THE STUDENT'S PROBLEM IN LEARNING VOCABULARY AT GRADE VII N 5 PANYABUNGAN

## A THESIS

Submitted to State Institute for Islamic Studies Padangsidimpuan as. a Partial Fulfillment of the Requirement for Degree of Islamic Education Scholar (S.Pd.I) in English

Written by :

SAHRIANI NASUTION
Reg. No. 093400060

ENGLISH EDUCATION DEPARTMENT

## FACULITY OF TARBIYAH AND PEDAGOGY STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSISIMPUAN



# THE STUDENT'S PROBLEMS IN LEARNING VOCABULARY AT GRADE VII SMP N 5 PANYABUNGAN 

## A THESIS

Submitted to the State Institute for Islamic Studies Padangsidimpuan as A Partial Fulfilment of The Requirement for the Degree of Islamic Educational Scholar (S.Pd.I) in English

Written By:<br>SAHRIANI NASUTION<br>Reg No. 093400060

## ENGLISH EDUCATION DEPARTMENT

## FACULTY OF TARBIYAH AND PEDAGOGY THE STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN <br> 2014



## THE STUDENT'S PROBLEMS <br> IN LEARNING VOCABULARY AT GRADE VII SMP N 5 PANYABUNGAN

## A THESIS

Submitted to the State Institute for Islamic Studies Padangsidimpuan as A Partial Fulfilment of The Requirement for the Degree of Islamic Educational Scholar (S.Pd.I) in English


ENGLISH EDUCATION DEPARTMENT

## FACULTY OF TARBIYAH AND PEDAGOGY THE STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN <br> 2014

| Things : Thesis | Padangsidimpuan,03 june 2014 |
| :---: | :--- |
|  | a.n. Sahriani Nasution | To:

Appendix : 6 (six) Exemplar
The Dean of Tarbiyah and pedagogy faculty di-

Padangsidimpuan

Assalamu'alaikum Wr. Wb.
After Reading, studying, and giving advices for necessary revises on thesis belongs to Sahriani Nasution. entitle "THE STUDENTS' PROBLEMS IN LEARNING VOCABULARY AT GRADE VII SMP N 5 PANYABUNGAN". We assume that the thesis has been acceptable the assignment and fulfill the requirement for the degree of Sarjana Pendidikan Islam (S.Pd.I), Department of Education in IAIN Padangsidimpuan.

Therefore, we hope that she could be to defend her thesis in Munaqosyah. That's all and thank you for your attention. Wassalami' alaikum Wr.Wb.


Drs. H. Syahid Muammar Pulungan, SH NIP. 195312071980031003

Advisor II


FitripKayani Siregar, M. Hum NIP. 198207312009122004

## DECLARATION LETTER OF WRITING OWN THESIS

| Name | $:$ SAHRIANI NASUTION |  |
| :--- | :--- | :--- |
| Registration Number | $: 09.3400060$ |  |
| Faculty | $:$ Tarbiyah dan Ilmu Keguruan |  |
| Study Program | : Tadris Bahasa Inggris (TBI - 2) |  |
| The title of thesis | $:$ THE STUDENTS' PROBLEMS IN LEARNING |  |
|  | VOCABULARY AT GRADE VII SMP N | 5 |
|  | PANYABUNGAN |  |

Declaring to arrange own thesis without asking for illegal helping from the other side except the guiding of advisors team and without doing plagiarism along with the students' ethic code in article 14 subsections 2 .

I made this declaration truthfully, if there is a deviation and incorrect of my declaration later on, I resign to get the punishment as what has involved in student' ethic code in article 19 subsections 4 that is about dispassion of academic degree disrespectfully and the other punishment accord with the norms and accepting legal requirement.

Padangsidimpuan, 31 May 2014 Declaration Maker,


## EXAMINERS SCHOLAR MUNAQOSYAH EXAMINATION

| Name | : SAHRIANI NASUTION |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reg. No. | $: 09340$ 0060 |  |  |  |  |  |
| Thesis | $:$ THE STUDENT'S | PROBLEMS | IN | LEARNING |  |  |
|  |  | VOCABULARY | AT | GRADE | VII | SMP |
|  | PANYABUNGAN | 5 |  |  |  |  |



Anhar.M.A
NIP. 197112141998031002


Anhar.M.A
NIP. 197112141998031002


Yusni Sinaga,S.Pd., M.Hum
NIP. 197007152005012010
Proposed:

| Place | $:$ Padangsidimpuan |
| :--- | :--- |
| Date | $:$ June, $11^{\text {st }} 2014$ |
| Time | $: 13.30$ until finish |
| Result/ Mark | $: 72,63 /$ B |
| IPK | $: 3,66$ |
| Predicate | $:$ Cumlaude |

Secretary,


NIP. 197403192000032001
Members,


## KEMENTERIAN AGAMA

## STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN

## TARBIYAH AND PEDAGOGY FACULTY

## Alamat: J. H.T. Rijal Nurdin KM. 4,5 Sihitang padangsidimpuan Tlpn.(0634)22080

 Fax.(0634)24022 Padangsidimpuan 22733
## LEGALIZATION

The Thesis with Title : THE STUDENT'S PROBLEMS IN LEARNING VOCABULARY AT GRADE VII SMP N 5 PANYABUNGAN

| Written by | $:$ SAHRIANI NASUTION |
| :--- | :--- |
| Reg. No | $: 093400060$ |

Had been accepted as a partial fulfillment of the requirement for the degree of Islamic Educational Scholar (S.Pd.I)


## ACKNOWLEDGEMENT



Firstly, researcher would like thank to Allah SWT who has given researcher the cans to finish this thesis. Secondly, blessing and peace be upon to prophet Muhammad SAW, who has brought human being from the dark era to the bright era.

In finishing this thesis, the researcher faced a lot of difficulties and troubles. Exactly without any help from the following people, it was imposible for researcher to complete and finish this thesis. Therefore researcher would like to thank:

1. Special thanks are due to Drs. H. Syahid Muammar Pulungan, SH., and Fitri Rayani Siregar, M.Hum., as researcher's advisors who had given researcher suggestion, ideas, criticism and guidance in writing this thesis.
2. Dr. H. Ibrahim Siregar, M.CL., as The Rector of State The Institute for Islamic Studies (IAIN) Padangsidimpuan.
3. Hj. Zulhimma, S.Ag., as the Dean of Tarbiyah and Pedagogy Faculty in IAIN Padangsidimpuan.
4. Rayendriani Fahmei Lubis, M.Ag., as the chief of English Education Dapartment IAIN Padangsidimpuan.
5. Yusril Fahmi, S.Ag., M.Hum., as the Chief of Library and his staffs have borrowed the books to me in this research.
6. All lectures who have given me their valuable through in teaching English for researcher during the process of academic years in TBI IAIN Padangsidimpuan.
7. The exclusive thanks to my beloved parent, Amirhak Nasution and Rohani who have given researcher support in moral and material during and after finishing academic year in IAIN Padangsidimpuan.
8. My two beloved sisters, Sahria and Sahada S.Pd.I, my beloved brother Zulfikar nasution, my beloved nephew Nada Sahira Fitri Lubis and Amirul Ansori, my beloved uncles, Anwar Saleh and Soumaddin who have motivated and support me to finish my thesis.
9. All my friends, especially to Munadi, Abdul Halim, Anita Safitri Hasibuan, Miskiyah, and Maryam who have helped, supported and motivated me to finish this thesis.

Last but least, researcher just wants to say thank you very much for their helping, Allah bless them and IAIN Padangsidimpuan.

Padangsidimpuan, 31 May 2014
Researcher,



#### Abstract

Name : SRI NARDANI HSB Registration Number Faculty/Department : 09.3400097 The Tittle of Thesis : Tarbiyah and Teaching/TBI-3 : THE EFFECT OF WATCHING FILM TO STUDENTS' VOCABULARY MASTERY AT GRADE XI SMKN 1 PADANGSIDIMPUAN.


This research discussed about students' problem in mastering vocabulary at grade XI SMK Negeri 1 Padangsidimpuan. The problems of the research are the score is low, Seldom practice, Students' low achievement in learning English, and the teacher usually use conventional method that make students' low achievement in learning English. The aim of this research was to find out the effect of watching film strategy to students' vocabulary mastery at grade XI SMK Negeri 1 Padangsidimpuan.

The research has done by experimental research into the eleventh grade. The sample was divided into two classes. The first class (thirty seven students) as the experimental class, while the second class (thirty seven students) as the control class. The experimental class was taught by using watching film and the control class was taught without media (conventional teaching). The instrument for collecting the data was tweenty multiple choices. To obtain the reliability of the test, the researcher used the KR. 20 (Kurder Richardson) formula. The data was analyzed by using t-test formula.

Data analysis of the post-test showed that score of the students in the experimental class was significantly higher than score of the students in the control class at the level of significance $5 \%$ with degree of freedom $\left(n_{1}+n_{2}-2\right)=70$. Mean score was got in the experimental class is 86.44 , highest score is 100 and smallest score is 75 . While, mean score was got in the control class is 82.33 , highest score is 90 and smallest score is 70 . The $t$-count of observation is 1.69 while the $t$-table is 1.667. Therefore, the null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected and the alternative hypothesis $\left(\mathrm{H}_{1}\right)$ is accepted. It means that "there is a significant effect of watching film to students' vocabulary mastery."

## APPENDIX 1

# RENCANA PELAKSANAAN PEMBELAJARAN (RPP) <br> IN THE EXPERIMENTAL CLASS 

Sekolah
Mata Pelajaran
Kelas
Alokasi Waktu
Standar Kompetensi

Kompetensi Dasar

Indicator :

- Merespon makna kosakata kosakata yang terdapat dalam film secara lancar dan akurat
- Merespon berbagai informasi yang terdapat dalam film
- Mengedintifikasi berbagai informasi yang terdapat dalam film
A. Tujuan Pembelajaran :
- Siswa mampu merespon dan mengucapkan makna kosakata yang terdapat dalam film dengan benar
- Siswa mampu merespon berbagai informasi yang terdapat dalam film
- Siswa mampu mengedintifikasi berbagai informasi yang terdapat dalam film
B. Materi Pengajaran : Karate kid
C. Media
D. Strategi
E. Kegiatan Pengajaran

1. Pendahuluan
2. Kegiatan Inti
3. Kegitan penutup
F. Sumber Materi
G. Penilaian
: Watching Film
:
:

- Mengucapkan salam antara guru dan siswa
- Siswa dan guru melakukan tanya-jawab seputar hal-hal yang berkaitan dengan materi
:
- Guru menjelaskan tentang materi Karate Kid
- Guru dan siswa mempraktekkan cara pengucapan kosakata kosakata yang terdapat pada film karate kid secara benar, akurat, dan lancar
- Siswa dan guru melakukan tanya-jawab seputar materi yang dijelaskan
:
- Guru membuat kesimpulan tentang materi yang sudah dijelaskan
- Guru memberikan tes kepada siswa
: Video Cassette of Karate Kids
: The amount of correct answer in multiple-choices

Padangsidimpuan, 18 Nopember 2013

Co-teacher of SMKN 1 Padangsidimpuan Teacher

Fadillah Hasibuan, S.Pd
Nip. 195711111981032005
Sri Nardani Hsb
Nim. 09.3400097

The Headmaster of SMKN 1 Padangsidimpuan

Drs. Afifuddin Lubis
Nip. 1962212271992031004

## APPENDIX 2

# RENCANA PELAKSANAAN PEMBELAJARAN (RPP) IN THE CONTROL CLASS 

Sekolah<br>Mata Pelajaran<br>Kelas<br>Alokasi Waktu<br>Standar Kompetensi<br>Kompetensi Dasar

: SMK Negeri 1 Padangsidimpuan
: Bahasa Inggris
: XI (Control Class)
: $2 \times 35$ menit
: Speaking
Memahami makna kosakata kosakata pada teks tulis fungsional dan prosedur yang berkaitan dengan lingkungan terdekat.
: Merespon makna kosakata kosakata yang terdapat dalam teks fungsional pendek sangat sederhana secara akurat, lancar dan berterima yang berkaitan dengan lingkungan terdekat.

Indicator
:

- Merespon makna kosakata kosakata dalam teks fungsional pendek
- Merespon berbagai informasi dalam teks fungsional pendek
- Mengedintifikasi berbagai informasi dalam teks fungsional pendek
A. Tujuan Pembelajaran :
- Siswa mampu merespon dan mengucapkan makna kosakata kosakata dalam teks fungsional pendek dengan benar
- Siswa mampu merespon berbagai informasi dalam teks fungsional pendek
- Siswa mampu mengedintifikasi berbagai informasi dalam teks fungsional pendek

| B. Materi Pengajaran | $:$ Story Text |
| :--- | :--- |
| C. Media | : Copies of paragraph |
| D. Kegiatan Pembelajaran | $:$ |
| $\quad$ 1. Pendahuluan | $:$ |

1. Pendahuluan :

- Mengucapkan salam antara guru dan siswa
- Siswa dan guru melakukan tanya-jawab seputar hal-hal yang berkaitan dengan materi

2. Kegiatan Inti :

- Guru menjelaskan tentang materi yang terdapat pada teks bercerita
- Guru dan siswa mempraktekkan cara pengucapan kosakata kosakata yang terdapat pada teks bercerita secara benar, akurat, dan lancar.
- Siswa dan guru melakukan tanya-jawab seputar materi yang dijelaskan

3. Kegitan penutup :

- Guru membuat kesimpulan tentang materi tersebut
- Guru memberikan tes kepada siswa
E. Sumber Materi : The story text is made in Researcher
F. Penilaian
: The amount of correct answer in multiple-choices

Co-teacher of SMKN 1 Padangsidimpuan Teacher

Fadillah Hasibuan, S.Pd
Nip. 195711111981032005

Sri Nardani Hsb
Nim. 09.3400097

The Headmaster of SMKN 1 Padangsidimpuan

Drs. Afifuddin Lubis
Nip. 1962212271992031004

## APPENDIX 3

## THE TEST BEFORE VALIDITY TEST

Pre Test
Nama
Kelas/Sem $\qquad$

Instruction
Give mark (X) on the best your answer....!!!
A. Match the word in the sentence below!

1. I will buy a... for writing
a. Pen
c. Book
b. Role
d. Eraser
2. Reno ate the banana in my house....
a. Tomorrow
c. Yesterday
b. Soon
d. Now
3. The window is $\ldots$ by Raisya
a. Made
c. Opened
b. Close
d. Buy
4. Dede gives a ... doll to his sister
a. Cook
c. Cute
b. Find
d. Clever
5. This English ... is bought by parent
a. Woman
c. Person
b. Book
d. Paper
6. I am studying English....
a. Now
c. Tomorrow
b. Last night
d. Yesterday
7. She has a $\ldots$ table.
a. Come
c. Small
b. Back
d. Return
8. We will consultant to our teacher....
a. Now
c. Last month
b. Yesterday
d. Next week
B. Arrange the sentence below!
9. I - my - and - teacher - is -R budi - student $-\mathrm{am}-\mathrm{a}$.
a. Am teacher I a and my student Rudi is
b. A teacher I am and Rudi is student my
c. I a teacher am Rudi my student is and
d. I am a teacher and Rudi is my student
10. Nita - an - is - English- teacher
a. English teacher is an Nita.
b. An Nita is English teacher.
c. Nita is an English teacher
d. Teacher English is an Nita
11. He - go - Jakarta - to - shall - or - Medan - he - shall - go - to
a. Medan he shall go to or Jakarta he shall go to
b. Go to Medan he shall or go to Jakarta he shall
c. He shall go to Meden or he shall go to Jakarta
d. Shall go he to Medan or go to Jakarta he shall
12. She - TV - Watched - Yesterday
a. Watched TV She yesterday
b. She watched TV yesterday
c. Yesterday watched TV She
d. TV watched She yesterday
13. Writes - Bobi - a - letter.
a. A letter writes Bobi
c. Bobi a letter writes
b. Writes Bobi a letter
d. Bobi writes a letter
14. Mother - to - comes - my - boarding school - my.
a. My boarding school comes to my mother
b. My mother comes to my boarding school
c. My comes mother to my boarding school
d. My boarding school my mother to comes
15. The - in - students - the - canteen - eating - are.
a. The canteen are in the students eating
b. In the canteen are eating the students
c. The students are eating in the canteen
d. Eating are in the canteen the students
16. Lamp - expensive - is - this.
a. This expensive is lamp
b. Lamp is this expensive
c. This lamp expensive is
d. This lamp is expensive
C. Translate the words that are underlined to Indonesian language below!
17. I buy the English book
a. Menyanyi
c. Menari
b. Menggambar
d.Membeli
18. Open the door, please!
a. Kursi
c. Pintu
b. Buku
d. Jendela
19. I sell the English book
a. Buku bahasa inggris
c. Buku matematika
b. Buku kimia
d. Buku kedokteran
20. That's my pat
a. Rumah saya
c. Buku saya
b. Pintu saya
d. Hewan kesayangan saya
21. The book is expensive
a. Murah
c. Bagus
b. Mahal
d. Sangat mahal
22. Selvi catches the Fly.
a. Semut
c. Pintu
b. Lalat
d. Nyamuk
23. She is busy burning up her lettes.
a. Sibuk
c. Marah
b. Lelah
d. Datang
24. Dani explains her proposal to the teacher.
a. Menyatakan
c. Berkerja
b. Menjelaskan
d. Menghapal
D. Translate the sentence to Indonesia language!
25. Rika invites me, translate the underline sentence!
a. Rika mengundangku
c. Rika memarahiku
b. Rika mengunjungiku
d. Rika membantuku
26. I'm climbing the mountain, translate the underline sentence!
a. Saya sedang memasak
c. Saya sedang mendaki gunung
b. Saya sedang minum susu
d. Saya sedang mencuci baju
27. Put the glass! means...
a. Berikan gelas itu!
c. Pecahkn gelas itu!
b. Letakkan gelas itu!
d. Cuci gelas itu!
28. I write a litter means...
a. Kamu sedang manulis
c. Saya membaca sebuah surat
b. Saya menulis sebuah surat
d. Saya membaca buku
29. Sasa sells her watch means...
a. Sasa membeli jam
c. Sasa membeli cincin
b. Sasa menjual jam
d. Sasa menjual jamnya
30. My house is near the post office.
a. Kantor pos dekat rmah saya
b. Rumah saya dekat kantor pos
c. Rumah saya dekat kantor jaksa
d. Kantor jaksa dekat rumah saya

## Post Test

Nama
Kelas/Sem $\qquad$

Instruction
Give mark (X) on the best your answer....!!!
A. Match the word in the sentence below!

