to Wallas in Handoko, which includes four stages, namely:⁸⁶

⁸⁵Ibid., 30-31.

⁸⁶Handoko, "Pembentukan Keterampilan Berpikir, 87-88.

- 1) Preparation is the process when someone prepares to solve a problem by gathering information, seeking answers, formulating the problem, and collecting facts and materials considered necessary.
- 2) Incubation is the stage when some of the ideas that were interfering with the solution will tend to fade. The overt activity of finding and collecting data or information about the problem is not continued. At this stage, the individual seems to break away temporarily from the problem. It means that he does not think about the problem consciously, but keeps it in a pre-conscious nature. So the contemplation about finding a solution to a problem will still be going on in mind.
- 3) Illumination is the stage when creative ideas occur suddenly. Consequently, the obscure thing becomes clear. This sudden flash of a solution is known as illumination and is similar to ‘aha (eureka)’ experience.
- 4) Verification is known as the evaluation stage. It is necessary to verify whether that solution is correct or not. In this stage, creative ideas need to be polished by critical thinking. So the individual required to think not only creatively but also critically.

Based on the description above, it shows that the process of generating creative thinking can be done in four steps, namely preparation, incubation, illumination, and verification.

C. Theoretical Framework

The effect of *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' critical and creative thinking skills.

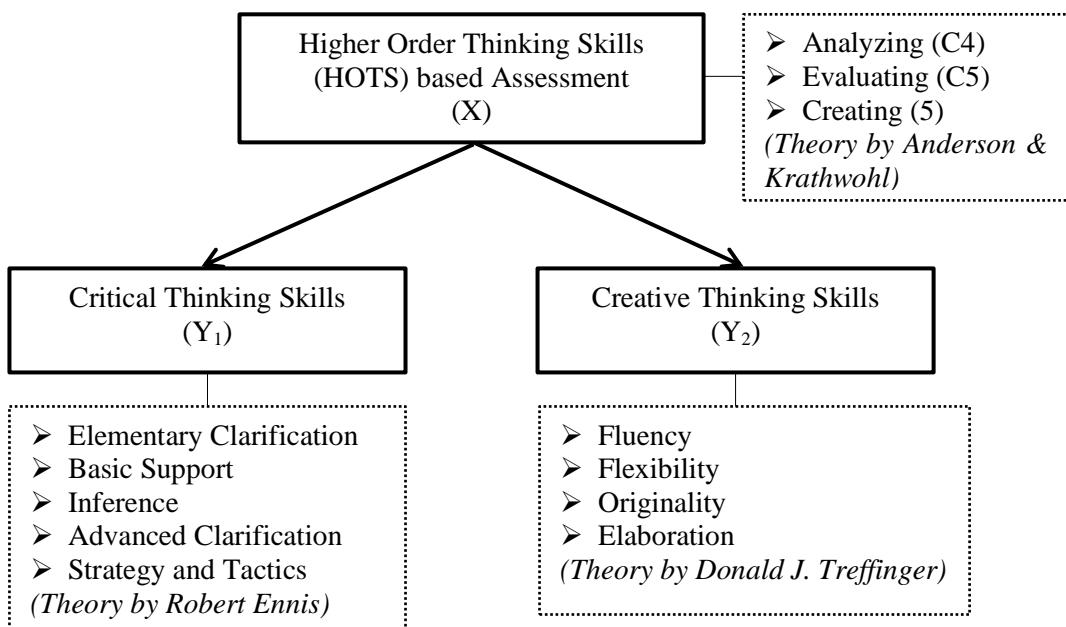


Figure 2.2 Theoretical Framework

Higher-Order Thinking Skills (HOTS)-based assessment is an assessment used to measure students' higher-order thinking skills that are not only to measure students' ability to memorize material but also to measure students' ability to analyze, evaluate, and create a solution to the problems given in questions. By accustoming students to working on HOTS questions, students are expected to have the ability to think more complex and can critically analyze, connect, and develop the acquired information so he can make a decision precisely in resolving the problems he faced. Therefore, students' critical and creative thinking skills will develop optimally and consistently.

D. Hypothesis

The hypotheses are interpreted as a temporary answer to the problem statement.⁸⁷ There are two kinds of hypotheses, namely the null hypothesis and the alternative hypothesis. The null hypothesis (H_0) states there is no influence or no relationship between X and Y variables. While the alternative hypothesis (H_a) is the opposite which states there is an influence, or there is a relationship between research variables.

The determination of the hypothesis in this research is as follows:

1. There is a significant effect of *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' critical thinking skills at SMA Al-Azhar Mandiri Palu.
2. There is a significant effect of *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' creative thinking skills at SMA Al-Azhar Mandiri Palu.

⁸⁷Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, (Bandung: Alfabeta, 2016), 64.

CHAPTER III

RESEARCH METHOD

A. Research Paradigm and Approach

Paradigm is a basic set of beliefs that guide action. This research use positivist or post-positivist paradigm.

The last term is called post-positivism because it represents the thinking after positivism, challenging the traditional notion of the absolute truth of knowledge and recognizing that we cannot be positive about our claims of knowledge when studying the behavior and action of humans.¹

The post-positivist paradigm has the principle that the symptoms, events, or phenomena studied must be concrete, empirical, objective, measurable, rational, and systematic. Other than these principles cannot be categorized scientifically, so they cannot be examined. As a scientific activity, research only reaches things that actually happen (not in the imagination), observable, and measurable.

Post-positivist research holds a deterministic philosophy in which causes (probably) determine effects or outcomes. Thus, the problems studied by post-positivist reflect the need to identify and assess the causes that influence outcomes.² That is why the post-positivist paradigm holds more for quantitative research than qualitative research.

Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be

¹John W. Creswell, *Research Design; Qualitative, Quantitative, and Mixed Methods Approaches*, (California: SAGE Publications, Inc., 2014), 36.

²Ibid.

measured, typically on instruments, so that numbered data can be analyzed using statistical procedures.³ Siregar also added that using quantitative approach aims to test theories, build facts, verify relationships and influence as well as comparisons between variables, providing statistical test, interpreting and forecasting the outcome.⁴ The quantitative approach is used to study certain populations or samples, data collection using research instruments such as questionnaires and statistical data analysis aimed at testing the predefined hypothesis.⁵

In quantitative research, there are two types of research design, namely experimental design and non-experimental designs such as surveys. This research uses survey research designs.

Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. It includes cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection with the intent of generalizing from a sample to the population.⁶

This research will use a cross-sectional type of surveys. Cross-sectional surveys are used to identify the relationship between two variables. Besides, this type of survey is short and quick to answer and can measure opinion in one particular situation. Therefore, this research is a quantitative type of research that aims to verify the relationship and influence between higher-order thinking skills (HOTS)-based assessment on the development of students' critical and creative thinking skills in SMA Al-Azhar Mandiri Palu.

³Ibid., 32.

⁴Syofian Siregar, *Metode Penelitian Kuantitatif; Dilengkapi dengan Perbandingan Perhitungan Manual & SPSS*, (Jakarta: Kencana, 2017), 110.

⁵Sugiyono, *Metode Penelitian Pendidikan*, (Bandung: Alfabeta, 2011), 14.

⁶Creswell, *Research Design*, 41-42.

B. Time and Location of the Research

This research was conducted at SMA Al-Azhar Mandiri Palu, located on Jalan Garuda No. 15, Tanamonindi, Mantikulore, Palu, Central Sulawesi Province. This research was held for approximately two and a half months. Start from the beginning of June until the mid of August 2020.

C. Population and Samples

1. Population

The population is a complete set of elements (persons or objects) that possess some common characteristic defined by the sampling criteria established by the researcher. Sugiyono also stated that the population is a generalization consisting of objects or subjects that have certain qualities and characteristics set by researchers to learn and then draw the conclusions.⁷

Based on the notion above, the author concluded that a population signifies the total number of objects that sparks researchers' interest in studying it, and not just the amount but covers all the characteristics or properties possessed by the objects. Thus, the population referred to in this study is students in class XI and XII of SMA Al-Azhar Mandiri Palu. The number of population is as follows:

Table 3.1
The Number of Population

No.	Class	Totaled
1.	XI	215
2.	XII	168
Totaled		383

Source: Documentation Data

⁷Sugiyono, *Metode Penelitian*, 117.

2. Samples

Samples are part or representative of the population studied.⁸ Samples should represent the characteristics of the intended population. Thus, samples are a portion of the population that has the same characteristics as the population. Sampling is a data collection procedure where only a portion of the population taken and used to determine the desired traits and characteristics of a population.⁹ The sampling technique used in this research is the simple random sampling technique, which is a random sampling without considering the strata in population.¹⁰

According to Arikunto, if the research subjects are less than 100 people, it is better to take all of them and if the subjects more than 100 people, then between 10-15% or 20-25% or more could be taken.¹¹ Because a researcher needs to choose a larger sample to generalize more considerable results to the population.¹² To determine the required number of samples, the author uses the Slovin formula,¹³ which is written as:

$$n = \frac{N}{1 + N e^2}$$

⁸Suharsimi Arikunto, *Prosedur Penelitian; Suatu Pendekatan Praktik*, (Jakarta: Rineka Cipta, 2014), 120.

⁹Siregar, *Metode Penelitian Kuantitatif*, 30.

¹⁰Sugiyono, *Metode Penelitian*, 120.

¹¹Arikunto, *Prosedur Penelitian*, 112.

¹²Wahyu Hidayat & Nur Asmawati Lawahid, *Metode Fuzzy Delphi Untuk Penelitian Sosial*, (Bandung: Alfabeta, 2020), 13.

¹³Siregar, *Metode Penelitian Kuantitatif*, 34.

Where:

n : Number of Samples

N : Total Population

e : Error Tolerance (Confidence Level)

The research sample was SMA Al-Azhar Mandiri Palu's students, especially in class XI and XII. So, if the population (N) = 383 with a sampling error rate of 10%, the totaled sample are as follows:

$$n = \frac{383}{1 + 383 (0,1)^2} = \frac{383}{1 + 383 (0,01)} = \frac{383}{1 + 3,83} = \frac{383}{4,83} = 79,29 = 80$$

Thus, the number of samples examined in this research was 80 people.

D. Research Variables

Research variables are everything that becomes the object of research observation. In this case, the variables are as follows:

1. Independent Variable (X)

Independent variables are variables that affect or become the cause of the change or the occurrence of dependent variables.¹⁴ The independent variable in this research is *Higher-Order Thinking Skills* (HOTS)-based assessment (X).

2. Dependent Variable (Y)

Dependent variables are variable that is affected or become a result due to the presence of an independent variable.¹⁵ There are two dependent variables in this research, namely, critical thinking skills (Y_1) and creative thinking skills (Y_2).

¹⁴Sugiyono, *Metode Penelitian*, 61.

¹⁵Ibid.

E. Operational Definition

In order to avoid the wrong interpretation from the reader, the author considers that it is necessary to provide operational definitions which should be explained from the title of this thesis proposal, namely:

1. *Higher-Order Thinking Skills (HOTS)-based Assessment*

Higher-Order Thinking Skills (HOTS)-based assessment is an assessment used to measure students' higher-order thinking skills that are not only to measure students' ability to memorize material but also to measure students' ability to analyze, evaluate, and create a solution to the problems given in questions. By accustoming students to working on HOTS questions, students are expected to have the ability to think more complex and can critically analyze, connect, and develop the acquired information so he can make a decision precisely in resolving the problems he faced. *Higher-Order Thinking Skills (HOTS)-based assessment* have three indicators used as benchmarks in this research, namely analyzing, evaluating, and creating.

2. Critical Thinking Skills

Critical thinking skills are thinking ability that enables a person to identify, analyze, and assess ideas or problems rationally, fairly, and specifically in making sensible and precise decisions. A person with critical thinking skills knows not only one answer, but he will try to develop the possibilities of other answers based on the analytical results and information obtained from a problem. Critical thinking skills have five indicators used as benchmarks in this research, namely

elementary clarification, basic support, inference, advanced clarification, and strategy & tactics.

3. Creative Thinking Skills

Creative thinking skills are a person's thinking ability to produce new products or ideas. With new or different ideas, one will be able to perform various solutions and innovations to solve the various real problems he faced. Thus, a person's creative thinking skills will be higher if he can show many possible answers to a problem. Creative thinking skills have four indicators used as benchmarks in this research, namely fluency, flexibility, originality, and elaboration.

F. Research Instrument

A research instrument is a tool that can be used to get, process, and interpret information obtained from respondents by using the same measuring pattern.¹⁶ A research instrument was used to measure the value of the examined variables. To generate accurate quantitative data, each instrument must have a scale. The measurement scale that will be used in this research is the Likert scale.

Likert scale is a scale that can be used to measure a person's attitudes, opinions, and perceptions of a particular object or phenomenon.¹⁷ By using a Likert scale, the measured variables are translated as variable indicators. Then, the

¹⁶Siregar, *Metode Penelitian Kuantitatif*, 46.

¹⁷Ibid., 25.

indicator used as a starting point for compiling instrument items that can be either a question or a statement.¹⁸

Based on the indicators of each variable, it can be compiled the following research instrument grids:

Table 3.2
Questionnaire Grids

Variables	Indicators	Items Number		Total
		Favorable	Unfavorable	
<i>Higher-Order Thinking Skills (HOTS)-based Assessment (X)</i>	Analyzing	1, 2	7, 8	4
	Evaluating	3, 4	9	3
	Creating	5, 6	10	3
Total		6	4	10
<i>Critical Thinking Skills (Y₁)</i>	Elementary Clarification	11	16	2
	Basic Support	12	17	2
	Inference	13	18	2
	Advanced Clarification	14	19	2
	Strategy & Tactics	15	20	2
Total		5	5	10
<i>Creative Thinking Skills (Y₂)</i>	Fluency	1, 2	7	3
	Flexibility	3, 4	8	3
	Originality	5	9	2
	Elaboration	6	10	2
Total		6	4	10

According to the table above, the number of statement items in this research instrument amounted to 30 items. Each research variable has 10 statement items. The statement item used in this questionnaire has two forms of favorable statements and unfavorable statements. Each statement amounted to 15 items.

¹⁸Sugiyono, *Metode Penelitian*, 134.

G. Data Collection Technique

Data collection techniques are ways that researchers use to collect data. In research, data collection is a crucial step because the collected data will be used to solve the problem that is being studied or to test the hypothesis that has been formulated.¹⁹ The techniques used in this research are:

1. Questionnaire

A Questionnaire is a number of written questions or statement that are used to obtain information from the respondent. The questionnaire is a data collection technique conducted by giving a set of written questions or statements to respondents to answer.²⁰ Once the questionnaire is answered, the questionnaire is returned to researchers for analysis.

The questionnaire in this research used forms of statements, namely favorable and unfavorable statements. The following is the score form of the favorable and unfavorable statement on a Likert scale.²¹

Table 3.3
Statements Score

Statements	Score	
	Favorable	Unfavorable
Strongly Agree	4	1
Agree	3	2
Disagree	2	3
Strongly Disagree	1	4

¹⁹Ibid., 17.

²⁰Ibid., 199.

²¹Siregar, *Metode Penelitian Kuantitatif*, 26.

The questionnaire will be distributed to students of XII grade at SMA Al-Azhar Mandiri Palu to find out the response for the effect of Higher-Order Thinking Skills (HOTS)-based assessment on the development of critical and creative thinking skills.

2. Documentation

The documentation is a data collection technique where the data is obtained through documents. The document has its relevance to the research object. In this data collection technique, the author researches by collecting relevant data from several official documents or important archives that can support the completeness of research data.

H. Data Analysis Technique

The data analysis is an activity after data from all respondents, or other data sources are collected. The data analysis technique in this research is a simple linear regression analysis with the help of the *Statistical Product and Service Solution* (SPSS) used to test the effect of variables. The statistical methods used are:

1. Validity Test

The validity test is a test that measures the validity level of an instrument. A validity test is used to indicates the extent to which the research instruments is capable of measuring what it wants to measure.²² This research used the questionnaire as a research instrument. Criteria for the validity of questionnaire items are determined based on the value of *Corrected Item-Total Correlation* (*r*-

²²Ibid., 46.

count) which is greater, and the value is not negative against r-table with the degree of freedom (df) = N-2 at a significance level of $\alpha = 0.05$.²³ So in making a decision if the value of r-count > r-table, then statement items in the questionnaire are declared valid.

2. Reliability Test

The reliability test is an index that indicates the extent to which a measuring instrument is trustworthy or reliable. The reliability test aims to determine the extent to which measurement results remain relatively consistent if performed repeated measurements of the same symptoms using the same instrument.²⁴

The reliability test in this research uses the testing technique of Cronbach's Alpha, which is a measure used to assess the reliability, or internal consistency, of a set of scale or test items. It is done to determine whether a research instrument is reliable or not.²⁵ An instrument considered reliable if it has Cronbach's Alpha value is > than 0,60.²⁶

3. Classical Assumption Test

The classical assumption test is one of the requirements that must be fulfilled before conducting a regression analysis. The classical assumption test is used to see whether the obtained data can be analyzed further. There are several tests to do in the classical assumption test, namely the linearity test, normality test,

²³Ibid., 48.

²⁴Ibid., 55.

²⁵Ibid., 56.

²⁶Ibid., 57.

heteroscedasticity test, outlier test, and autocorrelation test. This research used the outlier test, linearity test, and normality test.

a. Outlier Test

Outliers are observational data that appear with extreme values. Outlier data has unique characteristics that looks very different from other observational data and appears in extreme values.²⁷ Extreme values in observations are a value that far or completely different from most of the other values in the group. The existence of data outliers can affect the results of normality and linearity tests. Therefore, the outliers test needs to be done to see whether the observation data has outlier data or not. The way to detect outliers is by looking at the criteria for normal curve limitation, which have a Z-score in the range -2,5 to 2,5. This value limitation tends to produce better normality.²⁸

b. Linearity Test

The linearity test aims to determine whether two variables have a significant linear correlation or not.²⁹ The basis for decision making in the linearity test can be done in two ways, namely;

1) Comparing the significance value (Sig.) with 0,05

a) If the value of Deviation from Linearity $\text{Sig.} > 0,05$, then there is a significant linear correlation between the independent and dependent variables.

²⁷Imam Ghozali, *Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23*, (Semarang: Badan Penerbit Universitas Diponegoro, 2016), 41.

²⁸Sufren & Natanael, *Mahir Menggunakan SPSS Secara Otodidak*, (Jakarta: Elex Media Computindo, 2013), 51.

²⁹Ghozali, *Aplikasi Analisis Multivariete...*, 166.

b) If the value of Deviation from Linearity $\text{Sig.} < 0,05$, then there is no significant linear correlation between the independent and dependent variables.

2) Comparing the $F_{\text{statistics}}$ value with the F_{table}

- a) If the $F_{\text{statistics}} < F_{\text{table}}$, then there is a significant linear correlation between the independent and dependent variables.
- b) If the $F_{\text{statistics}} > F_{\text{table}}$, then there is no significant linear correlation between the independent and dependent variables.

c. Normality Test

The normality test aims to determine whether a data distribution is normal or not. The normality of data must be fulfilled when using linear regression analysis. The way to detect whether the analyzed data is normally distributer or not, namely by analyzing the histogram graph and the *Normal Probability Plot* (P-P Plot) graph. This normality detection of residual values is performed by looking at the spread of data resulting from SPSS output around the diagonal line and following the direction of the diagonal line or not. If the graph shows the spread of data around the diagonal line and follows the direction of the diagonal line, then the regression model has fulfilled the normality assumption.

4. Simple Linear Regression Analysis

The simple linear regression analysis is an analysis to measure the effect of the independent variable (X) and the dependent variable (Y). In this research, the simple linear regression analysis method was conducted with the help of the *Statistical Product and Service Solution* (SPSS). SPSS is a package of computer

programs used in processing statistical data. The simple linear regression equation has the form of as follows:

$$Y = a + bX$$

Where:

Y = Dependent Variable (Critical and Creative Thinking Skills)

X = Independent Variable (Higher-Order Thinking Skills-based Assessment)

a and b = Constants³⁰

The coefficient of determination (R^2) in linear regression is often defined as all independent variables' ability to explain the variance of the dependent variable.³¹ The coefficient of determination value is between zero and one. The small value of R^2 means that the independent variables' ability to explain the variation in the dependent variable is minimal. R^2 value that is close to one means that the independent variables provide almost all the information needed to predict the dependent variable's variation.

5. Hypothesis Test

The hypothesis test is a decision-making method based on data analysis. The hypothesis is a proportion of the responses that are often used as a basis for decision making or problem solutions and also for further research basis. The test can be done with a Partial Test (T-Test). T-test was conducted to determine whether the independent variables that were studied partially had a significant effect on the dependent variable.

³⁰Siregar, *Metode Penelitian Kuantitatif*, 284.

³¹Ghozali, *Aplikasi Analisis Multivariete*, 95.

Therefore, the decision-making in this research was conducted with Partial Test (T-Test) to test whether higher-order thinking skills-based assessment contributed to the development of students' critical and creative thinking skills at SMA Al-Azhar Mandiri Palu although only partial.

CHAPTER IV

RESULTS AND DISCUSSION

A. General Description of SMA Al-Azhar Mandiri Palu

1. Brief History of SMA Al-Azhar Mandiri Palu

In early 1985, this educational institution started with 12 students of neighboring children who learned to read *Al-Qur'an* on KH. Rustam Arsyad's terrace house, the Chairman of the Indonesian Ulama Council in Central Sulawesi. He was also a member of the Regional People's Representative Council in Central Sulawesi Province and a former member of the Indonesian People's Consultative Assembly.

Around mid-1985, this institution is named "Al-Azhar." The word Al-Azhar comes from Arabic, which means *flowers*. With expectations that someday, the institution and its alumni will make the nation proud and be useful for the community. The logo of Al-Azhar Mandiri Palu is circled by a rectangular line whose upper part depicting the dome of the mosque. Inside it, there is a logo of a pen, which means *science*, and three compiled books that indicate *Al-Qur'an*, *Hadith*, and *Fatwas Ulama*.

The conclusion of the Al-Azhar Mandiri Palu logo's meaning is, "A perfect human life must master science and technology which is based on faith and religious practice based on the guidance of the *Al-Qur'an*, *Hadith* and *Fatwas Ulama*. Ulama as conveyors of treatises directly to humankind until the end of time." The motto "intelligent with akhlaq" means that students who study and

people who work at Al-Azhar Mandiri Palu must be smart and still have noble morals following the meaning of the Al-Azhar Mandiri Palu logo.

At the end of 1985, a classroom made of a triplex was built. Above this simple building, a Madrasah Diniyah (Elementary School) was established with 20 students under three teachers' guidance. The students learn every afternoon from 14.00 to 17.30. The teachers compiled the madrasah curriculum, starting from reading and writing Arabic letters, basic knowledge of Arabic, reading Al-Qur'an, and Fiqh Hadith. One year later, the students who want to learn grew more and more. Finally, the foundation built a permanent Madrasah building made of concrete and named "Madrasah Ibtidaiyyah Al-Azhar Palu."

On October 10th, 1988, Abdul Basit Arsyad officially established the Al-Azhar's Educational Foundation in Palu with KH. Rustam Asryad serves as Chairman of the foundation and Abdul Basit Arsyad as secretary. Since childhood, Abdul Basit Arsyad has dreamed of building a private school that will become a leading and respected school in Central Sulawesi.

On May 7th, 1992, with the approval from the Regional Office of the Ministry of Education and Culture of Central Sulawesi Province, a Junior High School of Al-Azhar was established. So, May 7th is designated as the birthday of SMP Al-Azhar Mandiri Palu. At the beginning of its opening, about 40 students enrolled, and seven teachers supervised them. Generally, students who enter first are not accepted at public schools or come from lower-middle economic families, such as children of cart drivers, construction workers, and fish vendors in markets.

In 2007, SMP Al-Azhar Mandiri Palu received an “A” accreditation status by the Ministry of National Education. A year later, SMP Al-Azhar Mandiri Palu got the status of SSN (National Standard School). In August 2009, SMP Al-Azhar Mandiri Palu was designated by the Ministry of National Education as an International Standard School Pilot Project. With many achievements, SMP Al-Azhar Mandiri Palu has become a highly considered school for its quality and existence.

On August 17th, 2011, the foundation decided to build a high school. It was marked by the laying of the first stone for the construction of SMA Al-Azhar Mandiri Palu building by the Governor of Central Sulawesi Longki Djanggola. The establishment of this school is backed by the number of requests from the parents of Al-Azhar Mandiri Palu students who want their children to continue their high school education at the Al-Azhar foundation. The construction of SMA Al-Azhar Mandiri Palu showed evidence of the Al-Azhar foundation's seriousness in fulfilling the regional needs of qualified human resources.

2. Vision and Mission of SMA Al-Azhar Mandiri Palu

a. Vision

“Excellent and have a noble character, able to compete at the global tier.”

This vision reflects the ideals of a future-oriented school by concerning the new potential, following community norms and expectations.

b. Mission

- 1) Empower the educators and educational personnel who meet the standards.

- 2) Embedded discipline through an orderly culture, cleanliness culture, and working culture.
- 3) Develop education with character and faith.
- 4) Conducting learning that can improve skills and mastery of science and technology.
- 5) Improve achievement in academic and non-academic competitions so that they can compete with other schools at the regional, national, and international levels.
- 6) Cultivate an appreciation of regional culture and art so that they become one of the sources of wisdom in behaving and in society.
- 7) Nourish innovation in everyday life that can support the development of professionalism.
- 8) Empower all school components and optimize school resources in optimally developing students' potential and interest.

3. Profile of SMA Al-Azhar Mandiri Palu

Name	:	SMA Al-Azhar Mandiri Palu
Address	:	Garuda, No. 15 RT 001/RW 002, Lasoani, Mantikulore, Palu.
Postal Code	:	94111
Province	:	Central Sulawesi
School Statistics Number	:	302186002024
National School	:	69756117
Identification Number	:	
Accreditation	:	A
Year of Operation	:	2011
Surface Area	:	4400 M ²
Coordinate	:	-0.902074,119.898339
Tel./Fax. Number	:	(0451) 427438 / (0451) 456076

4. Condition of SMA Al-Azhar Mandiri Palu

a. Teachers

The condition of the teacher who teaches in SMA Al-Azhar Mandiri Palu amounts to 41 people, with the following details.

Table 4.1

The Condition of Teachers in SMA Al-Azhar Mandiri Palu

No.	Teacher	Totaled
1.	Civil Servant Teachers	2 People
2.	Permanent Teachers of the Foundation	33 People
3.	Honorary Teachers	6 People
Totaled		41 People

Source: Documentation Data

Based on the table above, it shows that SMA Al-Azhar Mandiri Palu has more permanent teachers of the foundation than civil servant teachers and honorary teachers.

b. Staffs

The condition of the staff who works in SMA Al-Azhar Mandiri Palu amounts to 13 people, with the following details.

Table 4.2

The Condition of Staffs in SMA Al-Azhar Mandiri Palu

No.	Staff	Totaled
1.	Administrative Staff	2 People
2.	Librarian	5 People
3.	Computer Operator	1 Person
4.	Computer Technician	1 Person
5.	Laboratory Assistant	1 Person
6.	Security	1 Person
7.	Gardener	1 Person
8.	Cleaning Service	1 Person
Totaled		13 People

Source: Documentation Data

Based on the table above, it shows that SMA Al-Azhar Mandiri Palu has many staffs who works as a librarian.

c. Students

The condition of students in the 2020-2021 period amounts to 594 people, with the following details.

Table 4.3
The Condition of Students in the 2020-2021 Period

No.	Class	Totaled
1.	Class VII	211 People
2.	Class VIII	215 People
3.	Class IX	168 People
Totaled		594 People

Source: Documentation Data

Based on the table above, it shows that Class IX has fewer students than other class.

5. The Implementation of *Higher-Order Thinking Skills-based Assessment* in SMA Al-Azhar Mandiri Palu

SMA Al-Azhar Mandiri Palu has implemented *Higher-Order Thinking Skills* (HOTS)-based assessment since 2019. As stated by one of the teachers that “HOTS-based assessment has effectively implemented since 2019.”¹ Related with this matter, Deputy Principal of Curriculum also added that:

Before 2019, HOTS-based assessment were in the socialized process, so the implementation was not required. However, in 2019 it became an obligation. Even though in everyday learning, we have implement learning that leads to developing the ability to analyze, evaluate, and create. It is

¹Nurun Nabila Safitri, Teachers of SMA Al-Azhar Mandiri Palu, *Interview*, Palu, June 19th, 2020.

just not labeled as *Higher-Order Thinking Skills*. So now we are maximizing it more.²

Based on the statements above, it can be interpreted that even though SMA Al-Azhar Mandiri Palu had only implemented HOTS-assessment in 2019, but previously they have implemented learning that leads to higher-order thinking skills. So, by implementing HOTS-based assessment will maximize the development of students higher-order thinking skills that have been done so far. However, before executing the HOTS-based assessment, teachers must be trained to make question items based on higher-order thinking skills.

As stated by one of the teachers, “before implementing HOTS-based assessment, teachers must attend socialization and training of HOTS-based assessment.”³ Deputy Principal of Curriculum also adds that “after the socialization process, teachers are assigned to make HOTS questions. Then, several teachers who are considered proficient are entrusted with assessing from lesson planning to assessment.”⁴

It indicates that before implementing HOTS-based assessments, teachers must understand and master it thoroughly. So basically, students are not the only one who has to develop the ability to analyze, evaluate, and create but teachers too. As stated by one of the teachers that “In preparing HOTS questions, teachers

²Siti Nur Wahdinah, Deputy Principal of Curriculum of SMA Al-Azhar Mandiri Palu, *Interview*, Palu, July 1st, 2020.

³Nurun Nabila Safitri, Teachers of SMA Al-Azhar Mandiri Palu, *Interview*, Palu, June 19th, 2020.

⁴Siti Nur Wahdinah, Deputy Principal of Curriculum of SMA Al-Azhar Mandiri Palu, *Interview*, Palu, July 1st, 2020.

are required to think logically and have a high imagination. So, answering HOTS questions is more manageable than compiling it.”⁵

Deputy Principal of Curriculum also added that:

Actually if you are familiar with HOTS-based learning, the assessment should not be difficult, because students have been trained in that zone. In the learning process, he was used to analyzing or evaluating, so that when the analysis questions appeared, it was no longer difficult. HOTS questions have different levels of difficulty; there are easy, medium, and difficult levels. So in compiling HOTS questions, there are criteria that must be followed.⁶

Based on the statement above, it shows that HOTS questions are not always tricky because the difficulty of HOTS questions is variant. With the implementation of HOTS-based learning, students become accustomed to answering HOTS questions. As stated by one of the students that “HOTS questions are not always complicated, because we are used to analyzing or evaluating in the learning process. Moreover, HOTS questions are related to real life, so we do not have to memorize answers.”⁷

It indicates that the implementation of HOTS-based assessment did not cause distress to students of SMA Al-Azhar Mandiri Palu. Thus, it can be concluded that HOTS-based assessments have been implemented at SMA Al-Azhar Mandiri Palu since 2019. Although at first, some teachers had difficulties in compiling HOTS questions, with a lot of training and guidance held, it made it

⁵Nurun Nabila Safitri, Teachers of SMA Al-Azhar Mandiri Palu, *Interview*, Palu, June 19th, 2020.

⁶Siti Nur Wahdinah, Deputy Principal of Curriculum of SMA Al-Azhar Mandiri Palu, *Interview*, Palu, July 1st, 2020.

⁷Fahreza Nurhidayat, Student of SMA Al-Azhar Palu, *Interview*, Palu, 22nd July 2020.

easier for teachers to implement HOTS-based assessment simultaneously in each class.

B. Data Description of Respondents

This research was conducted on students in grade XI and XII at SMA Al-Azhar Mandiri Palu. The data collection technique by using an online questionnaire. The questionnaire was distributed to each class through social media groups. Of the 80 questionnaires distributed, all answers were complete and worthy of analysis. The description data of respondents will be explained in general as follows.

Table 4.4
Data Description of Respondents

No.	Class	Gender		Totaled
		Male	Female	
1.	XI	22	27	49
2.	XII	11	20	31
Totaled		33	47	80
Percentage (%)		41,25 %	58,75 %	100%

Source: Processed Data of Respondents.

Based on the table above, it shows that from 80 respondents, 49 students came from class XI which consists of 22 male students and 27 female students. 31 students came from class XII that comprises 11 male students and 20 female students. It indicates that most of the respondents came from class XI. In term of gender, there were 33 male respondents with a percentage of 41,25%, while the female respondents were 47 students with a percentage of 58,75%. It can be interpreted that the characteristics of respondents based on gender are mostly female.

C. Research Instrument Test

Before analyzing the results obtained from the research instrument, the first step that must be taken is to test the research instrument, in this case, a questionnaire. The research instrument test was used to determine whether the statement items used in the questionnaire were valid and determine whether the instrument was worthy of being a measuring instrument.

1. Validity Test

The validity test of the instruments in this research was done by using computer program of Statistical Product and Service Solution version 25 (SPSS 25). The criteria used in determining the validity of the statement items used in this research are based on the value of the *Corrected Item-Total Correlation* ($r_{\text{statistics}}$), which is greater and not negative to the r_{table} with degrees of freedom (df) = $N-2 = 80-2 = 78$. That obtained r_{table} value = 0,219 at the significance level of $\alpha = 0,05$. So that in deciding, if the value of $r_{\text{statistics}} > r_{\text{table}}$, the statement item is declared valid.

Table 4.5
Validity Test Results

Variable	Statement Items	Corrected Item-Total Correlation ($r_{\text{statistics}}$)	r_{table}	Information
HOTS-based Assessment (X)	1	0,348	0,219	Valid
	2	0,529		Valid
	3	0,455		Valid
	4	0,641		Valid
	5	0,546		Valid
	6	0,524		Valid
	7	0,445		Valid
	8	0,590		Valid
	9	0,507		Valid
	10	0,439		Valid
Variable	Statement Items	Corrected Item-Total Correlation ($r_{\text{statistics}}$)	r_{table}	Information
Critical	1	0,399	0,219	Valid

Thinking Skills (Y₁)	2	0,583		Valid
	3	0,644		Valid
	4	0,602		Valid
	5	0,659		Valid
	6	0,490		Valid
	7	0,482		Valid
	8	0,556		Valid
	9	0,698		Valid
	10	0,564		Valid
Variable	Statement Items	Corrected Item-Total Correlation (r_{statistics})	r_{table}	Information
Creative Thinking Skills (Y₂)	1	0,588	0,219	Valid
	2	0,732		Valid
	3	0,596		Valid
	4	0,683		Valid
	5	0,573		Valid
	6	0,581		Valid
	7	0,513		Valid
	8	0,495		Valid
	9	0,342		Valid
	10	0,569		Valid

Source: Output Data of SPSS 25, July 27th, 2020.

Based on the table above, it shows that the value of r_{statistics} in the *Corrected Item-Total Correlation* column for each item has an r_{statistics} that is greater than the r_{table}, which means that each statement items in the variables X, Y₁, and Y₂ are valid.

2. Reliability Test

The reliability test in this research used Cronbach's Alpha statistical test. An instrument is declared reliable if it has the value of Cronbach's Alpha greater than 0,60. The results of the reliability test by using SPSS 25 can be seen in the following table:

Table 4.6
Reliability Test Results

Variable	Statement Items	Cronbach's Alpha	Information
HOTS-based Assessment (X)	10 Items	0,672	Reliable
Critical Thinking Skills (Y ₁)	10 Items	0.759	Reliable

Creative Thinking Skills (Y ₂)	10 Items	0,764	Reliable
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Source: Output Data of SPSS 25, July 27th, 2020.

Based on the table above, it indicates that each variable has a Cronbach's Alpha value greater than 0,60. Which means that all variable are reliable. So, all statement items from variable X, Y₁, and Y₂ can be further tested and worthy of being used as a measuring tool.

Thus, based on the data from the results of the validity and reliability test above. It can be interpreted that the results of the instrument testing in this research can be declared valid and reliable.

D. Analysis of the Frequency Distribution of Respondents' Answers

After the data has been collected, the next step is to analyze the data to see respondents' responses regarding the research variables, namely HOTS-based assessments, critical thinking skills, and creative thinking skills. Each statement item has a range between 1-4 and was tested on 80 respondents. To simplify the process of analyzing respondents' answers, the next step is determining the average score of each respondent's answer. Then an interval is made to ease the assessment of the average. According to Sudjana, the formula used as follows:

$$P = \frac{\text{Range}}{\text{Class Interval}}$$

Where:

P = Length of Class Interval

Range = Highest Data – Lowest Data

Class Interval = 4

Based on this formula, the length of class interval is:

$$P = \frac{4 - 1}{4} = 0,8$$

Then the interval from the average rating criteria can be interpreted as follows:

Very Bad	=	1,25 – 1,99
Bad	=	2,00 – 2,74
Good	=	2,75 – 3,49
Enough		
Good	=	3,50 – 4,24
Very Good	=	4,25 – 5,00

1. Description of Respondents' Answers to *Higher-Order Thinking Skills (HOTS)-based Assessment Variables (X)*

*Higher-Order Thinking Skills (HOTS)-based assessment variables consist of three indicators, namely analyzing, evaluating, and creating. Each indicator is represented by 3-4 statement items in *favorable* and *unfavorable* forms. The number of statement items in this variable is ten items. The table below show 80 respondents' responses to each statement item regarding HOTS-based assessments:*

Table 4.7
Frequency Distribution of Respondents' Answers to
the HOTS-based Assessment Variable (X)

Statement Items <i>(Favorable)</i>	Respondents' Answers Frequency Score				Total Score	Average	Criteria
	SS (4)	S (3)	TS (2)	STS (1)			
1. Saya mampu mengidentifikasi pokok utama suatu permasalahan	8 (10%)	70 (87,5%)	2 (2,5%)	-	254	3,17	Good Enough
2. Saya mampu menghubungkan informasi/pengetahuan yang telah diterima dalam	14 (17,5%)	63 (78,7%)	3 (3,7%)	-	265	3,31	Good Enough

menyelesaikan suatu masalah							
3. Saya selalu memeriksa kembali benar atau tidaknya informasi yang diterima	39 (48,7%)	41 (51,2%)	-	-	318	3,97	Good
4. Saya selalu menguji cara atau solusi yang tepat sebelum menerapkannya dalam penyelesaian masalah	24 (30%)	42 (52,5%)	13 (16,2%)	1 (1,2%)	273	3,41	Good Enough
5. Saya mampu memunculkan beragam ide atau jawaban dengan lancar	5 (6,2%)	52 (65%)	23 (28,7%)	-	227	2,83	Good Enough
6. Saya mampu menyelesaikan masalah dengan pendekatan dan solusi yang bervariasi	7 (8,7%)	54 (67,5%)	19 (23,7%)	-	235	2,93	Good Enough
Statement Items (Unfavorable)	Respondents' Answers Frequency Score				Total Score	Average	Criteria
	SS (1)	S (2)	TS (3)	STS (4)			
7. Saya tidak mampu membedakan antara penyebab dan akibat dari suatu permasalahan	1 (1,2%)	13 (16,2%)	54 (67,5%)	12 (15%)	249	3,11	Good Enough
8. Saya sulit merumuskan pertanyaan	-	28 (35%)	45 (56,2%)	7 (8,7%)	226	2,82	Good Enough
9. Saya tidak suka mencari cara atau solusi yang benar dalam menyelesaikan suatu masalah	-	1 (1,2%)	56 (70%)	23 (28,7%)	325	4,06	Good
10. Saya tidak suka menampilkan ide atau hasil karya saya kepada orang lain	-	17 (21,2%)	47 (58,7%)	16 (20%)	255	3,18	Good Enough
Average							

Source: Processed from Primary Data

The table shows the frequency of respondents' answers to statements from HOTS-based assessment variables, both *favorable* and *unfavorable* statements.

Favorable statement items start from number 1 to 6, while *unfavorable* statements start from numbers 7 to 10.

