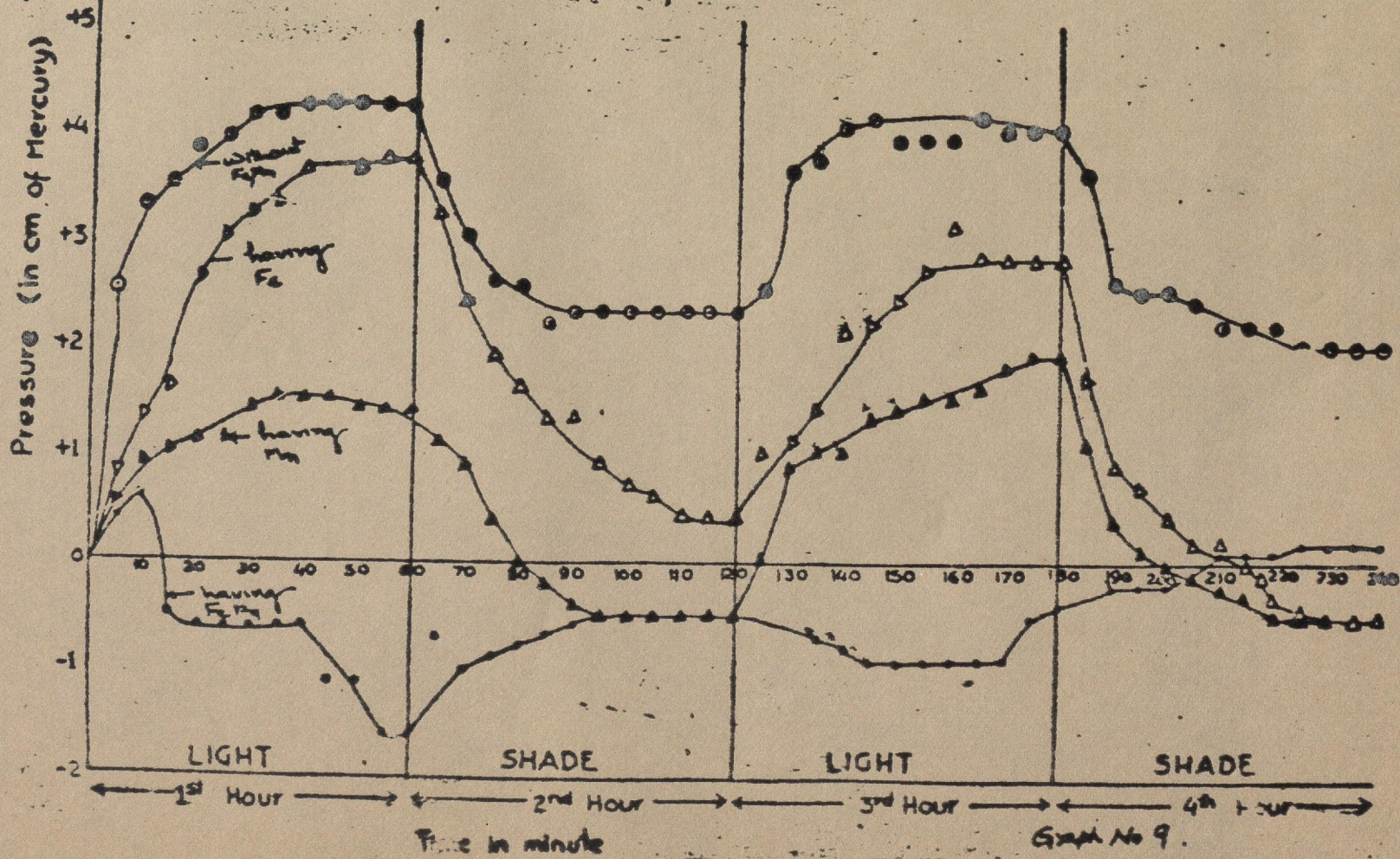


Increase in the pressure in cm of mercury by  
 'Jeewanu' in oxygenic condition.

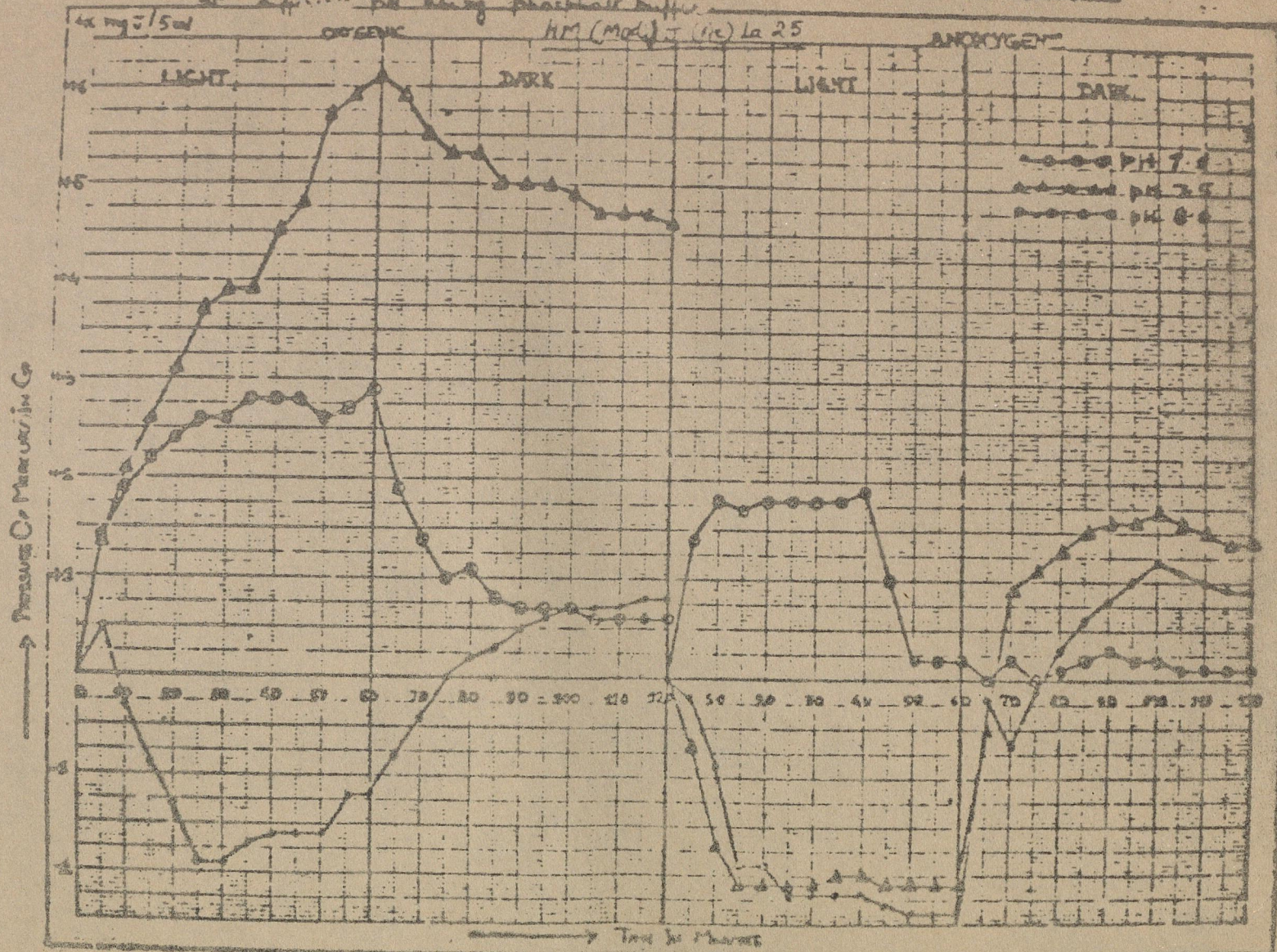
HMT 60  
HMT R (M)

HMT M 60  
HMT R 60

○ Jeewanu without Fe & Mn  
 △ Jeewanu having Fe  
 ▲ Jeewanu having Mn  
 ● Jeewanu having Fe & Mn

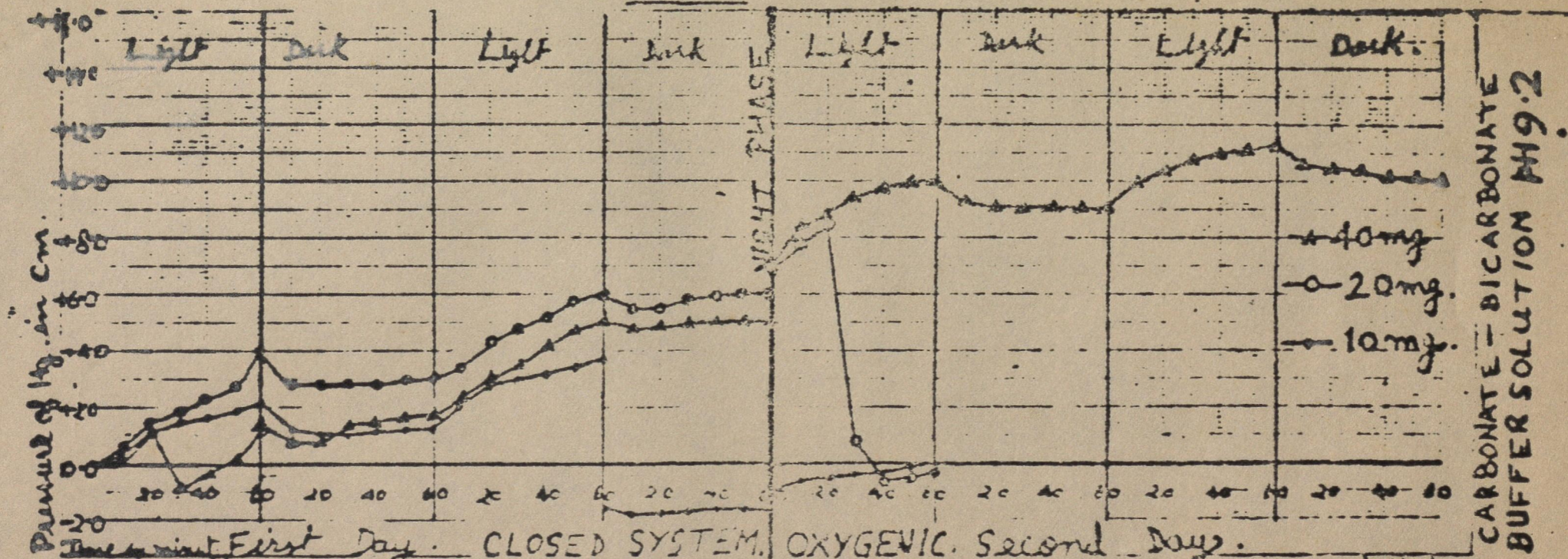


PRODUCTION OF HYDROGEN AND OXYGEN BY *PHOSPHATIBACILLUS* IN LAZARUS-BROTH  
 at pH 7.4, 7.5, 8.0 using phosphate buffer



Graph No 18

3111 J24

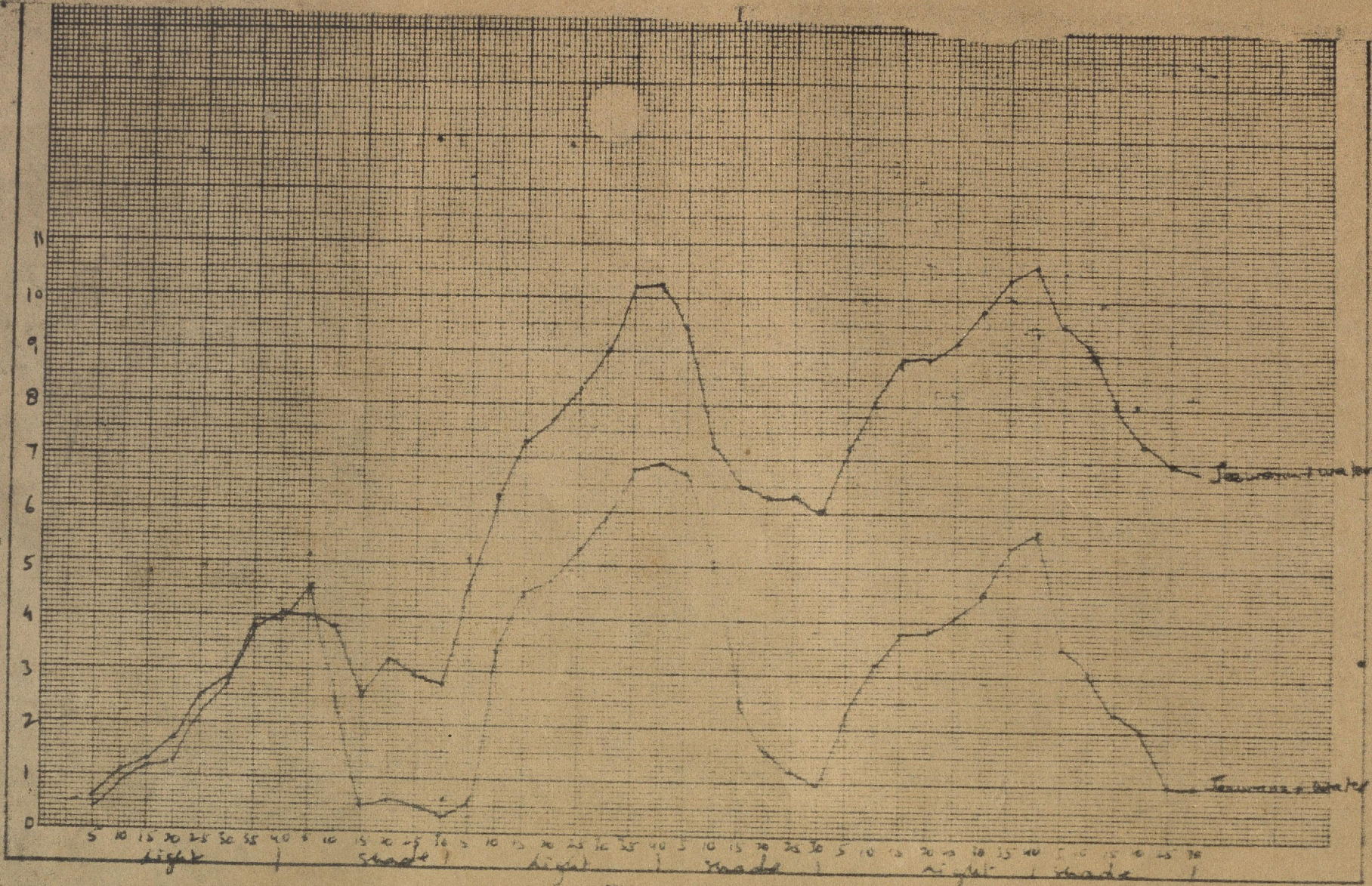


CARBONATE - BICARBONATE  
BUFFER SOLUTION PH 9.2

Time in min. First Day. CLOSED SYSTEM. OXYGENIC. Second Day.  
3:1:1:1 JEEWANU + 1.0 ml Buffer solution of pH 9.2 + 3.7 ml distilled water + 0.3 ml distilled water  
in side lobe. (— Jeevanu 10 mg) (—o Jeevanu 20 mg) (—▲ Jeevanu 40 mg)

Exp No 15

Cum. of Mercury



Sesemann with 10% Buffer

Sesemann with 2% Buffer

1:2:1:1 Sesemann with Methanol - with 10.2 Carbonate Buffer

+8.0

L

D

L

D

L

D

L

D

+7

+6

+5

+4

+3

+2

+1

0

-1

-2

-3

-4

PARENTAL MEDIUM PREPARED AND EXPOSED - JEEWANU ARE GETTING FORMED IN IT.