1. I need to ...
a. Towel
c. Practice
b. Bag
d. Pen
2. You're...
a. Come
c. Back
b. Funny
d. Return
3. Please pick up ... coat!
a. Your
c. Him
b. She
d. Me
4. He ... you are cute
a. Read
c. Think
b. Thirsty
d. Thinks
5. Mr. Han... we're just withdrawn in 305 and we have not hot ..., I come back another time
a. Flower
c. Water
b. Net
d. Cloudy
6. I ... baby I am tired too.
a. Know
c. Beautiful
b. Cute
d. Busy
7. I am not ....
a. Bach
c. Come
b. Happy
d. Burn
8. Is there your.... In the home?
a. Ate
c. Daddy
b. Hate
d. Broken
B. Arrange the sentence below!
9. almost - We - here - are
a. We are almost here
c. Are we almost here?
b. Almost we are here
d. Here we are almost
10. you- I- so - am - proud- of
a. you so proud of I am
c. So proud you of I am
b. I am so proud of you
d. You of proud so I am
11. you - cute - He - are - thinks
a. He thinks you are cute
c. He are cute you thinks
b. You are cute he thinks
d. You thinks he are cut
12. return - I - always - can
a. Always I can return
c. I can always return
b. Return I always can
d. I can return
13. Not - I - fall - will - hard
a. I fall will not hard
c. Fall hard will not I .
b. I will not hard fall
d. I will not fall hard
14. Will - kill - they - me.
a. Me will kill they
c. Will me they kill
b. They will kill me
d. kill me they will
15. This - home - is our.
a. Our home is this
c. This is our home
b. Home our is this
d. This is home our
16. I - teach - real - you - Kungfu - will.
a. I will teach you real kungfu
b. Teach you real Kungfu I
c. I teach you will real kungfu
d. You teach will you real Kungfu
C. Translate the words to Indonesian language!
17. Tired means...
a. Lelah
c. Ramah
b. Rajin
d. Kuat
18. Hurt means...
a. Luka
c. Sakit
b. Letih
d. Ramah
19. You can also tell how to do it, Translate the underline sentence ...
a. Menceritakan
c. Menulis
b. Membaca
d.Mengetik
20. Please pick up your coat! (Translate the underline sentence) ...
c. Celana
c. Jaket
d. Topi
d. Baju
21. I buy the new ring
a. Cincin
c. Cincin jelek
b. Cincin baru
d. Cincin asli
22. I hope you find the good teacher.
a. Mengajar
c. Mendapatkan
b. Terbang
d. Meniru
23. I will follow the audition next month.
a. Mengikuti
c. Masuk
b. Mendapatkan
d. Membahas
24. I have prize for you.
a. Makanan
c. Minuman
b. Tali
d. Hadiah
D. Translate the sentences to Indonesia language!
25. I'm thirsty means...
a. Saya lapar
c. Saya haus
b. Kamu haus
d. Dia menonton
26. You're funny means...
a. Kamu imut
c. Kamu cantik
b. Kamu lucu
d. Dia (pr) lucu
27. I do not care means...
a. Saya tidak peduli
c. Saya sedang mengetik
b. Saya ingin tidur
d. Saya telah makan pagi
28. You make me crazy means...
a. Anda membuat saya menangis
c. Dia(lk) membuat saya gila
b. Anda membuat saya gila
d. saya membuat Anda nyaman
29. I need to practice means...
a. Anda membutuhkan praktek
c. Dia (lk) membutuhkan praktek
b. Saya membutuhkan praktek
d.Dia (pr) membutuhkan praktek
30. This is my child means...
a. Ini mama saya
c. ini anak saya
b. Ini cucu saya
d. ini teman saya

## THE TEST AFTER VALIDITY TEST

## Pre Test

Nama
Kelas/Sem $\qquad$

Instruction
Give mark (X) on the best your answer....!!!
A. Match the word in the sentence below!

1. I will buy a... for writing
c. Pen
c. Book
d. Role
d. Eraser
2. The window is ... by Raisya
c. Made
c. Opened
d. Close
d. Buy
3. I am studying English....
c. Now
c. Tomorrow
d. Last night
d. Yesterday
4. She has a $\ldots$ table.
c. Come
c. Small
d. Back
d. Return
5. We will consultant to our teacher....
c. Now
c. Last month
d. Yesterday
d. Next week
B. Arrange the sentence below!
6. I - my - and - teacher - is - Rudi - student - am - a.
e. Am teacher I a and my student Rudi is
f. A teacher I am and Rudi is student my
g. I a teacher am Rudi my student is and
h. I am a teacher and Rudi is my student
7. Nita - an - is - English- teacher
e. English teacher is an Nita.
f. An Nita is English teacher.
g. Nita is an English teacher
h. Teacher English is an Nita
8. He - go - Jakarta - to - shall - or - Medan - he - shall - go - to
e. Medan he shall go to or Jakarta he shall go to
f. Go to Medan he shall or go to Jakarta he shall
g. He shall go to Meden or he shall go to Jakarta
h. Shall go he to Medan or go to Jakarta he shall
9. She - TV - Watched - Yesterday
e. Watched TV She yesterday
f. She watched TV yesterday
g. Yesterday watched TV She
h. TV watched She yesterday
10. Writes - Bobi - a - letter.
c. A letter writes Bobi
c. Bobi a letter writes
d. Writes Bobi a letter
d. Bobi writes a letter
C. Translate the words that are underlined to Indonesian language below!
11. I buy the English book
c. Menyanyi
c. Menari
d. Menggambar
d.Membeli
12. Open the door, please!
c. Kursi
c. Pintu
d. Buku
d. Jendela
13. I sell the English book
c. Buku bahasa inggris c. Buku matematika
d. Buku kimia
d. Buku kedokteran
14. The book is expensive
c. Murah
c. Bagus
d. Mahal
d. Sangat mahal
15. Selvi catches the Fly.
c. Semut
c. Pintu
d. Lalat
d. Nyamuk
D. Translate the sentence to Indonesia language!
16. Rika invites me, translate the underline sentence!
c. Rika mengundangku
c. Rika memarahiku
d. Rika mengunjungiku
d. Rika membantuku
17. I'm climbing the mountain, translate the underline sentence!
c. Saya sedang memasak
c. Saya sedang mendaki gunung
d. Saya sedang minum susu
d. Saya sedang mencuci baju
18. Put the glass! means...
c. Berikan gelas itu!
c. Pecahkan gelas itu!
d. Letakkan gelas itu!
d. Cuci gelas itu!
19. I write a litter means...
c. Kamu sedang menulis
c. Saya membaca sebuah surat
d. Saya menulis sebuah surat
d. Saya membaca buku
20. My house is near the post office.
e. Kantor pos dekat rmah saya
f. Rumah saya dekat kantor pos
g. Rumah saya dekat kantor jaksa
h. Kantor jaksa dekat rumah saya

## Post Test

Nama:
Kelas/Sem: $\qquad$

## Instruction

Give mark (X) on the best your answer....!!!
A. Match the word in the sentence below!

1. I need to ...
a. Towel
c. Practice
b. Bag
d. Pen
2. Please pick up ... coat!
a. Your
c. Him
b. She
d. Me
3. He ... you are cute
c. Read
c. Think
d. Thirsty
d. Thinks
4. Mr. Han... we're just withdrawn in 305 and we have not hot ..., I come back another time
a. Flower
c. Water
b. Net
d. Cloudy
5. I ... baby I am tired too.
a. Know
c. Beautiful
b. Cute
d. Busy
B. Arrange the sentence below!
6. you- I- so - am - proud- of
a. you so proud of I am
c. So proud you of I am
b. I am so proud of you
d. You of proud so I am
7. you - cute -He - are - thinks
a. He thinks you are cute
c. He are cute you thinks
b. You are cute he thinks
d. You thinks he are cut
8. return - I - always - can
a. Always I can return
c. I can always return
b. Return I always can
d. I can return
9. This - home - is -our.
a. Our home is this
c. This is our home
b. Home our is this
d. This is home our
10. I - teach - real - you - Kungfu - will.
a. I will teach you real kungfu
b. Teach you real Kungfu I
c. I teach you will real kungfu
d. You teach will you real Kungfu
C. Translate the words to Indonesian language!
11. Tired means...
a. Lelah
c. Ramah
b. Rajin
d. Kuat
12. Hurt means...
a. Luka
c. Sakit
b. Letih
d. Ramah
13. Please pick up your coat! (Translatethe underline sentence) ...
a. Celana
c. Jaket
b. Topi
d. Baju
14. I buy the new ring
a. Cincin
c. Cincinjelek
b. Cincin baru
d. Cincinasli
15. I hope you find the good teacher.
a. Mengajar
c. Mendapatkan
b. Terbang
d. Meniru
D. Translate the sentences to Indonesia language!
16. I'm thirsty means...
a. Saya lapar
c. Saya haus
b. Kamu haus
d. Dia menonton
17. I do not care means...
a. Saya tidak peduli
c. Saya sedang mengetik
b. Saya ingin tidur
d. Saya telah makan pagi
18. You make me crazy means...
a. Anda membuat saya menangis
c. $\operatorname{Dia}(\mathrm{lk})$ membuatsayagila
b. Anda membuat saya gila
d. sayamembuat Anda nyaman
19. I need to practice means...
a. Anda membutuhkan praktek
c. Dia (lk) membutuhkan praktek
b. Saya membutuhkan praktek d.Dia (pr) membutuhkan praktek
20. This is my child means...
a. Ini mama saya
c. Ini anak saya
b. Ini cucu saya
d. Ini teman saya

## APPENDIX 4

## KEY ANSWER

## 1. The Test before Validity Test

A. PRETEST

1. A
2. C
3. C
4. C
5. B
6. A
7. C
8. D
9. D
10. B
11. C
12. B
13. D
14. B
15. C
16. D
17. D
18. C
19. A
20. D
21. D
22. B
23. B
24. B
25. A
26. C
27. B
28. B
29. D
30. B

## B. POSTTEST

1. C
2. B
3. A
4. D
5. C
6. A
7. B
8. C
9. A
10. B
11. A
12. C
13. D
14. B
15. C
16. A
17. A
18. A
19. A
20. C
21. B
22. C
23. A
24. D
25. B
26. B
27. A
28. B
29. B
30. C
31. The Test after Validity Test
A. PRETEST
32. A
33. C
34. A
35. C
36. D
37. D
38. C
39. C
40. B
41. D
42. D
43. C
44. A
45. D
46. B
47. A
48. C
49. B
50. B
51. B

## B. POSTTEST

1. C
2. A
3. D
4. C
5. A
6. B
7. A
8. C
9. C
10. A
11. A
12. A
13. C
14. B
15. C
16. B
17. A
18. B
19. B
20. C

THE STUDENTS' SCORE IN PRE-TEST

| No | Initial | NUMBER OF ITEM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\mathrm{X}_{1}$ | $\mathrm{X}_{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |  |  |
| 1 | AB | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 27 | 729 |
| 2 | AD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 3 | AH | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 4 | AI | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 5 | AL | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 6 | AN | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 7 | AR | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 27 | 729 |
| 8 | AZ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 27 | 729 |
| 9 | BK | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 10 | CH | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 11 | DK | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 12 | DS | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 13 | EF | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 14 | FA | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 15 | GS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 27 | 729 |
| 16 | IS | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 17 | LM | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 18 | MF | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 19 | MN | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 28 | 784 |
| 20 | MT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 21 | PR | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 22 | PU | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 23 | RC | 1 | 1 | 1 | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 24 | RS | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 28 | 784 |
| 25 | SA | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 26 | SE | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 27 | SI | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 28 | SU | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 27 | 729 |
| 29 | ws | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 28 | 784 |
| 30 | YR | 1 | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
|  | Total | 28 | 21 | 25 | 20 | 25 | 29 | 21 | 18 | 29 | 28 | 28 | 29 | 18 | 28 | 29 | 27 | 28 | 28 | 29 | 29 | 28 | 28 | 28 | 28 | 28 | 28 | 29 | 29 | 28 | 29 |  |  |
|  | P | 0,9 | 0,7 | 0,8 | 0,6 | ${ }^{0,8}$ | 0,9 | 0,7 | 0,6 | 0.9 | 0,9 | 0,9 | 0.9 | 0.6 | 0.9 | 0.9 | 0,9 | 0.9 | 0.9 | 0,9 | 0,9 | 0.9 | 0,9 | 0,9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0,9 | 0.9 | Ex:828 | $\Sigma_{\mathrm{xt}}$ : 233711 |
|  | Q | 0,06 | 0,3 | 0,1 | 0,3 | 0,1 | 0,03 | 0,3 | 0,4 | 0.03 | 0,06 | 0,06 | 0.03 | 0.4 | 0.06 | 0.03 | 0,1 | 0.06 | 0.06 | 0,03 | 0,03 | 0.06 | 0,06 | 0,06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.06 | 0.03 |  |  |

## APPENDIX 6

## THE VALIDITY OF PRE-TEST

| No | Mp | Mt | $\mathbf{S D}_{\mathbf{t}}$ | P | Q | $r_{p b i=} \frac{M p-M t}{S D t} \sqrt{\frac{p}{q}}$ | Interpretation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 28.6 | 27.6 | 5.3 | 0.9 | 0.06 | 0.730 | VALID |
| 2. | 28.2 | 27.6 | 5.3 | 0.7 | 0.3 | 0.170 | INVALID |
| 3. | 29.1 | 27.6 | 5.3 | 0.8 | 0.1 | 0.770 | VALID |
| 4. | 27.3 | 27.6 | 5.3 | 0.6 | 0.3 | - 0.079 | INVALID |
| 5. | 28 | 27.6 | 5.3 | 0.8 | 0.1 | 0.212 | INVALID |
| 6. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 7. | 25.8 | 27.6 | 5.3 | 0.7 | 0.3 | -0.516 | INVALID |
| 8. | 30.2 | 27.6 | 5.3 | 0.6 | 0.4 | 0.598 | VALID |
| 9. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 10. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 11. | 29.6 | 27.6 | 5.3 | 0.9 | 0.06 | 1.460 | VALID |
| 12. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 13. | 30.2 | 27.6 | 5.3 | 0.6 | 0.4 | 0.598 | VALID |
| 14. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 15. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 16. | 27.5 | 27.6 | 5.3 | 0.9 | 0.1 | -0.056 | INVALID |
| 17. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 18. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 19. | 30.48 | 27.6 | 5.3 | 0.9 | 0.03 | 2.972 | VALID |
| 20. | 27.7 | 27.6 | 5.3 | 0.9 | 0.03 | 0.103 | INVALID |
| 21. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 22. | 29.7 | 27.6 | 5.3 | 0.9 | 0.06 | 1.533 | VALID |
| 23 | 29.8 | 27.6 | 5.3 | 0.9 | 0.06 | 1.606 | VALID |
| 24. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 25. | 28.8 | 27.6 | 5.3 | 0.9 | 0.06 | 0.876 | VALID |
| 26. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 27. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 28. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |
| 29. | 29.6 | 27.6 | 5.3 | 0.9 | 0.06 | 1.460 | VALID |
| 30. | 28.6 | 27.6 | 5.3 | 0.9 | 0.03 | 1.135 | VALID |

$$
\begin{aligned}
\mathrm{M}_{\mathrm{t}} & =\frac{\sum \mathrm{Xt}}{\mathrm{~N}} \\
& =\frac{829}{30} \\
& =27.6
\end{aligned}
$$

$$
\begin{aligned}
& \mathrm{SD}_{\mathrm{t}}=\sqrt{\frac{\Sigma f x^{\prime 2}}{N}}-\left[\frac{\Sigma f x^{\prime}}{N}\right]^{2} \\
& =\sqrt{\frac{23773}{30}-\left[\frac{829}{30}\right]^{2}} \\
& =\sqrt{792.4-761.7} \\
& =\sqrt{30.7} \\
& =5.5
\end{aligned}
$$

## Table

Mean from the answer that is correct $\left(\mathrm{M}_{\mathrm{p}}\right)$

| No | $\mathrm{Mp}=\frac{\text { Score }}{\mathrm{N}}$ |
| :---: | :---: |
| 1. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+25+27+28+28+30+28+29+30+28+28+28+28+28+30+28+27+28+23+27+28}{24}=30.3 \end{aligned}$ |
| 2. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+25+27+28+30+26+25+28+26+28+29+30+28+28+28+28+28+30+28+27+28+28+23+27+28}{27}=27.6 \end{aligned}$ |
| 3. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}=31.4 \\ & \frac{\mathrm{~N}}{28+28+27+25+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+23+27+28} \\ & 29 \end{aligned}$ |
| 4. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+28+28+29+30+28+28+28+28+30+28+28+28+27+28}{24}=28.9 \end{aligned}$ |
| 5. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AN}+\mathrm{AR}++\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+25+28+28+30+26+25+28+26+29+30+28+28+28+28+30+28+28+28+23+27+28}{29}=32.6 \end{aligned}$ |
| 6. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{28+28+27+25+27+28+28+28+30+26+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+23+27+28}{29}=27.8 \end{aligned}$ |
| 7. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29}=27.7 \end{aligned}$ |
| 8. | $\begin{array}{ll} \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AN}+\mathrm{AR}+\mathrm{BK}+\mathrm{CH}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ \frac{28+28+25+28+28+30+26+28+26+29+30+28+28+28+28+28+30+28+28+28+27+28}{22} & =26.6 \end{array}$ |
| 9. | $\begin{aligned} & \underline{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DS}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}++\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{28+28+27+25+27+28+28+28+30+26+28+28+29+30+28+28+28+28+28+30+28+27+28+28+27+28}{27} \quad=27.9 \end{aligned}$ |
| 10. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29}=29.5 \end{aligned}$ |
| 11. | $\frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}$ |


|  | $\frac{28+28+27+27+28+28+28+30+25+28+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{28}$ |
| :---: | :---: |
| 12. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29}=28.7 \end{aligned}$ |
| 13. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{28+28+27+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29}=27.7 \end{aligned}$ |
| 14. | $\frac{\mathrm{AB}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AZ}+\mathrm{BK}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MT}+\mathrm{PR}+\mathrm{RC}+\mathrm{SI}+\mathrm{SU}+\mathrm{YR}}{\mathrm{N}}$  <br> $\frac{28+27+25+27+28+28+30+25+28+26+28+29+30+28+28+30+28+27+28}{19}$ $=27.7$ |
| 15. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+27+28+28+27+23+28}{29} \end{aligned}$ |
| 16. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29}=31.2 \end{aligned}$ |
| 17. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \begin{array}{l} \mathrm{N} \\ \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29} \end{array}=29.5 \end{aligned}$ |
| 18. | $\begin{array}{ll} \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{IS}+\mathrm{LM}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SU}+\mathrm{YR}}{\mathrm{~N}} \\ \frac{28+27+27+28+28+30+26+25+28+26+28+30+28+28+28+25+30+28+27+28+23+28}{22} & =30.3 \end{array}$ |
| 19. | $\begin{array}{cc} \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AN}+\mathrm{AR}++\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{SII}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} & =32.6 \\ \frac{28+28+25+28+28+30+26+25+28+26+29+30+28+28+28+28+30+28+28+28+23+27+28}{29} & \end{array}$ |
| 20. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29} \end{aligned}$ |
| 21. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AN}+\mathrm{AR}++\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+25+28+28+30+26+25+28+26+29+30+28+28+28+28+30+28+28+28+23+27+28}{29}-27 \mathrm{~K} \end{aligned}$ |
| 22. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29} \end{aligned}$ |
| 23. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AH}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+23+27+28}{29}=31.3 \end{aligned}$ |
| 24. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{} \begin{array}{l} \mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR} \\ \mathrm{~N} \\ \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29} \end{array}=29.5 \end{aligned}$ |
| 25. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{28+28+27+25+27+28+28+28+30+26+25+28+26+28+29+30+28+28+28+28+28+25+30+28+27+28+28+27+28}{29}=28.7 \end{aligned}$ |



THE STUDENTS' SCORE IN POST-TEST

| No | Initial | NUMBER OF ITEM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\mathrm{X}_{1}$ | $\mathrm{X}_{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |  |  |
| 1 | AB | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 2 | AD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 3 | AH | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 4 | AI | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 25 | 625 |
| 5 | AL | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 6 | AN | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 7 | AR | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 8 | AZ | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 9 | BK | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 28 | 784 |
| 10 | CH | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 26 | 676 |
| 11 | DK | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 12 | DS | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 27 | 729 |
| 13 | EF | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 14 | FA | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 15 | GS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 16 | IS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 29 | 841 |
| 17 | LM | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 18 | MF | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 19 | MN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 20 | MT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 20 | 784 |
| 21 | PR | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 22 | PU | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 23 | RC | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 28 | 784 |
| 24 | RS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28 | 784 |
| 25 | SA | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 26 | SE | 0 | 1 | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | , | 1 | 1 | 28 | 784 |
| 27 | SI | 1 | 1 | 1 | 1 | 1 | I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 28 | SU | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | , | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | , | , | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | , | 1 | 1 | 23 | 529 |
| 29 | wS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |  | , | 0 | 1 | 1 | 1 |  | 27 | 729 |
| 30 | YR | 1 | 1 | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | , | 1 | , | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | , | 1 | 1 | 28 | 784 |
|  | Total | 24 | 27 | 29 | 24 | 23 | 29 | 29 | 22 | 27 | 29 | 28 | 28 | 29 | 19 | 29 | 29 | 30 | 22 | 22 | 29 | 29 | 29 | 29 | 29 | 28 | 28 | 29 | 27 | 29 | 29 | $\Sigma_{\text {xt } \mathrm{t}}: 829$ | $\begin{aligned} & \sum_{\mathrm{xtt}^{2}} \mathrm{i} \\ & 23773 \end{aligned}$ |
|  | P | 0,8 | 0,9 | 0,9 | 0,8 | 0,7 | 0,9 | 0,9 | 0,7 | 0,9 | 0,9 | 0,9 | 0,9 | 0,9 | 0,6 | 0,9 | 0,9 |  | 0,7 | 0.7 | 0.9 | 0.9 | 0.9 | 0,9 | 0.9 | 1 | 0,9 | 0.9 | 0,9 | 0.9 | 0.9 |  |  |
|  | Q | 0,2 | 0,1 | 0,03 | 0,2 | 0,2 | 0,03 | 0,03 | 0,3 | 0,1 | 0,03 | 0,06 | 0,06 | 0,03 | 0,3 | 0,03 | 0,03 | 0 | 0,3 | 0.3 | 0.03 | 0.03 | 0.03 | 0,03 | 0.03 | 0,02 | 0,06 | 0.03 | 0,1 | 0.03 | 0.03 |  |  |

