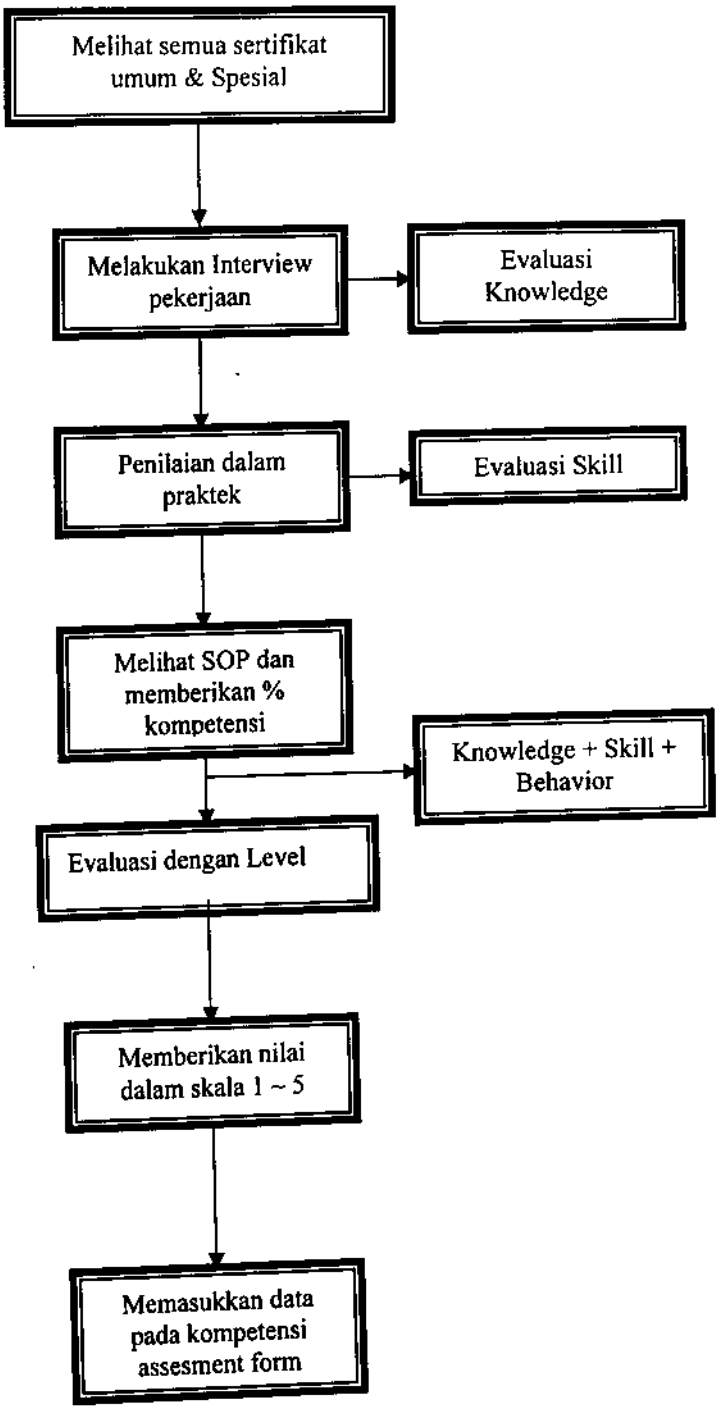
LAMPIRAN

GUIDANCE COMPETENCY ASSESMENT



Date :_____

CHART OF COMPETENCY LEVELS

SKILL LEVEL	Description / Attributes/ Comments
1	Trainee, basically unskilled; is learning how to operate equipment; unsure of him/her delft, need almost continuous supervision; may be unable to learn.
2	Can operate equipment, knows the basic process. Needs occasional assistant. Does not know equipment very well rarely. Recognize equipment malfunction or quality problem.
3	Operator equipment with confidence and need very little assistance. Recognize equipment malfunction or quality problem, but not correct them.
4	Know equipment very well and operates it with a high level of confidence. Needs no supervision. Understand relationship between equipment performance and quality / productivity. Recognizes equipment malfunctions and makes corrections/ adjustments. Could supervise others.
5	Experienced operator who know equipment and process very well. Supervises and trains others. Highly aware of equipment malfunctions, even of potential problems. Makes corrections/adjustments, inspects equipment and, make minor repairs. Highly aware of equipment condition/quality and productivity relationships. Potential supervisor/ team leader.

NOTE :

CERTIFICATION CHECKLIST

Oxidation Field Operator Certification Checklist

General

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Know how to access and utilize all safety and training information such as plant safety regs, Standard Operating Procedures, MSDS sheets, Process Specific manuals, etc.			
Describe the responsibilities and duties of an operator and list the things that he should do when he patrols the unit.			
Demonstrate proper use of the two-way radio communications system			
Be able to give a brief description of the Oxidation process including basic process flows.			
Describe the proper way to make shift relief including the types of information that should be discussed.			

