RESULTS

CASE No.	SEX	BIRTH ORDER	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	LEVEL of INSULIN µU/ml
CI	M	Ist Order	3.500	50	35	26
C2	M	2nd Order	3.600	50	35	27
C3	M	6th Order	3.400	50	34.5	25
C4	M	Ist Order	3.500	50	34	28
C5	F	3rd Order	3.250	49	33	24
C6	F	Ist Order	3.500	49	35	26
C7	F	Ist Order	3.500	49	34.5	27
C8	M	Ist Order	3.400	50	34.5	25
C9	M	3rd Order	3.500	50	35.5	27
CIO	M	3rd Order	3.300	49	34.5	24
CII	M	3rd Order	3.700	5I	35	29
CI2	F	Ist Order	3.500	50	35	26
CI3	M	Ist Order	3.600	50	35	28
CI4	F	2nd Order	3.300	49	34.5	24
CI5	M	6th Order	3.400	50	35	25
CI6	F	6th Order	3.250	49	34	24
CI7	M	3rd Order	3.300	49.5	34.5	24
CI8	F	3rd Order	3.500	50	35	25

TABLE NO. I : CLINICAL DATA AND INSULIN LEVEL IN CONTROL GROUP

CASE NO.	SEX	BIRTH ORDER	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100 ml)	CORD GLUCOSE (mg/100 ml)
C1	M	1st Order	3.500	50	35	96	91
C2	M	2nd Order	3.600	50	35	97	92
C3	M	6th Order	3.400	50	34.5	86	80
C4	M	1st Order	3.500	50	34	96	91
C5	F	3rd Order	3.250	49	33	76	70
C6	F	1st Order	3.500	49	35	94	87
C7	F	1st Order	3.500	49	34.5	94	86
C8	M	1st Order	3.400	50	34.5	86	80
C9	M	3rd Order	3.500	50	35.5	95	90
C10	M	3rd Order	3.300	49	34.5	80	74
C11	M	3rd Order	3.700	51	35	100	95
C12	F	1st Order	3.500	50	35	95	90
C13	M	1st Order	3.600	50	35	98	93

CASE No.	SEX	BIRTH ORDER	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100 ml)	CORD GLUCOSE (mg/100 ml)
CI4	F	2nd Order	3.300	49	34.5	80	74
CI5	M	6th Order	3.400	50	35	90	84
CI6	F	6th Order	3.250	49	34	76	70
CI7	M	3rd Order	3.300	49.5	34.5	82	76
CI8	F	3rd Order	3.500	50	35	95	89

TABLE NO. 2 : CLINICAL DATA, MATERNAL AND CORD GLUCOSE LEVELS IN CONTROL GROUP

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	LEVEL OF SM %	LEVEL OF INSULIN µU/ml
II	F	6th Order		2.800	48	34	84,6%	I7
2I	F	I st Order	Emesis for the first Month	3.I00	49	35	9I.6%	20
3I	M	Ist Order	Low forceps-Caput succedaneum	3.I00	49	34	94 %	2I
4I	F	Ist Order	BP I20/70-vaginal delivery failed —CS	3.I00	48	34.5	92 %	20
5I	M	Ist Order	Oedema in the last Month	2.800	46	34	84 %	I7
6I	F	5th Order	Vaginal bleeding of 2 days duration.	3	49	33	90 %	I9
7I	M	4th Order		3.200	49	34	96 %	22
8I	F	Ist Order		3.I00	48	34	94 %	2I
9I	M	Ist Order		2.850	48	33	85,6%	I8
I0I	M	2nd Order	Rheumatic heart - MS -	3.I00	48	34	96 %	22
III	F	Ist Order	Influenza in last Month	2.900	48	34.5	88 %	I7
I2I	F	Ist Order		3	49	33	90 %	I8

TABLE NO. 3 : CLINICAL DATA,SM AND INSULIN LEVELS IN INTERMEDIATE GROUP

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
II	F	6th		2.800	48	34	65	60
2I	F	Ist	Emesis for the first month	3.100	49	35	76	69
3I	M	Ist	Low forceps-Caput succedaneum	3.100	49	34	76	69
4I	F	Ist	BP 120/70 - vaginal delivery failed-CS	3.100	48	34.5	75	68
5I	M	Ist	Oedema in the last Month	2.800	46	34	65	60
6I	F	5th	Vaginal bleeding of 2 days duration	3	49	33	70	65
7I	M	4th		3.200	49	34	77	70
8I	F	Ist		3.100	48	34	75	67
9I	M	Ist		2.850	48	33	67	63
10I	M	2nd	Rheumatic heart - MS	3.100	48	34	74	67
III	F	Ist	Influenza in last Month	2.900	48	34.5	68	64
12I	F	Ist		3	49	33	70	65

TABLE NO. 4 : CLINICAL DATA, MATERNAL AND CORD GLUCOSE LEVELS IN INTERMEDIATE GROUP

CASE NO.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	LEVEL OF SM. %	LEVEL OF INSULIN µU/ml
IL	M	Ist	BP I40/90 Alb +++ - Oedema of L.L for last 2 Monthes.	2	43	3I	44%	7
2L	M	4th	Emesis for 3 Months - 8 days of Fever in the 8th Month - CS	2.500	46	33.5	80%	I2
3L	F	Ist	Twins	I.500	40	30	2I,7%	4
4L	F			I.400	36.5	28.5	20%	4
5L	F	Ist	Twins - BP I30/70 - Oedema of L.L for 2 Months - Antepartum haemorrhage,	2	44	30.5	40%	7
6L	M			I.900	43	30.5	34%	6
7L	F	8th	Emesis for 3 Months	2.300	45	33	60%	I0
8L	M	Ist	Low Socioeconomic	2.500	45.5	33	78%	I2
9L	M	5th	Low Socioeconomic	2.450	45	34	74%	II
I0L	M	3rd	Mother Rh, DM	2.370	43.5	32	65%	I0

CASE NO.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	LEVEL OF SM %	LEVEL OF INSULIN µU/ml
I1L	F	8th	Repeated neonatal death in Ist week, jaundiced Rh - ve	2.100	43	34	56%	9
I2L	M	5th	MS + AF + heart failure	2	43.5	31	46.7%	8
I3L	F	4th	Placenta Previa-Severe vaginal bleeding - CS.	2.350	44	32	60%	10
I4L	F	Ist	Emesis till 5th Month	I.950	43	30	38%	6
I5L	M	Ist	Twins - BP I70/I00 Alb +++, Oedema of L.L	I.850	40	30	28%	6
I6L	F			I.400	38	28	20%	4
I7L	M	3rd	BP I80/I20 - Oedema of L.L	2.I50	43	32	53.7%	9
I8L	M	5th	Twins	I.900	43	3I	3I%	6
I9L	F			I.800	40.5	3I	26%	5

TABLE NO. 5 : CLINICAL DATA, SM AND INSULIN LEVELS IN LOW BIRTH WEIGHT GROUP

CASE NO.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100ml)	CROD GLUCOSE (mg/100ml)
1L	M	1st	BP 140/90-Alb +++ - Oedema of L.L for last 2 Months	2	43	31	60	40
2L	M	4th	Emesis for 3 Months - 8 days of Fever in the 8th Month - CS	2.500	46	33.5	67	50
3L	F	1st	Twins	1.500	40	30	54	34
4L				1.400	36.5	28.5		32
5L	F	1st	Twins - BP 130/70 - Oedema of L.L for 2 Months - Antepartum haemorrhage.	2	44	30.5	60	39
6L	M			1.900	43	30.5		36
7L	F	8th	Emesis for 3 Months	2.300	45	33	63	43
8L	M	1st	Low Socioeconomic	2.500	45.5	33	67	50
9L	M	5th	Low Socioeconomic	2.450	45	34	66	48
10L	M	3rd	Mother Rh. DM	2.370	43.5	32	64	45
11L	F	8th	Repeated neonatal deaths in 1st week jaundiced, Rh-ve	2.100	43	34	61	41
12L	M	5th	MS + AF + heart failure	2	43.5	31	60	40

CASE NO.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
I3L	F	4th	Placenta Previa-Severe vaginal bleeding - CS	2.350	44	32	63	44
I4L	F	Ist	Emesis till 5th Month	I.950	43	30	59	38
I5L	M	Ist	Twins - BP I70/I00 Alb +++, oedema of LL.	I.850	40	30	58	35
I6L				I.400	38	28		3I
I7L	M	3rd	BP I80/I20 - Oedema of L.L.	2.I50	43	32	62	4I
I8L	M	5th	Twins	I.900	43	3I	56	36
I9L	F			I.800	40.5	3I		33

TABLE NO. 6 : CLINICAL DATA,MATERNAL AND CORD GLUCOSE LEVELS IN LOW BIRTHWEIGHT GROUP

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	LEVEL OF SM %	LEVEL OF INSULIN µU/ml
IP	F	Ist	36 weeks-Breech-Talipus equinovarus	2.500	46	32	72%	IO
2P	M	4th	32 weeks - Antepartum haemorrhage - BP I20/IIO - Alb +++ - oedema of L.L.	2	43	30	54%	6
3P	M	4th	36 weeks	2.700	47.5	33	79%	I3
4P	F	2nd	36 weeks - Antepartum haemorrhage - placenta previa	2.500	46.5	32.5	70%	IO
6P	F	Ist	32 weeks - Antepartum haemorrhage - Placenta previa centralis	2.I00	45	3I.5	60%	9
7P	F	Ist	28 weeks - Falling from stairs	0.850	34	2I.5	I3%	3
8P	M	8th	Twins-30 weeks - Antepartum haemorrhage - CS	I.300	37	28.5	33.7%	4
9P	F			I.500	38	29	39.7%	4
IOP	F	4th	36 weeks	2.550	47	34	74%	II
IIP	F	2nd	28 weeks - vaginal bleeding from IO a.m to 3 p.m	I	34	24.5	20%	3

CASE NO.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	LEVEL OF SM %	LEVEL OF INSULIN µU/ml
I2P	F	6th	34 weeks	2.400	44	32	64%	9
I3P	M	Ist	34 weeks - Maternal exertion	2.600	47.5	32.5	78%	I2
I4P	M	5th	30 weeks	I.650	38.5	30	46%	5
I5P	F	Ist	34 weeks - bleeding from I2 a.m to 6 p.m	2.400	43	32	62%	8
I6P	M	3rd	30 weeks - patulous Os	I.800	39	30.5	50%	6
I7P	M	3rd	30 weeks	I.750	39	30	48%	5
I8P	F	Ist	29 weeks - Exertion	I.I00	35	26	23%	4
I9P	F	2nd	28 weeks - trauma to the mother	0.550	33	20	9,7%	3

TABLE NO. 7 : CLINICAL DATA,SM AND INSULIN LEVELS IN PREMATURE GROUP

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
1P	F	1st	36 weeks - Breech - Talipus equinovarus	2.500	46	32	74,6	55
2P	M	4th	32 weeks-Antepartum haemorrhage-BP 120/110-Alb ++++- oedema of L.L	2	43	30	68	50
3P	M	4th	36 weeks	2.700	47.5	33	80	60
4P	F	2nd	36 weeks Antepartum haemorrhage - Placenta previa	2.500	46.5	32.5	74	55
6P	F	1st	32 weeks - Antepartum Haemorrhage - Placenta previa centralis	2.100	45	31.5	70	51
7P	F	1st	28 weeks - Falling from stairs	0.850	34	21.5	57	35
8P	M	8th	Twins - 30 weeks - Antepartum haemorrhage - CS	1.300	37	28.5	60	38
9P	F			1.500	38	29		40
10P	F	4th	36 weeks	2.550	47	34	76	57
11P	F	2nd	28 weeks - Vaginal bleeding from 10 a.m to 3 p.m	1	34	24.5	58	36

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (cms)	SKULL CIRCUM (cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
I2P	F	6th	34 weeks	2.400	44	32	72	53
I3P	M	Ist	34 weeks - Maternal Exertion	2.600	47.5	32.5	76	59
I4P	M	5th	30 weeks	I.650	38.5	30	6I	4I
I5P	F	Ist	34 weeks - bleeding from I2 a.m to 6 p.m	2.400	43	32	72	52
I6P	M	3rd	30 weeks - Patulous os	I.800	39	30.5	65	46
I7P	M	3rd	30 weeks	I.750	39	30	64	44
I8P	F	Ist	29 weeks - Exertion	I.I00	35	26	59	36
I9P	F	2nd	28 weeks - Trauma to the mother	0.550	33	20	57	35

TABLE NO. 8 : CLINICAL DATA, MATERNAL AND CORD GLUCOSE LEVELS IN PREMATURE GROUP.

CASE No.	SEX	BIRTHORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	LEVEL OF SM %	LEVEL OF INSULIN µU/ml
D_1	F	9th Order +2 Miscariages	Diabetic for 11 Months - Hospitalisation of pt for 1 week -. Delivery at 38w by CS - BP of mother 130/100 - short period of convulsions of the newborn	4.950	55	37	150%	78
D_2	M	2nd Order+5 miscariages	Diabetic for 5 years - Hospitalisation of pt for 4 weeks - Delivery at 38 w by CS - oedema of hands and feet for 1 week before delivery.	4.250	52	36	137%	68
D_3	F	8th Order	Diabetic for 1 yrs - Hospitalisation of pt for 8 weeks - Delivery at 38w by CS	3.750	50	35	126%	60
D_4	F	6th Order	Diabetic for 1½ yrs - Hospitalisation of pt for 7 weeks - Delivery at 38w by CS Oedema of hands and feet for 2 weeks.	3.850	51	36	130%	61
D_5	M	1st Order	Diabetic for 1½ yrs - Hospitalisation of pt for 4 weeks - Vaginal delivery at 32w	2.750	46	30.5	105%	32
D_6	M	11th Order	Diabetic for 8yrs - Hospitalisation of pt for 4 weeks followed by escape of pt then return to hospital with antepartum haemorshage + bleeding for 3 hours - delivery at 32w by CS - Malformation of cartilage of ear + gum hypertrophy of newborn - Newborn died 3 days later.	2.900	47	34	108%	36
D_7	F	2nd Order	Diabetic for 3 yrs - Hospitalisation of pt for 10 weeks - Delivery at 38 w by CS BP of mother 140/90- Oedema of LL for the last month.	3.500	49	33	122,6%	58

CASE No.	SEX	BIRTHORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	LEVEL OF Sm %	LEVEL OF INSULIN µU/ml
D_8	F	1st Order 4 Pregnancies ended in death of fetuses	Diabetic for 8yrs - Hospitalisation of pt for 16 weeks - Delivery at 38w by CS-BP of mother 110/80 - Oedema of LL for 10 days	3.270	48.5	34	117,6%	49
D_9	M	3rd Order	Diabetic for 4yrs - Hospitalisation of pt for 14 weeks - Delivery at 38w by CS	3.250	49	31.5	114%	47
D_{10}	F	2nd Order	Diabetic for 6yrs - Hospitalisation of pt for 5 weeks - Delivery at 38w by CS-BP of mother 140/100 - Oedema of hands and feet Plethoric baby	4.100	52	36	135%	65
D_{11}	M	8th Order 3 pregnancies ended in death of fetuses	Diabetic for 4yrs - Hospitalisation of pt for 4 weeks - Vaginal delivery at 28w.	2.100	40	30	103%	30
D_{12}	M	6th Order	Diabetic for 2 yrs - Hospitalisation of pt for 1 week - Delivery at 38w by CS	4.750	55	36.5	145%	75
D_{13}	F	3rd Order	Diabetic for 5yrs - Hospitalisation of pt for 18 weeks - Delivery at 38w by CS Talepus equinovarus of Rt foot -Syndactly of 2nd and 3rd toe	3	44	32.5	112%	40
D_{14}	F	8th Order last 2 pregnancies ended in 2 SB	Diabetic for 2yrs - Hospitalisation of pt for 11 weeks - Delivery at 38w by CS-BP of mother 140/100	3.500	49	34	120%	55

CASE No.	SEX	BIRTHORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	LEVEL OF Sm %	LEVEL OF INSULIN µU/ml
D_{15}	M	2nd Order	Diabetic for 2 yrs - Hospitalisation of pt for 4 weeks - Delivery at 38w by CS BP of mother 165/110	4.250	51.5	35.5	137%	69
D_{16}	M	3rd Order	Diabetic for 8 Months - Hospitalisation of pt for 10 weeks - Delivery at 38w by CS	3.500	50	35	122,6%	57
D_{17}	M	2nd Order	Diabetic for 6 Months - Hospitalisation of pt for 10 weeks - Delivery at 38w by CS	3.500	49	34.5	120%	56
D_{18}	F	4th Order 2 previous babies over weight	Diabetic for 1½ yrs - Hospitalisation of pt for 7 weeks -. Delivery at 38w by ventouse.	3.800	51	35	128%	60
D_{19}	M	1st Order	Diabetic for 10 Months - Hospitalisation of pt for 4 weeks - Delivery at 38w by vaginal route.	4.500	53	37	141%	71
D_{20}	F	3rd Order	Diabetic for 1½ yrs - Hospitalisation of pt for 2 weeks - Delivery at 38w by CS	4.700	54	36	144%	73
D_{21}	F	2nd Order	Diabetic for 1½ yrs - Hospitalisation of pt for 14 weeks - Delivery at 38w by CS	3.250	49	33	114%	45
D_{22}	M	2nd Order	Diabetic for 2yrs - Hospitalisation of pt for 12 weeks - Delivery at 38w by CS	3.400	50	34.5	119%	52
D_{23}	F	1st Order	Diabetic for 1½yrs - Hospitalisation of pt for 6 weeks - Delivery at 38w by CS"	4	51	35.5	133,6%	63

Table No.9 : Clinical data, SM and insulin levels in the diabetic group

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
D_1	F	9th Order + 2 miscariages	Diabetic for 11 Months - Hospitalisation of pt for 1 week - Delivery at 38 w by CS - BP of mother 130/100 - short period of convulsions of the newborn	4.950	55	37	170	130
D_2	M	2th Order + 5 miscariages	Diabetic for 5 yrs - Hospitalisation of pt for 4 weeks - Delivery at 38w by CS oedema of hands and feet for 1 week before delivery.	4.250	52	36	157	116
D_3	F	8th Order	Diabetic for 1 yrs - Hospitalisation of pt for 8 weeks - Delivery at 38 w by CS	3.750	50	35	145	114
D_4	F	6th Order	Diabetic for 1½ yrs - Hospitalisation of pt for 7 weeks - Delivery at 38 w by CS Oedema of hands and feet for 2 weeks.	3.850	51	36	152	110
D_5	M	1st Order	Diabetic for 1½ yrs - Hospitalisation of pt for 4 weeks - Vaginal delivery at 32 w.	2.750	46	30.5	89	80
D_6	M	11th Order	Diabetic for 8 yrs - Hospitalisation of pt for 4 weeks followed by escape of pt then return to hospital with Antepartum haemorrhage + bleeding for 3 hours delivery at 32 w by CS - Malformation of cartilage of ear + gum hypertrophy of newborn - Newborn died 3 days later.	2.900	47	34	96	90

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
D_7	F	2nd Order	Diabetic for 3 yrs - hospitalisation of pt for 10 weeks - Delivery at 38 w by CS BP of mother 140/90 - Oedema of L.L for the last month.	3.500	49	33	140	110
D_8	F	1st Order 4 pregnancies ended in death of fetuses	Diabetic for 8 yrs - hospitalisation of pt for 16 weeks - Delivery at 38 w by CS-BP of mother 110/80 - Oedema of LL for 10 days.	3.270	48.5	34	125	102
D_9	M	3rd Order	Diabetic for 4 yrs - hospitalisation of pt for 14 weeks - Delivery at 38w by CS	3.250	49	31.5	120	101
D_{10}	F	2nd Order	Diabetic for 6 yrs - hospitalisation of pt for 5 weeks - Delivery at 38w by CS-BP of mother 140/100 - Oedema of hands and feet - Plethoric baby.	4.100	52	36	156	115
D_{11}	M	8th Order 3 pregnancies ended in death of fetuses	Diabetic for 4 yrs - hospitalisation of pt for 4 weeks - Vaginal delivery at 28 w.	2.100	40	30	86	76
D_{12}	M	6th Order	Diabetic for 2 yrs - hospitalisation of pt for 1 week - Delivery at 38 w by CS	4.750	55	36.5	165	128
D_{13}	F	3rd Order	Diabetic for 5 yrs - hospitalisation of pt for 18 weeks - Delivery at 38 w by CS Talepus equinovarus of Rt foot - Syndactly of 2nd and 3rd toe.	3.	44	32.5	110	98

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
D_{14}	F	8th Order last 2 pregnancies ended in 2 S.B	Diabetic for 2 yrs - Hospitalisation of pt for 11 weeks - Delivery at 38 w by CS BP of mother 140/100	3.500	49	34	132	106
D_{15}	M	2nd Order	Diabetic for 2 yrs - Hospitalisation of pt for 4 weeks - Delivery at 38 w by CS - BP of mother 165/110	4.250	51.5	35.5	158	118
D_{16}	M	3rd Order	Diabetic for 8 Months - Hospitalisation of pt for 10 weeks - Delivery at 38 w by CS	3.500	50	35	138	108
D_{17}	M	2nd Order	Diabetic for 6 Months - Hospitalisation of pt for 10 weeks - Delivery at 38 w by CS	3.500	49	34.5	136	107
D_{18}	F	4th Order 2 previous babies overweight	Diabetic for 1½ yrs - Hospitalisation of pt for 7 weeks - Delivery at 38 w by Ventouse.	3.800	51	35	150	110
D_{19}	M	1st Order	Diabetic for 10 Months - Hospitalisation of pt for 4 weeks - Delivery at 38 w by vaginal route.	4.500	53	37	160	120
D_{20}	F	3rd Order	Diabetic for 1½ yrs - Hospitalisation of pt for 2 weeks - Delivery at 38 w by CS	4.700	54	36	162	125
D_{21}	F	2nd Order	Diabetic for 1½ yrs - Hospitalisation of pt for 14 weeks - Delivery at 38 w by CS	3.250	49	33	118	100

CASE No.	SEX	BIRTH ORDER	REMARKS	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)
D_{22}	M	2nd Order	Diabetic for 2 yrs - Hospitalisation of pt for 12 weeks - Delivery at 38 w by CS	3.400	50	34.5	130	104
D_{23}	F	1st Order	Diabetic for 1½ yrs - Hospitalisation of pt for 6 weeks - Delivery at 38 w by CS.	4	51	35.5	154	113

Table No.10 : Clinical data, Maternal and Cord Glucose Levels in the Diabetic Group

CASE No.	DURATION OF HOSPITALISATION	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)	LEVEL OF INSULIN uU/ml	LEVEL OF SM
SHORT TERM THERAPY (uncontrolled cases)								
D1	1 week hospitalisation	4.950	55	37	170	130	78	150%
D2	4 weeks hospitalisation	4.250	52	36	157	116	68	137%
D4	7 weeks hospitalisation	3.850	51	36	152	110	61	130%
D10	5 weeks hospitalisation	4.100	52	36	156	115	65	135%
D12	1 week hospitalisation	4.750	55	36.5	165	128	75	145%
D15	4 weeks hospitalisation	4.250	51.5	35.5	158	118	69	137%
D18	7 weeks hospitalisation	3.800	51	35	150	110	60	128%
D19	4 weeks hospitalisation	4.500	53	37	160	120	71	141%
D20	2 weeks hospitalisation	4.700	54	36	162	125	73	144%
D23	6 weeks hospitalisation	4	51	35	154	113	63	133.6%

Table No. 11 : CLINICAL DATA, MATERNAL AND CORD GLUCOSE LEVELS, SM AND INSULIN LEVELS IN THE DIABETIC GROUP RECEIVING SHORT TERM THERAPY.