The first statement, there are 8 people answered strongly agree with a percentage value of 10%, 70 people answered agree with a percentage value of 87,5%, 2 people answered disagree with the percentage value 2,5% and no one answered strongly disagree. The total score of answers from 80 respondents was 254, with an average value of 3,17. Therefore, the first statement is categorized as a good enough assessment.

The second statement, there are 14 people answered strongly agree with a percentage value of 17.5%, 63 people answered agree with a percentage value of 78,7%, 3 people answered disagree with a percentage value of 3,7%, and no one answered strongly disagree. The total score of answers from 80 respondents was 265, with an average value of 3,31. Therefore, the second statement is categorized as a good enough assessment.

The third statement, there are 39 people answered strongly agree with a percentage value of 48.7%, 41 people answered agree with a percentage value of 51,2%, and no one answered disagree and strongly disagree. The total score of answers from 80 respondents was 318, with an average value of 3,97. Therefore, the second statement is categorized as a good assessment.

The fourth statement, there are 24 people answered strongly agree with a percentage value of 30%, 42 people answered agree with a percentage value of 52,5%, 13 people answered disagree with a percentage value of 16,2%, and 1 person answered strongly disagree with a percentage value of 1,2%. The total

score of answers from 80 respondents was 273, with an average value of 3,41. Therefore, the fourth statement is categorized as a good enough assessment.

The fifth statement, there are 5 people answered strongly agree with a percentage value of 6,2%, 52 people answered agree with a percentage value of 65%, 23 people answered disagree with a percentage value of 28,7%, and no one answered strongly disagree. The total score of answers from 80 respondents was 227, with an average value of 2,83. Therefore, the fifth statement is categorized as a good enough assessment.

The sixth statement, there are 7 people answered strongly agree with a percentage value of 8,7%, 54 people answered agree with a percentage value of 67,5%, 19 people answered disagree with a percentage value of 23,7%, and no one answered strongly disagree. The total score of answers from 80 respondents was 235, with an average value of 2,93. Therefore, the sixth statement is categorized as a good enough assessment.

The seventh statement, there are 1 person answered strongly agree with a percentage value of 1,2%, 13 people answered agree with a percentage value of 16,2%, 54 people answered disagree with a percentage value of 67,5%, and 12 people answered strongly disagree with a percentage value of 15%. The total score of answers from 80 respondents was 294, with an average value of 3,11. Therefore, the seventh statement is categorized as a good enough assessment.

The eighth statement, no one answered strongly agree, 28 people answered agree with a percentage value of 35%, 45 people answered disagree with a percentage value of 56,2%, and 7 people answered strongly disagree with a

percentage value of 8,7%. The total score of answers from 80 respondents was 226, with an average value of 2,82. Therefore, the eighth statement is categorized as a good enough assessment.

The ninth statement, no one answered strongly agree, 1 person answered agree with a percentage value of 1,2%, 56 people answered disagree with a percentage value of 70%, and 23 people answered strongly disagree with a percentage value of 28,7%. The total score of answers from 80 respondents was 325, with an average value of 4,06. Therefore, the ninth statement is categorized as a good assessment.

The tenth statement, no one answered strongly agree, 17 people answered agree with a percentage value of 21,2%, 47 people answered disagree with a percentage value of 58,7%, and 16 people answered strongly disagree with a percentage value of 20%. The total score of answers from 80 respondents was 255, with an average value of 3,18. Therefore, the tenth statement is categorized as a good enough assessment.

Overall, the respondents' answers to the HOTS-based assessment variable's statements have an average value of 3,27, categorized as a good enough assessment. Following the statement item that has the highest average value of 4,06 found in number 9, which reads, "I don't like to find a way or a correct solution in solving a problem." Of the 80 respondents, 56 people, or 70% answered disagree. It indicates that students at SMA Al-Azhar Mandiri Palu when facing a problem, they prefer to find the right way or solution rather than solve the problem impulsively.

2. Description of Respondents' Answers to Critical Thinking Skills Variables (Y_1)

Critical thinking skills variables consist of five indicators, namely elementary clarification, basic support, inference, advanced clarification, and strategy & tactics. Each indicator is represented two statement items in *favorable* and *unfavorable* forms. The number of statement items in this variable is ten items. The table below show 80 respondents' responses to each statement item regarding critical thinking skills:

Table 4.8
Frequency Distribution of Respondents' Answers to
the Critical Thinking Skills Variable (Y_1)

Statement Items (<i>Favorable</i>)	Respondents' Answers Frequency Score				Total Score	Average	Criteria
	SS (4)	S (3)	TS (2)	STS (1)			
11. Saya tidak malu bertanya kepada orang lain bila sedang mendapatkan kesulitan	24 (30%)	44 (55%)	12 (15%)	-	276	3,45	Good Enough
12. Saya selalu mencari tahu apakah suatu sumber informasi dapat dipercaya atau tidak	26 (32,5%)	51 (63,7%)	3 (3,7%)	-	289	3,61	Good
13. Saya mampu menyimpulkan materi pembelajaran yang sudah diberikan	10 (12,5%)	60 (75%)	10 (12,5%)	-	250	3,12	Good Enough
14. Saya mampu mengidentifikasi ketidakbenaran yang disengaja	13 (16,2%)	50 (62,5%)	17 (21,2%)	-	249	3,11	Good Enough
15. Saya menyiapkan solusi alternatif dalam memutuskan suatu tindakan	15 (18,7%)	46 (57,5%)	18 (22,5%)	1 (1,2%)	250	3,12	Good Enough
Statement Items (<i>Unfavorable</i>)	Respondents' Answers Frequency Score				Total Score	Average	Criteria
	SS (1)	S (2)	TS (3)	STS (4)			
16. Saya tidak suka menjawab	3 (3,7%)	25 (31,2%)	43 (53,7%)	9 (11,2%)	227	2,83	Good Enough

pertanyaan yang menantang							
17. Saya tidak mempertimbangkan laporan hasil observasi dalam membuat kesimpulan	-	7 (8,7%)	55 (68,7%)	18 (22,5%)	269	3,36	Good Enough
18. Saya menarik kesimpulan yang tidak sesuai dengan fakta	-	3 (3,7%)	39 (48,7%)	38 (47,5%)	313	3,91	Good
19. Saya tidak mampu membedakan hal-hal yang termasuk asumsi, fakta, atau opini	-	9 (11,2%)	52 (65%)	19 (23,7%)	269	3,36	Good Enough
20. Saya berpendapat tanpa memberikan bukti	-	4 (5%)	50 (62,5%)	26 (32,5%)	288	3,60	Good
Average						3,34	Good Enough

Source: Processed from Primary Data

The table shows the frequency of respondents' answers to statements from critical thinking skills variables, both *favorable* and *unfavorable* statements. *Favorable* statement items start from number 1 to 5, while *unfavorable* statements start from numbers 6 to 10.

The eleventh statement, there are 24 people answered strongly agree with a percentage value of 30%, 44 people answered agree with a percentage value of 55%, 12 people answered disagree with a percentage value of 15%, and no one answered strongly disagree. The total score of answers from 80 respondents was 276, with an average value of 3,45. Therefore, the eleventh statement is categorized as a good enough assessment.

The twelfth statement, there are 26 people answered strongly agree with a percentage value of 32,5%, 51 people answered agree with a percentage value of 63,7%, 3 people answered disagree with a percentage value of 3,7%, and no one

answered strongly disagree. The total score of answers from 80 respondents was 289, with an average value of 3,61. Therefore, the twelfth statement is categorized as a good assessment.

The thirteenth statement, there are 10 people answered strongly agree with a percentage value of 12,5%, 60 people answered agree with a percentage value of 75%, 10 people answered disagree with a percentage value of 12,5%, and no one answered strongly disagree. The total score of answers from 80 respondents was 250, with an average value of 3,12. Therefore, the thirteenth statement is categorized as a good enough assessment.

The fourteenth statement, there are 13 people answered strongly agree with a percentage value of 16,2%, 50 people answered agree with a percentage value of 62,5%, 17 people answered disagree with a percentage value of 21,2%, and no one answered strongly disagree. The total score of answers from 80 respondents was 249, with an average value of 3,11. Therefore, the fourteenth statement is categorized as a good enough assessment.

The fifteenth statement, there are 15 people answered strongly agree with a percentage value of 18,7%, 46 people answered agree with a percentage value of 57,5%, 18 people answered disagree with a percentage value of 22,5%, and 1 person answered strongly disagree with a percentage value of 1,2%. The total score of answers from 80 respondents was 250, with an average value of 3,12. Therefore, the fifteenth statement is categorized as a good enough assessment.

The sixteenth statement, there are 3 people answered strongly agree with a percentage value of 3,7%, 25 people answered agree with a percentage value of

31,2%, 43 people answered disagree with a percentage value of 53,7%, and 9 people answered strongly disagree with a percentage value of 11,2%. The total score of answers from 80 respondents was 227, with an average value of 2,83. Therefore, the sixteenth statement is categorized as a good enough assessment.

The seventeenth statement, no one answered strongly agree, 7 people answered agree with a percentage value of 8,7%, 55 people answered disagree with a percentage value of 68,7%, and 18 people answered strongly disagree with a percentage value of 22,5%. The total score of answers from 80 respondents was 269, with an average value of 3,36. Therefore, the seventeenth statement is categorized as a good enough assessment.

The eighteenth statement, no one answered strongly agree, 3 people answered agree with a percentage value of 3,7%, 39 people answered disagree with a percentage value of 48,7%, and 38 people answered strongly disagree with a percentage value of 47,5%. The total score of answers from 80 respondents was 313, with an average value of 3,91. Therefore, the eighteenth statement is categorized as a good assessment.

The nineteenth statement, no one answered strongly agree, 9 people answered agree with a percentage value of 11,2%, 52 people answered disagree with a percentage value of 65%, and 19 people answered strongly disagree with a percentage value of 23,7%. The total score of answers from 80 respondents was 269, with an average value of 3,36. Therefore, the nineteenth statement is categorized as a good enough assessment.

The twentieth statement, no one answered strongly, 4 people answered agree with a percentage value of 5%, 50 people answered disagree with a percentage value of 62,5%, and 26 people answered strongly disagree with a percentage value of 32,5%. The total score of answers from 80 respondents was 288, with an average value of 3,60. Therefore, the twentieth statement is categorized as a good enough assessment.

Overall, the respondents' answers to the critical thinking skills variable's statements have an average value of 3,34, categorized as a good enough assessment. Following the statement item that has the highest average value of 3,91 found in number 18, which reads, "I made a conclusion not based on a fact." Of the 80 respondents, 39 people, or 48,7% answered strongly disagree. It indicates that students at SMA Al-Azhar Mandiri Palu made a conclusion not based on a bias, which means that they did not conclude just by prejudice or guessing but with facts. It proves that being able to conclude based on facts shows characteristics of critical thinking skills that have developed in students at SMA Al-Azhar Mandiri Palu.

3. Description of Respondents' Answers to Creative Thinking Skills Variables (Y_2)

Creative thinking skills variables consist of four indicators, namely fluency, flexibility, originality, and elaboration. Each indicator is represented by 2-3 statement items in *favorable* and *unfavorable* forms. The number of statement items in this variable is ten items. The table below show 80 respondents' responses to each statement item regarding creative thinking skills:

Table 4.9
Frequency Distribution of Respondents' Answers to
the Creative Thinking Skills Variable (Y₂)

Statement Items (Favorable)	Respondents' Answers Frequency Score				Total Score	Average	Criteria
	SS (4)	S (3)	TS (2)	STS (1)			
21. Saya mampu menyelesaikan soal dengan lancar dan cepat	1 (1,2%)	48 (60%)	27 (33,7%)	4 (5%)	207	2,58	Bad
22. Saya senang memberi banyak jawaban dalam menjawab suatu pertanyaan	13 (16,2%)	49 (61,2%)	17 (21,2%)	1 (1,2%)	247	3,08	Good Enough
23. Saya mampu menyelesaikan soal dengan lebih dari satu cara	6 (7,5%)	39 (48,7%)	34 (42,5%)	1 (1,2%)	182	2,27	Bad
24. Saya mampu mendiskusikan suatu permasalahan dengan cara yang berbeda-beda	6 (7,5%)	55 (68,7%)	19 (23,7%)	-	233	2,91	Good Enough
25. Saya senang memberikan ide-ide yang tidak pernah terpikirkan oleh orang lain	13 (16,2%)	50 (62,5%)	17 (21,2%)	-	249	3,11	Good Enough
26. Saya senang menambahkan dan mengembangkan tanggapan orang lain	15 (18,7%)	59 (73,7%)	6 (7,5%)	-	264	3,30	Good Enough
Statement Items (Unfavorable)	Respondents' Answers Frequency Score				Total Score	Average	Criteria
	SS (1)	S (2)	TS (3)	STS (4)			
27. Saya tidak suka mencari alternatif jawaban yang lain dalam menyelesaikan masalah	1 (1,2%)	14 (17,5%)	58 (72,5%)	7 (8,7%)	238	2,97	Good Enough
28. Saya hanya mampu melihat suatu masalah dari satu sudut pandang	-	3 (3,7%)	60 (75%)	17 (21,2%)	271	3,38	Good Enough
29. Saya senang meniru ide orang lain	1 (1,2%)	11 (13,7%)	56 (70%)	12 (15%)	251	3,13	Good Enough
30. Saya tidak suka memberikan jawaban dengan rinci dan jelas	2 (2,5%)	13 (16,2%)	43 (53,2%)	22 (27,5%)	267	3,33	Good Enough

Average	3,00	Good Enough
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Source: Processed from Primary Data

The table shows the frequency of respondents' answers to statements from creative thinking skills variables, both *favorable* and *unfavorable* statements. *Favorable* statement items start from number 1 to 6, while *unfavorable* statements start from numbers 7 to 10.

The twenty-first statement, there are 1 person answered strongly agree with a percentage value of 1,2%, 48 people answered agree with a percentage value of 60%, 27 people answered disagree with a percentage value of 33,7%, and 4 people answered strongly disagree with a percentage value of 5%. The total score of answers from 80 respondents was 207, with an average value of 2,58. Therefore, the twenty-first statement is categorized as a bad assessment.

The twenty-second statement, there are 13 people answered strongly agree with a percentage value of 16,2%, 49 people answered agree with a percentage value of 61,2%, 17 people answered disagree with a percentage value of 21,2%, and 1 person answered strongly disagree with a percentage value of 1,2%. The total score of answers from 80 respondents was 247, with an average value of 3,08. Therefore, the twenty-second statement is categorized as a good enough assessment.

The twenty-third statement, there are 6 people answered strongly agree with a percentage value of 7,5%, 39 people answered agree with a percentage value of 48,7%, 34 people answered disagree with a percentage value of 42,5%, and 1 person answered strongly disagree with a percentage value of 1,2%. The

total score of answers from 80 respondents was 182, with an average value of 2,27. Therefore, the twenty-third statement is categorized as a bad assessment.

The twenty-fourth statement, there are 6 people answered strongly agree with a percentage value of 7,5%, 55 people answered agree with a percentage value of 68,7%, 19 people answered disagree with a percentage value of 23,7%, and no one answered strongly disagree. The total score of answers from 80 respondents was 233, with an average value of 2,91. Therefore, the twenty-fourth statement is categorized as a good enough assessment.

The twenty-fifth statement, there are 13 people answered strongly agree with a percentage value of 16,2%, 50 people answered agree with a percentage value of 62,5%, 17 people answered disagree with a percentage value of 21,2%, and no one answered strongly disagree. The total score of answers from 80 respondents was 249, with an average value of 3,11. Therefore, the twenty-fifth statement is categorized as a good enough assessment.

The twenty-sixth statement, there are 15 people answered strongly agree with a percentage value of 18,7%, 59 people answered agree with a percentage value of 73,7%, 6 people answered disagree with a percentage value of 7,5%, and no one answered strongly disagree. The total score of answers from 80 respondents was 264, with an average value of 3,30. Therefore, the twenty-sixth statement is categorized as a good enough assessment.

The twenty-seventh statement, there are 1 person answered strongly agree with a percentage value of 1,2%, 14 people answered agree with a percentage value of 17,5%, 58 people answered disagree with a percentage value of 72,5%,

and 7 people answered strongly disagree with a percentage value of 8,7%. The total score of answers from 80 respondents was 238, with an average value of 2,97. Therefore, the twenty-seventh statement is categorized as a good enough assessment.

The twenty-eighth statement, no one answered strongly agree, 3 people answered agree with a percentage value of 3,7%, 60 people answered disagree with a percentage value of 75%, and 17 people answered strongly disagree with a percentage value of 21,2%. The total score of answers from 80 respondents was 271, with an average value of 3,38. Therefore, the twenty-eight statement is categorized as a good enough assessment.

The twenty-ninth, there are 1 person answered strongly agree with a percentage value of 1,2%, 11 people answered agree with a percentage value of 13,7%, 56 people answered disagree with a percentage value of 70%, and 12 people answered strongly disagree with a percentage value of 15%. The total score of answers from 80 respondents was 251, with an average value of 3,13. Therefore, the twenty-ninth statement is categorized as a good enough assessment.

The thirtieth statement, there are 2 person answered strongly agree with a percentage value of 2,5%, 13 people answered agree with a percentage value of 16,2%, 43 people answered disagree with a percentage value of 53,2%, and 22 people answered strongly disagree with a percentage value of 27,5%. The total score of answers from 80 respondents was 267, with an average value of 3,33. Therefore, the thirtieth statement is categorized as a good enough assessment.

Overall, the respondents' answers to the critical thinking skills variable's statements have an average value of 3,00, categorized as a good enough assessment. Following the statement item that has the highest average value of 3,38 found in number 28, which reads, "I can only see a problem from one point of view." Of the 80 respondents, 60 people, or 75% answered disagree. It indicates that students at SMA Al-Azhar Mandiri Palu see a problem from various points of view, which shows that they respect other people's opinions. It proves that the ability to generate ideas from various points of view, provide a variety of interpretations and produce works, shows characteristics of creative thinking skills that have developed in students at SMA Al-Azhar Mandiri Palu.

Regarding students' critical and creative thinking skills, the table below will show students' answer scores of critical and creative thinking skills questionnaire.

Table 4. 10
Students' Answer Scores

No.	Name	Gender	Score			Total Score
			X Variable	Y1 Variable	Y2 Variable	
1	Muhammad Riziq	M	33	39	38	110
2	Fahreza Nurhidayat	M	35	38	37	110
3	Mirza Faris Rahman	M	36	39	34	109
3	Siswa	M	36	36	37	109
4	Nurull	F	34	39	32	105
6	Nurullia	F	34	39	32	105
7	Mochammad Rizky Tenrisau	M	36	35	32	103
8	Cekkidoll	M	32	36	34	102
9	Nur Fadilah (XII)	F	35	37	30	102
10	Dian Sancika Rizky Sembiring	F	35	35	32	102
11	Dinda Nur Azmy	F	33	35	33	101
12	Reina	F	30	37	32	99

13	Dinda	F	35	32	32	99
13	Dani Rizky	M	33	33	32	98
14	Miftah	F	30	37	31	98
16	Muh. Hamdan Mubarak	M	33	32	32	97
17	Adinda Fildsah	F	32	32	33	97
18	Piu	M	33	33	30	96
19	Muhammad Rizqi Muslimin	M	35	31	30	96
20	Rayanda	M	32	33	31	96
21	Isra Muhammad	M	34	31	30	95
22	Aura Akta Amalia	F	31	31	33	95
23	Amalia AA.	F	31	31	33	95
23	KPL Nurul Intifada	F	33	32	30	95
24	Fadlia Nur	F	29	30	35	94
26	Regina Raisya Tiara	F	30	32	32	94
27	Christania Natasha	F	29	32	32	93
28	Ninda	F	35	29	29	93
29	Aulia Hidayah Kurniasari	F	31	31	31	93
30	Nailah Nafisah	F	30	30	32	92
31	Muh. Fatiha Rahmanda K.	M	30	33	29	92
32	Muh. Imam Maulana P.	M	30	33	29	92
33	Arrizq Abiyan Aziz	M	31	34	27	92
33	Yoga Dwisatya Giri	M	30	30	31	91
34	Ahmad Rifai	M	31	31	29	91
36	Annisa Miftahul Arifah	F	29	30	32	91
37	Siti Nurhalizah Ahmad	F	27	33	30	90
38	Syamsu Hatdi	M	31	30	29	90
39	Isra	M	31	30	29	90
30	Nadya Ainun	F	33	30	27	90
31	Inaya Putri	F	30	31	29	90
32	Utari	F	30	30	29	89
33	Andi Rezky	M	31	30	28	89
33	Fadil Gunawan	M	28	31	30	89
34	Muhammad Kamal Jaya	M	33	29	27	89
36	Prima Kusuma Wardana	M	30	29	30	89
37	Mohammad Yusuf	M	35	26	27	88
38	Nurul Intan Hidayah	F	29	27	31	87
39	Rikhul	M	25	31	31	87
40	Rahmad Hidayat Pakan	M	31	27	29	87
41	Intan Nuraini	F	29	30	27	86

42	Fitria E. Malelea	F	28	32	26	86
43	Haikal Alif Eyrlangga	M	28	29	29	86
43	Muh Hidayat Azmar	M	28	29	29	86
44	Kaffa Amaravati	F	29	30	27	86
46	Risti Rahmatunnisa	F	29	27	29	85
47	Aisyah H	F	28	32	25	85
48	Alifia Rusyda	F	28	30	27	85
49	Melati Putri Fahima	F	28	31	26	85
60	Putri	F	28	31	26	85
61	Fitriana Muthia	F	30	31	23	84
62	Zahra Nurani	F	30	30	24	84
63	La Ode Muh. Khadir	M	28	30	26	84
63	Cahaya Nissa	F	29	28	27	84
64	Andi Maziyah	F	28	28	28	84
66	Shafiyah	F	27	30	26	83
67	Azka Dani Ismatullah	M	27	30	26	83
68	Citra Nur Indah	F	28	28	27	83
69	Nova Rizkia	F	30	28	25	83
70	Reihan	M	26	29	27	82
71	Bela Regita Cahyani	F	29	26	26	81
72	Deviana Erlinawati Putri	F	29	27	25	81
73	Iin Sriana Nurlina	F	28	25	27	80
73	Yenny Wulandari	F	29	27	24	80
74	Raniyah Farah Fatihah Laoh	F	28	26	25	79
76	Amanda Puspa Cendana	F	25	27	26	78
77	Diah Liandary	F	29	27	22	78
78	Ahmad Dwi Fauzan	M	28	28	22	78
79	Faiz Ibrahim	M	26	27	25	78
80	Rania	F	25	27	25	77
Total			2432	2482	2331	7245

Source: Processed from Primary Data

The table above shows students' answer scores from the highest to the lowest score. Based on the table, there are 47 female students and 33 male students. However, the students who have the highest score is dominated by male students. 6 out of 33 male students have scored more than 100. While female students, only 5 out of 47 students have scored more than 100. It indicates that

male students are more critical and creative than female students in SMA Al-Azhar Mandiri Palu.

E. Research Results

1. The Effect of Higher-Order Thinking Skills (HOTS)-based Assessment on the Development of Students' Critical Thinking Skills at SMA Al-Azhar Mandiri Palu

a. Classic Assumption Test

The classic assumption test used in this research is the outlier test, linearity test, and normality test.

1) Outlier Test

The outliers test is used to see whether the observation data has outlier data or not. The way to detect outliers is by looking at the criteria for normal curve limitation, which have a Z-score in the range -2,5 to 2,5 If the output data shows a Z-score above 2,5 or below -2,5, then the data has outliers.

Table 4. 11
Outlier Data Results

No.	X	Y1	ZX	ZY1
1.	29	30	-0.50251	-0.30505
2.	36	39	2.01002	2.37342
3.	30	30	-0.14357	-0.30505
4.	26	29	-1.5793	-0.60265
5.	29	27	-0.50251	-1.19787
6.	27	30	-1.22037	-0.30505
7.	30	30	-0.14357	-0.30505
8.	28	32	-0.86144	0.29017
9.	25	27	-1.93823	-1.19787
10.	27	30	-1.22037	-0.30505
11.	29	26	-0.50251	-1.49548
12.	29	32	-0.50251	0.29017
13.	33	33	0.93322	0.58777

14.	29	27	-0.50251	-1.19787
15.	30	31	-0.14357	-0.00744
16.	30	33	-0.14357	0.58777
17.	27	33	-1.22037	0.58777
18.	28	32	-0.86144	0.29017
19.	29	27	-0.50251	-1.19787
20.	30	37	-0.14357	1.7782
21.	30	30	-0.14357	-0.30505
22.	31	30	0.21536	-0.30505
23.	28	28	-0.86144	-0.90026
24.	29	27	-0.50251	-1.19787
25.	28	31	-0.86144	-0.00744
26.	28	25	-0.86144	-1.79308
27.	30	33	-0.14357	0.58777
28.	25	31	-1.93823	-0.00744
29.	31	30	0.21536	-0.30505
30.	30	30	-0.14357	-0.30505
31.	28	28	-0.86144	-0.90026
32.	28	30	-0.86144	-0.30505
33.	31	34	0.21536	0.88538
34.	32	36	0.57429	1.4806
35.	35	32	1.65109	0.29017
36.	29	30	-0.50251	-0.30505
37.	26	27	-1.5793	-1.19787
38.	28	29	-0.86144	-0.60265
39.	31	30	0.21536	-0.30505
40.	28	30	-0.86144	-0.30505
41.	33	32	0.93322	0.29017
42.	33	29	0.93322	-0.60265
43.	33	39	0.93322	2.37342
44.	35	29	1.65109	-0.60265
45.	30	28	-0.14357	-0.90026
46.	35	37	1.65109	1.7782
47.	34	39	1.29216	2.37342
48.	33	33	0.93322	0.58777
49.	25	27	-1.93823	-1.19787
50.	36	36	2.01002	1.4806
51.	29	27	-0.50251	-1.19787
52.	29	28	-0.50251	-0.90026
53.	33	35	0.93322	1.18299
54.	28	26	-0.86144	-1.49548

55.	32	32	0.57429	0.29017
56.	35	35	1.65109	1.18299
57.	34	31	1.29216	-0.00744
58.	28	31	-0.86144	-0.00744
59.	28	31	-0.86144	-0.00744
60.	30	37	-0.14357	1.7782
61.	28	29	-0.86144	-0.60265
62.	33	30	0.93322	-0.30505
63.	31	27	0.21536	-1.19787
64.	31	31	0.21536	-0.00744
65.	28	28	-0.86144	-0.90026
66.	29	30	-0.50251	-0.30505
67.	31	31	0.21536	-0.00744
68.	31	31	0.21536	-0.00744
69.	31	31	0.21536	-0.00744
70.	35	38	1.65109	2.07581
71.	30	31	-0.14357	-0.00744
72.	29	30	-0.50251	-0.30505
73.	33	32	0.93322	0.29017
74.	36	35	2.01002	1.18299
75.	35	26	1.65109	-1.49548
76.	35	31	1.65109	-0.00744
77.	34	39	1.29216	2.37342
78.	30	29	-0.14357	-0.60265
79.	32	33	0.57429	0.58777
80.	30	32	-0.14357	0.29017

Source: Output Data of SPSS 25, October 24th, 2020

The table above shows that each variable did not have a Z-score above 2,5 or a Z-score below -2,5. Thus it can be concluded that each variable did not have outliers data.

2) Linearity Test

The linearity test aims to determine whether two variables have a significant linear correlation. With the help of the SPSS 25 program, it acquires an output as follows.

Table 4. 12

Linearity Test Results of X to Y₁

			ANOVA Table				
			Sum of Squares	df	Mean Square	F	Sig.
Critical Thinking * HOTS-based Assessment	Between Groups	(Combined)	415.621	11	37.784	5.394	.000
		Linearity	287.945	1	287.945	41.107	.000
		Deviation from Linearity	127.676	10	12.768	1.823	.073
	Within Groups		476.329	68	7.005		
	Total		891.950	79			

Source: Output Data of SPSS 25, October 24th, 2020

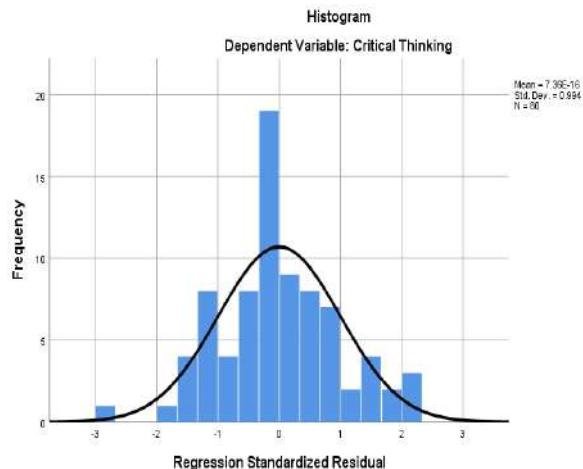
There are two criteria in processing the linearity test's output, namely based on the significant value and F_{statistics} value.

- a) The significance value (Sig.): Based on the output above, the value of Deviation from Linearity Sig. is 0,073 > 0,05. Then it can be concluded that there is a significant linear correlation between the HOTS-based assessment (X) and critical thinking skills (Y₁) variables.
- b) The F_{statistics} value: Based on the output above, the F_{statistics} value is 1,82 < F_{table} 1,97. It shows that F_{statistics} value is smaller than the F_{table} value, then it can be concluded that there is a significant linear correlation between the independent and dependent variables.

3) Normality Test

The normality test aims to determine whether a data distribution is normal. The way to detect whether the analyzed data is normally distributed or not is by examining the histogram graph and the Normal Probability Plot graph. If the graph shows the distribution of data around the diagonal line and follows the diagonal line's direction, then the regression model has fulfilled the assumption of normality. The results of the normality test are as follows:

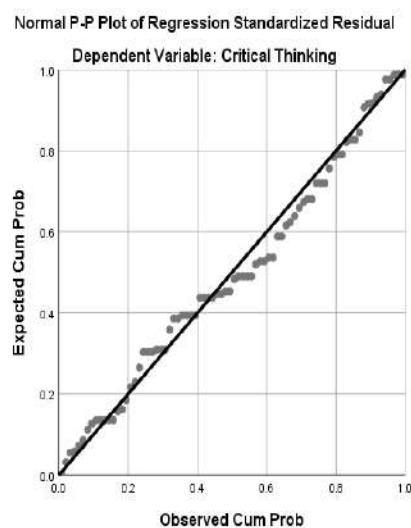
Figure 4.1
Normality Test Results (Histogram)



Source: Output Data of SPSS 25, July 27th, 2020

Based on the histogram graphic above, it shows that generally, the distribution of the data follows the normal curve. There is no slope and outliers, so it can be concluded that the histogram graph provides a normal distribution.

Figure 4.2
Normality Test Results (Probability Plot)



Source: Output Data of SPSS 25, July 27th, 2020

The graph above shows that the dots are following and spreading around the diagonal line. If the data spread around the diagonal line and follows the diagonal path, the regression model meets the normality assumption. Thus, by looking at the display of the histogram and the probability plot graph, it can be concluded that the histogram graph provides a normal distribution pattern. At the same time, the probability plot graph shows that the data is normally distributed. So, this research's regression model has met the normality assumption and can be used for further testing.

b. Simple Linear Regression Analysis

This research aims to determine HOTS-based assessment's effect on the development of students' critical thinking skills at SMA Al-Azhar Mandiri Palu through a simple linear regression analysis method. With the help of the SPSS 25 program, it acquires an output as follows.

Table 4.13
Simple Linear Regression Analysis Results of X to Y₁

Model		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	10.193	3.430		2.971	.004	3.364	17.022
	HOTS-based Assessment	.685	.112	.568	6.098	.000	.462	.909

a. Dependent Variable: Critical Thinking

Source: Output Data of SPSS 25, July 27th, 2020

Based on the results of data processing above, acquiring a simple linear regression equation as follows:

$$Y_1 = 10,193 + 0,685 X$$

The simple linear equation above can be described as follows:

- 1) The constant values is 10,193. This value indicates that if the independent variable, namely HOTS-based assessment (X), is fixed or has a value of 0 (zero), then the value produced by the dependent variable, namely critical thinking skills (Y_1), is 10,193.
- 2) The independent variable regression coefficient (HOTS-based assessment) value is 0,685, indicating that the effect of HOTS-based assessments on critical thinking skills is positive. Every escalate 1 unit will increase students' critical thinking skills by 0,685 or 68,5% with the note of other variables considered constant.

Table 4.14
Simple Linear Regression Coefficient of X to Y_1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.568 ^a	.323	.314	2.78274	.323	37.185	1	78	.000
a. Predictors: (Constant), HOTS-based Assessment									
b. Dependent Variable: Critical Thinking									

Source: Output Data of SPSS 25, July 27th, 2020

Based on the output above, the correlation coefficient (R) value is 0,568, which means that the correlation between the HOTS-based assessment variables on developing critical thinking skills is 0,568 or 56,8%. As for the coefficient of determination, R Square is 0,323. It indicates that the variation of changes in the critical thinking skills variable is influenced by the HOTS-based assessment variable's changes by 32,3%. Furthermore, the rest of 67,7% is influenced by other variables that are not examined in this research.

Thus from the simple linear regression equation acquired, namely $Y_1 = 10,193 + 0,685 X$, shows that if the HOTS-based assessment is fixed or has a

value of 0 (zero), then the amount produced by critical thinking skills is 10,193. As for the regression coefficient value of HOTS-based assessment is 0,685, indicating that the effect of HOTS-based assessment on critical thinking skills is positive. Every escalate 1 unit will increase students' critical thinking skills by 68,5%, with the note of other variables considered constant. Also, the variation of changes in the critical thinking skills variable is influenced by 32,3% of the HOTS-based assessment variable's changes, while other factors influence the rest. It proves that HOTS-based assessment is not the only factor affecting students' critical thinking skills at SMA Al-Azhar Mandiri Palu.

c. Hypothesis Test

Hypothesis test was done by using a partial test (T-test). T-test was conducted to determine the effect of HOTS-based assessments on the development of students' critical thinking skills. The T-test was done by using the SPSS 25 program so that it acquires the T-test output in the following table:

Table 4.15
T Test Results of X to Y₁

Model		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	10.193	3.430		2.971	.004	3.364	17.022
	HOTS-based Assessment	.685	.112	.568	6.098	.000	.462	.909

a. Dependent Variable: Critical Thinking

Source: Output Data of SPSS 25, July 27th, 2020

Steps in processing the output of T-Test (Partial Test):

1) Formulating hypotheses

H₀ : There is no significant effect between *Higher-Order Thinking*

Skills (HOTS)-based assessment on the development of students' critical thinking skills at SMA Al-Azhar Mandiri Palu

H_a : There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' critical thinking skills at SMA Al-Azhar Mandiri Palu.

2) Establishing criteria

It is known that $df = 78$ ($df = N - 2 = 80 - 2$) so that the T_{table} value at the significance level $\alpha = 0,05$ is 1,990.

3) The results of $T_{statistics}$ value

The results of $T_{statistics}$ value by using SPSS 25 is 6,098.

4) Making Decision

If the $T_{statistics}$ value is greater than the T_{table} value, then H_a is accepted, and H_0 is rejected. From the output results in the table above, it shows that the HOTS-based assessment variable has a $T_{statistics}$ value of 6,098 while the T_{table} is 1,990 at significance level $\alpha = 0,05$, which means that the $T_{statistics}$ is greater than the T_{table} .

5) Conclusion

Thus, it can be concluded that the HOTS-based assessment variable has a significant effect on the critical thinking skills variable. So the hypothesis H_a which reads "There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the

development of students' critical thinking skills at SMA Al-Azhar Mandiri Palu" is accepted.

Based on the research data processing results above, it can be concluded that HOTS-based assessments are affecting the development of students' critical thinking skills.

2. The Effect of Higher-Order Thinking Skills (HOTS)-based Assessment on the Development of Students' Creative Thinking Skills at SMA Al-Azhar Mandiri Palu

a. Classic Assumption Test

The classic assumption test used in this research is the linearity test, normality test, and outlier test.

1) Outlier Test

The outliers test is used to see whether the observation data has outlier data or not. The way to detect outliers is by looking at the criteria for normal curve limitation, which have a Z-score in the range -2,5 to 2,5 If the output data shows a Z-score above 2,5 or below -2,5, then the data has outliers.

Table 4. 16
Outlier Data Results

No.	X	Y2	ZX	ZY2
1.	29	27	-0.50251	-0.63488
2.	36	34	2.01002	1.44425
3.	30	32	-0.14357	0.85022
4.	26	27	-1.5793	-0.63488
5.	29	29	-0.50251	-0.04084
6.	27	26	-1.22037	-0.9319
7.	30	31	-0.14357	0.5532
8.	28	25	-0.86144	-1.22891
9.	25	26	-1.93823	-0.9319
10.	27	26	-1.22037	-0.9319

11.	29	26	-0.50251	-0.9319
12.	29	32	-0.50251	0.85022
13.	33	32	0.93322	0.85022
14.	29	22	-0.50251	-2.11997
15.	30	23	-0.14357	-1.82295
16.	30	29	-0.14357	-0.04084
17.	27	30	-1.22037	0.25618
18.	28	26	-0.86144	-0.9319
19.	29	31	-0.50251	0.5532
20.	30	32	-0.14357	0.85022
21.	30	29	-0.14357	-0.04084
22.	31	28	0.21536	-0.33786
23.	28	27	-0.86144	-0.63488
24.	29	25	-0.50251	-1.22891
25.	28	30	-0.86144	0.25618
26.	28	27	-0.86144	-0.63488
27.	30	29	-0.14357	-0.04084
28.	25	31	-1.93823	0.5532
29.	31	29	0.21536	-0.04084
30.	30	24	-0.14357	-1.52593
31.	28	22	-0.86144	-2.11997
32.	28	27	-0.86144	-0.63488
33.	31	27	0.21536	-0.63488
34.	32	34	0.57429	1.44425
35.	35	32	1.65109	0.85022
36.	29	35	-0.50251	1.74127
37.	26	25	-1.5793	-1.22891
38.	28	29	-0.86144	-0.04084
39.	31	29	0.21536	-0.04084
40.	28	26	-0.86144	-0.9319
41.	33	32	0.93322	0.85022
42.	33	27	0.93322	-0.63488
43.	33	38	0.93322	2.63233
44.	35	29	1.65109	-0.04084
45.	30	25	-0.14357	-1.22891
46.	35	30	1.65109	0.25618
47.	34	32	1.29216	0.85022
48.	33	30	0.93322	0.25618
49.	25	25	-1.93823	-1.22891
50.	36	37	2.01002	2.33531
51.	29	24	-0.50251	-1.52593

52.	29	27	-0.50251	-0.63488
53.	33	33	0.93322	1.14723
54.	28	25	-0.86144	-1.22891
55.	32	33	0.57429	1.14723
56.	35	32	1.65109	0.85022
57.	34	30	1.29216	0.25618
58.	28	26	-0.86144	-0.9319
59.	28	26	-0.86144	-0.9319
60.	30	31	-0.14357	0.5532
61.	28	29	-0.86144	-0.04084
62.	33	27	0.93322	-0.63488
63.	31	29	0.21536	-0.04084
64.	31	29	0.21536	-0.04084
65.	28	28	-0.86144	-0.33786
66.	29	32	-0.50251	0.85022
67.	31	31	0.21536	0.5532
68.	31	33	0.21536	1.14723
69.	31	33	0.21536	1.14723
70.	35	37	1.65109	2.33531
71.	30	29	-0.14357	-0.04084
72.	29	27	-0.50251	-0.63488
73.	33	30	0.93322	0.25618
74.	36	32	2.01002	0.85022
75.	35	27	1.65109	-0.63488
76.	35	30	1.65109	0.25618
77.	34	32	1.29216	0.85022
78.	30	30	-0.14357	0.25618
79.	32	31	0.57429	0.5532
80.	30	32	-0.14357	0.85022

Source: Output Data of SPSS 25, October 24th, 2020

The table above shows that each variable did not have a Z-score above 2,5 or a Z-score below -2,5. Thus it can be concluded that each variable did not have outliers data.