Safety and Environmental

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Know how to locate safety equipment in the area including safety showers, fire hoses and extinguishers.			
Describe the hazards of chemicals used in the Oxidation process			
Know the safe operating pressures and temperatures of hoses used in the unit			
List the PPE required for performing routine duties in the Oxidation unit.			
Be familiar with the plant alarms and evacuation process.			
Be familiar with the plant equipment lock-out procedure.			
Be familiar with the plant permitting procedure			
Complete the Oxidation weekly Fire and Safety Checklist.			

Process Air Compressor System

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the purpose of the Process Air Compressor and give a brief description of the basic process flows.			
List the major equipment in the system with their equipment numbers and explain their functions.			
Explain the purpose of the gas expander and describe the basic flow through the system.			
Explain the purpose of the steam turbine and describe the basic flow through the system.			
Understand compressor system trips and shutdowns.			

Demonstrate the proper method for making a walk-thru of the compressor area and fill out the patrol sheet			
Demonstrate the ability to perform a system start-up using the SOP			
Demonstrate the procedure for placing the expander in service and explain the purpose for the gas heaters.			
Demonstrate the procedure for placing the turbine in service and explain the purpose for maintaining a vacuum on the turbine "boot".			
Locate the major instrumentation, control valves etc, in the field and on DCS			
Demonstrate the procedure for placing the turbine bypass condenser in service.			
What is the purpose of the Off-gas dryers?			
Give a brief description of the operation and flows through the off-gas dryer system.			
Demonstrate the proper procedure for placing the off-gas dryer system in service.			
Give a brief description of the condensate collection system			
Demonstrate placing the condensate system in service			
Collect a set of condensate samples and perform routine lab analysis. Explain the purpose of the analysis and how to control them.			
Explain why we control pH on the condensate system and what could cause a drop in pH.			
Explain the steam system controls/letdown			

Front End Section – Feed Mix System

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Give a brief description of the feed mix system including the various process flows.			
List all of the major equipment in the feed mix system including numbers and functions.			
Demonstrate the proper procedure for unloading a shipment of liquid catalyst. List the proper PPE.			
Describe the HBr storage and transfer system, listing major equipment and process flows.			
Demonstrate the proper procedure for unloading an HBr shipment and list the proper PPE.			
Explain the purpose of the ASOMA analyzer system and demonstrate placing it in service.			
Demonstrate the procedure for placing a reactor feed pump in service. Switching pumps with the reactor on line.			
Demonstrate the proper method for preparing a feed pump for maintenance including electrical lock-out.			
Describe the reactor "hot charge" system including a description of the flows.			
Perform a walk-thru of the feed mix area and fill out a patrol sheet.			
Locate all major instrumentation and controllers for the area in the field and on DCS.			
Know the location of all safety equipment in the			

area(safety showers, fire hoses and extinguishers)			
Demonstrate the proper procedure for taking unit samples and list the proper PPE.			

Front End – Reactor/Crystallizer Section

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the function of the Oxidation reactor			
List all of the major equipment in the reactor system and explain their functions.			
Describe the function of the reactor overhead condenser system and explain the process flows through the system			
Give a brief description of the glycerin seal system.			
Give a brief description of the reactor oxygen analyzers.			
Demonstrate the proper method for placing the reactor in service using the SOP			
Know the effects of pressure, temperature, and WWD on the reactor.			
Demonstrate how to place the reactor on "hot hold"			
Explain the process of flushing a reactor dump line.			
Locate the major instrumentation and controllers in the field and on DCS for the reactor system.			
Demonstrate resetting the XV valves after a trip.			
Explain the function of the Oxidation crystallizer system.			
List all of the equipment and their equipment numbers.			
Explain the purpose of secondary oxidation and its effect on product quality.			
Explain the purpose and operation of the ejector system on the third crystallizer. Demonstrate placing it in service.			
Know the location of all safety equipment in the area.			
Demonstrate the proper method for flushing a crystallizer transfer line.			
Locate all major instrumentation and controllers in the crystallizer area.			
Demonstrate placing the various control valves in the reactor/crystallizer area in and out of hand-jack			

Front End – Reactor/Crystallizer Section (cont.)

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the process for caustic washing the reactor in preparation for entry and maintenance.			
Explain how to identify blinding locations and how to safely prepare lines for blinding			
What is the proper PPE for maintenance to use for installing blinds.			

Front End – High Pressure Absorber

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the function of the High Pressure Absorber.			
List the major equipment and their numbers and give a brief description of their functions.			
Describe the process flows through the system.			
Explain the pressure control system.			
Demonstrate placing the High Pressure Absorber in service using the SOP.			
Locate all of the major instrumentation and controllers in the field and on DCS.			

PTA Field Operator Certification Checklist

General

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Know how to access and utilize all safety and training information such as plant safety regs, Standard Operating Procedures, MSDS sheets, Process Specific manuals, etc.			
Describe the responsibilities and duties of an operator and list the things that he should do when he patrols the unit.			
Demonstrate proper use of the two-way radio communications system			
Be able to give a brief description of the PTA process including basic process flows.			
Describe the proper way to make shift relief including the types of information that should be discussed.			

