Table (1): Effect of erythropoietin (EPO) on random blood glucose level during the whole experiment

	At day 0	at day 11	at day 22	Mauchly's test of sphericity P-value>0.05	Mauchly's test of sphericity P-value <0.05
				Sphericity assumed	Lower bound
The control group(GI)	106.9 ± 12.2	107.3 ± 8.5	104.6 ± 2.99	0.803	-------
Diabetic group(GII)	347.9 ± 109.1**a**	367 ± 112.1**a**	377.6 ± 111.4**a**	0.008	-------
Diabetic taking erythropoietin group(GIII)	372± 99.8**a**	270 ± 85.4**a**	201.9 ± 10.7**b**	0.000	-------
Diabetic taking insulin group(GIV)	361.6 ± 128.47**a**	241.3 ± 80.4**b**	96.7 ± 9.5**c**	-------	0.001

Data are expressed as mean ± SD, values with different letters mean significant

P-Value was calculated by repeated measures two-way ANOVA test. Statistically significant p-value <0.05.

Table (2): Effect of erythropoietin (EPO) on hematocrit value, HBA1C and C peptide in diabetic rats

	Control group(GI)	Diabetic group(GII)	Diabetic taking erythropoietin group(GIII)	Diabetic taking insulin group(GIV)	P-value
Hematocrit value	40.3 ± 3.4 **b**	39.7 ± 2.1 **b**	44.7 ± 2.6**a**	39.4 ± 2.6 **b**	0.004
HBA1C	5.7 ± 1.04**b**	12 ± 1.8 **a**	6.1 ± 0.8 **b**	6 ± 0.9 **b**	0.000
C peptide	0.063 ± 0.004**a**	0.036 ± 0.01 **b**	0.062 ± .003**a**	0.039 ± 0.01 **b**	0.000

Data are expressed as mean ± standard deviation, Values with different letters are significant

P-Value was calculated by One Way-Anova test, Statistically significant p-value <0.05

Table (3): Effect of erythropoietin (EPO) on glucose tolerance in diabetic rats **Data are**

Groups	at 0 min	30 min	60 min	90 min	120 min	Mauchley test of sphericity P-value>0.05 P-value <0.05	
						Sphericity assumed	Lower bound
Control group(GI)	106.14 ± 7.7**b**	296 ± 87.6**a**	256.3 ± 34.8**a**	177.9 ± 39**a**	107.1 ± 8.6**b**	-------	0.001
Diabetic group(GII)	359 ± 130.7**b**	528.6 ± 126.7**a**	520.6 ± 128.6**a**	501.3 ± 108.2**a**	526.6 ± 126.1**a**	0.007	-------
Diabetic taking erythropoietin group	198± 11.1**c**	459.1 ± 54.1**a**	393.7 ± 54.9**b**	312.9 ± 38.6**b**	257.9 ± 21.9**b**	0.000	-------
Diabetic taking insulin group	100 ± 7.23**c**	373.71 ± 43.2**a**	298 ± 61.87**b**	196.14 ± 47.78**b**	98.86 ± 10.21**c**	-------	0.000

expressed as mean ± SD, values with different letters mean significant

P-Value was calculated by Repeated measures Two Way-Anova test. Statistically significant p-value <0.0

Table **(4):** Effect of Erythropoietin (EPO) on insulin sensitivity in diabetic rats.**Data are**

	0 min	30 min	60 min	90 min	120min	Mauchley test of sphericity P-value>0.05 Sphericity bound assumed	Pvalue<0.05 Lower
Control group (GI)	111.86 ± 10.19**a**	83.57 ± 7.458**b**	60.14 ± 9.2**c**	45.43 ± 7.79**c**	34.57 ± 4.756**c**	--------	0.000
Diabetic group(GII)	342.86 ± 122.50	329.14 ± 123.50	339.57 ± 146.68	263.71 ± 146.95	311.86 ± 157.2	--------	0.237
Diabetic taking erythropoietin group(GIII)	205.3 ± 10**a**	193.9 ± 5**a**	181.14 ± 5**b**	167.3 ± 4.5**c**	156 ± 3.5**c**	--------	0.000
Diabetic taking insulin group(GIV)	106.9 ± 10.7**a**	97.3 ± 8.2**a**	69.9 ± 7.7**b**	57.1 ± 7.3**c**	44.1 ± 4.9**c**	--------	0.000

expressed as mean ± SD, values with different letters mean significant

P-Value was calculated by Repeated measures Two Way Anova test. Statistically significant p-value <0.05