CASE No.	DURATION OF HOSPITALISATION	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)	MATERNAL GLUCOSE (mg/100ml)	CORD GLUCOSE (mg/100ml)	LEVEL OF INSULIN µU/ml	LEVEL OF SM %
Long term therapy (controlled cases)								
D3	8 weeks hospitalisation	3.750	50	35	145	114	60	126%
D7	10 weeks hospitalisation	3.500	49	33	140	110	58	122,6%
D8	16 weeks hospitalisation	3.270	48,5	34	125	102	49	117,6%
D9	14 weeks hospitalisation	3.250	49	31.5	120	101	47	114%
D13	18 weeks hospitalisation	3	44	32.5	110	98	40	112%
D14	11 weeks hospitalisation	3.500	49	34	132	106	55	120%
D16	10 weeks hospitalisation	3.500	50	35	138	108	57	122,6%
D17	10 weeks hospitalisation	3.500	49	34.5	136	107	56	120%
D21	14 weeks hospitalisation	3.250	49	33	118	100	45	114%
D22	12 weeks hospitalisation	3.400	50	34.5	130	104	52	119%

Table No.12 : CLINICAL DATA, MATERNAL AND CORD GLUCOSE LEVELS, SM AND INSULIN LEVELS IN THE DIABETIC GROUP RECEIVING LONG TERM THERAPY.

TABLE No. 13 : SHOWS RANGE, MEAN, STANDARD DEVIATION OF WEIGHT, LENGTH, SKULL CIRCUMFERENCE OF NEWBORN

IN CONTROL GROUP

	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)
RANGE	3.250 - 3.700	49 - 51	33 - 35
MEAN	3.44	49.69	34.64
SD	± 0.13	± 0.57	± 0.56

IN INTERMEDIATE GROUP

	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)
RANGE	2.800 - 3.200	46 - 49	33 - 35
MEAN	3	48.25	33.92
SD	± 0.14	± 0.87	± 0.63

IN LOW BIRTHWEIGHT GROUP

	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)
RANGE	1.400 - 2.500	36.5 - 45.5	28 - 34
MEAN	2.02	42.60	31.3
SD	± 0.34	± 2.52	± 1.7

IN PREMATURE GROUP

	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)
RANGE	0.550 - 2.700	33 - 47.5	20 - 34
MEAN	1.85	40.94	29.42
SD	± 0.67	± 5.12	± 3.97

IN DIABETIC GROUP

	WEIGHT (Kg)	LENGTH (Cms)	SKULL CIRCUM (Cms)
RANGE	3 - 4.950	44 - 55	31.5 - 37
MEAN	3.85	50.65	34.85
SD	± 0.56	± 2.54	± 1.51

IN UNCONTROLLED DIABETIC GROUP

	WEIGHT (Kg)	LENGHT (Cms)	SKULL CIRCUM (Cms)
RANGE	3.800 - 4.950	51 - 55	35.5 - 37
MEAN	4.31	52.55	36.0
SD	± 0.40	± 1.61	± 0.71

	CONTROL	L.B.W	PREMATURE	INTERMEDIATE
NUMBER	18	19	18	12
MEAN	25.78	7.68	6.94	19.33
∓ SD	1.59	2.67	3.33	1.92
t		25.13	21.65	9.63
P		LESS THAN 0.001	LESS THAN 0.001	LESS THAN 0.001

TABLE No. 14: SHOWS THE MEAN LEVELS OF INSULIN IN CORD BLOOD IN THE LBW, PREMATURE, INTERMEDIATE COMPARED WITH CONTROL GROUP.

	CONTROL	DIABETIC		
		ALL CASES	SHORT TERM	LONG TERM
NUMBER	18	20	10	10
MEAN	25.78	60.10	68.30	51.90
∓ SD	1.59	10.39	6.06	6.47
t		14.60	5.86	
P		LESS THAN 0.001	LESS THAN 0.001	

TABLE No.15 : SHOWS THE MEAN LEVELS OF INSULIN IN CORD BLOOD IN THE DIABETIC COMPARED WITH CONTROL GROUP.

t TEST OF INSULIN IN LONG TERM THERAPY VERSUS SHORT TERM THERAPY.

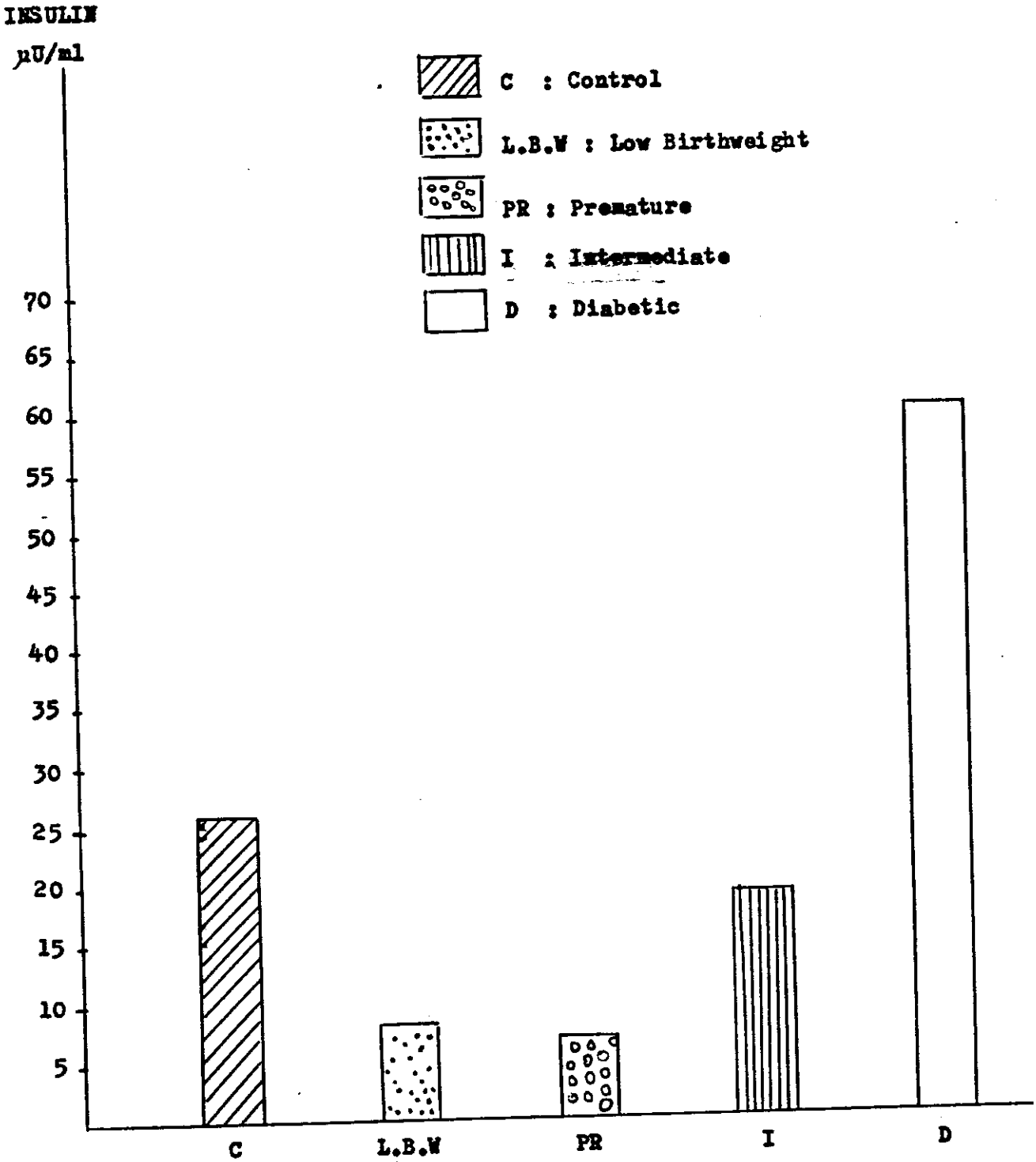
	CONTROL	L.B.W	PREMATURE	INTERMEDIATE
NUMBER	18	19	18	12
MEAN	100	46.11	49.78	90.48
∓ SD	-	19.74	22.43	4.22
t		11.98	9.49	7.80
P		LESS THAN 0.001	LESS THAN 0.001	LESS THAN 0.001

Table No. 16 : SHOWS THE MEAN LEVELS OF SOMATOMEDIN IN CORD BLOOD IN THE LBW, PREMATURE, INTERMEDIATE COMPARED WITH CONTROL GROUP.

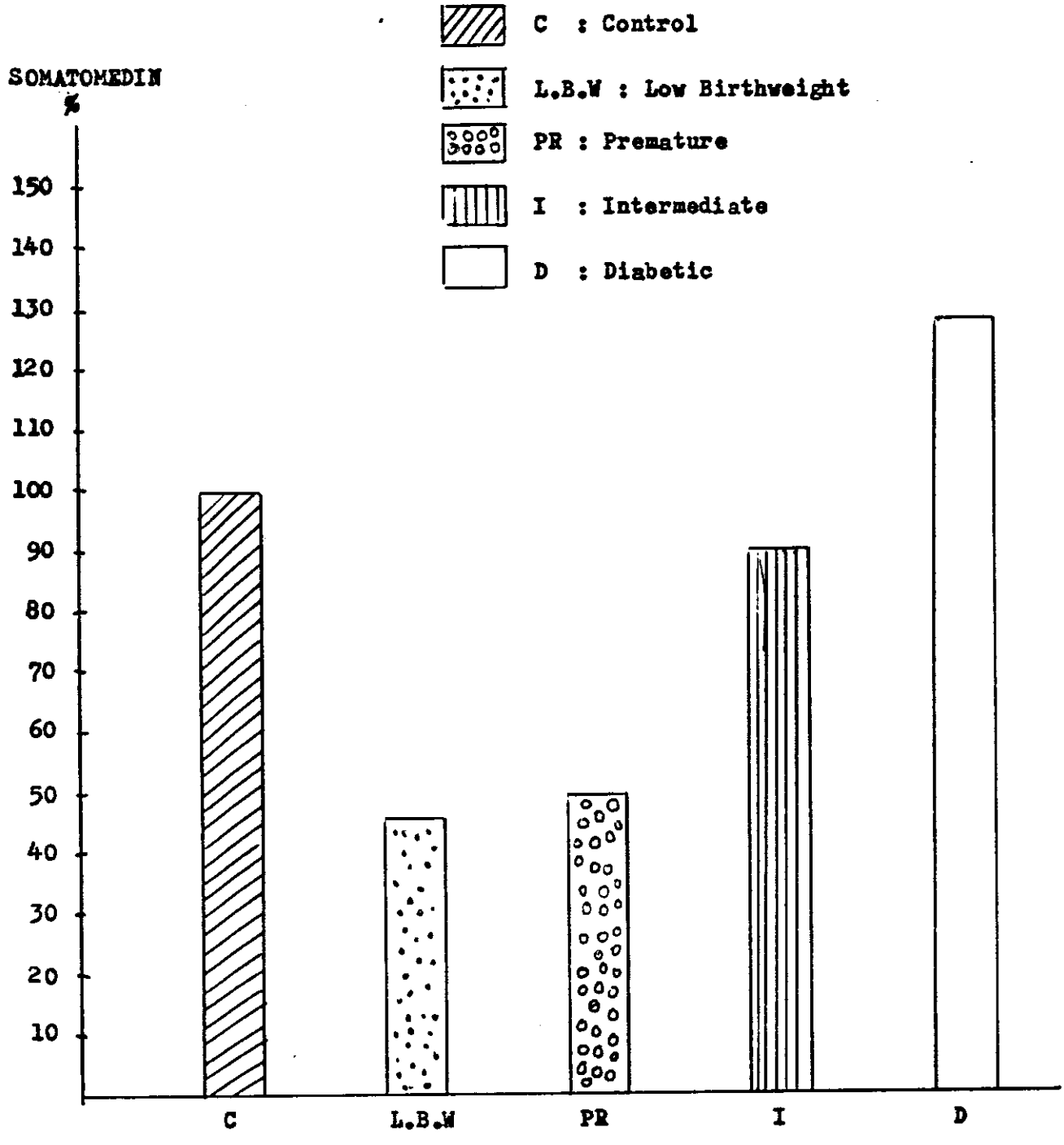
	CONTROL	DIABETIC		
		ALL CASES	SHORT TERM	LONG TERM
NUMBER	18	20	10	10
MEAN	100	128.42	138.06	118.78
∓ SD	-	11.40	6.93	4.44
t		11.15	7.42 *	
P		LESS THAN 0.001	LESS THAN 0.001	

Table No. 17 : SHOWS THE MEAN LEVELS OF SOMATOMEDIN IN CORD BLOOD IN THE DIABETIC COMPARED WITH CONTROL GROUP.

* t TEST OF INSULIN IN LONG TERM THERAPY (CONTROLLED) VERSUS SHORT TERM THERAPY (UNCONTROLLED DIABETICS)



BARR GRAPH No. I : SHOWS THE MEAN LEVELS OF INSULIN IN CORD BLOOD IN THE CONTROL AND OTHER GROUPS.



BARR GRAPH No. 2 : SHOWS THE MEAN LEVELS OF SOMATOMEDIN IN CORD BLOOD IN THE CONTROL AND OTHER GROUPS

	INSULIN uU/ml		
	r	P	Regression equation
Insulin to Weight	0.915	Less than 0.001	Y = 1.54 + 0.1x
Insulin to Length	0.63	Less than 0.001	Y = 43.85 + 0.23x
Insulin to Skull circum	0.47	Less than 0.05	Y = 30.16 + 0.17x

Table No. 18: SHOWS THE CORRELATIONS OF INSULIN TO WEIGHT, LENGTH and SKULL CIRCUM. IN THE CONTROL

	INSULIN µU/ml		
	r	P	REGRESSION EQUATION
INSULIN TO WEIGHT	0.970	LESS THAN 0.001	Y = 1.06 + 0.12x
INSULIN TO LENGTH	0.852	LESS THAN 0.001	Y = 36.4 + 0.80x
INSULIN TO SKULL CIRCUM	0.89	LESS THAN 0.001	Y = 26.97 + 0.56x
INSULIN TO SM	0.990	LESS THAN 0.001	Y = 10.24 + 7.33x

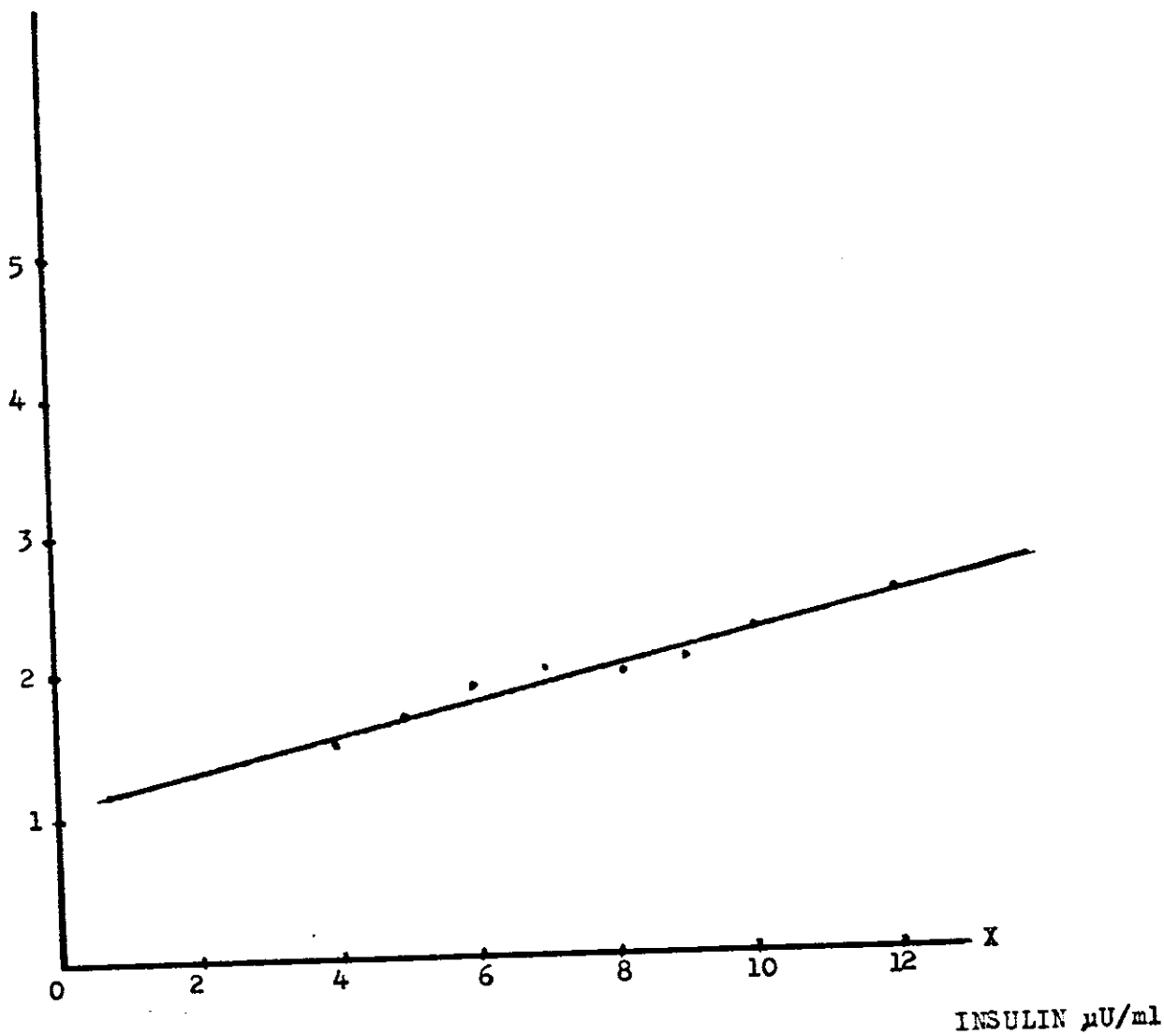
TABLE No.19 : SHOWS THE CORRELATIONS OF INSULIN TO WEIGHT, LENGTH, SKULL CIRCUM AND SM IN THE L.B.W.