Safety and Environmental

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Know how to locate safety equipment in the area including safety showers, fire hoses and extinguishers.			
Describe the hazards of chemicals used in the PTA process			
Know the safe operating pressures and temperatures of hoses used in the unit			
List the PPE required for performing routine duties in the PTA unit.			
Be familiar with the plant alarms and evacuation process.			
Be familiar with the plant equipment lock-out procedure.			
Be familiar with the plant permitting procedure			
Complete the PTA weekly Fire and Safety Checklist.			

BF-500A/B and BD-500

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the purpose of CTA silos and give a brief description of the basic process flow.			
List the major equipment in the system with their equipment numbers and explain their functions.			
Explain the purpose of the silo's vent scrubber BT-500.			
Explain the control system of the density meter.			
Understand the screw and rotary lock Inter Lock system and shutdown priority.			
Demonstrate the proper method for the density meters flushing.			
Demonstrate the proper method for making a walk-through of the silo and feed mix drums area and fill out the patrol sheet.			
Explain the purpose of the circulation system of BG-501A/B discharge line and give a brief description of the basic process flow.			
Explain the purpose of the BH-521A/B and give a brief description of the switching strainer.			
Explain the purpose of the vacuum system on the BD-500.			
Explain how to blending from BF-500A and BF-500B?			
Collect a set of feed mix sample and perform routine lab analysis. Explain purpose of the analysis and how to control them?			
Demonstrate the proper procedure of the feed mix pumps switching.			
Explain the unit on flush method by using the recycle solvent.			
Explain the purpose of fluffing gas at CTA silo BF-500 A/B?.			
Demonstrate or explain how to determine the %TS by visual check and when it will use?.			

Sundyne pump and Pre-heaters

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the purpose of the Sundyne Pump and give a description of the basic process flow.			
Understand the Sundyne system trips and shutdown			
Explain the start-up permissive of the Sundyne and seal water system			
Demonstrate the procedure for placing the Sundyne in service.			
Explain the system on flush operation and how to relate the sundyne			
Explain the purpose of the pre-heater and give a			

description of the basic process flow.			
Explain the process heating up system and the condensate pot system			
When the mechanical seal of sundyne pump was leaked how to take action			
Locate all major instrumentation and controllers in the field and on DCS.			
Know the location of all safety equipment in the area.(safety shower, fire hoses and extinguishers)			
How to introduce the hot oil to the BE-506A/B.			
How to solve problem when the condensate pot too high?			
Explain what the correlation between condensate pot level and outlet temperature of pre-heaters?.			
Explain the proper procedure of the caustic wash of BE-501 shell side?.			
Explain the possibility of hot oil flow increase on BE-506A B?			
Explain why do the hammering occur when start to heating up the unit, and how to avoid this matter?.			
Give the brief description if the pre-heater(BE-501) shell side has been plugged?			

Front End – Reactor/Crystallizer Section

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the purpose of the PTA reactor and give a brief description of the basic process flow			
Explain the reactor catalist charging method and give a brief description of the charging preparation.			
How to Hot Hold the PTA reactor			
Understand the reactor shutdown system and proper flushing method			
Demonstrate the procedure for placing the reactor in service.			
Locate all major instrumentation and controllers for the area in the field and on DCS			
Explain the reactor delta pressure too high what happened			
Explain the procedure the reactor catalyst flushing proper method			
Explain the procedure reactor catalyst pull out and give a brief drawing			
Demonstrate the Hydrogen introduce to the reactor			
When the delta pressure of the reactor goes increase explain how to take next action.			
Suddenly the reactor pressure goes down explain what is happened.			

Front End – Reactor/Crystallizer Section (cont.)

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the purpose of crystallizer and give a brief description of the basic process flow			
List major equipment in the system with their equipment numbers and explain their function			
Understand crystallizer system Hot Hold and when to do hot hold			
Explain the purpose of crystallizers vent energy system and give a brief description of the basic process flow			
Explain the crystalizer pressure 28k steam provide system and when to use the 28k steam			
Understand the crystallizer agitator system and glycerin system			
Demonstrate the ability to perform a system start up using SOP			
Explain the HPW flush system for the crystallizer train lines			
Demonstrate the HCV of crystallizers outlet valves open/close at manually			
Explain the hot oil jacket line system for the crystallizers lines			
Demonstrate the ability to perform a system introduce the hot oil to the train lines			
Explain the purpose of the radio isotope active system for the crystallizers			
Explain the purpose of flush water provide system to the each crystallizers level control valves			
Explain how to control the particle size as the crystallizers			
Explain the purpose of the vent scrubber system and give a brief description of the basic process flow			
Demonstrate the proper method for making a walk-through of the vent scrubber area and fill out the patrol sheet			
Explain the energy recovery system of the vent scrubber			
Demonstrate the proper procedure of the BG-601 A/B switching			
When the level of BD-601 was increased explain how to take action for this abnormal condition			
Suddenly active the PSD-601/PSV-601 of the BD-601 explain this abnormal condition but the level indicate 60% and pressure is normal			