2) Linearity Test

The linearity test aims to determine whether two variables have a significant linear correlation. With the help of the SPSS 25 program, it acquires an output as follows.

Table 4. 17
Linearity Test Results of X to Y₂

			ANOVA Table				
			Sum of Squares	df	Mean Square	F	Sig.
Creative Thinking * HOTS-based Assessment	Between Groups	(Combined)	332.670	11	30.243	3.654	.000
		Linearity	274.939	1	274.939	33.218	.000
		Deviation from Linearity	57.731	10	5.773	.698	.723
	Within Groups		562.818	68	8.277		
		Total	895.488	79			

Source: Output Data of SPSS 25, October 24th, 2020

There are two criteria in processing the linearity test's output, namely based on the significant value and F_{statistics} value.

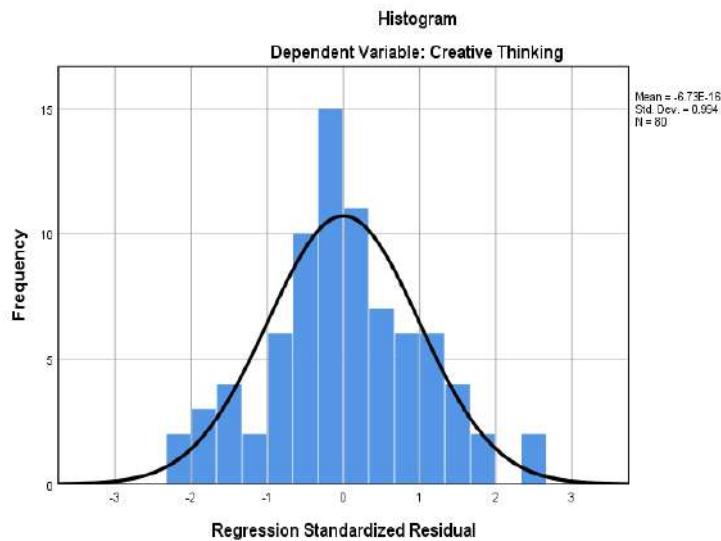
- a) The significance value (Sig.): Based on the output above, the value of Deviation from Linearity Sig. is 0,723 > 0,05. Then it can be concluded that there is a significant linear correlation between the HOTS-based assessment (X) and critical thinking skills (Y₁) variables.
- b) The F_{statistics} value: Based on the output above, the F_{statistics} value is 0,698 < F_{table} 1,97. It shows that F_{statistics} value is smaller than the F_{table} value, then it can be concluded that there is a significant linear correlation between the independent and dependent variables.

3) Normality Test

The normality test aims to determine whether a data distribution is normal. The way to detect whether the analyzed data is normally distributed or not is by examining the histogram graph and the Normal Probability Plot graph. If the

graph shows the distribution of data around the diagonal line and follows the diagonal line's direction, then the regression model has fulfilled the assumption of normality. The results of the normality test are as follows:

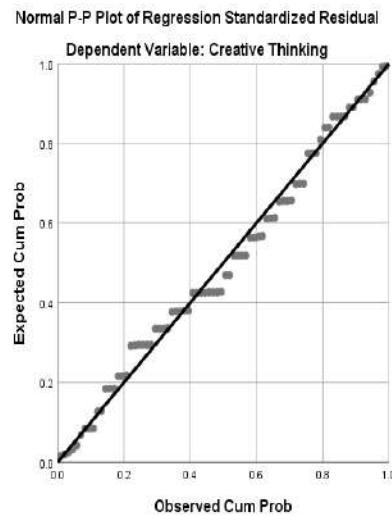
Figure 4.3
Normality Test Results (Histogram)



Source: Output Data of SPSS 25, July 27th, 2020

Based on the histogram graphic above, it shows that generally, the distribution of the data follows the normal curve. There is no slope and outliers, so it can be concluded that the histogram graph provides a normal distribution.

Figure 4.4
Normality Test Results (Probability Plot)



Source: Output Data of SPSS 25, July 27th, 2020

The graph above shows that the dots are following and spreading around the diagonal line. If the data spread around the diagonal line and follows the diagonal path, the regression model meets the normality assumption. Thus, by looking at the display of the histogram and the probability plot graph, it can be concluded that the histogram graph provides a normal distribution pattern. At the same time, the probability plot graph shows that the data is normally distributed. So, this research's regression model has met the normality assumption and can be used for further testing.

b. Simple Linear Regression Analysis

This research aims to determine HOTS-based assessment's effect on the development of students' creative thinking skills at SMA Al-Azhar Mandiri Palu through a simple linear regression analysis method. With the help of the SPSS 25 program, it acquires an output as follows.

Table 4.18
Simple Linear Regression Analysis Results of X to Y₂

Model		Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B
		B	Std. Error	Beta			Lower Bound Upper Bound
1	(Constant)	8.782	3.477		2.526	.014	1.859 15.704
	HOTS-based Assessment	.670	.114	.554	5.879	.000	.443 .896

a. Dependent Variable: Creative Thinking

Source: Output Data of SPSS 25, July 27th, 2020

Based on the results of data processing above, acquiring a simple linear regression equation as follows:

$$Y_2 = 8,782 + 0,670 X$$

The simple linear equation above can be described as follows:

- 1) The constant values is 8,782. This value indicates that if the independent variable, namely HOTS-based assessment (X), is fixed or has a value of 0 (zero), then the value produced by the dependent variable, namely creative thinking skills (Y₂), is 8,782.
- 2) The independent variable regression coefficient (HOTS-based assessment) value is 0,670, indicating that the effect of HOTS-based assessments on creative thinking skills is positive. Every escalate 1 unit

will increase students' creative thinking skills by 0,670 or 67%, with the note of other variables considered constant.

Table 4.19
Simple Linear Regression Coefficient of X to Y₂

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.554 ^a	.307	.298	2.82059	.307	34.558	1	78	.000

a. Predictors: (Constant), HOTS-based Assessment
b. Dependent Variable: Creative Thinking

Source: Output Data of SPSS 25, July 27th, 2020

Based on the output above, the correlation coefficient (R) value is 0,554, which means that the correlation between the HOTS-based assessment variables on developing creative thinking skills is 0,554 or 55,4%. As for the coefficient of determination, R Square is 0,307. It indicates that the variation of changes in the creative thinking skills variable is influenced by the HOTS-based assessment variable's changes by 30,7%. Furthermore, the rest of 70,3% is influenced by other variables that are not examined in this research.

Thus from the simple linear regression equation acquired, namely $Y_2 = 8,782 + 0,670 X$, shows that if the HOTS-based assessment is fixed or has a value of 0 (zero), then the amount produced by creative thinking skills is 8,782. As for the regression coefficient value of HOTS-based assessment is 0,670, indicating that the effect of HOTS-based assessment on creative thinking skills is positive. Every escalate 1 unit will increase students' creative thinking skills by 67%, with the note of other variables considered constant. Also, the variation of changes in the creative thinking skills variable is influenced by 30,7% of the HOTS-based

assessment variable's changes, while other factors influence the rest. It proves that HOTS-based assessment is not the only factor affecting students' creative thinking skills at SMA Al-Azhar Mandiri Palu.

c. Hypothesis Test

Hypothesis test was done by using a partial test (T-test). T-test was conducted to determine the effect of HOTS-based assessments on the development of students' creative thinking skills. The T-test was done by using the SPSS 25 program so that it acquires the T-test output in the following table:

Table 4.20
T Test Results of X to Y₂

Model		Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B
		B	Std. Error	Beta			Lower Bound Upper Bound
1	(Constant)	8.782	3.477		2.526	.014	1.859 15.704
	HOTS-based Assessment	.670	.114	.554	5.879	.000	.443 .896

a. Dependent Variable: Creative Thinking

Source: Output Data of SPSS 25, July 27th, 2020

Steps in processing the output of T-Test (Partial Test):

1) Formulating hypotheses

H_0 : There is no significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' creative thinking skills at SMA Al-Azhar Mandiri Palu

H_a : There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of

students' creative thinking skills at SMA Al-Azhar Mandiri Palu.

2) Establishing criteria

It is known that $df = 78$ ($df = N - 2 = 80 - 2$) so that the T_{table} value at the significance level $\alpha = 0,05$ is 1,990.

3) The results of $T_{statistics}$ value

The results of $T_{statistics}$ value by using SPSS 25 is 5,879.

4) Making Decision

If the $T_{statistics}$ value is greater than the T_{table} value, then H_a is accepted, and H_0 is rejected. From the output results in the table above, it shows that the HOTS-based assessment variable has a $T_{statistics}$ value of 5,879 while the T_{table} is 1,990 at significance level $\alpha = 0,05$, which means that the $T_{statistics}$ is greater than the T_{table} .

5) Conclusion

Thus, it can be concluded that the HOTS-based assessment variable has a significant effect on the creative thinking skills variable. So the hypothesis H_a which reads "There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' creative thinking skills at SMA Al-Azhar Mandiri Palu" is accepted.

Based on the research data processing results above, it can be concluded that HOTS-based assessments are affecting the development of students' creative thinking skills.

F. Discussion

1. The Effect of Higher-Order Thinking Skills (HOTS)-based Assessment on the Development of Students' Critical Thinking Skills at SMA Al-Azhar Mandiri Palu

Following the statistics results, it can be concluded that HOTS-based assessments significantly affecting the development of students' critical thinking skills. The simple analysis regression results show that the HOTS-based assessment variable positively and significantly affects the critical thinking skills variable. If HOTS-based assessment is high, students' critical thinking skills will be high. If HOTS-based assessment is low, students' critical thinking skills will be lower.

It indicates that optimizing the implementation of HOTS-based assessments can develop students' critical thinking skills. Because the item of HOTS-based assessments is directly related to the context of real-life experiences. Therefore, by accustoming students to answering HOTS-based questions can emphasize students' critical thinking skills where students can solve the problems by analyzing, connecting, and integrating their knowledge to the questions.

Regarding that issue, Tran Vui stated that higher-order thinking skills occur when a person takes new information and stores it in memory, and

interrelates and extends the information to achieve a purpose or possible answer in perplexing situations. Cohen also stated that critical thinkers look at issues and problems in the real world, with their fuzziness and contradictions, and offer relevant, practical, and sharp insights into them.

Critical thinking skills emphasize rational or sensible thinking and reflection so it can achieve the decision-making process. Through critical thinking skills, students can distinguish which opinions are relevant and irrelevant as well as able to make conclusions by considering the data and facts. Therefore, critical thinking skills should be developed from an early age so that when students faced a problem in learning, they can solve it well and achieve maximum learning outcomes.

Hence, based on the theory that has been proposed and research that has been done with the results of research, there is a significant effect of higher-order thinking skills-based assessment on the development of students' critical thinking skills. This research's results supported the results of research conducted by Retno Tri Lidya Ningrum (2016), which concludes that HOTS-based cognitive assessment instruments have a significant effect on students' critical thinking skills.

2. The Effect of Higher-Order Thinking Skills (HOTS)-based Assessment on the Development of Students' Creative Thinking Skills at SMA Al-Azhar Mandiri Palu

Following the statistics results, it can be concluded that HOTS-based assessments significantly affecting the development of students' creative thinking skills. The simple analysis regression results show that the HOTS-based

assessment variable positively and significantly affects the creative thinking skills variable. If HOTS-based assessment is high, students' creative thinking skills will be high. If HOTS-based assessment is low, students' creative thinking skills will be lower.

It indicates that optimizing the implementation of HOTS-based assessments can develop students' creative thinking skills. Because HOTS-based assessment emphasizes students' ability to explore, discover, and create. The item of HOTS-based assessments generally does not present all information explicitly but compels students to dig out the implied information by themselves. It needs critical in selecting and sorting the necessary information.

According to Widihastuti, HOTS-based assessment focuses on developing the ability to apply, analyze, evaluate, and create so that students can think critically, providing logical, analytical, and systematic reasons, solving problems, and making decisions quickly and precisely, and creating new products. Therefore, implementing HOTS-based assessment not only can affect the development of students' critical thinking skills but also their creative thinking skills.

Hence, based on the theory that has been proposed and research that has been done with the results of research, there is a significant effect of higher-order thinking skills-based assessment on the development of students' creative thinking skills. This research's results supported the results of research conducted by Deni Nasir Ahmad (2020), which concludes that HOTS-based assessment can provide a change in students' critical and creative thinking skills.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the analysis of research results and discussion described in the previous chapter, it can be concluded that:

1. There is a significant effect between the X variable (Higher-Order Thinking Skills (HOTS)-based assessment) on the Y_1 variable (critical thinking skills). It can be seen from the simple linear regression equation acquired, namely $Y_1 = 10,193 + 0,685 X$, shows that if the HOTS-based assessment is fixed or has a value of 0 (zero), then the amount produced by critical thinking skills is 10,193. As for the regression coefficient value of HOTS-based assessment is 0,685, indicating that the effect of HOTS-based assessment on critical thinking skills is positive. Every escalate 1 unit will increase students' critical thinking skills by 68,5%, with the note of other variables considered constant. Also, the T-test results show that the $T_{\text{statistics}}$ value of 6,098 is greater than the T_{table} value of 1,990 at a significance level of $\alpha = 0,05$. So it can be interpreted that hypothesis H_a , which reads, "There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' critical thinking skills at SMA Al-Azhar Mandiri Palu" is accepted.
2. There is a significant effect between the X variable (Higher-Order Thinking Skills (HOTS)-based assessment) on the Y_2 variable (creative thinking

skills). It can be seen from the simple linear regression equation acquired, namely $Y_2 = 8,782 + 0,670 X$, shows that if the HOTS-based assessment is fixed or has a value of 0 (zero), then the amount produced by creative thinking skills is 8,782. As for the regression coefficient value of HOTS-based assessment is 0,670, indicating that the effect of HOTS-based assessment on creative thinking skills is positive. Every escalate 1 unit will increase students' creative thinking skills by 67%, with the note of other variables considered constant. Also, the T-test results show that the $T_{\text{statistics}}$ value of 5,879 is greater than the T_{table} value of 1,990 at a significance level of $\alpha = 0,05$. So it can be interpreted that hypothesis H_a , which reads, "There is a significant effect between *Higher-Order Thinking Skills* (HOTS)-based assessment on the development of students' creative thinking skills at SMA Al-Azhar Mandiri Palu" is accepted.

B. Suggestion

After presenting the research results and conclusions, the next is suggestions that are likely to benefit various parties. The suggestions are as follows:

1. The Principal should facilitate and motivate teachers to take part in the training of HOTS-based assessment.
2. The teachers should be more committed to implementing HOTS-based assessments because it can ease the teachers to improve students' critical and creative thinking skills.

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APPENDICES

ANGKET PENELITIAN

“PENGARUH PENILAIAN BERBASIS *HIGHER-ORDER THINKING SKILLS (HOTS)* TERHADAP PENGEMBANGAN KETERAMPILAN BERPIKIR KRITIS DAN KREATIF PESERTA DIDIK DI SMA AL-AZHAR MANDIRI PALU”

A. Identitas

Nama :
Umur :
Jenis Kelamin : L / P
Kelas :
E-mail :

B. Petunjuk Pengisian

1. Baca dan pahamilah masing-masing pernyataan di bawah ini dengan cermat. Jawablah dengan sejujur-jujurnya tanpa dipengaruhi oleh siapapun. Setiap pilihan jawaban tidak mewujudkan baik/buruk atau benar/salah. Semua jawaban dianggap benar selama sesuai dengan diri anda.
2. Berikan tanda checklist (✓) pada kolom pilihan jawaban yang paling sesuai dengan keadaan anda yang sesungguhnya. Pilihan jawaban yang tersedia antara lain:

SS : Sangat Setuju
S : Setuju
TS : Tidak Setuju
STS : Sangat Tidak Setuju
3. Terimakasih atas partisipasinya dalam mengisi angket ini.

~Selamat Mengerjakan~

No	DAFTAR PERNYATAAN	JAWABAN			
		SS	S	TS	STS
	A. Penilaian berbasis <i>Higher-Order Thinking Skills</i> (HOTS)				
1.	Saya mampu mengidentifikasi pokok utama suatu permasalahan				
2.	Saya mampu menghubungkan informasi/pengetahuan yang telah diterima dalam menyelesaikan suatu masalah				
3.	Saya selalu memeriksa kembali benar atau tidaknya informasi yang diterima				
4.	Saya selalu menguji cara atau solusi yang tepat sebelum menerapkannya dalam penyelesaian masalah				
5.	Saya mampu memunculkan beragam ide atau jawaban dengan lancar				
6.	Saya mampu menyelesaikan masalah dengan pendekatan dan solusi yang bervariasi				
7.	Saya tidak mampu membedakan antara penyebab dan akibat dari suatu permasalahan				
8.	Saya sulit merumuskan pertanyaan				
9.	Saya tidak suka mencari cara atau solusi yang benar dalam menyelesaikan suatu masalah				
10.	Saya tidak suka menampilkan ide atau hasil karya saya kepada orang lain				
	B. Keterampilan Berpikir Kritis				
11.	Saya tidak malu bertanya kepada orang lain bila sedang mendapatkan kesulitan				
12.	Saya selalu mencari tahu apakah suatu sumber informasi dapat dipercaya atau tidak				
13.	Saya mampu menyimpulkan materi pembelajaran yang sudah diberikan				
14.	Saya mampu mengidentifikasi ketidakbenaran yang disengaja				
15.	Saya menyiapkan solusi alternatif dalam memutuskan suatu tindakan				
16.	Saya tidak suka menjawab pertanyaan yang menantang				
17.	Saya tidak mempertimbangkan laporan hasil observasi dalam membuat kesimpulan				
18.	Saya menarik kesimpulan yang tidak sesuai dengan fakta				
19.	Saya tidak mampu membedakan hal-hal yang termasuk asumsi, fakta, atau opini				
20.	Saya berpendapat tanpa memberikan bukti				
	C. Keterampilan Berpikir Kreatif				
21.	Saya mampu menyelesaikan soal dengan lancar dan cepat				
22.	Saya senang memberi banyak jawaban dalam menjawab suatu pertanyaan				

23.	Saya mampu menyelesaikan soal dengan lebih dari satu cara				
24.	Saya mampu mendiskusikan suatu permasalahan dengan cara yang berbeda-beda				
25.	Saya senang memberikan ide-ide yang tidak pernah terpikirkan oleh orang lain				
26.	Saya senang menambahkan dan mengembangkan tanggapan orang lain				
27.	Saya tidak suka mencari alternatif jawaban yang lain dalam menyelesaikan masalah				
28.	Saya hanya mampu melihat suatu masalah dari satu sudut pandang				
29.	Saya senang meniru ide orang lain				
30.	Saya tidak suka memberikan jawaban dengan rinci dan jelas				

Students' Answers

Variable X (HOTS-based Assessment)

No.	Name	Questionnaire Items										Totaled
		X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	
1	Intan Nuraini	3	3	3	3	3	3	2	3	3	3	29
2	Mirza Faris Rahman	3	3	4	4	3	3	4	4	4	4	36
3	Nailah Nafisah	3	3	3	4	2	3	3	3	3	3	30
4	Reihan	3	3	3	3	2	2	3	2	3	2	26
5	Risti Rahmatunnisa	3	3	3	3	3	3	3	2	3	3	29
6	Shafiyah	3	3	3	3	2	2	3	2	3	3	27
7	Yoga Dwisatya Giri	3	3	4	4	2	2	3	3	4	2	30
8	Aisyah H	3	2	4	1	4	2	3	2	3	4	28
9	Amanda Puspa Cendana	3	3	3	2	2	2	2	2	3	3	25
10	Azka Dani Ismatullah	3	3	3	2	2	2	3	3	3	3	27
11	Bela Regita Cahyani	3	3	3	3	3	2	3	3	3	3	29
12	Christania Natasha	3	3	3	3	3	3	3	2	3	3	29
13	Dani Rizky	3	4	3	4	3	4	3	2	4	3	33
14	Diah Liandary	3	3	4	3	2	3	3	3	3	2	29
15	Fitriana Muthia	3	3	4	4	2	2	3	3	3	3	30
16	Muh. Fatiha Rahminda K.	3	3	4	3	3	3	3	3	3	2	30
17	Siti Nurhalizah Ahmad	3	2	3	3	2	2	3	3	3	3	27
18	Fitria E. Malelea	3	3	3	2	3	3	3	2	3	3	28
19	Nurul Intan Hidayah	3	3	4	3	3	3	2	3	3	2	29
20	Reina	3	3	3	2	2	2	4	3	4	4	30
21	Utari	3	3	3	3	3	3	3	3	3	3	30
22	Andi Rezky	3	3	3	3	3	4	3	3	3	3	31
23	Citra Nur Indah	3	3	4	3	2	3	2	3	3	2	28
24	Deviana Erlinawati Putri	3	2	3	4	2	3	3	2	4	3	29
25	Fadil Gunawan	3	3	3	2	3	2	3	3	3	3	28
26	Iin Sriana Nurlina	3	3	3	3	2	3	3	2	3	3	28
27	Muh. Imam Maulana P.	2	3	4	3	4	3	3	3	3	2	30
28	Rikhul	3	3	3	2	2	2	2	2	3	3	25
29	Syamsu Hatdi	3	3	3	4	3	3	3	3	3	3	31
30	Zahra Nurani	3	3	3	2	3	3	3	2	4	4	30
31	Ahmad Dwi Fauzan	3	3	4	3	2	2	3	2	3	3	28
32	Alifia Rusyda	3	3	3	2	2	3	3	2	3	4	28
33	Arrizq Abiyan Aziz	3	3	4	4	3	3	3	3	3	2	31
34	Cekkidoll	4	4	4	3	3	4	2	2	4	2	32
35	Dinda	4	4	4	4	3	3	3	3	4	3	35
36	Fadlia Nur	3	3	4	3	3	3	2	2	3	3	29

37	Faiz Ibrahim	3	3	3	3	2	3	2	2	3	2	26
38	Haikal Alif Eyrlangga	3	3	3	2	3	3	3	2	3	3	28
39	Isra	4	3	4	3	3	3	3	2	3	3	31
40	La Ode Muh. Khaidir	3	3	4	2	3	2	2	2	4	3	28
41	Muh. Hamdan Mubarak	3	3	4	3	3	3	4	3	4	3	33
42	Muhammad Kamal Jaya	3	3	4	4	3	3	3	3	4	3	33
43	Muhammad Riziq	2	3	4	4	3	3	3	3	4	4	33
44	Ninda	3	4	4	3	3	2	4	4	4	4	35
45	Nova Rizkia	3	4	3	4	3	3	2	2	3	3	30
46	Nur Fadilah (XII)	3	4	4	3	3	3	4	3	4	4	35
47	Nurull	3	4	4	4	3	4	3	3	3	3	34
48	Piu	3	3	4	4	2	3	4	2	4	4	33
49	Rania	3	3	3	2	2	2	2	3	3	2	25
50	Siswa	4	4	3	4	4	3	3	4	4	3	36
51	Yenny Wulandari	3	4	3	3	3	3	3	2	3	2	29
52	Cahaya Nissa	3	3	3	3	3	2	3	2	3	4	29
53	Dinda Nur Azmy	4	3	4	4	3	3	3	3	3	3	33
54	Raniyah Farah Fatihah Laoh	3	3	4	3	2	3	2	2	3	3	28
55	Adinda Fildsah	3	4	3	4	3	3	4	3	3	2	32
56	Dian Sancika Rizky Sembiring	4	4	4	4	3	3	3	3	4	3	35
57	Isra Muhammad	3	3	3	3	4	4	4	3	3	4	34
58	Melati Putri Fahima	3	3	4	2	2	3	3	2	3	3	28
59	Putri	3	3	4	2	2	3	3	2	3	3	28
60	Miftah	3	3	3	3	3	3	3	3	3	3	30
61	Muh Hidayat Azmar	3	3	3	3	3	3	2	3	3	2	28
62	Nadya Ainun	3	3	3	3	3	3	3	4	4	4	33
63	Rahmad Hidayat Pakan	3	3	4	3	3	3	3	3	3	3	31
64	Ahmad Rifai	3	3	4	3	3	3	3	3	3	3	31
65	Andi Maziyah	3	3	3	3	3	2	3	3	3	2	28
66	Annisa Miftahul Arifah	3	3	3	3	3	3	3	3	3	2	29
67	Aulia Hidayah Kurniasari	3	3	3	3	3	3	3	3	4	3	31
68	Aura Akta Amalia	3	3	4	3	3	3	3	2	4	3	31
69	Amalia AA.	3	3	4	3	3	3	3	2	4	3	31
70	Fahreza Nurhidayat	4	4	4	4	3	3	1	4	4	4	35
71	Inaya Putri	3	3	3	3	3	3	3	3	3	3	30
72	Kaffa Amaravati	3	3	3	4	2	2	4	3	3	2	29
73	KPL Nurul Intifada	3	3	4	3	3	3	3	4	3	4	33
74	Mochammad Rizky Tenrisau	3	3	4	4	3	3	4	4	4	4	36
75	Mohammad Yusuf	3	4	4	4	3	4	3	3	3	4	35

76	Muhammad Rizqi Muslimin	4	3	4	4	4	3	4	3	3	3	35
77	Nurullia	3	4	4	4	3	4	3	3	3	3	34
78	Prima Kusuma Wardana	3	3	3	3	3	3	3	3	3	3	30
79	Rayanda	3	3	4	3	3	3	4	3	3	3	32
80	Regina Raisya Tiara	3	3	3	3	3	3	3	3	3	3	30
	Total	246	251	279	249	222	228	237	219	262	239	2432

Variable Y1 (Critical Thinking Skills)

No.	Name	Questionnaire Items										Totaled
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
1	Intan Nuraini	3	3	3	3	3	3	3	3	3	3	30
2	Mirza Faris Rahman	3	4	4	4	4	4	4	4	4	4	39
3	Nailah Nafisah	3	4	3	2	4	2	3	3	3	3	30
4	Reihan	4	3	3	3	2	2	3	4	3	2	29
5	Risti Rahmatunnisa	2	3	3	2	3	3	3	3	2	3	27
6	Shafiyah	2	3	2	2	3	3	4	4	3	4	30
7	Yoga Dwisatyta Giri	3	4	3	3	3	2	3	3	3	3	30
8	Aisyah H	4	3	3	2	4	2	4	4	3	3	32
9	Amanda Puspa Cendana	4	3	2	3	2	2	3	3	2	3	27
10	Azka Dani Ismatullah	4	4	3	2	2	3	3	3	3	3	30
11	Bela Regita Cahyani	3	3	2	2	3	2	3	3	2	3	26
12	Christania Natasha	3	3	3	3	3	3	3	4	3	4	32
13	Dani Rizky	3	4	3	3	4	3	4	4	3	2	33
14	Diah Liandary	2	3	2	3	3	2	3	3	3	3	27
15	Fitriana Muthia	4	4	3	3	2	3	3	3	3	3	31
16	Muh. Fatiha Rahminda K.	3	4	3	3	3	2	3	4	4	4	33
17	Siti Nurhalizah Ahmad	3	4	3	2	3	2	4	4	4	4	33
18	Fitria E. Malelea	4	3	3	3	2	2	4	4	3	4	32
19	Nurul Intan Hidayah	3	3	2	3	2	2	3	3	3	3	27
20	Reina	4	4	3	3	3	4	4	4	4	4	37
21	Utari	3	3	3	2	3	3	3	3	3	4	30
22	Andi Rezky	3	3	3	3	3	3	3	3	3	3	30
23	Citra Nur Indah	4	3	2	2	3	3	2	3	3	3	28
24	Deviana Erlinawati Putri	3	3	3	2	2	2	2	4	3	3	27
25	Fadil Gunawan	4	3	3	3	3	3	3	3	3	3	31
26	Iin Sriana Nurlina	3	2	2	2	3	2	3	3	2	3	25
27	Muh. Imam Maulana P.	4	4	2	3	3	3	3	4	3	4	33
28	Rikhul	3	3	3	3	3	3	3	4	3	3	31
29	Syamsu Hatdi	3	3	3	3	3	3	3	3	3	3	30
30	Zahra Nurani	4	4	3	3	2	2	3	3	3	3	30
31	Ahmad Dwi Fauzan	3	3	3	3	2	2	3	3	3	3	28

32	Alifia Rusyda	2	4	3	3	3	2	3	3	3	4	30
33	Arrizq Abiyan Aziz	4	3	3	3	4	3	3	4	4	3	34
34	Cekkidoll	4	3	4	4	3	4	3	4	4	3	36
35	Dinda	3	3	3	4	3	2	3	4	3	4	32
36	Fadlia Nur	4	3	3	3	3	3	3	4	2	2	30
37	Faiz Ibrahim	3	3	2	3	3	2	2	3	3	3	27
38	Haikal Alif Eyrlangga	3	3	3	2	3	3	3	3	3	3	29
39	Isra	3	3	3	4	3	2	3	3	3	3	30
40	La Ode Muh. Khadir	3	3	2	3	2	4	3	4	3	3	30
41	Muh. Hamdan Mubarak	3	3	3	3	3	3	3	4	3	4	32
42	Muhammad Kamal Jaya	2	3	3	3	3	3	3	3	3	3	29
43	Muhammad Riziq	4	4	3	4	4	4	4	4	4	4	39
44	Ninda	3	3	3	3	2	3	2	2	4	4	29
45	Nova Rizkia	2	3	3	2	2	3	3	3	3	4	28
46	Nur Fadilah	4	4	4	3	4	3	3	4	4	4	37
47	Nurull	4	4	4	4	4	4	3	4	4	4	39
48	Piu	4	3	3	3	3	3	4	4	3	3	33
49	Rania	3	3	3	2	2	3	3	3	2	3	27
50	Siswa	2	4	4	4	4	3	4	3	4	4	36
51	Yenny Wulandari	3	2	3	3	3	1	3	4	2	3	27
52	Cahaya Nissa	2	3	3	2	2	3	3	4	3	3	28
53	Dinda Nur Azmy	2	4	4	4	4	2	3	4	4	4	35
54	Raniyah Farah Fatihah Laoh	3	3	3	3	2	2	2	3	3	2	26
55	Adinda Fildsah	3	3	3	4	4	2	3	3	3	4	32
56	Dian Sancika Rizky Sembiring	4	4	3	3	3	3	3	4	4	4	35
57	Isra Muhammad	3	3	3	4	3	3	3	3	3	3	31
58	Melati Putri Fahima	4	3	3	3	3	3	3	3	3	3	31
59	Putri	4	3	3	3	3	3	3	3	3	3	31
60	Miftah	4	4	3	3	4	3	4	4	4	4	37
61	Muh Hidayat Azmar	3	3	3	3	2	3	3	3	3	3	29
62	Nadya Ainun	3	3	3	3	3	3	4	2	3	3	30
63	Rahmad Hidayat Pakan	3	3	3	2	3	2	2	3	3	3	27
64	Ahmad Rifai	3	3	3	3	3	3	3	4	3	3	31
65	Andi Maziyah	3	4	3	2	2	1	3	3	4	3	28
66	Annisa Miftahul Arifah	3	3	3	3	3	3	3	3	3	3	30
67	Aulia Hidayah Kurniasari	3	3	3	3	3	3	4	3	3	3	31
68	Aura Akta Amalia	3	4	3	3	3	2	3	4	3	3	31
69	Amalia AA.	3	4	3	3	3	2	3	4	3	3	31
70	Fahreza Nurhidayat	4	4	4	4	4	4	3	4	3	4	38
71	Inaya Putri	2	3	3	3	3	3	3	4	3	4	31

72	Kaffa Amaravati	2	2	3	3	2	3	4	4	4	3	30
73	KPL Nurul Intifada	3	3	4	3	3	3	4	3	3	3	32
74	Mochammad Rizky Tenrisau	3	3	4	3	3	3	4	4	4	4	35
75	Mohammad Yusuf	2	3	3	3	1	4	3	2	2	3	26
76	Muhammad Rizqi Muslimin	3	4	3	3	3	3	3	4	2	3	31
77	Nurullia	4	4	4	4	4	4	3	4	4	4	39
78	Prima Kusuma Wardana	3	3	3	3	3	3	2	3	3	3	29
79	Rayanda	3	4	3	4	3	1	4	4	4	3	33
80	Regina Raisya Tiara	3	3	3	3	4	3	4	3	3	3	32
	Total	252	263	240	236	235	218	251	275	250	262	2482

Variable Y2 (Creative Thinking Skills)

No.	Name	Questionnaire Items										Totaled
		X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	
1	Intan Nuraini	2	3	2	3	3	3	3	3	2	3	27
2	Mirza Faris Rahman	3	4	4	3	3	4	4	3	2	4	34
3	Nailah Nafisah	2	3	3	3	3	3	3	4	4	4	32
4	Reihan	2	3	3	2	3	3	2	3	3	3	27
5	Risti Rahmatunnisa	2	3	3	3	3	3	3	3	3	3	29
6	Shafiyah	2	3	2	3	2	2	3	3	3	3	26
7	Yoga Dwisatya Giri	3	3	3	4	2	4	3	2	3	4	31
8	Aisyah H	1	3	2	2	3	3	3	3	2	3	25
9	Amanda Puspa Cendana	2	2	2	2	3	3	3	3	3	3	26
10	Azka Dani Ismatullah	3	2	2	2	3	3	2	3	3	3	26
11	Bela Regita Cahyani	2	3	2	3	2	2	3	3	3	3	26
12	Christania Natasha	3	3	3	3	3	3	3	4	3	4	32
13	Dani Rizky	3	3	2	3	3	4	3	3	4	4	32
14	Diah Liandary	1	2	2	2	2	2	3	3	3	2	22
15	Fitriana Muthia	2	2	2	2	3	3	2	3	2	2	23
16	Muh. Fatiha Rahmunda K.	3	3	3	3	3	3	3	3	3	2	29
17	Siti Nurhalizah Ahmad	3	3	2	3	3	3	3	4	3	3	30
18	Fitria E. Malelea	3	2	2	2	2	3	2	3	4	3	26
19	Nurul Intan Hidayah	2	4	3	4	3	3	2	4	3	3	31
20	Reina	3	3	2	3	3	3	3	4	4	4	32
21	Utari	2	3	2	3	3	2	3	3	4	4	29
22	Andi Rezky	2	3	2	3	3	3	3	3	3	3	28
23	Citra Nur Indah	2	3	3	3	2	3	3	3	2	3	27
24	Deviana Erlinawati Putri	1	2	2	2	3	3	3	3	3	3	25
25	Fadil Gunawan	3	4	2	3	3	3	3	3	3	3	30
26	Iin Sriana Nurlina	3	3	2	2	3	3	3	3	3	2	27
27	Muh. Imam Maulana P.	2	3	3	3	2	3	3	3	4	3	29

28	Rikhul	3	4	2	3	3	3	3	4	3	3	31
29	Syamsu Hatdi	3	3	3	2	3	3	3	3	3	3	29
30	Zahra Nurani	1	2	1	3	2	3	2	3	4	3	24
31	Ahmad Dwi Fauzan	2	2	2	2	2	3	3	2	2	2	22
32	Alifia Rusyda	3	1	3	2	3	3	2	3	3	4	27
33	Arrizq Abiyan Aziz	3	2	3	3	2	3	3	4	2	2	27
34	Cekkidoll	3	4	4	3	3	4	4	4	3	2	34
35	Dinda	3	3	3	3	3	4	3	3	3	4	32
36	Fadlia Nur	4	4	4	4	4	3	3	3	3	3	35
37	Faiz Ibrahim	2	3	3	2	3	3	2	3	2	2	25
38	Haikal Alif Eyrlangga	3	3	3	3	3	3	3	3	3	2	29
39	Isra	2	3	3	3	4	3	2	3	3	3	29
40	La Ode Muh. Khaidir	3	2	2	3	2	3	3	2	3	3	26
41	Muh. Hamdan Mubarak	3	4	2	3	3	4	3	3	3	4	32
42	Muhammad Kamal Jaya	3	3	3	2	2	3	3	3	2	3	27
43	Muhammad Riziq	3	4	3	4	4	4	4	4	4	4	38
44	Ninda	3	3	2	3	2	3	4	3	3	3	29
45	Nova Rizkia	2	2	3	3	2	3	3	3	2	2	25
46	Nur Fadilah	3	3	3	3	3	3	2	4	3	3	30
47	Nurull	3	4	3	3	3	3	3	4	3	3	32
48	Piu	2	3	3	3	3	3	4	3	3	3	30
49	Rania	3	2	3	2	3	3	2	3	3	1	25
50	Siswa	3	4	4	3	4	4	4	3	4	4	37
51	Yenny Wulandari	2	2	2	3	3	2	3	3	3	1	24
52	Cahaya Nissa	3	3	2	2	2	3	3	3	3	3	27
53	Dinda Nur Azmy	3	3	3	3	4	4	3	3	3	4	33
54	Raniyah Farah Fatihah Laoh	2	3	2	2	2	3	2	3	3	3	25
55	Adinda Fildsah	3	3	2	4	4	4	3	4	3	3	33
56	Dian Sancika Rizky Sembiring	3	3	3	3	3	3	3	4	4	3	32
57	Isra Muhammad	2	3	2	3	4	3	3	3	3	4	30
58	Melati Putri Fahima	2	2	2	2	3	3	3	3	3	3	26
59	Putri	2	2	2	2	3	3	3	3	3	3	26
60	Miftah	2	3	2	3	3	4	3	3	4	4	31
61	Muh Hidayat Azmar	2	3	3	3	3	3	3	3	3	3	29
62	Nadya Ainun	2	2	3	3	3	3	2	3	4	2	27
63	Rahmad Hidayat Pakan	3	3	3	3	3	3	3	3	3	2	29
64	Ahmad Rifai	2	3	2	3	3	3	3	3	3	4	29
65	Andi Maziyah	3	3	2	3	3	3	3	3	1	4	28
66	Annisa Miftahul Arifah	3	3	3	3	4	4	3	3	3	3	32
67	Aulia Hidayah Kurniasari	3	3	3	3	4	3	3	3	3	3	31
68	Aura Akta Amalia	3	3	3	3	4	3	3	4	3	4	33

69	Amalia AA.	3	3	3	3	4	3	3	4	3	4	33
70	Fahreza Nurhidayat	3	4	4	4	3	4	4	4	3	4	37
71	Inaya Putri	3	2	3	29							
72	Kaffa Amaravati	3	3	2	3	2	2	2	3	3	4	27
73	KPL Nurul Intifada	3	30									
74	Mochammad Rizky Tenrisau	3	4	4	3	32						
75	Mohammad Yusuf	3	3	2	3	4	4	1	3	2	2	27
76	Muhammad Rizqi Muslimin	3	30									
77	Nurullia	3	4	3	3	3	3	3	4	3	3	32
78	Prima Kusuma Wardana	3	30									
79	Rayanda	3	3	3	3	3	4	3	3	3	3	31
80	Regina Raisya Tiara	3	3	3	3	4	3	3	3	3	4	32
	Total	206	234	210	227	236	249	231	254	239	245	2331

Validity of X Variable (HOTS-based Assessment)