1:2:1:2 J with 0, 1/2, 1 vol of Acetic Acid

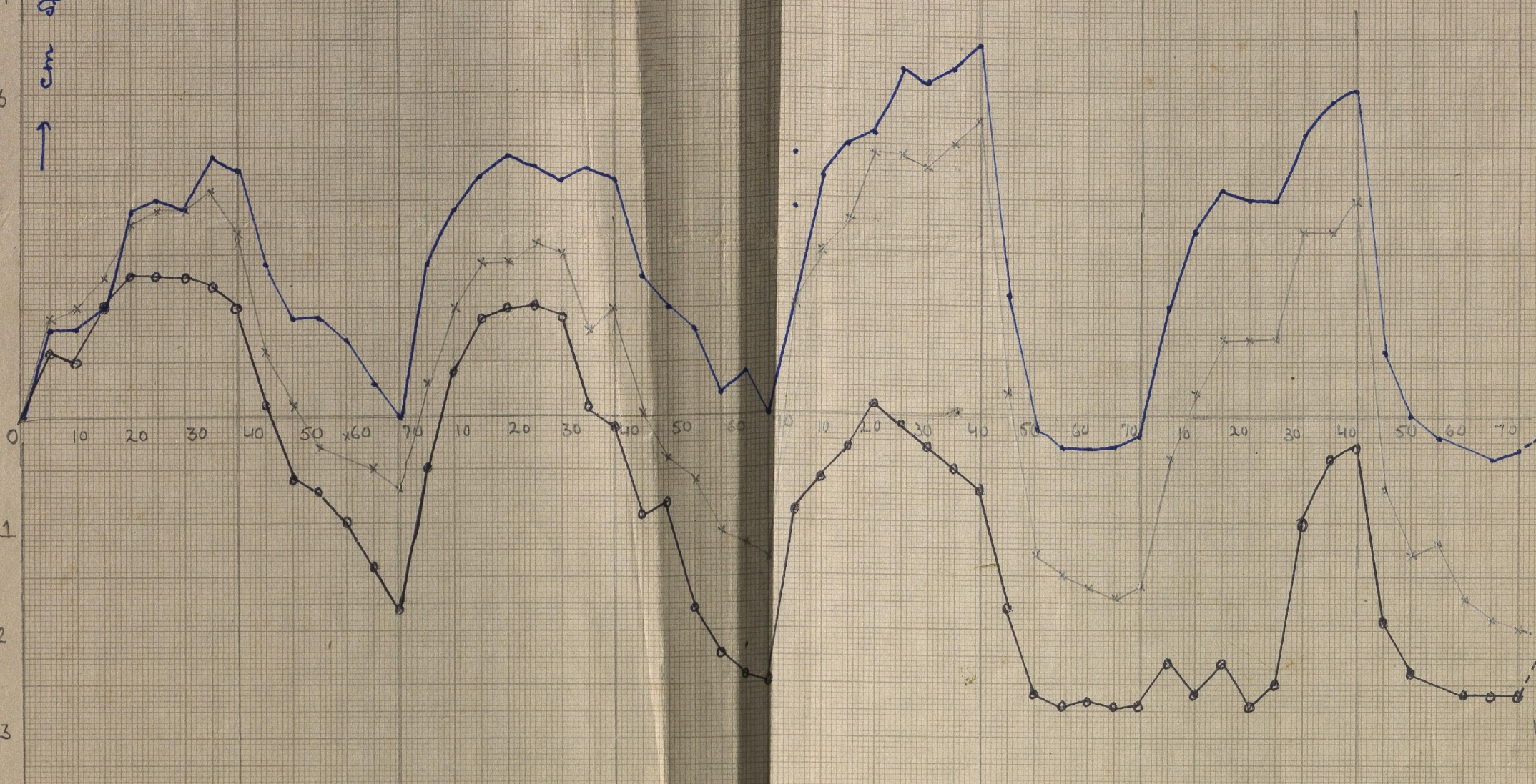
A<sub>11</sub> →

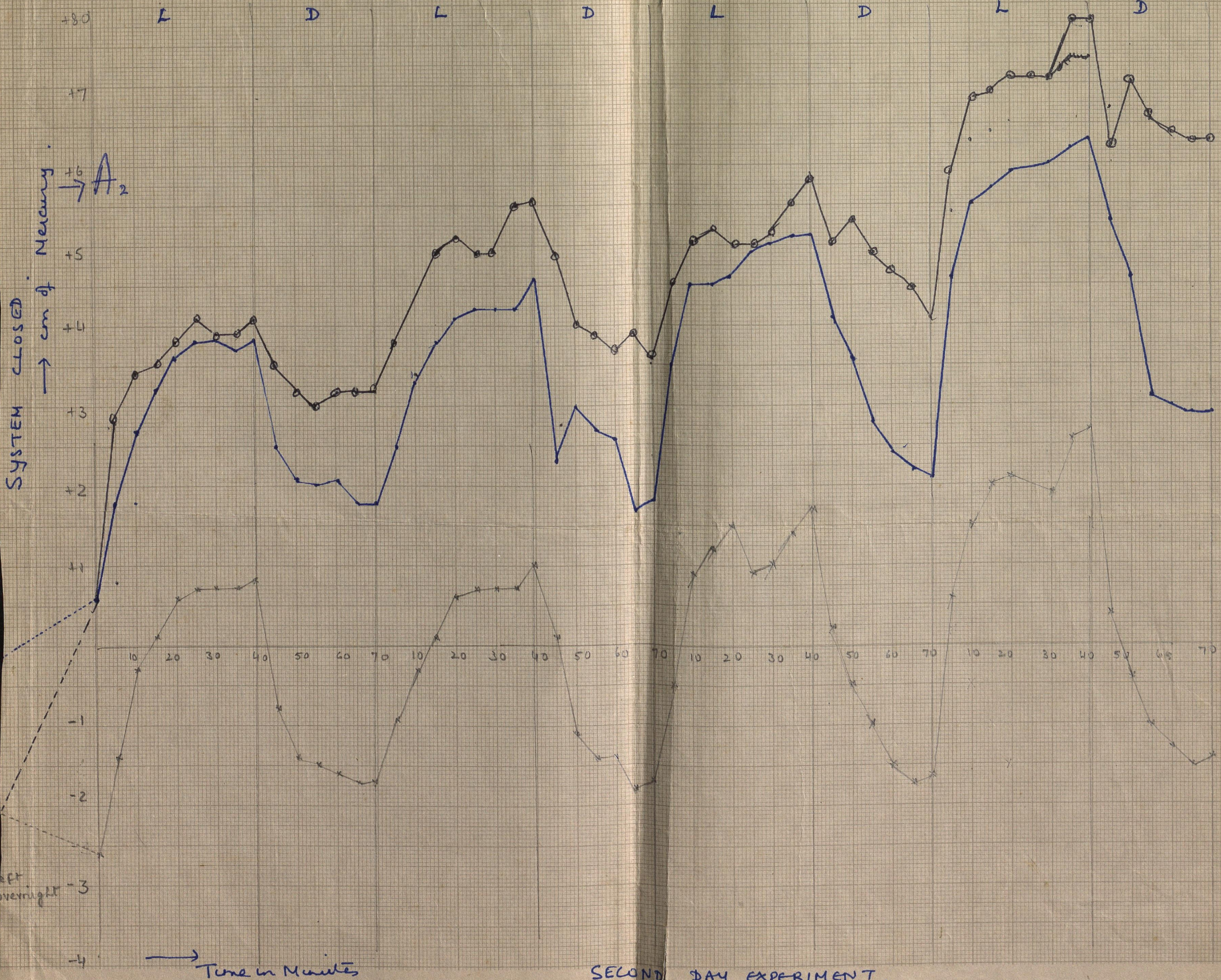
—x—x— 1:2:1:2 J with 0 acetic acid  
 —•—•— 1:2:1:2 J with 1/2 vol Acetic Acid  
 —o—o— 1:2:1:2 J with 1 vol of Acetic Acid

↑ cm of H<sub>2</sub>

→ Time in Minutes

FIRST DAY UNDER ANOXYGENIC. ATMOSPHERE





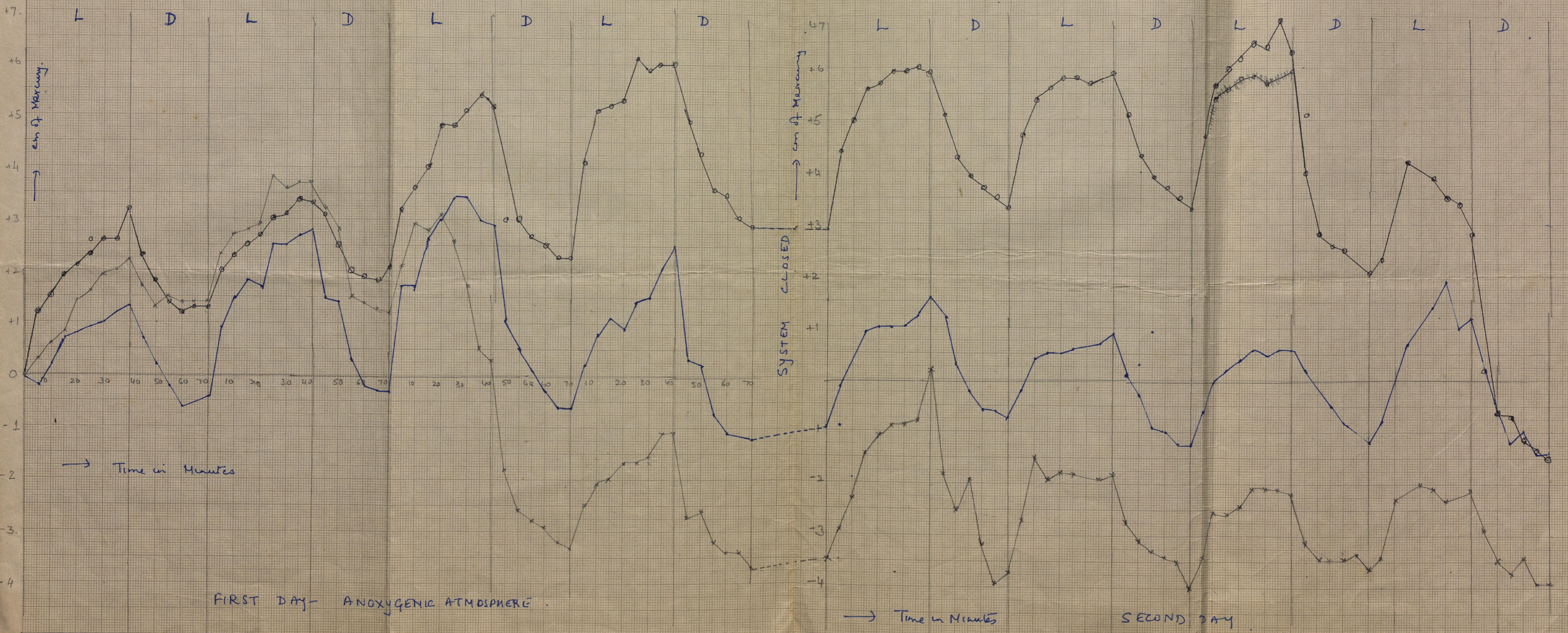
SECOND DAY EXPERIMENT.

PARENTAL MEDIUM PREPARED AND EXPOSED - JEEWANU ARE GETTING FORMED IN IT.

1:2:1:1:J with 0, 1/2, 1 vol of Acetic Acid

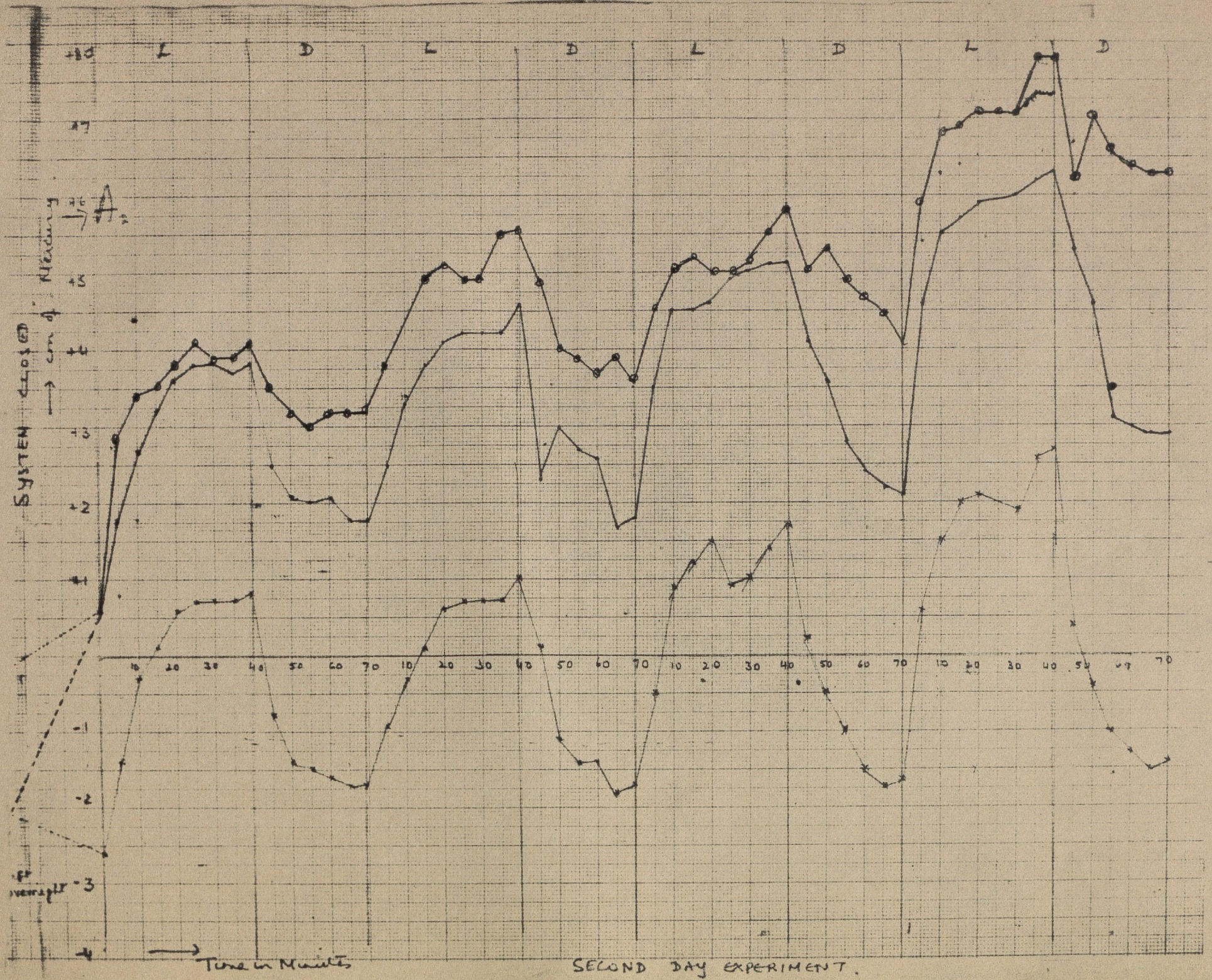
- x - x - 1:2:1:1:J with 0 Acetic Acid  
- . - . - 1:2:1:1:J with 1/2 vol Acetic Acid  
- o - o - 1:2:1:1:J with 1 vol of Ac. Acid