Back End – Pressure centrifuges

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Explain the purpose of centriguges and give a brief description of the basic proces flow.			
List the major equipment in the system with their equipment numbers and explain their functions.			
Explain the lube oil system for the centrifuges.			
Explain the back up system of the lube oil for the centrifuges.			
Explain the Inter Lock system of the centrifuges.			
Explain the startup permisssive of the centrifuges.			
Explain the torque arm system of the centrifuges			
Perform a walk through of the centrifuges system and fill out a patrol shett			
Demonstrate the proper procedure for LPW flush a centrifuges			
Demonstrate the proper procedure for caustic washing a centrifuges and explain the effect of sodium contamination of the system			
How to the understanding the ML was fall into the BD-702 from the wich centrifuge			
Suddenly active the high torque arm interlocks of the centrifuges explain how to take action on this time			
Explain the centrifuges ML system and give a brief description for the basic process flow			
Demonstrate the proper procedure of BG-703A/B suction line's caustic wash			
Explain the purpose of MLSR system and give a description go the basic process flow			
Explain the dr. M system every step			
Explain the proper procedure of dr. M's caustic washing			

WWT Field Operator Certification Checklist

Aeration Basin AM-710 & AM-711

Task Description	Trainees	Trainers	Date
1.Explain the purpose of the Aeration basin and give a brief description of the influent basic process flows.			
2.Explain the purpose of aerators are equipped in aeration basins.			
3.What is the design of TOC load of Aeration Basin and the TOC degradation.			
4.What do you know about Dissolve Oxygen. Explain what is the design DO in Aeration basin and What is caused DO High and Low.			
5.What is your action if DO low. And explain what is the influence to Aeration system if DO low.			
6.What is the purpose of Nutrient and what are the chemicals be use in Aeration			
7.Explain the garret system and sludge age.			

8.What is the normal range of TSS concentration. What is the caused if TSS high and Low and what is your action if TSS high and low.			
9.What is the purpose of sludge recycle and what is the Recycle amount.			
10.Demonstrate the proper action when Emergency shut down occurred			

Clarifier AM-712 A/B And Thickener AM-720

Task Description	Trainees	Trainers	Date
1.Explain the functions of the Clarifier and process flow.			
2.Explain the purpose of Scrappers are equipped in Clarifier.			
3.What is the normal TOC influent to clarifier.			
4.Explain briefly the purpose of AG-712 A/B.			
5.What are the target of TSS under flow of Clarifier.			
6.What is your action if TSS Low or High			
7.Explain how to measure the sludge blanketing. And what is the normal level sludge in clarifier.			
8.Explain why polymer injected to clarifier.			
9.What is the caused of floating sludge. And what is your action if sludge carry over.			
10.What is the caused of turbidity worsens and what is your proper action.			
11. Explain what the functions of Thickener and Described the process flow.			
12.Explain the purpose of Rake AA-720.			
13.What are the target of TSS in Thickener.			
14.Explain how to measure the sludge blanketing. And what is the normal level sludge in Thickener.			
15. Explain if plugging occurred on suction AG-720, what is the caused and your action.			
16.What is the caused of floating sludge on surface of Thickener.			
16.List sample point in Aeration Basin Area.			

Sump Area and Sampling

Task Description	*Trainees*	*Trainers*	*Date*
List all of Sanitary Sewer System in WWT of PT. AMI.			
Explain how did Pumps run in every unit of Sanitary Sewer System. (note : related with the Level of sump)			
Explain line of Sanitary Sewer System.			

Related with the Sanitary Sewer Water flow, How did Hypochlorite Pump (AG-733A/B) work/run?			
List all of Area Sump System in WWT of PT. AMI.			
Explain how did Pumps run in every unit of Area Sump System. (note : related with the Level of sump)			
Explain line of Area Sump System			

Utility Field Operator Certification Checklist

General

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Know how to access and utilize all safety and training information such as plant safety regs, Standard Operating Procedures, MSDS sheets, Process Specific manuals, etc.			
Describe the responsibilities and duties of an operator and list the things that he should do when he patrols the unit.			
Demonstrate proper use of the two-way radio communications system			
Be able to give a brief description of the Utility process including basic process flows.			
Describe the proper way to make shift relief including the types of information that should be discussed.			