Correlations											
	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	Total_X
X1	Pearson Correlation	1	.343**	.150	.221*	.155	.125	-.107	.153	.103	.004
	Sig. (2-tailed)		.002	.184	.049	.169	.269	.345	.174	.363	.970
	N		80	80	80	80	80	80	80	80	80
X2	Pearson Correlation	.343**	1	.150	.392**	.232*	.395**	-.028	.182	.238*	.006
	Sig. (2-tailed)		.002		.184	.000	.038	.000	.807	.106	.033
	N		80	80	80	80	80	80	80	80	80
X3	Pearson Correlation	.150	.150	1	.234*	.127	.175	.061	.175	.226*	.097
	Sig. (2-tailed)		.184	.184		.037	.262	.120	.592	.121	.044
	N		80	80	80	80	80	80	80	80	80
X4	Pearson Correlation	.221*	.392**	.234*	1	.130	.365**	.186	.389**	.244*	-.052
	Sig. (2-tailed)		.049	.000	.037		.250	.001	.098	.000	.029
	N		80	80	80	80	80	80	80	80	80
X5	Pearson Correlation	.155	.232*	.127	.130	1	.386**	.164	.311**	.094	.170
	Sig. (2-tailed)		.169	.038	.262	.250		.000	.145	.005	.407
	N		80	80	80	80	80	80	80	80	80
X6	Pearson Correlation	.125	.395**	.175	.365**	.386**	1	.021	.069	.062	.065
	Sig. (2-tailed)		.269	.000	.120	.001		.000	.855	.542	.583
	N		80	80	80	80	80	80	80	80	80
X7	Pearson Correlation	-.107	-.028	.061	.186	.164	.021	1	.247*	.168	.290**
	Sig. (2-tailed)		.345	.807	.592	.098	.145	.855		.027	.136
	N		80	80	80	80	80	80	80	80	80
X8	Pearson Correlation	.153	.182	.175	.389**	.311**	.069	.247*	1	.164	.152
	Sig. (2-tailed)		.174	.106	.121	.000	.005	.542	.027		.146
	N		80	80	80	80	80	80	80	80	80
X9	Pearson Correlation	.103	.238*	.226*	.244*	.094	.062	.168	.164	1	.340**
	Sig. (2-tailed)		.363	.033	.044	.029	.407	.583	.136	.146	.002
	N		80	80	80	80	80	80	80	80	80
X10	Pearson Correlation	.004	.006	.097	-.052	.170	.065	.290**	.152	.340**	1
	Sig. (2-tailed)		.970	.957	.393	.647	.132	.564	.009	.179	.002
	N		80	80	80	80	80	80	80	80	80
Total_X Pearson Correlation		.348**	.529**	.455**	.641**	.546**	.524**	.445**	.590**	.507**	.439**
Sig. (2-tailed)			.002	.000	.000	.000	.000	.000	.000	.000	.000
N			80	80	80	80	80	80	80	80	80

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Reliability of X Variable (HOTS-based Assessment)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.672	.676	10

Validity of Y₁ Variable (Critical Thinking Skills)

		Correlations										
		Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Total_Y1
Y11	Pearson Correlation	1	.237*	.076	.144	.162	.170	.012	.228*	.149	-.045	.399**
	Sig. (2-tailed)		.035	.500	.202	.150	.131	.913	.042	.188	.689	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y12	Pearson Correlation	.237*	1	.331**	.238*	.329**	.078	.167	.248*	.455**	.331**	.583**
	Sig. (2-tailed)	.035		.003	.033	.003	.493	.138	.027	.000	.003	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y13	Pearson Correlation	.076	.331**	1	.451**	.369**	.318**	.231*	.221*	.476**	.274*	.644**
	Sig. (2-tailed)	.500	.003		.000	.001	.004	.040	.049	.000	.014	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y14	Pearson Correlation	.144	.238*	.451**	1	.355**	.229*	.172	.208	.372**	.228*	.602**
	Sig. (2-tailed)	.202	.033	.000		.001	.041	.127	.064	.001	.042	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y15	Pearson Correlation	.162	.329**	.369**	.355**	1	.173	.296**	.332**	.339**	.316**	.659**
	Sig. (2-tailed)	.150	.003	.001	.001		.125	.008	.003	.002	.004	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y16	Pearson Correlation	.170	.078	.318**	.229*	.173	1	.164	.082	.176	.228*	.490**
	Sig. (2-tailed)	.131	.493	.004	.041	.125		.146	.470	.119	.042	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y17	Pearson Correlation	.012	.167	.231*	.172	.296**	.164	1	.293**	.264*	.210	.482**
	Sig. (2-tailed)	.913	.138	.040	.127	.008	.146		.008	.018	.062	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y18	Pearson Correlation	.228*	.248*	.221*	.208	.332**	.082	.293**	1	.329**	.257*	.556**
	Sig. (2-tailed)	.042	.027	.049	.064	.003	.470	.008		.003	.021	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y19	Pearson Correlation	.149	.455**	.476**	.372**	.339**	.176	.264*	.329**	1	.484***	.698**
	Sig. (2-tailed)	.188	.000	.000	.001	.002	.119	.018	.003		.000	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y20	Pearson Correlation	-.045	.331**	.274*	.228*	.316**	.228*	.210	.257*	.484**	1	.564**
	Sig. (2-tailed)	.689	.003	.014	.042	.004	.042	.062	.021	.000		.000
	N	80	80	80	80	80	80	80	80	80	80	80
Total_Y1	Pearson Correlation	.399**	.583**	.644**	.602**	.659**	.490**	.482**	.556**	.698**	.564**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	80	80	80	80	80	80	80	80	80	80	80

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability of Y₁ Variable (Critical Thinking Skills)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.759	.767	10

Validity of Y₂ Variable (Creative Thinking Skills)

		Correlations										
		Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y30	Total_Y2
Y21	Pearson Correlation	1	.364**	.426**	.326**	.280*	.363**	.157	.217	.020	.172	.588**
	Sig. (2-tailed)		.001	.000	.003	.012	.001	.165	.053	.858	.126	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y22	Pearson Correlation	.364**	1	.415**	.542**	.307**	.335**	.399**	.373**	.064	.327**	.732**
	Sig. (2-tailed)	.001		.000	.000	.006	.002	.000	.001	.573	.003	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y23	Pearson Correlation	.426**	.415**	1	.333**	.304**	.327**	.308**	.219	-.013	.050	.596**
	Sig. (2-tailed)	.000	.000		.003	.006	.003	.005	.051	.912	.659	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y24	Pearson Correlation	.326**	.542**	.333**	1	.281*	.302**	.322**	.313**	.195	.314**	.683**
	Sig. (2-tailed)	.003	.000	.003		.011	.006	.004	.005	.084	.005	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y25	Pearson Correlation	.280*	.307**	.304**	.281*	1	.387**	.058	.293**	.104	.231*	.573**
	Sig. (2-tailed)	.012	.006	.006	.011		.000	.609	.008	.358	.039	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y26	Pearson Correlation	.363**	.335**	.327**	.302**	.387**	1	.229*	.076	.048	.289**	.581**
	Sig. (2-tailed)	.001	.002	.003	.006	.000		.041	.502	.673	.009	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y27	Pearson Correlation	.157	.399**	.308**	.322**	.058	.229*	1	.126	.074	.268*	.513**
	Sig. (2-tailed)	.165	.000	.005	.004	.609	.041		.267	.513	.016	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y28	Pearson Correlation	.217	.373**	.219	.313**	.293**	.076	.126	1	.192	.151	.495**
	Sig. (2-tailed)	.053	.001	.051	.005	.008	.502	.267		.088	.182	.000
	N	80	80	80	80	80	80	80	80	80	80	80
Y29	Pearson Correlation	.020	.064	-.013	.195	.104	.048	.074	.192	1	.267*	.342**
	Sig. (2-tailed)	.858	.573	.912	.084	.358	.673	.513	.088		.017	.002
	N	80	80	80	80	80	80	80	80	80	80	80
Y30	Pearson Correlation	.172	.327**	.050	.314**	.231*	.289**	.268*	.151	.267*	1	.569**
	Sig. (2-tailed)	.126	.003	.659	.005	.039	.009	.016	.182	.017		.000
	N	80	80	80	80	80	80	80	80	80	80	80
Total_Y2	Pearson Correlation	.588**	.732**	.596**	.683**	.573**	.581**	.513**	.495**	.342**	.569**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	
	N	80	80	80	80	80	80	80	80	80	80	80

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Reliability of Y₂ Variable (Creative Thinking Skills)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.764	.767	10

Regression Output of X to Y₁

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	10.193	3.430		2.971	.004	3.364	17.022
	HOTS-based Assessment	.685	.112	.568	6.098	.000	.462	.909

a. Dependent Variable: Critical Thinking

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.568 ^a	.323	.314	2.78274	.323	37.185	1	78	.000

a. Predictors: (Constant), HOTS-based Assessment

b. Dependent Variable: Critical Thinking

ANOVA^a

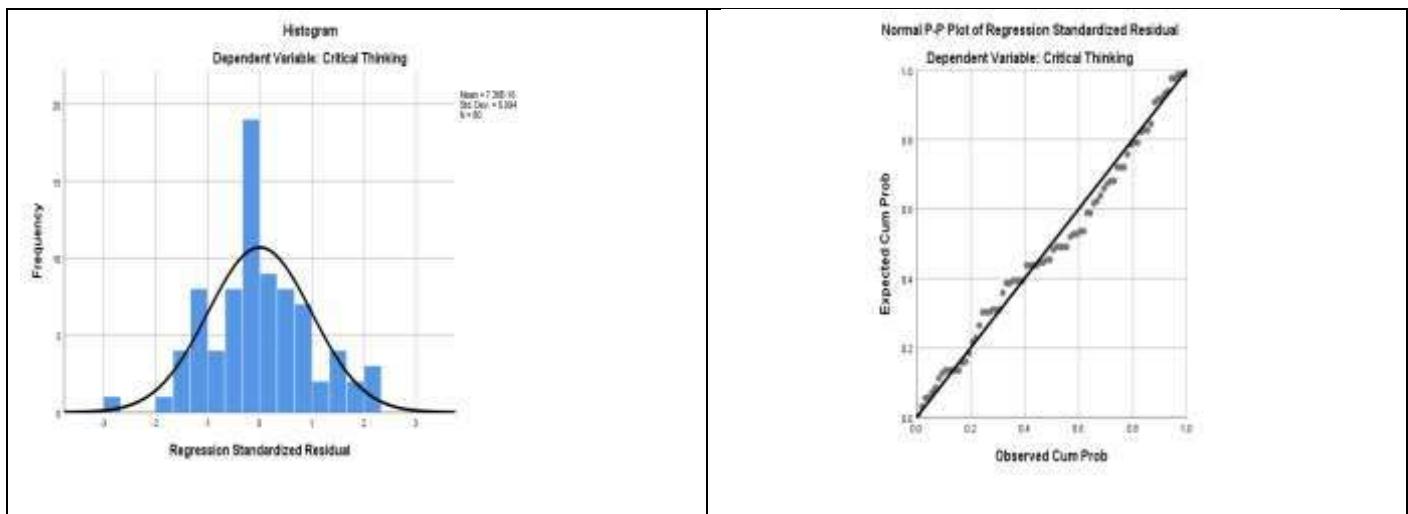
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	287.945	1	287.945	37.185	.000 ^b
	Residual	604.005	78	7.744		
	Total	891.950	79			

a. Dependent Variable: Critical Thinking

b. Predictors: (Constant), HOTS-based Assessment

ANOVA Table

				Sum of Squares	df	Mean Square	F	Sig.
		Between Groups	(Combined)					
Critical Thinking * HOTS-based Assessment	Groups	Linearity		287.945	1	287.945	41.107	.000
		Deviation from Linearity		127.676	10	12.768	1.823	.073
		Within Groups		476.329	68	7.005		
		Total		891.950	79			



Regression Output of X to Y₂

Model		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	8.782	3.477		2.526	.014	1.859	15.704
	HOTS-based Assessment	.670	.114	.554	5.879	.000	.443	.896

a. Dependent Variable: Creative Thinking

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.554 ^a	.307	.298	2.82059	.307	34.558	1	78	.000

a. Predictors: (Constant), HOTS-based Assessment

b. Dependent Variable: Creative Thinking

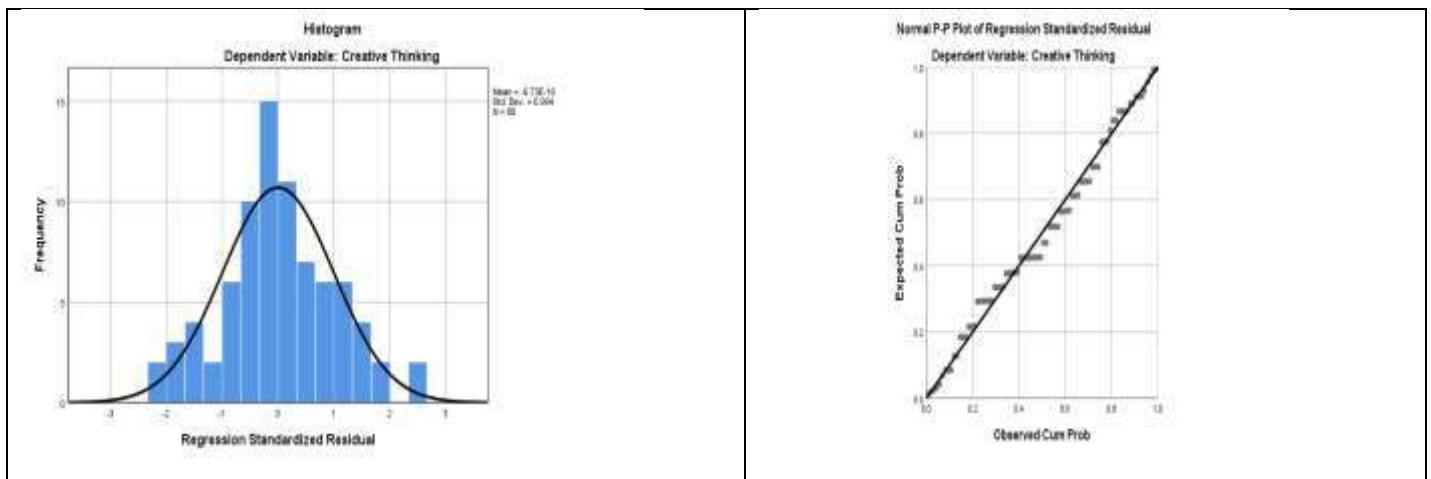
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	274.939	1	274.939	34.558	.000 ^b
	Residual	620.549	78	7.956		
	Total	895.487	79			

a. Dependent Variable: Creative Thinking
b. Predictors: (Constant), HOTS-based Assessment

ANOVA Table

				Sum of Squares	df	Mean Square	F	Sig.
		Between Groups	(Combined)					
Creative Thinking * HOTS-based Assessment	Between Groups	Linearity		274.939	1	274.939	33.218	.000
		Deviation from Linearity		57.731	10	5.773	.698	.723
		Within Groups		562.818	68	8.277		
		Total		895.488	79			

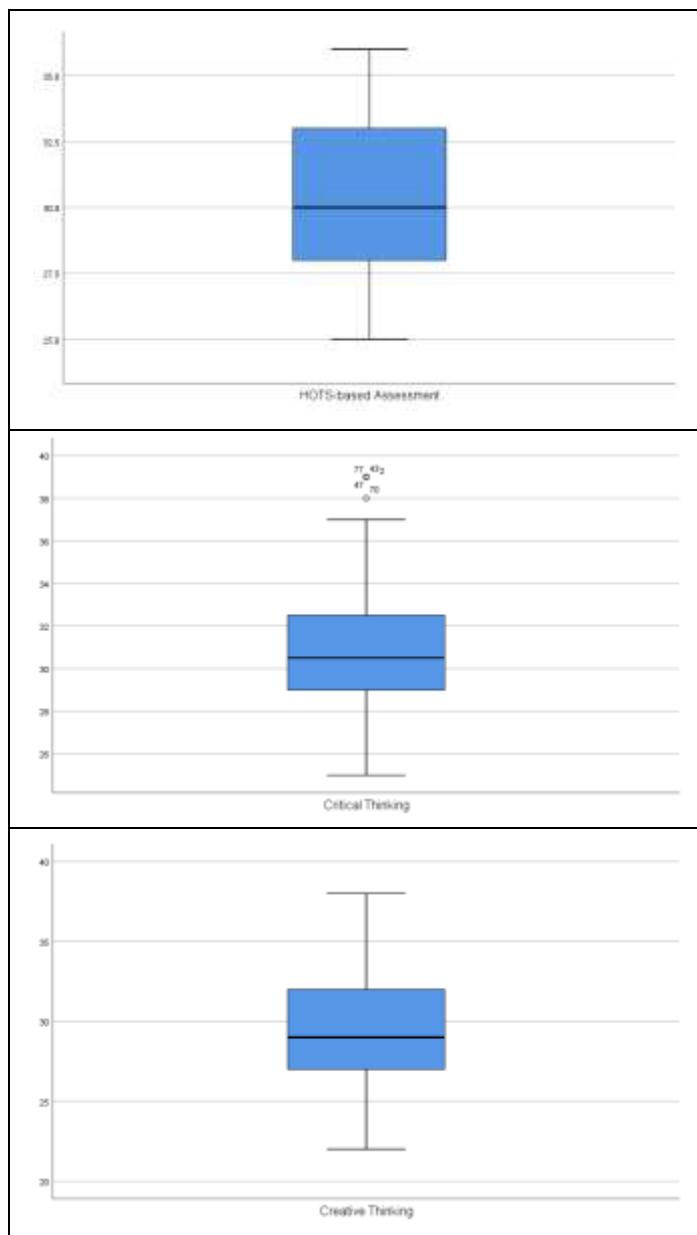


Outlier Data Results

No.	X	Y1	Y2	ZX	ZY1	ZY2
1.	29	30	27	-0.50251	-0.30505	-0.63488
2.	36	39	34	2.01002	2.37342	1.44425
3.	30	30	32	-0.14357	-0.30505	0.85022
4.	26	29	27	-1.5793	-0.60265	-0.63488
5.	29	27	29	-0.50251	-1.19787	-0.04084
6.	27	30	26	-1.22037	-0.30505	-0.9319
7.	30	30	31	-0.14357	-0.30505	0.5532
8.	28	32	25	-0.86144	0.29017	-1.22891
9.	25	27	26	-1.93823	-1.19787	-0.9319
10.	27	30	26	-1.22037	-0.30505	-0.9319
11.	29	26	26	-0.50251	-1.49548	-0.9319
12.	29	32	32	-0.50251	0.29017	0.85022
13.	33	33	32	0.93322	0.58777	0.85022
14.	29	27	22	-0.50251	-1.19787	-2.11997
15.	30	31	23	-0.14357	-0.00744	-1.82295
16.	30	33	29	-0.14357	0.58777	-0.04084
17.	27	33	30	-1.22037	0.58777	0.25618
18.	28	32	26	-0.86144	0.29017	-0.9319
19.	29	27	31	-0.50251	-1.19787	0.5532
20.	30	37	32	-0.14357	1.7782	0.85022
21.	30	30	29	-0.14357	-0.30505	-0.04084
22.	31	30	28	0.21536	-0.30505	-0.33786
23.	28	28	27	-0.86144	-0.90026	-0.63488
24.	29	27	25	-0.50251	-1.19787	-1.22891
25.	28	31	30	-0.86144	-0.00744	0.25618
26.	28	25	27	-0.86144	-1.79308	-0.63488
27.	30	33	29	-0.14357	0.58777	-0.04084
28.	25	31	31	-1.93823	-0.00744	0.5532
29.	31	30	29	0.21536	-0.30505	-0.04084
30.	30	30	24	-0.14357	-0.30505	-1.52593
31.	28	28	22	-0.86144	-0.90026	-2.11997
32.	28	30	27	-0.86144	-0.30505	-0.63488
33.	31	34	27	0.21536	0.88538	-0.63488
34.	32	36	34	0.57429	1.4806	1.44425
35.	35	32	32	1.65109	0.29017	0.85022
36.	29	30	35	-0.50251	-0.30505	1.74127
37.	26	27	25	-1.5793	-1.19787	-1.22891
38.	28	29	29	-0.86144	-0.60265	-0.04084
39.	31	30	29	0.21536	-0.30505	-0.04084

40.	28	30	26	-0.86144	-0.30505	-0.9319
41.	33	32	32	0.93322	0.29017	0.85022
42.	33	29	27	0.93322	-0.60265	-0.63488
43.	33	39	38	0.93322	2.37342	2.63233
44.	35	29	29	1.65109	-0.60265	-0.04084
45.	30	28	25	-0.14357	-0.90026	-1.22891
46.	35	37	30	1.65109	1.7782	0.25618
47.	34	39	32	1.29216	2.37342	0.85022
48.	33	33	30	0.93322	0.58777	0.25618
49.	25	27	25	-1.93823	-1.19787	-1.22891
50.	36	36	37	2.01002	1.4806	2.33531
51.	29	27	24	-0.50251	-1.19787	-1.52593
52.	29	28	27	-0.50251	-0.90026	-0.63488
53.	33	35	33	0.93322	1.18299	1.14723
54.	28	26	25	-0.86144	-1.49548	-1.22891
55.	32	32	33	0.57429	0.29017	1.14723
56.	35	35	32	1.65109	1.18299	0.85022
57.	34	31	30	1.29216	-0.00744	0.25618
58.	28	31	26	-0.86144	-0.00744	-0.9319
59.	28	31	26	-0.86144	-0.00744	-0.9319
60.	30	37	31	-0.14357	1.7782	0.5532
61.	28	29	29	-0.86144	-0.60265	-0.04084
62.	33	30	27	0.93322	-0.30505	-0.63488
63.	31	27	29	0.21536	-1.19787	-0.04084
64.	31	31	29	0.21536	-0.00744	-0.04084
65.	28	28	28	-0.86144	-0.90026	-0.33786
66.	29	30	32	-0.50251	-0.30505	0.85022
67.	31	31	31	0.21536	-0.00744	0.5532
68.	31	31	33	0.21536	-0.00744	1.14723
69.	31	31	33	0.21536	-0.00744	1.14723
70.	35	38	37	1.65109	2.07581	2.33531
71.	30	31	29	-0.14357	-0.00744	-0.04084
72.	29	30	27	-0.50251	-0.30505	-0.63488
73.	33	32	30	0.93322	0.29017	0.25618
74.	36	35	32	2.01002	1.18299	0.85022
75.	35	26	27	1.65109	-1.49548	-0.63488
76.	35	31	30	1.65109	-0.00744	0.25618
77.	34	39	32	1.29216	2.37342	0.85022
78.	30	29	30	-0.14357	-0.60265	0.25618
79.	32	33	31	0.57429	0.58777	0.5532
80.	30	32	32	-0.14357	0.29017	0.85022

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
HOTS-based Assessment	80	25	36	30.40	2.786
Critical Thinking	80	25	39	31.03	3.360
Creative Thinking	80	22	38	29.14	3.367
Valid N (listwise)	80				



FREQUENCY DISTRIBUTION

No.	Score (<i>Favorable</i>)												N	%	Totaled Score	Mean				
	SS (4)			S (3)			TS (2)			STS (1)										
	F	Score	%	F	Score	%	F	Score	%	F	Score	%								
X1	8	40	10	70	210	87,5	2	4	2,5	0	0	0	80	100	254	3,17				
X2	14	70	17,5	63	189	78,7	3	6	3,7	0	0	0	80	100	265	3,31				
X3	39	195	48,7	41	123	51,2	0	0	0	0	0	0	80	100	318	3,97				
X4	24	120	30	42	126	52,5	13	26	16,2	1	1	1,2	80	100	273	3,41				
X5	5	25	6,2	52	156	65	23	46	28,7	0	0	0	80	100	227	2,83				
X6	7	35	8,7	54	162	67,5	19	38	23,7	0	0	0	80	100	235	2,93				
No.	Score (<i>Unfavorable</i>)												N	%	Totaled Score	Mean				
	SS (1)			S (2)			TS (3)			STS (4)										
	F	Score	%	F	Score	%	F	Score	%	F	Score	%								
X7	1	1	1,2	13	26	16,2	54	162	67,5	12	60	15	80	100	249	3,11				
X8	0	0	0	28	56	35	45	135	56,2	7	35	8,7	80	100	226	2,82				
X9	0	0	0	1	2	1,2	56	168	70	23	155	28,7	80	100	325	4,06				
X10	0	0	0	17	34	21,2	47	141	58,7	16	80	20	80	100	255	3,18				
No.	Score (<i>Favorable</i>)												N	%	Totaled Score	Mean				
	SS (4)			S (3)			TS (2)			STS (1)										
	F	Score	%	F	Score	%	F	Score	%	F	Score	%								
Y ₁₁	24	120	30	44	132	55	12	24	15	0	0	0	80	100	276	3,45				
Y ₁₂	26	130	32,5	51	153	63,7	3	6	3,7	0	0	0	80	100	289	3,61				
Y ₁₃	10	50	12,5	60	180	75	10	20	12,5	0	0	0	80	100	250	3,12				
Y ₁₄	13	65	16,2	50	150	62,5	17	34	21,2	0	0	0	80	100	249	3,11				
Y ₁₅	15	75	18,7	46	138	57,5	18	36	22,5	1	1	1,2	80	100	250	3,12				

No.	Score (<i>Unfavorable</i>)												N	%	Totaled Score	Mean				
	SS (1)			S (2)			TS (3)			STS (4)										
	F	Score	%	F	Score	%	F	Score	%	F	Score	%								
Y ₁₆	3	3	3,7	25	50	31,2	43	129	53,7	9	45	11,2	80	100	227	2,83				
Y ₁₇	0	0	0	7	14	8,7	55	165	68,7	18	90	22,5	80	100	269	3,36				
Y ₁₈	0	0	0	3	6	3,7	39	117	48,7	38	190	47,5	80	100	313	3,91				
Y ₁₉	0	0	0	9	18	11,2	52	156	65	19	95	23,7	80	100	269	3,36				
Y ₁₀	0	0	0	4	8	5	50	150	62,5	26	130	32,5	80	100	288	3,60				
No.	Score (<i>Favorable</i>)												N	%	Totaled Score	Mean				
	SS (4)			S (3)			TS (2)			STS (1)										
	F	Score	%	F	Score	%	F	Score	%	F	Score	%								
Y ₂₁	1	5	1,2	48	144	60	27	54	33,7	4	4	5	80	100	207	2,58				
Y ₂₂	13	65	16,2	49	147	61,2	17	34	21,2	1	1	1,2	80	100	247	3,08				
Y ₂₃	6	30	7,5	39	117	48,7	34	68	42,5	1	1	1,2	80	100	182	2,27				
Y ₂₄	6	30	7,5	55	165	68,7	19	38	23,7	0	0	0	80	100	233	2,91				
Y ₂₅	13	65	16,2	50	150	62,5	17	34	21,2	0	0	0	80	100	249	3,11				
Y ₂₆	15	75	18,7	59	177	73,7	6	12	7,5	0	0	0	80	100	264	3,30				
No.	Score (<i>Unfavorable</i>)												N	%	Totaled Score	Mean				
	SS (1)			S (2)			TS (3)			STS (4)										
	F	Score	%	F	Score	%	F	Score	%	F	Score	%								
Y ₂₇	1	1	1,2	14	28	17,5	58	174	72,5	7	35	8,7	80	100	238	2,97				
Y ₂₈	0	0	0	3	6	3,7	60	180	75	17	85	21,2	80	100	271	3,38				
Y ₂₉	1	1	1,2	11	22	13,7	56	168	70	12	60	15	80	100	251	3,13				
Y ₁₀	2	2	2,5	13	26	16,2	43	129	53,7	22	110	27,5	80	100	267	3,33				

Titik Persentase Distribusi F untuk Probabilita = 0,05

df untuk penyebut (N2)	df untuk pembilang (N1)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
46	4.05	3.20	2.81	2.57	2.42	2.30	2.22	2.15	2.09	2.04	2.00	1.97	1.94	1.91	1.89
47	4.05	3.20	2.80	2.57	2.41	2.30	2.21	2.14	2.09	2.04	2.00	1.96	1.93	1.91	1.88
48	4.04	3.19	2.80	2.57	2.41	2.29	2.21	2.14	2.08	2.03	1.99	1.96	1.93	1.90	1.88
49	4.04	3.19	2.79	2.56	2.40	2.29	2.20	2.13	2.08	2.03	1.99	1.96	1.93	1.90	1.88
50	4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.07	2.03	1.99	1.95	1.92	1.89	1.87
51	4.03	3.18	2.79	2.55	2.40	2.28	2.20	2.13	2.07	2.02	1.98	1.95	1.92	1.89	1.87
52	4.03	3.18	2.78	2.55	2.39	2.28	2.19	2.12	2.07	2.02	1.98	1.94	1.91	1.89	1.86
53	4.02	3.17	2.78	2.55	2.39	2.28	2.19	2.12	2.06	2.01	1.97	1.94	1.91	1.88	1.86
54	4.02	3.17	2.78	2.54	2.39	2.27	2.18	2.12	2.06	2.01	1.97	1.94	1.91	1.88	1.86
55	4.02	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.06	2.01	1.97	1.93	1.90	1.88	1.85
56	4.01	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.05	2.00	1.96	1.93	1.90	1.87	1.85
57	4.01	3.16	2.77	2.53	2.38	2.26	2.18	2.11	2.05	2.00	1.96	1.93	1.90	1.87	1.85
58	4.01	3.16	2.76	2.53	2.37	2.26	2.17	2.10	2.05	2.00	1.96	1.92	1.89	1.87	1.84
59	4.00	3.15	2.76	2.53	2.37	2.26	2.17	2.10	2.04	2.00	1.96	1.92	1.89	1.86	1.84
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99	1.95	1.92	1.89	1.86	1.84
61	4.00	3.15	2.76	2.52	2.37	2.25	2.16	2.09	2.04	1.99	1.95	1.91	1.88	1.86	1.83
62	4.00	3.15	2.75	2.52	2.36	2.25	2.16	2.09	2.03	1.99	1.95	1.91	1.88	1.85	1.83
63	3.99	3.14	2.75	2.52	2.36	2.25	2.16	2.09	2.03	1.98	1.94	1.91	1.88	1.85	1.83
64	3.99	3.14	2.75	2.52	2.36	2.24	2.16	2.09	2.03	1.98	1.94	1.91	1.88	1.85	1.83
65	3.99	3.14	2.75	2.51	2.36	2.24	2.15	2.08	2.03	1.98	1.94	1.90	1.87	1.85	1.82
66	3.99	3.14	2.74	2.51	2.35	2.24	2.15	2.08	2.03	1.98	1.94	1.90	1.87	1.84	1.82
67	3.98	3.13	2.74	2.51	2.35	2.24	2.15	2.08	2.02	1.98	1.93	1.90	1.87	1.84	1.82
68	3.98	3.13	2.74	2.51	2.35	2.24	2.15	2.08	2.02	1.97	1.93	1.90	1.87	1.84	1.82
69	3.98	3.13	2.74	2.50	2.35	2.23	2.15	2.08	2.02	1.97	1.93	1.90	1.86	1.84	1.81
70	3.98	3.13	2.74	2.50	2.35	2.23	2.14	2.07	2.02	1.97	1.93	1.89	1.86	1.84	1.81
71	3.98	3.13	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.97	1.93	1.89	1.86	1.83	1.81
72	3.97	3.12	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.96	1.92	1.89	1.86	1.83	1.81
73	3.97	3.12	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.96	1.92	1.89	1.86	1.83	1.81
74	3.97	3.12	2.73	2.50	2.34	2.22	2.14	2.07	2.01	1.96	1.92	1.89	1.85	1.83	1.80
75	3.97	3.12	2.73	2.49	2.34	2.22	2.13	2.06	2.01	1.96	1.92	1.88	1.85	1.83	1.80
76	3.97	3.12	2.72	2.49	2.33	2.22	2.13	2.06	2.01	1.96	1.92	1.88	1.85	1.82	1.80
77	3.97	3.12	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.96	1.92	1.88	1.85	1.82	1.80
78	3.96	3.11	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.95	1.91	1.88	1.85	1.82	1.80
79	3.96	3.11	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.95	1.91	1.88	1.85	1.82	1.79
80	3.96	3.11	2.72	2.49	2.33	2.21	2.13	2.06	2.00	1.95	1.91	1.88	1.84	1.82	1.79
81	3.96	3.11	2.72	2.48	2.33	2.21	2.12	2.05	2.00	1.95	1.91	1.87	1.84	1.82	1.79
82	3.96	3.11	2.72	2.48	2.33	2.21	2.12	2.05	2.00	1.95	1.91	1.87	1.84	1.81	1.79
83	3.96	3.11	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.95	1.91	1.87	1.84	1.81	1.79
84	3.95	3.11	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.95	1.90	1.87	1.84	1.81	1.79
85	3.95	3.10	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.94	1.90	1.87	1.84	1.81	1.79
86	3.95	3.10	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.94	1.90	1.87	1.84	1.81	1.78
87	3.95	3.10	2.71	2.48	2.32	2.20	2.12	2.05	1.99	1.94	1.90	1.87	1.83	1.81	1.78
88	3.95	3.10	2.71	2.48	2.32	2.20	2.12	2.05	1.99	1.94	1.90	1.86	1.83	1.81	1.78
89	3.95	3.10	2.71	2.47	2.32	2.20	2.11	2.04	1.99	1.94	1.90	1.86	1.83	1.80	1.78
90	3.95	3.10	2.71	2.47	2.32	2.20	2.11	2.04	1.99	1.94	1.90	1.86	1.83	1.80	1.78

Tabel r untuk df = 51 - 100

df = (N-2)	Tingkat signifikansi untuk uji satu arah				
	0.05	0.025	0.01	0.005	0.0005
	Tingkat signifikansi untuk uji dua arah				
	0.1	0.05	0.02	0.01	0.001
51	0.2284	0.2706	0.3188	0.3509	0.4393
52	0.2262	0.2681	0.3158	0.3477	0.4354
53	0.2241	0.2656	0.3129	0.3445	0.4317
54	0.2221	0.2632	0.3102	0.3415	0.4280
55	0.2201	0.2609	0.3074	0.3385	0.4244
56	0.2181	0.2586	0.3048	0.3357	0.4210
57	0.2162	0.2564	0.3022	0.3328	0.4176
58	0.2144	0.2542	0.2997	0.3301	0.4143
59	0.2126	0.2521	0.2972	0.3274	0.4110
60	0.2108	0.2500	0.2948	0.3248	0.4079
61	0.2091	0.2480	0.2925	0.3223	0.4048
62	0.2075	0.2461	0.2902	0.3198	0.4018
63	0.2058	0.2441	0.2880	0.3173	0.3988
64	0.2042	0.2423	0.2858	0.3150	0.3959
65	0.2027	0.2404	0.2837	0.3126	0.3931
66	0.2012	0.2387	0.2816	0.3104	0.3903
67	0.1997	0.2369	0.2796	0.3081	0.3876
68	0.1982	0.2352	0.2776	0.3060	0.3850
69	0.1968	0.2335	0.2756	0.3038	0.3823
70	0.1954	0.2319	0.2737	0.3017	0.3798
71	0.1940	0.2303	0.2718	0.2997	0.3773
72	0.1927	0.2287	0.2700	0.2977	0.3748
73	0.1914	0.2272	0.2682	0.2957	0.3724
74	0.1901	0.2257	0.2664	0.2938	0.3701
75	0.1888	0.2242	0.2647	0.2919	0.3678
76	0.1876	0.2227	0.2630	0.2900	0.3655
77	0.1864	0.2213	0.2613	0.2882	0.3633
78	0.1852	0.2199	0.2597	0.2864	0.3611
79	0.1841	0.2185	0.2581	0.2847	0.3589
80	0.1829	0.2172	0.2565	0.2830	0.3568
81	0.1818	0.2159	0.2550	0.2813	0.3547
82	0.1807	0.2146	0.2535	0.2796	0.3527
83	0.1796	0.2133	0.2520	0.2780	0.3507
84	0.1786	0.2120	0.2505	0.2764	0.3487
85	0.1775	0.2108	0.2491	0.2748	0.3468
86	0.1765	0.2096	0.2477	0.2732	0.3449
87	0.1755	0.2084	0.2463	0.2717	0.3430
88	0.1745	0.2072	0.2449	0.2702	0.3412
89	0.1735	0.2061	0.2435	0.2687	0.3393
90	0.1726	0.2050	0.2422	0.2673	0.3375
91	0.1716	0.2039	0.2409	0.2659	0.3358
92	0.1707	0.2028	0.2396	0.2645	0.3341
93	0.1698	0.2017	0.2384	0.2631	0.3323
94	0.1689	0.2006	0.2371	0.2617	0.3307
95	0.1680	0.1996	0.2359	0.2604	0.3290
96	0.1671	0.1986	0.2347	0.2591	0.3274
97	0.1663	0.1975	0.2335	0.2578	0.3258
98	0.1654	0.1966	0.2324	0.2565	0.3242
99	0.1646	0.1956	0.2312	0.2552	0.3226
100	0.1638	0.1946	0.2301	0.2540	0.3211

t Table

cum. prob	<i>t_{.50}</i>	<i>t_{.75}</i>	<i>t_{.80}</i>	<i>t_{.85}</i>	<i>t_{.90}</i>	<i>t_{.95}</i>	<i>t_{.975}</i>	<i>t_{.99}</i>	<i>t_{.995}</i>	<i>t_{.999}</i>	<i>t_{.9995}</i>
one-tail	0.50	0.25	0.20	0.15	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
two-tails	1.00	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01	0.002	0.001
df											
1	0.000	1.000	1.376	1.963	3.078	6.314	12.71	31.82	63.66	318.31	636.62
2	0.000	0.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925	22.327	31.599
3	0.000	0.765	0.978	1.250	1.638	2.353	3.182	4.541	5.841	10.215	12.924
4	0.000	0.741	0.941	1.190	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.000	0.727	0.920	1.156	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	0.000	0.718	0.906	1.134	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.000	0.711	0.896	1.119	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.000	0.706	0.889	1.108	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.000	0.703	0.883	1.100	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.000	0.700	0.879	1.093	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.000	0.697	0.876	1.088	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.000	0.695	0.873	1.083	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.000	0.694	0.870	1.079	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.000	0.692	0.868	1.076	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.000	0.691	0.866	1.074	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.000	0.690	0.865	1.071	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.000	0.689	0.863	1.069	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.000	0.688	0.862	1.067	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.000	0.688	0.861	1.066	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.000	0.687	0.860	1.064	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.000	0.686	0.859	1.063	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.000	0.686	0.858	1.061	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.000	0.685	0.858	1.060	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.000	0.685	0.857	1.059	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.000	0.684	0.856	1.058	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.000	0.684	0.856	1.058	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.000	0.684	0.855	1.057	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	0.000	0.683	0.855	1.056	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.000	0.683	0.854	1.055	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	0.000	0.683	0.854	1.055	1.310	1.697	2.042	2.457	2.750	3.385	3.646
40	0.000	0.681	0.851	1.050	1.303	1.684	2.021	2.423	2.704	3.307	3.551
60	0.000	0.679	0.848	1.045	1.296	1.671	2.000	2.390	2.660	3.232	3.460
80	0.000	0.678	0.846	1.043	1.292	1.664	1.990	2.374	2.639	3.195	3.416
100	0.000	0.677	0.845	1.042	1.290	1.660	1.984	2.364	2.626	3.174	3.390
1000	0.000	0.675	0.842	1.037	1.282	1.646	1.962	2.330	2.581	3.098	3.300
Z	0.000	0.674	0.842	1.036	1.282	1.645	1.960	2.326	2.576	3.090	3.291
	0%	50%	60%	70%	80%	90%	95%	98%	99%	99.8%	99.9%
	Confidence Level										

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Sekolah	: SMA AL-AZHAR PALU
Mata Pelajaran	: Pendidikan Agama Islam dan Budi Pekerti
Kelas/Semester	: XI / Genap
Materi Pokok	: Iman Kepada Kitab-Kitab ALLAH SWT.
Alokasi Waktu	: 6 JP (2 Pertemuan)

A. KD

3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt.

B. IPK (INDIKATOR PENCAPAIAN KOMPETENSI)

- 3.3.1 Menelaah Q.S Al-maidah/5. 48, dan Q.S Al-a'la/87: 19.
- 3.3.2 Mengidentifikasi tanda-tanda orang yang beriman kepada kitab-kitab suci Allah Swt.
- 3.3.3 Mengidentifikasi dalil-dalil yang berkaitan dengan kitab-kitab suci Allah Swt.
- 3.3.4 Menyimpulkan makna dari mengimani kitab-kitab Allah Swt.