L denotes light phase  
D " dark phase

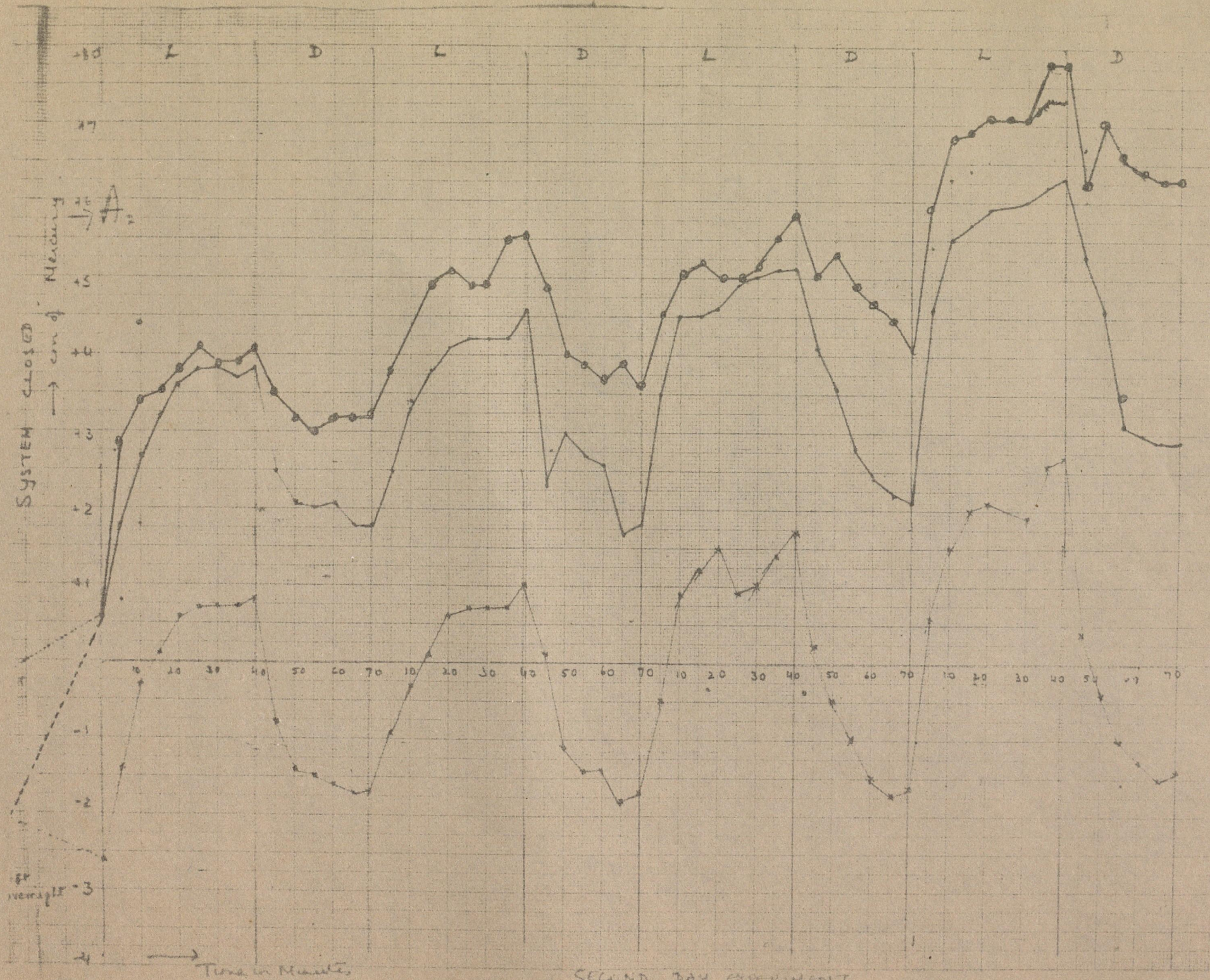


FIRST DAY - ANOXYGENIC ATMOSPHERE

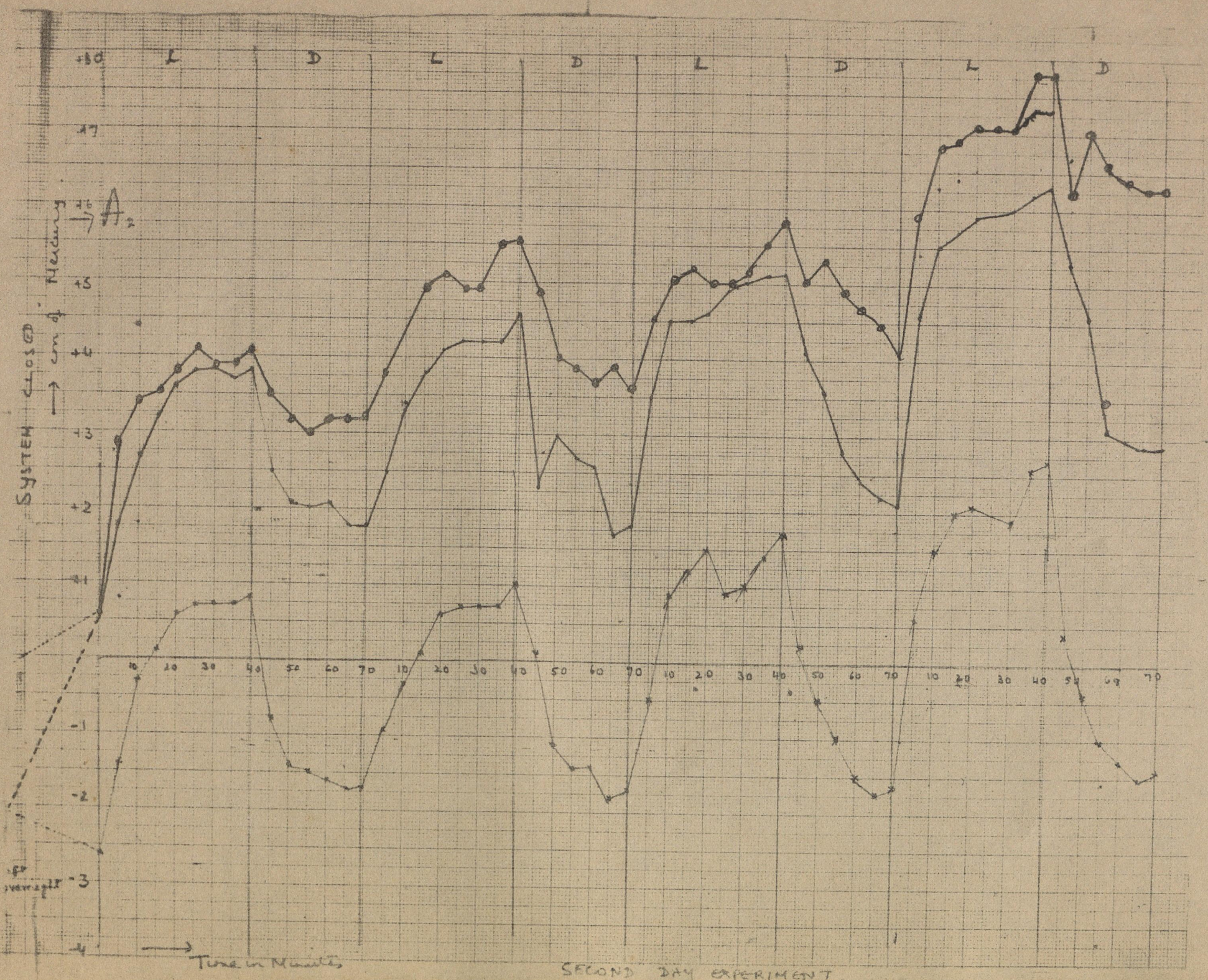
SECOND DAY



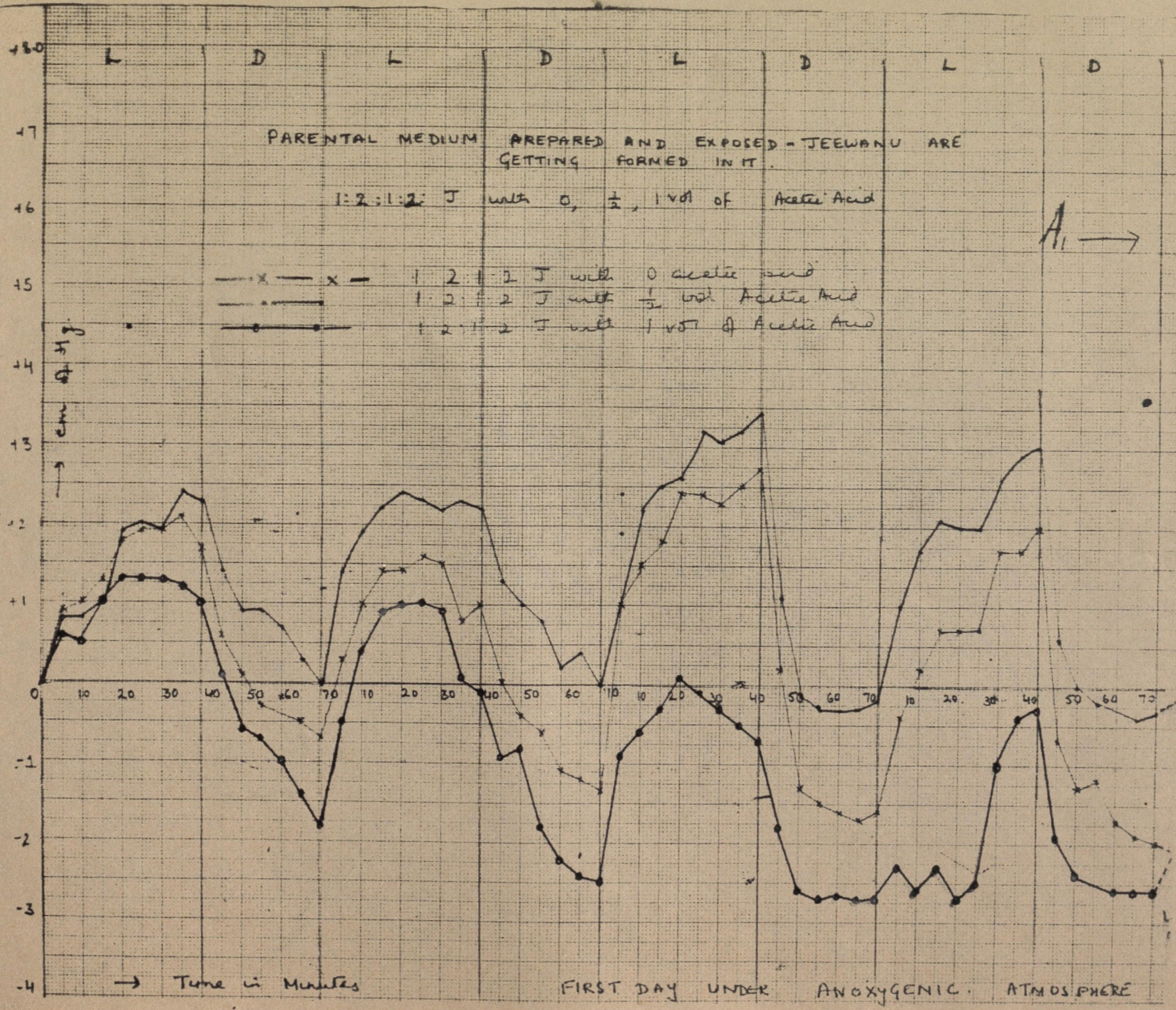
SECOND DAY EXPERIMENT.

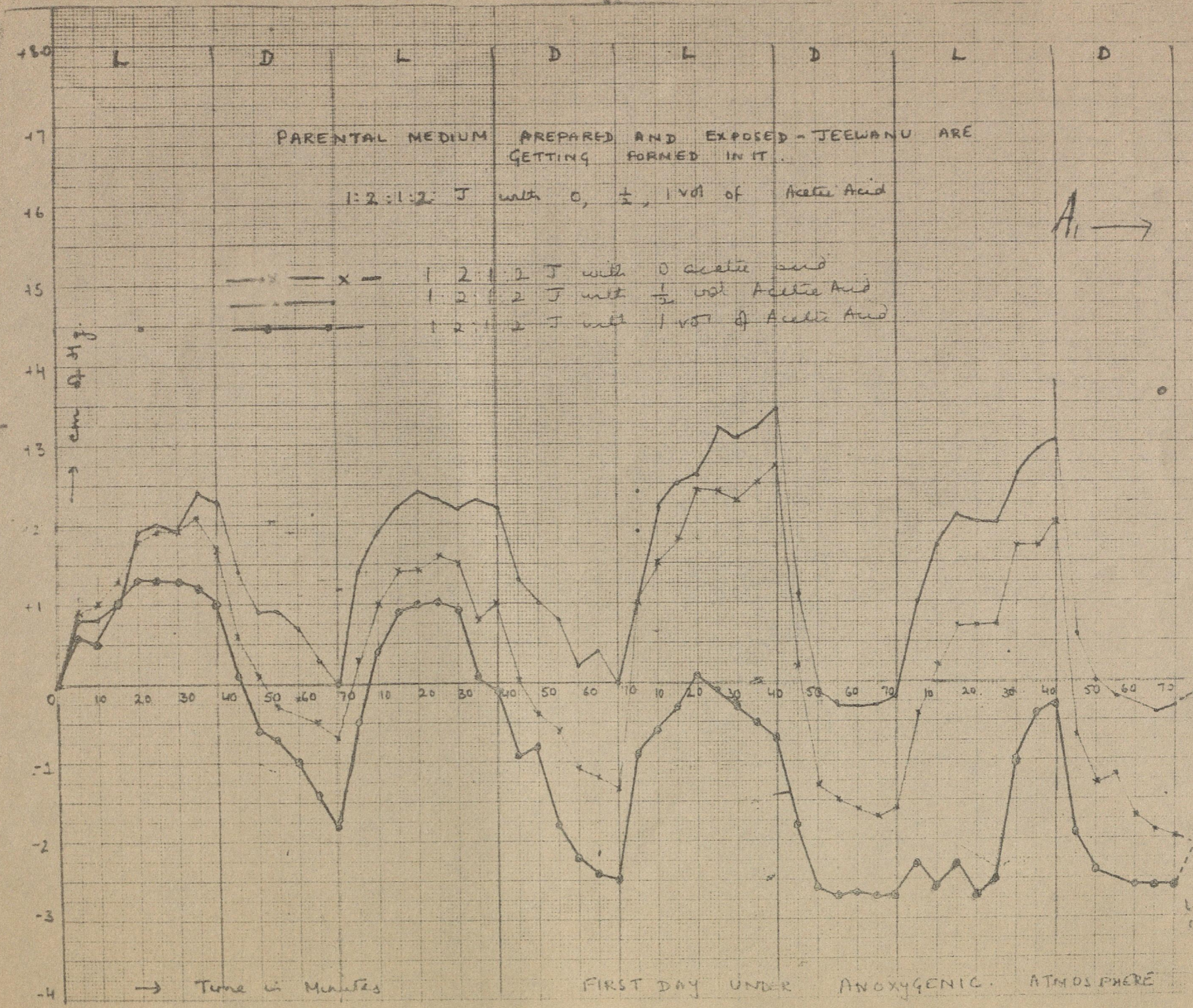


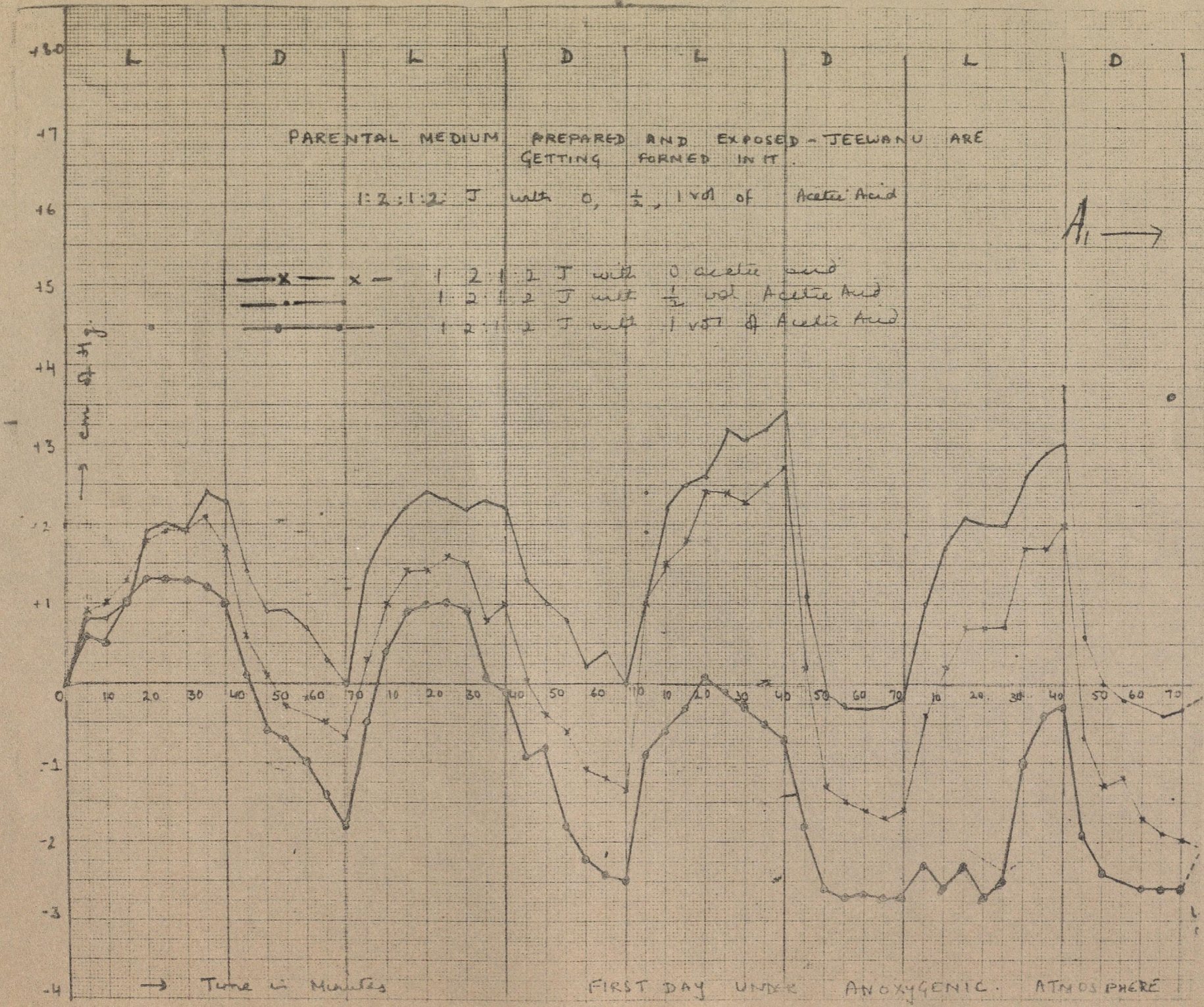
SECOND DAY EXPERIMENT.



SECOND DAY EXPERIMENT.





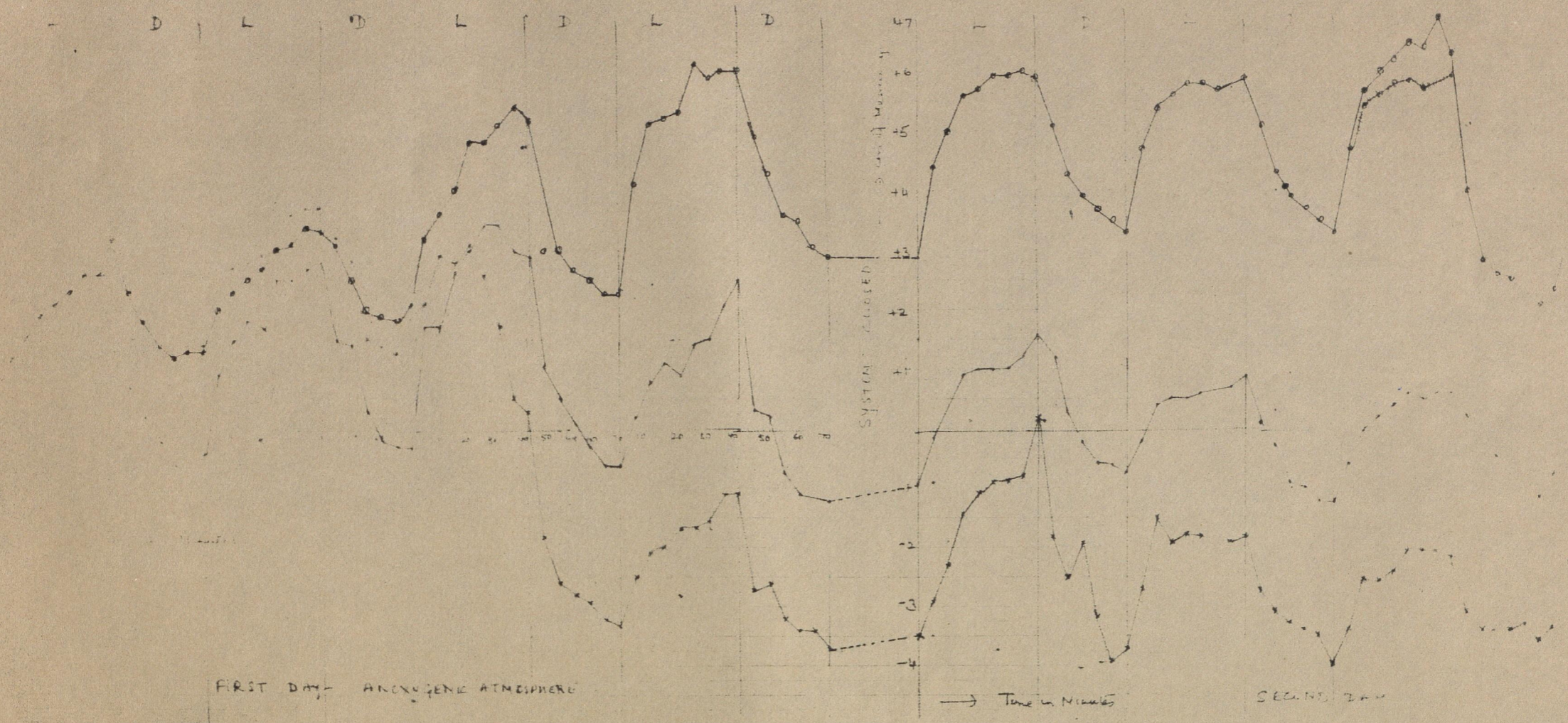


L denotes light phase  
D denotes dark phase

PARENTAL MEDIUM PREPARED AND EXPOSED, TEEWANU ARE GETTING FORMED IN IT.