Safety and Environmental

Task Description	*Trainees Initials*	*Trainers Initials*	*Date*
Know how to locate safety equipment in the area including safety showers, fire hoses and extinguishers.			
Describe the hazards of chemicals used in the Utility process			
Know the safe operating pressures and temperatures of hoses used in the unit			
List the PPE required for performing routine duties in the Utility unit.			
Be familiar with the plant alarms and evacuation process.			
Be familiar with the plant equipment lock-out procedure.			
Be familiar with the plant permitting procedure			
Be familiar with the Utility activity schedule			

Data

NO	Grade	Kompetensi
1	11	96
2	11	113
3	11	113
4	11	59
5	10	102
6	10	96
7	9	79
8	9	82
9	9	51
10	9	51
11	9	94
12	9	97
13	7	78
14	7	62
15	7	49
16	7	46
17	7	46
18	7	82
19	7	77
20	7	75
21	7	65
22	7	74
23	6	79
24	6	66
25	6	77
26	6	67
27	6	49
28	6	51
29	6	43
30	6	70
31	6	69
32	6	73
33	5	85
34	5	84
35	5	64
36	5	96
37	5	77
38	5	75
39	5	68
40	5	41
41	5	49
42	5	49
43	5	66
44	5	65
45	5	59
46	5	49

NO	Grade	Kompetensi
47	5	54
48	5	58
49	5	54
50	4	82
51	4	91
52	4	42
53	4	63
54	4	95
55	4	78
56	4	93
57	4	67
58	4	67
59	4	61
60	4	45
61	4	48
62	4	56
63	4	46
64	4	46
65	4	47
66	4	49
67	4	85
68	4	75
69	4	47
70	4	57
71	4	57
72	4	59
73	4	62
74	4	52
75	4	52
76	4	54
77	4	54
78	4	59
79	4	54
80	4	49
81	4	53
82	4	54
83	4	42
84	4	45
85	4	6
86	4	6
87	4	8
88	3	4
89	3	4
90	3	6
91	3	4

NO	Grade	Kompetensi
92	3	4
93	3	4

UJI CHI-SQUARE

NPar Tests

Frequencies

GRADE

	Observed N	Expected N	Residual
3	6	11.6	-5.6
4	38	11.6	26.4
5	17	11.6	5.4
6	10	11.6	-1.6
7	10	11.6	-1.6
9	6	11.6	-5.6
10	2	11.6	-9.6
11	4	11.6	-7.6
Total	93		

COMP

	Observed N	Expected N	Residual
4	5	2.0	3.0
6	3	2.0	1.0
8	1	2.0	-1.0
41	1	2.0	-1.0
42	2	2.0	.0
43	1	2.0	-1.0
45	2	2.0	.0
46	4	2.0	2.0
47	2	2.0	.0
48	1	2.0	-1.0
49	7	2.0	5.0
51	3	2.0	1.0
52	2	2.0	.0
53	1	2.0	-1.0
54	6	2.0	4.0
56	1	2.0	-1.0
57	2	2.0	.0
58	1	2.0	-1.0
59	4	2.0	2.0
61	1	2.0	-1.0
62	2	2.0	.0

63	1	2.0	-1.0
64	1	2.0	-1.0
65	2	2.0	.0
66	2	2.0	.0
67	3	2.0	1.0
68	1	2.0	-1.0
69	1	2.0	-1.0
70	1	2.0	-1.0
73	1	2.0	-1.0
74	1	2.0	-1.0
75	3	2.0	1.0
77	3	2.0	1.0
78	2	2.0	.0
79	2	2.0	.0
82	3	2.0	1.0
84	1	2.0	-1.0
85	2	2.0	.0
91	1	2.0	-1.0
93	1	2.0	-1.0
94	1	2.0	-1.0
95	1	2.0	-1.0
96	3	2.0	1.0
97	1	2.0	-1.0
102	1	2.0	-1.0
113	2	2.0	.0
Total	93		

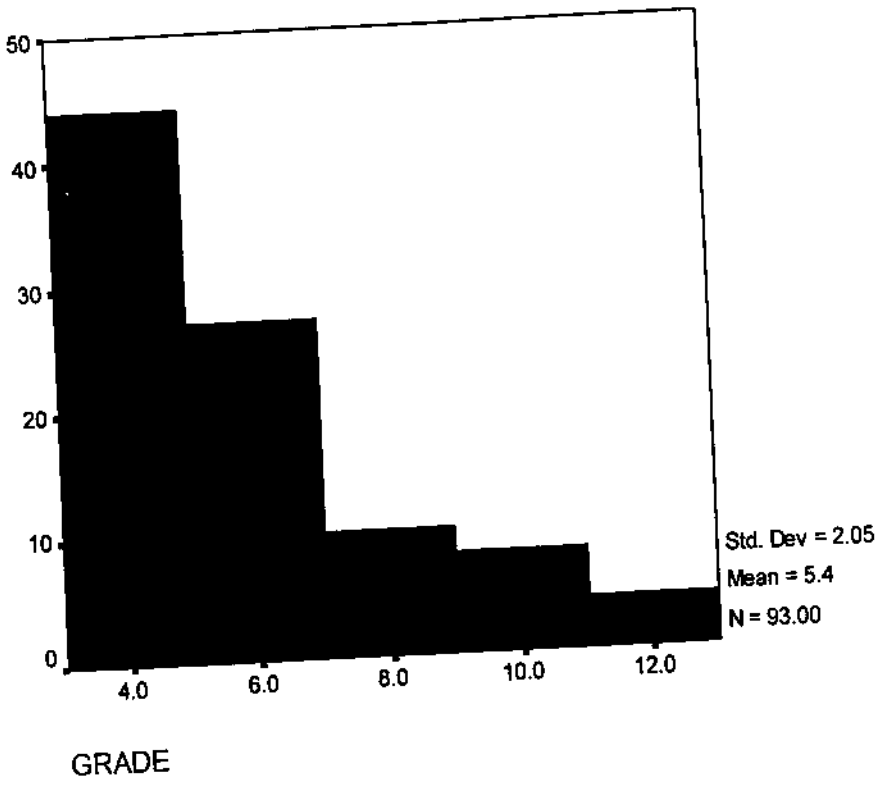
Test Statistics

	GRADE	COMP
Chi-Square(a,b)	81.194	43.022
df	7	45
Asymp. Sig.	.000	.556

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 11.6.
b 46 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.0.

