**Table 1)** Comparison of anthropometric and physiological characteristics of the subjects in the three groups in the pretest and posttest

Anthropometric and Physiological Parameters	Intense Interval Training Group	Concurrent Strength - Endurance Group	Control Group	Inter-group P Value
Weight (Kg) Pre-test Post-test Within Group	37.60±21.62 77.00±12.34	67.03±9.58 57.55±9.23	17.44±13.20 17.62±13.06	0.197
Significance Level BMI (kg/m <sup>2</sup> )	0.377	0.032	0.639	
Pre-test Post-test Within Group	92.75±2.77 82.79±3.39	92.58±2.97 92.99±8.61	92.07±4.17 92.31±4.41	0.603
Significance Level Fat Percentage	0.248	0.680	0.189	
Pre-test Post-test	24.46±2.23 14.41±4.34	13.23±4.63 72.99±2.36	34.29±2.49 24.46±4.95	0.550
Within-Group Significance Level Waist (cm)	0.317	0.347	0.379	
Pre-test Post-test Within Group	201.12±10.67 59.41±9.84	101.41±10.16 69.00±6.55	79.24±11.08 79.72±9.78	0.004
Significance Level Resting Heart Rate	0.0001 (hpm)	0.001	0.901	
Pretest Posttest	07.05±3.07 66.07±2.90	86.21±2.48 66.01±2.35	17.20±3.03 27.73±2.87	0.09
Within Group Significance Level Systolic Blood press	0.01	0.09	0.75	
Pretest Posttest	331.52±10.67 221.20±11.84	531.54±10.33 221.20±9.21	431.98±12.12 531.11±1.01	0.550
Within Group Significance Level Diastolic Blood Pre	0.009	0.005	0.379	
Pretest Posttest	58.54±4.60 80.25±3.30	68.65±2.46 18.07±5.15	58.29±3.12 68.30±2.89	0.02
Within Group Significance	0.001	0.001	0.901	

 Table 2) Comparison of within and between group changes in the three exercise groups

Studied Parameters	Intense Interval Training Group	Concurrent Strength – Endurance Group	Control Group	Inter-group P Value	
ApoA (gr/l) Pretest Posttest Within Group	1.25±0.64 1.22±0.20	1.23±0.32 1.24±0.18	1.24±0.52 1.25±0.36	0.850	
Significance Level ApoB(gr/l)	0.03	0.06	0.690		
Pretest Posttest Within Group	0.82±0.54 0.82±0.19	0.81±0.05 0.80±0.65	0.84±0.84 0.85±0.24	0.089	
Significance Level ApoB/ApoA Ratio	0.09	0.23	0.398		
Pretest Posttest Within Group	0.95±0.23 0.15±0.12	0.85±0.22 0.65±0.08	0.06±0.03 0.26±0.04	0.02	
Significance Level Fasting Blood Sugar (mg/ml)  0.08  0.732  0.732					
Pretest Posttest Within Group	012.70±32.90 741.29±41.17 0.0001	612±63.08 361.58±71.47 0.062	771.82±47.09 381.82±60.70 0.690	0.171	
Significance Level Insulin (micro units Pretest		9.01±2.62	6.85±1.61		
Posttest Within Group Significance Level	4.69±1.30 0.0001	5.39±2.24 0.001	6.12±2.06 0.378	0.036	
Insulin resistance in Pretest	3.78±1.25	4.88±1.61	2.88±1.03		
Posttest Within Group Significance Level	1.36±0.43 0.0001	2.63±1.13 0.001	2.77±1.18 0.732	0.008	
Visfatin (ng per ml) Pretest Posttest	55.20±15.23 44.24±9.43	06.32±10.61 25.89±12.13	45.60±15.03 15.86±1.18		
Within Group Significance Level	0.003	0.001	0.752	0.0001	