## APPENDIX 8

THE VALIDITY OF POST TEST

| $\mathbf{N o}$ | $\mathbf{M p}$ | $\mathbf{M t}$ | $\mathbf{S D}_{\mathbf{t}}$ | $\mathbf{P}$ | $\mathbf{Q}$ | $r_{p b i=} \frac{M p-M t}{S D t} \sqrt{\frac{p}{q}}$ | Interpretation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 30.3 | 27.6 | 5.5 | 0.8 | 0.2 | 0.981 | VALID |
| 2. | 27.6 | 27.6 | 5.5 | 0.9 | 0.1 | 0 | INVALID |
| 3. | 31.4 | 27.6 | 5.5 | 0.9 | 0.03 | 3.784 | VALID |
| 4. | 28.9 | 27.6 | 5.5 | 0.8 | 0.2 | 0.472 | VALID |
| 5. | 32.6 | 27.6 | 5.5 | 0.7 | 0.2 | 1.700 | VALID |
| 6. | 27.8 | 27.6 | 5.5 | 0.9 | 0.03 | 0.199 | INVALID |
| 7. | 27.7 | 27.6 | 5.5 | 0.9 | 0.03 | 0.099 | INVALID |
| 8. | 26.6 | 27.6 | 5.5 | 0.7 | 0.3 | -0.277 | INVALID |
| 9. | 27.9 | 27.6 | 5.5 | 0.9 | 0.1 | 0.163 | INVALID |
| 10. | 29.5 | 27.6 | 5.5 | 0.9 | 0.03 | 1.892 | VALID |
| 11. | 28.8 | 27.6 | 5.5 | 0.9 | 0.06 | 0.845 | VALID |
| 12. | 28.7 | 27.6 | 5.5 | 0.9 | 0.06 | 0.777 | VALID |
| 13. | 27.7 | 27.6 | 5.5 | 0.9 | 0.03 | 0.099 | INVALID |
| 14. | 27.7 | 27.6 | 5.5 | 0.6 | 0.3 | 0.025 | INVALID |
| 15. | 31.4 | 27.6 | 5.5 | 0.9 | 0.03 | 3.784 | VALID |
| 16. | 31.2 | 27.6 | 5.5 | 0.9 | 0.03 | 3.585 | VALID |
| 17. | 29.5 | 27.6 | 5.5 | 0.9 | 0.03 | 1.892 | VALID |
| 18. | 30.3 | 27.6 | 5.5 | 0.7 | 0.3 | 0.749 | VALID |
| 19. | 32.6 | 27.6 | 5.5 | 0.7 | 0.2 | 1.700 | VALID |


| 20. | 31.2 | 27.6 | 5.5 | 0.9 | 0.03 | 3.585 | VALID |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21. | 32.6 | 27.6 | 5.5 | 0.7 | 0.2 | 1.700 | VALID |
| 22. | 29.5 | 27.6 | 5.5 | 0.9 | 0.03 | 1.892 | VALID |
| 23 | 30.3 | 27.6 | 5.5 | 0.9 | 0.03 | 2.688 | VALID |
| 24. | 31.4 | 27.6 | 5.5 | 0.9 | 0.03 | 3.784 | VALID |
| 25. | 28.7 | 27.6 | 5.5 | 0.9 | 0.06 | 0.777 | VALID |
| 26. | 27.7 | 27.6 | 5.5 | 0.9 | 0.06 | 0.070 | INVALID |
| 27. | 29.5 | 27.6 | 5.5 | 0.9 | 0.03 | 1.892 | VALID |
| 28. | 28.7 | 27.6 | 5.5 | 0.9 | 0.1 | 0.6 | VALID |
| 29. | 31.4 | 27.6 | 5.5 | 0.9 | 0.03 | 3.784 | VALID |
| 30. | 31.4 | 27.6 | 5.5 | 0.9 | 0.03 | 3.784 | VALID |

$$
\begin{aligned}
\mathrm{M}_{\mathrm{t}} & =\frac{\sum \mathrm{Xt}}{\mathrm{~N}} \\
& =\frac{828}{30} \\
& =27.6 \\
\mathrm{SD}_{\mathrm{t}} & =\sqrt{\frac{\Sigma f x^{\prime 2}}{N}}-\left[\frac{\Sigma f x^{\prime}}{N}\right]^{2}
\end{aligned}
$$

$$
\begin{aligned}
& =\sqrt{\frac{23711}{30}-\left[\frac{828}{30}\right]^{2}} \\
& =\sqrt{790.3-761.7} \\
& =\sqrt{28.6} \\
& =5.3
\end{aligned}
$$

## Table

Mean from the answer that is correct $\left(\mathrm{M}_{\mathrm{p}}\right)$

| No | $\mathrm{Mp}=\frac{\text { Score }}{\mathrm{N}}$ |
| :---: | :---: |
| 1. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+24+25+28+26+30+30+25+28+26+28+27+25+30+29+25+30+30+29+28+30+29+24+28+26+28+30}{28}=28.6 \end{aligned}$ |
| 2. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AL}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MT}+\mathrm{PR}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SU}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{27+28+24+28+30+30+25+28+27+25+30+29+30+30+29+30+29+24+28+27+27}{21}=28.2 \end{aligned}$ |
| 3. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{27+28+24+25+28+30+30+25+28+27+25+30+29+30+30+29+30+29+28+26+27+28+27}{25}=29.1 \end{aligned}$ |
| 4. | $\frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AR}+\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{GS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}$ |


|  | $\frac{27+28+30+30+25+28+26+28+30+25+30+30+29+28+30+29+28+26+27+28+27}{20}$ |
| :---: | :---: |
| 5. | $\frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{WS}+\mathrm{YR}}{\mathrm{N}}$ $\frac{27+28+26+30+30+25+28+26+28+27+25+30+29+25+30+30+29+28+30+29+24+28+28+27}{25}=28$ |
| 6. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \\ & \mathrm{~N} \\ & \frac{30+30+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+3 \mathrm{C}}{29}=28.7 \end{aligned}$ |
| 7. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SI}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{27+28+25+28+26+30+30+26+28+30+29+25+30+30+29+28+30+29+26+28+27}{21}=25.8 \end{aligned}$ |
| 8. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SI}+\mathrm{SU}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{27+28+28+26+30+30+27+30+29+30+30+29+28+30+29+26+27+27}{18}=30.2 \end{aligned}$ |
| 9. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \\ & \frac{\mathrm{~N}}{27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+3 \mathrm{C}} \\ & 29 \end{aligned}=28.7 .$ |
| 10. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \\ & \mathrm{~N} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28}=28.8 \end{aligned}$ |
| 11. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{27+28+24+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+28+30+29+28+26+27+28+27}{28} \end{aligned}$ |
| 12. | $\begin{aligned} & \underline{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+} \\ & \underline{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \end{aligned}$ |


|  | $\begin{gathered} \mathrm{N} \\ \hline \frac{27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+30}{29} \end{gathered}$ | $=28.7$ |
| :---: | :---: | :---: |
| 13. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+\mathrm{AZ}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SI}+\mathrm{SU}+\mathrm{YR}}{\mathrm{~N}} \\ & \frac{27+28+28+26+30+30+27+30+29+30+30+29+28+30+29+26+27+27}{18}=30.2 \end{aligned}$ |  |
| 14. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \\ & \mathrm{~N} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28} \end{aligned}$ | $=28.8$ |
| 15. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+3 \mathrm{c}}{29} \end{aligned}$ | $=28.7$ |
| 16. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+24+25+28+26+30+30+28+26+28+30+29+25+25+30+30+28+30+29+28+26+27+28+27}{27}=27.5 \end{aligned}$ |  |
| 17. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28} \end{aligned}$ |  |
| 18. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28} \end{aligned}$ | $=28.8$ |
| 19. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \mathrm{~N} \\ & \frac{\mathrm{~N}}{27+28+25+28+26+30+30+25+28+26+28+27+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27} \\ & 29 \end{aligned}$ | $=30.48$ |


| 20. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+25+28+26+30+30+25+28+26+28+27+30+29+25+30+30+29+28+30+29+24+28+26+27+28+27}{29}=27.7 \end{aligned}$ |
| :---: | :---: |
| 21. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\underline{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}} \mathrm{~N} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28}=28.8 \end{aligned}$ |
| 22. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{30+30+25+28+26+30+30+25+28+28+27+30+29+25+30+30+29+28+30+29+24+28+27+28+27}{28} \end{aligned}$ |
| 23. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+28+26+30+30+25+28+26+28+27+30+29+25+30+30+29+28+30+29+24+28+27+28+27}{28}=29.8 \end{aligned}$ |
| 24. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28}=28.8 \end{aligned}$ |
| 25. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \\ & \mathrm{~N} \\ & \frac{27+28+24+25+28+30+30+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{28}=28.8 \end{aligned}$ |
| 26. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+3 \mathrm{C}}{29}=28.7 \end{aligned}$ |
| 27. | $\frac{\frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}}{\mathrm{~N}}$ |


|  | $27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+30$ |
| :---: | :---: |
| 28. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+30}{29}=28.7 \end{aligned}$ |
| 29. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AH}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\frac{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}}{\mathrm{~N}}} \\ & \frac{27+28+24+25+28+26+30+30+25+28+26+28+27+30+29+25+30+30+29+28+30+24+28+26+27+28+27}{28} \end{aligned}$ |
| 30. | $\begin{aligned} & \frac{\mathrm{AB}+\mathrm{AD}+\mathrm{AI}+\mathrm{AL}+\mathrm{AN}+\mathrm{AR}+}{\mathrm{AZ}+\mathrm{BK}+\mathrm{CH}+\mathrm{DK}+\mathrm{DS}+\mathrm{EF}+\mathrm{FA}+\mathrm{GS}+\mathrm{IS}+\mathrm{LM}+\mathrm{MF}+\mathrm{MN}+\mathrm{MT}+\mathrm{PR}+\mathrm{PU}+\mathrm{RC}+\mathrm{RS}+\mathrm{SA}+\mathrm{SE}+\mathrm{SI}+\mathrm{SU}+\mathrm{WS}+\mathrm{YR}} \\ & \mathrm{~N} \\ & \frac{27+28+25+28+26+30+30+25+28+26+28+27+25+30+29+25+25+30+30+29+28+30+29+24+28+26+27+28+27}{29} \end{aligned}$ |


| 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| Abdul Azis | 65 | 75 | 10 | 100 |
| Adelina Sari | 85 | 100 | 15 | 225 |
| Apriyanthi Sagala | 40 | 85 | 45 | 2025 |
| Cristin Selasari | 40 | 80 | 40 | 1600 |
| Desi Ratnasari | 60 | 80 | 20 | 400 |
| Dewi Purnama Sari | 35 | 80 | 45 | 2025 |
| Dian Vihaja | 50 | 80 | 30 | 900 |
| Erni Julianti | 30 | 80 | 50 | 2500 |
| Evi Julian Sari | 50 | 80 | 30 | 900 |
| Giya Rahayu | 70 | 85 | 15 | 225 |
| Hikmah Warni | 35 | 85 | 50 | 2500 |
| Ilya Avianti | 10 | 95 | 85 | 7225 |
| Irna Sari | 40 | 75 | 35 | 1225 |
| Juana Hajjah | 60 | 85 | 25 | 625 |
| Latipa Usia | 40 | 90 | 50 | 2500 |
| Mahadir Muhammad | 25 | 90 | 65 | 4225 |
| Marina | 60 | 85 | 25 | 625 |
| May Chairani | 40 | 85 | 45 | 2025 |
| Monalisa | 30 | 90 | 60 | 3600 |
| Megawati | 45 | 90 | 45 | 2025 |
| Nanni Romaito | 35 | 95 | 60 | 3600 |
| Nani Afsah | 60 | 95 | 35 | 1225 |


| Nisa Amsia Marbu | 30 | 85 | 55 | 3025 |
| :---: | :---: | :---: | :---: | :---: |
| Nurlita Sinaga | 40 | 95 | 55 | 3025 |
| Nur Afifah | 75 | 90 | 15 | 225 |
| Oky Kurniawan | 30 | 85 | 55 | 3025 |
| Parlindungan | 45 | 90 | 45 | 2025 |
| Riswani | 40 | 90 | 50 | 2500 |
| Ricky Anasari | 50 | 85 | 35 | 1225 |
| Rahmad Ananda | 45 | 95 | 45 | 2025 |
| Rahmad Septiansyah | 40 | 85 | 45 | 2025 |
| Suci Ramadhani | 40 | 85 | 45 | 2025 |
| Seri Aminah | 50 | 90 | 40 | 1600 |
| Sri Wahyuni | 55 | 85 | 30 | 900 |
| Siti Rahmah | 75 | 85 | 10 | 100 |
| Siti Aminah | 60 | 90 | 30 | 900 |
| Total |  |  | 1435 | 66925 |

## APPENDIX 10

## THE SCORE OF CONTROL GROUP

| Name of student <br> ( n ) | Pre- test | Post- test | $\mathrm{Y}_{1}$ | $\mathrm{Y}_{1}{ }^{\text {²}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |
| Abdul Karim | 65 | 75 | 10 | 100 |
| Alexander | 85 | 80 | 15 | 225 |
| Asni Parinduri | 40 | 85 | 45 | 2025 |
| Apriliana Masnun | 50 | 75 | 25 | 625 |
| Annisa Fitri | 60 | 75 | 15 | 225 |
| Dorima | 35 | 75 | 40 | 1600 |
| Dina Yani | 50 | 80 | 30 | 900 |
| Esa Soraya | 30 | 80 | 50 | 2500 |
| Esther Wahyuni | 50 | 80 | 30 | 900 |
| Elsa Maya suci | 70 | 85 | 15 | 225 |
| Hapsa Hosnita | 35 | 80 | 45 | 2025 |
| Herlina Sinaga | 50 | 90 | 40 | 1600 |
| Juanda | 40 | 75 | 35 | 1225 |
| Juni Hartati | 60 | 85 | 25 | 625 |
| Lisa Anggraini | 40 | 90 | 50 | 2500 |
| Lisni Handayani | 25 | 90 | 65 | 4225 |
| Mahraini Saputri | 60 | 80 | 20 | 400 |
| Mitra Hanligahani | 40 | 85 | 45 | 2025 |
| Monalisa | 30 | 90 | 60 | 3600 |


| Mordiansyah | 45 | 90 | 45 | 2025 |
| :---: | :---: | :---: | :---: | :---: |
| Ramlah Zakiah | 35 | 90 | 55 | 3025 |
| Nurlatifah | 60 | 90 | 30 | 900 |
| Rizki Ameliah | 30 | 85 | 55 | 3025 |
| Resna Siska | 40 | 90 | 50 | 2500 |
| Sahriani | 75 | 90 | 15 | 225 |
| Siti Hartini | 30 | 70 | 40 | 1600 |
| Siti Jaleha | 45 | 90 | 45 | 2025 |
| Siti Olona | 40 | 90 | 50 | 2500 |
| Muhammada Katif | 50 | 80 | 30 | 900 |
| Muhammad Rifai | 40 | 80 | 40 | 1600 |
| Yati Oktavia | 40 | 80 | 40 | 1600 |
| Yanti Kartika | 40 | 80 | 40 | 1600 |
| Yeni Widya | 50 | 80 | 30 | 900 |
| Viktor | 55 | 85 | 30 | 900 |
| Tri Wahyuni | 75 | 85 | 10 | 100 |
| Siska | 65 | 90 | 25 | 625 |
| Total |  |  | 1290 | 53600 |

## APPENDIX 11

## The Steps Analysis Data

1. The average score of experimental group.

$$
\begin{aligned}
M_{1} & =\frac{Y_{1}^{2}}{Y_{1}} \\
& =\frac{66925}{1435} \\
& =46.63
\end{aligned}
$$

2. The average score of control group.

$$
\begin{aligned}
M_{1} & =\frac{Y_{2}^{2}}{Y_{2}} \\
& =\frac{53600}{1290} \\
& =41.55
\end{aligned}
$$

3. The deviation score of experimental group

$$
\begin{aligned}
\Sigma_{X 1} & =\Sigma Y_{1}^{2}-\frac{\left(\Sigma Y_{1}\right)^{2}}{n_{1}} \\
& =66925-\frac{(1435)^{2}}{36} \\
& =66925-\frac{2059225}{36}
\end{aligned}
$$

$$
\begin{aligned}
& =66925-57200.69 \\
& =9724.31
\end{aligned}
$$

4. The deviation score of control group

$$
\begin{aligned}
\Sigma_{X 2} & =\Sigma Y_{2}^{2}-\frac{\left(\Sigma Y_{2}\right)^{2}}{n_{2}} \\
& =53600-\frac{(1290)^{2}}{36} \\
& =53600-\frac{1664100}{36} \\
& =53600-46225 \\
& =7375
\end{aligned}
$$

5. The formulation of T-test

List of Score

| No | Symbol | Score |
| :---: | :---: | :---: |
| 1. | $\mathrm{M}_{1}$ | 46.63 |
| 2. | $\mathrm{M}_{2}$ | 41.55 |
| 3. | $\mathrm{X}_{1}{ }^{2}$ | 9724.31 |
| 4. | $\mathrm{X}_{2}{ }^{2}$ | 7375 |
| 5. | $\mathrm{n}_{1}$ | 36 |
| 6. | $\mathrm{n}_{2}$ | 36 |

$$
\begin{aligned}
& T t=\frac{M_{1}-M_{2}}{\sqrt{\left(\frac{\Sigma X_{1}+\Sigma X_{2}^{2}}{n_{1}+n_{2}-2}\right)\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}} \\
& =\frac{46.63-41.55}{\sqrt{\left(\frac{9724.31+7375}{36+36-2}\right)\left(\frac{1}{36}+\frac{1}{36}\right)}} \\
& =\frac{5.08}{\sqrt{\left(\frac{17099.31}{70}\right)\left(\frac{2}{36}\right)}} \\
& =\frac{5.08}{\sqrt{244.2\left(\frac{2}{36}\right)}} \\
& =\frac{5.08}{\sqrt{\frac{488.4}{36}}=\frac{5.08}{\sqrt{13.5}}} \\
& =\frac{5.08}{3.6}=1.69
\end{aligned}
$$

## APPENDIX 12

## RELIABILITY TEST

To test reliability, researcher would use product moment formula, as follow:

$$
\mathrm{r}_{11}=\left(\frac{n}{n-1}\right)\left(\frac{S t^{2}-\sum p q}{S t^{2}}\right)
$$

So:

$$
\begin{aligned}
\mathrm{r}_{11} & =\left(\frac{36}{36-1}\right)\left(\frac{5.40^{2}-\sum 17.38}{5.40^{2}}\right) \\
& =\left(\frac{36}{35}\right)\left(\frac{29.16-\sum 17.38}{29.16}\right) \\
& =(1.02)(0.4) \\
& =0.408
\end{aligned}
$$

After doing the calculation, researcher got $r_{\text {count }}=0.408$ and $n=36$ from product moment $r_{\text {table }}$ was got $r_{\text {table }}=0.413$ with $\alpha 5 \%$, cause $r_{\text {count }}>r_{\text {table }}(0.408>$ $0.235)$. So, instrument test is reliable.