B. Langkah-Langkah Pembelajaran

Kegiatan Pendahuluan (15 Menit)	
Melakukan pembukaan dengan salam pembuka dan berdoa untuk memulai pembelajaran, memeriksa kehadiran peserta didik sebagai sikap disiplin	
Mengaitkan materi/tema/kegiatan pembelajaran yang akan dilakukan dengan pengalaman peserta didik dengan materi/tema/kegiatan sebelumnya serta mengajukan pertanyaan untuk mengingat dan menghubungkan dengan materi selanjutnya.	
Menyampaikan motivasi tentang apa yang dapat diperoleh (tujuan&manfaat) dengan mempelajari materi : IMAN KEPADA KITAB-KITAB ALLAH SWT.	
Menjelaskan hal-hal yang akan dipelajari, kompetensi yang akan dicapai, serta metode belajar yang akan ditempuh,	
Kegiatan Inti (3x45 menit)	
Kegiatan Literasi	Peserta didik diberi motivasi atau rangsangan untuk memusatkan perhatian pada topik materi Iman Kepada Kitab-Kitab ALLAH SWT dengan cara melihat, mengamati, membaca melalui tayangan yang di tampilkan.
Critical Thinking	Guru memberikan kesempatan pada peserta didik untuk mengidentifikasi sebanyak mungkin pertanyaan yang berkaitan dengan gambar yang disajikan dan akan dijawab melalui kegiatan belajar khususnya pada materi Iman Kepada Kitab-Kitab ALLAH SWT.
Collaboration	Peserta didik dibentuk dalam beberapa kelompok untuk mendiskusikan, mengumpulkan informasi, mempresentasikan ulang, dan saling bertukar informasi mengenai Iman Kepada Kitab-Kitab ALLAH SWT.
Communication	Peserta didik mempresentasikan hasil kerja kelompok atau individu secara klasikal, mengemukakan pendapat atas presentasi yang dilakukan kemudian ditanggapi kembali oleh kelompok atau individu yang mempresentasikan
Creativity	Guru dan peserta didik membuat kesimpulan tentang hal-hal yang telah dipelajari terkait Iman Kepada Kitab-Kitab ALLAH SWT. Peserta didik kemudian diberi kesempatan untuk menanyakan kembali hal-hal yang belum dipahami
Kegiatan Penutup (15 Menit)	
<ul style="list-style-type: none"> • Peserta didik dan guru merefleksi kegiatan pembelajaran. • Peserta didik dan guru menarik kesimpulan dari hasil kegiatan Pembelajaran. • Guru Memberikan penghargaan(misalnya Pujian atau bentuk penghargaan lain yang Relevan kepada kelompok yang kinerjanya Baik. • Menugaskan Peserta didik untuk terus mencari informasi dimana saja yang berkaitan dengan materi/pelajaran yang sedang atau yang akan pelajari. • Guru menyampaikan materi pembelajaran berikutnya. • Guru menutup kegiatan pembelajaran dengan mengucapkan salam dan doa. 	

C. Penilaian Hasil Pembelajaran

1. Penilaian Sikap: Observasi dalam proses pembelajaran
2. Penilaian Pengetahuan: Tes lesan dan tes tulis bentuk uraian
3. Penilaian Keterampilan: Praktek

Mengetahui,
Kepala Sekolah

Guru Mapel

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Sekolah	: SMA AL-AZHAR MANDIRI PALU
Mata Pelajaran	: Pendidikan Agama Islam dan Budi Pekerti
Kelas/Semester	: XI / Genap
Materi Pokok	: Hidup nyaman dengan perilaku jujur
Alokasi Waktu	: 6 JP (2 pertemuan)

A. KD.

3.5Menganalisis makna *syaja'ah* (berani membela kebenaran) dalam kehidupan sehari-hari

B. IPK (INDIKATOR PENCAPAIAN KOMPETENSI)

- Mengidentifikasi tanda-tanda orang yang memiliki sifat *Syaja'ah* (berani membela kebenaran).
- Mengidentifikasi dalil-dali yang berkaitan dengan *Syaja'ah* (berani membela kebenaran).
- Menyajikan paparan tentang makna, dalil, dan contoh sifat *Syaja'ah* (berani membela kebenaran).
- Menyimpulkan hikmah dan manfaat sifat *Syaja'ah* (berani membela kebenaran).

B. Langkah-Langkah Pembelajaran

Kegiatan Pendahuluan (15 Menit)

Melakukan pembukaan dengan salam pembuka dan berdoa untuk memulai pembelajaran, memeriksa kehadiran peserta didik sebagai sikap disiplin

Mengaitkan materi/tema/kegiatan pembelajaran yang akan dilakukan dengan pengalaman peserta didik dengan materi/tema/kegiatan sebelumnya serta mengajukan pertanyaan untuk mengingat dan menghubungkan dengan materi selanjutnya.

Menyampaikan motivasi tentang apa yang dapat diperoleh (tujuan&manfaat) dengan mempelajari materi : **Hidup nyaman dengan perilaku jujur**

Menjelaskan hal-hal yang akan dipelajari, kompetensi yang akan dicapai, serta metode belajar yang akan ditempuh,

Kegiatan Inti (3X45 MENIT)

Kegiatan Literasi	Peserta didik diberi motivasi atau rangsangan untuk memusatkan perhatian pada topik materi Hidup nyaman dengan perilaku jujur dengan cara melihat, mengamati, membaca melalui tayangan yang di tampilkan.
Critical Thinking	Guru memberikan kesempatan pada peserta didik untuk mengidentifikasi sebanyak mungkin pertanyaan yang berkaitan dengan gambar yang disajikan dan akan dijawab melalui kegiatan belajar khususnya pada materi Hidup nyaman dengan perilaku jujur .
Collaboration	Peserta didik dibentuk dalam beberapa kelompok untuk mendiskusikan, mengumpulkan informasi, mempresentasikan ulang, dan saling bertukar informasi mengenai Hidup nyaman dengan perilaku jujur .
Communication	Peserta didik mempresentasikan hasil kerja kelompok atau individu secara klasikal, mengemukakan pendapat atas presentasi yang dilakukan kemudian ditanggapi kembali oleh kelompok atau individu yang mempresentasikan
Creativity	Guru dan peserta didik membuat kesimpulan tentang hal-hal yang telah dipelajari terkait Hidup nyaman dengan perilaku jujur . Peserta didik kemudian diberi kesempatan untuk menanyakan kembali hal-hal yang belum dipahami

Kegiatan Penutup (15 Menit)

- Peserta didik dan guru merefleksi kegiatan pembelajaran.
- Peserta didik dan guru menarik kesimpulan dari hasil kegiatan Pembelajaran.
- Guru Memberikan penghargaan(misalnya Pujian atau bentuk penghargaan lain yang Relevan kepada kelompok yang kinerjanya Baik.
- Menugaskan Peserta didik untuk terus mencari informasi dimana saja yang berkaitan dengan materi/pelajaran yang sedang atau yang akan pelajari.
- Guru menyampaikan materi pembelajaran berikutnya.
- Guru menutup kegiatan pembelajaran dengan mengucapkan salam dan doa.

C. Penilaian Hasil Pembelajaran

1. Penilaian Sikap: Observasi dalam proses pembelajaran
2. Penilaian Pengetahuan: Tes lisan dan tes tulis bentuk uraian
3. Penilaian Keterampilan: Praktek

Mengetahui,
Kepala Sekolah

Guru Mapel

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Sekolah	: SMA AL-Azhar Mandiri Palu
Mata Pelajaran	: Pendidikan Agama Islam dan Budi Pekerti
Kelas/Semester	: XI / Genap
Materi Pokok	: Pelaksanaan tatacara penyelenggaraan jenazah
Alokasi Waktu	: 9 JP (3 x pertemuan)

A. KD (KOMPETENSI DASAR)

3.7 Menganalisis pelaksanaan penyelenggaraan jenazah

B. IPK (INDIKATOR PENCAPAIAN KOMPETENSI)

- Mengidentifikasi dalil-dalil yang berkaitan dengan tatacara penyelenggaraan jenazah
- Mengidentifikasi hikmah dan manfaat tatacara penyelenggaraan jenazah.
- Membuat kelompok praktik tata cara penyelenggaraan jenazah
- Menyajikan paparan tentang makna, dalil, dan contoh tatacara penyelenggaraan jenazah.
- Menyajikan paparan tentang hikmah dan manfaat tatacara penyelenggaraan jenazah.
- Menyimpulkan hikmah dan manfaat tatacara penyelenggaraan jenazah.

B. Langkah-Langkah Pembelajaran

Kegiatan Pendahuluan (15 Menit)	
Melakukan pembukaan dengan salam pembuka dan berdoa untuk memulai pembelajaran, memeriksa kehadiran peserta didik sebagai sikap disiplin	
Mengaitkan materi/tema/kegiatan pembelajaran yang akan dilakukan dengan pengalaman peserta didik dengan materi/tema/kegiatan sebelumnya serta mengajukan pertanyaan untuk mengingat dan menghubungkan dengan materi selanjutnya.	
Menyampaikan motivasi tentang apa yang dapat diperoleh (tujuan&manfaat) dengan mempelajari materi : Pelaksanaan tatacara penyelenggaraan jenazah.	
Menjelaskan hal-hal yang akan dipelajari, kompetensi yang akan dicapai, serta metode belajar yang akan ditempuh,	
Kegiatan Inti (3x45 menit)	
Kegiatan Literasi	Peserta didik diberi motivasi atau rangsangan untuk memusatkan perhatian pada topik materi Pelaksanaan tatacara penyelenggaraan jenazah dengan cara melihat, mengamati, membaca melalui tayangan yang di tampilkan.
Critical Thinking	Guru memberikan kesempatan pada peserta didik untuk mengidentifikasi sebanyak mungkin pertanyaan yang berkaitan dengan gambar yang disajikan dan akan dijawab melalui kegiatan belajar khususnya pada materi Pelaksanaan tatacara penyelenggaraan jenazah .
Collaboration	Peserta didik dibentuk dalam beberapa kelompok untuk mendiskusikan, mengumpulkan informasi, mempresentasikan ulang, dan saling bertukar informasi mengenai Pelaksanaan tatacara penyelenggaraan jenazah
Communication	Peserta didik mempresentasikan hasil kerja kelompok atau individu secara klasikal, mengemukakan pendapat atas presentasi yang dilakukan kemudian ditanggapi kembali oleh kelompok atau individu yang mempresentasikan
Creativity	Guru dan peserta didik membuat kesimpulan tentang hal-hal yang telah dipelajari terkait Pelaksanaan tatacara penyelenggaraan jenazah . Peserta didik kemudian diberi kesempatan untuk menanyakan kembali hal-hal yang belum dipahami
Kegiatan Penutup (15 Menit)	
<ul style="list-style-type: none"> • Peserta didik dan guru merefleksi kegiatan pembelajaran. • Peserta didik dan guru menarik kesimpulan dari hasil kegiatan Pembelajaran. • Guru Memberikan penghargaan(misalnya Pujian atau bentuk penghargaan lain yang Relevan kepada kelompok yang kinerjanya Baik. • Menugaskan Peserta didik untuk terus mencari informasi dimana saja yang berkaitan dengan materi/pelajaran yang sedang atau yang akan pelajari. • Guru menyampaikan materi pembelajaran berikutnya. • Guru menutup kegiatan pembelajaran dengan mengucapkan salam dan doa. 	

C. Penilaian Hasil Pembelajaran

1. Penilaian Sikap: Observasi dalam proses pembelajaran
2. Penilaian Pengetahuan: Tes lesan dan tes tulis bentuk uraian
3. Penilaian Keterampilan: Praktek

Mengetahui,
Kepala Sekolah

Guru Mapel

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Sekolah	: SMA Al-Azhar Mandiri Palu
Mata Pelajaran	: Pendidikan Agama Islam dan Budi Pekerti
Kelas/Semester	: XI / Genap
Materi Pokok	: Pelaksanaan khutbah, tabligh dan dakwah di masyarakat
Alokasi Waktu	: 6 JP (3 x pertemuan)

A. KD (KOMPETENSI DASAR)

3.8 Menganalisis pelaksanaan khutbah, tablig, dan dakwah

B. IPK (INDIKATOR PENCAPAIAN KOMPETENSI)

- Mengidentifikasi hadis dan ayat tentang pelaksanaan khutbah, tabligh dan dakwah.
- Mengidentifikasi hikmah dan manfaat ketentuan khutbah, tablig dan dakwah.
- Menyajikan contoh khutbah, tabligh dan dakwah
- Menyimpulkan hikmah dan manfaat ketentuan khutbah, tablig dan dakwah.

B. Langkah-Langkah Pembelajaran

Kegiatan Pendahuluan (15 Menit)	
Melakukan pembukaan dengan salam pembuka dan berdoa untuk memulai pembelajaran, memeriksa kehadiran peserta didik sebagai sikap disiplin	
Mengaitkan materi/tema/kegiatan pembelajaran yang akan dilakukan dengan pengalaman peserta didik dengan materi/tema/kegiatan sebelumnya serta mengajukan pertanyaan untuk mengingat dan menghubungkan dengan materi selanjutnya.	
Menyampaikan motivasi tentang apa yang dapat diperoleh (tujuan&manfaat) dengan mempelajari materi : Pelaksanaan khutbah, tabligh dan dakwah di masyarakat.	
Menjelaskan hal-hal yang akan dipelajari, kompetensi yang akan dicapai, serta metode belajar yang akan ditempuh,	
Kegiatan Inti (3x45 Menit)	
Kegiatan Literasi	Peserta didik diberi motivasi atau rangsangan untuk memusatkan perhatian pada topik materi Pelaksanaan khutbah, tabligh dan dakwah di masyarakat dengan cara melihat, mengamati, membaca melalui tayangan yang ditampilkan.
Critical Thinking	Guru memberikan kesempatan pada peserta didik untuk mengidentifikasi sebanyak mungkin pertanyaan yang berkaitan dengan gambar yang disajikan dan akan dijawab melalui kegiatan belajar khususnya pada materi Pelaksanaan khutbah, tabligh dan dakwah di masyarakat.
Collaboration	Peserta didik dibentuk dalam beberapa kelompok untuk mendiskusikan, mengumpulkan informasi, mempresentasikan ulang, dan saling bertukar informasi mengenai Pelaksanaan khutbah, tabligh dan dakwah di masyarakat
Communication	Peserta didik mempresentasikan hasil kerja kelompok atau individu secara klasikal, mengemukakan pendapat atas presentasi yang dilakukan kemudian ditanggapi kembali oleh kelompok atau individu yang mempresentasikan
Creativity	Guru dan peserta didik membuat kesimpulan tentang hal-hal yang telah dipelajari terkait Pelaksanaan khutbah, tabligh dan dakwah di masyarakat . Peserta didik kemudian diberi kesempatan untuk menanyakan kembali hal-hal yang belum dipahami
Kegiatan Penutup (15 Menit)	
<ul style="list-style-type: none"> • Peserta didik dan guru merefleksi kegiatan pembelajaran. • Peserta didik dan guru menarik kesimpulan dari hasil kegiatan Pembelajaran. • Guru Memberikan penghargaan(misalnya Pujian atau bentuk penghargaan lain yang Relevan kepada kelompok yang kinerjanya Baik. • Menugaskan Peserta didik untuk terus mencari informasi dimana saja yang berkaitan dengan materi/pelajaran yang sedang atau yang akan pelajari. • Guru menyampaikan materi pembelajaran berikutnya. • Guru menutup kegiatan pembelajaran dengan mengucapkan salam dan doa. 	

C. Penilaian Hasil Pembelajaran

1. Penilaian Sikap: Observasi dalam proses pembelajaran
2. Penilaian Pengetahuan: Tes lesan dan tes tulis bentuk uraian
3. Penilaian Keterampilan: Praktek

Mengetahui,
Kepala Sekolah

Guru Mapel

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Sekolah	: SMA AL-AZHAR MANDIRI PALU
Mata Pelajaran	: Pendidikan Agama Islam dan Budi Pekerti
Kelas/Semester	: XI / Genap
Materi Pokok	: Perkembangan peradaban Islam pada masa kejayaan
Alokasi Waktu	: 9 JP (3 x pertemuan)

A. KD (KOMPETENSI DASAR)

3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan

B. IPK (INDIKATOR PENCAPAIAN KOMPETENSI)

- Menemukan kisah-kisah yang terkait dengan sejarah perkembangan Islam
- Mendiskusikan contoh-contoh kemajuan perkembangan peradaban Islam pada masa kejayaan.
- Mengidentifikasi nama-nama penemu islam dalam perkembangan peradaban Islam pada masa kejayaan.
- Mengidentifikasi hikmah dan manfaat perkembangan peradaban Islam pada masa kejayaan .
- Mendiskusikan hikmah dan manfaat perkembangan peradaban Islam pada masa kejayaan .
- Menyimpulkan hikmah dan manfaat perkembangan peradaban Islam pada masa kejayaan.

B. Langkah-Langkah Pembelajaran

Kegiatan Pendahuluan (15 Menit)	
Melakukan pembukaan dengan salam pembuka dan berdoa untuk memulai pembelajaran, memeriksa kehadiran peserta didik sebagai sikap disiplin	
Mengaitkan materi/tema/kegiatan pembelajaran yang akan dilakukan dengan pengalaman peserta didik dengan materi/tema/kegiatan sebelumnya serta mengajukan pertanyaan untuk mengingat dan menghubungkan dengan materi selanjutnya.	
Menyampaikan motivasi tentang apa yang dapat diperoleh (tujuan&manfaat) dengan mempelajari materi : Perkembangan peradaban Islam pada masa kejayaan.	
Menjelaskan hal-hal yang akan dipelajari, kompetensi yang akan dicapai, serta metode belajar yang akan ditempuh,	
Kegiatan Inti (3X45 Menit)	
Kegiatan Literasi	Peserta didik diberi motivasi atau rangsangan untuk memusatkan perhatian pada topik materi Perkembangan peradaban Islam pada masa kejayaan dengan cara melihat, mengamati, membaca melalui tayangan yang di tampilkan.
Critical Thinking	Guru memberikan kesempatan pada peserta didik untuk mengidentifikasi sebanyak mungkin pertanyaan yang berkaitan dengan gambar yang disajikan dan akan dijawab melalui kegiatan belajar khususnya pada materi Perkembangan peradaban Islam pada masa kejayaan.
Collaboration	Peserta didik dibentuk dalam beberapa kelompok untuk mendiskusikan, mengumpulkan informasi, mempresentasikan ulang, dan saling bertukar informasi mengenai Perkembangan peradaban Islam pada masa kejayaan
Communication	Peserta didik mempresentasikan hasil kerja kelompok atau individu secara klasikal, mengemukakan pendapat atas presentasi yang dilakukan kemudian ditanggapi kembali oleh kelompok atau individu yang mempresentasikan
Creativity	Guru dan peserta didik membuat kesimpulan tentang hal-hal yang telah dipelajari terkait Perkembangan peradaban Islam pada masa kejayaan . Peserta didik kemudian diberi kesempatan untuk menanyakan kembali hal-hal yang belum dipahami
Kegiatan Penutup (15 Menit)	
<ul style="list-style-type: none"> • Peserta didik dan guru merefleksi kegiatan pembelajaran. • Peserta didik dan guru menarik kesimpulan dari hasil kegiatan Pembelajaran. • Guru Memberikan penghargaan(misalnya Pujian atau bentuk penghargaan lain yang Relevan kepada kelompok yang kinerjanya Baik. • Menugaskan Peserta didik untuk terus mencari informasi dimana saja yang berkaitan dengan materi/pelajaran yang sedang atau yang akan pelajari. • Guru menyampaikan materi pembelajaran berikutnya. • Guru menutup kegiatan pembelajaran dengan mengucapkan salam dan doa. 	

C. Penilaian Hasil Pembelajaran

1. Penilaian Sikap: Observasi dalam proses pembelajaran
2. Penilaian Pengetahuan: Tes lesan dan tes tulis bentuk uraian
3. Penilaian Keterampilan: Praktek

Mengetahui,
Kepala Sekolah

Guru Mapel

Drs. Abdul Basit, M.Pd.
NIP.

.....

NIP/NRK.

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Sekolah	: SMA AL-AZHAR PALU
Mata Pelajaran	: Pendidikan Agama Islam dan Budi Pekerti
Kelas/Semester	: XI / Genap
Materi Pokok	: Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja
Alokasi Waktu	: 6 JP (2 pertemuan)

A. KD (KOMPETISI DASAR)

3.1 Menganalisis makna *Q.S. al Maidah/5: 48; Q.S. an-Nisa/4: 59*; dan *Q.S. at Taubah /9: 105*, serta hadis tentang taat pada aturan, kompetisi dalam kebaikan, dan etos kerja

B. IPK (INDIKATOR PENCAPAIAN KOMPETENSI)

- 3.1.1 Menelaah *Q.S. an-Nisā'/4: 59*, *Q.S. al-Māidah/5: 48*, *Q.S. at-Taubah/9: 105* sesuai dengan kaidah tajwīd dan makharijul huruf.
- 3.1.2 Mengidentifikasi hadis tentang taat pada aturan, kompetisi dalam kebaikan dan etos kerja.
- 3.1.3 Menampilkan contoh perilaku taat kompetitif dalam kebaikan dan kerja keras berdasarkan *Q.S. an-Nisā'/4: 59*, *QS. al-Māidah/5: 48*, dan *Q.S. at-Taubah/9: 105*.
- 3.1.4 Menyimpulkan makna surah *Q.S. an-Nisā'/4: 59*, *QS. al-Māidah/5: 48*, dan *Q.S. at-Taubah/9: 105*.

C. Langkah-Langkah Pembelajaran

Kegiatan Pendahuluan (15 Menit)	
Melakukan pembukaan dengan salam pembuka dan berdoa untuk memulai pembelajaran, memeriksa kehadiran peserta didik sebagai sikap disiplin	
Mengaitkan materi/tema/kegiatan pembelajaran yang akan dilakukan dengan pengalaman peserta didik dengan materi/tema/kegiatan sebelumnya serta mengajukan pertanyaan untuk mengingat dan menghubungkan dengan materi selanjutnya.	
Menyampaikan motivasi tentang apa yang dapat diperoleh (tujuan&manfaat) dengan mempelajari materi : Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja	
Menjelaskan hal-hal yang akan dipelajari, kompetensi yang akan dicapai, serta metode belajar yang akan ditempuh,	
Kegiatan Inti (3X45 Menit)	
Kegiatan Literasi	Peserta didik diberi motivasi atau rangsangan untuk memusatkan perhatian pada topik materi Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja dengan cara melihat, mengamati, membaca melalui tayangan yang di tampilkan.
Critical Thinking	Guru memberikan kesempatan pada peserta didik untuk mengidentifikasi sebanyak mungkin pertanyaan yang berkaitan dengan gambar yang disajikan dan akan dijawab melalui kegiatan belajar khususnya pada materi Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja
Collaboration	Peserta didik dibentuk dalam beberapa kelompok untuk mendiskusikan, mengumpulkan informasi, mempresentasikan ulang, dan saling bertukar informasi mengenai Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja
Communication	Peserta didik mempresentasikan hasil kerja kelompok atau individu secara klasikal, mengemukakan pendapat atas presentasi yang dilakukan kemudian ditanggapi kembali oleh kelompok atau individu yang mempresentasikan
Creativity	Guru dan peserta didik membuat kesimpulan tentang hal-hal yang telah dipelajari terkait Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja . Peserta didik kemudian diberi kesempatan untuk menanyakan kembali hal-hal yang belum dipahami
Kegiatan Penutup (15 Menit)	
<ul style="list-style-type: none">• Peserta didik dan guru merefleksi kegiatan pembelajaran.• Peserta didik dan guru menarik kesimpulan dari hasil kegiatan Pembelajaran.• Guru Memberikan penghargaan(misalnya Pujian atau bentuk penghargaan lain yang Relevan kepada kelompok yang kinerjanya Baik.• Menugaskan Peserta didik untuk terus mencari informasi dimana saja yang berkaitan dengan materi/pelajaran yang sedang atau yang akan pelajari.• Guru menyampaikan materi pembelajaran berikutnya.• Guru menutup kegiatan pembelajaran dengan mengucapkan salam dan doa.	

C. Penilaian Hasil Pembelajaran

1. Penilaian Sikap: Observasi dalam proses pembelajaran
2. Penilaian Pengetahuan: Tes lesan dan tes tulis bentuk uraian
3. Penilaian Keterampilan: Praktek

Mengetahui,
Kepala Sekolah

Guru Mapel

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KISI-KISI SOAL KETERAMPILAN BERPIKIR KRITIS

SEKOLAH : SMA AL AZHAR MANDIRI PALU

MATA PELAJARAN : PAI

PEMINATAN : Agama Islam

TAHUN PELAJARAN : 2020/2021

KURIKULUM : 2013

NO	Kompetensi Dasar	Kelas/ Semester	Materi	Indikator soal	Level Kognitif	Bentuk soal	No soal
1.	3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt.	XI/1	Iman kepada kitab-kitab Allah	Disajikan pertanyaan tentang nama-nama lain Al-Qur'an, siswa di harapkan dapat mengetahui nama-nama lain dari kitab suci Al-Qur'an dan mengetahui mana yang tidak termasuk nama lain Al-Qur'an	L1	PG	1.
2	3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt	XI/ 1	Iman kepada kitab-kitab Allah	Disajikan pertanyaan tentang perilaku orang-orang yang beriman kepada kitab suci yang telah Allah Swt. Turunkan melalui Rasul Saw. Siswa di minta bisa menentukan mana sifat yang termasuk dalam sifat beriman kepada kitab suci yang telah diturunkan ke bumi.	L2	PG	2.
3.	3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt	XI/ 1	Iman kepada kitab-kitab Allah	Disajikan sebuah hadis yaitu Nabi Muhammad Saw. Menjelaskan bahwa tidak akan tersesat orang yang berpegang teguh kepada Al-	L2	PG	3.

				Qur'an dan sunnah siswa di harapkan dapat memahami maksud dari hadis tersebut			
4	3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt	XI/ 1	Iman kepada kitab-kitab Allah	Disajikan pertanyaan tentang jumlah dan banyaknya surah serta ayat yang terdapat dalam Al-Qur'an	L1	PG	4.
5	3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt	XI/ 1	Iman kepada kitab-kitab Allah	Disajikan pertanyaan tentang cara Allah Swt. Menyampaikan wahyu kepada para Nabi dan Rasul, yaitu berupa kitab suci dan suhuf, siswa di harapkan dapat membedakan pengertian dari kitab dan suhuf	L1	PG	5.
6	3.3 Menganalisis makna iman kepada kitab-kitab Allah Swt	XI/ 1	Iman kepada kitab-kitab Allah	Disajikan sebuah pertanyaan tentang isi pokok dari kitab suci Al-Qur'an dan di harapkan siswa dapat mengetahui apa saja yang tidak terdapat dalam isi pokok kitab suci Al-Qur'an	L1	PG	6.
7	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran) dalam kehidupan sehari-hari	XI/ 1	Hidup nyaman dengan perilaku jujur	Hidup nyaman dengan perilaku jujur	L2	PG	7.
8	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran) dalam kehidupan sehari-hari	XI/ 1	Hidup nyaman dengan perilaku jujur	Disajikan pertanyaan tentang jumlah dan banyaknya surah serta ayat yang terdapat dalam Al-Qur'an	L1	PG	8.
9	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran)	XI/ 1	Hidup nyaman dengan perilaku	Disajikan sebuah wacana tentang perilaku jujur, siswa di harapkan	L2	PG	9.

	dalam kehidupan sehari-hari		jujur	dapat mengetahui macam-macam perilaku jujur dan dapat mengetahui mana yang bukan hikmah dari perlakuan jujur			
10	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran) dalam kehidupan sehari-hari	XI/ 1	Hidup nyaman dengan perilaku jujur	Disajikan peryataan tentang ciri-ciri dan hikmah dari perilaku tidak jujur, siswa di harapkan dapat mengetahui hikmah yang bukan termasuk perilaku jujur	L1	PG	10
11	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran) dalam kehidupan sehari-hari	XI/ 1	Hidup nyaman dengan perilaku jujur	Disajikan sebuah hadis riwayah Abu Daud dan Tirmidzi yaitu tentang ciri-ciri orang munafik yang telah di sampaikan Rasulullah Saw. siswa di harapkan dapat mengetahui arti dari hadis tersebut	L2	PG	11
12	3.7 Menganalisis pelaksanaan penyelenggaraan jenazah	XI/ 1	Pelaksanaan tata cara penyelenggaraan jenazah	Disajikan pertanyaan bagaimana perilaku seseorang ketika berada di pemakaman, siswa di harapkan dapat mengetahui sunnah dan bukan sunnah yang dapat dilakukan di pemakaman	L1	PG	12
13	3.7 Menganalisis pelaksanaan penyelenggaraan jenazah	XI/ 1	Pelaksanaan tata cara penyelenggaraan jenazah	Disajikan pernyataan tentang tata cara penyelenggaraan jenazah yang baik dan benar sesuai syariat Islam, siswa di harapkan dapat mengetahui tata cara menyolatkan jenazah berdasarkan syariat Islam	L2	PG	13
14	3.7 Menganalisis pelaksanaan penyelenggaraan jenazah	XI/ 1	Pelaksanaan tata	Disajikan peryataan tentang syarat-syarat menyolatkan	L2	PG	14

			cara penyelenggaraan jenazah	jenazah, siswa diharapkan dapat mengetahui peryataan yang benar tentang syarat menyolatkan jenazah			
15	3.8 Menganalisis pelaksanaan khutbah, tablig, dan dakwah	XI/ 1	Pelaksanaan khutbah, tabligh dan dakwah di masyarakat	Disajikan pernyataan tentang seorang laki-laki yang memiliki ciri-ciri Islam,Baligh, dan berakal. Siswa di harapkan dapat menganalisis cerita tersebut	L3	PG	15
16	3.8 Menganalisis pelaksanaan khutbah, tablig, dan dakwah	XI/ 1	Pelaksanaan khutbah, tabligh dan dakwah di masyarakat	Disajikan pernyataan tentang seorang DA'I hendaklah memulai dakwah dari dirinya sendiri, siswa di harapkan dapat mengetahui maksud dari istilah tersebut	L2	PG	16
17	3.8 Menganalisis pelaksanaan khutbah, tablig, dan dakwah	XI/ 1	Pelaksanaan khutbah, tabligh dan dakwah di masyarakat	Disajikan pernyataan tentang kisah Rasulullah dalam berdakwah, siswa di harapkan dapat menganalisis maksud dari kisah tersebut dan dapat mengetahui nama-nama lain dari cara Rasulullah SAW berdakwah	L3	PG	17
18	3.8 Menganalisis pelaksanaan khutbah, tablig, dan dakwah	XI/ 1	Pelaksanaan khutbah, tabligh dan dakwah di masyarakat	Disajikan pernyataan tentang perilaku seseorang di saat mendengarkan khutbah, siswa di harapkan dapat mengetahui hal-hal wajib yang di laksanakan pada saat pelaksanaan solat jumat dan mendengarkan khutbah	L2	PG	18
19	3.8 Menganalisis pelaksanaan khutbah, tablig, dan dakwah	XI/ 1	Pelaksanaan khutbah, tabligh	Disajikan pertanyaan etika dalam menyampaikan menyerukan	L2	PG	19

			dan dakwah di masyarakat	kebaikan dalam Tabligh, siswa di harapkan dapat mengetahui etika dalam bertablig			
20	3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan	XI/ 1	Perkembangan peradaban Islam pada masa kejayaan	Disajikan pertanyaan tentang perkembangan Islam yang di mulai pada periode klasik, siswa di harapkan mampu mengingat pada tahun berapa periode klasik di mulai hingga tahun berapa	L2	PG	20
21	3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan	XI/ 1	Perkembangan peradaban Islam pada masa kejayaan	Disajikan pertanyaan tentang penyebab islam berkembang sangat pesat, siswa di harapkan dapat menganalisis pernyataan yang tidak benar tentang sejarah peradaban islam	L3	PG	21
22	3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan	XI/ 1	Perkembangan peradaban Islam pada masa kejayaan	Disajikan pertanyaan tentang cendekiawan muslim yang menguasai ilmu tafsir, siswa di harapkan dapat mengetahui nama-nama ilmuan tafsir Islam	L1	PG	22
23	3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan	XI/ 1	Perkembangan peradaban Islam pada masa kejayaan	Disajikan pertanyaan tentang cendekiawan muslim yang memuat pengetahuannya dalam sebuah buku berjudul Al-Qanun Fi at-Tib dan Al-Syifa, siswa di harapkan dapat mengetahui penulis dari buku tersebut	L1	PG	23
24	3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan	XI/ 1	Perkembangan peradaban Islam pada masa kejayaan	Disajikan pertanyaan tentang cendekiawan muslim yang menguasai ilmu tafsir, siswa di harapkan dapat mengetahui	L1	PG	24

				nama-nama ilmuan tafsir Islam			
25	3.10 Menelaah perkembangan peradaban Islam pada masa kejayaan	XI/ 1	Perkembangan peradaban Islam pada masa kejayaan	Disajikan pernyataan tentang peradaban Islam yang kini memasuki kemajuan, siswa di harapkan dapat melengka[i] maksud dari pernyataan tersebut	L2	PG	25
26	3.1 Menelaah Q.S. an-Nisā' /4: 59, Q.S. al-Māidah/5: 48, Q.S. at-Taubah/9: 105 sesuai dengan kaidah tajwīd dan makhrajul huruf.	XI/ 1	Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja	Disajikan pertanyaan tentang perilaku seorang pemimpin, siswa di harapkan dapat mengetahui cara menyikapi hal tersebut dengan baik dan benar sesuai syariat islam yang di tegaskna dalam surah An-Nisa ayat 59	L2	PG	26
27	3.1 Menelaah Q.S. an-Nisā' /4: 59, Q.S. al-Māidah/5: 48, Q.S. at-Taubah/9: 105 sesuai dengan kaidah tajwīd dan makhrajul huruf.	XI/ 1	Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja	Disajikan pernyataan tentang permaslahan yang terjadi antara 2 belah pihak, siswa di harapkan dapat mengetahui sikap apa yang harus di lakukan	L2	PG	27
28	3.1 Menelaah Q.S. an-Nisā' /4: 59, Q.S. al-Māidah/5: 48, Q.S. at-Taubah/9: 105 sesuai dengan kaidah tajwīd dan makhrajul huruf.	XI/ 1	Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja	Disajikan pertanyaan tentang perilaku seseorang dalam kategori etos kerja, siswa di harapkan dapat membedakan yang mana termasuk dalam kategori etos kerja	L2	PG	28
29	3.1 Menelaah Q.S. an-Nisā' /4: 59, Q.S. al-Māidah/5: 48, Q.S. at-Taubah/9: 105 sesuai dengan kaidah tajwīd dan makhrajul huruf.	XI/ 1	Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja	Disajikan sebuah kasus yang berkaitan dengan Q.S Almaidah ayat/5: 48, dari kasus tersebut siswa di harapkan dapat menganalisis makna yang tersirat	L2	PG	29

				dari kasus tersebut			
30	3.1 Menelaah Q.S. an-Nisā' /4: 59, Q.S. al-Māidah /5: 48, Q.S. at-Taubah /9: 105 sesuai dengan kaidah tajwīd dan makhrajul huruf.	XI/ 1	Membangun Bangsa melalui Perilaku Taat, Kompetisi dalam Kebaikan, dan Etos Kerja	Disajikan pertanyaan tentang asbabun nuzul dari Q.S At-Taubah ayat 105, siswa di harapkan dapat mengetahui apa asbabun nuzul dari Q.S. At Taubah ayat 105	L2	PG	30

Mengetahui,
Kepala Sekolah

Abdul Basit, M.Pd
NIP. -

Palu,
Guru Mata Pelajaran

Nurun Nabila Safitri. S.Pd



UJIAN AKHIR SEMESTER GANJIL TA 2020/2021

Mata Pelajaran : Pendidikan Agama Islam
Kelas : XI B,C,D,E dan XI F
Guru Mata Pelajaran : Nurun Nabilah Safitri S.Pd

SEBELUM MEMULAI MENGERJAKAN JANGAN LUPA UNTUK BERDOA !!!

1. Setelah lili mengkaji kitab suci Al-Qur'an dia dapat mengetahui berbagai macam pengetahuan tentang islam dan alam semesta, dan lili ingin mengetahui yang tidak termasuk nama lain Al-Qur'an adalah
 - a. Al-Huda
 - b. AL-Furqan
 - c. Al-Mizan
 - d. Al-Kitab
 - e. Asy-Syifa'
2. Berikut ini yang termasuk perilaku orang yang beriman kepada kitab suci yang di turunkan Allah Swt. Kepada para nabi-Nya adalah
 - a. Hanya meyakini satu kitab suci saja
 - b. Berlomba-lomba untuk mempertahankan kebenaran masing-masing
 - c. Selalu menjalankan ajaran semua kirab suci yang di turunkan Allah Swt.
 - d. Menyeleksi isinya kemudian menjalankan yang dianggap mudah di amalkan
 - e. Mengimani keberadaan semua kitab suci, tetapi hanya menjalankan isi kitab suci yang di yakininya saja.
3. Nabi Muhammad Saw. Menjelaskan bahwa tidak akan tersesat orang yang berpegang teguh kepada Al-Qur'an dan sunnah, maksudnya
 - a. Bagi orang yang selalu membawanya ke mana saja ia pergi
 - b. **Bagi orang** yang selalu mengamalkannya di mana saja ia berada
 - c. Bagi orang yang selalu mengkajinya siang dan malam
 - d. Bafi orang yang selalu berdakwah untuk kebenaran Al-Qur'an
 - e. Bagi orang yang meyakini dalam hatinya
4. Berapa jumlah surah dan ayat yang terdapat di dalam Al-Qur'an
 - a. 30 surah, dan 6666 ayat
 - b. 114 surah, dan 6730 ayat
 - c. 114 surah, dan 6235 ayat
 - d. 114 surah, dan 6666 ayat
 - e. **114** surah, dan 6236 ayat
5. Berikut yang merupakan perbedaan dari kitab dan suhuf
 - a. Kitab dan shuhuf adalah wahyu allah
 - b. Kitab berbentuk lembaran dan suhuf wahyu berbentuk buku
 - c. **Kitab** wahyu yang berbentuk buku dan suhuf berbentuk selembaran
 - d. Kitab sangat simple dan suhuf tidak simple
 - e. Kitab dan suhuf di turunkan secara langsung, serta secara berangsur-angsur
6. Yang termasuk isi pokok dalam Al-Qur'an adalah, kecuali
 - a. Aqidah
 - b. **Muamalah**
 - c. Akhlaq
 - d. Qissah
 - e. Qissas
7. Ikhlas dalam melakukan sesuatu, tanpa di campuri oleh kepentingan-kepentingan dunia. Jenis jujur seperti ini termasuk kategori
 - a. Jujur dalam berkata
 - b. **Jujur** dalam berbuat
 - c. Jujur dalam niat
 - d. jujur dalam berjanji
 - e. jujur dalam bertekad
8. Nabi Muhammad SAW. Menjelaskan bahwa jujur itu membawa kebaikan dan kebaikan itu menuntun ke surge. Ungkapan tersebut mengandung arti
 - a. **Jujur** sangat penting dalam kehidupan sehari-hari
 - b. Jujur menyebabkan kenyamanan dalam berperilaku
 - c. Jujur membuat pelakunya selalu gelisah
 - d. Jujur membawa keberkahan dalam hidup
 - e. Jujur perlu di junjung tinggi agar hidup tentram
9. Besok ada kajian yang di adakan oleh anak-anak risma Sma AL-Azhar Didi mengajak dodo untuk ikut pergi ke acara kajian tersebut. Kemudian dodo menyetujui ajakan tersebut, ke esokan harinya didi

memanggil dodo untuk pergi tapi dodo mengatakan dia tidak jadi pergi dengan alasan dia punya kesibukan lain.