	SOMATOMEDIN %		
	r	P	REGRESSION EQUATION
SM TO WEIGHT	0.960	LESS THAN 0.001	Y = 1.25 + 0.02x
SM TO LENGTH	0.850	LESS THAN 0.001	Y = 37.61 + 0.11x
SM TO SKULL CIRCUM	0.88	LESS THAN 0.001	Y = 27.81 + 0.1x

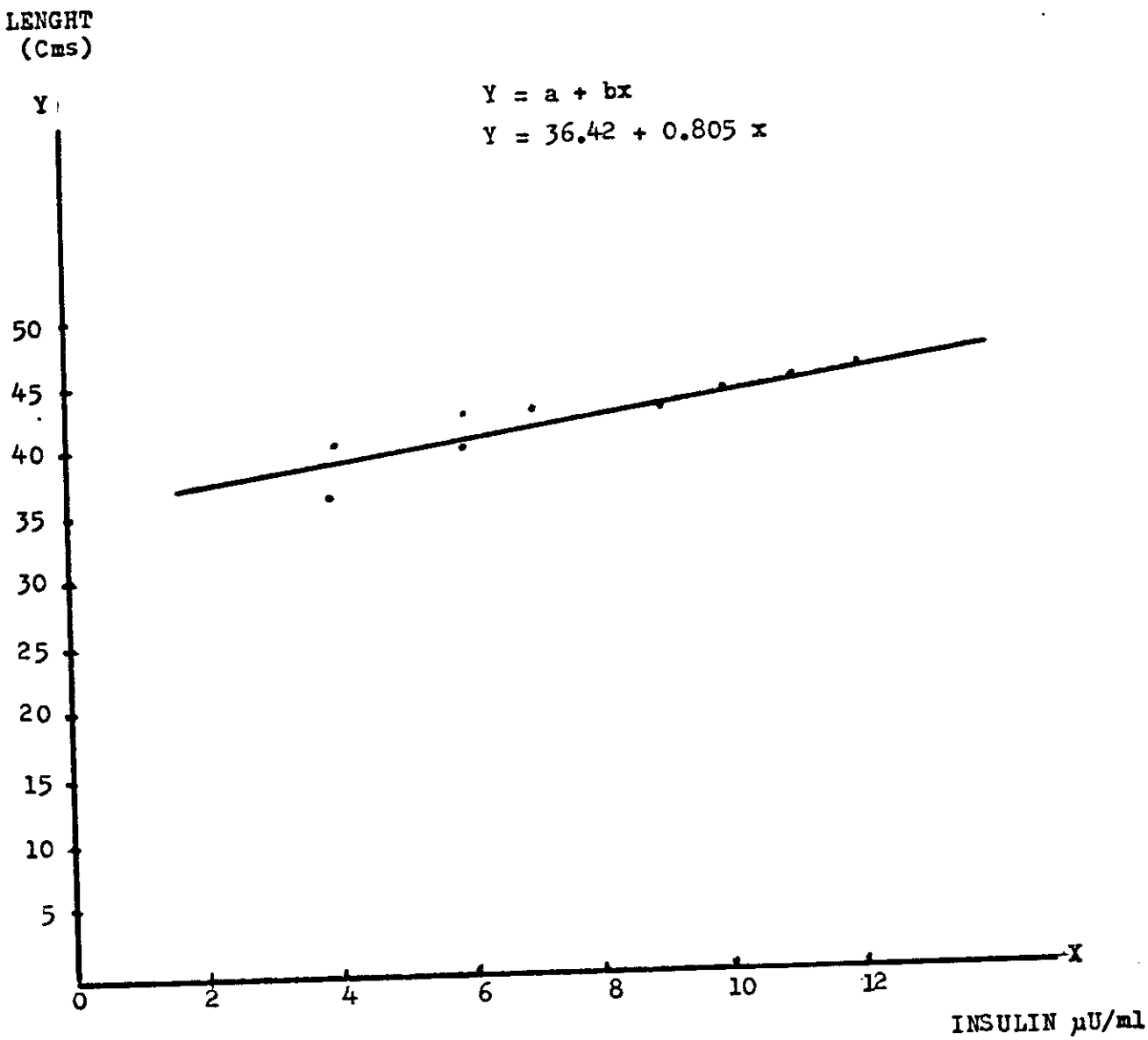
TABLE No.20 : SHOWS THE CORRELATIONS OF SOMATOMEDIN TO WEIGHT, LENGTH AND SKULL CIRCUM IN THE L.B.W.

WEIGHT
(Kg)
Y

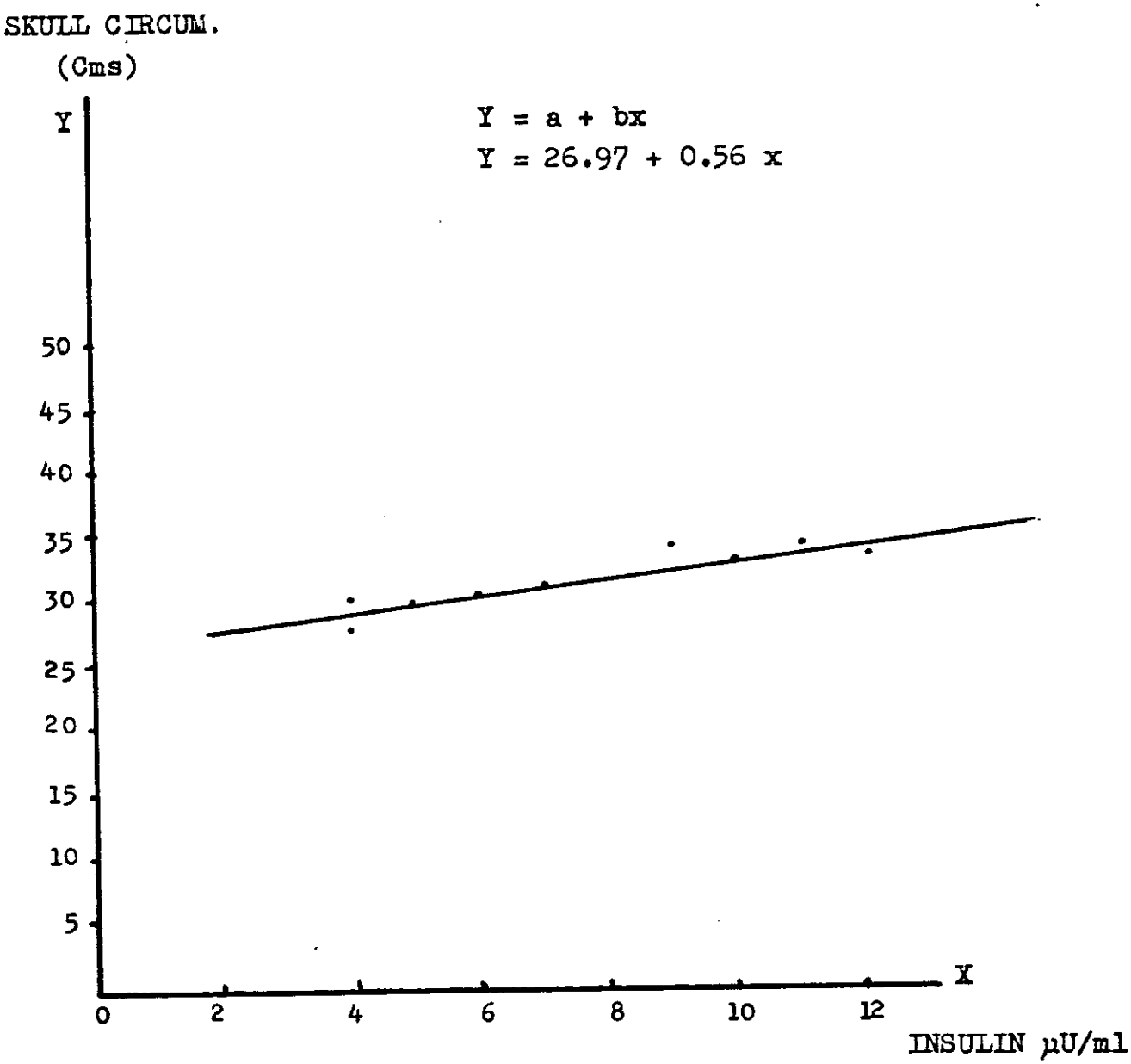
$$Y = a + bx$$
$$Y = 1.06 + 0.125\ x$$



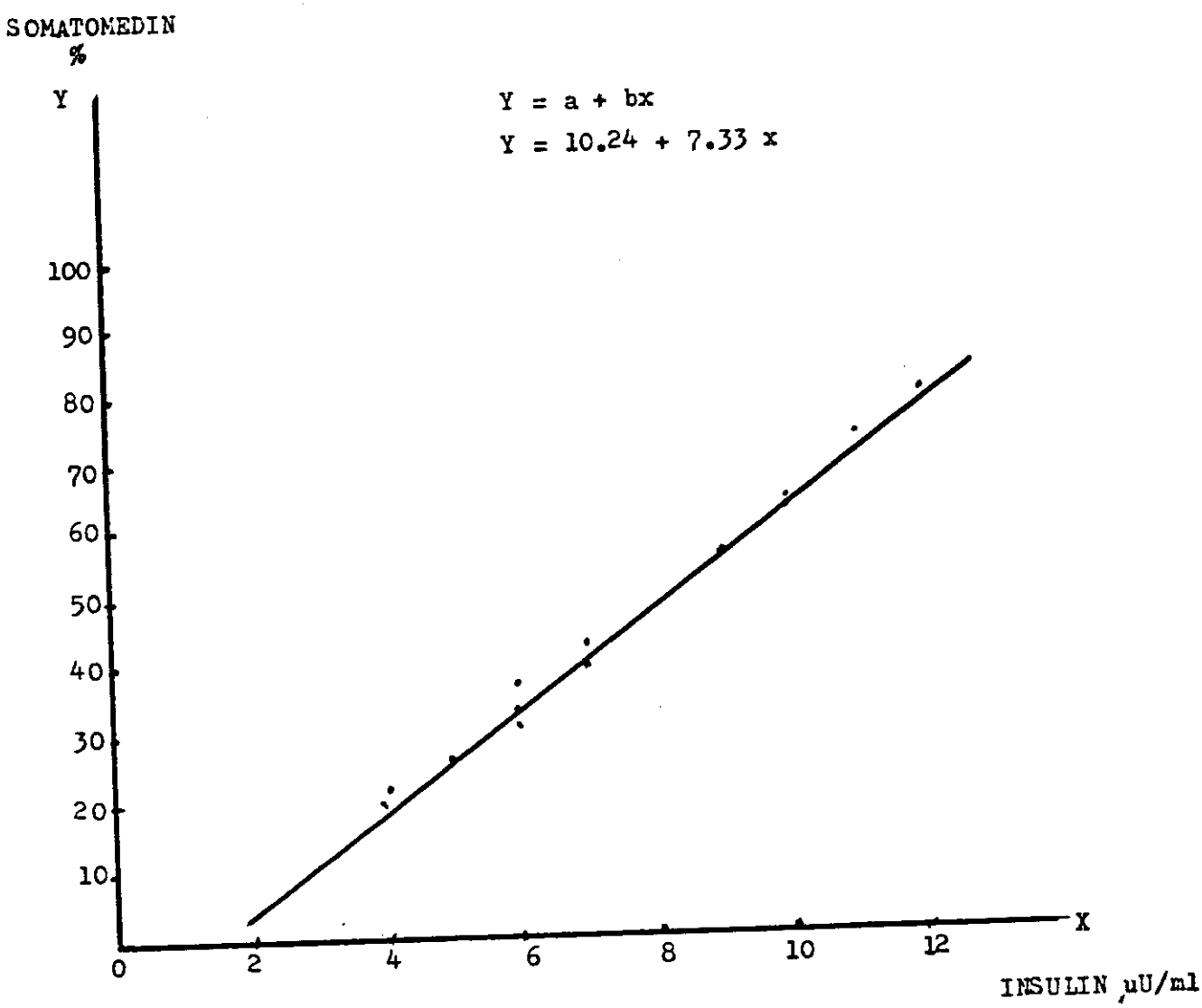
CURVE No. I : SHOWS THE CORRELATION OF INSULIN TO WEIGHT IN THE LOW BIRTHWEIGHT



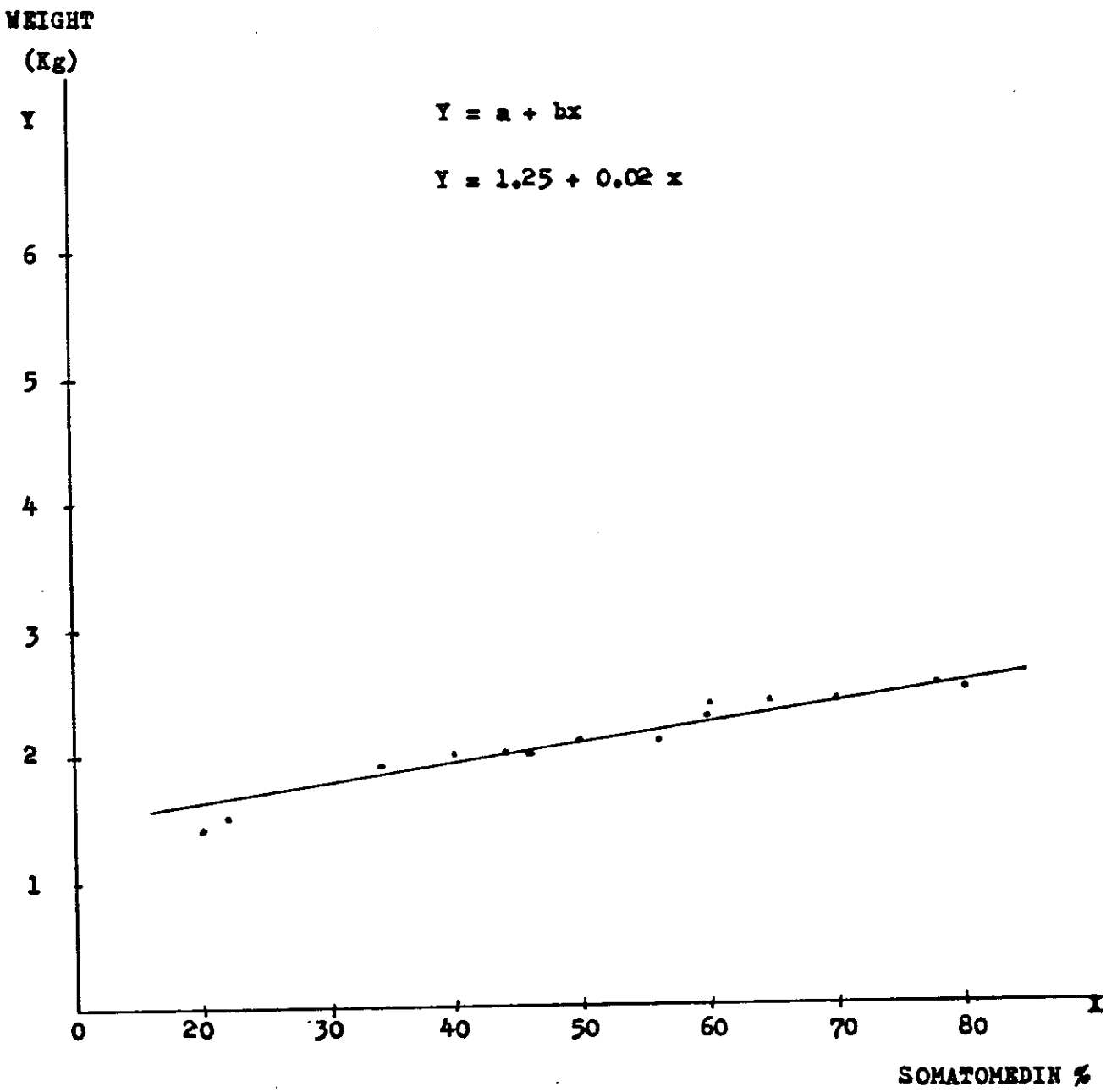
CURVE No.2 : SHOWS THE CORRELATION OF INSULIN TO LENGHT IN THE LOW BIRTHWEIGHT



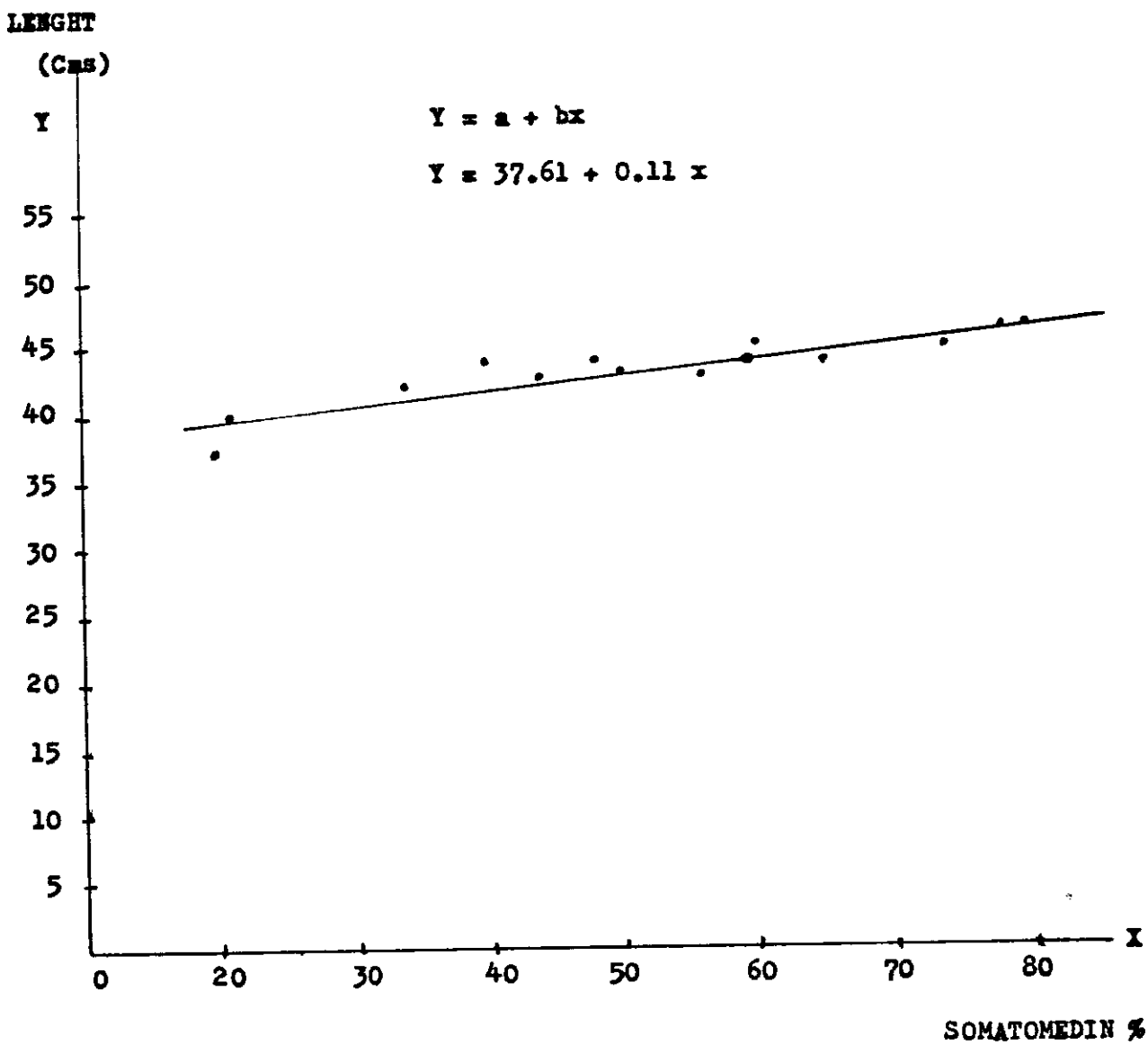
CURVE No. 3 : SHOWS THE CORRELATION OF INSULIN TO SKULL CIRCUMFERENCE IN THE LOW BIRTHWEIGHT



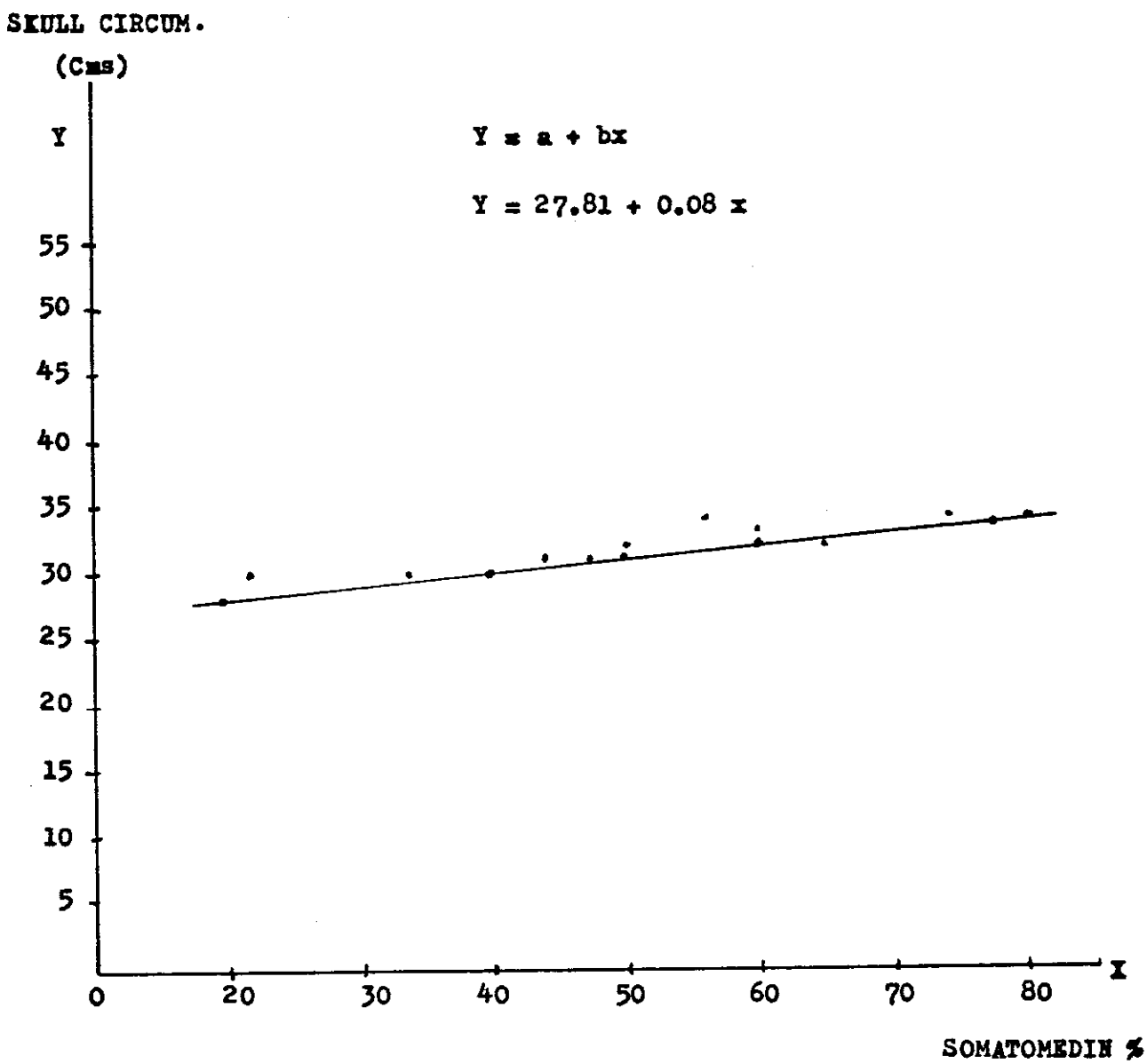
CURVE No.4 : SHOWS THE CORRELATION OF INSULIN TO SOMATOMEDIN IN THE LOW BIRTHWEIGHT