1:2:1:1:1 with 0, 1/2, 1 vol of Acetic Acid

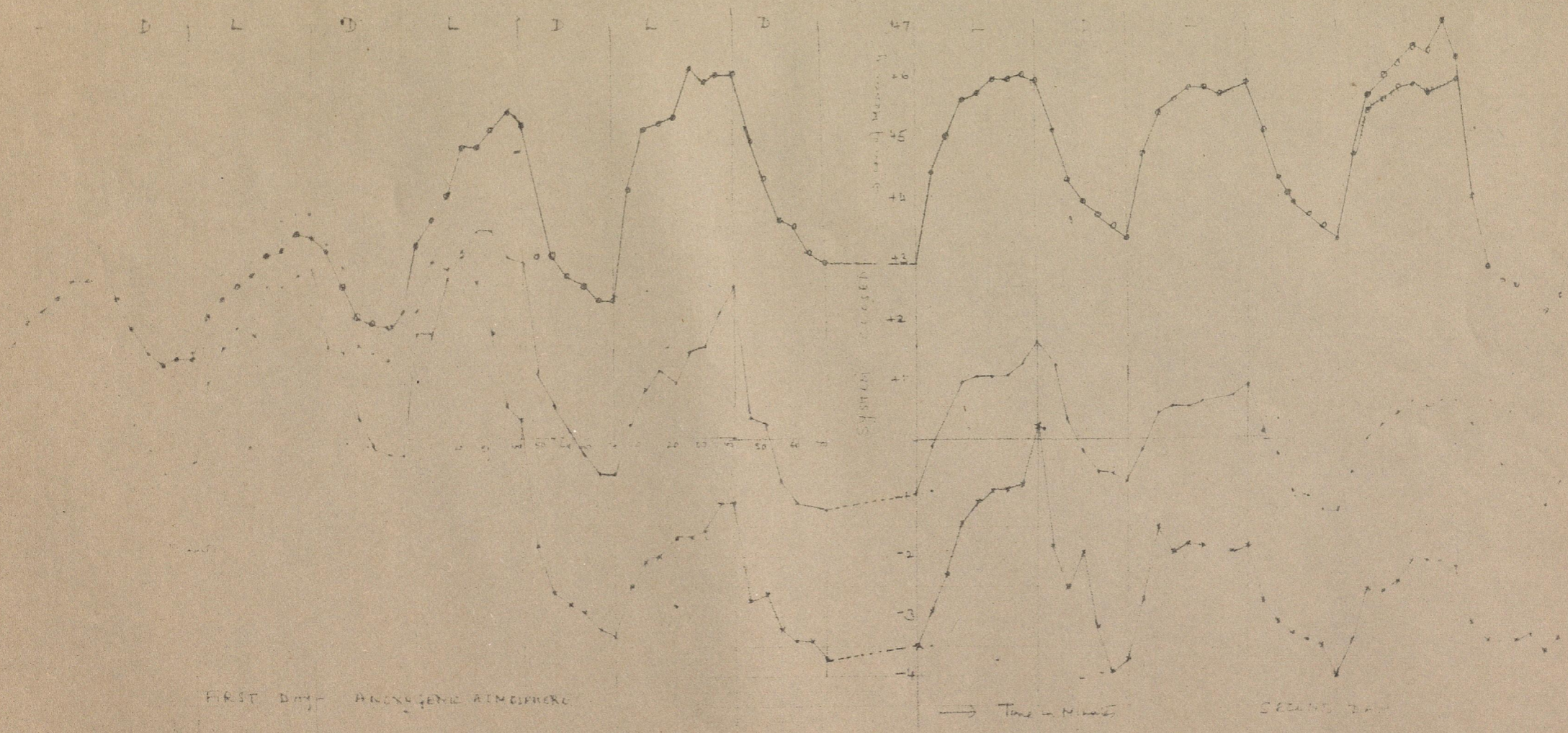
—x—x—  
- - - - -  
—o—o—



1 -> light phase  
 2 -> dark phase

PARENTAL MEDIUM PREPARED AND EXPOSED, JEEWANU ARE  
 GETTING ARMED IN IT  
 12H 1:5 WITH 0, 1/2, 1% OF Acetic Acid

— x — x —  
 — o — o —



FIRST DAY - ANOXIC ATMOSPHERE

→ Time in MINUTES

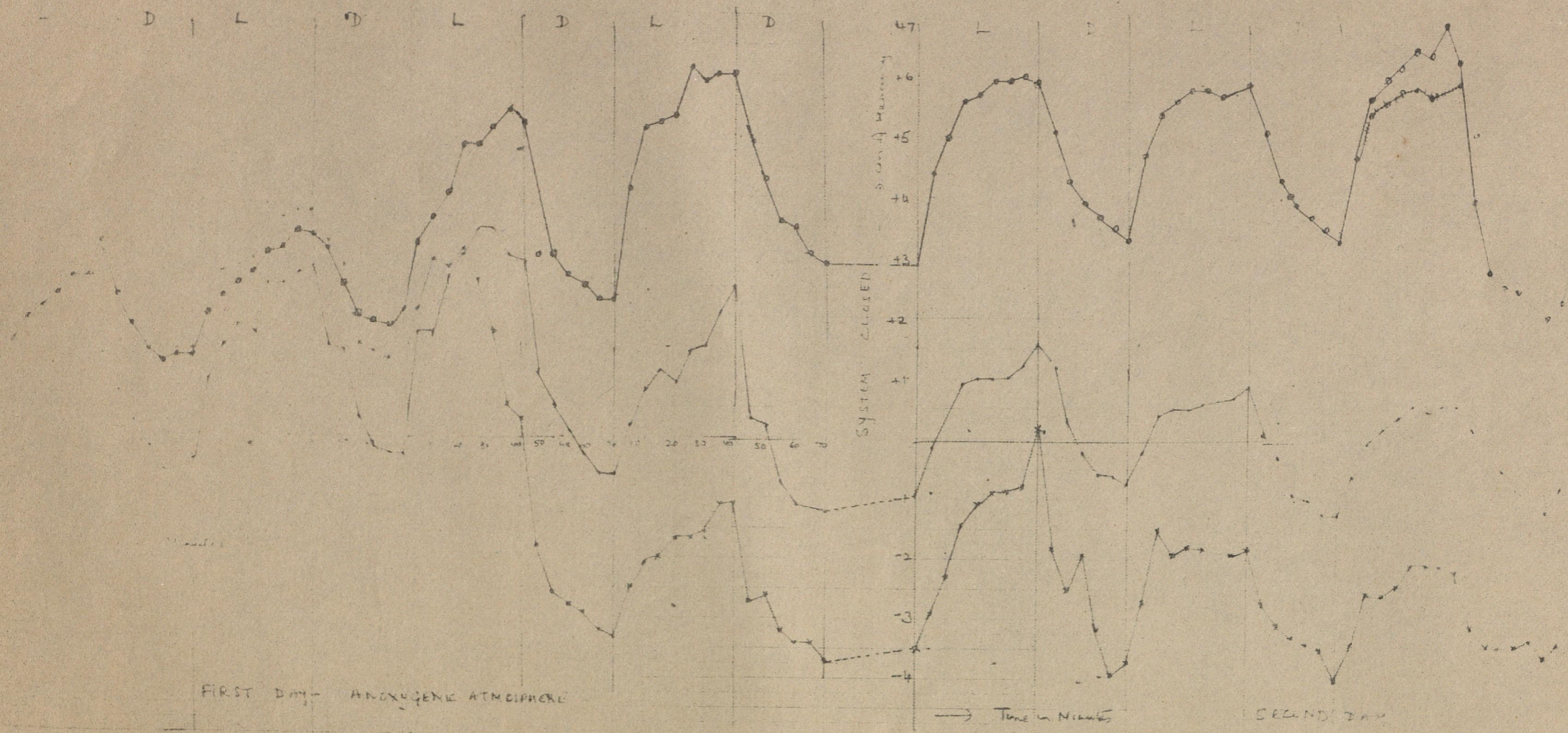
SECOND DAY

L denotes light phase  
D - dark phase

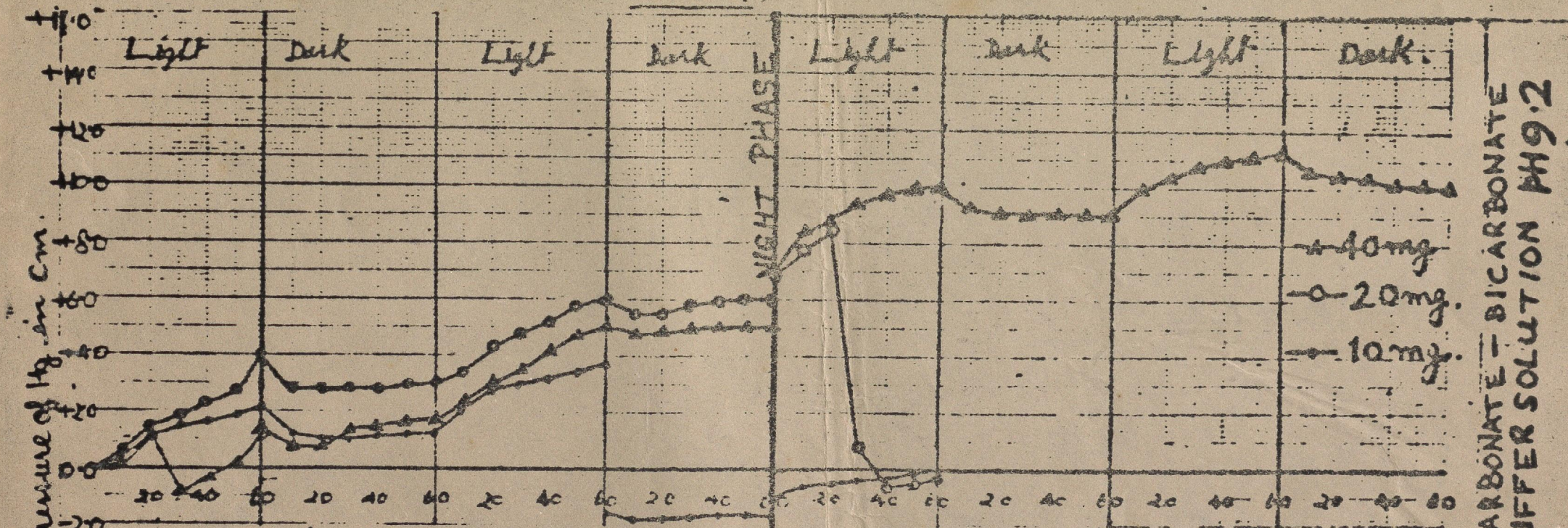
PARENTAL MEDIUM PREPARED AND EXPOSED. JEEWANU ARE  
GETTING FORMED IN IT.

1:2:1:1:5 with 0,  $\frac{1}{2}$ , 1 vol of Acetic Acid

— x — x —  
— . . . . .  
— o — o —



3111 J24



CARBONATE - BICARBONATE  
BUFFER SOLUTION pH 9.2

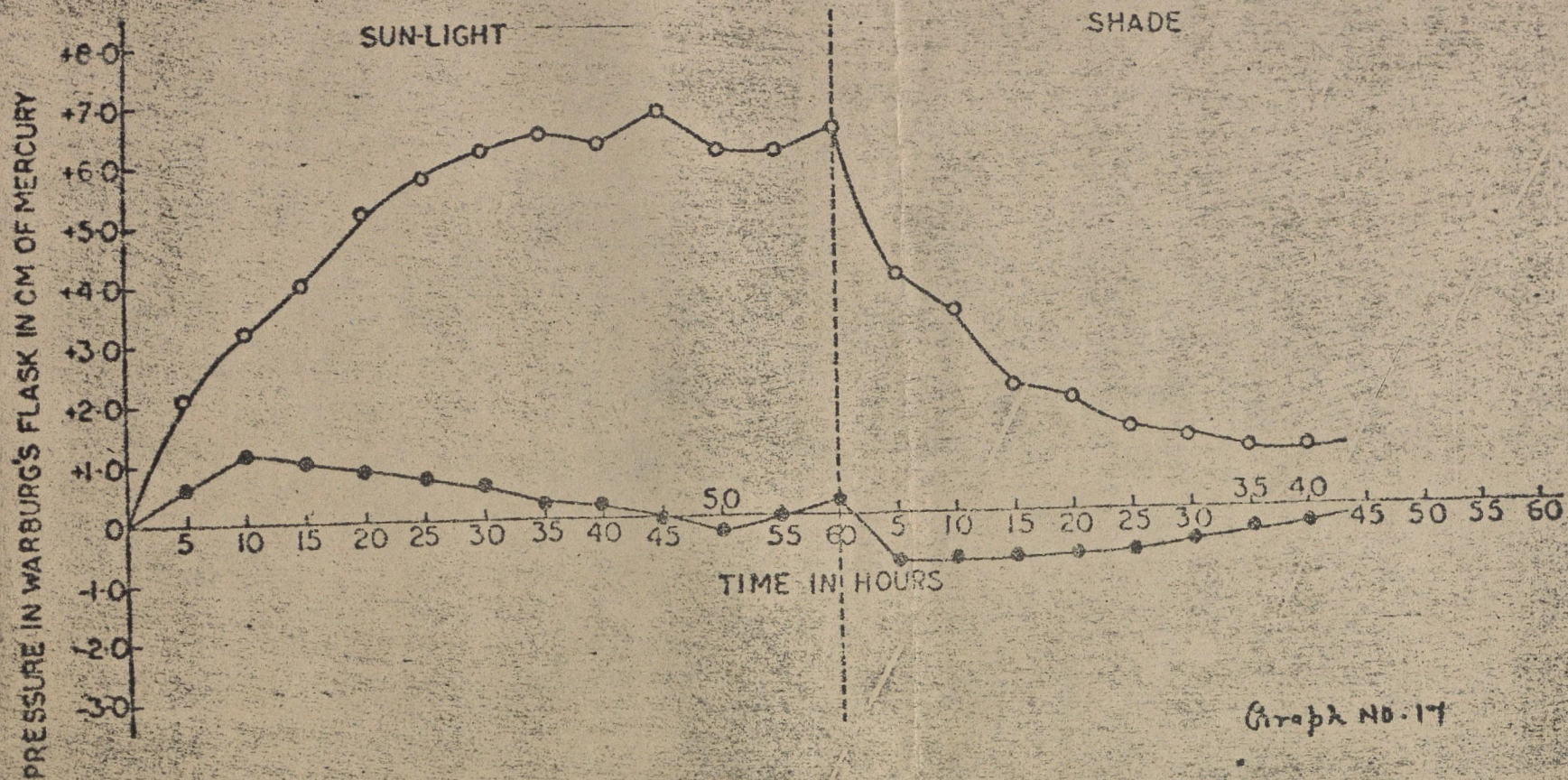
Time in min. First Day. CLOSED SYSTEM. OXYGENIC. Second Day.  
 3:1:1:1 JEEWANU + 1.0 ml Buffer solution of pH 9.2 + 3.7 ml distilled water + 0.3 ml distilled water  
 in side lobe. (—•— Jeevanu 10 mg) (—○— Jeevanu 20 mg) (—△— Jeevanu 40 mg)

Exp No. 15

PRESSURE IN CM OF MERCURY IN WARBURG'S FLASK HAVING 8 MG OF HM JEEWANU (Ac)/ML DURING EXPOSURE TO SUNLIGHT AND IN SHADE UNDER ANOXYGENIC AND OXYGENIC CONDITIONS ON FIRST DAY.