Orang yang tidak jujur atau dusta di sebut orang munafik. Salah satu ciri orang munafik adalah, *kecuali.....*

- a. Jika bekerja ingin upah d. jika berbicara ingin di pahami
- b. Jika berkata ingin di dengar e. jika di percaya amanah
- c. Jika berbuat ingin di lihat

10. Perhatikan pernyataan berikut ini !

- 1. Orang jujur akan mendapatkan banyak teman
- 2. Orang jujur akan susah hidupnya
- 3. Orang jujur akan mendapatkan kebahagiaan di akhirat
- 4. Orang munafik akan di sukai teman di akhirat
- 5. Orang jujur selalu mendapatkan berkah di mana saja

Pernyataan di atas yang tidak termasuk hikmah dari perilaku jujur adalah

- a. 1 dan 2 d. 2 dan 4
- b. 2 dan 3 e. 3 dan 5
- c. 3 dan 4

11. آیة المُنَافِقِ تَلَاثٌ إِذَا حَدَّثَ كَذَبَ، وَإِذَا وَعَدَ أَخْفَى، وَإِذَا اؤْتَمِنَ خَانَ ، ayat tersebut menjelaskan tentang

- a. Orang yang berbuat kebaikan d. orang yang boros
- b. Orang berkata jujur e. orang yang selalu bersedekah
- c. **Orang munafik**

12. Berikut ini termasuk perbuatan-perbuatan sunnah pada waktu pemakaman, kecuali

- a. Meninggikan kubur seadanya d. menyiram kubur dengan air
- b. Menandai kubur dengan batu atau kayu e. penguburan jenazah bisa di perlama
- c. Menaruk kerikil di atas kubur

13. Perhatikan pernyataan berikut !

- 1. Yang shalat jenazah harus orang Islam.
- 2. Merendahkan suara bacaan
- 3. Shalat jenazah dilakukan setelah jenazah di mandikan
- 4. Membaca surah lain setelah membaca Al-Fatihah
- 5. Letak jenazah di sebelah kiblat dari yang menyalatkan tepat di sudut.

Dari pernyataan di atas, pernyataan yang termasuk syarat-syarat sah shalat jenazah adalah ...

- a. 1, 2 dan 3 d. 1, 4 dan 5
- b. 2, 3 dan 4 e. 3, 4 dan 5
- c. **1, 3 dan 4**

14. Perhatikan pernyataan berikut !

- 1. Mayat harus dalam keadaan suci
- 2. Mayat sudah di mandikan
- 3. Mayat di tutup menggunakan sarung
- 4. Jenazah sudah berada di depan orang yang menyalatkan.

Dari pernyataan di atas, yang termasuk dalam syarat agar mayat dapat di shalatkan adalah

- a. 1, 3 dan 4 d. **1, 2 dan 4**
- b. 1, 2 dan 3 e. 3 dan 4
- c. **1 dan 2**

15. Roni beragama Islam,dia berumur 21 tahun dan sudah Baligh, roni di ajak orang tuanya untuk mengunjungi neneknya di kampung sekaligus liburan, roni sangat senang belajar agama dia juga mengetahui tentang apa saja hal-hal yang sunnah serta wajib. Dari cerita di atas termasuk syarat dari

- a. Syarat Khutbah d. **syarat khatib**
- b. Rukun Khutbah e. orang beriman
- c. Sunnah khutbah

16. Seorang Da'I hendaklah memulai dakwahnya atas dirinya sendiri. Istilah ungkapan tersebut adalah

- a. *Amar ma'ruf* d. *haqqul ya kin*
- b. *Nahi munkar* e. *uswatun hasanah*
- c. *Ib'da binafsik*

17. Para sahabat pernah menceritakan dan menjelaskan bahwa Rasulullah pertama kali berdakwah dengan cara sembunyi-sembunyi dan kemudian dengan cara terang-terangan, akhirnya islam menyebar ke seluruh penjuru dunia, Salah satu metode dakwah Rasulullah SAW. dengan cara

menyampaikan nasihat yang baik serta mengajarkan dengan cara yang baik-baik, di sebut apakah istilah dakwan tersebut

1. Mempersaudarakan rakyatnya seperti saudara kandung
 2. Senantiasa bersikap adil dan bijaksana serta berpola hidup sederhana
 3. Bekerja keras dengan cara yang baik dan halal
 4. Menyelesaikan tugas sampai tuntas
 5. Kemlompok-kelompok yang berbeda tidak perlu diperangi, tetapi didekati.
- Ungkapan di atas yang termasuk kategori etos kerja adalah
- a. 1 dan 2
 - b. 2 dan 3
 - c. 3 dan 4
 - d. 3 dan 5
 - e. 1 dan 5
29. Akhir-akhir ini semangat berkompetisi sangat menurun di kalangan pelajar. Ini dibuktikan ketika di umumkan tentang peringkat kelas, justru sang juara menjadi cemoohan teman-temannya yang lain. Mereka menanggapinya dengan sinis bahwa si juara ini pelit orangnya, tidak mau berbagi pada saat ujian. Yang harus dilakukan oleh orang yang memahami isi Q.S Al-Maidah/5 ; 48 adalah
- a. Belajar dengan sungguh-sungguh agar ia menjadi juara kelas
 - b. Bekerja keras agar apa yang di inginkan dapat tercapai
 - c. Berkompetsi secara sehat, tidak curang dan tidak menyontek
 - d. Berkolaborasi agar sama-sama mendapatkan nilai memuaskan
 - e. Menaati semua aturan yang ada di sekolah dan kelas
30. Apa yang kalian ketahui tentang surah At-Taubah ayat 105, yang termasuk asbabun nuzul dari surah At-Taubah ayat 105 adalah
- a. Surah At-Taubah di turunkan agar kita selalu menjadi pribadi yang taat akan perintah Allah
 - b. Surah At-Taubah di turunkan agar Semangat dan bersungguh-sungguh dalam bekerja
 - c. Surah At-Taubah di turunkan agar Saling menyayangi antar sesama umat
 - d. Surah At-Taubah di turunkan agar kita menjadi orang yang mengikuti peraturan dan disiplin
 - e. Selalu mengikuti kata hati

☺ SELAMAT MENGERJAKAN ☺

KISI-KISI PENULISAN SOAL

Jenjang Pendidikan : SMA Al-Azhar Mandiri Palu
 Mata Pelajaran : Pendidikan Agama Islam dan Budi Pekerti
 Kurikulum : 2013

No.	Kompetensi Dasar	Kelas / Semester	Materi	Indikator Soal	Level Kognitif / Proses Dimensi Kognitif	Bentuk Soal	No. Soal
1.	3.3 Menganalisis makna iman kepada kitab-kitab Allah SWT	XI / Ganjil	Iman kepada kitab-kitab Allah SWT	Disajikan salah satu deskripsi dari isi kandungan kitab suci Al-Qur'an, siswa dapat mengambil hikmah dari keterkaitan isi kandungan yang satu dengan yang lainnya	L3/C4	Pilihan Ganda	1
2.	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran) dalam kehidupan sehari-hari	XI / Ganjil	<i>Syaja'ah</i> (berani membela kebenaran)	Disajikan kisah salah satu tokoh yang memiliki sifat <i>syaja'ah</i> , siswa dapat memberikan contoh yang benar dari sifat <i>syaja'ah</i> dalam kehidupan sehari-hari	L3/C5	Pilihan Ganda	2
3.	3.9 Menelaah prinsip-prinsip dan praktik ekonomi dalam Islam	XI/ Genap	Prinsip-prinsip dan praktis ekonomi dalam Islam	Disajikan wacana muamalah yang berkaitan prinsip-prinsip dan praktik ekonomi dalam Islam, siswa dapat membandingkan prinsip-prinsip tersebut.	L3/C4	Uraian	3

KARTU SOAL
(PILIHAN GANDA)

MATA PELAJARAN : Pendidikan Agama Islam dan Budi Pekerti
KELAS/SEMESTER : XI/Ganjil
KURIKULUM : 2013

Kompetensi Dasar	:	3.3 Menganalisis makna iman kepada kitab-kitab Allah SWT
Materi	:	Iman kepada kitab-kitab Allah SWT
Indikator Soal	:	Disajikan salah satu deskripsi dari isi kandungan kitab suci Al-Qur'an, siswa dapat mengambil hikmah dari keterkaitan isi kandungan yang satu dengan yang lainnya
Level Kognitif/Dimensi Proses Kognitif	:	L3/C4

BUTIR SOAL NO:

1. Isi kandungan Al-Qur'an antara lain aqidah, ibadah, muamalah, akhlak, syari'ah atau hukum, kisah, sains, dan teknologi. Sains dan teknologi terus berkembang secara cepat dan sesuai dengan perkembangan pemikiran manusia. Keterkaitan antara perkembangan sains dan teknologi dengan isi kandungan Al-Qur'an yang lain dapat dilihat dari pengalaman berikut ini, yaitu ...
 - A. Teknologi yang super canggih dapat membantu dalam mempercepat perhitungan awal Ramadhan.
 - B. Teknologi yang super canggih dapat menemukan sejarah masa lalu yang sangat tepat.
 - C. Sains dan teknologi tidak dapat membantu manusia dalam berkeyakinan tentang adanya Allah SWT.
 - D. Teknologi yang super canggih dapat membantu kelancaran muamalah antara seseama manusia.
 - E. Dengan teknologi yang sangat canggih dapat mendeteksi sifat manusia dengan mengetahui tingkat kejujurannya.

Guru Mata Pelajaran

Nurun Nabilah Safitri, S.Pd.

KUNCI JAWABAN: D

Penelaah

Keputusan*:

	Diterima tanpa perbaikan
	Diterima dengan perbaikan
	Ditolak

*Diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena untuk menjawab soal tersebut diperlukan kemampuan menelaah ide dan informasi secara kritis tentang isi dan makna kandungan Al-Qur'an, pemahaman makna yang tersembunyi dari deskripsi tersebut bisa mengambil hikmah dari deskripsi tersebut.

KARTU SOAL
(PILIHAN GANDA)

MATA PELAJARAN : Pendidikan Agama Islam dan Budi Pekerti
KELAS/SEMESTER : XI/Ganjil
KURIKULUM : 2013

Kompetensi Dasar	:	3.5 Menganalisis makna <i>syaja'ah</i> (berani membela kebenaran) dalam kehidupan sehari-hari
Materi	:	<i>Syaja'ah</i> (berani membela kebenaran)
Indikator Soal	:	Disajikan kisah salah satu tokoh yang memiliki sifat <i>syaja'ah</i> , siswa dapat memberikan contoh yang benar dari sifat <i>syaja'ah</i> dalam kehidupan sehari-hari
Level Kognitif/Dimensi Proses Kognitif	:	L3/C5

BUTIR SOAL NO:

2. Sering kita dengar peristiwa, dimana ada orang-orang yang takut untuk berkata benar karena akan diintimidasi. Berbeda dengan kisah menarik yang pernah ada dalam sejarah umat manusia, yaitu kisah keberanian Asiah istri Firaun dan Masyitah, pelayan Firaun. Keduanya harus menebus keimanan mereka kepada Allah SWT dengan nyawa mereka. Asiah di tiang penyiksaannya dan Masyitah di kuali panas mendidih beserta seluruh keluarganya karena mereka berdua tak sudi menuhankan Fir'aun.
Berikut yang merupakan contoh yang benar dari sifat *syaja'ah* dalam kehidupan sehari-hari adalah ...
- A. Mempertahankan pendapatnya dalam berdiskusi di kelas meskipun berbeda dengan pendapat orang lain.
 - B. Mengatakan tidak setuju kepada hasil kesepakatan karena yakin bahwa kesepakatan itu tidak benar dan merugikan.
 - C. Mengikuti aturan yang berlaku di sekolah karena yakin bahwa peraturan itu dibuat untuk kebaikan siswa.
 - D. Agar aman dari cercaan orang lain, ia rela mengikuti scenario yang dibuat oleh ketua pimpinan di lembaganya.
 - E. Meskipun harus dikeluarkan dari sekolah ia rela daripada dia mengaku berbuat yang sebenarnya tidak dia lakukan.

Guru Mata Pelajaran

Nurun Nabilah Safitri, S.Pd.

KUNCI JAWABAN: E

Penelaah

Keputusan*:

	Diterima tanpa perbaikan
	Diterima dengan perbaikan
	Ditolak

*Diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena untuk menjawab soal tersebut diperlukan kemampuan menggunakan informasi untuk menyelesaikan masalah tentang makna *syaja'ah* dan isi cerita tokoh yang memiliki sifat *syaja'ah* tersebut, pemahaman makna yang tersembunyi dari isi cerita tersebut dapat memberikan pemahaman tentang kisah-kisah dalam konteks lain yang memiliki makna serupa.

**KARTU SOAL
(URAIAN)**

MATA PELAJARAN : Pendidikan Agama Islam dan Budi Pekerti
 KELAS/SEMESTER : XI/Genap
 KURIKULUM : 2013

Kompetensi Dasar	:	3.9 Menelaah prinsip-prinsip dan praktik ekonomi dalam Islam
Materi	:	Prinsip- prinsip dan praktik ekonomi dalam Islam
Indikator Soal	:	Disajikan wacana muamalah yang berkaitan prinsip-prinsip dan praktik ekonomi dalam Islam, siswa dapat membandingkan prinsip-prinsip tersebut.
Level Kognitif/Dimensi Proses Kognitif	:	L3/C4

BUTIR SOAL NO:

3. Telah kita ketahui bersama bahwa Indonesia adalah Negara dengan penduduk mayoritas muslim, akan tetapi sistem ekonomi yang diterapkan bukanlah sistem ekonomi Islam. Konsep ekonomi Islam dapat mengatasi berbagai problematika ekonomi, terutama dapat menghindari perilaku riba.

Berikan contoh uraian alternatif ekonomi Islam yang dapat menyelesaikan permasalahan dan terhindar dari sistem riba!

No.	Uraian Jawaban/ Kata Kunci	Skor
1.	Syirkah (kerjasama, kongsi, atau bersyarikat.) merupakan suatu usaha untuk menggabungkan sumberdaya yang dimiliki untuk mencapai tujuan bersama, sumberdaya yang dimaksud bisa berupa modal uang, keahlian, bahan baku, jaringan kerja, dan dilakukan oleh dua orang atau lebih.	2
2.	Mudharabah, yaitu akad untuk mengikat kerjasama antara dua pihak, yaitu pemodal (shahib al-mal) dan pelaksana usaha (mudharib), akad mudharabah juga disebut bagi hasil bagi sebagian orang. Caranya dengan menentukan berapa persen bagian keuntungan yang akan diterima oleh kedua pihak.	2

3.	Jual Beli (bai' al-murabahah), yaitu akad yang berlaku untuk mengikat penjual dan pembeli dengan adanya penyerahan kepemilikan antara pedagang dan pembeli.	2
4.	Transaksi dengan Pemberian Kepercayaan, yaitu akad atau perjanjian mengenai penjaminan hutang atau penyelesaian dengan pemberian kepercayaan.	2
5.	Transaksi Pemberian/ Perwakilan dalam Transaksi (Wakalah) Transaksi ini berupa pemberian kekuasaan untuk menyelesaikan transaksi tertentu, semisal penyerahan rumah atau transaksi jual beli surat berharga yang dilakukan oleh manajer investasi yang dilakukan pada bank kustodian	2
Total Skor		10

Guru Mata Pelajaran

Nurun Nabilah Safitri, S.Pd.

Penelaah

Keputusan*:

<input type="checkbox"/>	Diterima tanpa perbaikan
<input type="checkbox"/>	Diterima dengan perbaikan
<input type="checkbox"/>	Ditolak

*Diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena untuk menjawab soal tersebut diperlukan kemampuan menggunakan informasi untuk menyelesaikan masalah tentang jenis-jenis ekonomi Islam dan bagaimana mengantisipasi bila terjadi peristiwa ekonomi yang mengandung riba.

KISI-KISI PENULISAN SOAL

Jenjang Pendidikan : SMA
 Mata Pelajaran : Bahasa Inggris
 Kurikulum : K-2013

No	KD	Kelas/ Semester	Materi	Indikator Soal	Level Kognitif / Proses Dimensi Kognitif	Bentuk Soal	No. Soal
1	4.4.1 Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks eksposisi analitis lisan dan tulis, terkait isu actual.	XI/1	Analytical Exposition Text	<p>Disajikan sebuah wacana mengenai permasalahan siswa dalam pembelajaran bahasa inggris, peserta didik menemukan <i>thesis statement</i> dari argument yang diberikan.</p> <p>Disajikan sebuah artikel tentang usaha mengatasi dampak penggunaan kendaraan bermotor, peserta didik dapat memprediksi hasil yang akan terjadi.</p>	L3/C5 L3/C5	Pilhan Ganda Pilhan Ganda	1 2

Guru Mata Pelajaran,

Nurhayati Putri Fitria, S.Pd., Gr.
NIP. -

Kelas/Semester : XI/1

Kurikulum : 2013

Kompetensi Dasar	:	Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks eksposisi analitis lisan dan tulis, terkait isu aktual.
Materi	:	Analytical Exposition Text
Indikator Soal	:	Disajikan sebuah wacana mengenai permasalahan siswa dalam pembelajaran bahasa inggris, peserta didik menemukan <i>thesis statement</i> dari argument yang diberikan.
Level Kognitif/Dimensi Proses Kognitif	:	L3/C5

BUTIR SOAL NOMOR : 1

Passage 1

Firstly, I would like to point out "the song stuck in my head" phenomenon (the echoing in our minds of the last song we heard after leaving a restaurant, shopping malls, etc) which can be both enjoyable and sometimes unnerving. This phenomenon also seems to reinforce the idea that songs work on short-and-long memory.

Secondly, songs in general also use simple conversational language, with a lot of repetition, which is just what many learners look for sample text. The fact that they are effective makes them many times more motivating than other text. Although usually simple, some songs can be quite complex syntactically, lexically and poetically, and can be analyzed in the same way as any other sample.

Furthermore, songs are relaxing. They provide variety and fun, and encourage harmony within oneself and within one group. Little wonder they are important tools in sustaining culture, religion, patriotism. There are many learning activities we can do with songs such as studying grammar, practicing listening comprehension, translating songs, learning vocabulary, and spelling.

Passage 2

The eleventh grader students have some trouble in learning English as they think that English is a difficult subject. They rarely pay attention in the class and often go out of the class out of boredom. As a teacher Mr. Riyadi needs to come up with a new teaching method. Then, one day Mr. Riyadi read one article inspiring him to improve his teaching method. He is persuaded by the writer's thesis statement.

- 1) By reading the arguments from article passage 1 that Mr. Riyadi read, what could be the best thesis statement of the text?
 - a. I believe song has a way back history in English teaching and learning process.
 - b. Undoubtedly, people start to believe that song can lift up the students' mood.
 - c. I think we can mix pleasure with learning when we listen to a song and exploit the song as means to our English progress.
 - d. When we learn English through song it can give us a feeling of relaxing as it uses mostly simple conversational language.
 - e. The song will stick in students' minds and ease the students to understand the material.

KUNCI JAWABAN : C

Kompetensi Dasar	:	Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks eksposisi analitis lisan dan tulis, terkait isu aktual.
Materi	:	Analytical Exposition Text
Indikator Soal	:	Disajikan sebuah artikel tentang usaha mengatasi dampak penggunaan kendaraan bermotor, peserta didik dapat memprediksikan hasil yang akan terjadi.
Level Kognitif/Dimensi Proses Kognitif	:	L3/C5

BUTIR SOAL NOMOR : 2

Passage 1

Cars Should be Banned in the City

Cars should be banned in the city. As we all know, cars create pollution, and cause a lot of road deaths and other accidents.

Firstly, *cars*, as we all know, contribute to most of the pollution in the world. Cars emit a deadly gas that causes illnesses such as bronchitis, lung cancer, and ‘triggers’ off asthma. Some of these illnesses are so bad that people can die from them. Secondly, the city is very busy. Pedestrians wander everywhere and cars commonly hit pedestrians in the city, which causes them to die. Cars today are our roads biggest killers. Thirdly, cars are very noisy. If you live in the city, you may find it hard to sleep at night, or concentrate on your homework, and especially talk to someone.

In conclusion, cars should be banned from the city for the reasons listed.

Passage 2

A go green community has a new belief that cars will only bring destruction to nature and people. The leader of the community wants to spread his community belief into society, so those citizens will no longer using cars anymore. In order to gain their trust, he needs to find a reliable article that can persuade the reader. The secretary of the group offers an analytical exposition above to be used as the flyers for people to read.

- 2) By reading those passages, what would happen if the leader accepts the secretary offers?
- a. People will be hard to be convinced as to it lacks some persuasive techniques.
 - b. People will be quietly persuaded as it has common truth or generalization.
 - c. It can help them to gain more people interested in their believing.
 - d. They can make people believe with them as it uses technique to make the case looks worse.
 - e. People will think that cars are not the only think that bring destruction to nature and people.

KUNCI JAWABAN : A

No	KD	Kelas/ Semester	Materi	Indikator Soal	Level Kognitif / Proses Dimensi Kognitif	Bentu k Soal	No. Soal
1	3.1 Menganalisis fenomena sifat koligatif larutan (penurunan tekanan uap jenuh, kenaikan titik didih, penurunan titik beku, dan tekanan osmosis)	XII / Ganjil	Sifat Koligatif Larutan	Diberikan gambar dan bacaan terkait pedangan asongan yang menjual minuman dingin, tetapi mendinginkannya tidak menggunakan kulkas melainkan menggunakan box dengan ukuran tertentu yang diisi dengan es batu kemudian ditaburi garam atau zat tertentu, kemudian botol botol minumannya ditata rapi. Diberikan tabel beberapa jenis garam beserta massa dan Mr nya, peserta didik diharapkan mampu memprediksi jenis garam mana yang baiknya digunakan pak Budi agar minumannya bisa habis terjual, kemudian dengan ukuran box tertentu berapa botol yang bisa pak Budi dinginkan, kemudian berdasarkan jumlah partikel terlarut peserta didik diharapkan mampu memilih jenis garam atau zat mana yang baiknya digunakan pak Budi setiap hari untuk membantunya mendinginkan minumannya	C5 (mengevaluasi)	Essay	1
2	3.9 Menganalisis faktor – faktor yang mempengaruhi pergeseran arah kesetimbangan dan penerapannya dalam industri	XI / Ganjil	Pergeseran Kesetimbangan Kimia	Diberikan bacaan terkait koral yang mengandung kalsium karbonat, yang selanjutnya kalsium karbonat akan dilarutkan dalam larutan asam. Proses pelarutan akan menghasilkan gas yang selanjutnya terhirup kedalam tubuh si Andi. Setelah terhirup tiba tiba Andi pingsan. Peserta didik diharapkan mampu menganalisis dampak yang terjadi akibat menghirup gas hasil reaksi kalium karbonat dengan larutan asam pada darah Andi, dan istilah yang tepat untuk menunjukkan gejala yang terjadi pada pH darah Andi di tinjau dari pergeseran kesetimbangan pada sistem penyanga yang menyusun pH darah manusia	C4 (menganalisis)	PG	2

**KARTU SOAL HOTS
(URAIAN)**

MATA PELAJARAN : Kimia
 KELAS/SEMESTER : XII/ Ganjil
 KURIKULUM : 2013

Kompetensi Dasar	:	3.1 Menganalisis fenomena sifat koligatif larutan (penurunan tekanan uap jenuh, kenaikan titik didih, penurunan titik beku, dan tekanan osmosis)
Materi	:	Sifat Koligatif Larutan
Indikator Soal	:	Diberikan gambar dan bacaan terkait pedangan asongan yang menjual minuman dingin, tetapi mendinginkannya tidak menggunakan kulkas melainkan menggunakan box dengan ukuran tertentu yang diisi dengan es batu kemudian ditaburi garam atau zat tertentu, kemudian botol-botol minumannya ditata rapi. Diberikan tabel beberapa jenis garam beserta massa dan Mr nya, peserta didik diharapkan mampu memprediksi jenis garam mana yang baiknya digunakan pak Budi agar minumannya bisa habis terjual, kemudian dengan ukuran box tertentu berapa botol yang bisa pak Budi dinginkan, kemudian berdasarkan jumlah partikel terlarut peserta didik diharapkan mampu memilih jenis garam atau zat mana yang baiknya digunakan pak Budi setiap hari untuk membantunya mendinginkan minumannya
Level kognitif/ Dimensi Proses Kognitif	:	C5 (mengevaluasi)

BUTIR SOAL NO: 1



Pedagang asongan adalah pedagang yang menjajakan barangnya dengan cara menyodorkan barangnya pada calon pembeli. Pedagang ini banyak kita jumpai di perempatan jalan di kota-kota, halte, terminal, di bus, kereta api, stasiun. Umumnya pedangan asongan menjual minuman dingin yang suhunya berkisar 15° - 10° C dibawah titik beku normal air, namun untuk mendinginkannya tidak menggunakan kulkas, melainkan menggunakan box yang berisi es batu yang ditaburi garam atau zat sejenisnya yang dapat menjaga suhu es batu tetap rendah. Salah satu pedangan asongan adalah pak Budi. Pak budi setiap harinya menjual minuman

dingin dalam box berukuran panjang 50 cm, lebar 30 cm, dan tinggi 40 cm. Pak budi menata botol minumannya didalam box dengan cara memanjang yang bentuk botolnya memiliki ukuran 5 x 5 cm, jejeran botol tidak dibuat bertingkat, dan diantara botol – botol tersebut terdapat es batu berukuran 2 x 2 cm untuk membantu menjaga suhu botol tetap dingin. Jika diberikan beberapa jenis garam atau zat yang dapat digunakan sebagai zat tabur untuk menjaga suhu es batu (dianggap volume es batu sama dengan volume air yang digunakan untuk membuatnya yaitu 5 liter) seperti tabel berikut,

No	Jenis garam / zat (dalam molal)	Massa (Kg)	Mr Zat
1	KCl	1	74.5
2	NaCl	1	58.5
3	MgCl ₂	1	95
4	CO(NH ₂) ₂	1	60

Dari wacana diatas, maka uraikan jawaban pertanyaan – pertanyaan berikut!

1. Dari keempat garam atau zat diatas, prediksikan garam yang mana yang baiknya digunakan pak Budi agar minuman yang dijualnya pada hari itu dapat habis.
2. Berapa botol minuman yang bisa pak Budi dinginkan?
3. Jika ditinjau dari jumlah total partikel terlarut garam atau zat mana yang baiknya digunakan oleh pak Budi setiap hari untuk membantu mendinginkan minumannya?

Kunci jawaban dan pedoman penskoran:

No	LANGKAH ATAU KATA KUNCI	SKOR
1 a	KCl	1
	$\Delta T_f = K_f \cdot m \cdot i$	1
	$\Delta T_f = K_f \left(\frac{\text{gram}}{\text{Mr}} \times \frac{1000}{p(\text{gram})} \right) \cdot i$	1
	$\Delta T_f = 1.86 \left(\frac{1000}{74.5} \times \frac{1000}{5000} \right) \cdot 2$	1
	$\Delta T_f = 9.9^0\text{C}$	1
	$T_f = 0^0\text{C} - 6.2^0\text{C} = -9.9^0\text{C}$	1
	NaCl	1
	$\Delta T_f = K_f \cdot m \cdot i$	1
	$\Delta T_f = K_f \left(\frac{\text{gram}}{\text{Mr}} \times \frac{1000}{p(\text{gram})} \right) \cdot i$	1
	$\Delta T_f = 1.86 \left(\frac{1000}{58.5} \times \frac{1000}{5000} \right) \cdot 2$	1
	$\Delta T_f = 12.71^0\text{C}$	1
	$T_f = 0^0\text{C} - 12.71^0\text{C} = -12.71^0\text{C}$	1
	MgCl₂	1
	$\Delta T_f = K_f \cdot m \cdot i$	1
	$\Delta T_f = K_f \left(\frac{\text{gram}}{\text{Mr}} \times \frac{1000}{p(\text{gram})} \right) \cdot i$	1
	$\Delta T_f = 1.86 \left(\frac{1000}{95} \times \frac{1000}{5000} \right) \cdot 3$	1
	$\Delta T_f = 11.74^0\text{C}$	1
	$T_f = 0^0\text{C} - 11.74^0\text{C} = -11.74^0\text{C}$	1

	$\text{CO}(\text{NH}_2)_2$ $\Delta T_f = K_f m$	1
	$\Delta T_f = K_f \left(\frac{\text{gram}}{\text{Mr}} \times \frac{1000}{p \text{ (gram)}} \right)$	1
	$\Delta T_f = 1.86 \left(\frac{1000}{60} \times \frac{1000}{5000} \right)$	1
	$\Delta T_f = 6.2^\circ\text{C}$	1
	$T_f = 0^\circ\text{C} - 6.2^\circ\text{C} = -6.2^\circ\text{C}$	1
	Berdasarkan perhitungan nilai titik beku es batu setelah ditambahkan garam atau zat tertentu maka garam yang baiknya digunakan untuk mendinginkan botol minuman tersebut adalah NaCl dan MgCl ₂ sebab menghasilkan titik beku yang ada kisaran standar suhu minuman dingin yang dijual, sehingga orang – orang akan membeli minuman dingin kepada pak Budi dan minuman pak Budi pasti akan habis	2
b	Jumlah botol minuman yang pak Budi dapat jual berdasarkan ukuran box yaitu.	
	$\text{Luas box} = p \times l = 50 \times 30 \text{ cm} = 1500 \text{ cm}^2$	1
	$\text{Luas botol plus es batu} = p \times l = 7 \times 7 \text{ cm} = 49 \text{ cm}^2$	1
	$\text{Jumlah botol} = \text{luas box} / \text{luas botol plus es batu}$ $= 1500 / 49 = 30.6$	1
	Berdasarkan perhitungan sekitar 30 botol minuman pak Budi dapat dijual	
c	Jika ditinjau dari total jumlah partikel terlarut maka garam yang baiknya pak Budi gunakan tiap hari untuk membantu mendinginkan minuman adalah garam NaCl, sebab akan menghasilkan total partikel terlarut yang paling banyak dibanding garam yang lain yang ada diatas.	2

Skor : maksimum 27

Nilai : (skor / 27) x 100

Guru Mata Pelajaran

Irwan, S.Pd

Penelaah

Keputusan*:

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<input type="checkbox"/>	Diterima dengan perbaikan
<input type="checkbox"/>	Ditolak

*diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena:

1. Soal termasuk C5 (mengevaluasi)
2. Soal diatas menghubungkan beberapa konsep yaitu titik beku, kemolalan, ionisasi garam, zat elektrolit dan non elektrolit
3. Besifat kontekstual

4. Tidak rutin

BUTIR SOAL NO: 2



Koral atau karang adalah invertebrata laut yang termasuk dalam kelas Anthozoa dari filum Cnidaria. Beberapa jenis koral akan mensekerikan kalium karbonat untuk membentuk kerangka koral yang keras. Kalsium karbonat (CaCO_3) yang terdapat pada terumbu karang yang rusak atau mati banyak dimanfaatkan untuk keperluan penelitian ataupun industri. Didalam laboratorium Andi akan menghitung kadar kalsium karbonat yang ada dalam terumbu karang yang diperolehnya, Andi pun melarutkan terumbu karang tersebut dalam larutan asam, (seperti HCl) dan tanpa sengaja Andi menghirup gas yang dihasilkan dari reaksi tersebut, disebabkan kecerobahan Andi yang tidak menggunakan masker. Seketika Andi pun pingsan dan karena panik segera temannya membawa Andi ke rumah sakit. Sampai dirumah sakit Andi pun diperiksa oleh dokter. Jika Anda seorang dokter, maka diagnosa sementara yang Andi alami adalah....

- a. pH darah Andi naik dan disebut asidosis
- b. pH darah Andi turun dan disebut alkalosis
- c. konsentrasi ion H^+ dalam darah Andi meningkat dan disebut asidosis
- d. konsentrasi ion H^+ dalam darah Andi naik dan disebut hemolisis
- e. konsentrasi ion H^+ dalam darah Andi turun dan disebut hemofilia

Guru Mata Pelajaran

Irwan, S.Pd

KUNCI JAWABAN: C

Penelaah

Keputusan*:

<input type="checkbox"/>	Diterima tanpa perbaikan
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<input type="checkbox"/>	Diterima dengan perbaikan
<input type="checkbox"/>	Ditolak

*diisi tanda centang

.....

Keterangan:

Soal ini termasuk soal HOTS karena:

1. Soal diatas, termasuk C4 menganalisis
2. Soal diatas memerlukan transfer konsep, persamaan reaksi kimia, pergeseran kesetimbangan (pengaruh penambahan konsentrasi, peranan larutan penyangga dalam pH darah, dan istilah – istilah terkait sistem pH darah)
3. Soal tidak rutin

KISI-KISI PENULISAN SOAL

Jenjang Pendidikan : SMA Al-Azhar Mandiri Palu
 Mata Pelajaran : Sejarah Indonesia
 Kurikulum : K-2013

No	KD	Kelas/ Semeste r	Materi	Indikator Soal	Level Kognitif / Proses Dimensi Kognitif	Bentuk Soal	No. Soal
1.	3.1 Menganalisis proses masuk dan perkembangan penjajahan bangsa Eropa (Portugis, Spanyol, Belanda, Inggris) ke Indonesia	XI / Ganjil	Masa Kolonialisme dan Imperialisme di Indonesia	Disajikan dengan memberikan gambaran umum tentang program-program Belanda di Indonesia dengan bentuk teks dan data kepada peserta didik. Sehingga siswa dapat menganalisis program Belanda di Indonesia.	C4	Pilihan Ganda	1
2.	3.2 Menganalisis dampak politik, budaya, sosial, ekonomi, dan pendidikan pada masa penjajahan bangsa Eropa (Portugis, Spanyol, Belanda, Inggris) dalam kehidupan bangsa Indonesia masa kini	XI / Ganjil	Dampak dari masa penjajahan bagi bangsa Indonesia	Disajikan dalam bentuk penjelasan Teks tentang hubungan antara setiap peristiwa yang terjadi di Indonesia. Agar peserta didik dapat menilai setiap peristiwa yang terjadi adalah dampak dari peristiwa sebelumnya.	C4	Uraian	8
3.	3.1 Menganalisis upaya bangsa Indonesia dalam menghadapi ancaman disintegrasi bangsa antara lain: PKI Madiun 1948, DI/TII, APRA, Andi Aziz, RMS, PRRI, Permesta, G-30-S/PKI	XI I/ Ganjil	Disintegrasi atau Pergolakan dalam negeri yang terjadi dalam negeri masa demokrasi Liberal 1950-1959	Disajikan dalam bentuk penjelasan teks tentang peristiwa pergolakan atau pemberontakan dalam negeri. Siswa diharapkan mampu menganalisis para tokoh yang terlibat dalam pergolakan dalam negeri.	C4	Uraian	9

KARTU SOAL HOTS
(URAIAN)

MATA PELAJARAN : Sejarah Indonesia

KELAS/SEMESTER : XI / Ganjil

KURIKULUM : 2013

Kompetensi Dasar	:	3.2 Menganalisis dampak politik, budaya, sosial, ekonomi, dan pendidikan pada masa penjajahan bangsa Eropa (Portugis, Spanyol, Belanda, Inggris) dalam kehidupan bangsa Indonesia masa kini
Materi	:	Dampak dari masa penjajahan bagi bangsa Indonesia
Indikator Soal	:	Disajikan dalam bentuk penjelasan Teks tentang hubungan antara setiap peristiwa yang terjadi di Indonesia. Agar peserta didik dapat menganalisis setiap peristiwa yang terjadi adalah dampak dari persetiwa sebelumnya.
Level kognitif/ Dimensi Proses Kognitif	:	C4 Menganalisis

BUTIR SOAL NO:

1. Tahun 1889, mantan pegawai Belanda di Indonesia bernama Dowwes Dekker atau Setia Budi menulis Novel yang mengegerkan parlemen Belanda saat itu, dengan judul *Max Havelaar* atau Politik Dagang Kopi Hindia Belanda dengan nama pena Multatuli. Novel tersebut mendapatkan dukungan dari golongan Liberal di Parlemen Belanda. Sehingga tahun awal tahun 1891 di Indonesia mulai dibangun sekolah-sekolah untuk golongan Pribumi, sebagai bentuk balas budi pemerintah Hindia Belanda kepada masyarakat Indonesia serta untuk melindungi golongan Konservatif di Parlemen Belanda. Dampak dari pendirian sekolah-sekolah tersebut, awal tahun 1900 pemuda-pemuda Indonesia mulai banyak yang mendirikan organisasi, seperti Budi Utomo, Sarekat Islam, Nahdahtul Ulama atau PNI sebagai wadah untuk mewujudkan kemerdekaan Indonesia. Tokoh-tokoh organisasi tersebut pada akhirnya, mereka berhasil memerdekakan bangsa Indonesia tahun 1945. Sehingga kemerdekaan kita bisa rasakan dan nikmati saat ini.

Dari pernyataan diatas, tentang perjuangan merebut kemerdekaan Indonesia ternyata juga Negara Belanda berperan secara tidak langsung membantu kemerdekaan bangsa Indonesia. Sebagai siswa bagaimana pandangan anda yang hidup setelah kemerdekaan, setuju kah kalau Belanda disebut bukan membantu Indonesia dalam menuju kemerdekaan?

Kunci jawaban dan pedoman penskoran:

NO	LANGKAH ATAU KATA KUNCI	SKOR
	1. Setuju, karena Negara Belanda tetap melaksanakan penjajahan walaupun dengan sistem yang berbeda atau lebih baik. 2. Tidak setuju, karena sebagian orang-orang dibelanda tidak melakukan penjajahan bahkan menentangnya. Walaupun pada faktanya para tokoh bangsalah yang memperjuangkan kemerdekaan.	2 1
	Total skor	

Guru Mata Pelajaran

Fikri Yudianto, S.Pd

Penelaah

Keputusan*:

Diterima tanpa perbaikan
Diterima dengan perbaikan
Ditolak

*diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena:

1.
2.
3.

**KARTU SOAL HOTS
(PILIHAN GANDA)**

MATA PELAJARAN : Sejarah Indonesia

KELAS/SEMESTER : XI / Ganjil

KURIKULUM : 2013

Kompetensi Dasar	:	3.1 Menganalisis proses masuk dan perkembangan penjajahan bangsa Eropa (Portugis, Spanyol, Belanda, Inggris) ke Indonesia
Materi	:	Masa Kolonialisme dan Imperialisme di Indonesia
Indikator Soal	:	Disajikan dalam bentuk penjelasan Teks tentang hubungan antara setiap peristiwa yang terjadi di Indonesia. Agar peserta didik dapat menilai setiap peristiwa yang terjadi adalah dampak dari peristiwa sebelumnya.
Level kognitif/ Dimensi Proses Kognitif	:	C4 Menganalisis

BUTIR SOAL NO:

1. Pada saat Belanda datang ke Indonesia, Membangun infrastruktur adalah salah satu program wajib Pemerintahan Belanda di Indonesia serta untuk memperkuat kedudukan Belanda di Indonesia. Benteng Oranje ini merupakan benteng pertama yang dibangun Belanda di Nusantara. Di tahun 1607, Sultan Ternate mengundang Belanda untuk membantu mereka mengusir pasukan Spanyol. Tahun 1744 Gubernur Jenderal Gustaf Willien Baron membangun Istana Bogor, dengan alasan untuk memberikan ketenangan kepada pemerintah Hindia Belanda dalam memerintah di Indonesia, alasan lain juga karena lokasi tersebut memiliki ketenangan untuk mengadakan pertemuan. Fort de Kock adalah benteng peninggalan Belanda yang berdiri di Kota Bukit Tinggi, Sumatera Barat. Benteng ini didirikan oleh Kapten Bouer pada tahun 1825 pada masa Baron Hendrik Merkus de Kock menjadi komandan Der Troepen dan Wakil Gubernur Jenderal Hindia Belanda. Bangunan tersebut digunakan sebagai pertahanan Belanda saat Perang Paderi dari tahun 1821 – 1837.