CURVE No. 5 : SHOWS THE CORRELATION OF SOMATOMEDIN TO WEIGHT IN THE LOW BIRTHWEIGHT



CURVE No. 6 : SHOWS THE CORRELATION OF SOMATOMEDIN TO LENGHT IN THE LOW BIRTHWEIGHT



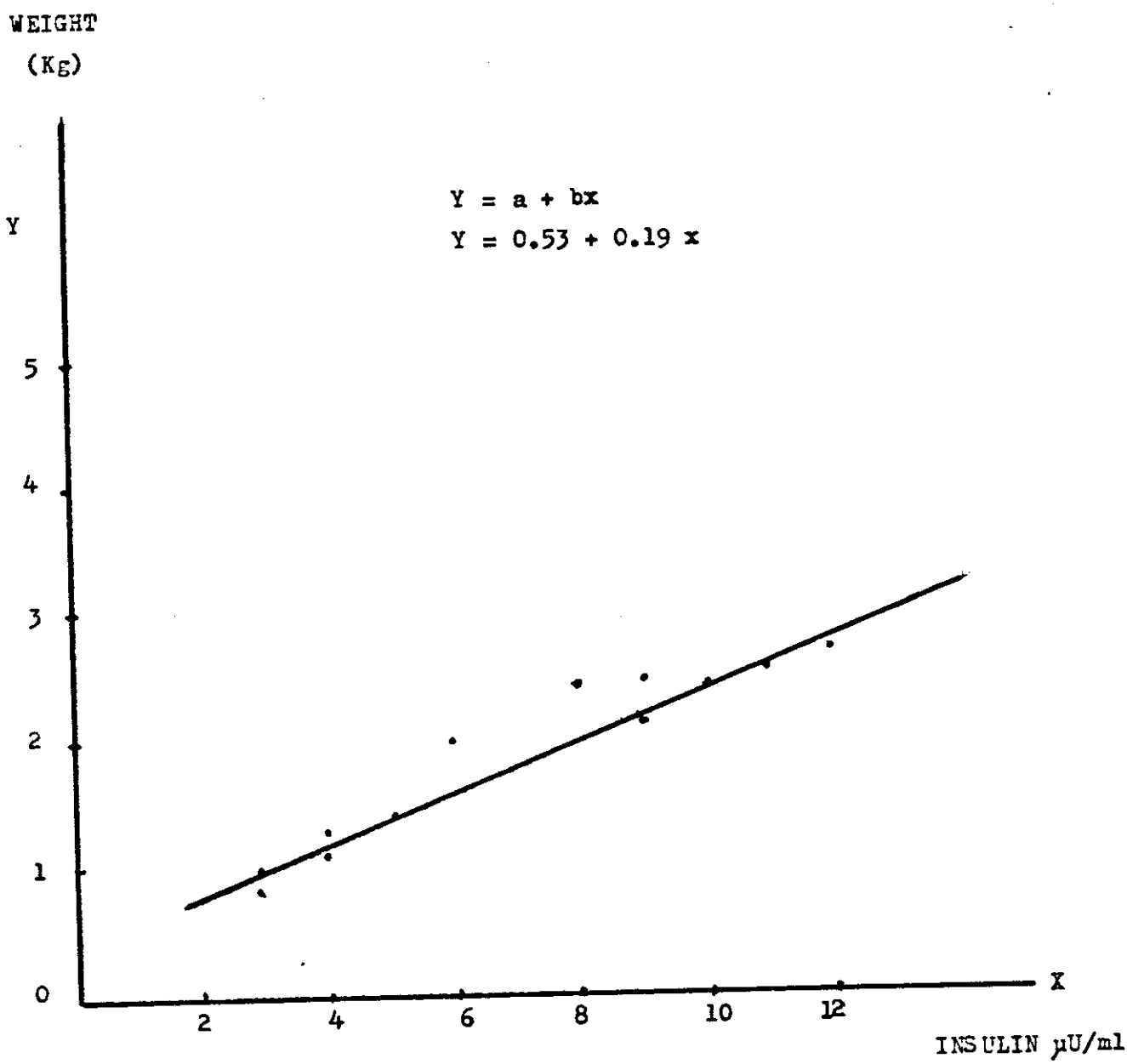
CURVE No. 7 : SHOWS THE CORRELATION OF SOMATOMEDIN TO SKULL CIRCUMFERENCE IN THE LOW BIRTHWEIGHT

	INSULIN µU/ml		
	r	P	REGRESSION EQUATION
INSULIN TO WEIGHT	0.930	LESS THAN 0.001	Y = 0.53+0.19x
INSULIN TO LENGTH	0.960	LESS THAN 0.001	Y =30.7+1.47x
INSULIN TO SKULL CIRCUM	0.82	LESS THAN 0.001	Y =22.7+0.97x
INSULIN TO GESTATIONAL AGE	0.94	LESS THAN 0.001	Y =26.0+0.84x
INSULIN TO SM	0.94	LESS THAN 0.001	Y =5.9 + 6.32x

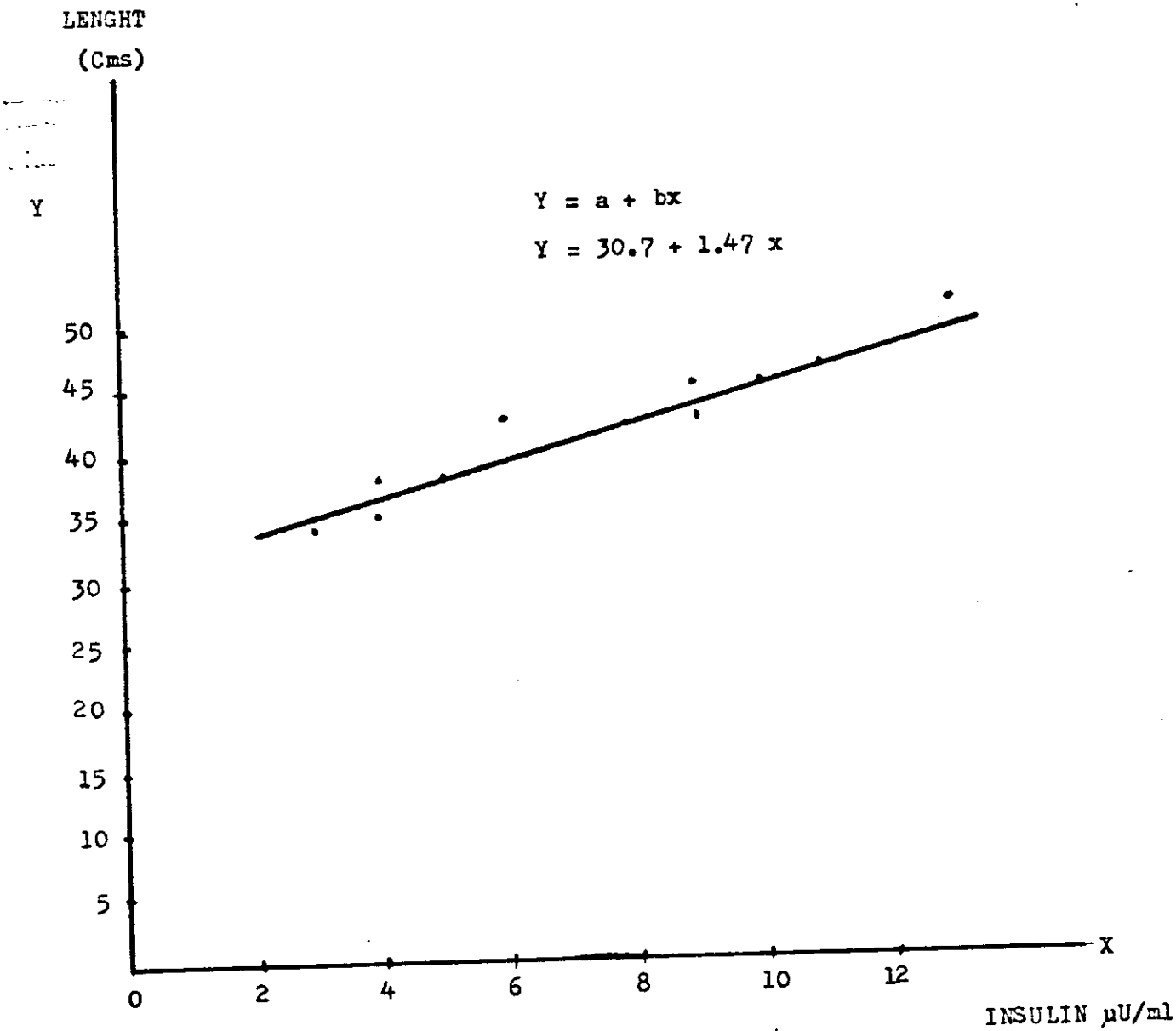
TABLE No.21 : SHOWS THE CORRELATIONS OF INSULIN TO WEIGHT, LENGTH, SKULL CIRCUM, GESTATIONAL AGE AND SM IN THE PREMATURE

	SOMATOMEDIN %		
	r	P	REGRESSION EQUATION
SM TO WEIGHT	0.993	LESS THAN 0.001	Y = 0.36+0.03x
SM TO LENGTH	0.979	LESS THAN 0.001	Y = 29.82+0.22x
SM TO SKULL CIRCUM	0.950	LESS THAN 0.001	Y = 21.05+0.17x
SM TO GESTATIONAL AGE	0.930	LESS THAN 0.001	Y = 25.65+0.12x

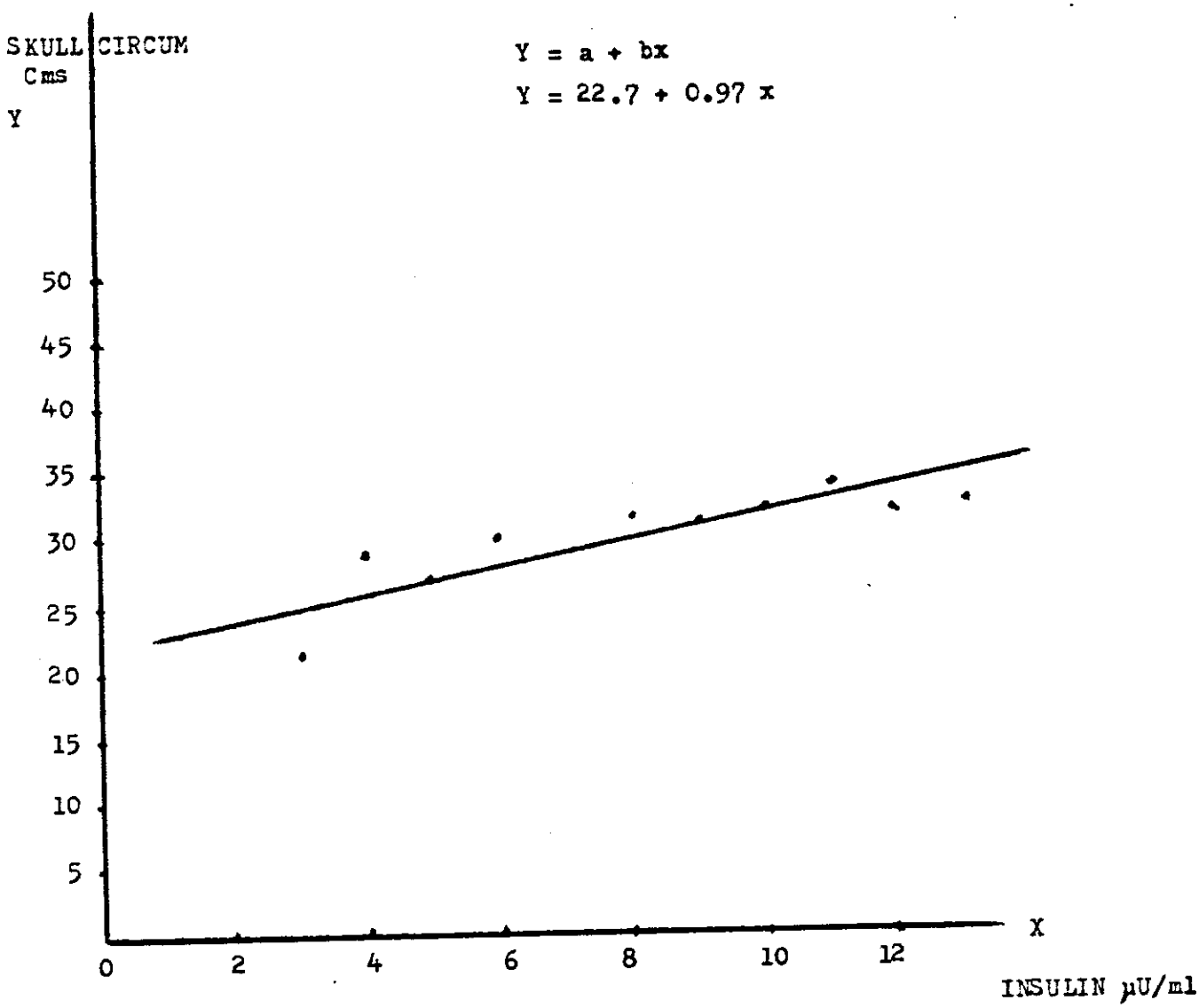
TABLE No.22 : SHOWS THE CORRELATIONS OF SOMATOMEDIN TO WEIGHT, LENGTH SKULL CIRCUM AND GESTATIONAL AGE IN THE PREMATURE.



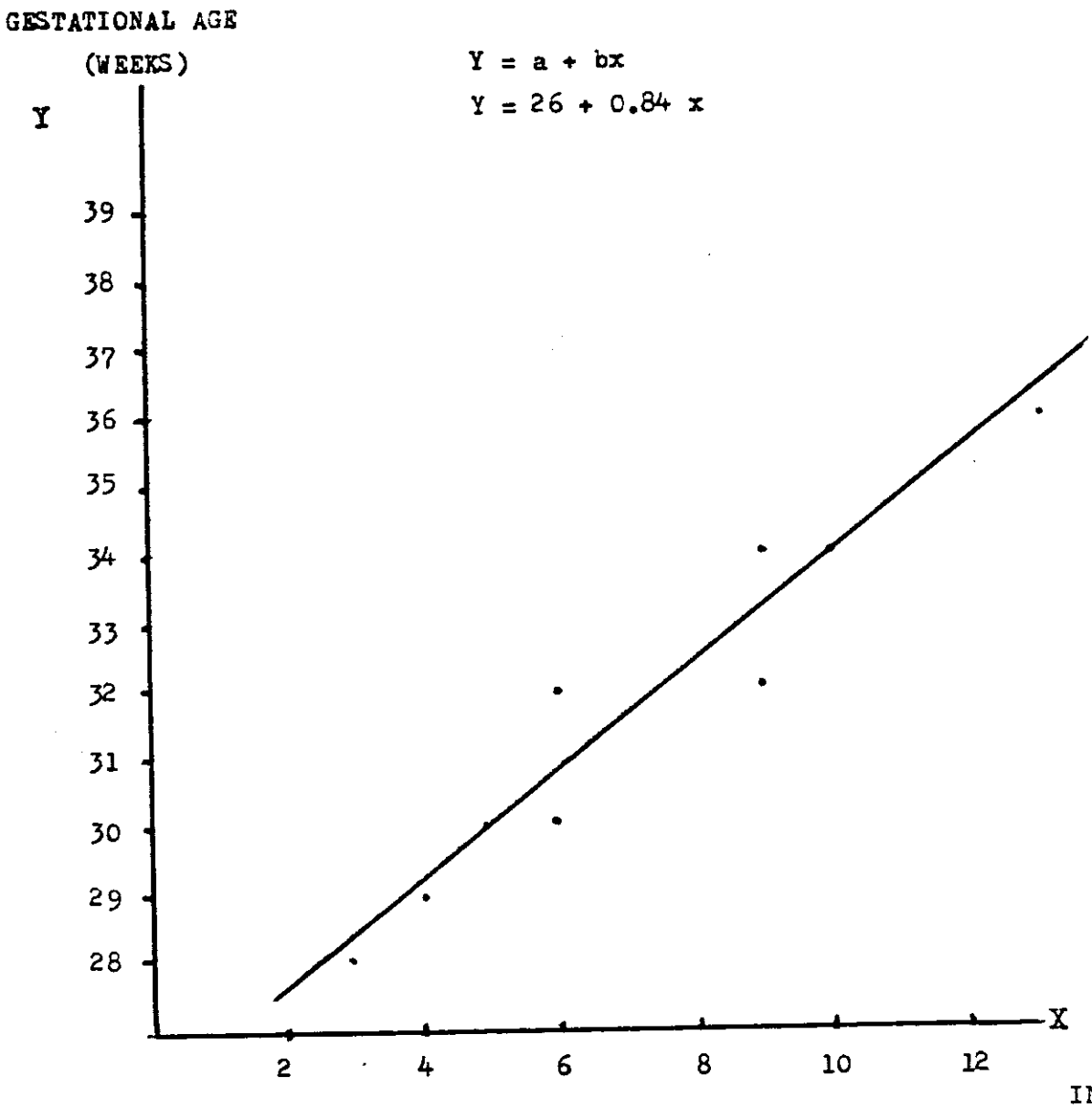
CURVE No. 8 : SHOWS THE CORRELATION OF INSULIN TO WEIGHT IN THE PREMATURE



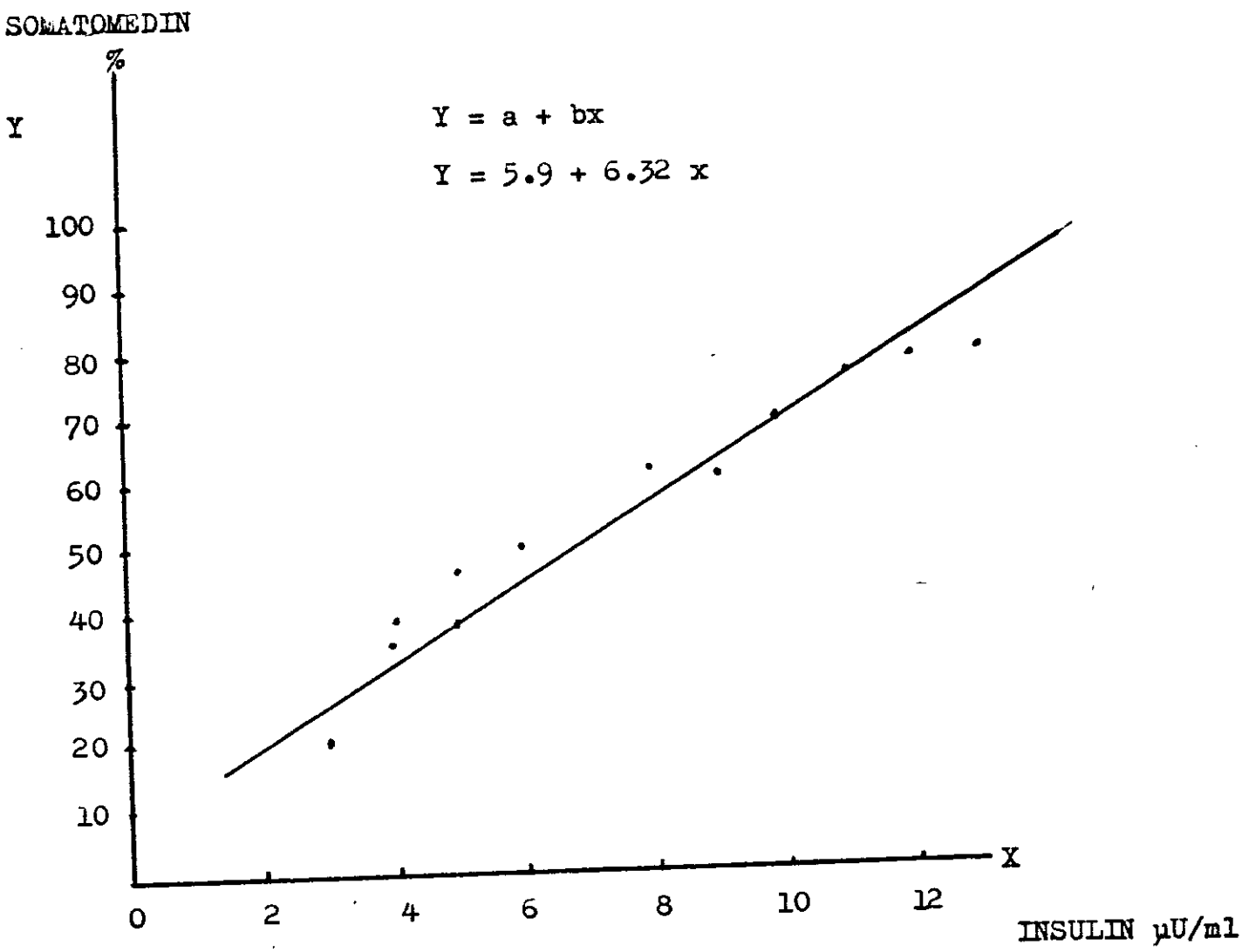
CURVE No. 9 : SHOWS THE CORRELATION OF INSULIN TO LENGHT IN THE PREMATURE



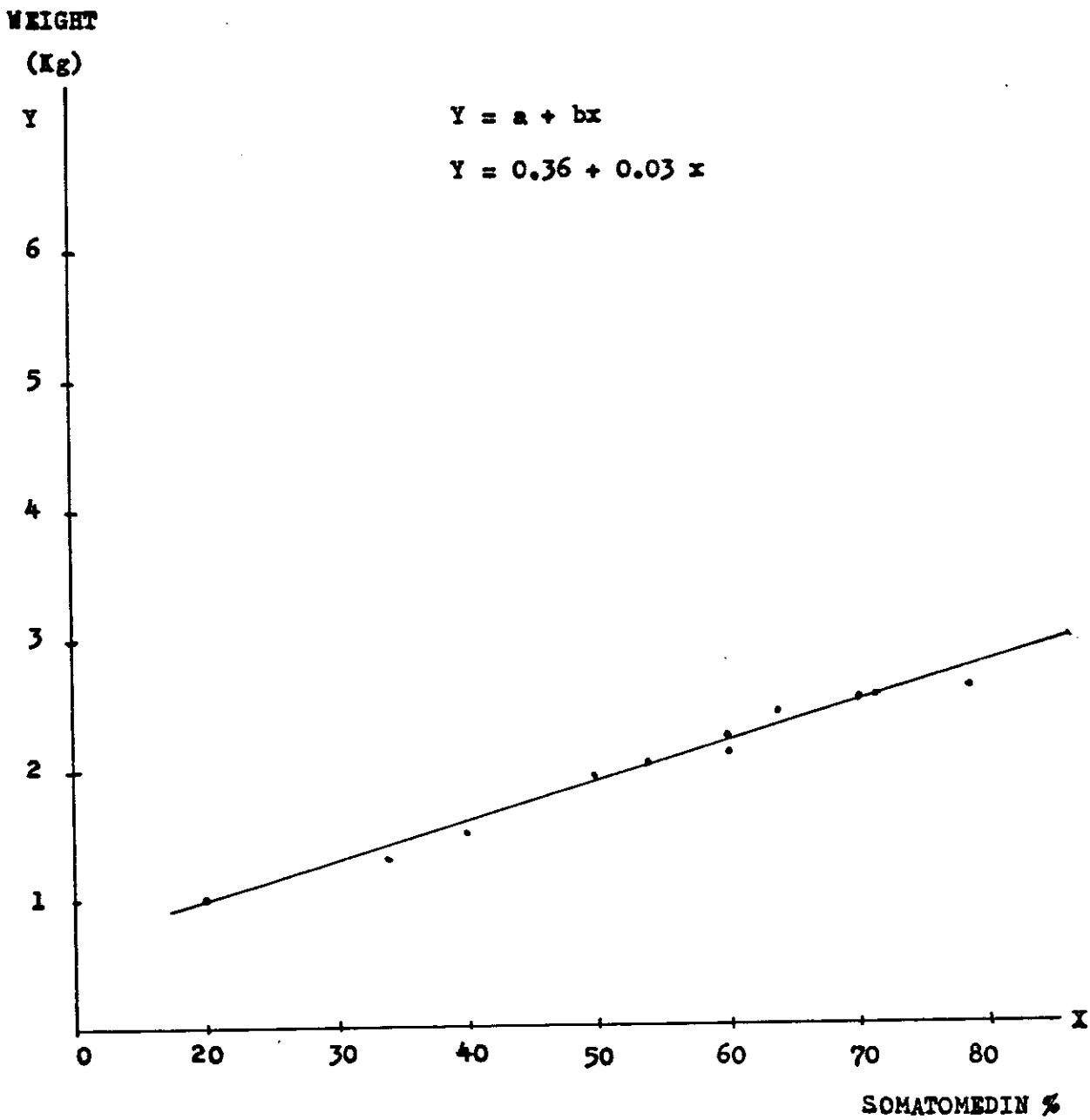
CURVE No.IO : SHOWS THE CORRELATION OF INSULIN TO SKULL CIRCUM FERENCE IN THE PREMATURE