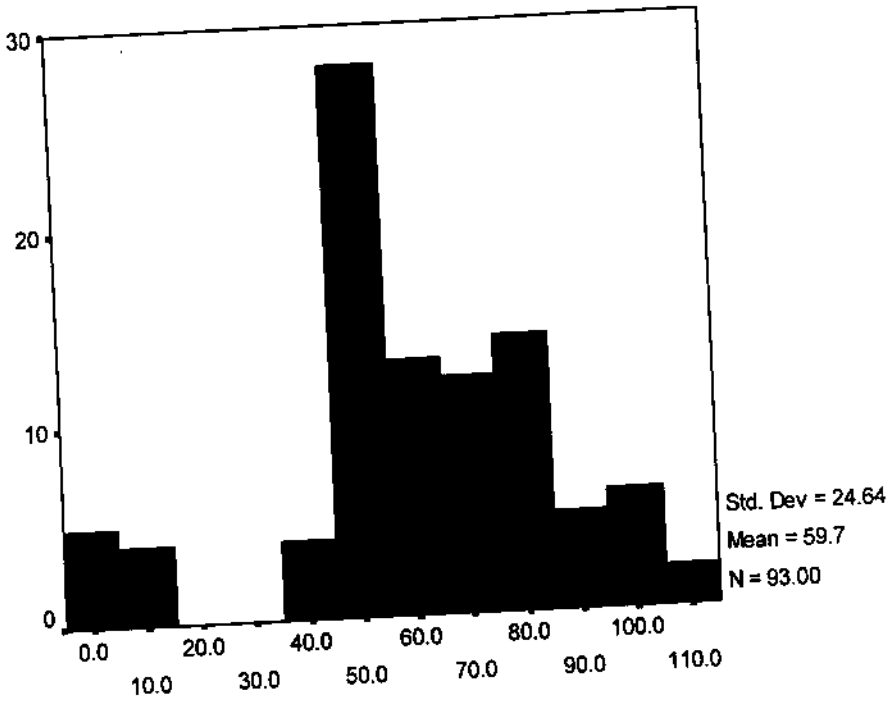
GRAFIK HISTOGRAM DISTRIBUSI GRADE

Graph



GRAFIK HISTOGRAM DISTRIBUSI KOMPETENSI

Graph



UJI KORELASI SPEARMAN'S

Nonparametric Correlations

Correlations

			GRADE	COMP
Spearman's rho	GRADE	Correlation Coefficient	1.000	.519(**)
		Sig. (2-tailed)	.	.000
		N	93	93
	COMP	Correlation Coefficient	.519(**)	1.000
		Sig. (2-tailed)	.000	.
		N	93	93

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

Regression

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	COMP(a)	.	Enter

a All requested variables entered.
b Dependent Variable: GRADE

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.563(a)	.317	.310	1.703

a Predictors: (Constant), COMP
b Dependent Variable: GRADE

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	122.541	1	122.541	42.251	.000(a)
	Residual	263.932	91	2.900		
	Total	386.473	92			

a Predictors: (Constant), COMP
b Dependent Variable: GRADE

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.610	.465		5.608	.000
	COMP	.047	.007	.563	6.500	.000

a Dependent Variable: GRADE

Casewise Diagnostics(a)

Case Number	Std. Residual	GRADE	Predicted Value	Residual
1	2.286	11	7.11	3.89
2	1.818	11	7.90	3.10

3	1.818	11	7.90	3.10
4	3.304	11	5.37	5.63
5	1.534	10	7.39	2.61
6	1.699	10	7.11	2.89
7	1.579	9	6.31	2.69
8	1.497	9	6.45	2.55
9	2.349	9	5.00	4.00
10	2.349	9	5.00	4.00
11	1.166	9	7.01	1.99
12	1.084	9	7.15	1.85
13	.432	7	6.26	.74
14	.872	7	5.51	1.49
15	1.230	7	4.91	2.09
16	1.312	7	4.76	2.24
17	1.312	7	4.76	2.24
18	.322	7	6.45	.55
19	.460	7	6.22	.78
20	.515	7	6.12	.88
21	.790	7	5.65	1.35
22	.542	7	6.08	.92
23	-.182	6	6.31	-.31
24	.175	6	5.70	.30
25	-.127	6	6.22	-.22
26	.148	6	5.75	.25
27	.643	6	4.91	1.09
28	.588	6	5.00	1.00
29	.808	6	4.62	1.38
30	.065	6	5.89	.11
31	.093	6	5.84	.16
32	-.017	6	6.03	-.03
33	-.935	5	6.59	-1.59
34	-.907	5	6.55	-1.55
35	-.357	5	5.61	-.61
36	-1.237	5	7.11	-2.11
37	-.715	5	6.22	-1.22
38	-.660	5	6.12	-1.12
39	-.467	5	5.80	-.80
40	.276	5	4.53	.47
41	.056	5	4.91	.09
42	.056	5	4.91	.09
43	-.412	5	5.70	-.70
44	-.385	5	5.65	-.65
45	-.220	5	5.37	-.37
46	.056	5	4.91	.09
47	-.082	5	5.14	-.14
48	-.192	5	5.33	-.33
49	-.082	5	5.14	-.14