## APPENDIX 13

## PRODUCT MOM ENT r Table

| $\mathbf{N}$ | Taraf |  | $\mathbf{N}$ |  |  | $\mathbf{N}$ | Taraf <br> $5 \%$ | $\begin{gathered} \hline \text { Signif } \\ \hline 1 \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 \% | 1 \% |  | 5 \% | 1 \% |  |  |  |
| 3 | 0,997 | 0,999 | 27 | 0,381 | 0,487 | 55 | 0,266 | 0,345 |
| 4 | 0,950 | 0,990 | 28 | 0,374 | 0,478 | 60 | 0,254 | 0,330 |
| 5 | 0,878 | 0,959 | 29 | 0,367 | 0,470 | 65 | 0,244 | 0,317 |
| 6 | 0,811 | 0,917 | 30 | 0,361 | 0,463 | 70 | 0,235 | 0,306 |
| 7 | 0,754 | 0,874 | 31 | 0,355 | 0,456 | 75 | 0,227 | 0,296 |
| 8 | 0,707 | 0,834 | 32 | 0,349 | 0,449 | 80 | 0,220 | 0,286 |
| 9 | 0,666 | 0,798 | 33 | 0,344 | 0,442 | 85 | 0,213 | 0,278 |
| 10 | 0,612 | 0,765 | 34 | 0,339 | 0,436 | 90 | 0,207 | 0,270 |
| 11 | 0,602 | 0,735 | 35 | 0,334 | 0,430 | 95 | 0,202 | 0,261 |
| 12 | 0,576 | 0,708 | 36 | 0,329 | 0,424 | 100 | 0,195 | 0,256 |
| 13 | 0,553 | 0,684 | 37 | 0,325 | 0,418 | 125 | 0,176 | 0,230 |
| 14 | 0,532 | 0,661 | 38 | 0,320 | 0,413 | 150 | 0,159 | 0,210 |
| 15 | 0,514 | 0,641 | 39 | 0,316 | 0,408 | 175 | 0,148 | 0,194 |
| 16 | 0,497 | 0,623 | 40 | 0,312 | 0,403 | 200 | 0,138 | 0,181 |
| 17 | 0,482 | 0,606 | 41 | 0,308 | 0,398 | 300 | 0,113 | 0,148 |


| 18 | 0,468 | 0,590 | 42 | 0,304 | 0,393 | 400 | 0,098 | 0,128 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | 0,456 | 0,575 | 43 | 0,301 | 0,389 | 500 | 0,088 | 0,115 |
| 20 | 0,444 | 0,561 | 44 | 0,297 | 0,384 | 600 | 0,080 | 0,105 |
|  |  |  |  |  |  |  |  |  |
| 21 | 0,433 | 0,549 | 45 | 0,294 | 0,380 | 700 | 0,074 | 0,097 |
| 22 | 0,423 | 0,517 | 46 | 0,291 | 0,376 | 800 | 0,070 | 0,091 |
| 23 | 0,413 | 0,526 | 47 | 0,288 | 0,372 | 900 | 0,065 | 0,086 |
| 24 | 0,404 | 0,515 | 48 | 0,284 | 0,368 | 1000 | 0,062 | 0,081 |
| 25 | 0,396 | 0,505 | 49 | 0,281 | 0,364 |  |  |  |
| 26 | 0,388 | 0,496 | 50 | 0,279 | 0,361 |  |  |  |
|  |  |  |  |  |  |  |  |  |

## APPENDIX 14

TABLE FOR FINDING MEAN, VARIANTS, AND STANDARD DEVIATION OF EKSPERIMENT4AL CLASS IN PRE-TEST

| $\mathbf{N O}$ | $\mathbf{X i}$ | $\mathbf{F i}$ | $\mathbf{F i X i}$ | $\mathbf{X i}^{\mathbf{2}}$ | $\mathbf{F i X i}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 10 | 1 | 10 | 100 | 100 |
| 2 | 25 | 1 | 25 | 625 | 625 |
| 3 | 30 | 4 | 120 | 900 | 3600 |
| 4 | 35 | 3 | 105 | 1225 | 3675 |
| 5 | 40 | 9 | 360 | 1600 | 14400 |
| 6 | 45 | 3 | 135 | 2025 | 6075 |
| 7 | 50 | 4 | 200 | 2500 | 10000 |
| 8 | 55 | 1 | 55 | 3025 | 3025 |
| 9 | 60 | 5 | 300 | 3600 | 18000 |
| 10 | 65 | 1 | 65 | 4225 | 4225 |
| 11 | 70 | 1 | 70 | 4900 | 4900 |
| 12 | 75 | 2 | 150 | 5625 | 11250 |
| 13 | 85 | 1 | 85 | 7225 | 7225 |
|  | Total | 35 | 1680 | - | 87100 |

1. Mean

$$
\begin{aligned}
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}} \\
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}}=\frac{1680}{36}=46.66
\end{aligned}
$$

2. The variant is;

$$
\begin{aligned}
& \left(S^{2}\right)=\frac{\mathrm{Nx} \sum \mathrm{FiXi}^{2}-\left(\sum \mathrm{FiXi}\right)^{2}}{\mathrm{~N}(\mathrm{~N}-1)} \\
& \left(\mathrm{S}^{2}\right)=\frac{36 \times 87100-(1680)^{2}}{36(36-1)} \\
& \left(\mathrm{S}^{2}\right)=\frac{3135600-2822400}{36.35}
\end{aligned}
$$

$$
\begin{aligned}
& \left(S^{2}\right)=\frac{313200}{1260} \\
& \left(S^{2}\right)=284.57
\end{aligned}
$$

3. Standart deviation

$$
\begin{aligned}
& S=\sqrt{S^{2}} \\
& S=\sqrt{284.57} \\
& S=16.86
\end{aligned}
$$

## APPENDIX 15

TABLE FOR FINDING MEAN, VARIANTS, AND STANDARD DEVIATION OF CONTROL CLASS IN PRE-TEST

| $\mathbf{N O}$ | $\mathbf{X i}$ | $\mathbf{F i}$ | $\mathbf{F i X i}$ | $\mathbf{X i}^{\mathbf{2}}$ | $\mathbf{F i X i}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 25 | 1 | 25 | 625 | 625 |
| 2 | 30 | 4 | 120 | 900 | 3600 |
| 3 | 35 | 3 | 105 | 1225 | 3675 |
| 4 | 40 | 9 | 360 | 1600 | 14400 |
| 5 | 45 | 2 | 90 | 2025 | 4050 |
| 6 | 50 | 6 | 300 | 2500 | 15000 |
| 7 | 55 | 1 | 55 | 3025 | 3025 |
| 8 | 60 | 4 | 240 | 3600 | 14400 |
| 9 | 65 | 2 | 130 | 4225 | 8450 |
| 10 | 70 | 1 | 70 | 4900 | 4900 |
| 11 | 75 | 2 | 150 | 5625 | 11250 |
| 12 | 85 | 1 | 85 | 7225 | 7225 |
|  | Tota | 36 | 1730 | - | 90600 |

1. Mean

$$
\begin{aligned}
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}} \\
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}}=\frac{1730}{36}=48,05
\end{aligned}
$$

2. Varian

The variant is;

$$
\left(S^{2}\right)=\frac{N x \sum F i X i^{2}-\left(\sum F i X i\right)^{2}}{N(N-1)}
$$

$$
\begin{aligned}
& \left(S^{2}\right)=\frac{36 \times 90600-(1730)^{2}}{22(22-1)} \\
& \left(S^{2}\right)=\frac{3261600-2992900}{36(35)} \\
& \left(S^{2}\right)=\frac{268700}{1260} \\
& \left(S^{2}\right)=213.25
\end{aligned}
$$

3. Standart deviation

$$
\begin{aligned}
& S=\sqrt{S^{2}} \\
& S=\sqrt{213.25} \\
& S=14.60
\end{aligned}
$$

## APPENDIX 16

## THE EXPERIMENTAL GROUP IN POST-TEST

1. The score of experimental group from low score to high score.

| 75 | 80 | 85 | 90 | 95 | 85 | 95 | 90 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 100 | 80 | 95 | 85 | 95 | 90 | 85 |  |
| 85 | 80 | 75 | 85 | 85 | 85 | 85 |  |
| 80 | 80 | 85 | 90 | 95 | 90 | 90 |  |
| 80 | 85 | 90 | 90 | 90 | 85 | 85 |  |

2. High score $=100$
3. Low score $=75$
4. Range $=$ high score - low score

$$
=100-75=25
$$

5. Total of Classes $=1+3.3 \log (\mathrm{n})$
$=1+3.3 \log (36)$
$=1+3.3(1.55)$
$=1+5.115$
$=6.115$
$=6$
6. Interval (i)

$$
\begin{aligned}
\mathrm{i} & =\frac{R}{B K}=\frac{25}{6}=4.16 \\
& =4
\end{aligned}
$$

| Interval | Fi | Xi | Fixi |
| :---: | :---: | :---: | :---: |
| $75-79$ | 2 | 77 | 154 |
| $79-83$ | 6 | 81 | 486 |
| $83-87$ | 13 | 85 | 1105 |
| $87-91$ | 9 | 89 | 801 |
| $91-95$ | 5 | 93 | 465 |
| $95-99$ | 0 | 97 | 0 |
| $99-103$ | 1 | 101 | 101 |
| $\mathrm{i}=4$ | 36 |  | 3112 |

7. $\mathrm{Me}=\mathrm{Bb}+\mathrm{i}\left(\frac{n / 2-F}{f m}\right)$
$\mathrm{Me}=$ Median
$\mathrm{Bb}=$ Low limit of the interval median conceives Me
Fm = Frequency of class conceives Me
F = Frequency of cumulative before interval of classes conceives Me
i = Length of classes
n $\quad=$ Total of sample
Position of Me in the interval of classes is experimental, as follow:

$$
\begin{array}{ll}
\mathrm{Bb} & =91 \\
\mathrm{~F} & =9 \\
\mathrm{fm} & =5 \\
\mathrm{i} & =4 \\
\mathrm{n} & =36
\end{array}
$$

So :

$$
\begin{aligned}
\mathrm{Me}= & \mathrm{Bb}
\end{aligned} \begin{aligned}
& \mathrm{i}\left(\frac{n / 2-F}{f m}\right) \\
&=91+4\left(\frac{18-9}{5}\right) \\
&=91+4(9 / 5) \\
&=91+4(1.8) \\
&=91+7.2 \\
&=98.2
\end{aligned}
$$

8. Modus $=85$

Table For Finding Mean, Variants, and Standard Deviation of Experiment Class in Post Test

| $\mathbf{N O}$ | $\mathbf{X i}$ | $\mathbf{F i}$ | $\mathbf{F i X i}$ | $\mathbf{X i}^{\mathbf{2}}$ | $\mathbf{F i X i}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 75 | 2 | 150 | 5625 | 11250 |
| 2 | 80 | 6 | 480 | 6400 | 38400 |
| 3 | 85 | 13 | 1105 | 7225 | 93925 |
| 4 | 90 | 9 | 810 | 8100 | 72900 |
| 5 | 95 | 5 | 475 | 9025 | 45125 |
| 6 | 100 | 1 | 100 | 10000 | 10000 |
|  | Total | 36 | 3120 | - | 271600 |

1. Mean

$$
\begin{aligned}
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}} \\
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}}=\frac{3120}{36}=86.66
\end{aligned}
$$

2. Varian

The variant is;

$$
\begin{aligned}
& \left(S^{2}\right)=\frac{N x \sum F_{i X i}{ }^{2}-\left(\sum \mathrm{FiXi}\right)^{2}}{N(N-1)} \\
& \left(S^{2}\right)=\frac{36 \times 271600-(3120)^{2}}{36(36-1)} \\
& \left(S^{2}\right)=\frac{9777600-9734400}{36(35)} \\
& \left(S^{2}\right)=\frac{43200}{1260} \\
& \left(S^{2}\right)=34.285
\end{aligned}
$$

3. Standart deviation

$$
\begin{aligned}
& S=\sqrt{S^{2}} \\
& S=\sqrt{34.285} \\
& S=5.85
\end{aligned}
$$

## APPENDIX 17

## THE CONTROL GROUP IN POST-TEST

1. The score of control group from low score to high score

| 75 | 75 | 80 | 90 | 90 | 70 | 80 | 90 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 80 | 80 | 90 | 80 | 90 | 90 | 80 |  |
| 85 | 80 | 75 | 85 | 85 | 90 | 80 |  |
| 75 | 80 | 85 | 90 | 90 | 80 | 85 |  |
| 75 | 85 | 90 | 90 | 90 | 80 | 85 |  |

2. High score $=90$
3. Low score $=70$
4. Range $=$ High score - low score

$$
=90-70=20
$$

5. Total of Classes $=1+3.3 \log (n)$

$$
=1+3.3 \log (36)
$$

$$
=1+3.3(1.55)
$$

$$
=1+5.115
$$

$$
=6.115
$$

$$
=6
$$

6. Interval (i)

$$
\begin{aligned}
\mathrm{i} & =\frac{R}{B K}=\frac{20}{6}=3.33 \\
& =4
\end{aligned}
$$

| Interval | Fi | Xi | Fixi |
| :---: | :--- | :--- | :--- |
| $70-74$ | 1 | 72 | 72 |
| $78-78$ | 5 | 76 | 380 |
| $82-86$ | 11 | 80 | 880 |
| $86-90$ | 12 | 87 | 588 |
|  |  |  |  |
| $\mathrm{i}=4$ | 36 |  | 2964 |

7. $\mathrm{Me}=\mathrm{Bb}+\mathrm{i}\left(\frac{n / 2-F}{f m}\right)$
$\mathrm{Bb}=82$
$\mathrm{F}=11$
$\mathrm{fm}=7$
i $=4$
n $=36$

$$
\begin{aligned}
\mathrm{Me} & =\mathrm{Bb}+\mathrm{i}\left(\frac{n / 2-F}{f m}\right) \\
& =82+4\left(\frac{18-11}{7}\right) \\
& =82+4(7 / 7) \\
& =82+4(1)
\end{aligned}
$$

$$
\begin{aligned}
& =82+4 \\
& =86
\end{aligned}
$$

8. Modus $=80$

Table For Finding Mean, Variants, And Standard Deviation of Control Class in Post-Test

| $\mathbf{N O}$ | $\mathbf{X i}$ | $\mathbf{F i}$ | $\mathbf{F i X i}$ | $\mathbf{X i}^{\mathbf{2}}$ | $\mathbf{F i X i}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 70 | 1 | 70 | 4900 | 4900 |
| 2 | 75 | 5 | 375 | 5625 | 28125 |
| 3 | 80 | 11 | 880 | 6400 | 70400 |
| 4 | 85 | 7 | 592 | 7225 | 50575 |
| 5 | 90 | 12 | 1080 | 8100 | 97200 |
|  | Total | 36 | 2997 | - | 251200 |

1. Mean

$$
\begin{aligned}
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}} \\
& \overline{\mathrm{X}}=\frac{\sum \mathrm{FiXi}}{\mathrm{Fi}}=\frac{2997}{36}=83.25
\end{aligned}
$$

2. Varian

The variant is;

$$
\begin{aligned}
& \left(S^{2}\right)=\frac{N x \sum F_{i X i}{ }^{2}-\left(\sum \mathrm{FiXi}\right)^{2}}{N(N-1)} \\
& \left(S^{2}\right)=\frac{36 \times 251200-(2997)^{2}}{36(36-1)} \\
& \left(S^{2}\right)=\frac{9043200-8982009}{36(35)}
\end{aligned}
$$

$$
\begin{aligned}
& \left(S^{2}\right)=\frac{61191}{1260} \\
& \left(S^{2}\right)=48.56
\end{aligned}
$$

3. Standart deviation

$$
\begin{aligned}
& S=\sqrt{S^{2}} \\
& S=\sqrt{48.56} \\
& S=6.96
\end{aligned}
$$

## APPENDIX 18

THE NORMALITY OF EXPERIMENT CLASS IN PRE-TEST

| No | Xi | Fi | F Kum | Zi | $\mathrm{F}(\mathrm{Zi})$ | $\mathrm{S}(\mathrm{Zi})$ | (Fzi)-(Szi) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 10 | 1 | 1 | -2.17 | 0.0150 | 0.02 | -0.005 |
| 2 | 25 | 1 | 2 | -1.29 | 0.0985 | 0.05 | $\mathbf{0 . 0 4 8 5}$ |
| 3 | 30 | 4 | 6 | -0.98 | 0.1635 | 0.16 | -0.0265 |
| 4 | 35 | 3 | 9 | -0.69 | 0.2451 | 0.25 | -0.0049 |
| 5 | 40 | 9 | 18 | -0.39 | 0.3483 | 0.5 | -0.8599 |
| 6 | 45 | 3 | 21 | -0.09 | 0.4641 | 0.58 | -0.9147 |
| 7 | 50 | 4 | 25 | 0.19 | 0.5753 | 0.69 | -0.1517 |
| 8 | 55 | 1 | 26 | 0.49 | 0.6879 | 0.72 | -0.1147 |
| 9 | 60 | 5 | 31 | 0.79 | 0.7852 | 0.86 | -0.0321 |
| 10 | 65 | 1 | 32 | 1.08 | 0.8599 | 0.88 | -0.0748 |
| 11 | 70 | 1 | 33 | 1.37 | 0.9147 | 0.91 | 0.0047 |
| 12 | 75 | 2 | 35 | 1.68 | 0.9535 | 0.97 | -0.0165 |
| 13 | 85 | 1 | 36 | 2.27 | 0.9883 | 1 | -0.0117 |

To find Z score by using this formula

$$
\mathrm{Zi}=\frac{\mathrm{xi}-\overline{\mathrm{x}}}{\mathrm{~S}}
$$

To find $\mathrm{S}(\mathrm{Zi})$ score by using this formula:
$S(Z i)=\frac{\text { F.kum }}{N}$

THE NORMALITY OF CONTROL CLASS IN PRE-TEST

| No | Xi | Fi | F Kum | Zi | $\mathrm{F}(\mathrm{Zi})$ | $\mathrm{S}(\mathrm{Zi})$ | (Fzi)-(Szi) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 25 | 1 | 1 | -1.57 | 0.0582 | 0.02 | $\mathbf{0 . 0 3 8 2}$ |
| 2 | 30 | 4 | 5 | -1.23 | 0.1093 | 0.13 | -0.0207 |
| 3 | 35 | 3 | 8 | -0.89 | 0.1867 | 0.22 | -0.0333 |
| 4 | 40 | 9 | 17 | -0.55 | 0.2912 | 0.47 | -0.1788 |
| 5 | 45 | 2 | 18 | -0.20 | 0.4207 | 0.52 | -0.0993 |
| 6 | 50 | 6 | 25 | 0.13 | 0.5517 | 0.69 | -0.1383 |
| 7 | 55 | 1 | 26 | 0.47 | 0.6808 | 0.72 | -0.0393 |
| 8 | 60 | 4 | 30 | 0.81 | 0.7910 | 0.83 | -0.039 |
| 9 | 65 | 2 | 32 | 1.16 | 0.8770 | 0.88 | -0.003 |
| 10 | 70 | 1 | 33 | 1.50 | 0.9332 | 0.91 | 0.0232 |
| 11 | 75 | 2 | 35 | 1.84 | 0.9671 | 0.97 | -0.0029 |
| 12 | 85 | 1 | 36 | 2.53 | 0.9943 | 1 | -0.0057 |

To find Z score by using this formula
$\mathrm{Zi}=\frac{\mathrm{xi}-\overline{\mathrm{x}}}{\mathrm{S}}$

To find $\mathrm{S}(\mathrm{Zi})$ score by using this formula:
$S(Z i)=\frac{\text { F.kum }}{N}$

## APPENDIX 19

THE NORMALITY OF EXPERIMENT CLASS IN POST-TEST

| No | Xi | Fi | F Kum | Zi | $\mathrm{F}(\mathrm{Zi})$ | $\mathrm{S}(\mathrm{Zi})$ | (Fzi)-(Szi) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 75 | 2 | 2 | -1.99 | 0.0233 | 0.05 | -0.0267 |
| 2 | 80 | 6 | 8 | -1.13 | 0.1293 | 0.22 | -0.0907 |
| 3 | 85 | 13 | 21 | -0.28 | 0.3897 | 0.58 | $\mathbf{- 0 . 1 9 0 3}$ |
| 4 | 90 | 9 | 30 | 0.57 | 0.7175 | 0.83 | -0.1125 |
| 5 | 95 | 5 | 35 | 1.42 | 0.9222 | 0.97 | -0.0478 |
| 6 | 100 | 1 | 36 | 2.28 | 0.9487 | 1 | -0.0513 |