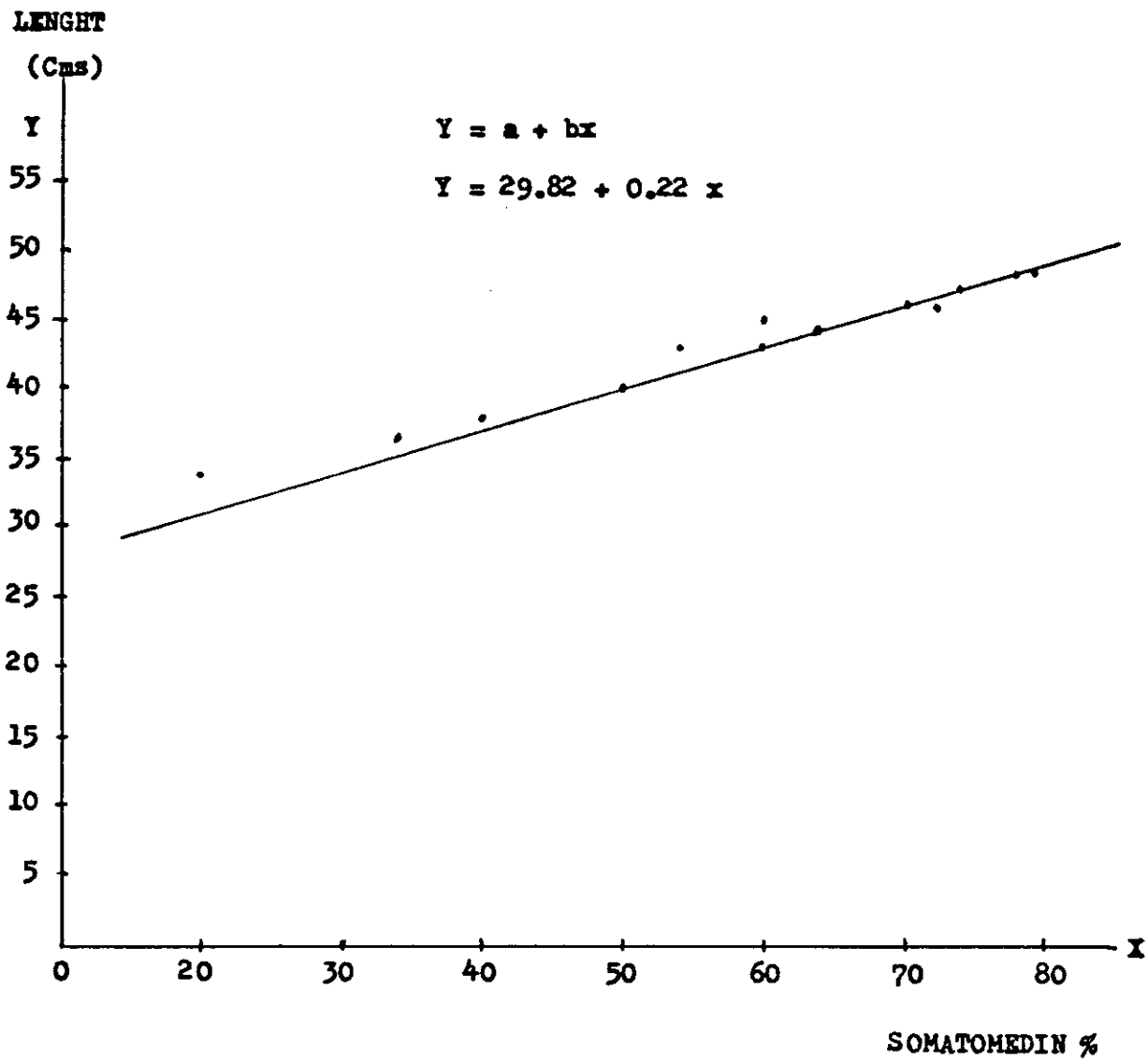
CURVE No II SHOWS THE CORRELATION OF INSULIN TO GESTATIONAL AGE IN THE PREMATURE



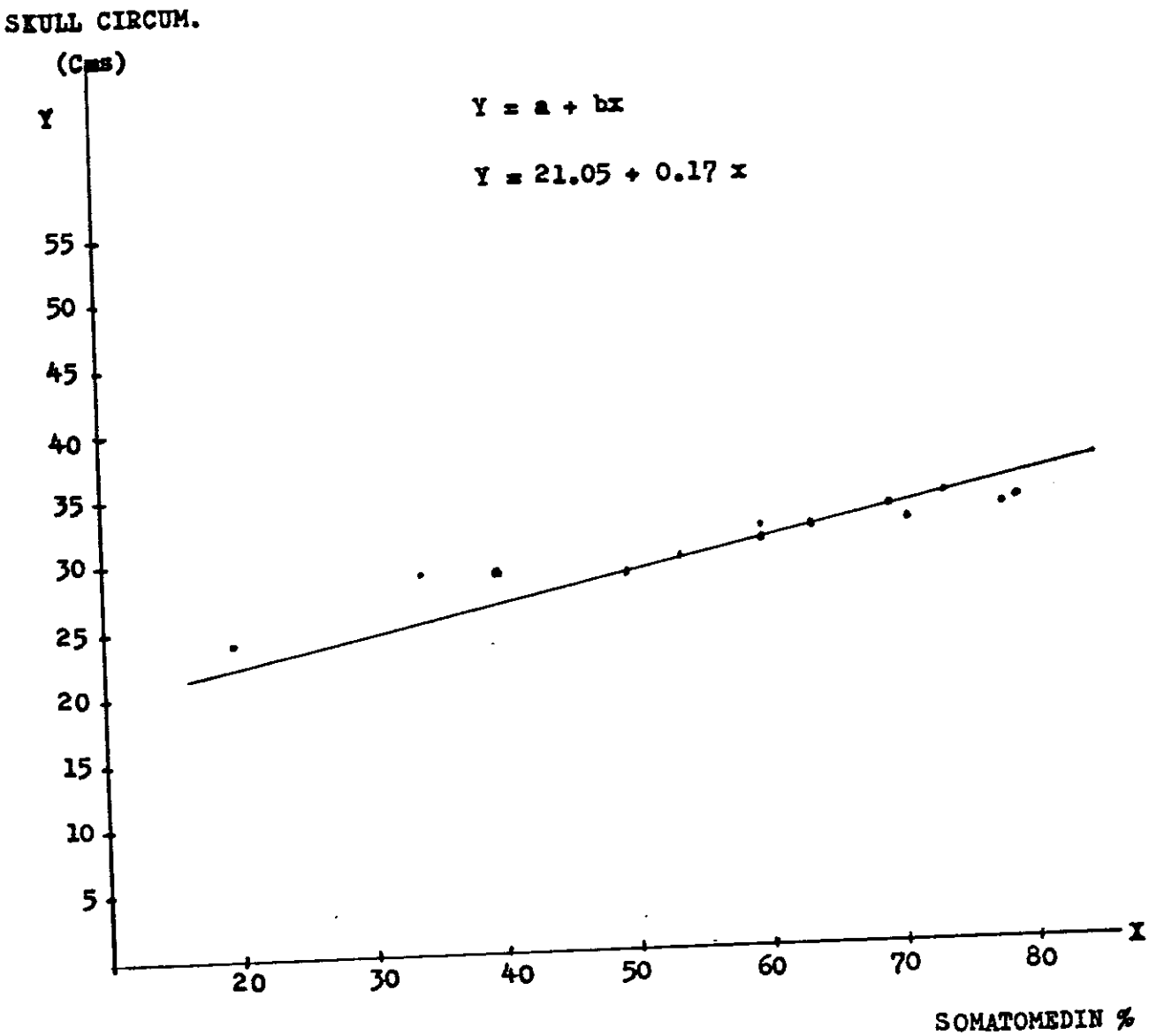
CURVE No.12 SHOWS THE CORRELATION OF INSULIN TO SOMATOMEDIN IN THE PREMATURE



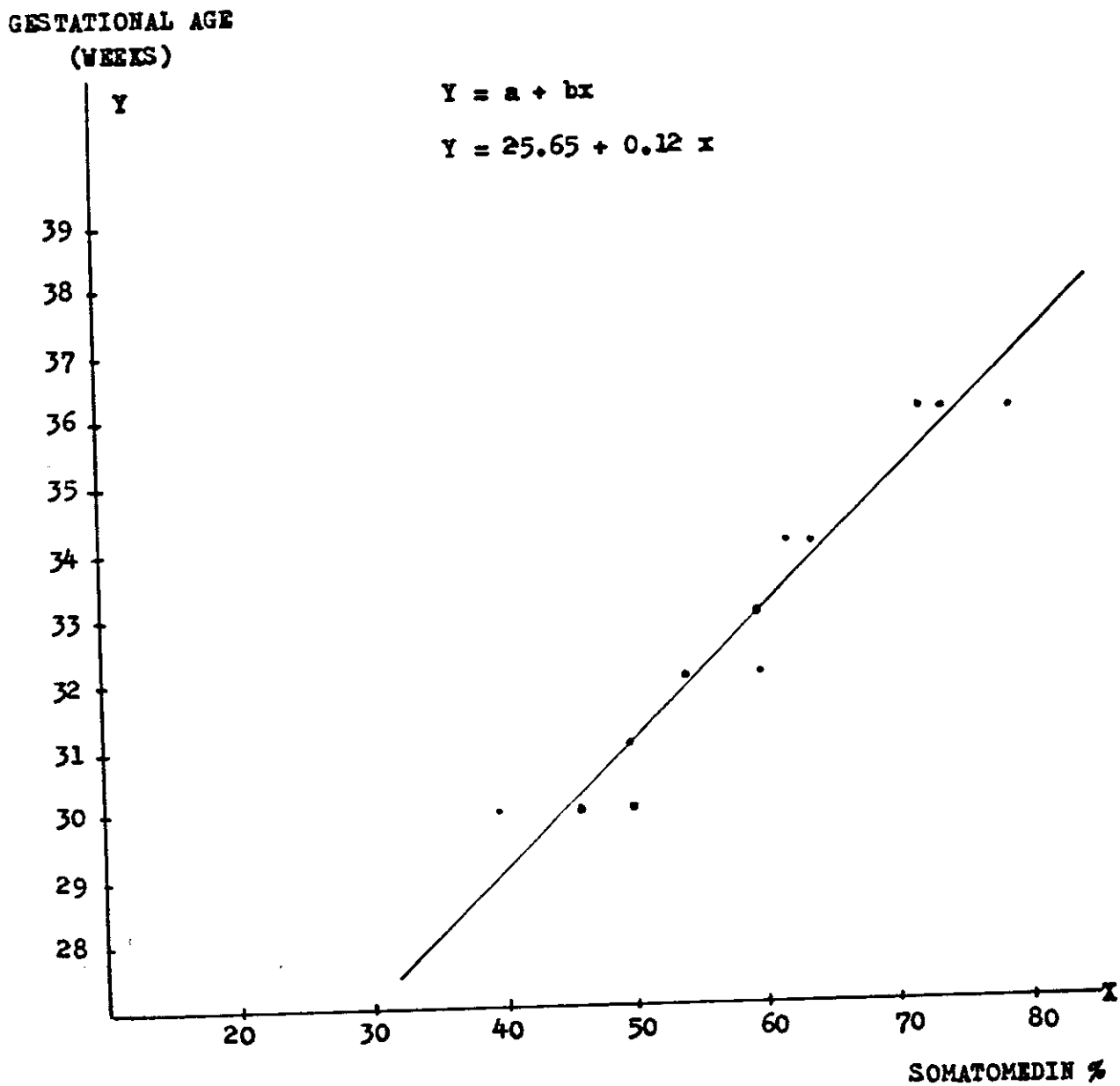
CURVE No. 13 : SHOWS THE CORRELATION OF SOMATOMEDIN TO WEIGHT IN THE PREMATURE



CURVE No. 14 : SHOWS THE CORRELATION OF SOMATOMEDIN TO LENGHT IN THE PREMATURE



CURVE No. 15 : SHOWS THE CORRELATION OF SOMATOMEDIN TO SKULL CIRCUMFERENCE IN THE PREMATURE



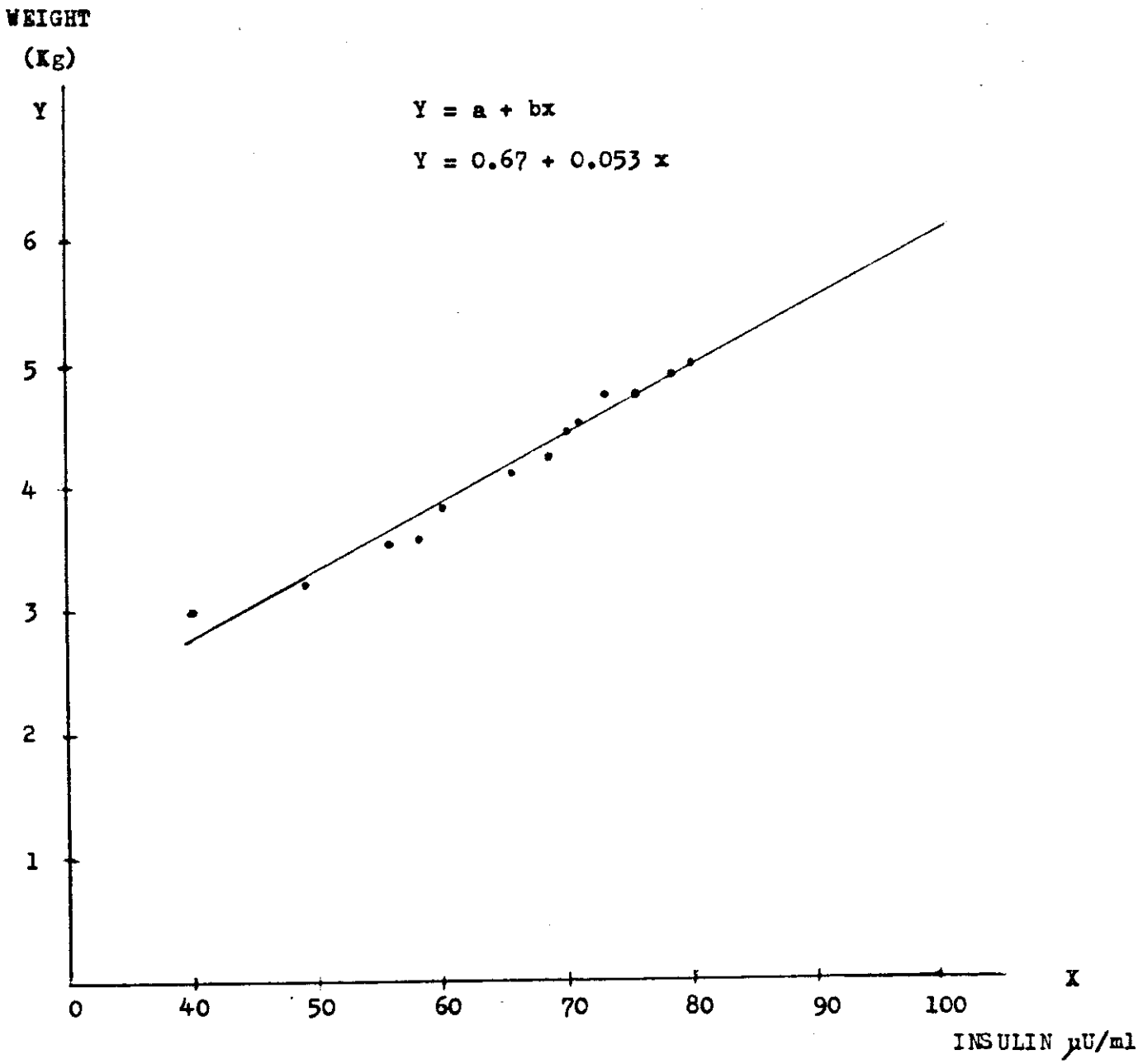
CURVE No. 16 : SHOWS THE CORRELATION OF SOMATOMEDIN TO GESTATIONAL AGE IN THE PREMATURE

	INSULIN μU/ml		
	r	P	REGRESSION EQUATION
INSULIN TO WEIGHT	0.975	LESS THAN 0.001	Y = 0.67 + 0.05 x
INSULIN TO LENGTH	0.931	LESS THAN 0.001	Y = 36.9 + 0.23 x
INSULIN TO SKULL CIRCUM	0.888	LESS THAN 0.001	Y = 27.1 + 0.13 x
INSULIN TO SM	0.98	LESS THAN 0.001	Y = 63.8 + 1.1 x

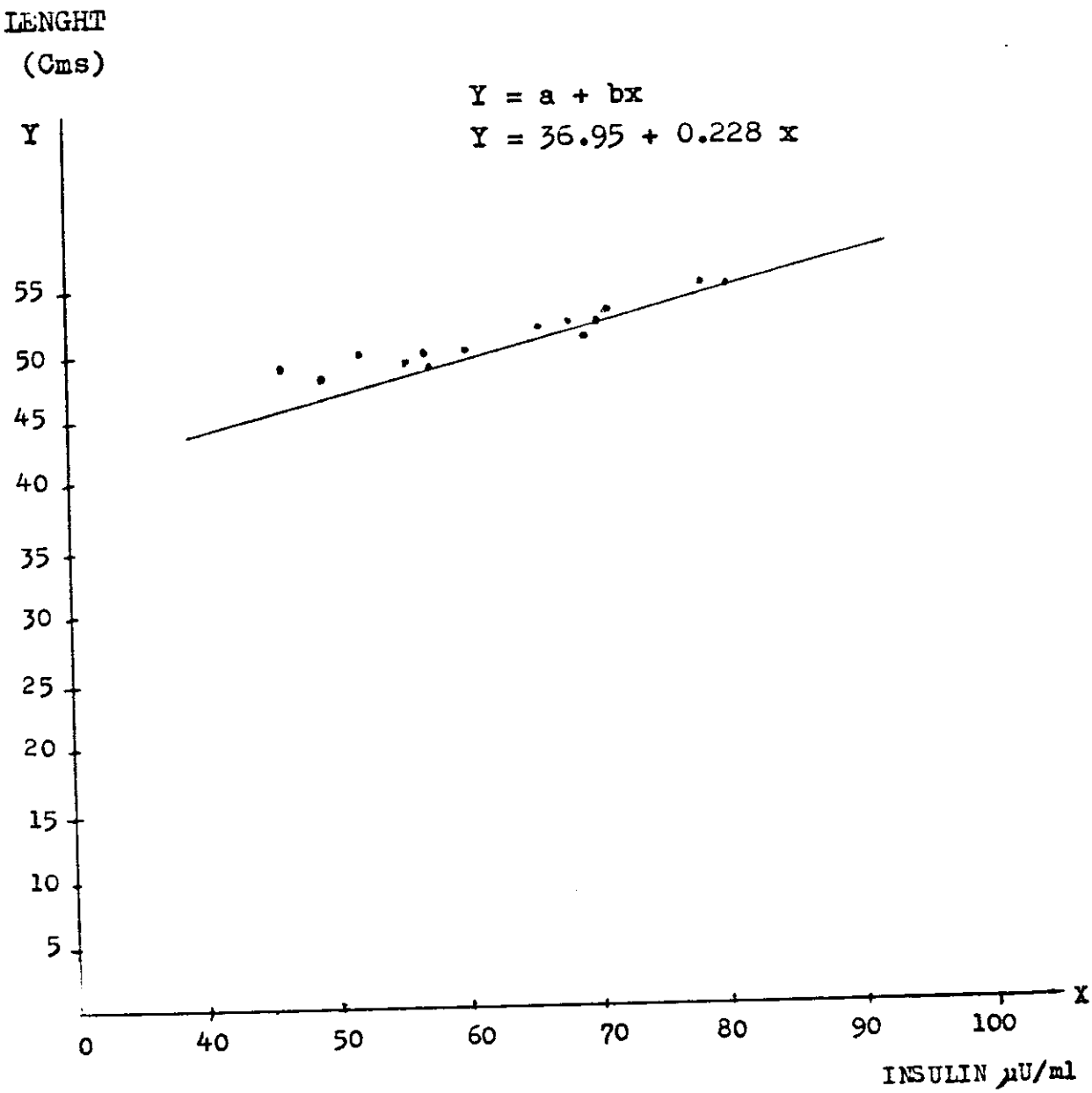
TABLE No.23 : SHOWS THE CORRELATIONS OF INSULIN TO WEIGHT , LENGTH, SKULL CIRCUM AND SM IN THE DIABETIC