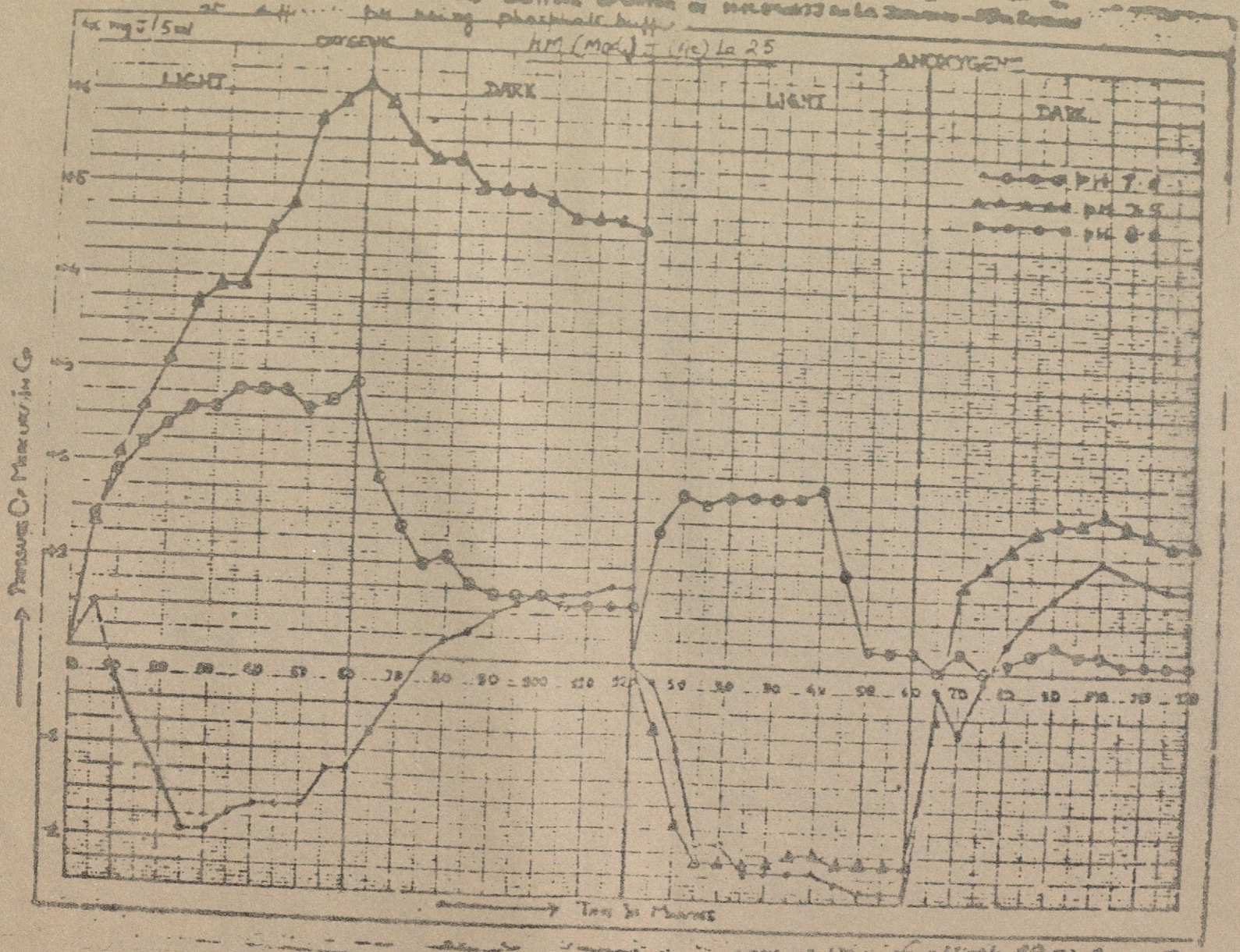
HMJ (Ac) Fe 60

○ ANOXYGENIC  
● OXYGENIC



Graph No. 17

POTENTIAL EFFECT OF NITROGEN AND OXYGEN ON THE GROWTH OF *HALOPHYTES* IN LA SERRA - 1934

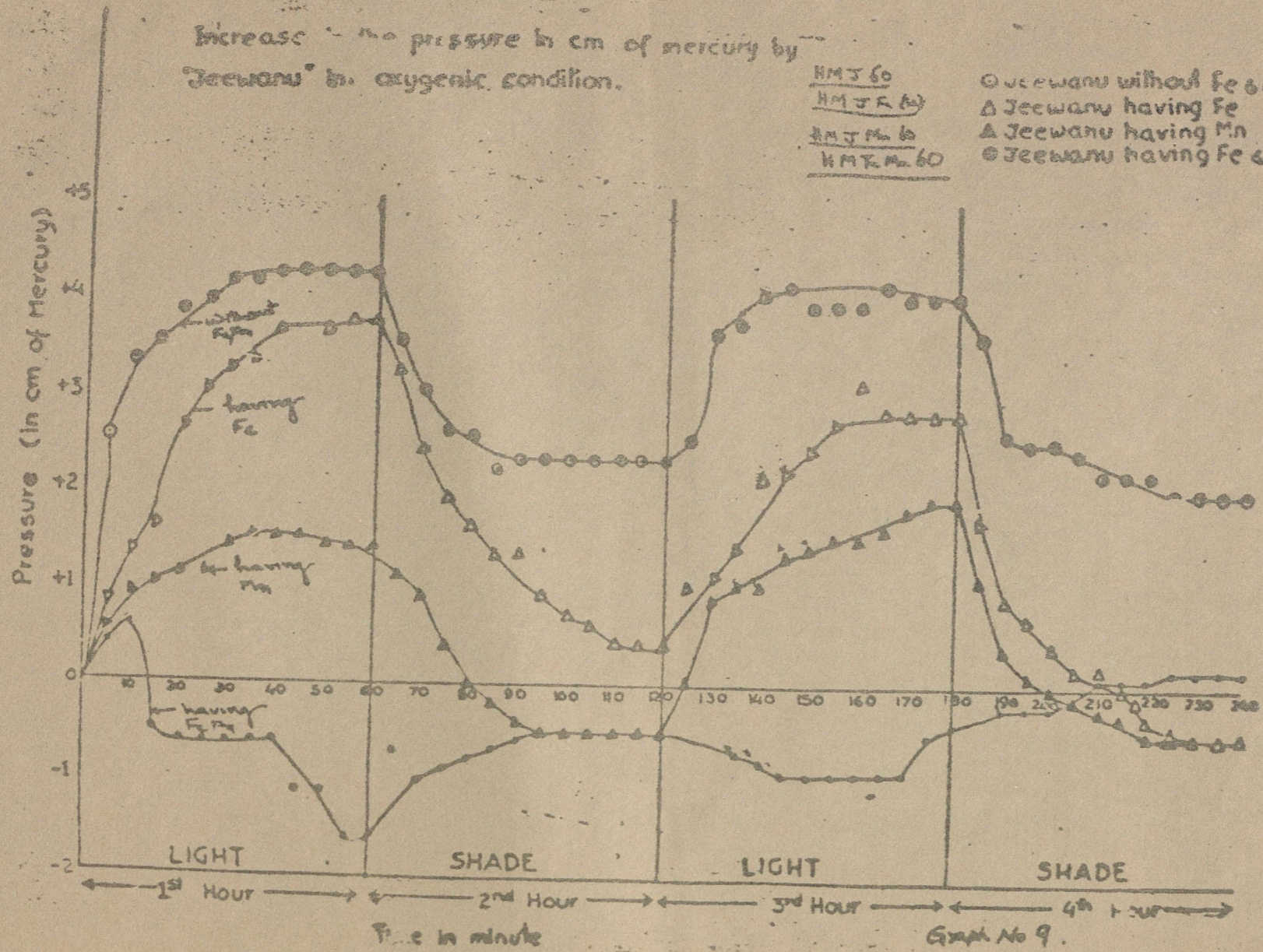


Graph No 18

Increase in pressure in cm of mercury by  
 "Jeewanu" in oxygenic condition.

H.M.J. 60  
H.M.J.R. (A)  
H.M.J. M. 60  
H.M.R. M. 60

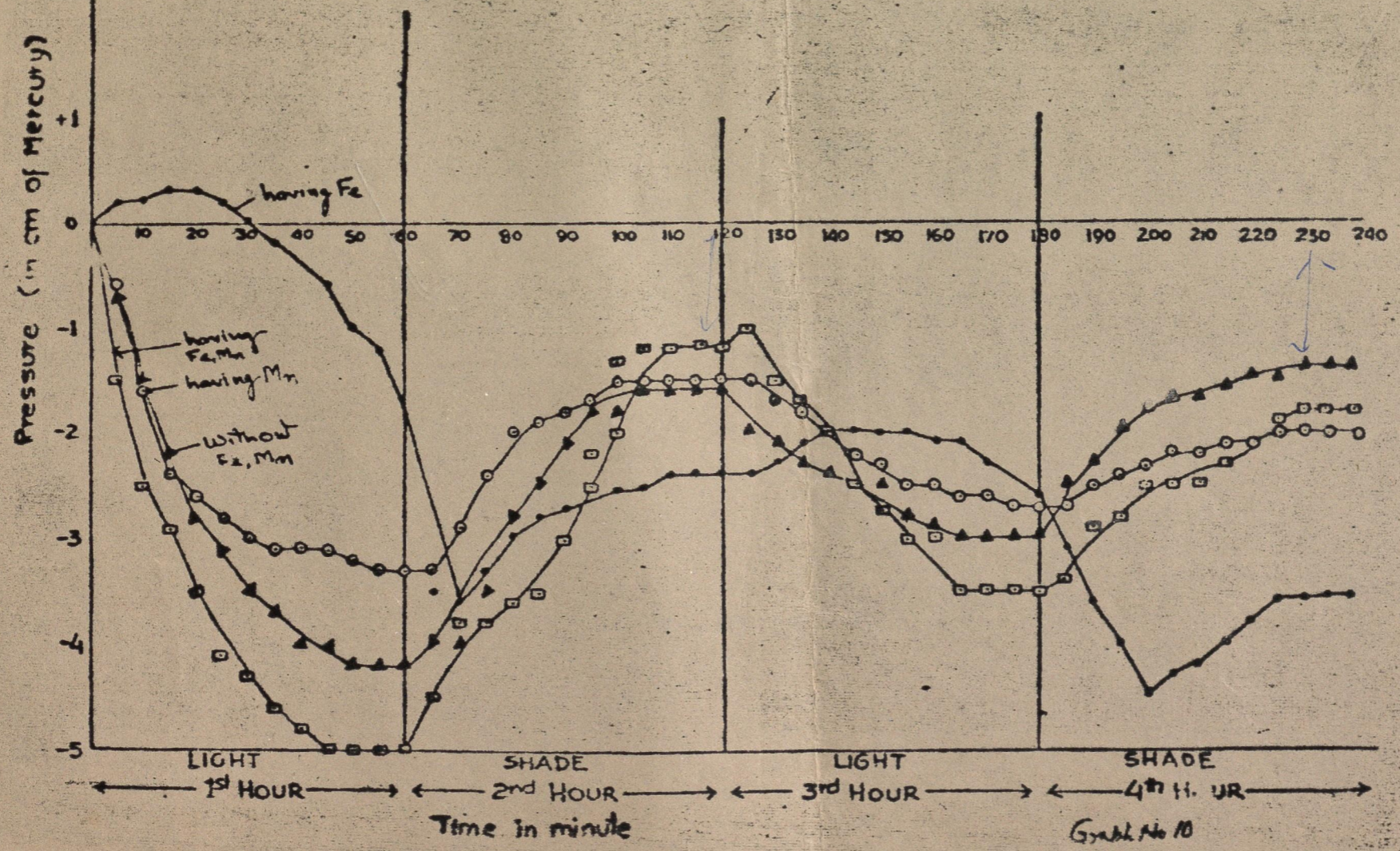
○ Jeewanu without Fe & Mn  
 △ Jeewanu having Fe  
 ▲ Jeewanu having Mn  
 ⊙ Jeewanu having Fe & Mn



Graph No 9.

Change Increase in the pressure in cm of mercury by "Jeewanu" in anoxygenic condition

- HMT 60      ▲ Jeewanu without Fe & Mn
- HMT Fe 60    ● Jeewanu having Fe
- HMT Mn 60    ○ Jeewanu having Mn
- HMT Fe Mn 60    □ Jeewanu having Fe & Mn



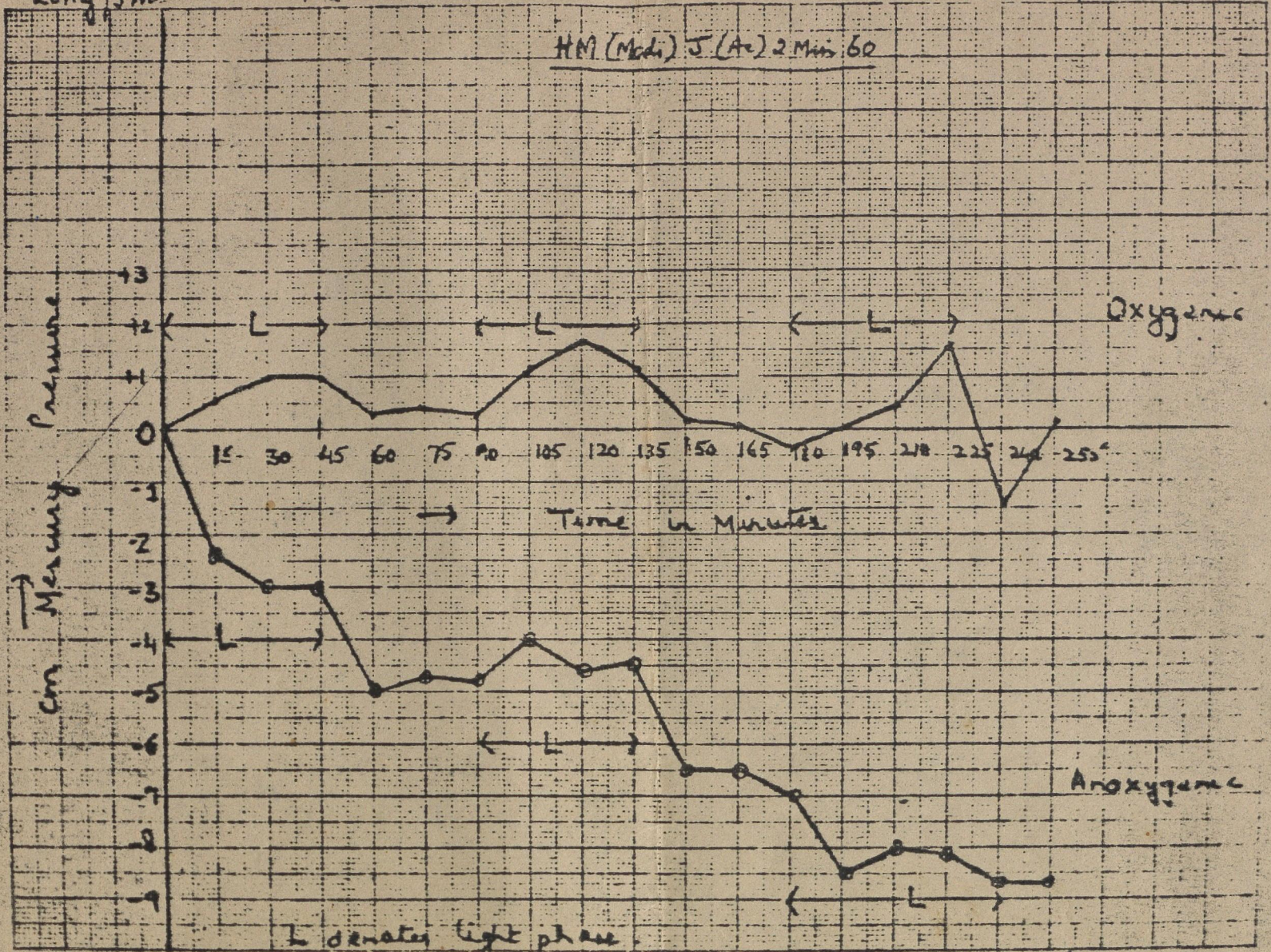
STUDY OF THE PHOTOLYTIC SPLITTING OF WATER AND NITROGEN  
 FIXATION UNDER ANOXYGENIC & OXYGENIC CONDITIONS

By High Mineral (Modi) J (Acetic Acid) and

Additional 1 vol mineral sol<sup>n</sup> - 60 Hr Exposure

20mg/5ml

HM (Modi) J (Ac) 2 Min 60



L denotes light phase  
 Alternating is the Dark phase

Graph No. 19

HM (Mod) J (Ac) 60 TiSO<sub>4</sub> 20.0 mg / 100 ml. (Oxygenic)