To find Z score by using this formula
$Z i=\frac{x i-\bar{x}}{S}$
To find $\mathrm{S}(\mathrm{Zi})$ score by using this formula:
$S(Z i)=\frac{\text { F.kum }}{N}$
THE NORMALITY OF CONTROL CLASS IN POST-TEST

| No | Xi | Fi | F Kum | Zi | $\mathrm{F}(\mathrm{Zi})$ | $\mathrm{S}(\mathrm{Zi})$ | (Fzi)-(Szi) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 70 | 1 | 1 | -1.90 | 0.0287 | 0.02 | $\mathbf{0 . 0 0 8 7}$ |
| 2 | 75 | 5 | 6 | -1.18 | 0.1190 | 0.16 | -0.041 |
| 3 | 80 | 11 | 17 | -0.46 | 0.3228 | 0.47 | -0.1472 |
| 4 | 85 | 7 | 24 | 0.25 | 0.5987 | 0.66 | -0.0613 |
| 5 | 90 | 12 | 36 | 0.96 | 0.8315 | 1 | -0.1685 |

To find Z score by using this formula

$$
\mathrm{Zi}=\frac{\mathrm{xi}-\overline{\mathrm{x}}}{\mathrm{~S}}
$$

To find $\mathrm{S}(\mathrm{Zi})$ score by using this formula:

$$
S(Z i)=\frac{\text { F.kum }}{N}
$$

## APPENDIX 20

PERCENTAGE POINTS OF THE T DISTRIBUTION

| One pabil probabilies <br> two  tail Tails |  |  |  |  |  |  |  |  | 0.10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 0.20 | 0.10 | 0.05 | 0.02 | 0.01 | 0.002 | 0.001 |  |  |
| D | 1 | 3.078 | 6.314 | 12.71 | 31.82 | 63.66 | 318.3 | 637 | 1 |
| E | 2 | 1.886 | 2.920 | 4.303 | 6.965 | 9.925 | 22.330 | 31.6 | 2 |
| G | 3 | 1.638 | 2.353 | 3.182 | 4.541 | 5.841 | 10.210 | 12.92 | 3 |
| R | 4 | 1.533 | 2.132 | 2.776 | 3.747 | 4.604 | 7.173 | 8.610 | 4 |
| E | 5 | 1.476 | 2.015 | 2.571 | 3.375 | 4.032 | 5.893 | 6.869 | 5 |
| E | 6 | 1.440 | 1.943 | 2.447 | 3.143 | 3.707 | 5.208 | 5.959 | 6 |
| S | 7 | 1.415 | 1.895 | 2.365 | 2.998 | 3.499 | 4.785 | 5.408 | 7 |
|  | 8 | 1.397 | 1.860 | 2.306 | 2.896 | 3.355 | 4.501 | 5.041 | 8 |
| O | 9 | 1.383 | 1.833 | 2.262 | 2.821 | 3.250 | 4.297 | 4.781 | 9 |
| F | 10 | 1.372 | 1.812 | 2.228 | 2.764 | 3.169 | 4.144 | 4.587 | 10 |
|  | 11 | 1.363 | 1.796 | 2.201 | 2.718 | 3.106 | 4.025 | 4.437 | 11 |
| F | 12 | 1.356 | 1.782 | 2.279 | 2.682 | 3.055 | 3.930 | 4.318 | 12 |
| R | 13 | 1.350 | 1.771 | 2.160 | 2.650 | 3.012 | 3.852 | 4.221 | 13 |
| E | 14 | 1.345 | 1.761 | 2.145 | 2.624 | 2.977 | 3.787 | 4.140 | 14 |
| E | 15 | 1.341 | 1.753 | 2.131 | 2.602 | 2.947 | 3.733 | 4.073 | 15 |
| D | 16 | 1.337 | 1.746 | 2.120 | 2.583 | 2.921 | 3.686 | 4.015 | 16 |
| O | 17 | 1.333 | 1.740 | 2.110 | 2.567 | 2.898 | 3.646 | 3.965 | 17 |
| M | 18 | 1.330 | 1.734 | 2.101 | 2.552 | 2.878 | 3.610 | 3.922 | 18 |
|  | 19 | 1.328 | 1.729 | 2.093 | 2.539 | 2.861 | 3.579 | 3.883 | 19 |
|  | 20 | 1.325 | 1.725 | 2.086 | 2.528 | 2.845 | 3.552 | 3.850 | 20 |
|  | 21 | 1.323 | 1.721 | 2.080 | 2.518 | 2.831 | 3.527 | 3.719 | 21 |
|  | 22 | 1.321 | 1.717 | 2.074 | 2.508 | 2.819 | 3.505 | 3.792 | 22 |
|  | 23 | 1.319 | 1.714 | 2.069 | 2.500 | 2.807 | 3.485 | 3.768 | 23 |
|  | 24 | 1.318 | 1.711 | 2.064 | 2.492 | 2.797 | 3.467 | 3.745 | 24 |
|  | 25 | 1.316 | 1.708 | 2.060 | 2.485 | 2.787 | 3.450 | 3.725 | 25 |
|  | 26 | 1.315 | 1.706 | 2.056 | 2.479 | 2.779 | 3.435 | 3.707 | 26 |
|  | 27 | 1.314 | 1.703 | 2.052 | 2.473 | 2.771 | 3.421 | 3.690 | 27 |
|  | 28 | 1.313 | 1.701 | 2.048 | 2.467 | 2.763 | 3.408 | 3.674 | 28 |
|  | 29 | 1.311 | 1.699 | 2.045 | 2.462 | 2.756 | 3.396 | 3.659 | 29 |
|  | 30 | 1.310 | 1.697 | 2.042 | 2.457 | 2.750 | 3.385 | 3.646 | 30 |
|  | 32 | 1.309 | 1.694 | 2.037 | 2.449 | 2.738 | 3.365 | 3.622 | 32 |
|  | 34 | 1.307 | 1.691 | 2.032 | 2.441 | 2.728 | 3.348 | 3.601 | 34 |
|  | 36 | 1.306 | 1.688 | 2.028 | 2.434 | 2.719 | 3.333 | 3.582 | 36 |


|  | 38 | 1.304 | 1.686 | 2.024 | 2.429 | 2.712 | 3.319 | 3.566 | 38 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 40 | 1.303 | 1.684 | 2.021 | 2.423 | 2.704 | 3.307 | 3.551 | 40 |
|  | 42 | 1.302 | 1.682 | 2.018 | 2.418 | 2.698 | 3.296 | 3.538 | 42 |
|  | 44 | 1.301 | 1.680 | 2.015 | 2.414 | 2.692 | 3.286 | 3.526 | 44 |
|  | 46 | 1.300 | 1.679 | 2.013 | 2.410 | 2.687 | 3.277 | 3.515 | 46 |
|  | 48 | 1.299 | 1.677 | 2.011 | 2.407 | 2.682 | 3.269 | 3.505 | 48 |
|  | 50 | 1.299 | 1.676 | 2.009 | 2.403 | 2.678 | 3.261 | 3.496 | 50 |
|  | 55 | 1.297 | 1.673 | 2.004 | 2.396 | 2.668 | 3.245 | 3.476 | 55 |
|  | 60 | 1.296 | 1.671 | 2.000 | 2.390 | 2.660 | 3.232 | 3.460 | 60 |
|  | 65 | 1.295 | 1.669 | 1.997 | 2.385 | 2.654 | 3.220 | 3.447 | 65 |
|  | $\mathbf{7 0}$ | $\mathbf{1 . 2 9 4}$ | $\mathbf{1 . 6 6 7}$ | $\mathbf{1 . 9 9 4}$ | $\mathbf{2 . 3 8 1}$ | $\mathbf{2 . 6 4 8}$ | $\mathbf{3 . 2 1 1}$ | $\mathbf{3 . 4 3 5}$ | $\mathbf{7 0}$ |
|  | 80 | 1.292 | 1.664 | 1.990 | 2.374 | 2.639 | 3.195 | 3.416 | 80 |
|  | 100 | 1.290 | 1.660 | 1.984 | 2.364 | 2.626 | 3.174 | 3.390 | 100 |
|  | 150 | 1.287 | 1.655 | 1.976 | 2.351 | 2.609 | 3.145 | 3.357 | 150 |
|  | 200 | 1.286 | 1.653 | 1.972 | 2.345 | 2.601 | 3.131 | 3.340 | 200 |
| Two | Tails | 0.20 | 0.10 | 0.05 | 0.02 | 0.01 | 0.002 | 0.001 |  |
| One | Tail | 0.10 | 0.05 | 0.025 | 0.01 | 0.005 | 0.001 | 0.0005 |  |

Tail probabilities

## CURRICULUM VITAE

A. Identity

| Name | $:$ SRI NARDANI HSB |
| :--- | :---: |
| Reg.No | $: 093400097$ |

Place and Birthday : Kisaran and 16 September 1990
Sex : Female
Religion : Islam
Address : Padang Matinggi
Parents
Father's name : M. Haspan Hsb
Mother's name : Suriani
B. Educational Background

1. Primary School : at SDN 014678 Kisaran (2003)
2. Junior High School : at MTs. Kisaran Barat (2006)
3. Senior High School : at MAS Kisaran Selatan (2009)
4. Institute : at Educational English Department of Tarbiyah Faculty at IAIN Padangsidimpuan (2014)

## CHAPTER I

## INTRODUCTION

## A. Background of the Problem

English is one of the foreign languages in Indonesia that is provided as compulsory subject to students of elementary school, junior high school, senior high school, and even in higher education level. In some private school it has already been given to the kindergarten/third year's pupil of primary education. In studying English, there are four basic skills that must be mastered. They are listening, speaking, reading, and writing. Moreover, in al-Qur'an Allah invites the human to learn as written:


Meaning : "Recite in the name of your lord who created, created man from a clot if congealed blood recite: and your lord is most generous who taught by the pen, taught man what he didn't know ". ${ }^{1}$

Educational field has rapidly grown up. English becomes a tool of communication around the world including in educational. Government realizes the important of English language and in Indonesia it is foreign language. As a forward orientation, Indonesian Government had published Indonesia roles

[^0](UUD) No. 2 year in 1989 about national educational system to develop human resource in educational world. ${ }^{2}$ So, English Lesson is very important to .the students.

English has mushroomed in every part of the world and become a universal language because it is used in almost all countries, even in number of countries have become the primary language. It has become the standard language used in everyday life such as in government, social, and other formal institution.

There is one of base that must be dominated that is vocabulary because if the people have not vocabulary mastery, they cannot dominate the four skills (listening, reading, speaking and writing). The vocabulary is keys in dominating the four skills. The vocabulary is necessary for everybody in variety of purposes and needs, but there was problematic at SMK Negeri 1 Padangsidimpuan in vocabulary mastery. The actual fact was revealed in following illustration.

Students' English achievement was low. It is seen from the result of study when I was PPL in SMK Negeri 1 Padangsidimpuan reveals the average of students' English achievement does not fulfill the expectation. The score was low. Based on UU Sisdiknas, passing grade of English in senior high school was 7.5 for all subject and skills includes English. The data found in SMK Negeri 1 Padangsidimpuan reveals the average of students' value of grade XI: 60 and 65. It means do not reach the passing grade yet.

[^1]In addition, it was found that students were seldom practice for example speaking or reading book when I was PPL in SMK Negeri 1 Padangsidimpuan. They are choosing playing games than learning English, that they are not interested in English.

Accordingly, the problems above need to be solved in order to avoid flaws in students as product of education. There is some strategies that can enhance students' ability in reading such as vocabulary mastery which is facilitates students can understand what the meaning words or sentences in the book.

The researcher chooses to employ vocabulary mastery. At least four reasons are available as background of the choice that is consideration of student learning materials. Below the researcher reveals the reason.

First, it was found that student's learning materials are textbook or English book. English book contains all the text or words and sentences are English so if the students have not vocabulary mastery; they will not understand what they read. Accordingly, by understanding English text by through vocabulary, a reader will be able to understand the whole text.

Second, learning the vocabulary of a foreign language presents the learner with firstly making the correct connections when understanding the language between the form and the meaning of words including discriminating the meanings of closely related words. Secondly, when producing the language, using the correct form of a word for the meaning intended.

The third, the vocabulary as one of the elements of language is important to study, because without enough vocabulary mastery, the ability to communicate and convey cannot be established.

The last, the teacher does not use the strategy how the students can be interested in studying. If the students are interested in studying; they will understand easily. The teachers use conventional method only in teaching English.

The researcher tried to apply a strategy that is watching film. The researcher gave reason why choice to apply this strategy, because of watching film that the students will had been feel serious but they will be relaxing. So they can receive some vocabularies easily. As stated Hakim said watching the film of Hollywood can be improving the vocabulary mastery and to see the gestures or facial expression can be help to understand the film of Hollywood. ${ }^{3}$ Thus the researcher did the research by applying watching film.

Based on explanation above, therefore the researcher interest to research is The Effect of Watching Film to Students' Vocabulary Mastery at Grade XI SMK Negeri 1 Padangsidimpuan.

## B. Identification of the Problem

Based on the background above, the problems of students' vocabulary mastery at SMK Negeri 1 Padangsidimpuan are: 1) The score is low, 2) Seldom

[^2]practice, 3) Students' low achievement in learning English, and 4) the teacher usually use conventional method that make students' low achievement in learning English.

## C. Limitation of the Problem

The researcher gave the limitation in this research. The researcher focused on strategy that by using film and the problem was also limited on vocabulary mastery; it is about teaching and learning vocabulary. The vocabulary focused to noun, verb, adjective and adverb.

## D. Definition of Operational Variable

## 1. Watching Film

a. Watching derived watch (verb1), verb 1 plus "ing" becomes present continuous. As stated Marcella Frank said if verb 1 plus "ing" can be become gerund too. ${ }^{4}$ A "subject" that is contained within the gerund phrase takes inflected possessive form, prepositional form, or unchanged form. The "object" of gerund is unchanged or is contained within an "of" phrase. ${ }^{5}$

[^3]b. Film According to Hornby, the film is a series of moving pictures recorded with sound that tells a story, shown on television or at the cinema/movie theater. ${ }^{6}$

So, watching film is paying attention to a series of moving picture recorded with sound that tells a story. This research uses the infocus for watching film.
2. Students' Vocabulary Mastery
a. Student is a person who is studying at a school, college, university, etc. ${ }^{7}$ The researcher concludes that the student is a person on grade of elementary junior and senior high school not only on the formal educational institution but also on the informal educational.
b. Vocabulary is one of the language aspects which should be learnt. Learning vocabulary is important because we are able to speak, write, and listen nicely have to know vocabulary first. ${ }^{8}$ According to Hornby, the vocabulary is a list of words with their meanings, especially in a book for learning foreign language. ${ }^{9}$
c. Mastery is great knowledge about or understanding of a particular thing. ${ }^{10}$

[^4]So, students' vocabulary mastery is the students that master vocabulary. The vocabulary is in English such as; verb, adjective, noun, pronoun, adverb, conjunction, interjection, and preposition.

## E. The Formulation of the Problem

The formulation of the problem of this research as follow: "is there a significant effect of watching film to students' vocabulary mastery at grade XI SMK Negeri 1 Padangsidimpuan"

## F. The Aim of the Research

The purpose of research was to get the empirical description about the effect of watching films to students' vocabulary mastery at grade XI SMK Negeri 1 Padangsidimpuan.

## G. The Uses of the Research

The uses of this research are:

1. As an information for English teacher in order to develop the students by watching English film.
2. As information for headmaster in order to develop the teachers' teaching strategy in teaching vocabulary.
3. As the information for other researchers in order to do more research related to this problem
4. As reference or literatures for researcher in order to enrich the science in the field language teaching.

## H. Significances of the Research

This research was expected to be useful at least in three domains, they were for the science of education, for the teachers and the future researchers. The following illustration described the significance for these parties. First, this research was given the contribution and enriched the science that field was researched, and complete this study that is empty. Second, this teacher was useful for teachers as source teaching. It can be improving students' the process and the study result. Finally, this researcher can be used by the future researchers as reference or literature and source for researching the other subjects in the field of language teaching.

## I. Systematic of the Thesis

The systematic of this research is divided into five chapters. Each chapter consists of many sub chapters with detail as follow: in chapter one, it is consist of background of the problem, identification of the problem, limitation of the problem, definition of operational variables, formulation of the problem, aims of research, significances of the research, and outline of the thesis.

In chapter two, it is consist of the theoretical description, which consists of sub chapters such as theoretical consists of description of media (film), and description of vocabulary. Then, review of related findings, conceptual of frame work and hypothesis.

In chapter three, it is consist of research methodology which consist of time and place of the research, research methodology, population and sample,
instrument of research, the techniques of data collection and the last the techniques of data analysis and outline of the thesis.

In chapter four, it is the result of the research talking about the analysis of data. This chapter four, it is consist of description of data, hypothesis testing, discussion and the threats of research.

Finally, in chapter five consist of conclusion that is giving conclusion about the result of research and suggestion that given suggestion to students and teacher by researcher.

## CHAPTER II

## THE THEORETICAL DESCRIPTION

## A. Theoretical Description

## 1. Media

## a. Definition of Media and Film

Media derived from the word medius is mediation, mediator, and middle. According Arsyad from Gerlach \& Ely, the media that if it is understood guide line is human, matter, or creation that make the students to be able get the knowledge, skills, and attitudes. In the meaning, teachers, books, and the tools of school are media. ${ }^{1}$

Other hand media is mediation or mediator of message from the sender to the receiver of message. As stated Arsyad from Briggs, the media are all of physicals that they can give the message for the students (e.g., book, film, and cassette). ${ }^{2}$

Thus, it can be concluded that media is the students' help tool so that they can be applying that they have studied.

[^5]
## b. Kinds of Media

Media is very important to use in learning process, teacher can use many kinds of media, and they are: ${ }^{3}$

1) Text is public media that used; the media is shown in the all format, such as book and blackboard.
2) Audio include a certain that it can be heard, such as radio and tape recorder.
3) Visual includes diagram, poster, picture and cartoon.
4) Video is the media that show movement, such as DVD, computer animation, and film.
5) Engineering has a round three dimension that can be tough and hold by the students, such as plastic model.
6) People can be teacher or scholar scientist.
c. The Principles of Using and Developing of Learning Media

As stated Arsyad from Leshin, the principles of using and developing of learning media can be divided by five, they are: media as base of human, publication, visual, audiovisual, and computer. ${ }^{4}$

1) Media as base of human

Media as base of human is the most oldest of media that used to send and communicate the information. This media has benefit, if

[^6]we have the purpose is for changing the students' attitude in education, for example teacher, instructor, and the group action. As teacher that can direct and influence the process of learning. The teacher or instructor can combine the messages for the first group specifically, and after that the messages are combined as need of learning.

Some the ways that used as interesting the attention
a) To begin the teaching is to focus on some issues that it is relevant with students,
b) To inform toward students what wanted and they can do the action, and
c) To begin for submitting the questions or problems that focus the attention toward the information that it must be studied by students.
2) Media as base of publication

The matter of teaching as base of publication is known textbook, magazine, and guide book.
3) Media as base of visual

Media as base of visual holds the important character in the process of learning. This media can speed up the understanding and strengthen the memory. The form of visual can be divided by four, they are:
a) Picture as image, photo, painting that they show a something.
b) Diagram that draw the relationship of concept, organization, and the structure of matter content
c) Map that show the relationship of room among of elements in the matter content.
d) Graphic as table, chart that give the pictures or numbers.
4) Media as base of audiovisual

The media as base visual fuse in using the sound. For example, video, film, slide with tape, and television. One among of the important action in media as base Audio-visual is writing the manuscript and storyboard that need some preparations, and research.
5) Media as base of computer

The computer has different function in education and training. The using of computer as media of learning generally as the process of instructional, they are:
a) Applying, organizing, arranging, and scheduling of teaching,
b) Evaluating the students,
c) Collecting the students' data,
d) Doing statistic analysis as the data of learning, and
e) Making the developing note of learning.

This research uses the audiovisual media. Audiovisual is the media that in addition to contain sound and contain the picture too as film and video. ${ }^{5}$ In this research, the researcher wants research is the effect of watching film to students in the process of learning and teaching.

## d. Process of Learning and Teaching as Process Communication

The process of learning and teaching is process of communication that the process of message delivery from the source of message through the media to the message receiver. The media is among of source of studying that can be given the message, help to surpass it. The different style of studying, interest, intelligence, and handicap can be help with using the media. The media can be books, photo or picture, video, and film. ${ }^{6}$

According to Pike, to add the media of visual in learning will raise the memory from $14 \%$ to $38 \%$. The research shows improvement until $200 \%$ when the vocabulary is taught with using the media of visual. ${ }^{7}$

The available media become the process communication is success. Media helps process of learning and teaching.