	SOMATOMEDIN %		
	r	P	REGRESSION EQUATION
SM TO WEIGHT	0.993	LESS THAN 0.001	Y = - 2.46 + 0.05x
SM TO LENGTH	0.920	LESS THAN 0.001	Y = 24.29 + 0.2 x
SM TO SKULL CIRCUM	0.890	LESS THAN 0.001	Y = - 19.76 + 0.12 x

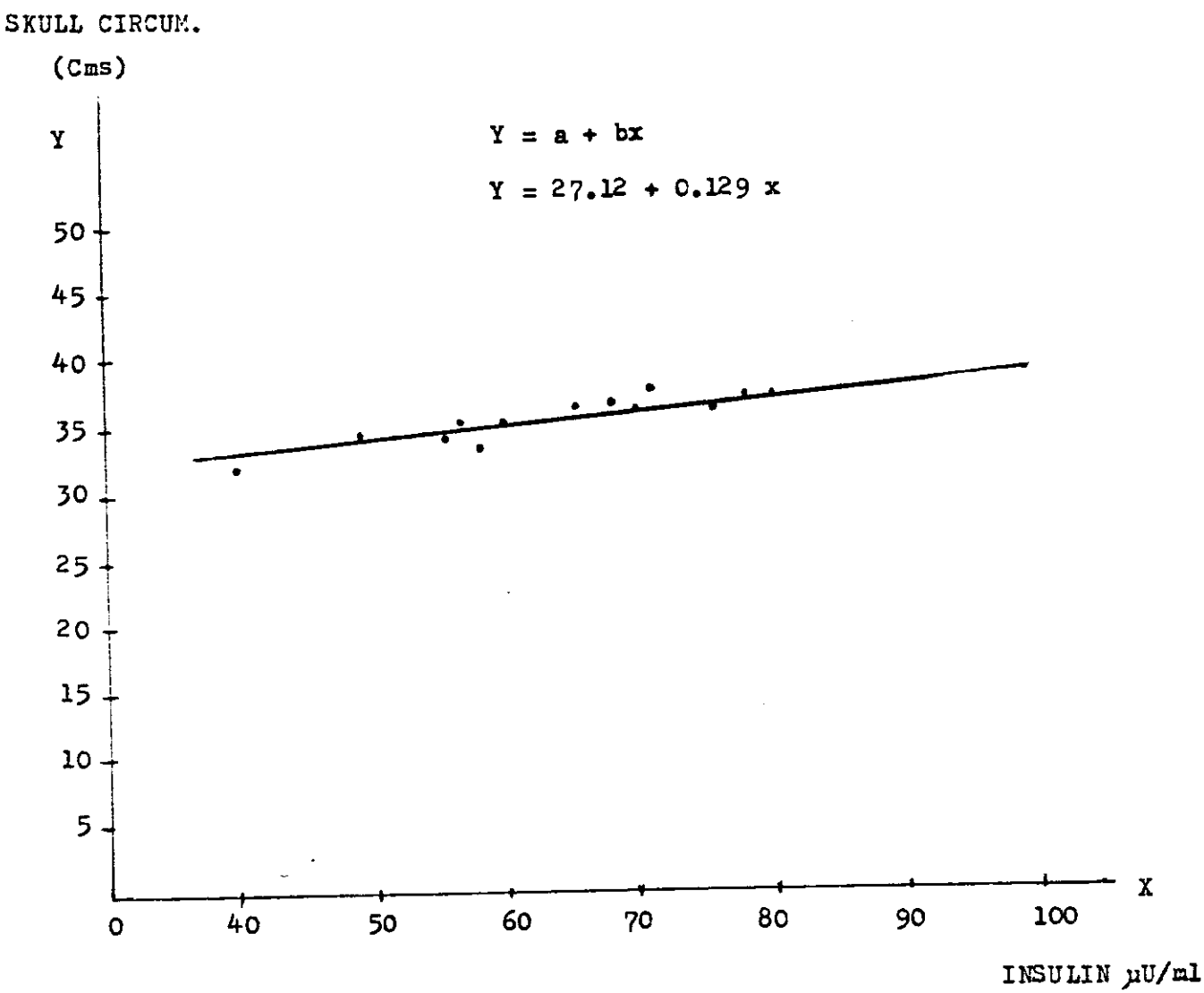
TABLE No. 24 : SHOWS THE CORRELATIONS OF SOMATOMEDIN TO WEIGHT, LENGTH AND SKULL CIRCUM IN THE DIABETIC.



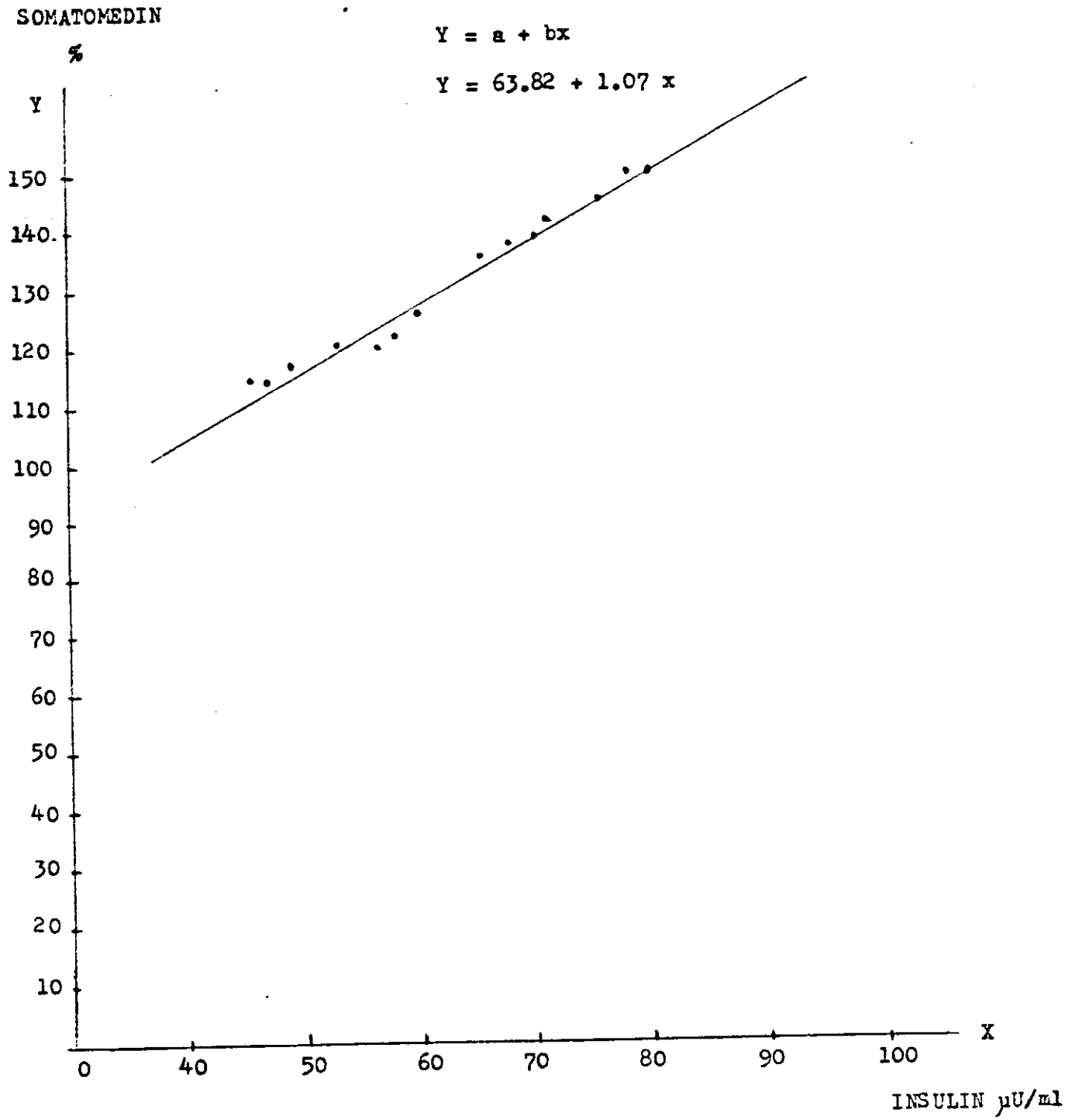
CURVE No. 17 : SHOWS THE CORRELATION OF INSULIN TO WEIGHT IN THE DIABETIC



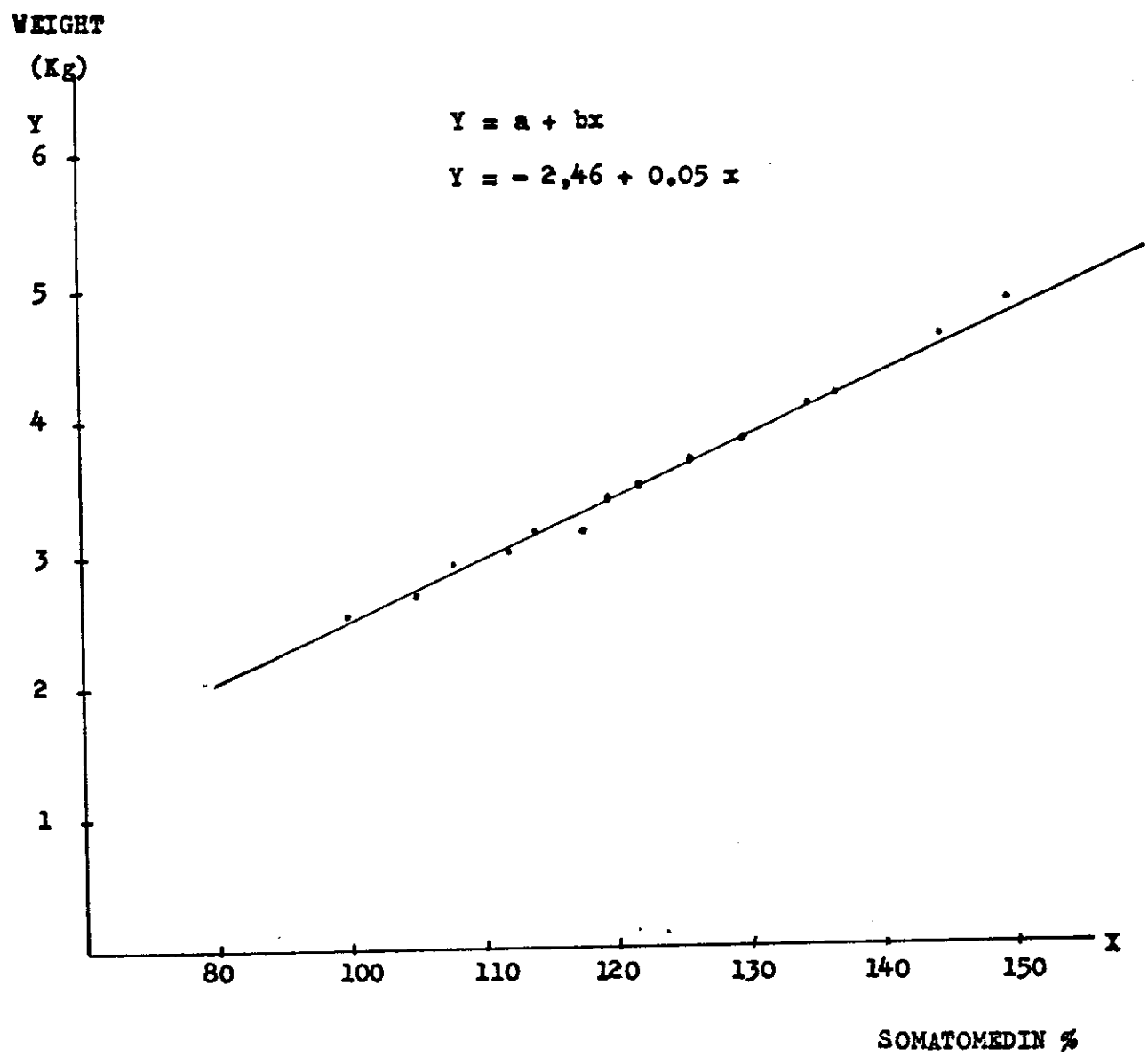
CURVE No.18 : SHOWS THE CORRELATION OF INSULIN TO LENGHT IN THE DIABETIC



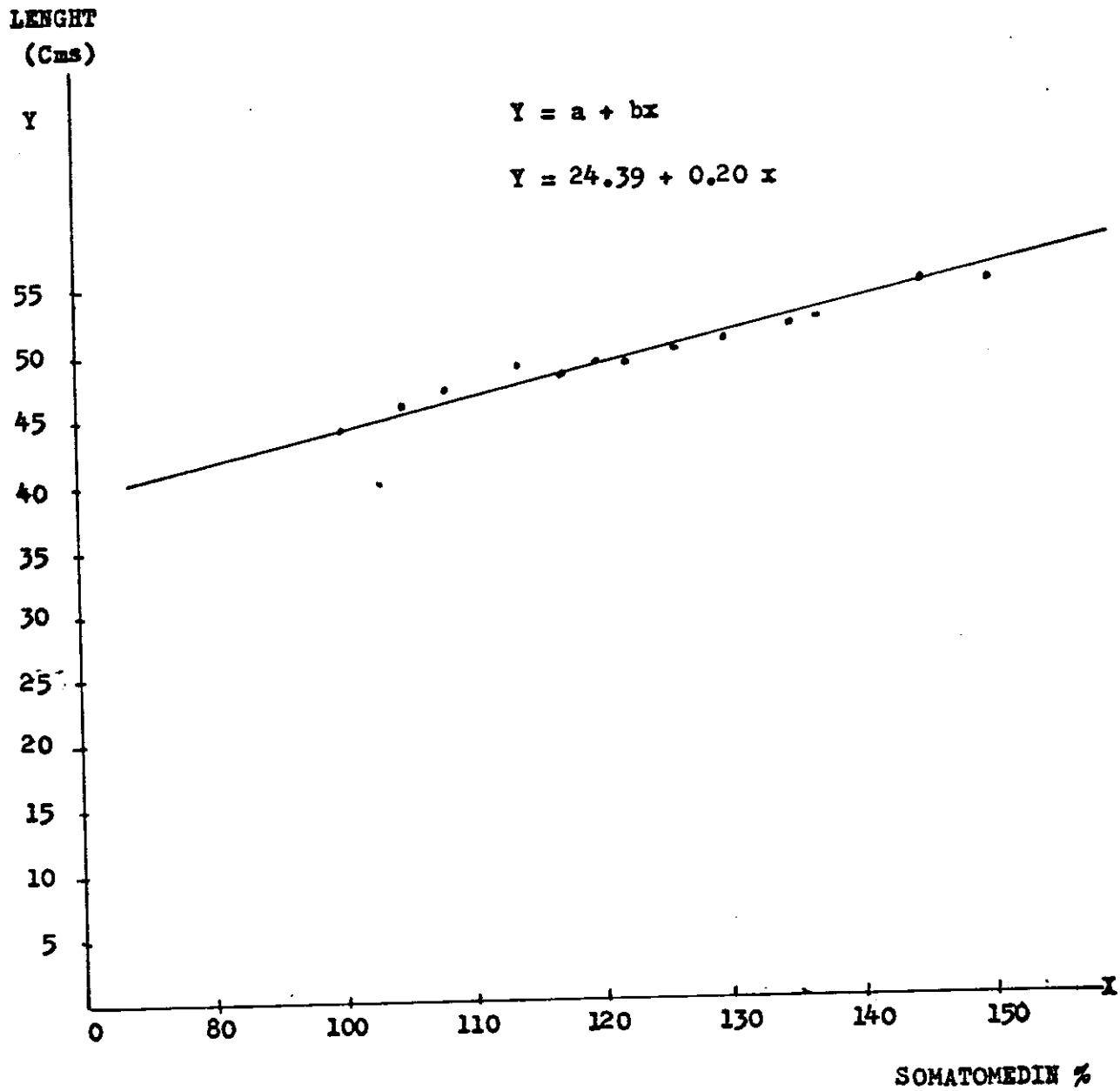
CURVE No.19 : SHOWS THE CORRELATION OF INSULIN TO SKULL CIRCUMFERENCE IN THE DIABETIC



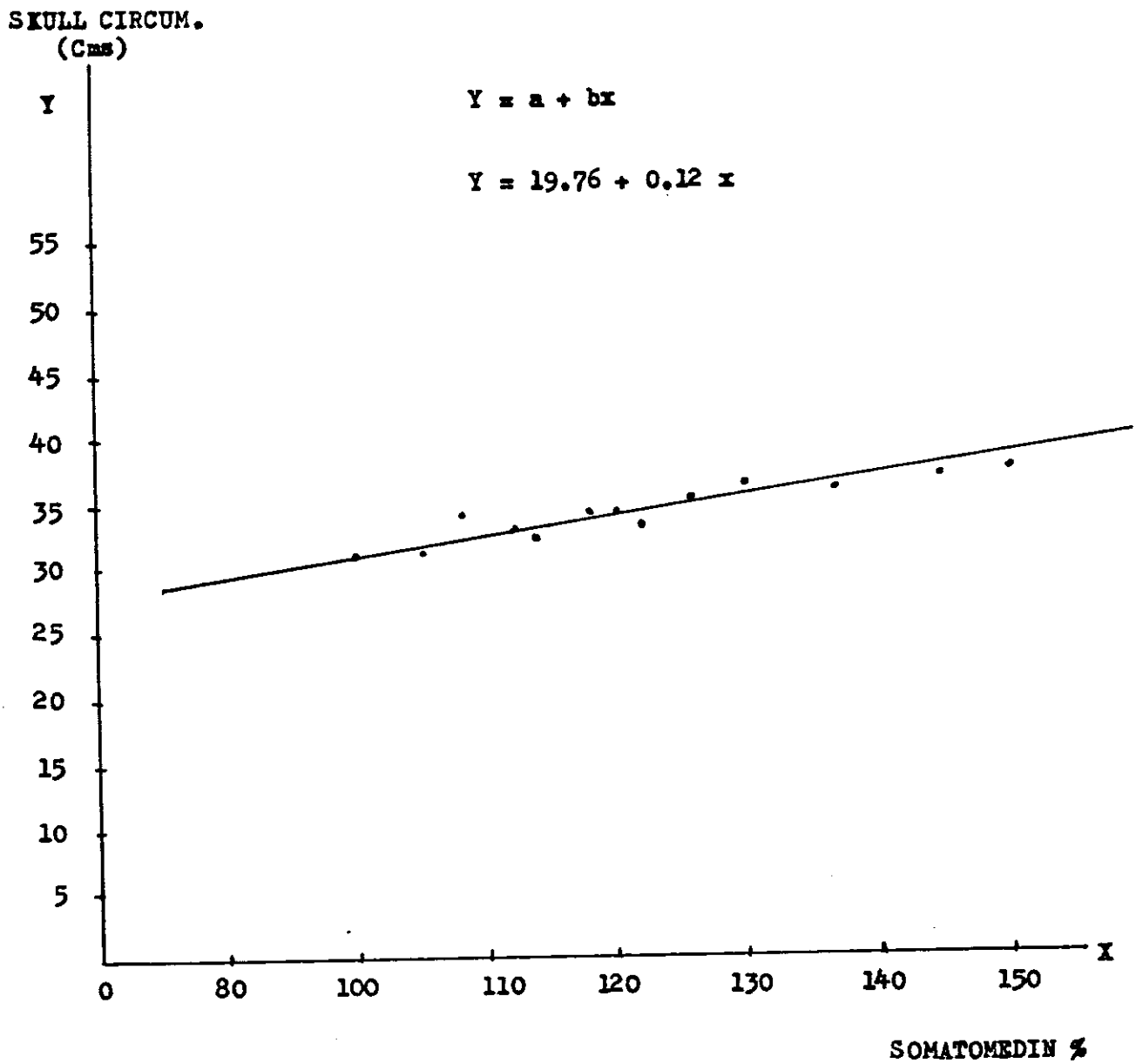
CURVE No.20 : SHOWS THE CORRELATION OF INSULIN TO SOMATOMEDIN IN THE DIABETIC.