50	-1.439	4	6.45	-2.45
51	-1.687	4	6.87	-2.87
52	-.339	4	4.58	-.58
53	-.917	4	5.56	-1.56
54	-1.797	4	7.06	-3.06
55	-1.329	4	6.26	-2.26
56	-1.742	4	6.97	-2.97
57	-1.027	4	5.75	-1.75
58	-1.027	4	5.75	-1.75
59	-.862	4	5.47	-1.47
60	-.422	4	4.72	-.72
61	-.504	4	4.86	-.86
62	-.724	4	5.23	-1.23
63	-.449	4	4.76	-.76
64	-.449	4	4.76	-.76
65	-.477	4	4.81	-.81
66	-.532	4	4.91	-.91
67	-1.522	4	6.59	-2.59
68	-1.247	4	6.12	-2.12
69	-.477	4	4.81	-.81
70	-.752	4	5.28	-1.28
71	-.752	4	5.28	-1.28
72	-.807	4	5.37	-1.37
73	-.889	4	5.51	-1.51
74	-.614	4	5.05	-1.05
75	-.614	4	5.05	-1.05
76	-.669	4	5.14	-1.14
77	-.669	4	5.14	-1.14
78	-.807	4	5.37	-1.37
79	-.669	4	5.14	-1.14
80	-.532	4	4.91	-.91
81	-.642	4	5.09	-1.09
82	-.669	4	5.14	-1.14
83	-.339	4	4.58	-.58
84	-.422	4	4.72	-.72
85	.651	4	2.89	1.11
86	.651	4	2.89	1.11
87	.596	4	2.98	1.02
88	.119	3	2.80	.20
89	.119	3	2.80	.20
90	.064	3	2.89	.11
91	.119	3	2.80	.20
92	.119	3	2.80	.20
93	.119	3	2.80	.20