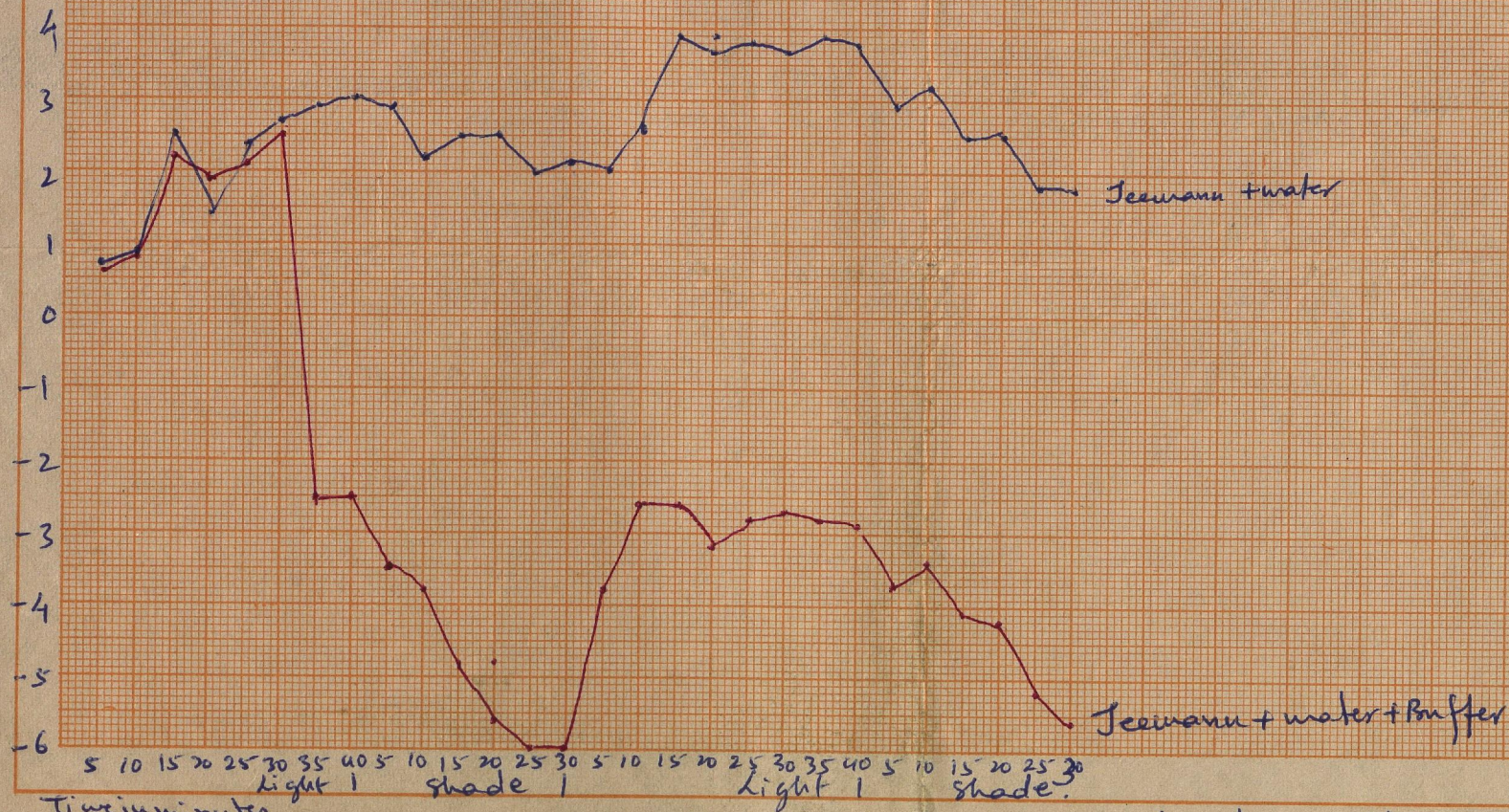
20.0 mg J + 3.7 d.w.  
+ 1.0 ml buffer

Sunlight

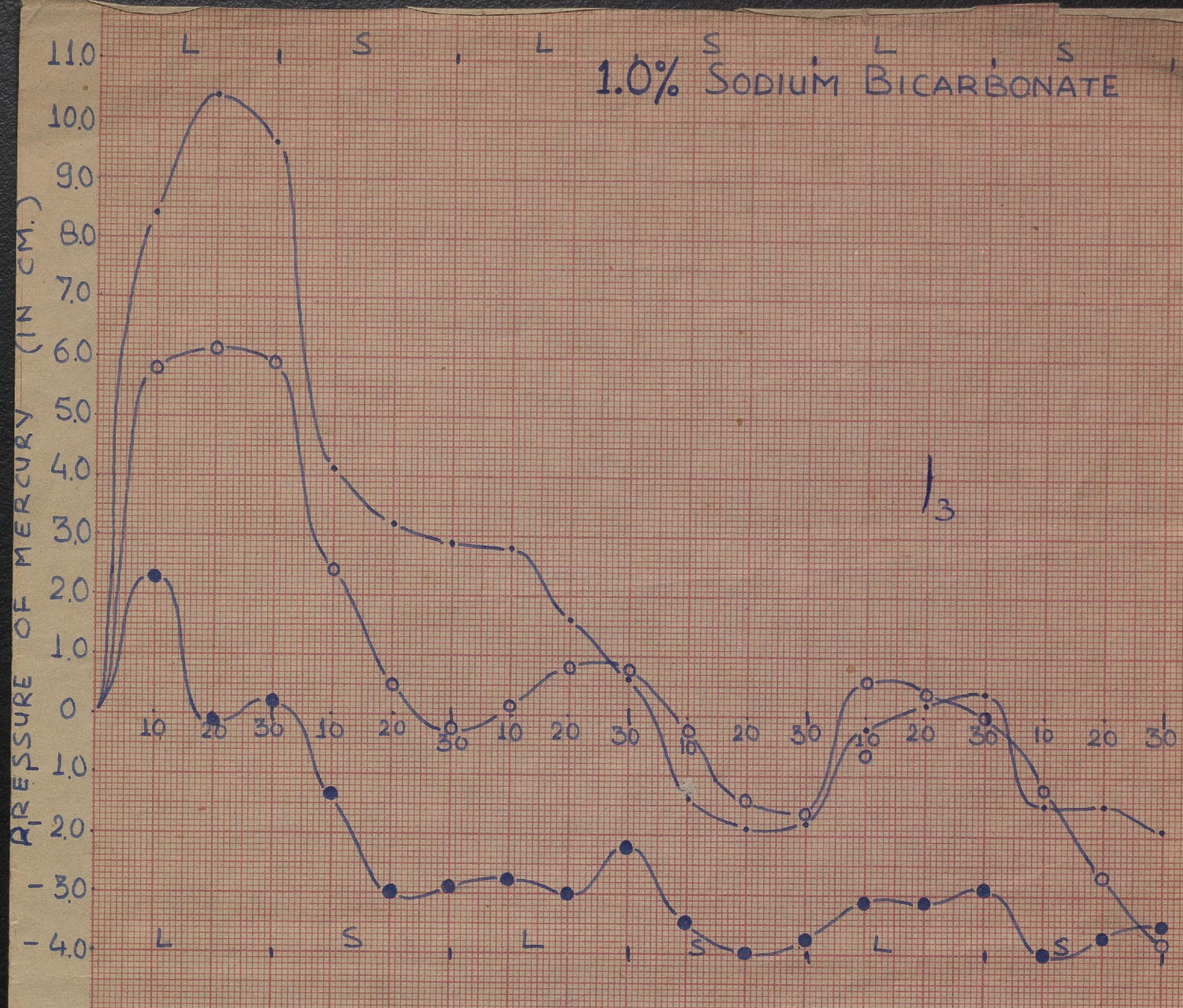
Shade

○ pH 9.2  
 × pH 9.7  
 ● pH 10.2 } CO<sub>3</sub><sup>2-</sup>

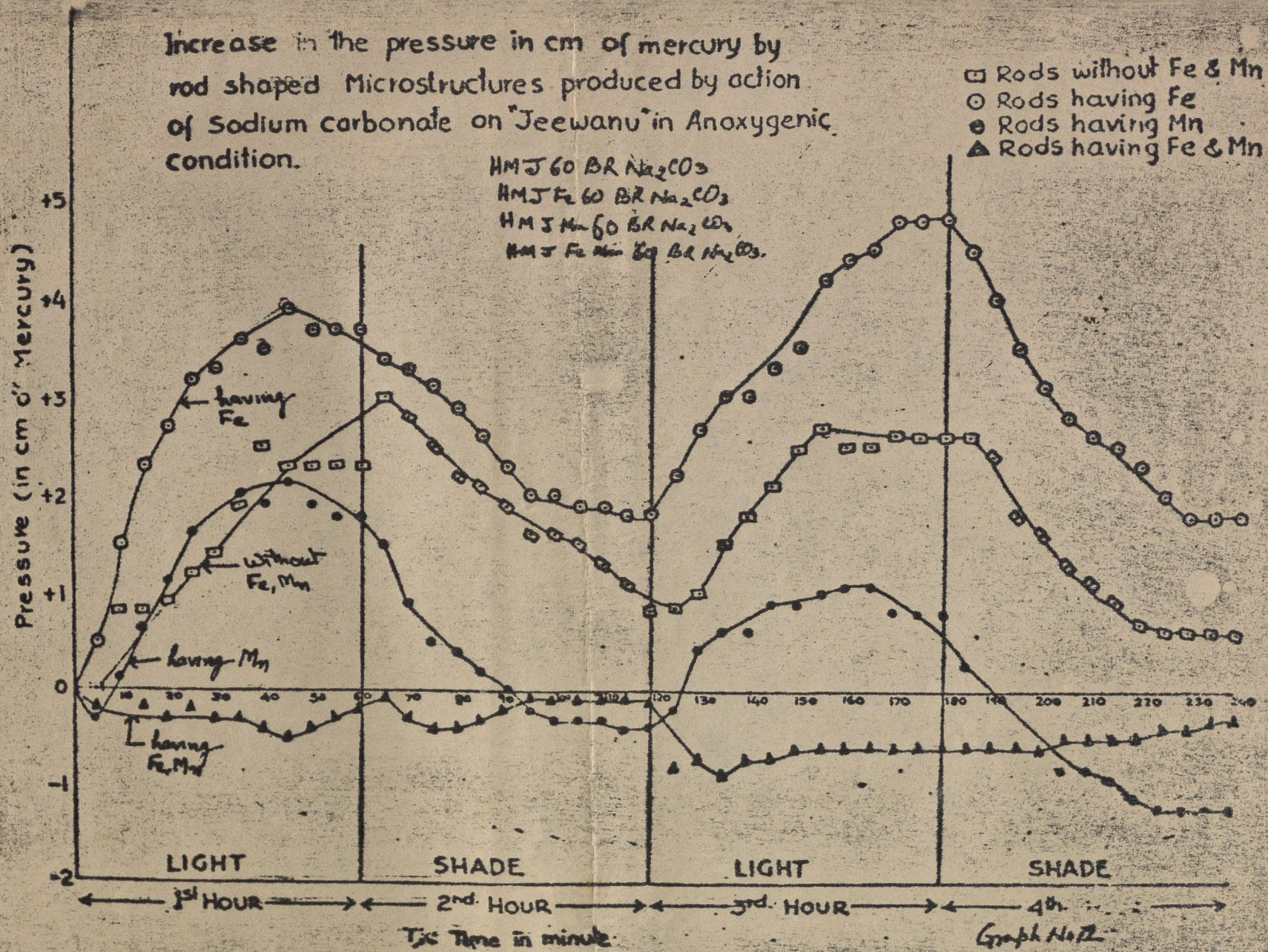




1:2:1:1 Jeemann with Methanol - with 10.2 carbonate Buffer  
Anoxy



Increase in the pressure in cm of mercury by rod shaped Microstructures produced by action of Sodium carbonate on "Jeewanu" in Anoxygenic condition.

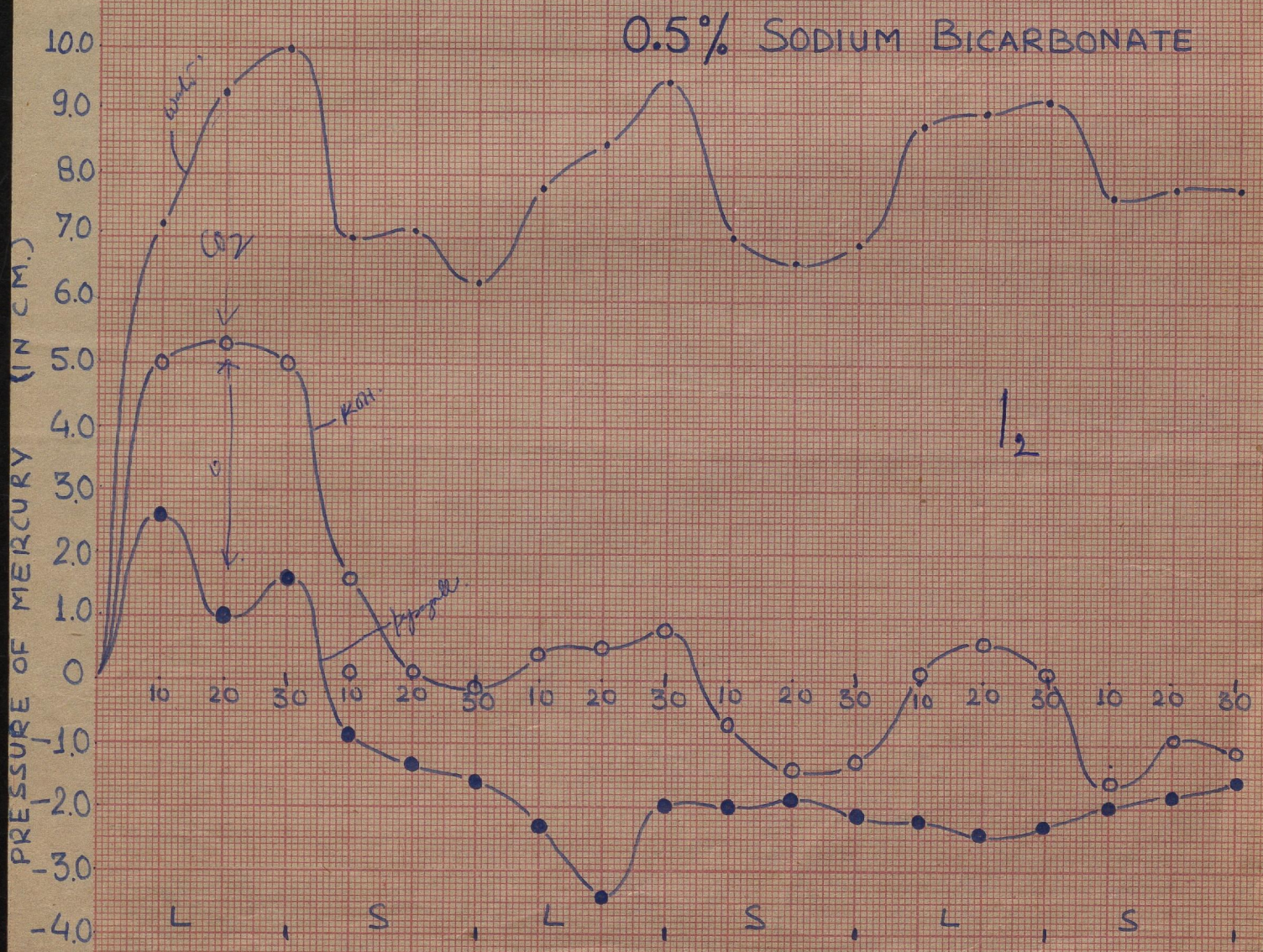
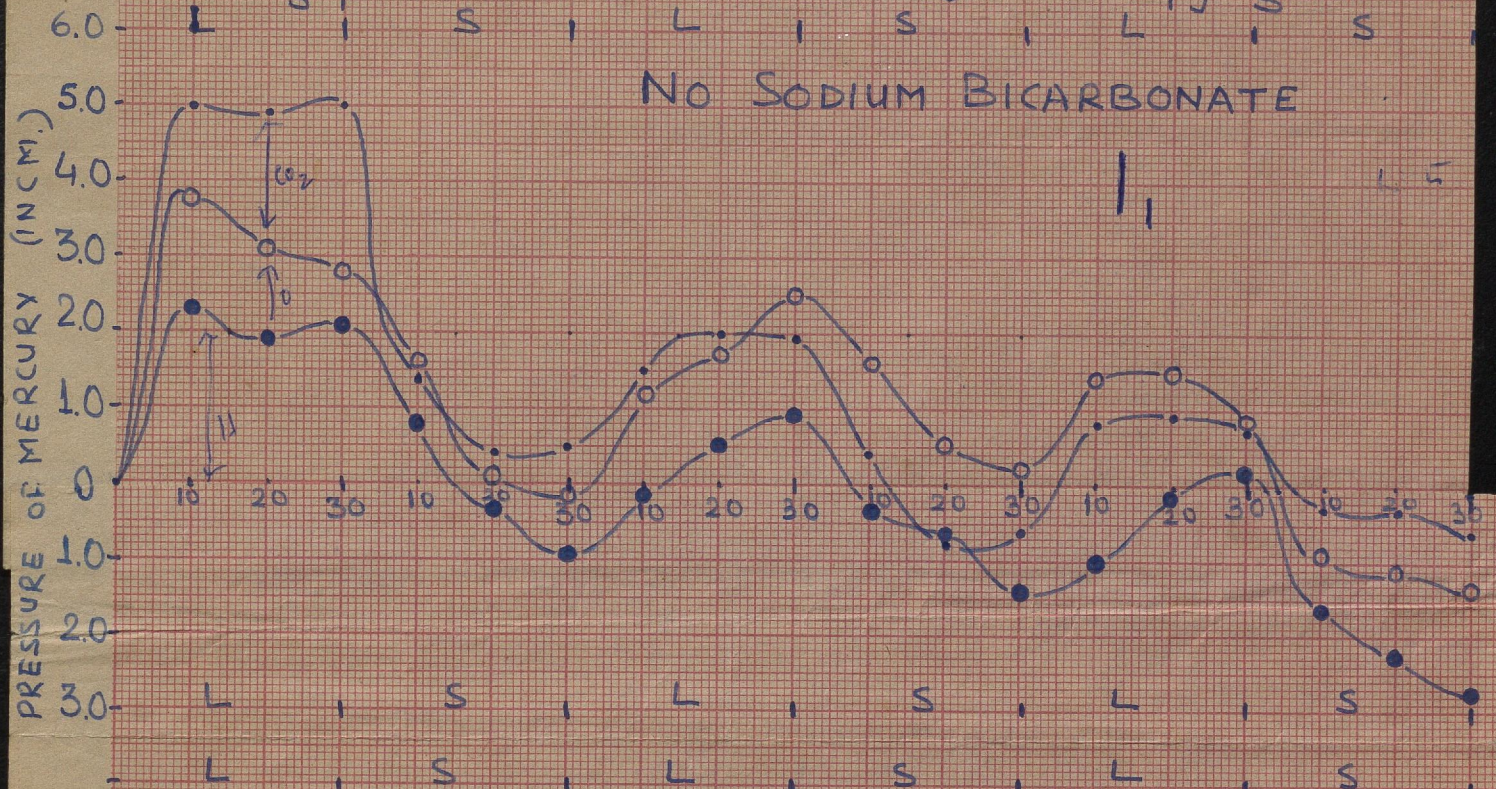


# EFFECT OF DIFFERENT CONCENTRATIONS OF SODIUM BICARBONATE ON EXCHANGE OF GASES BY AQUEOUS MIXTURES OF JEEWANU UNDER DIFFERENT ENVIRONMENTAL CONDITIONS

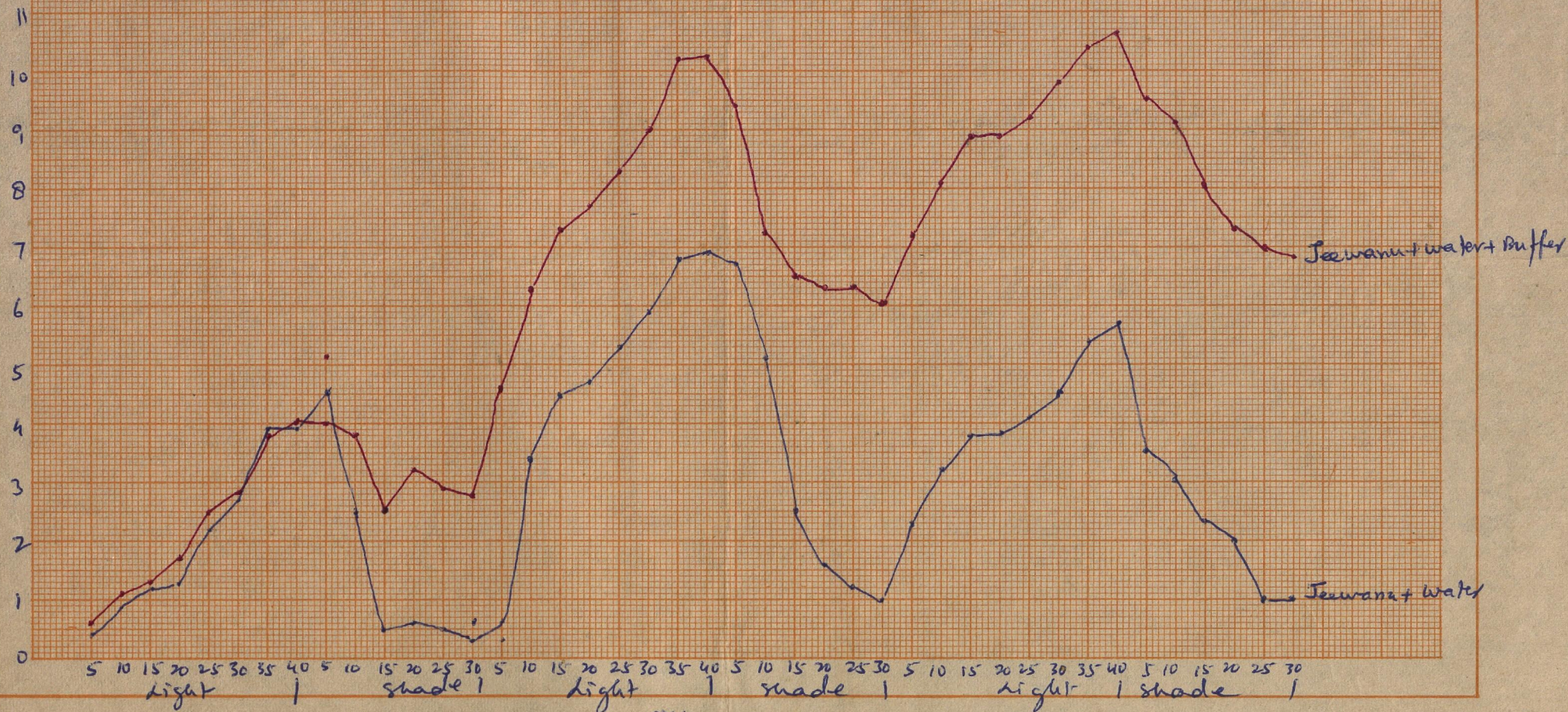
1.2.1.1. Fe. Mn. 24 JEEWANU  
40mgJ/ 5.0 ml mixture