Dari penjelasan diatas dapat disimpulkan bahwa fungsi Hak oktroi/istimewa yang diberikan kepada VOC dapat digunakan sebagai berikut?

- A. Menyatakan Perang
- B. Membentuk Pasukan
- C. Membangun Benteng
- D. Memonopoli Perdagangan

E. Memerintah Negara Jajahan

Guru Mata Pelajaran

Fikri Yudianto, S.Pd

KUNCI JAWABAN: E

Penelaah

Keputusan*:

	Diterima tanpa perbaikan
	Diterima dengan perbaikan
	Ditolak

*diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena:

1. .
2. .
3. .

KARTU SOAL HOTS
(URAIAN)

MATA PELAJARAN : Sejarah Indonesia

KELAS/SEMESTER : XII / Ganjil

KURIKULUM : 2013

Kompetensi Dasar	:	3.1 Menganalisis upaya bangsa Indonesia dalam menghadapi ancaman disintegrasi bangsa antara lain: PKI Madiun 1948, DI/TII, APRA, Andi Aziz, RMS, PRRI, Permesta, G-30-S/PKI
Materi	:	Disintegrasi Bangsa Indonesia tahun 1948-1965
Indikator Soal	:	Disajikan dalam bentuk penjelasan teks tentang peristiwa pergolakan atau pemberontakan dalam negeri. Siswa diharapkan mampu menganalisis para tokoh yang terlibat dalam pergolakan dalam negeri.
Level kognitif/ Dimensi Proses Kognitif	:	C4 Menganalisis

BUTIR SOAL NO:

1. Tahun 1889, mantan pegawai Belanda di Indonesia bernama Dowwes Dekker atau Setia Budi menulis Novel yang mengegerkan parlemen Belanda saat itu, dengan judul *Max Havelaar* atau Politik Dagang Kopi Hindia Belanda dengan nama pena Multatuli. Novel tersebut mendapatkan dukungan dari golongan Liberal di Parlemen Belanda. Sehingga tahun awal tahun 1891 di Indonesia mulai dibangun sekolah-sekolah untuk golongan Pribumi, sebagai bentuk balas budi pemerintah Hindia Belanda kepada masyarakat Indonesia serta untuk melindungi golongan Konservatif di Parlemen Belanda. Dampak dari pendirian sekolah-sekolah tersebut, awal tahun 1900 pemuda-pemuda Indonesia mulai banyak yang mendirikan organisasi, seperti Budi Utomo, Sarekat Islam, Nahdahtul Ulama atau PNI sebagai wadah untuk mewujudkan kemerdekaan Indonesia. Tokoh-tokoh organisasi tersebut pada akhirnya, mereka berhasil memerdekaan bangsa Indonesia tahun 1945. Sehingga kemerdekaan kita bisa rasakan dan nikmati saat ini.
Dari pernyataan diatas, tentang andil kemerdekaan Indonesia ternyata juga berasal dari Negara Belanda sendiri walaupun tanpa mengesampingkan bagaimana perjuangan berabad-abad tokoh bangsa yang lain. Sebagai siswa bagaimana pandangan anda yang hidup setelah kemerdekaan, melihat peristiwa tersebut yang ternyata orang Belanda tidak sepenuhnya menjajah bangsa Indonesia, apakah tetap disebut sebagai panjalah atau bukan?

Kunci jawaban dan pedoman penskoran:

NO	LANGKAH ATAU KATA KUNCI	SKOR
	1. Setuju, karena Negara Belanda tetap melaksanakan penjajahan walaupun dengan sistem yang berbeda atau lebih baik. 2. Tidak setuju, karena sebagian orang-orang dibelanda tidak melakukan penjajahan bahkan menentangnya. Walaupun pada faktanya para tokoh bangsalah yang memperjuangkan kemerdekaan.	2 1
	Total skor	

Guru Mata Pelajaran

Fikri Yudianto, S.Pd

Penelaah

Keputusan*:

<input type="checkbox"/>	Diterima tanpa perbaikan
<input type="checkbox"/>	Diterima dengan perbaikan
<input type="checkbox"/>	Ditolak

*diisi tanda centang

Keterangan:

Soal ini termasuk soal HOTS karena:

1.
2.
3.



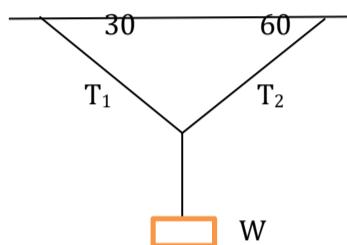
MATA PELAJARAN : FISIKA

KELAS : XI

GURU MAPEL : TRIWAHYUNI, S.SI

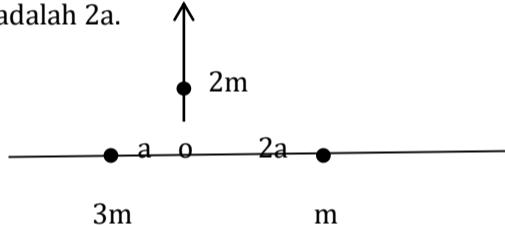
A. PILIHAN GANDA

1. Sebuah benda yang massanya 20 kg digantungkan pada ujung tali. Maka tegangan tali T_1 dan T_2 berturut-turut adalah.....



- a. 100 N dan 100 N
- b. 100 N dan $100\sqrt{2}$ N
- c. 100 N dan $100\sqrt{3}$ N
- d. $100\sqrt{2}$ N dan 100 N
- e. $100\sqrt{3}$ N dan 100 N

2. Tiga buah partikel dengan massa m , $2m$, dan $3m$ dipasang pada ujung kerangka yang terletak pada bidang xy. Jika sistem diputar terhadap titik O dan massanya diabaikan. Maka momen inersia sistem adalah jika jarak o ke $2m$ adalah a , jarak o ke $3m$ adalah a , dan jarak o ke m adalah $2a$.



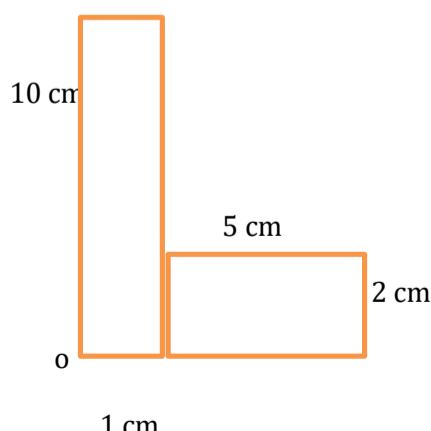
- a. $5 ma$
- b. $7 ma$
- c. $5 ma^2$
- d. $6 ma^2$
- e. $9 ma^2$

3. Seorang anak dengan kedua lengan berada dalam pangkuan sedang berputar pada suatu kursi putar dengan 1 putaran/s. Ketika ia merentangkan kedua lengan diperlambat sampai 0,4 putaran/s. Maka perbandingan momen inersia sebelum dan sesudahnya adalah...

- a. $1 : 5$
- b. $2 : 5$
- c. $5 : 1$
- d. $5 : 2$
- e. $1 : 4$

4. Letak titik berat bidang homogen dibawah ini terhadap titik O adalah....

- a. $(2 ; 2)$
- b. $(2 ; 3)$
- c. $(2 ; 4)$
- d. $(3 ; 2)$
- e. $(3 ; 3)$



5. Tali nilon berdiameter 2 mm ditarik dengan gaya 100 N. Maka tegangan talinya adalah....
- a. $31,5 \times 10^6 \text{ N/m}^2$ c. $3,15 \times 10^6 \text{ N/m}^2$ e. $1,35 \times 10^5 \text{ N/m}^2$
 b. $31,5 \times 10^5 \text{ N/m}^2$ d. $3,15 \times 10^5 \text{ N/m}^2$
6. Batang serba sama (homogen) panjang L, ketika ditarik dengan gaya F bertambah panjang sebesar ΔL . Agar pertambahan panjang menjadi $4 \Delta L$ maka besar gaya tariknya adalah....
- a. $\frac{1}{4} L$ b. $\frac{1}{2} L$ c. $2 F$ d. $4 F$ e. $16 F$
7. Pada percobaan elastisitas suatu pegas diperoleh data seperti pada tabel dibawah ini. Dapat disimpulkan bahwa nilai konstanta pegas tersebut adalah....
- | Gaya (N) | Pertambahan Panjang (m) |
|----------|-------------------------|
| 0,98 | $8 \cdot 10^{-4}$ |
| 1,96 | $16 \cdot 10^{-4}$ |
| 2,94 | $24 \cdot 10^{-4}$ |
| 3,92 | $32 \cdot 10^{-4}$ |
- a. 1002 N/m b. 1201 N/m c. 1225 N/m d. 1245 N/m e. 1250 N/m
8. Tiga buah pegas dirakai seperti gambar berikut. Jika konstanta pegas $k_1 = k_2 = 3 \text{ N/m}$ dan $k_3 = 6 \text{ N/m}$. Maka konstanta susunan pegas besarnya adalah... N/m
- a. 1 b. 3 c. 7,5 d. 12 e. 15
- 
9. Sepotong besi bermassa 4 kg dan massa jenisnya 8 gram/cm^3 dimasukkan ke dalam air yang massa jenisnya 1 gram/cm^3 . Didalam air berat besi tersebut seolah-olah hilang sebesar....
- a. 5 N b. 15 N c. 20 N d. 35 N e. 40 N
10. Sebuah gabus dimasukkan ke dalam air ternyata 75% volume gabus tercelup dalam air, maka massa jenis gabus adalah.... gram/cm³
- a. 1,75 b. 1 c. 0,75 d. 0,5 e. 0,25
11. Luas penampang dongkrak hidrolik masing-masing $0,04 \text{ m}^2$ dan $0,1 \text{ m}^2$. Jika gaya masukan adalah 5 N, maka gaya keluaran maksimum adalah....
- a. 10 N b. 12,5 N c. 15 N d. 17,5 N e. 20 N
12. Suatu tabung berdiameter $4 \cdot 10^{-3} \text{ m}$, jika dimasukkan ke dalam air secara vertikal sudut 60° . Apabila tegangan permukaan air $0,5 \text{ N/m}$. Maka kenaikan air dalam tabung tersebut adalah....
- a. 2 cm b. 2,5 cm c. 5 cm d. 7,5 cm e. 10 cm
13. Sebuah bak penampungan berisi air setinggi 1 m dan pada dinding terdapat lubang kebocoran. Lubang berjarak 20 cm dari dasar tangki. Kelajuan air yang keluar lubang tersebut adalah....m/s
- a. 1 b. 2 c. 4 d. 8 e. 10
14. Sebuah pesawat dengan total luasan sayap 80 m^2 melaju dengan kecepatan 250 m/s . Jika kecepatan aliran udara pada bagian bawah pesawat sebesar 210 m/s . Maka besar maksimal berat total pesawat yang diperbolehkan agar pesawat dapat mengudara adalah.... ($\rho_{\text{udara}}=1,3 \text{ kg/m}^3$)
- a. 78000 N b. 883200 N c. 98000 N d. 999200 N e. 100000 N
15. Suatu fluida ideal mengalir melalui pipa datar AB. Jika luas penampang A dua kali penampang B dan kecepatan aliran di A adalah v, maka kecepatan aliran fluida di b adalah...

a. v

b. 2v

c. 3v

d. 1/2v e. 1/3 v

16. Air terjun setinggi 10 m digunakan untuk Pembangkit Listrik Tenaga Air (PLTA) berdaya listrik 1000 W. Jika efisiensi generator 80%, debit air yang sampai ke kincir adalah...

- a. 10,5 L/s b. 11,5 L/s c. 12,5 L/s d. 13,5 L/s e. 14,5 L/s

17. Dalam suatu wadah terisolasi 1000 gram air 50°C dicampur dengan 500 gram es -40°C . jika kalor jenis es $0,5 \text{ kal/g}^{\circ}\text{C}$, kalor jenis air $1 \text{ kal/g}^{\circ}\text{C}$, kalor lebur es 80 kal/g . Maka keadaan akhir campuran air dan es dalam wadah adalah.....

- a. Es tersisa dengan suhu -10°C
b. Seluruh es mencair dengan suhu campuran 0°C
c. Es mencair sebagian dengan suhu campuran 0°C
d. Menjadi air dengan suhu campuran 5°C
e. Seluruh es mencair dengan suhu campuran -10°C

18. Didalam pabrik pengelolaan bahan makanan yang panas akibat alat pemanas listrik (oven), akan dibuat ruang pengawas pekerja berdinding kaca. Seorang arsitek memiliki data hasil eksperimen nilai konduktivitas termal tiga jenis kaca dengan ketebalan bervariasi seperti tabel.

Jenis kaca	Ketebalan (cm)	Konduktivitas termal (W/mK)
Bening	0,5	1,286
	0,8	1,967
Rayban	0,5	1,327
	0,8	2,014
Buram	0,5	0,851
	0,8	1,296

Agar panas oven tidak mempengaruhi suhu diruang pengawas, jenis kaca paling baik yang dapat digunakan untuk menyekat ruangan adalah....

- a. Kaca bening ketebalan 0,5 cm. d. Kaca ryben dengan ketebalan 0,5 cm.
b. Kaca bening ketebalan 0,8 cm. e. Kaca rayban dengan ketebalan 0,8 cm.
c. Kaca buram ketebalan 0,5 cm.

19. Sebuah benda yang terbuat dari baja memiliki panjang 1000 cm. Berapakah pertambahan panjang baja jika terjadi perubahan suhu sebesar 50°C (Koefisien muai panjang baja $12 \cdot 10^{-6} /{}^{\circ}\text{C}$)

- a. 40 cm b. 60 cm c. 80 cm d. 100 cm e. 120 cm

20. Berapakah kapasitas kalor dari 5 kg suatu zat yang mempunyai kalor jenis $2 \text{ kal/g}^{\circ}\text{C}$?

- a. 20.000 Kal/ $^{\circ}\text{C}$ b. 15.000 kal/ $^{\circ}\text{C}$ c. 10.000 kal/ $^{\circ}\text{C}$ d. 5.000 kal/ $^{\circ}\text{C}$ e. 1.000 kal/ $^{\circ}\text{C}$

21. Berapakah massa kalor yang melebur pada es jika kalor yang diberikan pada es adalah 670 KJ (kalor lebur es 335 KJ/kg)

- a. 1 kg b. 2 kg c. 3 kg d. 4 kg e. 5 kg

22. Perhatikan data berikut ini.

1. Tekanan 2. Volume 3. Suhu 4. Jenis Zat

Faktor yang mempengaruhi energi kinetik gas dalam ruang tertutup ditunjukkan oleh nomor.....

- a. 1 dan 2 b. 1 dan 3 c. 1 dan 4 d. 2 e. 3

23. Suatu jenis gas menempati suatu ruangan yang memiliki volume 300 cm^3 pada suhu 27°C dan tekanan 1 atm. Jika suhu dinaikkan menjadi 127°C dan tekanan menjadi dua kali semula, volume gas akan menjadi.... cm^3
- a. 60 b. 75 c. 200 d. 250 e. 300
24. Sejumlah gas ideal dalam tabung tertutup dipanaskan secara isokhorik sehingga suhunya naik menjadi empat kali suhu semula. Energi kinetik rata-rata molekul gas ideal menjadi....
- a. $\frac{1}{4}$ kali semula b. $\frac{1}{2}$ kali semula c. sama dengan semula d. 2 kali semula
e. 4 kali semula.
25. Anggap 4 mol gas diatomik memiliki energi dalam 15 kJ. Suhu gas setelah mencapai kesetimbangan adalah....
- a. 180 K b. 270 K c. 400 K d. 800 K e. 1450 K
26. Jika pada tekanan 10^5 Pa , massa jenis oksigen adalah $1,4 \text{ kg/m}^3$, ini berarti laju rms molekul-molekul oksigen adalah....
- a. 5 m/s b. 18 m/s c. 120 m/s d. 270 m/s e. 460 m/s
27. Gas helium sebanyak 16 gram memiliki volume 5 liter dan tekanan $2 \times 10^2 \text{ Pa}$. Jika $R = 8,31 \text{ J/mol K}$. Maka suhu gas tersebut adalah... $\text{Mr He} = 4 \text{ gram/mol}$
- a. 0,01 K b. 0,02 K c. 0,03 K d. 0,04 K e. 0,05 K
28. Suatu gas yang suhunya 127°C dipanaskan menjadi 227°C pada tekanan tetap. Volume gas sebelum dipanaskan adalah V . Volume gas setelah dipanaskan adalah....
- a. $\frac{1}{4}V$ b. $\frac{4}{5}V$ c. $\frac{5}{4}V$ d. $\frac{3}{4}V$ e. $\frac{4}{3}V$
29. Volume 5 mol gas pada suhu dan tekanan standar (0°C dan 1 atm) adalah.... m^3
- a. 1,12 b. 0,112 c. 0,0112 d. 0,00112 e. 11,2
30. Suatu gas ideal mula-mula menempati ruang dengan volume V dan tekanan P pada suhu T , jika suhu dinaikkan menjadi $3T$ dan tekanan berubah menjadi $3/2 P$, maka volume akhir gas tersebut adalah.... semula
- a. sama b. $2x$ c. $3x$ d. $1/2x$ e. $1/3x$

B. URAIAN

1.



Seorang Pendaki Gunung Cartenz Leny Surya Martina dan kelompoknya menghabiskan biaya 55 juta perorang lantaran letak gunung tersebut sulit dijangkau pada saat mendaki Leny menggunakan tali kernmantle dengan panjang 73 m dan diameter 1,5 cm. Leny memiliki bobot tubuh 72 kg. Ketika Leny mengikat tali kernmantle ke tubuhnya dan menaiki gunung ternyata tali mulur sepanjang 1,2 m. Tali

Kernmantle hanya memiliki daya tahan $5,2 \cdot 10^9$ N/m². Mampukah Leny Surya Martina mendaki gunung Cartenz dengan selamat ? Beri penjelasan

2. Air mendidih (100°C) sebanyak 250 ml dituangkan ke dalam panci berisi 400 ml air bersuhu 35°C . Setelah terjadi keseimbangan termal, maka suhu campuran adalah . (kalorjenis air 1 kal.gr⁻¹.°C⁻¹)

3. Logam P, Q dan R berukuran sama. Konduktivitas logam P, Q dan R berturut-turut adalah $4k$, $2k$ dan k Ketiganya terhubung dengan suhu pada ujung-ujung terbuka seperti pada gambar berikut ini.



Tentukan T_x dan T_y ?

SELAMAT BEKERJA



KEMENTERIAN AGAMA RI
PASCASARJANA
INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU
Alamat : Jl. Diponegoro No. 23 Telp. (0451) 460798 Fax. 460165, 460732 Palu 94221
Sulawesi Tengah

PENGAJUAN JUDUL TESIS

Yang bertanda tangan di bawah ini:

N a m a : FARHAH UTAMI
NIM : 02.11.09.18.008
T.T.L : PALU / 25 FEBRUARI 1997
Alamat : Jl. TENTENA II NO. 06 PERUMNAS SILAE

Semester : III (TIGA) / PAI /
Prodi/Jurusan : PAI (Pendidikan Agama Islam)
Program : Magister (S2)
No. HP : 0823 6666 0597

Judul :

- 02/09/19. *The Effect of Higher Order Thinking Skills-Based Assessment on The Development of Students' Thinking Skills in SMA Al-Azhar Mandiri Palu*
1. *Critical*
2. *The Effect of Emotional & Spiritual Intelligence on Character Building of Students in MATH 2 Kota Palu*
3. *The Effectiveness of the Use of Academic Assessment Standard on Student's Final Score in IAIN Palu*

Palu, 02 September 2018
Mahasiswa,

NIM. 02.11.09.18.008

Telah disetujui judul Tesis dengan catatan:

Pembimbing I : H. ALEROIN, S.Pd., S.S, M.com, Ph.D.

Pembimbing II : DR. HJ. MARY ASMAWATI, S.AG., M.Pd.

Mengetahui:
Direktur,

Prof. Dr. Rusli, S.Ag., M.Soc.Sc.
NIP. 19720523 199903 1 007

Ketua Prodi/Jurusan PAI,

Dr. H. Ahmad Syahid, M.Pd.
NIP. 19681217 199403 1 003



PASCASARJANA IAIN PALU

KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU

NOMOR: 067 TAHUN 2020

TENTANG PENUNJUKAN PEMBIMBING TESIS MAHASISWA PASCASARJANA IAIN PALU

- Menimbang a. Bahwa penulisan karya ilmiah dalam bentuk tesis merupakan salah satu syarat dalam penyelesaian studi pada jenjang Strata Dua (S2) Pascasarjana IAIN Palu. Untuk itu dipandang perlu menunjuk pembimbing proposal dan tesis magister;
- b. Bahwa saudara yang tersebut namanya di bawah ini dipandang cakap (mampu) melaksanakan tugas tersebut.
- c. Bahwa berdasarkan pertimbangan sebagaimana huruf a dan b diatas perlu menetapkan keputusan Direktur Pascasarjana IAIN Palu
- Mengingat 1. Undang-Undang Nomor: 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
2. Peraturan Pemerintah Nomor: 60 Tahun 1999 tentang Pendidikan Tinggi;
3. Keputusan Presiden RI Nomor 57 Tahun 2013 tentang Pendirian Institut Agama Islam Negeri (IAIN) Palu;
4. Peraturan Menteri Agama RI Nomor 92 Tahun 2013 tentang Organisasi dan Tata Kerja IAIN Palu;
5. Keputusan Menteri Pendidikan Nasional Nomor 232/U/2000 tentang Pedoman Penyusunan Kurikulum Pendidikan Tinggi dan Hasil Belajar Mahasiswa
6. Keputusan Menteri Pendidikan Nasional Nomor 234/U/2000 tentang Pedoman Pendirian Perguruan Tinggi;
7. Keputusan Menteri Pendidikan Nasional Nomor 178/U/2001 tentang Gelar dan Lulusan Perguruan Tinggi;
8. Keputusan Menteri Pendidikan Nasional Nomor 184/U/2001 tentang Pedoman, Pengawasan, Pengendalian, dan Pembinaan Program Diploma, Sarjana dan Pascasarjana di Perguruan Tinggi;
9. Keputusan Menteri Pendidikan Nasional Nomor 004/U/2002 tentang Akreditasi Program Studi pada Perguruan Tinggi;
10. Keputusan Direktur Jenderal Pendidikan Islam Kementerian Agama RI Nomor: Dj.I/674/2010 tentang izin Penyelenggaraan Program Studi Strata Dua (S2) Pendidikan Agama Islam pada Sekolah Tinggi Agama Islam Negeri (STAIN) Datokarama Palu;
11. Keputusan Badan Akreditasi Nasional Perguruan Tinggi Nomor: 193/SK/BAI'I-PT/Ak -XI/M/IX/2013 tentang Nilai Peringkat Akreditasi Program Studi Pendidikan Agama Islam pada Program Magister;
12. Keputusan Direktur Jenderal Pendidikan Islam, Kementerian Agama RI Nomor: 3251 Tahun 2015 tentang Izin Penyelenggaraan Program Studi Hukum Keluarga (Ahwal Syakhsiyah) pada Program Magister Institut Agama Islam Negeri Palu Tahun 2015;
13. Keputusan Badan Akreditasi Nasional Perguruan Tinggi Nomor: 4920/SK/BAN-PT/Akred/M/XII/2017 tentang Nilai Peringkat Akreditasi Program Studi Ahwal Syakhsiyah pada Program Magister;
14. Keputusan Menteri Agama Republik Indonesia, Nomor 52/In.13/KP.07.6/01/2018 tentang Pengangkatan Pejabat Pelaksana Akademik Institut Agama Negeri Palu Masa Jabatan 2017/2021

MEMUTUSKAN

- Menetapkan : KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI IAIN PALU
TENTANG PENUNJUKAN PEMBIMBING TESIS MAHASISWA PASCASARJANA IAIN PALU
- Pertama : Menunjuk Saudara (i):
1. H. Nurdin, S.Pd., S.Sos., M.Com., Ph.D
2. Dr. Hj. Nur Asmawati, S.Ag., M.Pd
Masing-masing sebagai Pembimbing I dan II bagi Mahasiswa:
Nama : FARHAH UTAMI
Nomor Induk : 02.11.09.18.008
Program Studi : Pendidikan Agama Islam
Judul Tesis : The Effect of Higher Order Thinking Skills – Based Assessment on the Development of Students' Critical Thinking in SMA Al-Azhar Mandiri Palu
- Kedua : Tugas Pembimbing tersebut adalah membimbing dan mengarahkan mahasiswa, mulai penyusunan proposal sampai selesai menjadi sebuah karya ilmiah yang berkualitas dalam bentuk tesis;
- Ketiga : Segala biaya akibat diterbitkannya surat keputusan ini dibebankan pada DIPA IAIN Palu ;
- Keempat : Salinan surat keputusan ini disampaikan kepada masing-masing yang bersangkutan untuk dilaksanakan sebagaimana mestinya.

Ditetapkan di : Palu
Pada Tanggal : 09 April 2020
Direktur

Prof. Dr. Rusli, S.Ag, M.Soc.Sc.
NIP.19720523199903 1 007

Tembusan:

Masing-masing yang bersangkutan.

KARTU KONTROL

KEGIATAN SEMINAR MAHASISWA PASCASARJANA
INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU

NO	TANGGAL	TEMA SEMINAR	NARASUMBER	TANDA TANGAN	KET
1	31 MARET 2020	MODEL PENANAMKAN BUDAYA RELIGIUS PESERTA DIDIK DI KOTA PALU	HARTI AZMI ZAINAH		
2	06 APRIL 2020	MERENCANKAN MOTIVASI BELAJAR SISWA RADA MASA REJASARAN PAI MELALUI PEMERIKSAAN	MUH. ALI,		
3	09 APRIL 2020	PEREMBANGAN MENTAL SPIRUAL PESERTA DIDIK BESCA TEMPAT SMPN 15 PALU	MUH. ABDUL RAFAQ		
4	09 APRIL 2020	GAYA KERENCIHAN KEPALA DIAORAKAH DAN MENINGKATKAN MINTA PAI DI TAHUN 1 MASA BDU MOHL. RULIAN YOHANIS BOGO			
5	09 APRIL 2020	STRATEGI BORU DALAM PENANAMKAN BUDI PEKERJAAN UNTUK ANALISIS KERAHITA	EDY SURYOJO		
6	20 April 2020	POLA AFUS ORANGTUA TERHADAP ANAK DI ERA DIGITAL SISWI KASUS DI DEPO FIRMATI			
7	20 April 2020	PENERAPAN KODE ETIK GURU INDONESIA DAN KEMINISTRAKAN PROFESIONALISME GURU ITA PARWANASARI			
8	13 MEI 2020	PERAN KEGURUAN BARU PAI DALAM PENGAMBUNAAN KARAKTER PESERTA DIDIK DI PALU	LATAHANS NOHO		
9	13 MEI 2020	EFEKTIVITAS PELAKUANAN PROGRAM LITERASI BANTAH DALAM PENINGKATAN PRESTASI AMBO ASRANG			
10	15 MEI 2020	PERAN DAN KARAKTER PESERTA DIDIK DI MAN 1 POPO	SAMIA		

Mengetahui:

Direktur,
Ketua Prodi

Palu,

Mahasiswa Ybs.

FACHAH UTAMI
NIM. 0211.09.18.008

Prof. Dr. Rusli, S.Ag., M.Soc.Sc.
NIP. 19720523 19903 1 007

Dr. H. Ahmad Sekti, M.Pd...
NIP. 0211.09.18.008



KEMENTERIAN AGAMA REPUBLIK INDONESIA

INSTITUT AGAMA ISLAM NEGERI PALU

الجامعة الإسلامية الحكومية فالو

STATE INSTITUTE FOR ISLAMIC STUDIES PALU

PASCASARJANA

Jl. Diponegoro No. 23 Palu Telp. 0451-460798 Fax. 0451-460165

Website : www.iainpalu.ac.id, email : humas@iainpalu.ac.id

Nomor : 178 /In.13/D/PP.00.9/05/2020

Lamp. : 1 eks (SK & Proposal)

Perihal : Undangan Tim Penguji Seminar Proposal Tesis

Kepada Yth.
Dewan Penguji Seminar Proposal Tesis
Di
Tempat

Assalamu 'Alaikum Warahmatullahi Wabarakatuh.

Semoga keselamatan dan kesejahteraan senantiasa dilimpahkan Allah SWT kepada kita dalam menjalankan aktifitas sehari-hari, amin.

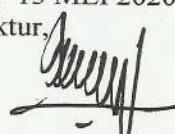
Dalam rangka **Ujian Proposal Tesis** Mahasiswa Program Magister Pendidikan Agama Islam (PAI) Pascasarjana IAIN Palu, diundang dengan hormat Bapak/Ibu Dosen Pembimbing/Penguji untuk hadir sekaligus menjadi penguji pada ujian yang dimaksud sebagaimana jadwal terlampir.

Demikian undangan ini disampaikan, atas kesediaannya diucapkan terima kasih.

Wassalamu 'Alaikum Warahmatullahi Wabarakatuh.

Palu, 13 MEI 2020

Direktur,


Prof. Dr. Rusli, S.Ag., M.Soc.Sc.
NIP. 197205231999031007

Catatan: (Bagi kandidat magister)

- * Hadir 30 Menit Sebelum Ujian dilaksanakan.
- * Berpakaian Rapi, Kemeja Berdasarkan (memakai jas) bagi laki-laki & perempuan menyesuaikan.
- * Mengundang Minimal 5 orang mahasiswa Pascasarjana IAIN Palu untuk hadir dalam ujian yang dimaksud
- * Peserta Ujian Menyiapkan Konsumsi bagi Tim Penguji dan Mahasiswa yang Hadir dalam Proses Ujian

Tembusan;

1. Rektor IAIN Palu
2. Masing-Masing Kandidat Magister



PASCASARJANA IAIN PALU

KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU NOMOR 087 TAHUN 2020

TENTANG TIM PENGUJI PROPOSAL TESIS MAHASISWA PASCASARJANA (S2) IAIN PALU TAHUN 2020

DIREKTUR PASCASARJANA IAIN PALU

- Menimbang
- a. Bahwa dalam rangka pelaksanaan Ujian Proposal Tesis mahasiswa Pascasarjana IAIN Palu Tahun 2019, dipandang perlu menunjuk Tim Penguji.
 - b. Bahwa tim penguji yang namanya tercantum dalam Surat Keputusan ini dipandang memenuhi syarat untuk melaksanakan tugas-tugas yang dimaksud.
 - c. Bahwa berdasarkan pertimbangan sebagaimana huruf a dan b diatas perlu menetapkan keputusan Direktur Pascasarjana IAIN Palu.

- Mengingat
- 1 Undang-Undang Nomor: 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
 - 2 Peraturan Pemerintah Nomor: 60 Tahun 1999 tentang Pendidikan Tinggi;
 - 3 Peraturan Presiden RI Nomor: 51 Tahun 2013 tentang Perubahan Sekolah Tinggi Agama Islam Negeri Palu (Lembaran Negara Republik Indonesia 2013 Nomor 121);
 - 4 Peraturan Menteri Agama RI Nomor: 92 Tahun 2013 tentang Organisasi dan Tata Kerja Institut Agama Islam Negeri Palu;
 - 5 Keputusan Direktur Jenderal Pendidikan Islam Kementerian Agama RI Nomor: Dj.I/674/2010 tentang izin Penyelenggaraan Program Studi Strata Dua (S2) Pendidikan Agama Islam pada Sekolah Tinggi Agama Islam Negeri (STAIN) Datokarama Palu Tahun 2010
 - 6 Keputusan Badan Akreditasi Nasional Perguruan Tinggi Nomor: 193/SK/BAII-PT/Ak - XI/M/IX/2013 tentang Nilai Peringkat Akreditasi Program Studi pada Program Magister
 - 7 Keputusan Direktur Jenderal Pendidikan Islam, Kementerian Agama RI Nomor: 3251 Tahun 2015 tentang Izin Penyelenggaraan Program Studi Hukum Keluarga (Ahwal Syakhsiyah) pada Program Magister Institut Agama Islam Negeri Palu Tahun 2015
 - 8 Keputusan Rektor Institut Agama Islam Negeri Palu No. 335/In.KP.07.6/05/2018 tentang Pengangkatan Direktur Pascasarjana IAIN Palu;

MEMUTUSKAN

- Menetapkan
- : KEPUTUSAN DIREKTUR PASCASARJANA IAIN PALU TENTANG TIM PENGUJI PROPOSAL TESIS MAHASISWA PASCASARJANA (S2) TAHUN 2020
- Pertama
- : Menetapkan Tim Penguji Ujian Proposal Tesis mahasiswa Pascasarjana Institut Agama Islam Negeri (IAIN) Palu.
- Kedua
- : Tim Penguji bertugas merencanakan, melaksanakan, mengawasi, dan melaporkan hasil kegiatannya masing-masing kepada Direktur Pascasarjana IAIN Palu.
- Ketiga
- : Segala biaya yang dikeluarkan sebagai akibat dikeluarkannya keputusan ini dibebankan pada DIPA IAIN Palu Tahun 2020.
- Keempat
- : Keputusan ini berlaku sejak tanggal ditetapkan dan berakhir setelah seluruh rangkaian kegiatan Ujian Proposal Tesis mahasiswa yang bersangkutan selesai.
- Kelima
- : Apabila di kemudian hari ternyata terdapat kekeliruan dalam keputusan ini akan diubah dan diperbaiki sebagaimana mestinya.

Ditetapkan di : Palu
Pada Tanggal : 18 MEI 2020

Direktur,

Prof. Dr. Rush, S.Ag., M.Soc.Sc.
NIP. 19720523 199903 1 007

Tembusan:

1. Rektor IAIN Palu
2. Yang Bersangkutan

LAMPIRAN
KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU

TENTANG
TIM PENGUJI SEMINAR PROPOSAL TESIS MAHASISWA PASCASARJANA (S2) IAIN PALU TAHUN 2020

NOMOR : 087 TAHUN 2020
TANGGAL : 18 MEI 2020

No.	Peserta	Judul	Tim Pengaji	Hari / Tgl	Prodi	Ruang
	NIM	Nama	Ketua	Prof. Dr. Rusli, S.Ag, M.Soc.Sc.		R. Kuliah Pasca Sarjana/ Online
1	02.11.09.18.008	FARHAH UTAMI	Pembimbing I Pembimbing II Pengaji Utama	H. Nurdin, S.Pd, S.Sos, M.Com, PhD Dr. Hj. Nur Asmawati, S.Ag., M.Hum. Prof. Dr. Rusli, S.Ag, M.Soc.Sc.	Rabu, 20 Mei 2020 14.30 – 16.00	PAI
		THE EFFECT OF HIGHER ORDER THINKING SKILLS (HOTS)-BASED ASSESSMENT ON THE DEVELOPMENT OF STUDENTS' CRITICAL AND CREATIVE THINKING SKILLS AT SMA AL- AZHAR MANDIRI PALU				

Palu, 18 Mei 2020
Direktur,

Prof. Dr. Rusli, S.Ag, M.Soc.Sc.
NIP. 197205231999031007



KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI PALU
جامعة الإسلامية الحكومية فالو
STATE INSTITUTE FOR ISLAMIC STUDIES PALU
PASCASARJANA
Jl. Diponegoro No. 23 Palu Telp. 0451-460798 Fax. 0451-460165
Website : <http://pps.iainpalu.ac.id>, email : pascasa:jana@iainpalu.ac.id

Nomor : 136/In.13/D/PP.00.9/065/2020
Sifat : -
Lampiran : -
Perihal : Izin Pra-Penelitian Tesis

Palu, 13 Mei 2020

Yth. Kepala SMA Al-Azhar Mandiri Palu
Di-

Tempat

Assalamu 'Alaikum Warahmatullahi Wabarakatuh.

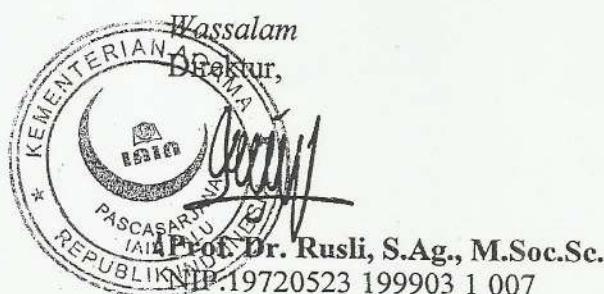
Semoga keselamatan dan kesejahteraan senantiasa dilimpahkan Allah swt kepada Bapak/Ibu dan seluruh jajarannya, amin.

Selanjutnya kami sampaikan bahwa mahasiswa Pascasarjana IAIN Palu:

Nama	: Farhah Utami
NIM	: 02.11.09.18.008
Semester	: IV (Empat)
Program Studi	: Pendidikan Agama Islam (PAI)
Tempat, Tanggal Lahir	: Palu, 25 Februari 1997
Alamat	: Jl. Tentena II No. 06 BTN Silae

Bermaksud melakukan Pra-Penelitian Tesis dengan judul "*The Effect of Higher-Order Thinking Skills-Based Assesment on the Development of Students' Critical and Creative Thinking Skills at SMA Al-Azhar Mandiri Palu*".

Demikian kami sampaikan atas kerjasama yang baik diucapkan terima kasih.





KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI PALU
جامعة الإسلامية الحكومية فالو
STATE INSTITUTE FOR ISLAMIC STUDIES PALU
PASCASARJANA
Jl. Diponegoro No. 23 Palu Telp. 0451-460798 Fax. 0451-460165
Website : <http://pps.iainpalu.ac.id>, email : pascasarjana@iainpalu.ac.id

Nomor : 148 /In.13/D/PP.00.9/04/2020
Sifat : -
Lamp. : -
Perihal : Izin Penelitian Tesis

Palu, 14 April 2020

Yth. Kepala SMA Al-Azhar Mandiri Palu
Di -

Tempat

Dengan Hormat,

Semoga kesehatan, keselamatan dan kesejahteraan senantiasa dilimpahkan Allah swt kepada Bapak/Ibu dan seluruh jajarannya, amin.

Selanjutnya kami sampaikan bahwa mahasiswa Pascasarjana IAIN Palu:

Nama : Farhah Utami
NIM : 02.11.09.18.008
Tempat/Tgl Lahir : Palu, 25 Februari 1997
Semester : IV (Empat)
Program Studi : Pendidikan Agama Islam (S2)

Bermaksud melakukan Izin Penelitian Tesis dengan judul "*The Effect of Higher-Order Thinking Skills-Based Assesment on the Development of Students' Critical and Creative Thinking Skills in SMA Al-Azhar Mandiri Palu.*

Demikian kami sampaikan atas kerjasama yang baik diucapkan terima kasih.



Rusli, S.Ag., M.Soc.Sc.
RENTAL NO. 720523 199903 1 007



cerdas berakhlak

SMA AL-AZHAR MANDIRI PALU

SURAT KETERANGAN

No. : 0098/I.24.3.5/SMA-AM/VIII/2020

Yang bertanda tangan di bawah ini:

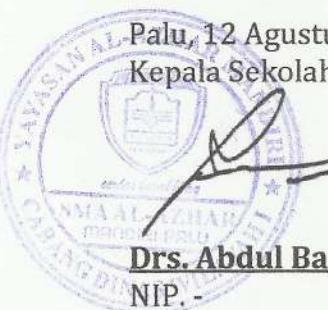
Nama : Drs. Abdul Basit, M.Pd
N I P : -
Jabatan : Kepala Sekolah
Nama Unit Kerja : SMA Al-Azhar Mandiri Palu

Dengan ini menyatakan bahwa :

Nama : Farhah Utami
N I M : 02.11.09.18.008
Semester : IV (Empat)
Program Studi : Pendidikan Agama Islam

Telah melaksanakan Observasi dan Penelitian dalam rangka penyelesaian Tesis dengan judul "*The Effect of Higher-Order Thinking Skills-Based Assesment on the Development of Student's Critical and Creative Thinking Skills in SMA Al-Azhar Mandiri Palu*".