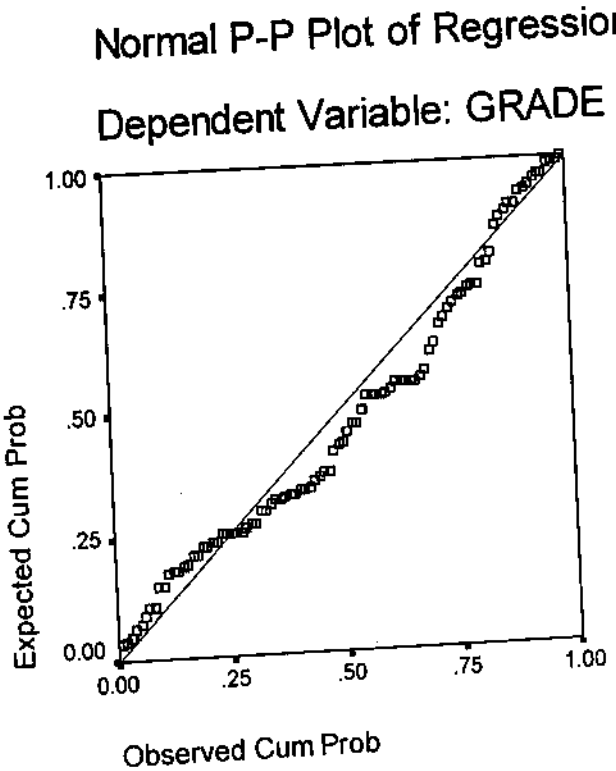
a Dependent Variable: GRADE

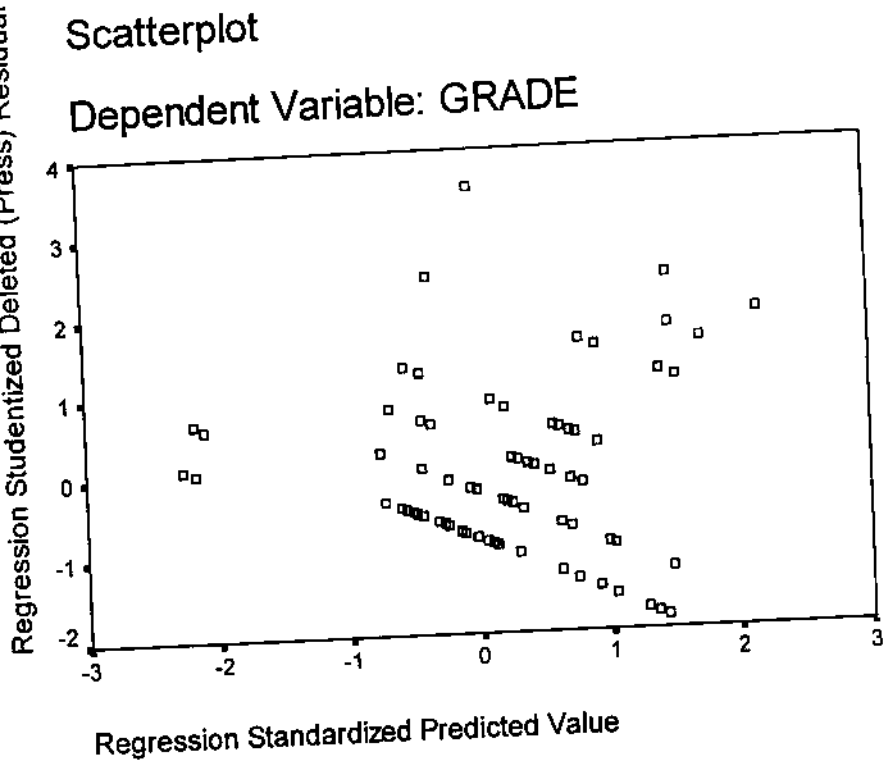
Residuals Statistics(a)

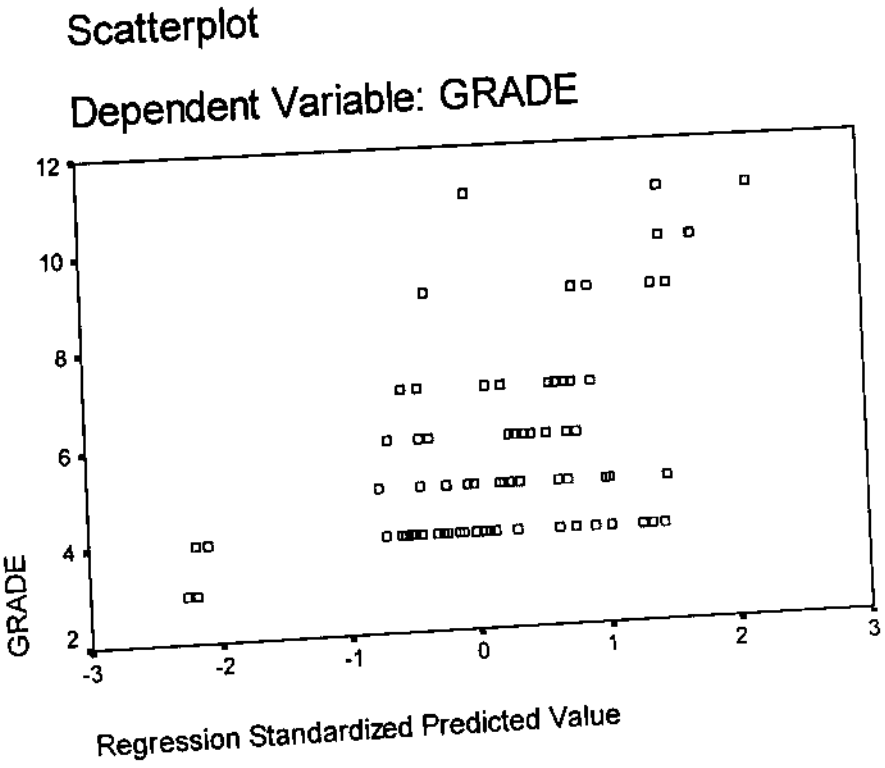
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.80	7.90	5.41	1.154	93
Std. Predicted Value	-2.263	2.162	.000	1.000	93
Standard Error of Predicted Value	.177	.439	.236	.081	93
Adjusted Predicted Value	2.78	7.70	5.40	1.151	93
Residual	-3.06	5.63	.00	1.694	93
Std. Residual	-1.797	3.304	.000	.995	93
Stud. Residual	-1.827	3.322	.002	1.006	93
Deleted Residual	-3.16	5.69	.01	1.734	93
Stud. Deleted Residual	-1.852	3.524	.007	1.022	93
Mahal. Distance	.001	5.119	.989	1.557	93
Cook's Distance	.000	.116	.012	.023	93
Centered Leverage Value	.000	.056	.011	.017	93

a Dependent Variable: GRADE

Charts




Scatterplot
Dependent Variable: GRADE
Regression Studentized Deleted (Press) Residual
Regression Standardized Predicted Value
4
3
2
1
0
-1
-2
-3
-2
-1
0
1
2
3


Scatterplot
Dependent Variable: GRADE
GRADE
Regression Standardized Predicted Value
12
10
8
6
4
2
-3
-2
-1
0
1
2
3

SCATTER GRADE KOMPETENSI

Graph