Side lobe having

- Distilled water
- 60% Potassium hydroxide
- Alkaline pyrogallol



Cm. of Mercury

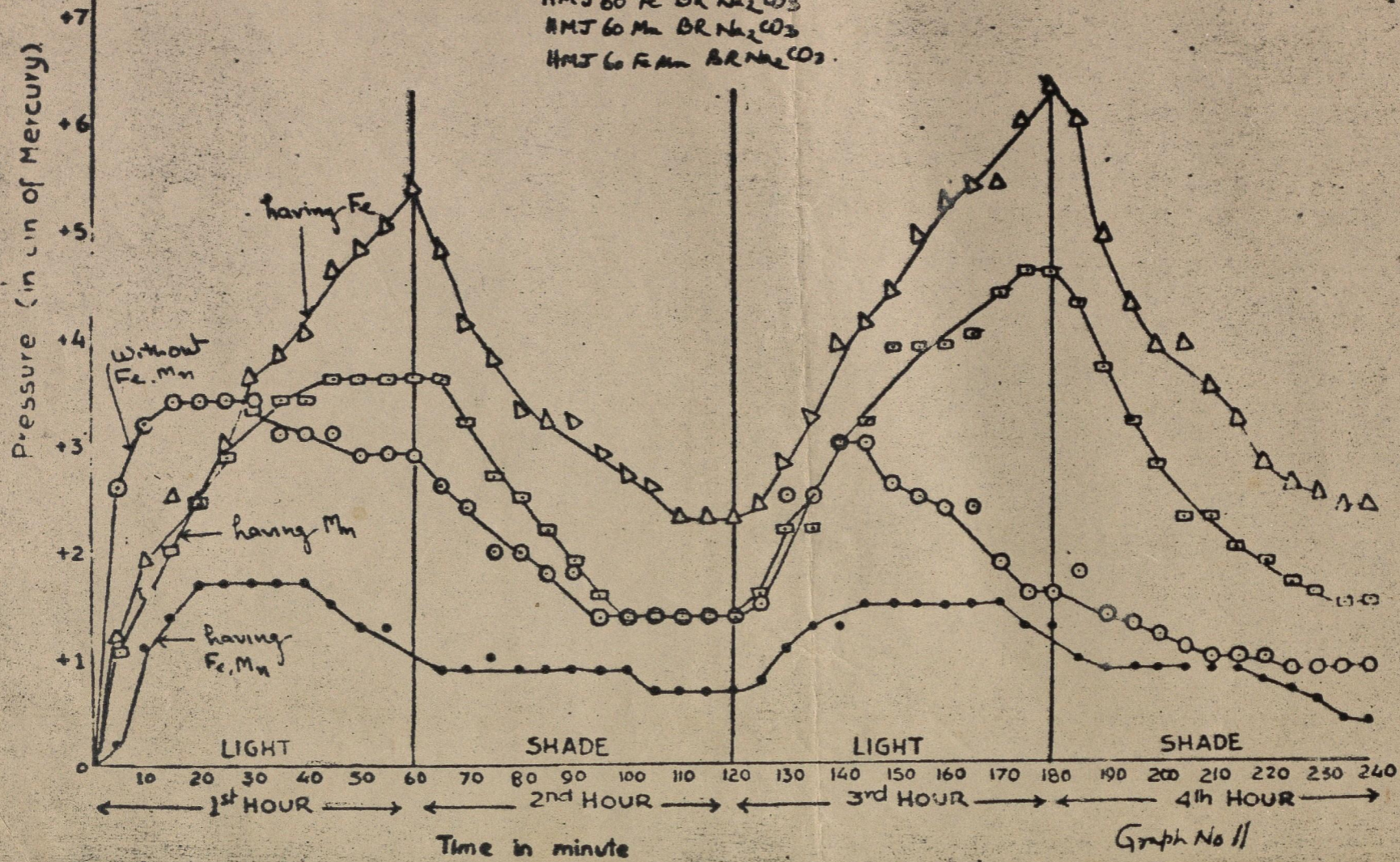


1:2:1:1 Jeewanu with Methanol - <sup>Oxy</sup> with 10:2 carbonate Buffer

Increase in the pressure in cm. of mercury by the rod shaped microstructure by the action of sodium carbonate on "Jeewanu" in oxygenic condition.

HMJ 60 BR  $\text{Na}_2\text{CO}_3$   
 HMJ 60 Fe BR  $\text{Na}_2\text{CO}_3$   
 HMJ 60 Mn BR  $\text{Na}_2\text{CO}_3$   
 HMJ 60 Fe Mn BR  $\text{Na}_2\text{CO}_3$

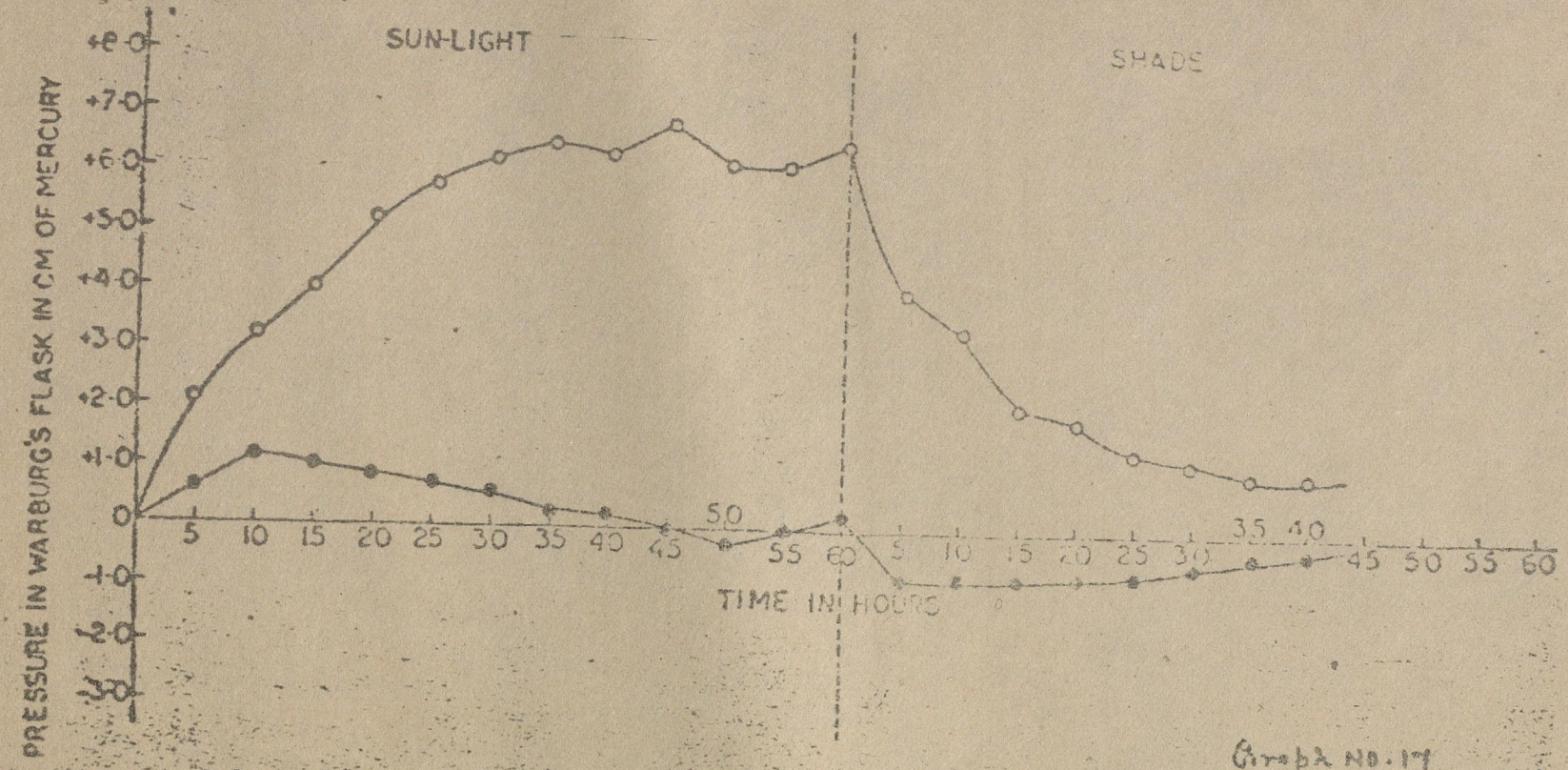
- Rods without Fe & Mn
- △ Rods having Fe
- Rods having Mn
- Rods having Fe & Mn



PRESSURE IN CM OF MERCURY IN WARBURG'S FLASK HAVING 8 MG OF HM JEEWANU (Ae) / ML DURING EXPOSURE TO SUNLIGHT AND IN SHADE UNDER ANOXYGENIC AND OXYGENIC CONDITIONS ON FIRST DAY.

HMJ (Ae) Fe 60

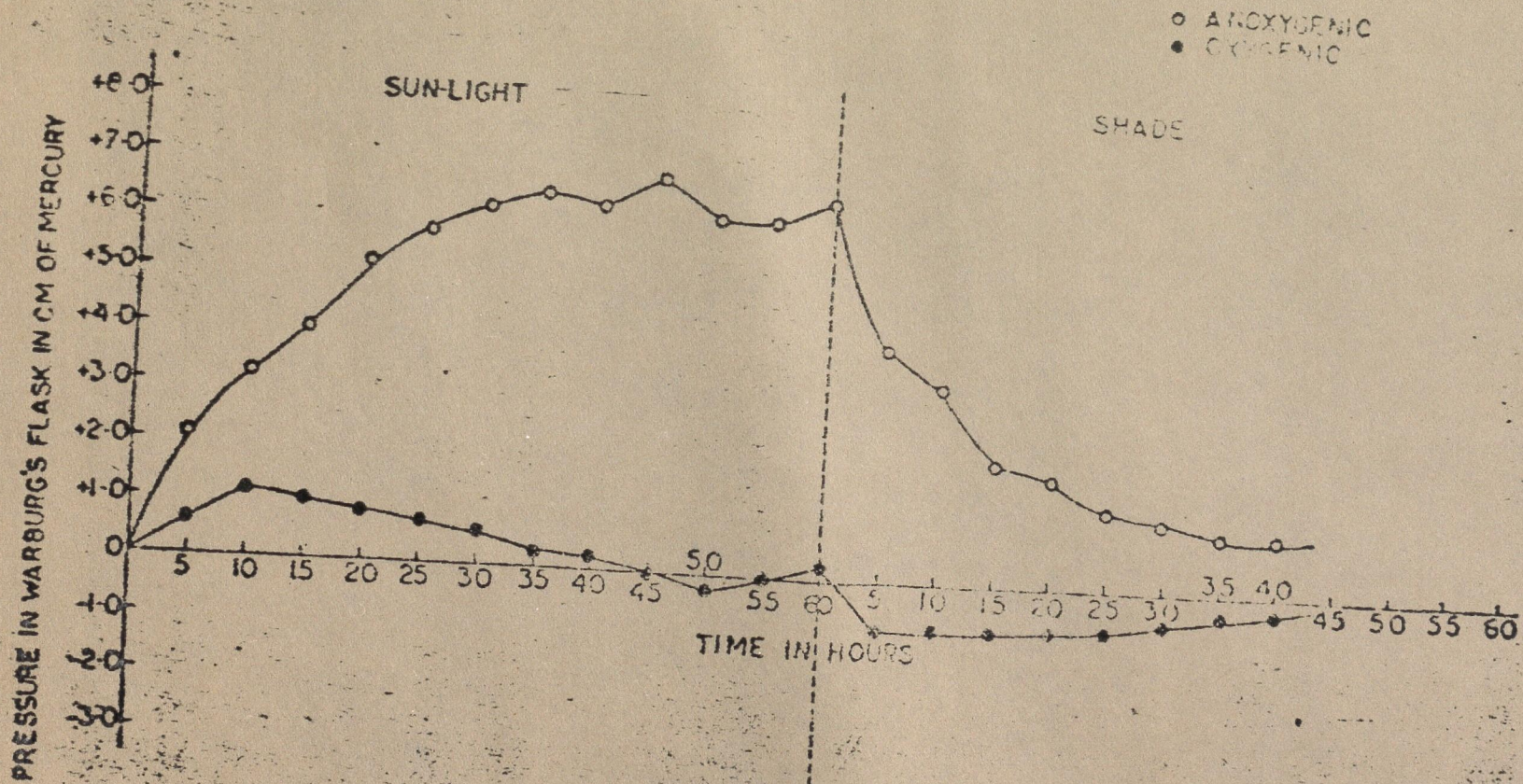
○ ANOXYGENIC  
● OXYGENIC



Graph NO. 17

PRESSURE IN CM OF MERCURY IN WARBURG'S FLASK HAVING 8 MG OF HM JEEWANU (Ac) / ML DURING EXPOSURE TO SUNLIGHT AND IN SHADE UNDER ANOXYGENIC AND OXYGENIC CONDITIONS ON FIRST DAY.

HMJ (Ac) Fe 60

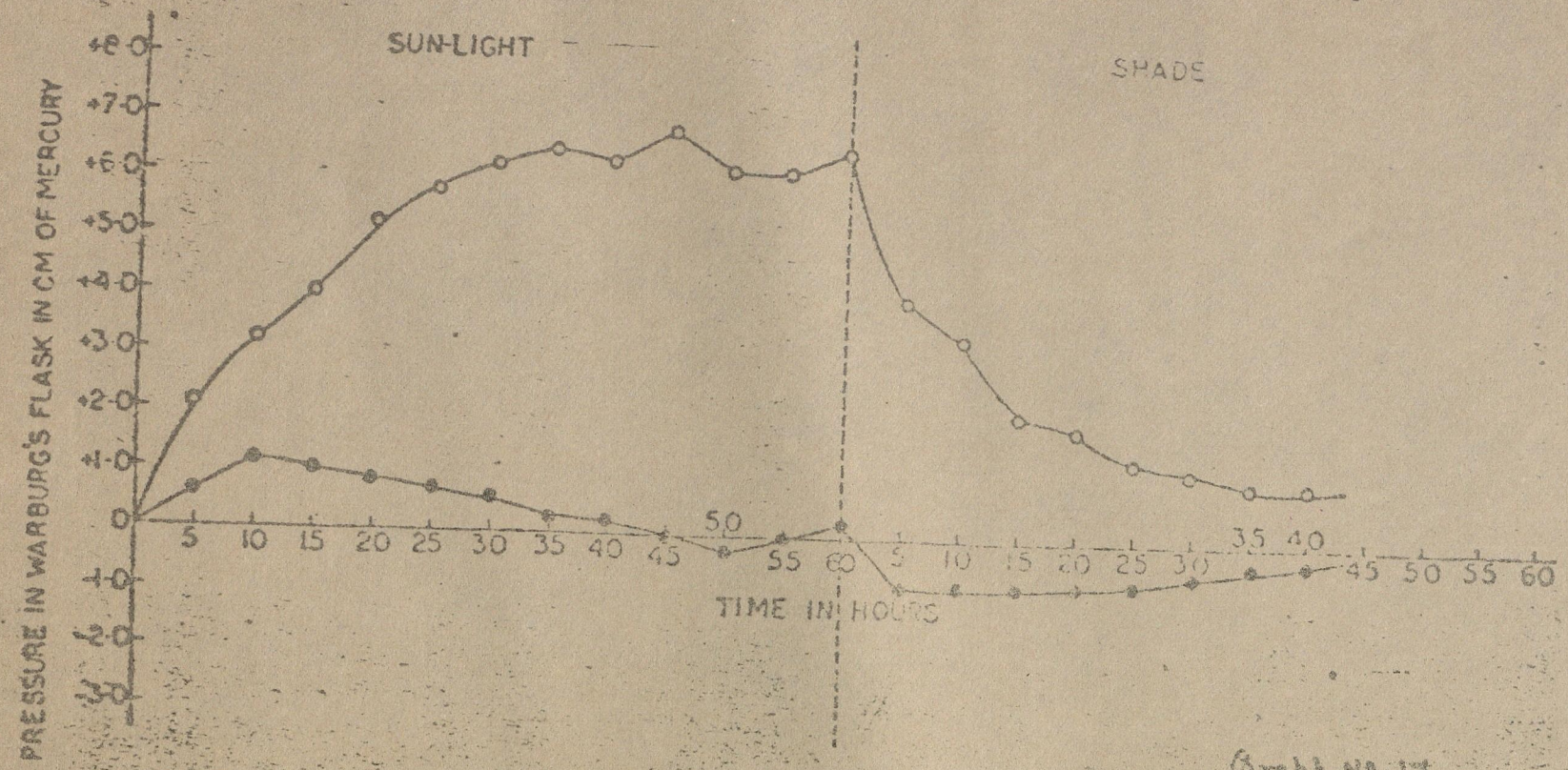


Graph NO. 17

PRESSURE IN CM OF MERCURY IN WARBURG'S FLASK HAVING 8 MG OF HM JEEWANU (Ac)/ML DURING EXPOSURE TO SUNLIGHT AND IN SHADE UNDER ANOXYGENIC AND OXYGENIC CONDITIONS ON FIRST DAY.