[^7]
## e. Media Film

1) Definition of film

According Hornby, ${ }^{8}$ the film is a series of moving pictures recorded with sound that tell a story, shown on television or the cinema/movie theater.
2) Advantages and Disadvantages of Film

There are some advantages of using media film in the process of teaching and learning. Nasution said that the advantages of film are:
a) The film is very good for explaining a process of teaching and learning,
b) Every student can be learning the something from the film that is smart or not smart,
c) History film can be drawing the events in the past,
d) The film can be bringing the students from country to other country, and
e) The film can be repeated for adding the explaining. ${ }^{9}$

Film must be chosen that the lesson will be given to students is suitable. The teacher must be more known an available film and the film must be seen by the teacher before the students see it.

[^8]If the teacher does not see the film that it will be dangerous to students, for example in the film there is negative that pornographic, it is not good to students. If the teacher gives it without given the tasks to students and they is not serious again for studying. Thus, they are some disadvantages of film to students.

## 2. Vocabulary Mastery

## a. Definition of vocabulary Mastery

Vocabulary is one of the language aspects which should be learnt. Learning vocabulary is important because we are able to speak, write, and listen nicely have to know vocabulary first. A person said to know a word if they can recognize its meaning when they see it. It means that in learning vocabulary we have to know the meaning of it and also understand and can use it in sentence context. In learning vocabulary automatically we have to know the meaning of words itself and can use it in sentences. ${ }^{10}$

As stated Horward and Etienne, the vocabulary is a representative collection of the words that exist in English language.

Wilkins states that vocabulary learning is learning to discriminate progressing the meaning of words in the target language from the meanings of their nearest 'equivalent' in the mother tongue. It is also learning to make the most appropriate lexical choices for particular

[^9]linguistic and situational context. ${ }^{11}$ Or other hand, the vocabulary is a representative collection of the words that exist in English language. ${ }^{12}$

It means that vocabulary is a collection of English words. So, researcher concludes that vocabulary mastery is a skill in mastering vocabulary, specifically in mastering English vocabulary to understand reading, writing, speaking, and listening.

## b. Kinds of Vocabulary

Surely, there are some words in a sentence and those collections of words include to the vocabulary because vocabulary is a list or collections of words arranged in alphabetical order and explained. Those words could be Noun which is usually used as subject or object, Verb or it is usually used as predicate in a sentence, Adverbs and soon. The sentence may be further divided according to the functions of each word has in the subject - predicate relationship - each of these functions is classified as a different part of speech. They are: ${ }^{13}$

1) Noun

It is one of most important part of speech. It is arrangement with the verb helps to form the sentence core which is essential to

[^10]every complete sentence. It could be the name of person, place, thing or idea. Example:
a) It is a magazine.
b) There is an umbrella.
2) Verb

It is the word which expresses an action, condition or existence. Example:
a) Mr. Herman is teaching mathematic.
b) The students are playing football.
3) Adjective

It is a word used to describe or qualify nouns. Example :
a) Mr. Herman is clever.
b) This magazine is expensive.
4) Adverb

It is a word to modify a verb, an adjective or another adverb or word used to explain how, where, when and why an action. Example:
a) Mrs. Nurul is teaching in the classroom.
b) I go to campus.
5) Conjunction

It is a word used to combine one word to another one, or one sentence to another one. Example:
a) I called him before I go.
b) Irma and I go to the STAIN.
6) Pronoun

It is the word which can take the place of a noun. Example:
a) They are $m y$ lecture.
b) He goes to office.
7) Interjection

It is a word put into a sentence to express a sudden feeling of mind or emotion. Example:
a) Hurrah! I am the winner.
b) Oh my god, I can't believe it's real.
8) Preposition

It is a word used to explain the relation between two grammatical words or a word used with a noun or pronoun to show their relation with some other word in the sentence is known as a preposition. Example:
a) She is angry with me.
b) I deposited my money in the bank.

## c. Teaching Vocabulary

## 1) Background to the Teaching of Vocabulary

Vocabulary teaching and learning must fit into the broader framework of a language course. One way to make sure that there is a
balanced range of learning opportunities is to see a language course as
consisting of four stands, they are as follows: ${ }^{14}$
a) Learning from meaning-focused input

The "learning from meaning-focused input" stands involves learning from listening and reading. For vocabulary learning to occur in this stand, learners need to know 98 percent of the running words already. That means that, at most, there should be only one unknown word every word in every fifty running words. This one unknown word in fifty is something that can be learned through guessing from context and which does not stop comprehension of the text.
b) Deliberate learning

The deliberate learning stand is sometimes called fromfocused instruction, language-focused learning, or language study. It involves paying deliberate attention to language features such as sounds, spelling, vocabulary, grammar, or discourse that are presented out of context. The most obvious deliberate learning technique is learning new vocabulary by memorizing their first language translations.
c) Learning from meaning-focused output

The "learning from meaning-focused output" stand involves learning through speaking and writing where the learners' main attention is on communicating messages. It may seem a little strange to see the productive skills as source of vocabulary learning, but using vocabulary productively can strengthen learning and can push learners to focus on aspect of vocabulary knowledge that they did not need to attend to when listening and reading
d) Fluency development

Vocabulary must not only be known, it must be readily available for use. The fluency development stand of a course aims at helping learners make the best use of what they already know. It is important to see fluency as being related to each of the four skills of listening, speaking, reading, and writing with fluency needing to be development independently in each of these skills.

[^11]Vocabulary is very important. If we master the vocabulary so we will not master four skill that are listening, speaking, reading and writing. Therefore, there is teaching vocabulary.

## 2) The status of vocabulary in the curriculum

For much of this century, the principal focus of language teaching has been on the grammar of the language. While grammar translation approaches to the teaching of language provided a balanced diet of grammar and vocabulary, audio-linguistics suggested that the emphasis should be strongly on the acquisition of the basic grammatical patterns of the language. One of the most influential structural linguistic of the day went so far as to argue that vocabulary was the easiest aspect of a second language to learn and that it hardly required formal attention in the classroom.

Since then, however the status of vocabulary has been considerable enhanced. This has come about partly as a result of the development of communicative approaches to language teaching, and partly through the stimulus of comprehension based methods such as the Natural Approach.

In 1983, River argued that the acquisition of an adequate vocabulary is essential for successful second language use because, without an extensive vocabulary, it will be unable to use the structures
and functions we may have learned the comprehensible communication. ${ }^{15}$

The consensus of opinion seems to be that the development of a rich vocabulary is an important element in the acquisition of second language.

## 3) Principle for Teaching Vocabulary

Learners see vocabulary as being a very important part of language learning and one of the difficulties in planning vocabulary component of a course is making sure that it does not overwhelm other essential parts of the course. The best way to avoid this is for the teacher and course designer to have a set of guiding principles that can be applied in variety of teaching and learning situations. They are: ${ }^{16}$
a) Focus on the most useful vocabulary first

The most useful vocabulary that every English language learners needs whether they use language for listening, speaking, writing, or whether they use the language in formal and informal situations, is the most frequent 1000 word families of English. This vocabulary is so useful that it covers around 75 percent of the running words in academic texts and news papers, over 80 percent of the running words in novels, and about 85 percent of the running words in conversation. It contains most of the 176 function word families (words like $a$, the, of, because, could), and words like keep, kind, know, lack, and land. It is possible to say and write a lot using only the first English.

[^12]b) Focus on the vocabulary in the most appropriate way There are four most important vocabulary learning strategies, they are using word parts, guessing from context, using word cards, and using dictionaries. Using word cards is one of the appropriate strategies for children to help them memorize the new words.
c) Give attention to the high frequency words across the four stands of course
High frequency vocabulary needs to occur in all four stands of a course. It should get deliberate attention through teaching and study and should be met and used in communicating messages in listening, speaking, reading, and writing. High frequency vocabulary should also be fluently accessible for receptive and productive use.
d) Encourage learners to reflect on and take responsibility for learning
There is an important principle that lies behind choosing and learning and that is that learners that they must be responsible for their own learning. Taking this responsibility requires:
(1) Knowledge of what to learn and the range of option for learning vocabulary,
(2) Skill in choosing the best option, and
(3) The ability to monitor and evaluate progress with those options.

Based on explanation, the more principles how the way teaching vocabulary that the students memorize vocabulary rapidly.

But in this research, the researcher uses watching film strategy.

## d. Developing Audio-Visual Media in Teaching Vocabulary

The most of teachers still use conventional method in the process of learning and teaching English, it is seen when I was PPL in SMK Negeri 1 Padangsidimpuan. Lecturing method is one of the regular method that teacher use in teaching vocabulary. This classical learning
phenomenon will affect the result learning. The main problems for teachers are many distortions, besides that, students' interpretation to the material of learning will be less enough.

Based on the explanation above, the teachers need use the media for solving some barriers in the class. According to Hakim said watching the film of Hollywood can be improving the vocabulary mastery and to see the gestures or facial expression can be help to understand the film of Hollywood. ${ }^{17}$ There are many kinds of media that teachers can use in teaching vocabulary, such as film, video, OHP, and others. Audio-visual media will become an interesting media in teaching and learning of vocabulary especially for students. For this research, researcher will present audio-visual media that watching film in teaching vocabulary.

Then, the process communication (the process teaching of learning) is success, because there is media, for example watching film. Like the picture below:

[^13]

There are some reasons why the researcher chooses to use audio-visual media (watching film) in teaching vocabulary, they are:

1. Audio-visual media can take the students' attention and encourage them to study English especially in learning vocabulary.
2. The students need relax in learning, if they are relax; they will understand easily in learning.

## 3. The Related Theory to the Research

## a. Behaviorisict Theory

Researcher explores the effect of watching film to students' vocabulary mastery. The theory that is designed is behavioristic theory. As Abuddin Nata says, behavioristic theory assumption that children do not have potency since born, but the children growth are effected by environment factors, like a family, school, society, human, nature, culture,
region and so on. In which children growth relate on the concrete term that can be seen and can be researched. ${ }^{18}$

Then, Jeanne in his book says, ${ }^{19}$ there are some basic assumption of behavioristic theory about learning. The first assumption is some of the people behavior is the result of experience with environment stimulus. The second is learning can be drawn in association between ancient that can be researched, they are the association between stimulus and response. The third is learning is the effect of behavior changing. The last is learning often event when stimulus and response come in near time.

Next, in Abuddin Nata book also says that, Behavioristic theory is said stimulus and response theory that is separated in three parts, they are stimulus-response theory, conditioning theory and reinforcement theory. ${ }^{20}$
a) Stimulus response theory

This theory assumption that learning is capacity to form stimulus response relation as much as is possible. In which there are three law of learning, they are: law of readiness, law of exercise or repition, and law of effect.

[^14]b) Conditioning Theory

This theory that is learning must be helped with certain condition. For example, before the students enter to the class and every changed of time, it usually will be sounded bell.
c) Reinforcement theory

In this theory, condition is given on stimulus, so the reinforcement condition is given on response. Because the children study with spirit and they understand what they learn so the teacher give them high value, or may be present with purpose that the process of teaching learning will more spirit.

So based on the explanation of behavioristic theory above researcher gives the conclusion that in teaching learning process, the teacher must able to give the students many stimulus so that the students are able to give response. In which the Behavioral theory have some assumption, they are: the effect of environment, focus on behavior that can be researched, learning is changed with behavior and the last is the similar principle of learning in all species.

## b. The Relation of Behavioristic Theory and Watching Film Strategy to Students' Vocabulary Mastery

The relation of behavioristic theory and watching film strategy to students' vocabulary mastery in which Behavioristic theory is one assumption that behavior and the children growth are effected by
environment factors, like a family, school, society, human, nature, culture, region and so on. So, behavioral theory is said with stimulus response theory.

Watching film strategy is an approach on the students learning with learning strategies. By watching film strategy a teacher teach students the cognitive skills with make learning experience, with behavior modeling and then to help students to grow these skills base on their effort with giving spirit, support and so on. Next, watching film strategy is a strategy for influencing vocabulary mastery with using media.

## B. Review of Related Findings

The research is belonging to Ahmadin Azhar, he is the student of Tarbiyah and English Section program study, Educational Department, Padangsidimpuan state university (STAIN), his thesis is "The Effect Of Using Media Video Dora The Explorer of Using Media Video Dora The Explorer to Students' Vocabulary Mastery at SD Negeri Padangsidimpuan ".The problems are here that students can not master the meaning of English vocabulary was given by their teacher with conventional teaching, as English teacher told to researcher before that the students of SD Negeri 200201/4 Padangsidimpuan felt boring in time studying English vocabulary by using conventional teaching
(without media). Finally, the students could not master and memorize vocabulary well. ${ }^{21}$

The research is related to Muhammad Yusuf (2011) STAIN Padangsidimpuan, research on the title "The Effect of Total Physical Response (TPR) on Grade V Students' Vocabulary Mastery". The result is the score of experimental group is higher than control group, and from the calculation of $t$ test 2.20 and $t$ table 1.17, it means that, $t$ test is higher than $t$ table (2.20>1.17). ${ }^{22}$ So, there was a significant effect of Total Physical Response (TPR) on V grade students' vocabulary mastery at SD Negeri 142612 Panyabungan.

Students have seen that there is more teaching strategy that can't be done by teacher. If the teacher uses the strategies in teaching vocabulary; the students will interest to studying vocabulary and their vocabulary is as good as possible. So the researcher wants to research with the title: The Effect of Watching Film to Students' Vocabulary Mastery at Grade XI SMK Negeri 1 Padangsidimpuan.

## C. Conceptual Framework

Vocabulary mastery should be owned by every student to make them understand and master all skills in English language. Considering that vocabulary mastery has a mutual effect to be students' achievement in English language, teachers have found an appropriate method and media for teaching vocabulary.

[^15]Now days, there are many English teacher who still do not understand to this situation, they still use the conventional method to teach vocabulary. There is theory from Hakim that watching film of Hollywood can be improving the vocabulary mastery and to see the gestures or facial expression can be help to understand the film of Hollywood. ${ }^{23}$ This media will make students enjoy learning vocabulary, and they can master vocabulary as good as possible. The researcher will research at SMK Negeri 1 Padangsidimpuan.

## D. Hypothesis

The hypothesis of this research stated that: "there is a significant effect of watching film to students' vocabulary mastery"

[^16]
## CHAPTER III

## RESEARCH METHODOLOGY

## A. Time and Place of Research

The process of research had been done from February 2013 up to February $21^{\text {st }}$ 2014. The location of the research is at SMP Negeri 5 Padangsidimpuan. The school is located at Street Sutan Soripada Mulia No. 25 Padangsidimpuan.

## B. Kind and Approach of the Research

The kind of research was quantitative research. The researcher used experimental method in doing this research. Gay says, "Experimental research is the only type of research that can test hypotheses to established cause and effect". ${ }^{1}$ The design was presented as follows:

Table.1.Research Design

| Class | Pre-test | Treatment | Post-test |
| :--- | :---: | :---: | :---: |
| Experimental | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Control | $\checkmark$ | $\times$ | $\checkmark$ |

[^17]
## C. Population and Sample

a. Population

According to Gay and Peter, "Population is the group to which researcher would like the results of the study to be generalizable". ${ }^{2}$ The population of this research is eleventh grade students of SMK Negeri 1 Padangsisimpuan that there are 11 classes and the total are 414 students.
b. Sample

The researcher took the representative of all class that is called sample. ${ }^{3}$ The result of research from the sample took generalization to whole population. The researcher used cluster sampling in this research.

The researcher took 72 people that are two classes from all population. Those two classes are 2 AK 2 that the experimental class which were 36 students and 2 AK 3 that the control class which were 36 students. As the table:

Table.2.Samples

| No | Class | Total Person |
| :---: | :---: | :---: |
| 1. | 2 AK 2 | 36 |
| 2. | 2 AK 3 | 36 |

[^18]
## D. Instrument Data Collection

A research must have a good instrument in this research because a good instrument can give the valid data. In addition, Suharismi Arikunto said that the instrument of the research is a tool of facility was used by the researcher to collecting data. ${ }^{4}$ In this research, the researcher gave 30 tests to all students. The instrument data in vocabulary test and the indicator below:

Table.3. Indicator of Vocabulary

| Indicator | No Item | Item |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Match word (verb, <br> adjective, noun, and <br> adverb) | $1,2,3,4,5,6,7,8$. | 8 |  |  |
| Arrange the sentence | $9,10,11,12,13,14,15,16$. | 8 |  |  |
| To translate a word | $17,18,19,20,21,22,23,24$. | 8 |  |  |
| To translate a sentence | $25,26,27,28,29,30$. | 6 |  |  |
| Total |  |  |  | 30 |

${ }^{4}$ Suharsimi Arikunto, Prosedur Penelitian Suatu Pendekatan Praktek, (Jakarta: Rineka Cipta, 1995), p. 21.

After the validity test, the indicators of the test that was used become 20 points. The indicator as below:

Table.4. Indicator of Vocabulary

| Indicator | No Item | Item | Score | Score |
| :--- | :---: | :---: | :---: | :---: |
| Match word (verb, <br> adjective, noun, and <br> adverb) | $1,2,3,4,5$. | 5 | 5 | 25 |
| Arrange the sentence | $6,7,8,9,10$. | 5 | 5 | 25 |
| To translate a word | $11,12,13,14,15$. | 5 | 5 | 25 |
| To translate a sentence | $16,17,18,19,20$. | 5 | 5 | 25 |
| Total | 20 | 20 | 20 | 100 |

## E. Procedure of the Research

The instrument of collecting data in this research in this research was test. The test applied to the experimental class and the control class. The researcher used two kinds of test, they are:
a. Pre-test

The function of the pre-test was to find the mean scores of the Watching film class and conventional class before the researcher gave treatment. In this case, the researcher hoped that the whole students' speaking
ability is same, or if there was a difference between those groups, the difference was hopefully not significant.
b. Treatment

The experimental class and the control class were given some material that was taught by the researcher in different ways. The experimental class was given treatment that is watching film. The experimental research was made in 2 AK 2. The control class used discussion strategy was made in 2 AK 3 class. Index which was resulted after t-test was determined the admission or the rejection of the hypotheses.
c. Post-test

The pos-test also was given to the both control and experimental class to know the students' ability after applying the treatment. Post-test was done to differentiate between using discussion strategy and using media film or watching film in teaching vocabulary.

## F. Validity and Reliability of Instrument Analysis

To analyse the data for this testing was:
a. Validity of the items

Before giving the test to the sample, test was tested to the other students outside of sample who has the same grade that is 2 TKJ 1 to check for the validity of the items of the test. In this research the test has been tested to the grade XI SMK Negeri 1 Padangsdimpuan.

To know validity of the items, researcher used the correlation biserial, in giving interpretation to $\mathrm{r}_{\mathrm{pbi}}$ is used $\mathrm{N}-\mathrm{nr}: 20-2=18$ and consulted to " r " product moment in significant level $5 \%=0.444$ and $1 \%=0.561$. It formula, as follow:

$$
\mathrm{r}_{\mathrm{pbi}}=\frac{M p-M t}{S D t} \sqrt{\frac{p}{q}}
$$

Where:
$\mathrm{r}_{\mathrm{pbi}} \quad=$ Number ofindex Correlation Point Biserial
$M_{p} \quad=$ Reaverage of the score of the students answer correctly
$\mathrm{M}_{\mathrm{t}} \quad=$ Reaverage of thetotal score total that achievedsuccessly by member of the test
$\mathrm{SD}_{\mathrm{t}}=$ Standard of deviation
$\mathrm{p} \quad=$ Proporsition ofthe students answer correctly
$p=\frac{\text { Total of the student answer correctly }}{\text { Total of the Student }}$
$\mathrm{q} \quad=$ Proporsiton of the incorrect answer student $(\mathrm{q}=1-\mathrm{p})^{5}$
Criteria:

| $\mathrm{D}<0.00$ | very bad |
| :--- | :--- |
| $0.00<\mathrm{D}<0.20$ | bad |
| $0.20<\mathrm{D}<0.40$ | enough |
| $0.40<\mathrm{D}<0.70$ | good |
| $0.70<\mathrm{D}<1.00$ | very good |

The researcher made the test there were 30 points in pretest and posttest. From the analysis result was tested its valid were just 24 and invalid

[^19]there are 6 items in pretest, the tests has been valid there were 22 items and invalid there were 8 items in posttest that can be seen in the appendix 5-8. So, the researcher has taken 20 items from pretest and posttest were valid.
b. Reliability of the test

Testing of reliability with the internal consistency, done in a way tryout the instrument once, and then were analyzed with a specific technique. The results of the analysis can be used to predict the reliability of the instrument.