CURVE No.21 : SHOWS THE CORRELATION OF SOMATOMEDIN TO WEIGHT IN THE DIABETIC



CURVE No.22 : SHOWS THE CORRELATION OF SOMATOMEDIN TO LENGHT IN THE DIABETIC



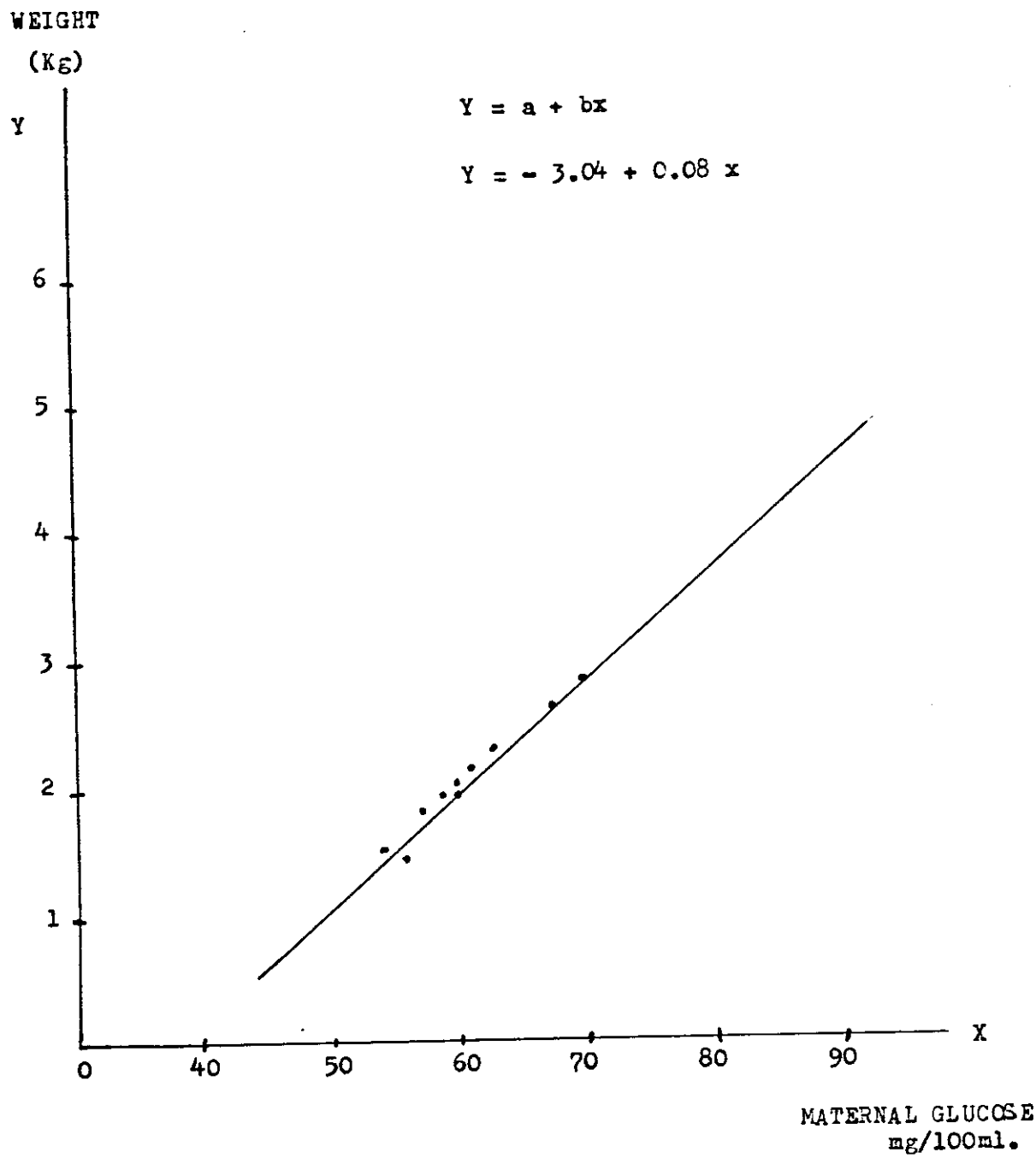
CURVE No.23 : SHOWS THE CORRELATION OF SOMATOMEDIN TO SKULL CIRCUMFERENCE IN THE DIABETIC

	CONTROL	LOW BIRTHWEIGHT	PREMATURE	INTERMEDIATE	DIABETIC
NUMBER	18	19	19	12	20
RANGE	76-100	54 - 67	57 - 80	65 - 77	110 - 170
MEAN	89.78	61.33	67.27	71.50	143.9
SD	$\bar{+}$ 7.97	$\bar{+}$ 3.81	$\bar{+}$ 7.66	$\bar{+}$ 4.50	$\bar{+}$ 17.2
t		13.74	8.34	6.3	12.64
P		LESS THAN 0.001	LESS THAN 0.001	LESS THAN 0.001	LESS THAN 0.001

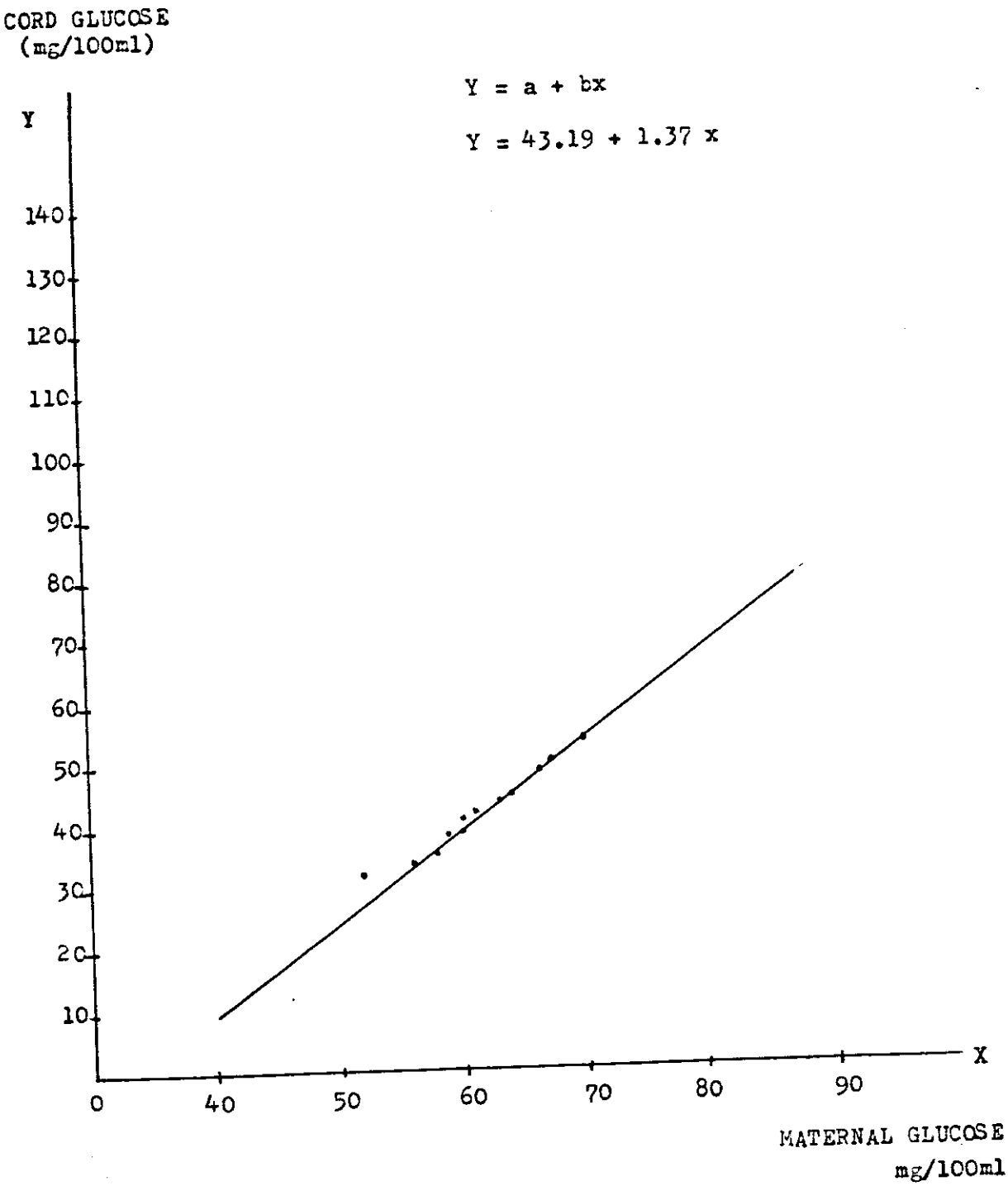
TABLE No.25 : SHOWS RANGE, MEAN, STANDARD DEVIATION OF MATERNAL GLUCOSE IN THE CONTROL AND OTHER GROUPS.

GROUP		WEIGHT OF NEWBORN r P	CORD GLUCOSE r P
CONTROL	MATERNAL BLOOD GLUCOSE	0,960 LESS THAN 0.001	0,996 LESS THAN 0.001
	REGRESSION EQUATION	Y = 2.05 + 0.01x	Y = - 8.76 + 1.03x
LOW BIRTH-WEIGHT	MATERNAL BLOOD GLUCOSE	0,935 LESS THAN 0.001	0,940 LESS THAN 0.001
	REGRESSION EQUATION	Y = - 3.04 + 0.1x	Y = - 43.2 + 1.37x
PREMATURE	MATERNAL BLOOD GLUCOSE	0.97 LESS THAN 0.001	0.992 LESS THAN 0.001
	REGRESSION EQUATION	Y = - 4 + 0.09x	Y = 27.15 + 0.85x
DIABETIC	MATERNAL BLOOD GLUCOSE	0,947 LESS THAN 0.001	0.942 LESS THAN 0.001
	REGRESSION EQUATION	Y = 0.61 + 0.03x	Y = 39.7 + 0.5x

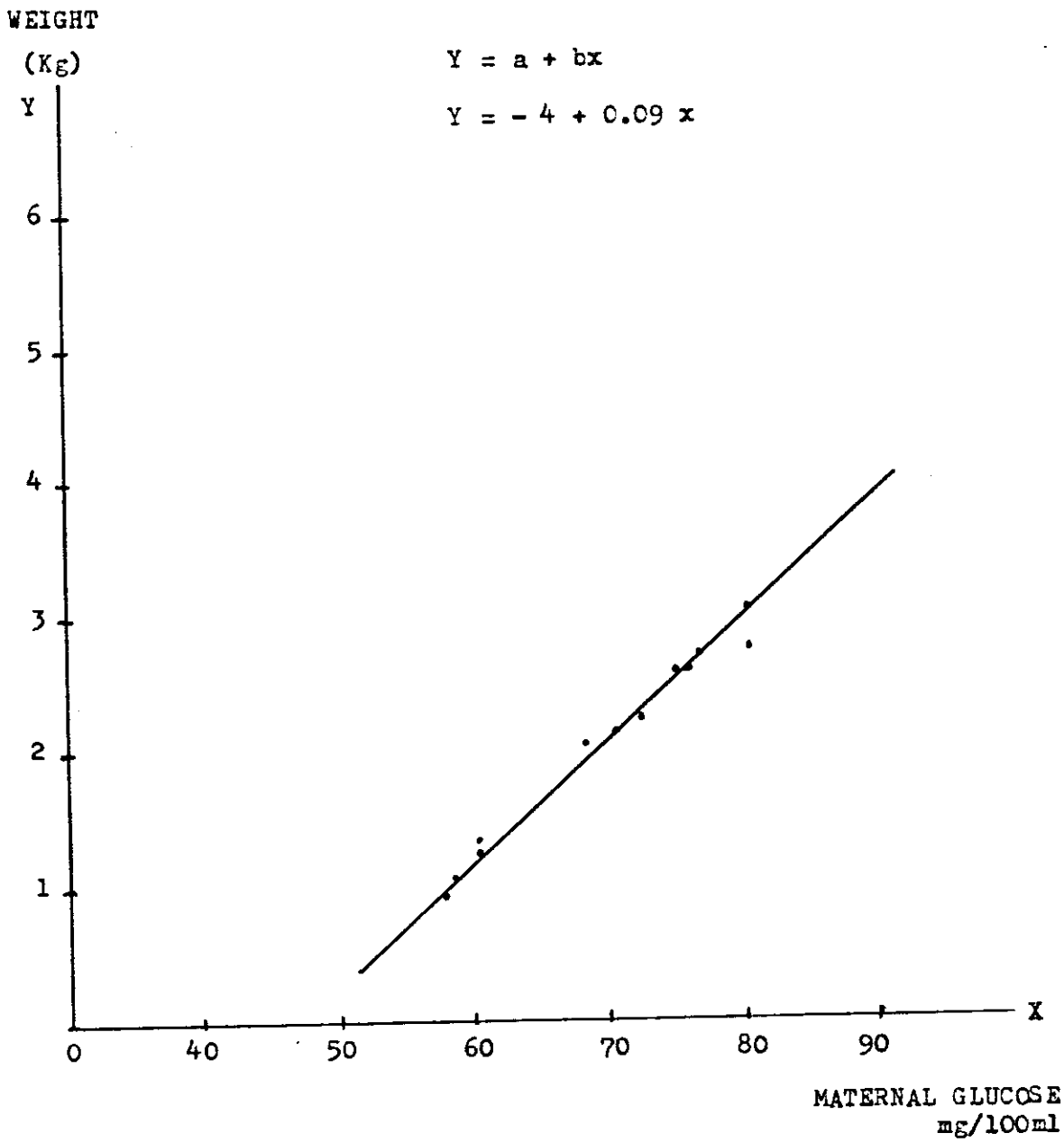
TABLE No.26 : SHOWS THE CORRELATION OF MATERNAL BLOOD GLUCOSE TO WEIGHT OF NEWBORN AND CORD GLUCOSE IN THE CONTROL AND OTHER GROUPS.



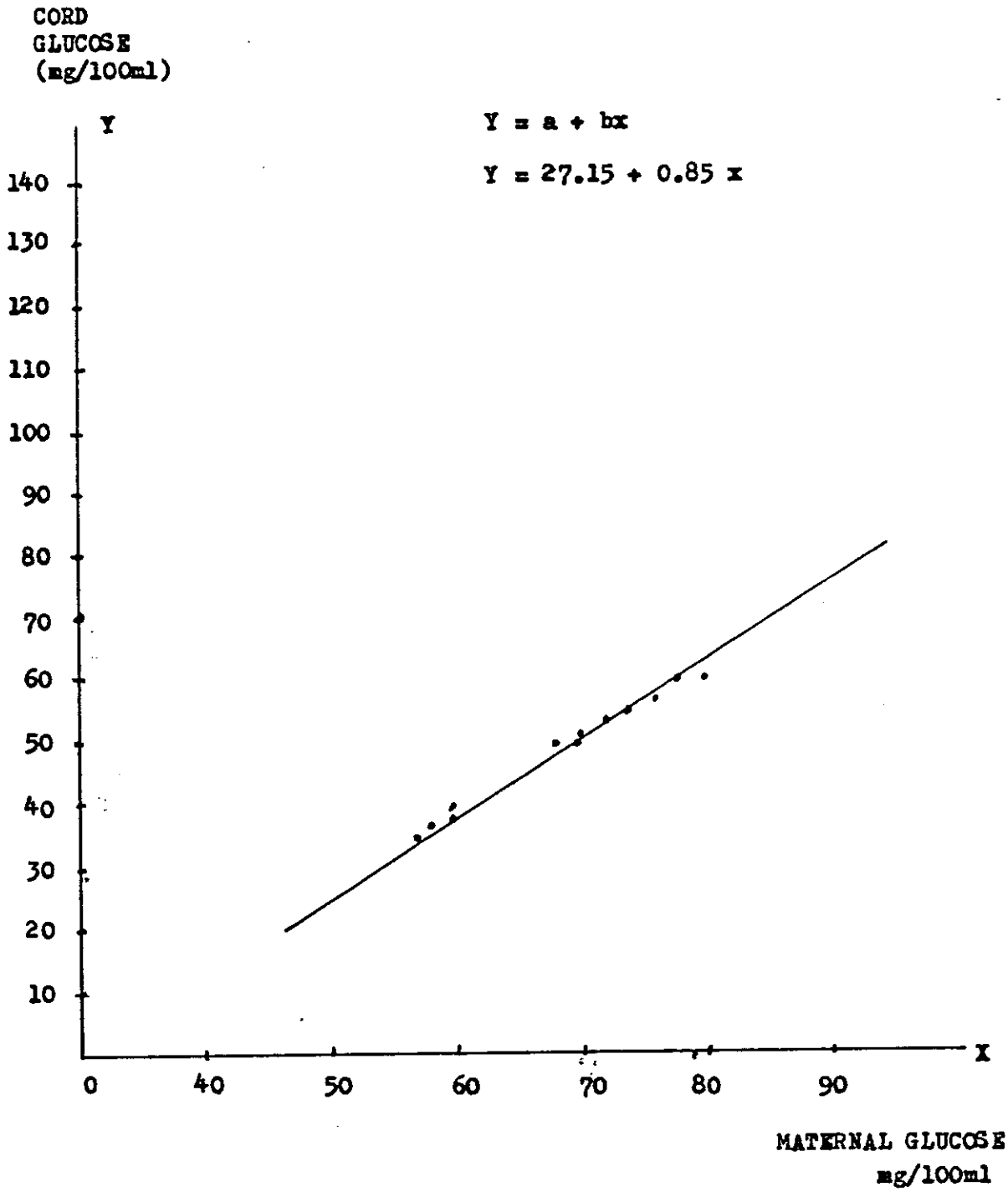
CURVE No.24 : SHOWS THE CORRELATION OF MATERNAL GLUCOSE TO WEIGHT OF NEWBORN IN THE LOW BIRTHWEIGHT



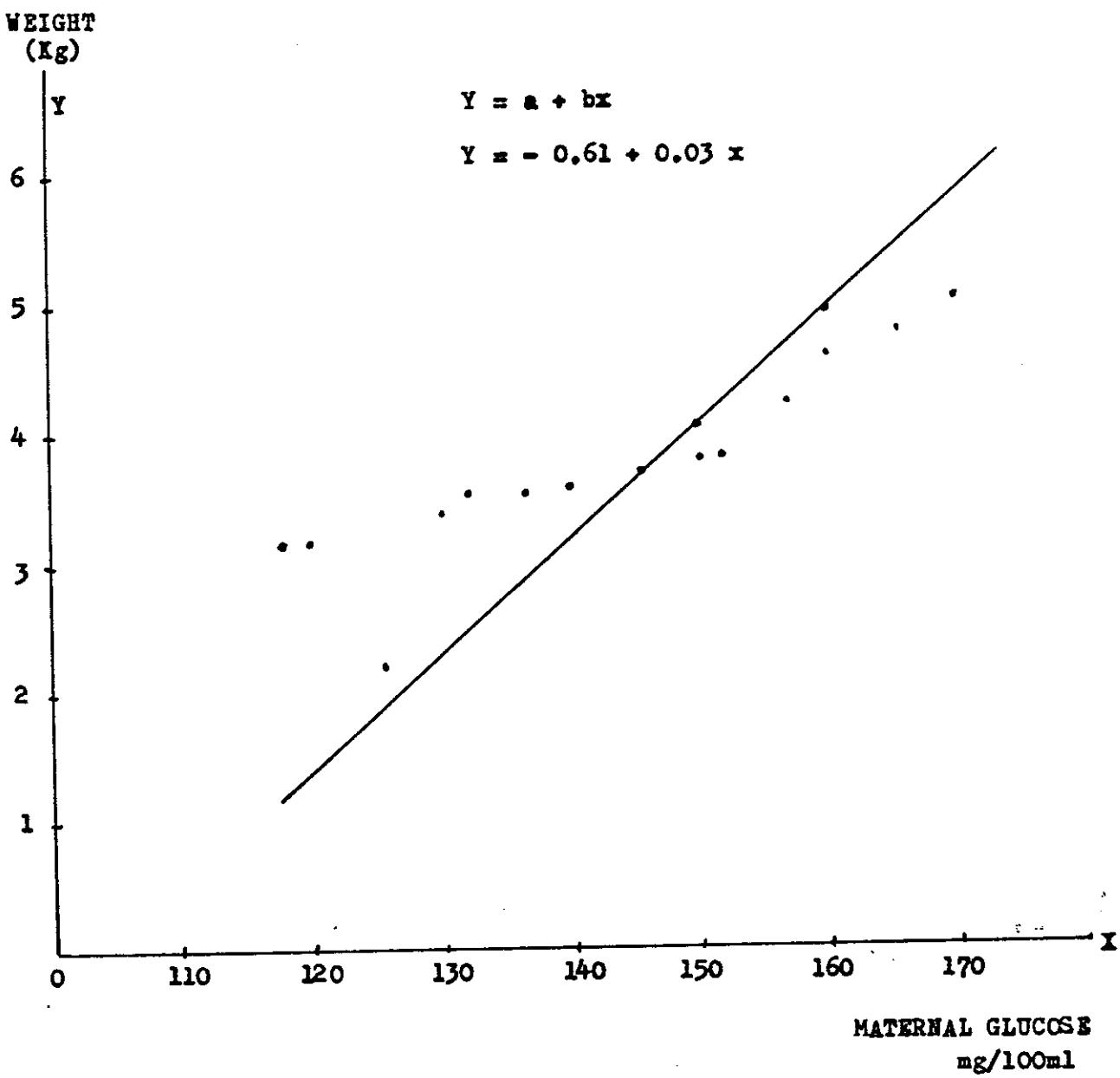
CURVE No.25 SHOWS THE CORRELATION OF MATERNAL GLUCOSE TO CORD GLUCOSE IN THE LOW BIRTHWEIGHT