Demikian Keterangan ini dibuat untuk dapat digunakan sebagaimana mestinya.

Palu, 12 Agustus 2020
Kepala Sekolah

Drs. Abdul Basit, M.Pd
NIP. -



KEMENTERIAN AGAMA REPUBLIK INDONESIA

INSTITUT AGAMA ISLAM NEGERI PALU

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PASCASARJANA

Jl. Diponegoro No. 23 Palu Telp. 0451-460798 Fax. 0451-460165

Website : www.iainpalu.ac.id, email : humas@iainpalu.ac.id

Nomor : 453 /In.13/D/PP.00.9/11 /2020

Lamp. : 1 eks (SK & Tesis)

Perihal : Undangan Tim Penguji Seminar Hasil Tesis

Kepada Yth.

Dewan Penguji Seminar Hasil Tesis

Di

Tempat

Assalamu 'Alaikum Warahmatullahi Wabarakatuh.

Semoga keselamatan dan kesejahteraan senantiasa dilimpahkan Allah SWT kepada kita dalam menjalankan aktifitas sehari-hari, amin.

Dalam rangka Ujian Hasil Tesis mahasiswa Program Magister Pendidikan Agama Islam (PAI) Pascasarjana IAIN Palu, diundang dengan hormat Bapak/Ibu Dosen Pembimbing/Penguji untuk hadir sekaligus menjadi penguji pada ujian yang dimaksud sebagaimana jadwal terlampir.

Demikian undangan ini disampaikan, atas kesediaannya diucapkan terima kasih.

Wassalamu 'Alaikum Warahmatullahi Wabarakatuh.



Catatan: (Bagi kandidat magister)

- * Hadir 30 Menit Sebelum Ujian dilaksanakan.
- * Berpakaian Rapi, Kemeja Berdasarkan (memakai jas) bagi laki-laki & perempuan menyesuaikan.
- * Mengundang Minimal 5 orang mahasiswa Pascasarjana IAIN Palu untuk hadir dalam ujian yang dimaksud
- * Peserta Ujian Menyiapkan Konsumsi bagi Tim Penguji dan Mahasiswa yang Hadir dalam Proses Ujian

Tembusan:

1. Rektor IAIN Palu
2. Masing-Masing Kandidat Magister



PASCASARJANA IAIN PALU

KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU NOMOR :233 TAHUN 2020

TENTANG PENGUJI SEMINAR HASIL TESIS MAHASISWA PASCASARJANA (S2) IAIN PALU TAHUN 2020

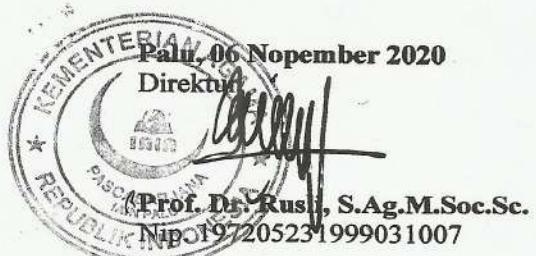
DIREKTUR PASCASARJANA IAIN PALU

Menimbang : a. Bahwa dalam rangka Ujian Seminar HASIL Tesis mahasiswa Pascasarjana IAIN Palu Tahun 2020 dipandang perlu untuk menunjuk Tim Penguji
b. Bahwa Tim Penguji yang namanya tercantum dalam lampiran keputusan ini dipandang memenuhi syarat dan mampu melaksanakan tugas-tugas dimaksud;
c. Bahwa berdasarkan pertimbangan sebagaimana huruf a dan b diatas perlu menetapkan keputusan Direktur Pascasarjana IAIN Palu

Mengingat : 1. Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
2. Peraturan Pemerintah Nomor 60 Tahun 1999 tentang Pendidikan Tinggi;
3. Peraturan Presiden RI Nomor 51 Tahun 2013 tentang Perubahan Sekolah Tinggi Agama Islam Negeri Palu (Lembaran Negara Republik Indonesia 3013 Nomor 121);
4. Peraturan Menteri Agama RI Nomor: 92 Tahun 1999 tentang Organisasi dan Tata Kerja Institut Agama Islam Negeri Palu;
5. Keputusan Direktur Jenderal Pendidikan Islam, Kementerian Agama RI Nomor: Dj.I/674/2010 tentang Izin Penyelenggaran Program Studi Strata Dua (S2) Pendidikan Agama Islam pada Sekolah Tinggi Agama Islam Negeri (STAIN) Datokarama Palu tahun 2010;
6. Keputusan Badan Akreditasi Nasional Perguruan Tinggi Nomor 193/SK/BAI'I-PT/Ak-XI/M/IX/2013 tentang Nilai Peringkat Akreditasi Program Studi pada Program Magister;
7. Keputusan Direktur Jenderal Pendidikan Islam, Kementerian Agama RI Nomor: 3251 Tahun 2015 tentang Izin Penyelenggaraan Program Studi Hukum Keluarga (Ahwal Syakhsiyah) pada Program Magister Institut Agama Islam Negeri Palu Tahun 2015;
8. Keputusan Menteri Agama Republik Indonesia, Nomor 52/In.13/KP.07.6/01/2018 Tentang Pengangkatan Pejabat Pelaksana Akademik Institut Agama Islam Negeri Palu Masa Jabatan 2017/2021;
9. Keputusan Rektor Institut Agama Islam Negeri Palu No. 335/In.KP.07.6/05/2018 tentang Pengangkatan Direktur Pascasarjana IAIN Palu;

Menetapkan : MEMUTUSKAN
KEPUTUSAN DIREKTUR PASCASARJANA IAIN PALU TENTANG TIM PENGUJI SEMINAR HASIL TESIS MAHASISWA PASCASARJANA IAIN PALU TAHUN 2020

Pertama : Menentapkan Tim Penguji Ujian Seminar HASIL Tesis Mahasiswa Pascasarjana Institut Agama Islam Negeri (IAIN) Palu;
Kedua : Tim Penguji merencanakan, melaksanakan, mengawasi, dan melaporkan hasil kegiatannya masing-masing kepada Direktur Pascasarjana IAIN Palu;
Ketiga : Segala biaya yang dikeluarkan sebagai akibat dikeluarkannya Keputusan ini dibebankan kepada DIPA IAIN Palu Tahun 2020;
Keempat : Keputusan ini berlaku sejak tanggal ditetapkan dan berakhir setelah seluruh rangkaian kegiatan ujian tesis mahasiswa yang bersangkutan selesai;
Kelima : Apabila di kemudian hari ternyata terdapat kekeliruan dalam keputusan ini maka akan diubah dan diperbaiki sebagaimana mestinya;



Tembusan:
Rektor IAIN Palu

LAMPIRAN
KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU

TENTANG
TIM PENGUJI SEMINAR HASIL TESIS MAHASISWA PASCASARJANA (S2) IAIN PALU TAHUN 2020

NOMOR : 233 TAHUN 2020
TANGGAL : 06 NOPEMBER 2020

No.	Peserta NIM	Nama	Judul	Tim Penguji	Hari / Tgl	Prodi	Ruang
			Ketua	Prof. Dr. Rusli, S.Ag., M.Soc.Sc.			
			Pembimbing I	Prof. H. Nurdin, S.Pd., S.Sos., M.Com., Ph.D	Selasa, 10 Nopember 2020		R. Kuliah Pasca Sarjana/ Online
			Pembimbing II	Dr. Hj. Nur Asmawati, S.Ag., M.Hum.		PAI	
			Pengaji Utama I	Prof. Dr. Rusli, S.Ag., M.Soc.Sc.	09.00 – 11.00		
1	02.11.09.18.008	FARHIAH UTAMI	Pengaji Utama II	Dr. Juliastuti, S.S., M.Hum			



Prof. Dr. Rusli, S.Ag., M.Soc.Sc.
NIP. 197203231999031007



KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI PALU
الجامعة الإسلامية الحكومية فالو
STATE INSTITUTE FOR ISLAMIC STUDIES PALU
PASCASARJANA
Jl. Diponegoro No. 23 Palu Telp. 0451-460798 Fax. 0451-460165
Website : www.iainpalu.ac.id, email : humas@iainpalu.ac.id

Nomor : 011 /In.13/D/PP.00.9/01/2021

Lamp. : 1 eks (SK & Tesis)

Perihal : Undangan Tim Penguji Seminar TUTUP Tesis

Kepada Yth.

Dewan Penguji Seminar TUTUP Tesis

Di

Tempat

Assalamu 'Alaikum Warahmatullahi Wabarakatuh.

Semoga keselamatan dan kesejahteraan senantiasa dilimpahkan Allah SWT kepada kita dalam menjalankan aktifitas sehari-hari, amin.

Dalam rangka **Ujian Seminar TUTUP Tesis** Mahasiswa Program Magister Pendidikan Agama Islam (PAI) Pascasarjana IAIN Palu, diundang dengan hormat Bapak/Ibu Dosen Pembimbing/Penguji untuk hadir sekaligus menjadi penguji pada ujian yang dimaksud sebagaimana jadwal terlampir.

Demikian undangan ini disampaikan, atas kesediaannya diucapkan terima kasih.

Wassalamu 'Alaikum Warahmatullahi Wabarakatuh.

Palu, 15 JANUARI 2021

Direktur

Prof. Dr. Rusli, S.Ag., M.Soc.Sc.
NIP. 197205231999031007

Catatan: (Bagi Kandidat Magister)

- * Hadir 30 Menit Sebelum Ujian dilaksanakan.
- * Berpakaian Rapi, Kemeja Berdasi (memakai jas) bagi laki-laki & perempuan menyesuaikan.
- * Mengundang Minimal 5 orang mahasiswa Pascasarjana IAIN Palu untuk hadir dalam ujian yang dimaksud
- * Peserta Ujian Menyiapkan Konsumsi bagi Tim Penguji dan Mahasiswa yang Hadir dalam Proses Ujian

Tembusan:

1. Rektor IAIN Palu
2. Masing-Masing Kandidat Magister



PASCASARJANA IAIN PALU

KEPUTUSAN DIREKTUR PASCASARJANA
INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU
NOMOR : 010 TAHUN 2021

TENTANG
PENGUJI TESIS (TUTUP)
MAHASISWA PASCASARJANA (S2) IAIN PALU
TAHUN 2021

DIREKTUR PASCASARJANA IAIN PALU

Menimbang : a. Bahwa dalam rangka Ujian Tesis (Proposal/Tutup) mahasiswa Pascasarjana IAIN Palu Tahun 2021 dipandang perlu untuk menunjuk Tim Pengaji
b. Bahwa Tim Pengaji yang namanya tercantum dalam lampiran keputusan ini dipandang memenuhi syarat dan mampu melaksanakan tugas-tugas dimaksud;
c. Bahwa berdasarkan pertimbangan sebagaimana huruf a dan b diatas perlu menetapkan keputusan Direktur Pascasarjana IAIN Palu

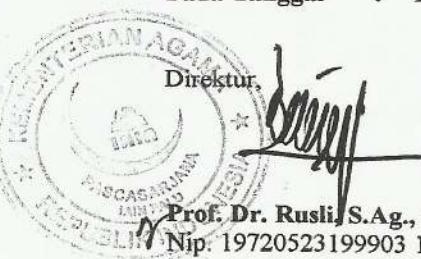
Mengingat : 1. Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
2. Peraturan Pemerintah Nomor 60 Tahun 1999 tentang Pendidikan Tinggi;
3. Peraturan Presiden RI Nomor 51 Tahun 2013 tentang Perubahan Sekolah Tinggi Agama Islam Negeri Palu (Lembaran Negara Republik Indonesia 3013 Nomor 121);
4. Peraturan Menteri Agama RI Nomor: 92 Tahun 1999 tentang Organisasi dan Tata Kerja Institut Agama Islam Negeri Palu;
5. Keputusan Direktur Jenderal Pendidikan Islam, Kementerian Agama RI Nomor: Dj.I/674/2010 tentang Izin Penyelenggaraan Program Studi Strata Dua (S2) Pendidikan Agama Islam pada Sekolah Tinggi Agama Islam Negeri (STAIN) Datokarama Palu tahun 2010;
6. Keputusan Badan Akreditasi Nasional Perguruan Tinggi Nomor 193/SK/BAI'I-PT/Ak-XI/M/IX/2013 tentang Nilai Peringkat Akreditasi Program Studi pada Program Magiste;
7. Keputusan Direktur Jenderal Pendidikan Islam, Kementerian Agama RI Nomor: 3251 Tahun 2015 tentang Izin Penyelenggaraan Program Studi Hukum Keluarga (Ahwal Syakhsiyah) pada Program Magister Institut Agama Islam Negeri Palu Tahun 2015;
8. Keputusan Menteri Agama Republik Indonesia, Nomor 52/In.13/KP.07.6/01/2018 Tentang Pengangkatan Pejabat Pelaksana Akademik Institut Agama Islam Negeri Palu Masa Jabatan 2017/2021;
9. Keputusan Rektor Institut Agama Islam Negeri Palu No. 335/In.KP.07.6/05/2018 tentang Pengangkatan Direktur Pascasarjana IAIN Palu;

MEMUTUSKAN

**KEPUTUSAN DIREKTUR PASCASARJANA IAIN PALU TENTANG TIM PENGUJI TESIS
(TUTUP) MAHASISWA PASCASARJANA IAIN PALU TAHUN 2021**

Pertama : Menentapkan Tim Pengaji Ujian Tesis Mahasiswa Pascasarjana Institut Agama Islam Negeri (IAIN) Palu;
Kedua : Tim Pengaji merencanakan, melaksanakan, mengawasi, dan melaporkan hasil kegiatannya masing-masing kepada Direktur Pascasarjana IAIN Palu;
Ketiga : Segala biaya yang dikeluarkan sebagai akibat dikeluarkannya Keputusan ini dibebankan kepada DIPA IAIN Palu Tahun 2021;
Keempat : Keputusan ini berlaku sejak tanggal ditetapkan dan berakhir setelah seluruh rangkaian kegiatan ujian tesis mahasiswa yang bersangkutan selesai;
Kelima : Apabila di kemudian hari ternyata terdapat kekeliruan dalam keputusan ini maka akan diubah dan diperbaiki sebagaimana mestinya.

Ditetapkan di : Palu
Pada Tanggal : 15 JANUARI 2021



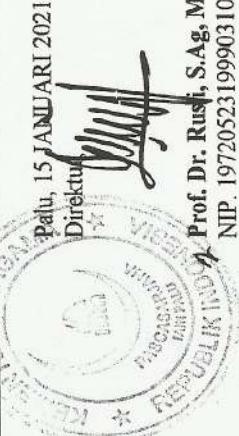
Prof. Dr. Rusli, S.Ag., M.Soc.Sc.
Nip. 19720523199903 1 007

LAMPIRAN
KEPUTUSAN DIREKTUR PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU

TENTANG
TIM PENGUJI SEMINAR TUTUP TESIS MAHASISWA PASCASARJANA (S2) IAIN PALU TAHUN 2021

NOMOR : 010 TAHUN 2021
TANGGAL : 15 JANUARI 2021

No.	Peserta	Judul	Tim Penguji	Hari / Tgl	Prodi	Ruang
	No. NIM	Nama	Ketua	Prof. Dr. Rusli, S.Ag., M.Soc.Sc.		
①	02.11.09.18.008	FARFAH UTAMI	Pembimbing I Pembimbing II Penguji Utama I Penguji Utama II	Prof. H. Nurdin, S.Pd., S.Sos., M.Com., Ph.D Dr. Hj. Nur Asmawati, S.Ag., M.Hum. Prof. Dr. Rusli, S.Ag., M.Soc.Sc. Dr. Juliastuti, S.S., M.Hum	RABU, 20 JANUARI 2021 09.00 – 11.00	PAI
2	02.11.09.18.009	FITRIAH M.	Pembimbing I Pembimbing II Penguji Utama I Penguji Utama II	Dr. H. Sidik, M.Ag. Dr. Rustina, S.Ag., M.Ag. Dr. H. Saude, M.Pd. Dr. Gusnari, M.Pd	RABU, 20 JANUARI 2021 14.00 – 16.00	PAI



Patu, 15 JANUARI 2021

Direktur

Prof. Dr. Rusli, S.Ag., M.Soc. Sc.
NIP. 197205231999031007



PASCASARJANA IAIN PALU

BUKU KONSULTASI BIMBINGAN TESIS

PROGRAM MAGISTER (S2)

Pascasarjana Institut Agama Islam Negeri (IAIN) Palu
Jl. Diponegoro No. 23 Palu, Sulawesi Tengah
Telp: (0451) 460798, 462380 | Fax: (0451) 460165
Website: www.pps.iainpalu.ac.id, email: pasca@iainpalu.ac.id

**BUKU KONSULTASI
BIMBINGAN TESIS**



NAMA MAHASISWA : TAPRHAH UTAMI
NIM : 02.11.02.18.008
PROGRAM STUDI : PENDIDIKAN AGAMA ISLAM

PROGRAM MAGISTER (S2)

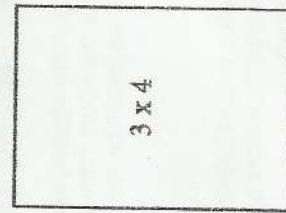
PASCASARJANA INSTITUT AGAMA ISLAM NEGERI (IAIN) PALU
Jl Diponegoro No. 23 Kota Palu Sulawesi Tengah Telp. 0451-460165
Website : www.pps.iainpalu.ac.id, email: pasc@jainpalu.ac.id

**BUKU KONSULTASI BIMBINGAN TESIS
PASCASARJANA PROGRAM MAGISTER IAIN PALU**

Nama : TARHANI UTAMI
NIM : 02.11.09.00.008
Program Studi : PENDIDIKAN AGAMA ISLAM
Alamat dan No.HP : Jl.TENTENA 5 NO.6 DTH SIALANG
Judul Tesis : "THE EFFECT OF HIGHER-ORDER THINKING SKILLS
(HOTS)-BASED ASSESSMENT ON THE DEVELOPMENT OF
STUDENTS' CRITICAL AND CREATIVE THINKING SKILLS
IN SMA AL-AZHAR MANDIRI PALU"

Pembimbing I : H. MURDIH, S.Pd., MM, Com., Ph.D.
Pembimbing II : DR. HJ. NUR ASMAWATI, SAg., MThum.
Batas Akhir Masa Studi :

Palu, 20....
Ketua Prodi S2 PAI / AS
.....
NIP.



ETIKA MAHASISWA PROGRAM MAGISTER (S2)
IAIN DATOKARAMA PALU

KEGIATAN BIMBINGAN TESIS
PASCASARJANA PROGRAM MAGISTER IAIN PALU

1. Beriman dan bertaqwa pada Tuhan YM, dan menjunjung tinggi nilai-nilai Pancasila dan UUD 1945.
2. Menempatkan kepelajaran Negara dan bangsa di atas kepentingan diri sendiri atau kelompok.
3. Bertingkah laku ramah, sopan santun dan menjaga harkat martabat diri sendiri dan orang lain.
4. Berpenampilan sopan dan rapi.
5. Memiliki integritas dan rasa tanggung jawab yang tinggi sesuai tujuan program pascasarjana IAIN Palu menjadi Akademisi, Praktisi, dan Peneliti dibidang Pendidikan Agama Islam dan Akyatul Syahsiyah.
6. Menghargai dan menghormati orang lain tanpa diskriminatif.
7. Ketika mengerjakan Tesis :
 - a. Jujur dan mematuhi etika ilmiah dalam penulisan dan penyajian Tesis
 - b. Menjunjung tinggi kejujuran dan menghindari hal-hal yang bersifat gratifikasi, suap kepada Pembimbing I dan II, dosen pengujii ataupun pegawai
 - c. Mengikuti proses bimbingan dengan tepat waktu, sungguh-sungguh demi meningkatkan Ilmu pengetahuan dalam proses bimbingan Thesis.
 - d. Tidak menjanjikan atau memberikan sejumlah uang, fasilitas lainnya, benda, makanan, minuman, merujukkan imbal jasa atau bentuk-bentuk lain kepada Pembimbing I dan II, dosen pengujii maupun pegawai dengan tujuan untuk memperoleh garansi proses bimbingan dan ujian akhir/promosi.
 - e. Memastikan Thesis yang akan diujikan pada seminar hasil dan tutup telah melalui software pengecekan plagiasi/checker plagiatisme (Turnitin).
8. Ketika berkomunikasi dengan dosen melalui telepon genggam:
 - a. Perhatikan waktu berbicara (SMS, WhatsApp, FB, Instagram, Line, dll). Pilihlah waktu yang tepat pada hari kerja (paling lambat pukul 20.30 WIB), atau dengan mengkomunikasikan waktu yang tepat dengan Dosen, Pengujii, Pembimbing I dan Pembimbing II selama masa bimbingan.
 - b. Gunakan bahasa yang santun, formal, mudah dimengerti dan menggunakan tanda baca yang tepat, guna menghindari kesalahan pahaman. Hindari menyemat kata seperti drm, yg, otw, dll.
 - c. Availi dengan mengucapkan salam, seperti assalamualaikum, selamat pagi / siang atau sore
 - d. Sebutkan identitas diri anda diawal pembicaraan/pesan singkat, karena dosen tidak menyimpan semua nomor telefon mahasiswa. Sebutkan nama, mahasiswa program Magister (S2) Pascasarjana IAIN Palu, angkatan berapa, dan group anda.
 - e. Jelaskan keperluan anda dengan singkat.
 - f. Ucapkan terimakasih pada akhir pesan singkat.
 - g. Bila anda membuat janji dengan dosen, anda wajib menelepon janji tersebut.
 - h. Jika anda ingin membagikan nomor telefon dosen pada seseorang, mintakan izin pada dosen tersebut untuk menghargai privasinya.

No.	Kegiatan	Tanggal Masuk	Tanggal Selesai	Ket.
1.	Mengajukan Judul	01/09/2019	02/09/2019	
2.	Menetapkan Pembimbing	01/09/2019	02/09/2019	
3.	Mengajukan Proposal	15/01/2020	20/01/2020	
4.	Merevisi Proposal	20/01/2020	01/02/2020	
5.	Memeriksakan tesis ke Pembimbing dan prodi	20/02/2020	27/02/2020	
6.	Merevisi Tesis	27/02/2020	20/03/2020	
7.	Memeriksakan dan merevisi Abstrak	01/04/2020	05/04/2020	
8.	Melakukan Cheker Plagiarism	01/04/2020	03/04/2020	
9.	Meminta Pengesahan	04/04/2020	05/04/2020	
10.	Mendaftar Ujian Tesis *)	05/04/2020	05/04/2020	
11.	Menempuh Ujian Tesis	20/04/2020	20/04/2020	
12.	Merevisi Tesis	15/05/2021	09/05/2021	

*) Syarat: Sudah lulus ujian Kualifikasi
Syarat ujian kualifikasi:

1. Semua teori sudah ditempuh;
2. Tidak ada nilai kurang dari C;
3. Nilai C (C+) paling banyak 1 (satu);
4. IPK ≥ 2,75

**KEGIATAN BIMBINGAN TESIS
PASCASARJANA PROGRAM MAGISTER (S2) IAIN PALU**

**KEGIATAN BIMBINGAN TESIS
PASCASARJANA PROGRAM MAGISTER (S2) IAIN PALU**

Nama	: FARAH MIAMI.....
NIM	: 0211.09.18.008.....
Judul Tesis	: "THE EFFECT OF HIGHER-ORDER THINKING SKILLS-BASED ASSESSMENT ON THE DEVELOPMENT OF STUDENTS' CRITICAL & CREATIVE THINKING SKILLS IN SMA AL-MANDIRI PALU"
URAIAN PERBAIKAN	

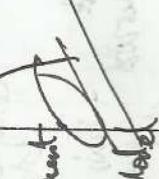
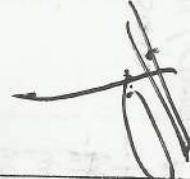
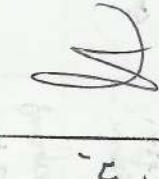
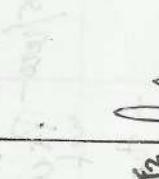
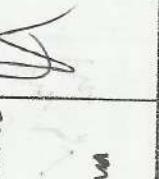
Notice well the types of research validity - find the Grand theory	<i>f</i>
But let see the legal condition on pre dm.	<i>f</i>
Methodology, Research Instrument - Previous studies	<i>f</i>
The importance of the research - The implication of the research	<i>f</i>

- Kelengkapan administrasi :
1. Persetujuan usulan judul
 2. Daftar Cek bersih judul
 3. Surat kesediaaan sebagai pembimbing
 4. Fotocopy SPP
 5. Lembar Draft SK Pembimbing Thesis yang telah ditanda tangan pembimbing I, II.

TANGGAL	MATERI BIMBINGAN	PARAF DOSEN PEMBIMBING
Rabu 15 April 2010	<ul style="list-style-type: none"> - Bagaimana penulisan teks membangun, keberimpulan teks, arah teks dan (Ujung Qualitative) - Consistency of writing technique - Teknis Pengumpulan data (Angket, Analisis Doc, Wawancara - Jurnal) 	<i>f</i>
Jumat 07 Mei 2010	<ul style="list-style-type: none"> - Bab 1 Paragraf 1 : Uncomplete sentence, Expert sentence statement needed. also positive sentence - Bab 2 - Bab 3. If H1s → H2t brach texts also expert statement needed - Bab 2. H.1.2 P.2 → Connect the paragraph 1 to 2 - Suggestion of using experiment research instead of qualitative research - Previous studies first in sb A not Conceptual Description - Hypotheses : use ... Ha or H0 =x 	<i>f</i>
Senin 11/05/2010	Kuis 14/05/2010	<i>f</i>

KEGIATAN BIMBINGAN TESIS
PASCASARJANA PROGRAM MAGISTER IAIN PALU

KEGIATAN BIMBINGAN TESIS
PASCASARJANA PROGRAM MAGISTER IAIN PALU

TANGGAL	MATERI BIMBINGAN	PARAF DOSEN PEMBIMBING
Selasa 06/10/2020	<ul style="list-style-type: none"> - Consistency of Point of view in writing - The usage of Article - Parallelism 	
Kamis 15/10/2020	<ul style="list-style-type: none"> - The significance of my research to PAS - Lead to more theory-based assessment in PAS subject - The possibility of using Roth Model → Theory Model - Removal & Neutral 	 
Rabu 20/10/2020	<ul style="list-style-type: none"> - Definition of Coefficient of determination - Reveal all the details among researches about the unwillingness of participants 	
Jumat 23/10/2020	<ul style="list-style-type: none"> - Hal. 84 Interview - Hal. 113 (Suggestion) - Hal. 113 (Suggestion) - Suggestion No. 3 is not related to main findings. IAN to suggest Al-Azhar 	 
Selasa 27/10/2020		

TANGGAL	MATERI BIMBINGAN	PARAF DOSEN PEMBIMBING

**KEGIATAN BIMBINGAN TESIS
PASCABARJANA PROGRAM MAGISTER IAIN PALU**

CEK LIST PEMERIKSAAN

TANGGAL	MATERI BIMBINGAN	PARAF DOSEN PEMBIMBING

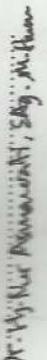
- Kepatuhan atas tata cara penulisan thesis sesuai pedoman penulisan thesis
- Menggunakan minimal 35 referensi yang terkait judul thesis dan 50 % jurnal Internasional dan nasional bereputasi
- Mengikuti Bimbingan dengan baik

Pembimbing I



.....
Prof. Dr. H. M. ...

Pembimbing II



.....
Dr. W. N. ...

Kelengkapan Administrasi :

1. Kartu kontrol ujian (telah mengikuti minimal 10 x seminar hasil tesis)
2. Foto copy SPP
3. SK Penentuan Pembimbing I, II dan Pengaji
4. Persetujuan Pembimbing I, II
5. Blanko Format Sidang ujian yang telah ditanda tangani pembimbing I,II
6. Menyediakan 5 fotocopy proposal yang dijilid dengan baik untuk para pembimbing dan minimal 15 fotocopy proposal penelitian untuk peserta.
7. Undangan ujian dan fotocopy proposal sudah harus disampaikan pada dosen pembimbing dan pengaji minimal 7 hari sebelum ujian.

Pada hari Ujian :

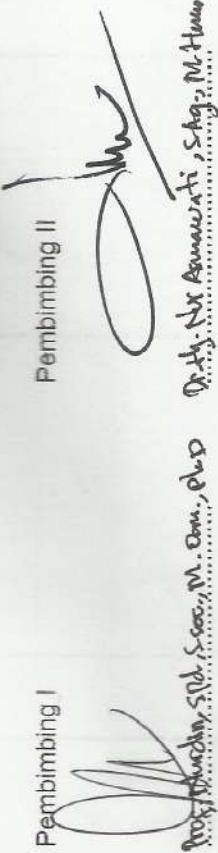
1. Hadir minimal 15 menit sebelum waktu yang telah ditetapkan
2. Menentukan 3 mahasiswa sebagai pembeding ujian.
3. Menghadirkan minimal 10 orang mahasiswa Prodi sebagai peserta
4. Mempersiapkan presentasi dengan menggunakan power point / alat peraga lain yang dipandang perlu.

CEK LIST PEMERIKSAAN
UJIAN HASIL PENELITIAN TESIS

Kepatuhan atas tata cara penulisan thesis sesuai pedoman penulisan tesis

- Menggunakan minimal 100 referensi yang terkait judul thesis, 50% jurnal Internasional dan nasional ber reputasi
- Telah melaksanakan penelitian dan mengikuti proses bimbingan dengan baik
- Telah menyelesaikan Abstrak (dalam bahasa Indonesia dan Inggris)
- Telah menyelesaikan naskah publikasi (sinopsis) dan submit ke jurnal ber reputasi.
- Telah melaksanakan Checker Plagiarism

Pembimbing I



Prof. Dr. Nurchita, M. Com., Ph.D
Orty: Dr. Amawati, S.Pd., M.Hum

Kelengkapan Administrasi:

1. Foto copy SPP
2. Persetujuan Pembimbing I, II
3. Blanko Format Sidang Seminar Hasil yang telah ditanda tangani pembimbing I, II
4. Menyediakan 5 fotocopy naskah ujian hasil thesis yang dijilid dengan baik untuk ketua sidang, pengaji, pembimbing.
5. Undangan Ujian Hasil Thesis dan fotocopy sudah disampaikan pada ketua sidang, pembimbing dan pengaji minimal 7 hari sebelum ujian

Pada Hari Seminar Hasil Thesis

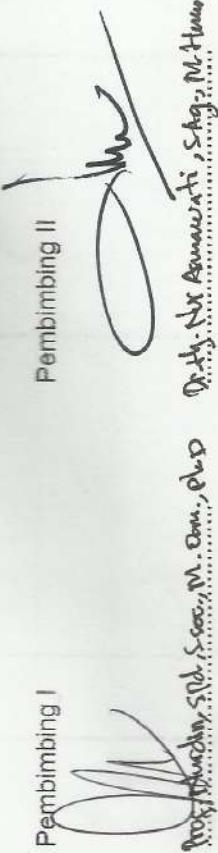
1. Hadir minimal 15 menit sebelum waktu yang telah ditetapkan
2. Menghadirkan minimal 10 orang mahasiswa Prodi sebagai peserta
3. Mempersiapkan presentasi dengan menggunakan power point / alat peraga lain yang dipandang perlu.

OBATAN MABAUKAN/PERBAIKAN/UJUAN
SEMINAR HASIL PENELITIAN

Tgl Seminar: 10 November 2020

Nama Pemberi masukan/ Perbaikan/ujuan	MATERI	Perbaikan Peneliti
Dr. Nurlia, S.Si., M.Pd.	Chapter I p.10	The importance of my research is related to my department the importance of having the ability to think creatively > critically
Pro. Dr. Rusli, S.Pd., M.Sc.	Chapter II → The importance of having the ability to think creatively > critically Chapter IV → Result	Adding more appendix regarding the example of Hot's-based test in Islands Studies

Pembimbing II



Dr. Nurchita,

Chapter IV → Distribution
- Documentation of
Hot's-based Assessment
of the frequency
Distribution

Distinguishing
the genre of the
responses based
on their gender, class

**CEK LIST PEMERIKSAAN
UJIAN MEJAVITUP**

- Kepatuhan atas tata cara penulisan tesis sesuai pedoman penulisan tesis
- Menggunakan minimal 100 referensi yang terkait judul tesis, 50% jurnal Internasional dan nasional bereputasi
- Telah selesai melakukan seluruh perbaikan atas tesis, dan naskah publikasi!
- Telah menyelesaikan Abstrak (dalam bahasa Indonesia dan Inggris)
- Telah menyelesaikan naskah publikasi (synopsis) dan accepted ke jurnal bereputasi
- Telah menyelesaikan Checker Plagiarism (Turnitin)

No	Perbaikan	Perbaikan	Paraf Dosen Ketua Sidang
1	The implication of the research		
	1. Influences of each variables 2. Characteristics of central & outside + learning skill.	Pengaji I <i>[Signature]</i>	
	Chapter I → The Significance of the research Chapter II → Best Empathetic Chapter III → Observation	Pengaji II <i>[Signature]</i>	
	Chapter IV → Discussion Chapter V → Suggestion Chapter VI → Conclusion	Pembimbing I <i>[Signature]</i>	
	Abstract → Add the background of the research Chap. I → Background Chap. III → Methodology especially the instruments	Pembimbing II <i>[Signature]</i>	
		Palu, Ketua Prodi	
		20.... <i>[Signature]</i>	
		NIP.	

Kelengkapan Administrasi:

1. Foto copy SPP.
2. Persetujuan Pembimbing I, II.
3. Blanko Format Sidang Meja Hijau yang telah ditanda tangani pembimbing I, II.
4. Fotocopy Naskah Publikasi dan Tesis rangkap 6.
5. Fotocopy hasil ujian toefl minimal score : 450.
6. Fotocopy Surat Penerimaan penerbitan naskah jurnal ilmiah.
7. Telah lulus seluruh mata kuliahan dengan minimal IPK 2.75.
8. Undangan Ujian Tesis dan fotocopy Tesis sudah disampaikan pada pembimbing dan pengaji minimal 7 hari sebelum ujian, dan naskah publikasi telah accepted pada jurnal bereputasi.

Documentation



Picture 1. The Entrance of SMA Al-Azhar Mandiri Palu



Picture 2. School Organizational Structure



Picture 3. School Profile



Picture 4. Vision and Mission



Picture 5 & 6. The Achievements of SMA Al-Azhar Mandiri Palu





Picture 7. Interview with the Deputy Principal of Curriculum



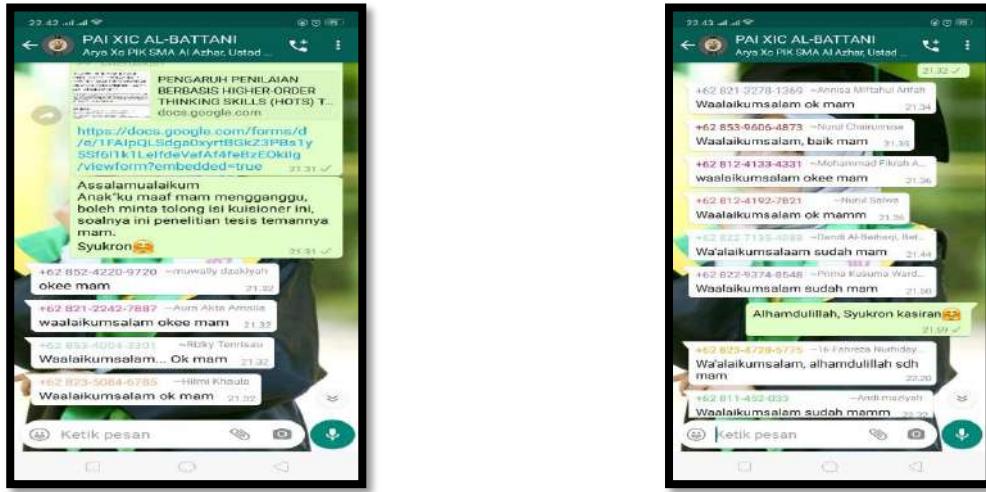
Picture 8. Interview with Islamic Education teacher



Picture 9 & 10. Interview with the students



Picture 11 & 12. Students filling the questionnaire



Picture 13 & 14. Distributing questionnaire via social media

Pictures of Online Questionnaire

KUESIONER PENGARUH PENILAIAN BERBASIS HIGHER-ORDER THINKING SKILLS (HOTS)

Kuesioner ini dilakukan untuk memperoleh data penilaian berbasis HOTS (higher-order thinking skills) terhadap pengembangan keterampilan berpikir kritis dan kreatif peserta didik.

Pertanyaan Pertama:

1. Saya akan mengikuti survei ini dengan sebaik-baiknya.
2. Saya akan mengikuti survei ini dengan sebaik-baiknya.
3. Saya akan mengikuti survei ini dengan sebaik-baiknya.
4. Saya akan mengikuti survei ini dengan sebaik-baiknya.
5. Saya akan mengikuti survei ini dengan sebaik-baiknya.

Section 2 of 2

Identitas Responden

Name: _____

Email: _____

Gender:

Jenis Kelamin:

Laki-laki

Perempuan

KUESIONER PENGARUH PENILAIAN BERBASIS HIGHER-ORDER THINKING (HOTS)

A. Penilaian berbasis Higher-Order Thinking Skills (HOTS)

1. Dapat menyerah dan tidak mau mencari solusi

Sering Terjadi
 Sedang
 Tidak Sedang
 Sering Tidak Terjadi

2. Dapat menyerah dalam menyelesaikan tugas akhir dengan teliti dan akurasi

Sering Terjadi
 Sedang
 Tidak Sedang
 Sering Tidak Terjadi

B. Keterampilan Berpikir Kritis

1. Dapat tidak mampu bertanya tentang hasil kerja teman sebangku

Sering Terjadi
 Sedang
 Tidak Sedang
 Sering Tidak Terjadi

2. Dapat tidak mencari tahu tentang sumber informasi dalam diperlukan atau tidak

Sering Terjadi
 Sedang
 Tidak Sedang
 Sering Tidak Terjadi

C. Keterampilan Berpikir Kreatif

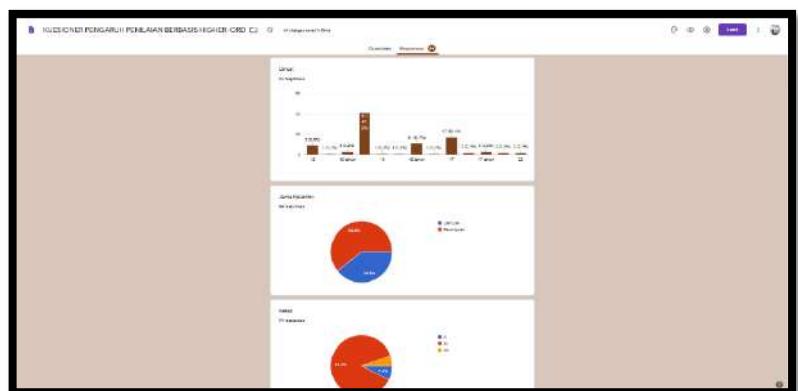
1. Dapat menyerah dan tidak mau mencari solusi

Sering Terjadi
 Sedang
 Tidak Sedang
 Sering Tidak Terjadi

2. Sering terima memberi saran dan saran dalam merencanakan tugas akhir

Sering Terjadi
 Sedang
 Tidak Sedang
 Sering Tidak Terjadi

3. Dapat menyerah dan tidak mau mencari solusi



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