Testing of instrument reliability can be done with the technique of KR. 20 (Kurder Richardson) formula, as follow:
$\mathrm{r}_{11}=\left(\frac{n}{n-1}\right)\left(\frac{S t^{2}-\sum p q}{S t^{2}}\right)$
Where:

| $\mathrm{r}_{11}$ | $=$ Realibility of the test |
| :--- | :--- |
| $\sum_{\mathrm{p}} p q$ | $=$ Total of the result times p and q |
| q | $=$ Proporsition of the students answer correctly |
| n | $=$ Proporsition of the students answer incorrectly |
| St | $=$ Total of the items |
|  | $=$ Standard of deviation of the test |

Result of calculation the realibility of the items ( $\mathrm{r}_{11}$ ) was determined whether $\mathrm{r}_{11}>\mathrm{r}_{\text {table }}$ with the significant level $5 \%$ (0.05) with the table r product moment.So, that the items was reliable.

Criteria of realibility of the test, there are:

| $<0.20$ | very low |
| :--- | :--- |
| $0.20-0.40$ | low |
| $0.41-0.70$ | enough |
| $0.71-0.90$ | high |
| $0.91-1.00$ | very high $^{6}$ |

To know the effect of Watching Film to Students' Vocabulary Mastery, t0 minimized $(1.69-1.667=0.023)$. Next, the result of it interoperated to above table. So that, the effect of Watching Film to Student's Vocabulary Mastery was categorized that was low.

## G. Technique of Data Analysis

## 1. Qualification Test of Data Analysis Pre-test and Post-test

a. Normality test

To calculate normality test was used by Liliefors formula, as follow: ${ }^{7}$

1) Calculating average and standard deviation by the formula:
$\mathrm{x}=\sum \frac{F i X i}{F i}$
2) Perception $\mathrm{x} 1, \mathrm{x} 2 \ldots \mathrm{xn}$ made permanent number $\mathrm{zi}, \mathrm{z} 1, \mathrm{z} 2, . . \mathrm{zn}$ by using formula:

[^20]$\mathrm{Zi}=\frac{x i-x}{s}$
3) To every this permanent number and by using enlist of permanent normal distribution, and then calculating the opportunity.
$\mathrm{F}(\mathrm{Zi})=\mathrm{P}(\mathrm{Z}<\mathrm{Zi})$
4) Counting the difference $\mathrm{F}(\mathrm{Zi})-\mathrm{S}(\mathrm{Zi})$, and then determine its absolute price.
5) Taking the biggest price among absolute price of the difference and mentioning the price by Lo.
6) If $\mathrm{Lo}<\mathrm{L}$ obtained from the critical value test, the Liliefors with the real level $\alpha=0,05$, hence the distribution is normal.

Based on the result of calculation, the score of experimental class $\mathrm{Lo}=-0.1903<\mathrm{Lt}=0.1454$ with $\mathrm{n}=36$ and control class $\mathrm{Lo}=-$ $0.0087<\mathrm{Lt}=0.1454$ with $\mathrm{n}=36$, real level $\alpha$ was 0.05 . Cause Lo <Lt in the both class. So, $\mathrm{H}_{0}$ is accepted, it means that experiment class and control class were distributed normal. Researcher calculation, it can be seen on the appendix 19.
b. The homogeneity of test

To test whether variants of both homogenous samples, variants equality test, that is:
$\mathrm{F}=\frac{\text { the biggest variants }}{\text { the smallest variant }}$

Here, after comparing to the Ftable, its criterion is :
If F calculating $<\mathrm{F}$ table, then both samples are homogeneous.
Based on the result of calculation, the coefficient of F count $=$ is compared with F table. Where F table was determined at real $\alpha=0.05$, and the same numerator $\mathrm{dk}=\mathrm{N}-1=36-1=35$ and denominator $\mathrm{dk} \mathrm{N}-1=36-1=35$ So, by using the list of critical value at F distribution is $\operatorname{got} \mathrm{F}_{\mathbf{0 , 0 5}(\mathbf{1 9 , 2 1})}=$ 1.84. It shows that $\mathrm{F}_{\text {count }}(1.41)<\mathrm{F}_{\text {table }}(1.84)$. So, it can be concluded that the variant from the data of the effect of watching film to students' vocabulary mastery at grade XI SMK Negeri 1 Padangsidimpuan by experimental and control class was homogeny.

## 2. Hypotheses test

1. Averages of the result studying vocabulary by watching film was significant than the result studying vocabulary without using media (H1), the form is as follows:
$\mathrm{H} 1: \mu \mathrm{Y} 1>\mu \mathrm{Y} 2$
2. Averages of the result studying vocabulary by watching film was not significant than the result studying vocabulary without using media (H0). The form is as follows:
$\mathrm{H} 0: \mu \mathrm{X} 1=\mu \mathrm{X} 2$
In accordance with the formulation of the problem, the technique in analyzing the data was used by t-test, because was aimed to examine the
difference of two variables. Such examination performed both on pre-test and pos-test score from the experimental class and control class. T-test formula applied is as follows: ${ }^{8}$

$$
T t=\frac{M_{1}-M_{2}}{\sqrt{\left(\frac{\Sigma X_{1}+\Sigma X_{2}^{2}}{n_{1}+n_{2}-2}\right)\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}
$$

Where :
t : Test
$\mathrm{M}_{1}$ : The mean of experimental group
M2: The mean of control group
X2 : The variable of experimental group
Y2 : The variable of control group
N1 : The total number of experimental group
N2 : The total number of control group

[^21]
## CHAPTER IV

## DATA ANALYSIS

As mentioned in earlier chapter, in order to evaluate the effect of Watching Film to Students' vocabulary Mastery, the researcher has calculated the data using pre-test and post-test. Applying quantitative analysis, the researcher used the formulation of T-test. Next, the researcher described the data as follow:

## A. Description of Data before using Watching Film

Based on research was done, researcher got the result of data pre-test of students' score in experimental class and control class, as follow:

1. The score of Pre-test Experimental Group

Based on the result of data pre-test has taken in experimental class, the researcher described the score of pre-test experimental, as follow:

Table 5
The score of Pre-test in Experimental group

| Initial of student <br> $(\mathbf{n})$ | Pre- test |
| :---: | :---: |
| ABD | 65 |
| ADL | 85 |
| APR | 40 |
| CRI | 40 |
| DES | 60 |
| DEW | 35 |
| DIN | 50 |
| ERN | 30 |
| EVI | 50 |
| GIY | 70 |
| HMH | 35 |
| ILY | 10 |
| IRA | 40 |
| JNA | 60 |


| LPA | 40 |
| :---: | :---: |
| MDR | 25 |
| MNA | 60 |
| MAY | 40 |
| MNA | 30 |
| MEGA | 45 |
| NNI | 35 |
| NAI | 60 |
| NIA | 30 |
| NTA | 40 |
| NUR | 75 |
| OKY | 30 |
| PIN | 45 |
| RIN | 40 |
| RKY | 50 |
| RMD | 45 |
| RHD | 40 |
| SUCI | 40 |
| SERI | 50 |
| SRI | 55 |
| SITI | 75 |
| STI | 60 |
| Total | 1820 |
| Mean | 46.66 |
| Mode | 40 |
| Median | 55 |
| The Lowest | 10 |
| The High | 85 |
|  |  |
|  |  |

Based on the table above the sum of score in experimental group was 1820, mean was 46.66 mode was 40 , median was 30 . The researcher got the highest score was 85 , and the lowest score is 10 . Then, the computed of the frequency distribution of the student's score of group can be applied in to table frequency distribution as follows:

Table 6
Distributing of the Variable Score Frequency of the Result Studying Vocabulary before Treatment in the Experimental Class

| No | Interval | Median | Frequency | Percentages |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $10-23$ | 16.5 | 1 | $2.7 \%$ |
| 2 | $23-36$ | 29.5 | 8 | $22.2 \%$ |
| 3 | $36-49$ | 42.5 | 12 | $33.3 \%$ |
| 4 | $49-62$ | 55.5 | 10 | $27.7 \%$ |
| 5 | $62-75$ | 69.5 | 4 | $11.1 \%$ |
| 6 | $75-88$ | 81.5 | 1 | $2.7 \%$ |
| $\mathrm{i}=13$ |  | Total | 36 | $100 \%$ |

By visual, distributing of the data can be desribed to histogram form, that:

2. The score of Pre-test in Control Group

Based on the result of data pre-test has taken in control class, the researcher describe the score of pre-test control group, as follow:

Table 7
The score of Pre-test in Control Group

| Initial of student ( n ) | Pre- test |
| :---: | :---: |
| ABDL | 65 |
| ALEX | 85 |
| ASNI | 40 |
| APIL | 50 |
| ANIA | 60 |
| DOMA | 35 |
| DINA | 50 |
| ESA | 30 |
| ESTR | 50 |
| ELSA | 70 |
| HAPA | 35 |
| HENA | 50 |
| JUDA | 40 |
| JUNI | 60 |
| LISA | 40 |
| LISNI | 25 |
| MINI | 60 |
| MITA | 40 |
| MONA | 30 |
| MODI | 45 |
| RAMA | 35 |
| NULA | 60 |
| RZKI | 30 |
| RSNA | 40 |
| SHRI | 75 |
| SITH | 30 |
| SITJ | 45 |
| SITO | 40 |
| MHK | 50 |
| MHR | 40 |
| YATI | 40 |
| YNTI | 40 |
| YENI | 50 |
| VTOR | 55 |


| TRI | 75 |
| :---: | :---: |
| SSKA | 65 |
| Total | 1690 |
| Mean | 48.05 |
| Mode | 40 |
| Median | 55 |
| The Lowest | 25 |
| The High | 85 |

Based on the table above the sum of score in experimental group was 1690 , mean was 48.05 mode was 40 , median was 30 . The researcher got the highest score was 85 , and the lowest score is 25 . Then, the computed of the frequency distribution of the student's score of group can be applied in to table frequency distribution as follows:

Table 8
Distributing of the Variable Score Frequency of the Result Studying Vocabulary before Treatment in the Control Class

| No | Interval | Median | Frequency | Percentages |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $25-35$ | 30 | 8 | $22.2 \%$ |
| 2 | $35-45$ | 40 | 11 | $30.5 \%$ |
| 3 | $45-55$ | 50 | 7 | $19.4 \%$ |
| 4 | $55-65$ | 60 | 6 | $16.6 \%$ |
| 5 | $65-75$ | 70 | 3 | $8.3 \%$ |
| 6 | $75-85$ | 80 | 1 | $2.7 \%$ |
| $\mathrm{i}=10$ |  | Total | 36 | $100 \%$ |

By visual, distributing of the data can be desribed to histogram form, that:


From the table above, the writer concluded the students' ability before using Watching film was enough. It was improved by the means score of Experimental Group and Control Group were 46.66 and 48.05 .

## B. Description of Data after using Watching Film

Based on research was done, researcher got the result of data post-test of students' score in experimental class and control class, as follow:

1. Description Data of Experimental Group

Based on the result of data post-test has taken in experimental class, the researcher describe the score of post-test experimental, as follow:

Table 9
The score of Post-test in experimental group

| Initial of student <br> ( n ) | Post- test |
| :---: | :---: |
| ABD | 75 |
| ADL | 100 |
| APR | 85 |
| CRI | 80 |
| DES | 80 |
| DEW | 80 |
| DIN | 80 |
| ERN | 80 |
| EVI | 80 |
| GIY | 85 |
| HMH | 85 |
| ILY | 95 |
| IRA | 75 |
| JNA | 85 |
| LPA | 90 |
| MDR | 90 |
| MNA | 85 |
| MAY | 85 |
| MNA | 90 |
| MEGA | 90 |
| NNI | 95 |
| NAI | 95 |
| NIA | 85 |
| NTA | 95 |
| NUR | 90 |
| OKY | 85 |
| PIN | 90 |
| RIN | 90 |
| RKY | 85 |
| RMD | 95 |
| RHD | 85 |
| SUCI | 85 |
| SERI | 90 |
| SRI | 85 |
| SITI | 85 |
| STI | 90 |
| Total | 8112 |
| Mean | 86.66 |
| Mode | 98.2 |
| Median |  |
|  | 95 |
|  | 9 |
|  |  |


| The Lowest | 75 |
| :---: | :---: |
| The High | 100 |

Based on the table above the sum of score in experimental group was 3112, mean was 86.66 , mode was 85 , median was 98.2 . The resesarcher got the highest score was 100 , and the lowest score is 75 . Next, the calculation of how to get it can be seen in the appendix 16 . Then, the computed of the frequency distribution of the student's score of group can be applied in to table frequency distribution as follows:

Table 10
The frequency distribution of students' score in Experimental Group

| No | Interval | Median | Frequency | Percentages |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $75-79$ | 77 | 2 | $5.5 \%$ |  |  |  |  |
| 2 | $79-83$ | 81 | 6 | $16.6 \%$ |  |  |  |  |
| 3 | $83-87$ | 85 | 13 | $36.1 \%$ |  |  |  |  |
| 4 | $87-91$ | 89 | 9 | $25 \%$ |  |  |  |  |
| 5 | $91-95$ | 93 | 5 | $13.8 \%$ |  |  |  |  |
| 6 | $95-99$ | 97 | 0 | 0 |  |  |  |  |
| 7 | $99-103$ | 101 | 1 | $2.7 \%$ |  |  |  |  |
| $\mathrm{i}=4$ |  |  |  |  |  | Total | 36 | $100 \%$ |

By visual, distributing of the data can be desribed to histogram form, that:

2. Description Data of Control Group

Based on the result of data post-test has taken in control class, the researcher describe the score of post-test control group, as follow:

Table 11
The score of Post-test in Control group

| Initial of student <br> $(\mathbf{n})$ | Post- test |
| :---: | :---: |
| ABDL | 75 |
| ALEX | 80 |
| ASNI | 85 |
| APIL | 75 |
| ANIA | 75 |
| DOMA | 75 |
| DINA | 80 |
| ESA | 80 |
| ESTR | 80 |


| ELSA | 85 |
| :---: | :---: |
| HAPA | 80 |
| HENA | 90 |
| JUDA | 75 |
| JUNI | 85 |
| LISA | 90 |
| LISNI | 90 |
| MINI | 80 |
| MITA | 85 |
| MONA | 90 |
| MODI | 90 |
| RAMA | 90 |
| NULA | 90 |
| RZKI | 85 |
| RSNA | 90 |
| SHRI | 90 |
| SITH | 70 |
| SITJ | 90 |
| SITO | 90 |
| MHK | 80 |
| MHR | 80 |
| YATI | 80 |
| YNTI | 80 |
| YENI | 80 |
| VTOR | 85 |
| TRI | 85 |
| SSKA | 90 |
| Total | 2964 |
| Mean | 83.25 |
| Mode | 90 |
| Median | 82 |
| The Lowest | 70 |
| The High | 90 |

Based on the table above the sum of score in experimental group was 2964 , mean was 83.25 mode was 80 , median was 82 , the lowest score was 70 , and the highest score was 90 . Next, the calculation of how to get it can be seen in the appendix 17. Then, the computed of the frequency distribution of
the student's score in post test can be applied in to table frequency distribution as follows:

Table 12
The frequency distribution of students' score in control group

| No | Interval | Median | Frequency | Percentages |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $70-74$ | 72 | 1 | $2.7 \%$ |
| 2 | $74-78$ | 76 | 5 | $13.8 \%$ |
| 3 | $78-82$ | 80 | 11 | $30.5 \%$ |
| 4 | $82-86$ | 84 | 7 | $19.4 \%$ |
| 5 | $86-90$ | 87 | 12 | $33.3 \%$ |
| $\mathrm{i}=4$ |  | Total | 36 | $100 \%$ |

By visual, distributing of the data can be desribed to histogram form, that:


Picture 4. Histogram of the Result StudyingVocabulary without M edia in the Control Class

## C. Technique f Data Analysis

## 1. Qualification Test of Data Analysis Pre-test and Post-test

a. Normality of experimental class and control class in Pre-test

Table 13
Normality and homogeneity in pre-test

| Class | Normality <br> Test |  | Homogeneity <br> Test |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{t}_{\text {count }}$ | $\mathrm{t}_{\text {table }}$ | $\mathrm{t}_{\text {count }}$ | $\mathrm{t}_{\text {table }}$ |  |
| Experiment <br> Class | 0.0485 | 0.1454 | $1.33<1.84$ |  |  |
| Control <br> Class | 0.0382 | 0.1454 |  |  |  |

Based on the table above researcher calculation, the score of experiment class $\mathrm{Lo}=0.0485<\mathrm{Lt}=0.1454$ with $\mathrm{n}=36$ and control class $\mathrm{Lo}=0.0382<\mathrm{Lt}=0.1454$ with $\mathrm{n}=36$, and real level $\alpha 0.05$. Cause ${ }_{\text {Lo }}<\mathrm{Lt}$ in the both class. So, $\mathrm{H}_{0}$ is accepted, it means that experiment class and control class were distributed normal. Researcher calculation, it can be seen on the appendix 18.

## b. Homogeneity of experimental class and control class in Pre-test

Then, the coefficient of $\mathrm{F}_{\text {count }}=$ is compared with F table. Where F table was determined at real $\alpha=0.05$, and the same numerator $\mathrm{dk}=\mathrm{N}-1=$ $36-1=35$ and denominator $\mathrm{dk} \mathrm{N}-1=36-1=35$ So, by using the list of critical value at F distribution is $\operatorname{got} \mathrm{F}_{\mathbf{0 . 0 5}(\mathbf{1 9 . 2 1 )}}=1.84$. It shows that $\mathrm{F}_{\text {count }}$ $(1.33)<\mathrm{F}_{\text {table }}$ (1.84). So, it can be concluded that the variant from the data of the effect of watching film to students' vocabulary mastery at grade XI

SMK Negeri 1 Padangsidimpuan by experimental and control class was homogeny.

## c. Normality of experimental class and control class in Post-test

Tabel 14
Normality and homogeneity in post-test

| Class | Normality <br> Test |  | Homogeneity <br> Test |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathrm{t}_{\text {count }}$ | $\mathrm{t}_{\text {table }}$ | $\mathrm{t}_{\text {count }}$ | $\mathrm{t}_{\text {table }}$ |
| Experiment <br> Class | -0.1903 | 0.1454 | $1.41<1.84$ |  |
| Control <br> Class | 0.00087 | 0.1454 |  |  |

Based on the table above researcher calculation, the score of experimental class $\mathrm{Lo}=-0.1903<\mathrm{Lt}=0.1454$ with $\mathrm{n}=36$ and control class $\mathrm{Lo}=-0.0087<\mathrm{Lt}=0.1454$ with $\mathrm{n}=36$, real level $\alpha$ was 0.05 . Cause ${ }_{\mathrm{Lo}}<\mathrm{Lt}$ in the both class. So, $\mathrm{H}_{\mathrm{o}}$ is accepted, it means that experiment class and control class were distributed normal. Researcher calculation, it can be seen on the appendix 19.

## d. Homogeneity of experimental class and control class in Post-test

Then, the coefficient of F count $=$ is compared with F table. Where F table was determined at real $\alpha=0.05$, and the same numerator $\mathrm{dk}=\mathrm{N}-1=$ $36-1=35$ and denominator $\mathrm{dk} \mathrm{N}-1=36-1=35$ So, by using the list of critical value at F distribution is got $\mathrm{F}_{\mathbf{0 , 0 5 (}(\mathbf{1 9 , 2 1})}=1.84$. It shows that $\mathrm{F}_{\text {count }}$ $(1.41)<\mathrm{F}_{\text {table }}$ (1.84). So, it can be concluded that the variant from the data of the effect of watching film to students' vocabulary mastery at grade XI

SMK Negeri 1 Padangsidimpuan by experimental and control class was homogeny.

