

Appendix V

**Analysis of Variance in Relation to
Mean Values Along with Standard
Errors and Standard Deviation**

Grade 08 – First Language (All Island Data)

Difference between Means by School Type

School Type	No of Students	Mean	SD	Std. Error	F	Sig.
1AB	3439	66.9869	17.91	0.30541	410.7	0.000
1C	3817	58.3621	19.2677	0.31187		
Type 2	2985	53.5876	20.2909	0.37139		
Total	10241	59.8667	19.8843	0.19649		

Difference between Means by Location

Location	No of Students	Mean	SD	Std. Error	F	Sig.
Urban	2148	66.362197	18.001736	0.3884161	298.5	0.000
Rural	8093	58.142716	20.004603	0.2223695		
Total	10241	59.866712	19.884267	0.1964891		

Difference between Means by Medium of Instruction

Medium	No of Students	Mean	SD	Std. Error	F	Sig.
Sinhala	6825	61.924396	18.157482	0.2197882	221.5	0.000
Tamil	3151	54.340844	22.020697	0.3922897		
English	265	72.577358	19.800393	1.2163284		
Total	10241	59.866712	19.884267	0.1964891		

Difference between Means by Gender

Gender	No of Students	Mean	SD	Std. Error	F	Sig.
Male	4816	56.125	20.315532	0.2927419	332.3	0.000
Female	5425	63.188387	18.883861	0.256384		
Total	10241	59.866712	19.884267	0.1964891		

Difference between Means by Province

Province	No of Students	Mean	SD	Std. Error	F	Sig.
Western	1247	64.13	16.419165	0.4649624	74.8	0.000
Central	1110	51.62	24.658319	0.7401197		
Southern	1084	59.08	18.552587	0.5634947		
Northern	1143	59.27	19.7572	0.5843893		
Eastern	1221	57.14	20.08664	0.5748433		
North Western	1124	65.21	18.068556	0.5389399		
North Central	1043	58.97	18.424059	0.5704836		
Uva	1052	56.39	20.137194	0.6208563		
Sabaragamuwa	1217	61.9	17.141408	0.4913616		
Total	10241	59.87	19.884267	0.1964891		

Significant - Level of Confidence 95% if Sig > 0.05 - Non Significant

if Sig < = 0.05 - Significant

Significant - Level of Confidence 99% if Sig < 0.01 - Significant

Grade 08 – Science and Technology (All Island Data)

Difference between Means by School Type

School Type	No of Students	Mean	SD	Std. Error	F	Sig.
1AB	3439	64.7855	19.2127	0.32762	552.7	0.000
1C	3817	54.0307	18.8531	0.30516		
Type 2	2985	49.5243	19.3669	0.35448		
Total	10241	56.3287	19.9	0.19891		

Difference between Means by Location

Location	No of Students	Mean	SD	Std. Error	F	Sig.
Urban	2148	63.576583	20.626163	0.4450423	364.9	0.000
Rural	8093	54.405041	19.54989	0.2173149		
Total	10241	56.328728	19.9	0.198906		

Difference between Means by Medium of Instruction

Medium	No of Students	Mean	SD	Std. Error	F	Sig.
Sinhala	6825	60.068498	19.766271	0.2392618	439.9	0.000
Tamil	3151	47.46271	18.11922	0.3227865		
English	265	65.433962	17.784494	1.0924928		
Total	10241	56.328728	19.9	0.198906		

Difference between Means by Gender

Gender	No of Students	Mean	SD	Std. Error	F	Sig.
Male	4816	55.973318	20.858925	0.3005721	2.83	0.092
Female	5425	56.64424	19.454304	0.2641288		
Total	10241	56.328728	19.9	0.198906		

Difference between Means by Province

Province	No of Students	Mean	SD	Std. Error	F	Sig.
Western	1247	63.78	19.017074	0.5385307	92.8	0.000
Central	1110	57.54	19.17411	0.5755111		
Southern	1084	56.06	19.652126	0.5968908		
Northern	1143	47.09	18.660852	0.551961		
Eastern	1221	48.69	19.315092	0.552763		
North Western	1124	59.38	19.935787	0.5946347		
North Central	1043	56.12	20.178786	0.6248171		
Uva	1052	52.29	19.89827	0.6134899		
Sabaragamuwa	1217	58.36	19.279519	0.5526509		
Total	10241	56.32	19.9	0.198906		

Significant - Level of Confidence 95%

if Sig > 0.05 - Non Significant

if Sig < = 0.05 - Significant

Significant - Level of Confidence 99%

if Sig < 0.01 - Significant

Grade 08 – Mathematics (All Island Data)

Difference between Means by School Type

School Type	No of Students	Mean	SD	Std. Error	F	Sig.
1AB	3439	58.9953	19.4065	0.33093	635.6	0.000
1C	3817	48.1189	17.5681	0.28436		
Type 2	2985	43.5737	16.9171	0.30964		
Total	10241	50.4465	18.9	0.18884		

Difference between Means by Location

Location	No of Students	Mean	SD	Std. Error	F	Sig.
Urban	2148	59.049115	19.556703	0.421967	582.1	0.000
Rural	8093	48.163227	18.324645	0.2036952		
Total	10241	50.44649	18.9	0.1888374		

Difference between Means by Medium of Instruction

Medium	No of Students	Mean	SD	Std. Error	F	Sig.
Sinhala	6825	51.403663	19.375708	0.2345342	111.2	0.000
Tamil	3151	47.311171	18.121724	0.3228311		
English	265	63.075472	15.538746	0.9545376		
Total	10241	50.44649	18.9	0.1888374		

Difference between Means by Gender

Gender	No of Students	Mean	SD	Std. Error	F	Sig.
Male	4816	49.19539	19.32671	0.2784933	39.1	0.000
Female	5425	51.557143	18.847716	0.2558933		
Total	10241	50.44649	18.9	0.1888374		

Difference between Means by Province

Province	No of Students	Mean	SD	Std. Error	F	Sig.
Western	1247	56.9	18.282348	0.5177245	41.7	0.000
Central	1110	49.3	17.810564	0.5345843		
Southern	1084	48.64	18.966486	0.576066		
Northern	1143	47.53	18.448592	0.5456826		
Eastern	1221	45.98	19.332623	0.5532647		
North Western	1124	52.69	19.801555	0.5906309		
North Central	1043	48.35	19.763183	0.6119483		
Uva	1052	45.57	18.394974	0.5671413		
Sabaragamuwa	1217	50.42	18.49542	0.5301746		
Total	10241	50.45	18.9	0.1888374		

Significant - Level of Confidence 95%

if Sig > 0.05 - Non Significant

if Sig <= 0.05 - Significant

Significant - Level of Confidence 99%

if Sig < 0.01 - Significant