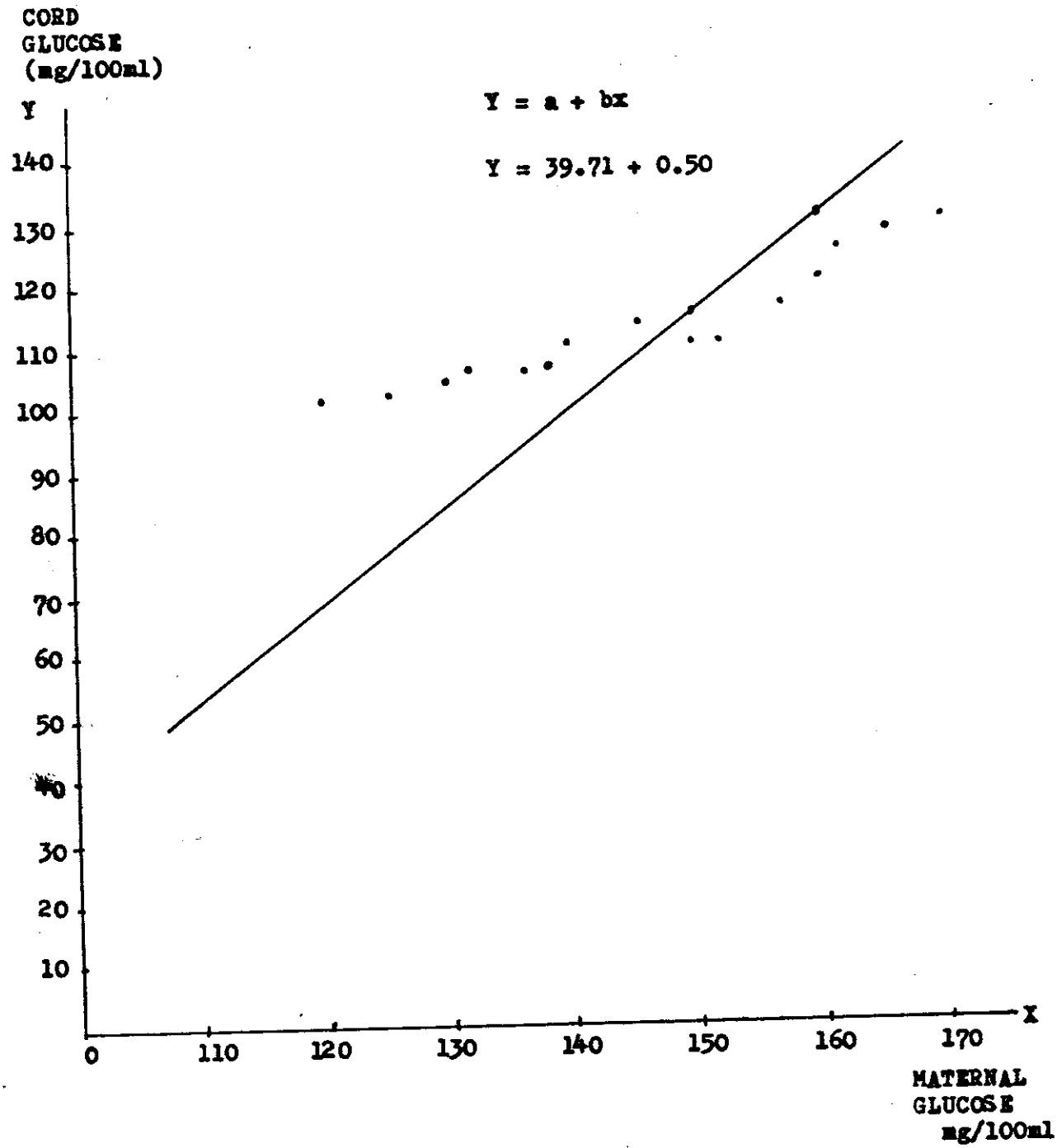
CURVE No.26 : SHOWS THE CORRELATION OF MATERNAL GLUCOSE TO WEIGHT OF NEWBORN IN THE PREMATURE



CURVE No. 27 : SHOWS THE CORRELATION OF MATERNAL GLUCOSE TO CORD GLUCOSE IN THE PREMATURE



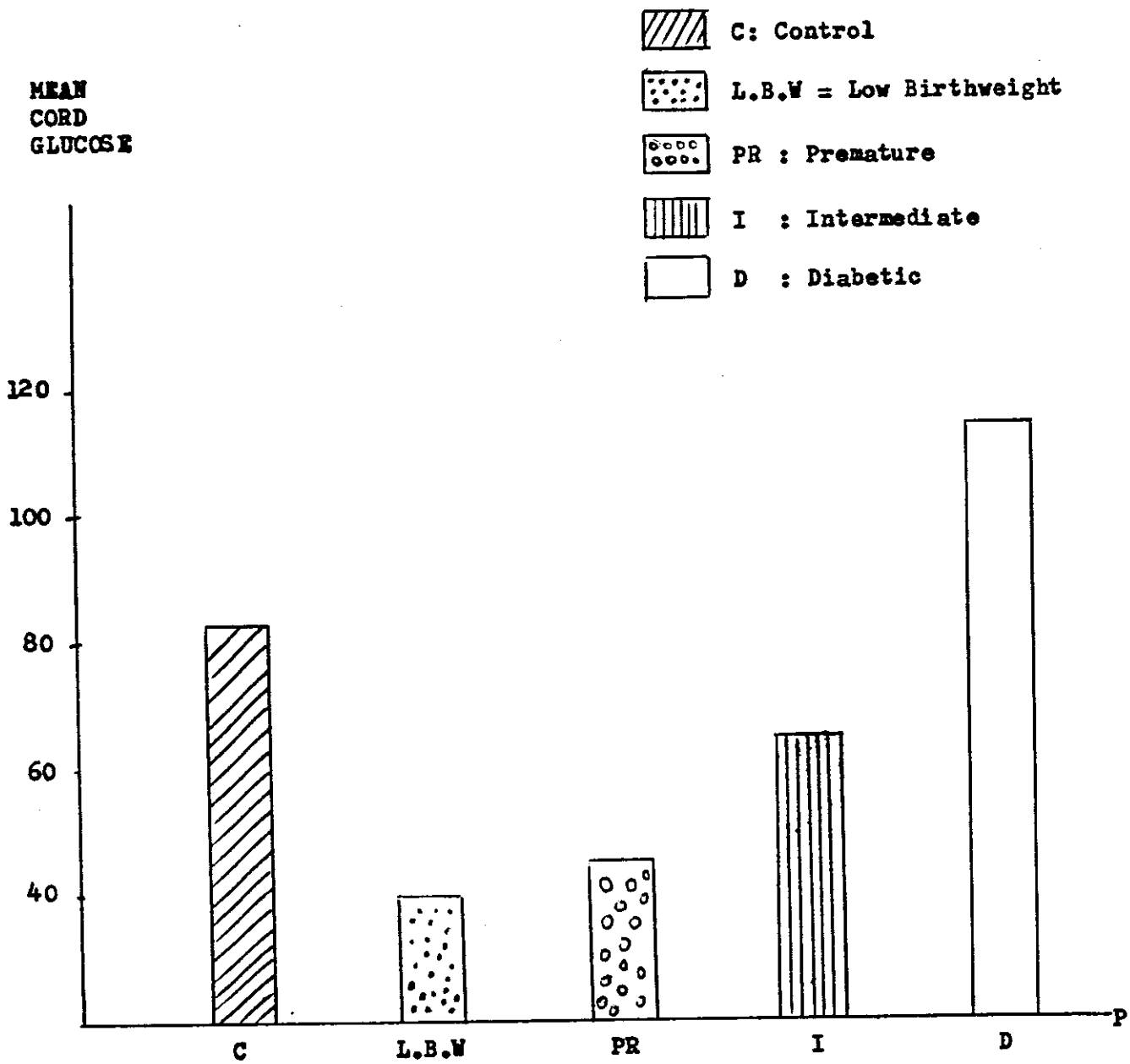
CURVE No.28 : SHOWS THE CORRELATION OF MATERNAL GLUCOSE TO WEIGHT OF NEWBORN IN THE DIABETIC



CURVE No.29 : SHOWS THE CORRELATION OF MATERNAL GLUCOSE TO CORD GLUCOSE IN THE DIABETIC

	Control	Low Birthweight (L.B.W)	Premature	Intermediate	Diabetic
Number	18	19	19	12	20
Mean	84.0	39.79	46.83	65.58	117.75
SD	8.27	5.81	8.85	3.37	9.15
t		18.73	13.23	8.45	11.97
P		< 0.001	< 0.001	< 0.001	< 0.001

Table No.27 : SHOWS THE MEAN LEVELS OF CORD GLUCOSE IN THE CONTROL AND OTHER GROUPS.



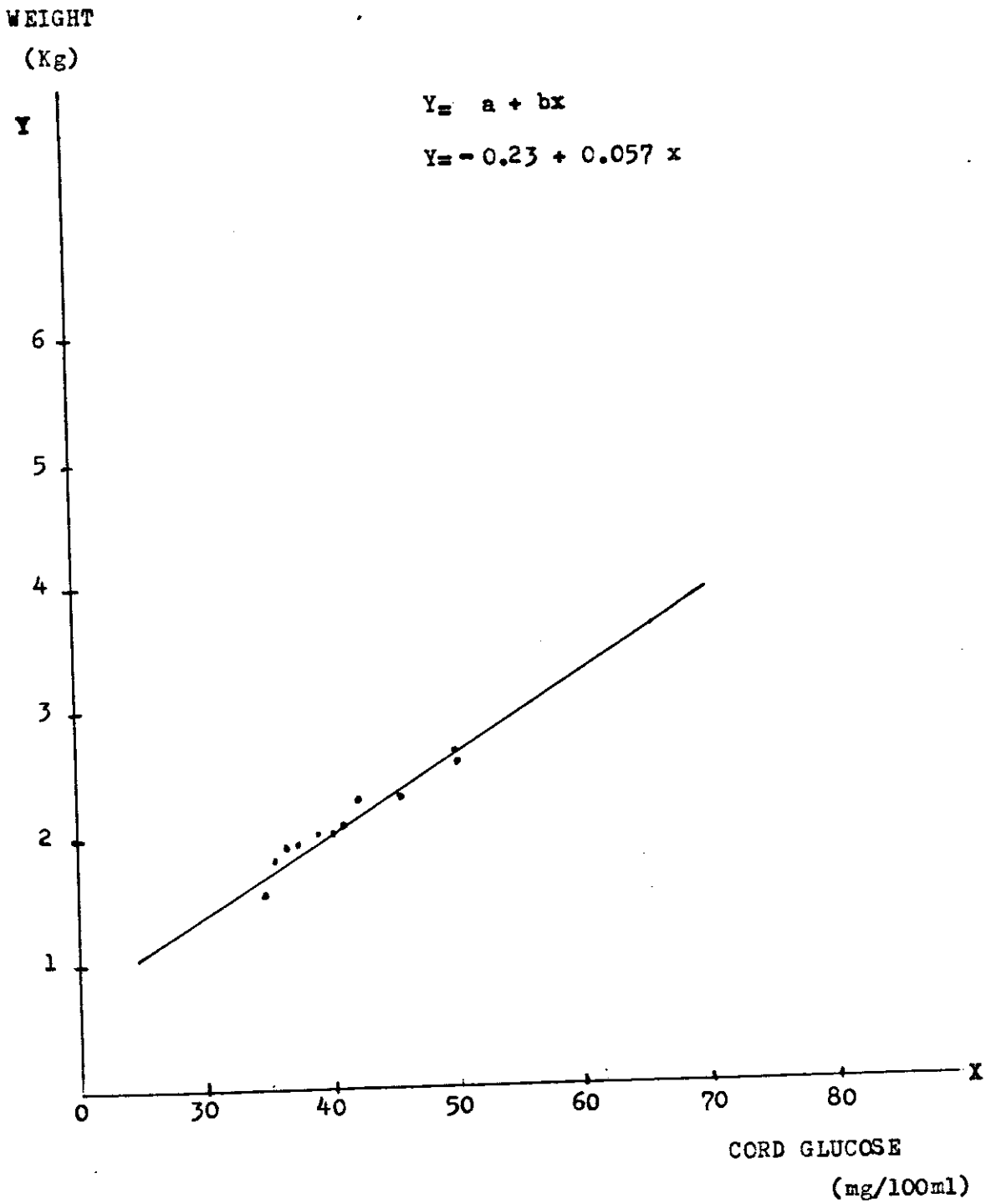
BARR GRAPH No. 3 : SHOWS THE MEAN LEVELS OF CORD GLUCOSE IN THE CONTROL AND OTHER GROUPS.

GROUP	VARIABLE 1	VARIABLE 2	r	P	REGRESSION EQUATION
PREMATURE	CORD GLUCOSE	WEIGHT OF NEWBORN	0.976	LESS THAN 0.001	Y =-1.69 + 0.1x
L.B.W	CORD GLUCOSE	WEIGHT OF NEWBORN	0.950	LESS THAN 0.001	Y =-0.23 + 0.1x

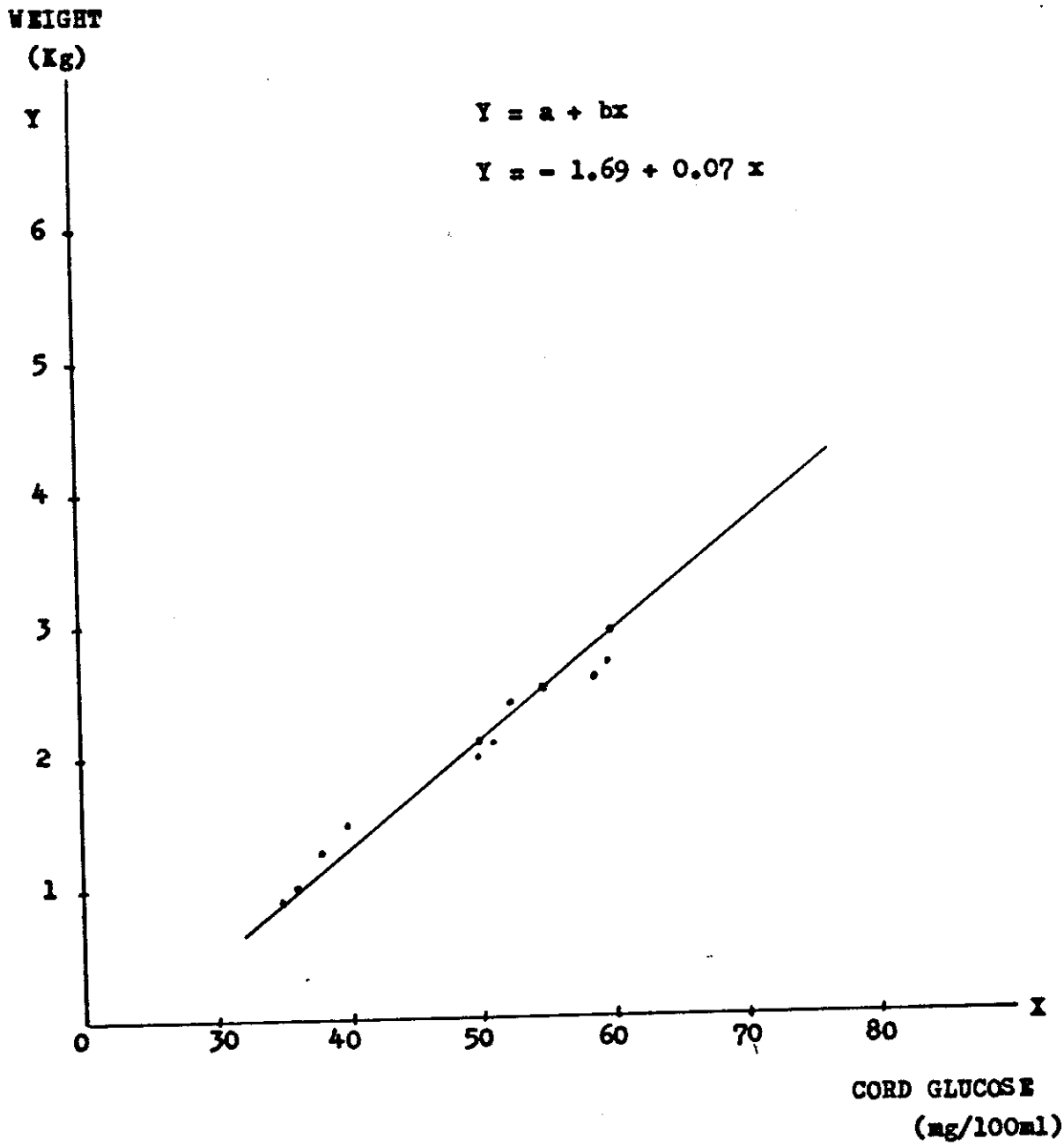
TABLE No.28 : SHOWS THE CORRELATION OF CORD GLUCOSE TO WEIGHT OF NEWBORN IN THE PREMATURE AND LOW BIRTHWEIGHT.

	CORD GLUCOSE AND WEIGHT OF NEWBORN	PERIOD OF STAY IN HOSPITAL AND WEIGHT OF NEWBORN
r	0.980	- 0.960
P	LESS THAN 0.001	LESS THAN 0.001
REGRESSION EQUATION	Y = - 2.91 + 0.06x	Y = 4.75 - 0.11 x

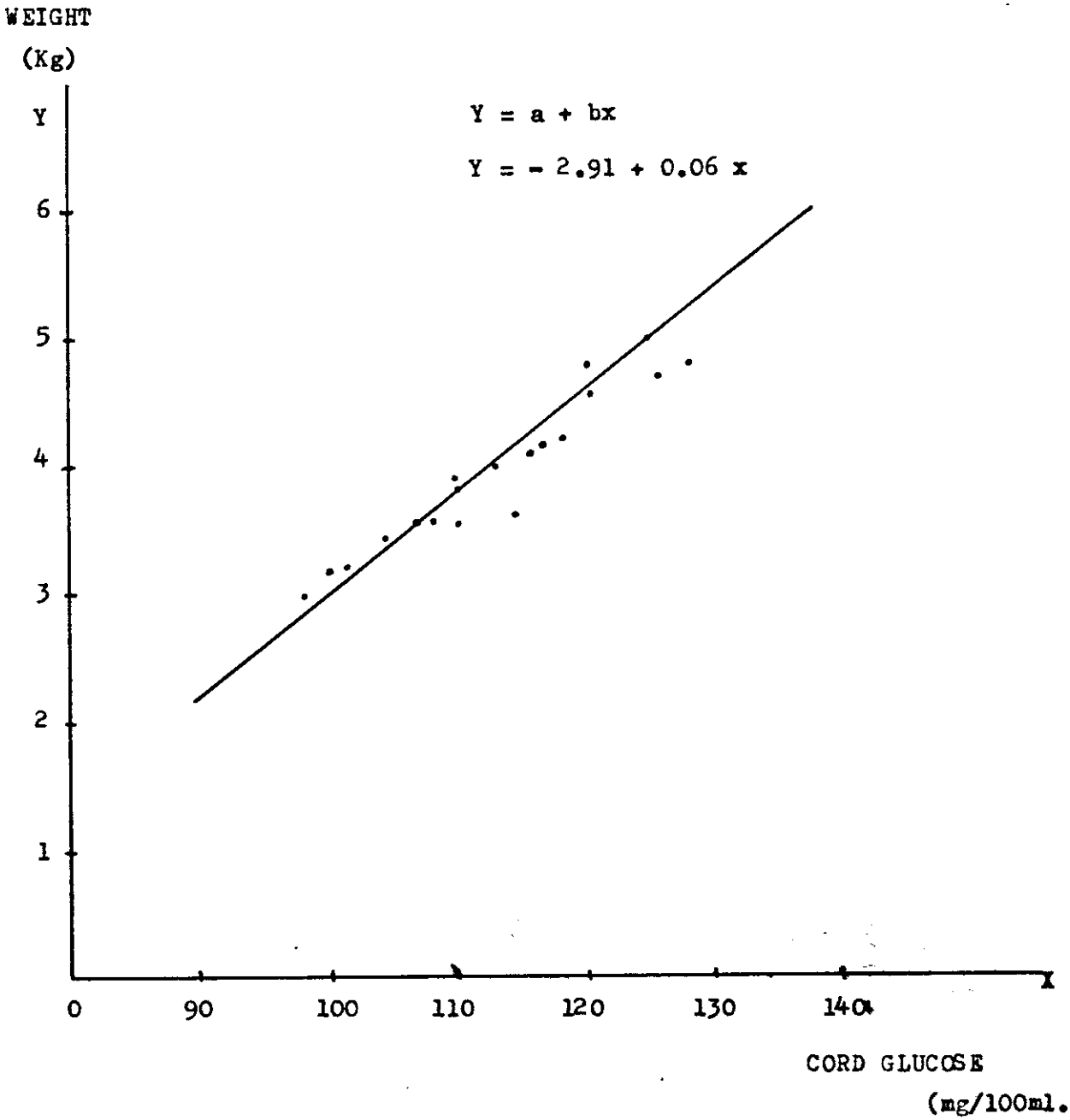
TABLE No.29 : SHOWS THE CORRELATION OF CORD GLUCOSE TO WEIGHT OF NEWBORN AND THE CORRELATION OF PERIOD OF STAY IN HOSPITAL TO WEIGHT OF NEWBORN IN THE DIABETIC



CURVE No.30: SHOWS THE CORRELATION OF CORD GLUCOSE TO WEIGHT OF NEWBORN IN THE LOW BIRTHWEIGHT



CURVE No. 31 : SHOWS THE CORRELATION OF CORD GLUCOSE TO WEIGHT OF NEWBORN IN THE PREMATURE



CURVE No.32 : SHOWS THE CORRELATION OF CORD GLUCOSE TO WEIGHT OF NEWBORN IN THE DIABETIC

N	SHORT TERM THERAPY IN THE DIABETIC 10	LONG TERM THERAPY IN THE DIABETIC 10	CONTROL 18
MATERNAL GLUCOSE MEAN ± SD t P	158.4 ± 6.08	129.4 ± 11.03 7.29 < 0.001	89.78 ± 7.97 25.51 <0.001
CORD GLUCOSE MEAN ± SD t P	118.5 ± 7.15	105.0 ± 4.94 4.91 < 0.001	84.0 ± 8.27 11.5 <0.001
WEIGHT OF NEW BORN MEAN ± SD t P	4.31 ± 0.4	3.39 ± 0.21 6.57 < 0.001	3.44 ± 0.13 6.69 <0.001

TABLE No.30 : SHOWS THE EFFECTIVENESS OF TREATMENT DURING PREGNANCY BY COMPARING SHORT TERM THERAPY TO LONG TERM THERAPY AND CONTROL GROUP.