## e. Hypotheses

The data would be analyzed to prove hypothesis by using formula of T-test. The result of the researcher calculation, it can be seen on the table as follow:

Table 15
Result of T-test from the Both Averages

| Pre-test |  | Post-test |  |
| :---: | :---: | :---: | :---: |
| $\mathrm{t}_{\text {count }}$ | $\mathrm{t}_{\text {table }}$ | $\mathrm{t}_{\text {count }}$ | $\mathrm{t}_{\text {table }}$ |
| 0,08 | 1,667 | 1.69 | 1,667 |

$$
\begin{aligned}
& H_{0}: \mu_{1}=\mu_{2} \\
& H_{a}: \mu_{1} \neq \mu_{2}
\end{aligned}
$$

Where:
$H_{1}$ : There was a significant effect watching film to students' vocabulary mastery.
$H_{0}$ : There was no significant effect of watching film to students' vocabulary .mastery

The formula was used was t -test, that:

$$
T t=\frac{M_{1}-M_{2}}{\sqrt{\left(\frac{\Sigma X_{1}+\Sigma X_{2}{ }^{2}}{n_{1}+n_{2}-2}\right)\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}
$$

Where:
t : Test
$\mathrm{M}_{1}$ : The mean of experimental group
M2 : The mean of control group
X2 : The variable of experimental group
Y2 : The variable of control group
N1 : The total number of experimental group
N 2 : The total number of control group

Based on researcher calculation, researcher found that $t_{\text {count }} 5,81$ while $t_{\text {table }} 1,66$. With opportunity $\quad(1-\alpha)=1-5 \%=$ $\%$ and $\mathrm{dt}=\left(\mathrm{n}_{1}+\mathrm{n}_{2}-2\right)=(36+36-2)=70$, cause t count $>\mathrm{t}_{\text {table }}$ (1.69>1.667. It means that hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ was accepted; it means there is a significant effect watching film to students' vocabulary mastery. It described the mean score of experiment class by using watching film strategy is 86.66 and mean score of control class in using discussion strategy is 83.25 . So, from the explanation above it
was experimental class was better than control class $\left(\mu^{1>} \mu^{2}\right)$. See appendix 11.

Next, to know the category how far the effect of Watching Film to Student's Vocabulary Mastery, it would be interoperated from the table below:

Table 13
The Table Coefficient Effect of Interpretation

| Coefficient interval | Effect level |
| :---: | :---: |
| $0,00-0,20$ | Very low |
| $0,20-0,40$ | Low |
| $0,40-0,70$ | Enough |
| $0,70-0,90$ | High |
| $0,90-1,00$ | Very high |

To know the effect of Watching Film to Students’ Vocabulary Mastery, to minimized $(1.69-1.667=0.023)$. Next, the result of it interoperated to above table. So that, the effect of Watching Film to Student's Vocabulary Mastery was categorized that was low.

## D. Discussion

Based on the theory and related findings, the researcher discuss what that was found. First, Abuddin Nata ${ }^{1}$ says that Behavioristics theory assumption that learning is capacity to form stimulus response relation as much as possible. It means that, by much stimulus that is given to students so much more the students' response in teaching learning process. So, the application of watching film strategy improved the students' stimulus and response and good result in mastering vocabulary.

Second, in the research with title is "The Effect of Total Physical Response (TPR) on Grade V Students' Vocabulary Mastery on V grade students' vocabulary mastery at SD Negeri 142612 Panyabungan". ${ }^{2}$ The result of his research found that there was significant Effect of Total Physical Response (TPR) on Grade V Students' Vocabulary Mastery on V grade students' vocabulary. The result of his research found that there was significant effect of Total Physical response on Students' vocabulary. Further, in the research with title is "The Effect Of Using Media Video Dora The Explorer of Using Media Video Dora The Explorer to Students' Vocabulary Mastery at SD Negeri Padangsidimpuan". ${ }^{3}$ The result of their research found that the participants in the experimental group achieved better in mastering vocabulary after being taught through using media or

[^22]strategy. It means, learning vocabulary by using strategy help the students to easier to understand.

Therefore, the researcher found the students' vocabulary mastery before using watching film strategy was lower than the students' vocabulary mastery after using watching film strategy. It can be seen from last score of the calculation above indicated $\mathrm{t}_{\mathrm{o}} \square \mathrm{t}_{\mathrm{t}}(1.69 \square 1.67)$ and also from mean score between the experimental group and control group, it is indicated that the score of experimental group was bigger than control group (86.66 > 83.25). Finally, researcher can conclude that the hypothesis was accepted and there was the effect of watching film to students' vocabulary mastery.

## E. Threats of the Research

The researcher found the threat of this research was the students do enjoy in watching film so that they was not serious in its respond. Therefore, based on the result that has calculated effect watching film was low.

## CHAPTER V

## CONCLUSION AND SUGGESTION

## A. CONCLUSION

Based on the result of data analysis that has described in the previous chapter, the writer gave the conclusion that studying vocabulary by watching film at SMK Negeri 1 Padangsidimpuan has a significant. It is proven based on calculation result was gotten from post-test calculation, that mean of experimental class is better than mean of control class, that 86.66 is better than 83.25 While, result of $t$-test was gotten $\mathrm{t}_{\text {count }}=1.69$ and $\mathrm{t}_{\text {table }}=1.667$, cause $\mathrm{t}_{\text {count }}>\mathrm{t}_{\text {table }}(1.69>$ 1.667) with each the sample are 36 and $d k=\left(n_{1}+n_{2}-2\right)=70$ with significant level $\alpha=5 \%$. So, it means hypothesis is accepted. In other words, there is a significant effect of watching film to students' vocabulary mastery at grade XI SMK Negeri 1 Padangsidimpuan.

The researcher proved the theory of behavioristic that the learning result is based on stimulus and respond; it is proved that students' vocabulary mastery of SMK Negeri 1 Padangsidimpuan by using Watching Film is influenced.

## B. SUGGESTION

After finishing the research, researcher got much information related in the English teaching and learning process. In addition, the result of the research is using media that is watching film has a significant effect on students' vocabulary
mastery and could help the students to increase their vocabulary mastery. Therefore, researcher has suggestion:
a. The researcher hopes that the students especially the eleventh grade of SMK N 1 Padangsidimpuan will improve their vocabulary mastery by using media that is watching film.
b. For the students, students should memorize and practice their vocabulary mastery in their daily activities.
c. For the teacher, watching film can be used as a strategy in teaching vocabulary to improve students' vocabulary mastery.

## REFERENCES

A.S. Hornby, Oxford Advanced Learners Dictionary New York: Oxford University Press.

Abdullah Yusuf Ali, The Meaning of the Holy Qur'an in English Language, AlAlami Publications: Beirut, 2001.
Abuddin Nata, Ilmu Pendidikan Islam dengan Pendekatan Multidisipliner, Jakarta: PT Rajagrafindo Persada, 2009.

Anas Sudijono, Pengantar Statistik Pendidikan, Jakarta: Raja Grafindo Persada, 2008.

Arief S Sadiman, et. al. Media Pendidikan, Jakarta: PT Raja Grafindo, 1996.
Azhar Arsyad, Media Pembelajaran, Jakarta: PT Raja Grafindo, 2010.
Brainyquote, vocabulary, accessed from: http://www.brainyquote.com/word/vo/vocabulary
23788.htmi\#i4gvbWrO.99, on Tuesday, April $30^{\text {th }} 2013$, at 08.00 am .

Cameron, vocabulary, accessed from http//www.Meaning Vocabulary .com//, http// Wikipedia.com// vocabulary, on Saturday, March $24^{\text {th }} 2012$, at 03.00 pm .

David Nunan, Language Teaching Methodology, Malaysia: Longman, 1998.
_ , Practical English Language Teaching, New York: MC Grow Hill, 2003.

Gay L. R.and Peter Airasian, Educational Research, America: Merrill, 1987. Hidayat Komaruddin, Active Learning, Yogyakarta: Pustaka Insan Madani, 1996.

Horward Jackson and Etienne ZeAmvela, Words, Meaning, and Vocabulary, London: Casell, 2000.

Jayanthy Dakshina Murthy Contemporary English Grammar, Delhi: Book Palace, 2003.

Kasihani K.E. Suyanto, English for Young Learners, Jakarta: BumuAksara, 2010.
Marcella Frank, Modern English, New York: Prentice-Hall, 1972.

Nasution, Teknologi Pendidikan, Jakarta: Bumiaksara, 2005.
Ormrod, Jeanne Ellis. Psikologi Pendidikan, diterjemahkan dari "Psychology of Education" oleh Wahyu Indianti, Jakarta: Erlanggga, 2008.

Suharsimi Arikunto, Prosedur Penelitian Suatu Pendekatan Praktek, Jakarta: Rineka Cipta, 1995.

Suharsimi Arikunto, ProsedurPenelitian, Jakarta: RinekaCipta, 2006.
Sutrisno Hadi, Statistik, Yogyakarta: FakultasPsikologi UGM, 1987.
Thomson and Martinet, A Practical English Grammar, Hong Kong: Oxford English, 1985.

Thursan Hakim, Meningkatkan Vocabulary, accessed from http//www. Cara TermudaMembuatKalimatPercakapanBahasaInggris. com//, on Monday, December 17th 2012 at 08.00 pm.

Wilkins, vocabulary, accessed from http//www.Meaning Vocabulary .com//, http// Wikipedia.com// vocabulary, on Saturday, March $24^{\text {th }} 2012$, at 03.30 pm .

Wina Sanjaya, Strategi Pembelajaran, Jakarta: Kencana, 2008.

## TABLE OF CONTENTS

Page
COVER PAGE ..... i
LETTER OF AGREEMENT. ..... ii
DECLARATION OF SELF THESIS COMPLETION ..... iii
MUNAQOSYAH EXAMINATION PAGE ..... iv
LEGALIZATION DEAN FACULTY OF TARBIYAH AND
PEDAGOGY ..... v
ABSTRACT ..... vi
ACKNOWLEDGEMENT ..... vii
TABLE OF CONTENTS ..... ix
LIST OF TABLES ..... xi
LIST OF PICTURES ..... xii
LIST OF APPENDIXES ..... xiii
CHAPTER I : INTRODUCTION
A. Background of the Problems ..... 1
B. Identification of Problems ..... 4
C. Limitation of the Problem ..... 5
D. Definition of Operational Variables ..... 5
E. Formulation of the Problem. ..... 7
F. Aims of Research ..... 7
G. The Uses of Research ..... 7
H. Significances of Research. ..... 8
I. Systematic of the Thesis ..... 8
CHAPTER II : THEORETICAL DESCRIPTION
A. Theoretical Description1. Media
a. Definition of Media and Film ..... 10
b. Kinds of Media ..... 11
c. The Principles of Using and Developing ofd. Learning Media11
e. Process of Learning and Teaching as Process Communication ..... 14
f. Media Film ..... 15
2. Vocabulary Mastery
a. Definition of Vocabulary Mastery ..... 16
b. Kinds of Vocabulary Mastery ..... 17
c. Teaching Vocabulary ..... 19
d. Developing Audio-Visual Media in Teaching Vocabulary ..... 23
3. The Related Theory to the Research
a. Behavioral Theory ..... 25
b. The Relation of Behavioral Theory, Watching Film Strategy to Students' Vocabulary Mastery ..... 27
B. Review of Related Findings ..... 28
C. Conceptual Framework ..... 29
D. Hypothesis. ..... 30
CHAPTER III : RESEARCH METHODOLOGY
A. Place and Time of Research ..... 31
B. Kind and Approach of the Research ..... 31
C. Population and Sample ..... 32
D. Instrument of Research ..... 33
E. Procedure of the Research ..... 34
F. Validity of Instruments ..... 35
G. Technique of Data Analysis ..... 38
H. Hypothesis Test. ..... 40
CHAPTER IV : THE DATA ANALYSIS
A. Description of Data before Watching Film ..... 42
B. Description of Data after Watching Film ..... 47
C. Technique of Data Analysis ..... 53
D. Hypothesis ..... 55
E. Discussion. ..... 58
CHAPTER V : CONCLUSION AND SUGGESTION
A. Conclusion ..... 60
B. Suggestion ..... 61
REFERECENCES
APPENDICES
CURRICULUM VITAE

## LIST OF TABLES

## Page

Table 1 Research Design..................................................................................... 31
Table 2 Sample of Research................................................................................. 32
Table 3 Indicator of Vocabulary (before test validity) .......................................... 33
Table 4 Indicator of vocabulary (after test validity) ............................................. 34
Table 5 The score of Pre-test in Experimental Group ............................................ 42
$\begin{aligned} \text { Table } 6 & \begin{array}{l}\text { Distributing of the Variable Score Frequency of the } \\ \\ \\ \\ \\ \\ \\ \text { Experimental Class................................................................................ } 44\end{array}\end{aligned}$
Table 7 The score of Pre-test in Control Group .................................................... 45
$\begin{array}{ll}\text { Table } 8 & \text { Distributing of the Variable Score Frequency of the } \\ & \text { Result Studying Vocabulary before Treatment in the Control Class....... } 46\end{array}$
Table 9 The score of Post-test in Experimental Group.......................................... 48
Table 10 Frequency Distribution of Students' Score in Experimental Group ......... 49
Table 11 The score of Post-test in Control Group.................................................. 50
Table 12 Frequency Distribution of Student' Score in Control Group.................... 52
Table 13 Normality and Homogeneity in Pre-Test................................................... 53
Table 14 Normality and Homogeneity in Pre-Test.................................................. 54
Table 15 Result of T-Test from Both Averages ...................................................... 55

## LIST OF PICTURES

## Page

Picture 1. Histogram of the Result Studying Vocabulary before Treatment in the Experimental Class. ..... 44
Picture 2. Histogram of the Result Studying Vocabulary before Treatment in the Control Class. ..... 47
Picture 3. Histogram of the Result Studying Vocabulary by Watching Film in the Experimental Class ..... 50
Picture 4. Histogram of the Result Stuying Vocabulary without Media in the Control Class ..... 52

## LIST OF APPENDIXES

Appendix 1. Rencana Pelaksanaan Pembelajaran (RPP) in the Experimental Class
Appendix 2. Rencana Pelaksanaan Pembelajaran (RPP) in the Control Class
Appendix 3. The Test is Tested The Validity and The Test has been Validity
Appendix 4. Key Answer
Appendix 5. The Students' Score in Pre-Test
Appendix 6. Validity of Pre-Test
Appendix 7. The Students' Score in Post-Test
Appendix 8. Validity of Post-Test
Appendix 9. The Score of Experimental Group
Appendix 10. The Score of Control Group
Appendix 11. The Steps Analysis Data
Appendix 12. Reliability of the Test
Appendix 13. Product Moment r Table
Appendix 14. Result of the mean, median, modus in experimental class
Appendix 15. Result of the mean, median, modus control class
Appendix 16. Percentage Points of The T Distribution


[^0]:    ${ }^{1}$ Abdullah Yusuf Ali, The Meaning of the Holy Qur'an in English Language (Al-Alami Publications: Beirut, 2001) p. 924.

[^1]:    ${ }^{2}$ Kasihani K.E. Suyanto, English For Young Learners, (Jakarta: Bumi Aksara, 2010), p. 1.

[^2]:    ${ }^{3}$ Thursan Hakim, Cara Termuda Membuat Kalimat Percakapan Bahasa Inggris, accessed from http//www.Meningkatkan Vocabulary .com//, on Monday, December $17^{\text {th }} 2012$ at 08.00 pm .

[^3]:    ${ }^{4}$ Thomson and Martinet, A Practical English Grammar, (Hong kong: Oxford English, 1986), p. 164.
    ${ }^{5}$ Marcella Frank, Modern English, (New York University: Prentice-Hall, 1972), p. 314.

[^4]:    ${ }^{6}$ A.S. Hornby, Oxford Advanced Learners Dictionary, (New York: Oxford University Press), p. 496.
    ${ }^{7}$ Ibid., p. 1344.
    ${ }^{8}$ Cameron, vocabulary, accessed from http//www.Meaning Vocabulary .com//, http// Wikipedia.com// vocabulary, on Saturday, March $24^{\text {th }} 2012$, at 03.00 pm .
    ${ }^{9}$ A.S. Hornby, Op.cit., p. 1506.
    ${ }^{10}$ A.S. Hornby, Ibid, p. 822.

[^5]:    ${ }^{1}$ Azhar Arsyad, Op.cit, p. 3-4.
    ${ }^{2}$ Ibid.

[^6]:    ${ }^{3}$ Sharon E. Smaldino, at. al. Intructional Technology and madia for Learning, (Jakarta: Kencana, 2011), p. 7.
    ${ }^{4}$ Azhar Arsyad, Op.cit, p. 81-96.

[^7]:    ${ }^{5}$ Wina Sanjaya, Strategi Pembelajaran, (Jakarta: Kencana, 2008), p. 172.
    ${ }_{7}^{6}$ Arief S. Sadiman, at al. Media Pendidikan, (Jakarta: PT Raja Grafindo, 1996), p. 11-14.
    ${ }^{7}$ Komaruddin Hidayat, Active Learning, (Yogyakarta: Pustaka Insan Madani, 2009), p. 3.

[^8]:    ${ }^{8}$ A.S. Hornby, Loc.cit.
    ${ }^{9}$ Nasution, Teknologi Pendidikan, (Jakarta: Bumi Aksara, 2005), p. 104.

[^9]:    ${ }^{10}$ Cameron, Loc. Cit.

[^10]:    ${ }^{11}$ Wilkins, Vocabulary, accessed from http//www.Meaning Vocabulary .com//, http// Wikipedia.com// vocabulary, on Saturday, March $24^{\text {th }} 2012$, at 03.30 pm .
    ${ }^{12}$ Horward Jackson and Etienne Ze Amvela, Words, Meaning, and Vocabulary, (London: Casell, 2000), p. 118.
    ${ }^{13}$ Jayanthi Dakshina Murthy, Contemporary English Grammar, (Delhi: Book Palace, 2003), p. 5-8.

[^11]:    ${ }^{14}$ David Nunan, Practical English Language Teaching, (New York: MC Grow Hill, 2003), p. 133-134.

[^12]:    ${ }^{15}$ David Nunan, Language Teaching Methodology, (Malaysia: Longman, 1998), p. 117.
    ${ }^{16}$ Ibid, p. 135-140.

[^13]:    ${ }^{17}$ Thursan Hakim, Loc.Cit.

[^14]:    ${ }^{18}$ Abuddin Nata, Ilmu Pendidikan Islam dengan Pendekatan Multidisipliner, (Jakarta: PT Rajagrafindo Persada, 2009), p. 175.
    ${ }^{19}$ Jeanne Ellis Ormrod, Psikologi Pendidikan, diterjemahkan dari "Psychology of Education" oleh Wahyu Indianti, (Jakarta: Erlanggga, 2008), p. 422-423.
    ${ }^{20}$ Abuddin Nata, Ibid., p. 175-176.

[^15]:    ${ }^{21}$ Ahmadin Azhar, The Effect Of Using Media Video Dora The Explorer of Using Media Video Dora The Explorer to Students’ Vocabulary Mastery at SD Negeri Padangsidimpuan, (Padangsidimpuan: np, 2012), p. 4.
    ${ }^{22}$ Muhammad Yusuf, The Effect of Total Physical Response (TPR) on Grade V Students' Vocabulary Mastery (Padangsidimpuan: np, 2011) p. 33.

[^16]:    ${ }^{23}$ Thursan Hakim, Op. Cit.

[^17]:    ${ }^{1}$.L. R. Gay and Peter Arisan, Education Research, (America : Merril, 1987), p. 367.

[^18]:    ${ }^{2}$ Gay and Peter, Educational Research, (America: Merrill, 1987), p. 122.
    ${ }^{3}$ Ibid, p. 123.

[^19]:    ${ }^{5}$ Anas Sudijono, Pengantar Statistik Pendidikan, (Jakarta: Raja Grafindo Persada, 2008), p. 258.
    ${ }^{7}$ Suharsimi Arikunto, Dasar-dasar Evaluasi Pendidikan, (Jakarta: Bumi Aksara, 1993), p. 210.

[^20]:    ${ }^{6}$ Anas Sudijono, Ibid., p. 258.
    ${ }^{7}$ Darwyan Syah, at. al. Pengantar Statistik Pendidikan, (Jakarta: Gaung Persada Press) p.

[^21]:    ${ }^{8}$ Sutrisno Hadi, Statistik, (Yogyakarta: Fakultas Psikologi UGM, 1987), p. 237.

[^22]:    ${ }^{1}$ Abuddin Nata, Loc.Cit.
    ${ }^{2}$ Muhammad Yusuf, Loc.Cit.
    ${ }^{3}$ Ahmadin Azhar, Loc.Cit.