HMT (Ac) Fe 60

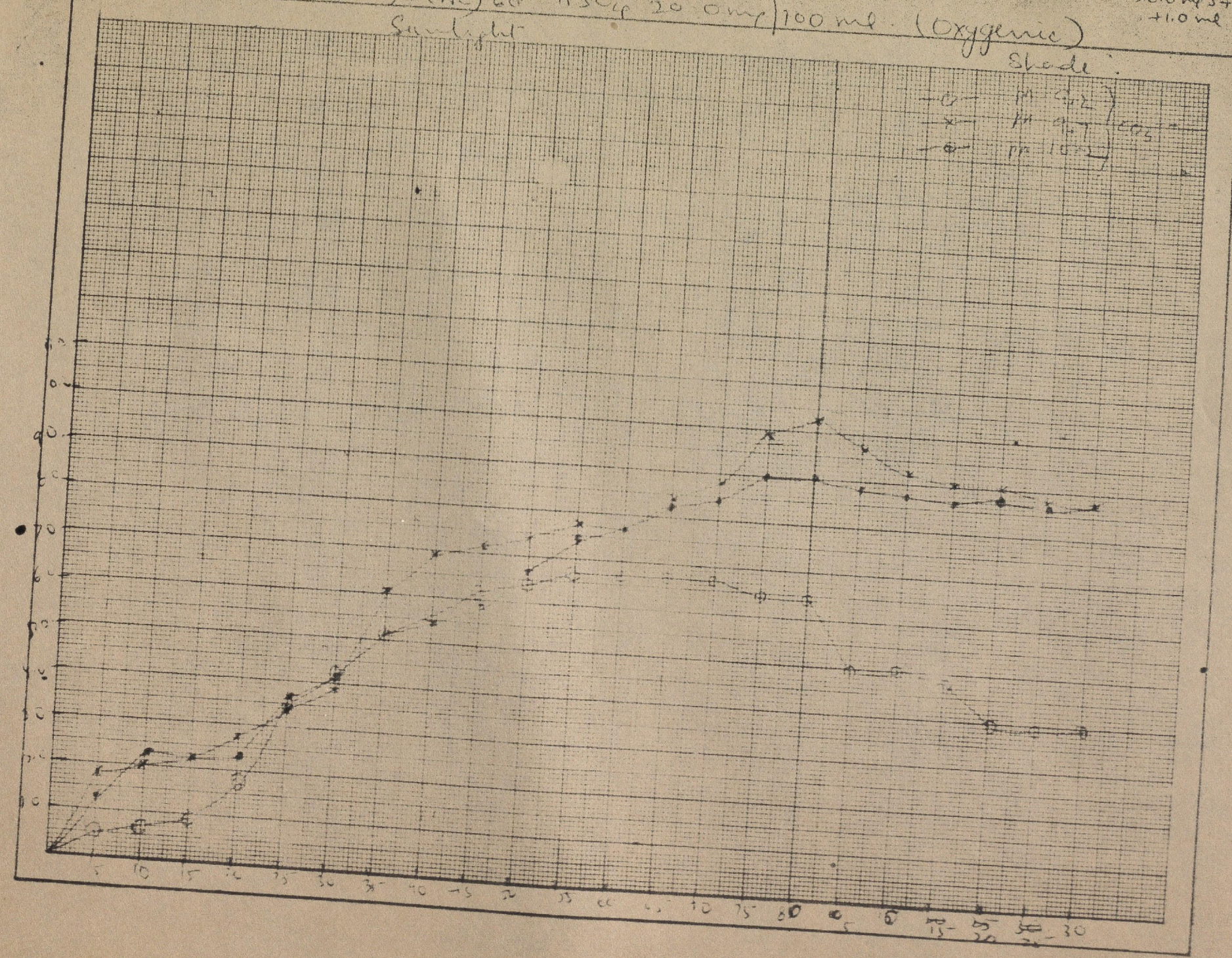
○ ANOXYGENIC  
● OXYGENIC



Graph NO. 17

HM (Mod) 5 (Ac) 60 TiSO<sub>4</sub> 20 0mg / 100 ml (Oxygenic)  
 Sunlight

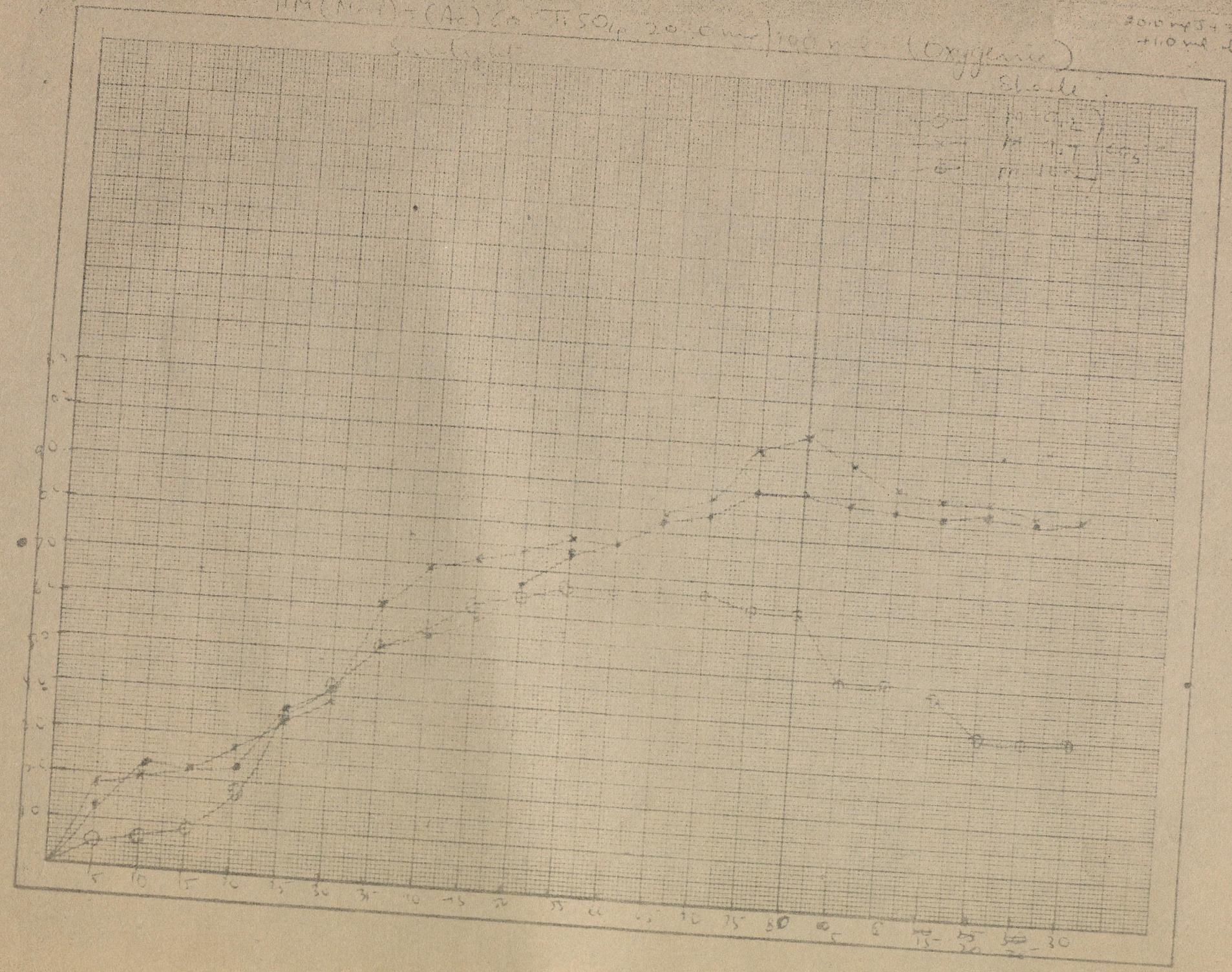
20.0 ml J + 3.74 ml O  
 + 1.0 ml buffer



HM (Mn<sup>2+</sup>) = (Ac) 20 H<sub>2</sub>SO<sub>4</sub> 20.0 ml / 100 ml (Oxygenic)  
 Sun light  
 Shade

20.0 ml J + 3.7 ml O  
 + 1.0 ml buffer

10 - 10 - 0.2  
 20 - 10 - 0.7  
 30 - 10 - 1.2



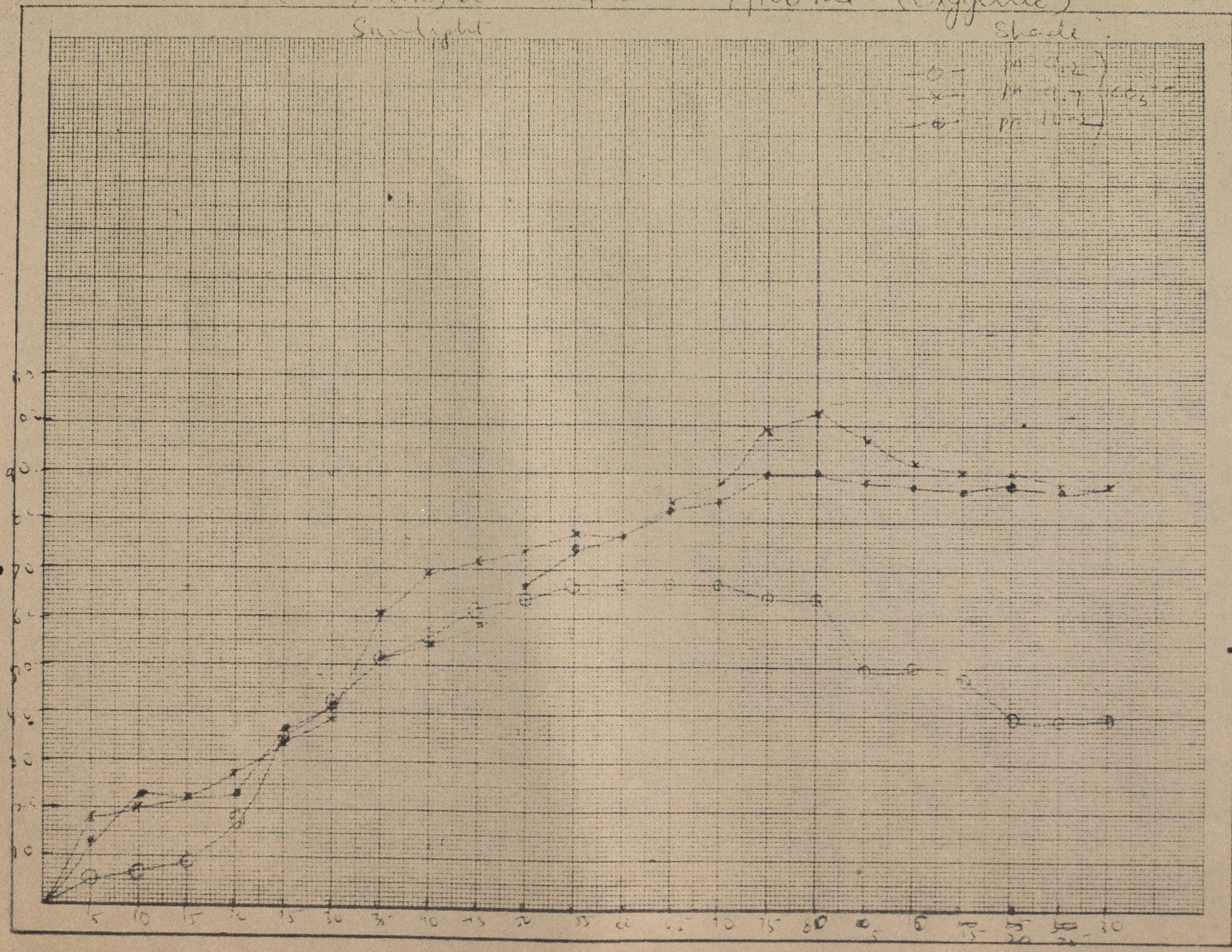
20.0 ml J + 3.7 ml CO  
+ 1.0 ml buffer

HM (Mod) J (Ac) 60 TiSO<sub>4</sub> 20.0 ml / 100 ml (Oxygenic)

Sunlight

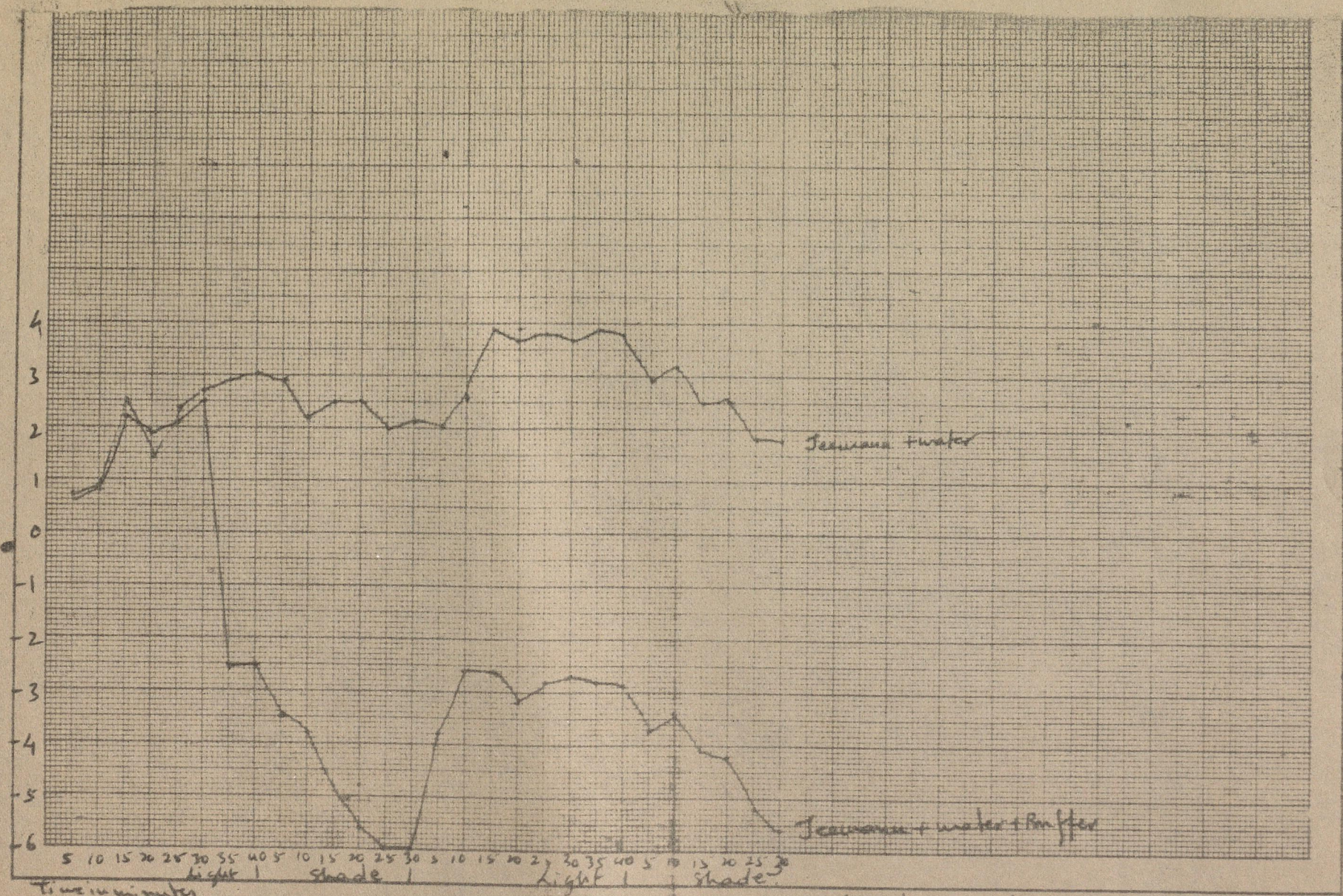
Shade

○ - pH 7.2  
x - pH 7.7  
● - pH 8.2



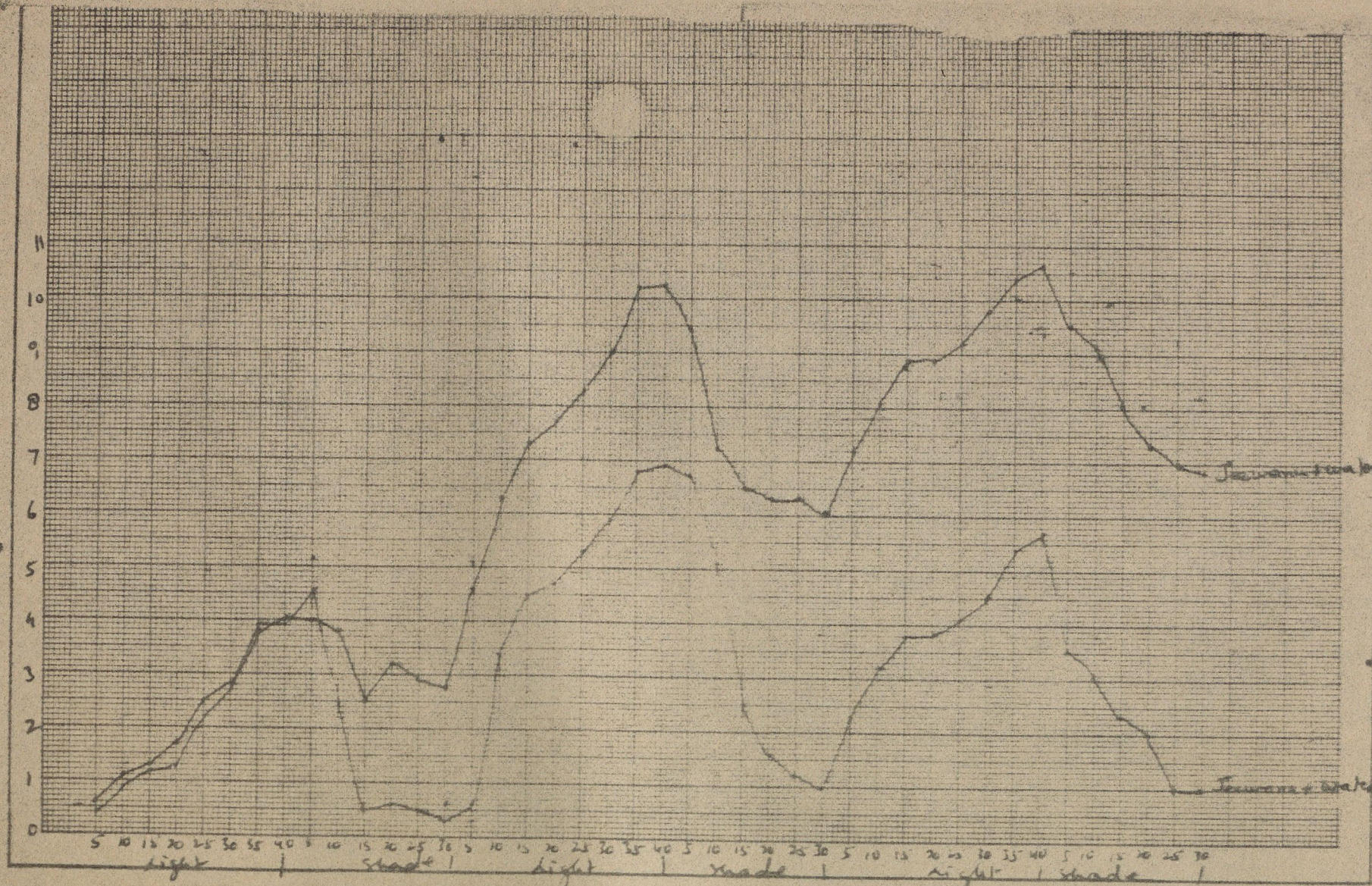


1:2:1:1 Jesmanow with Methanol - with 10.2 Carbonate Buffer  
 Anox

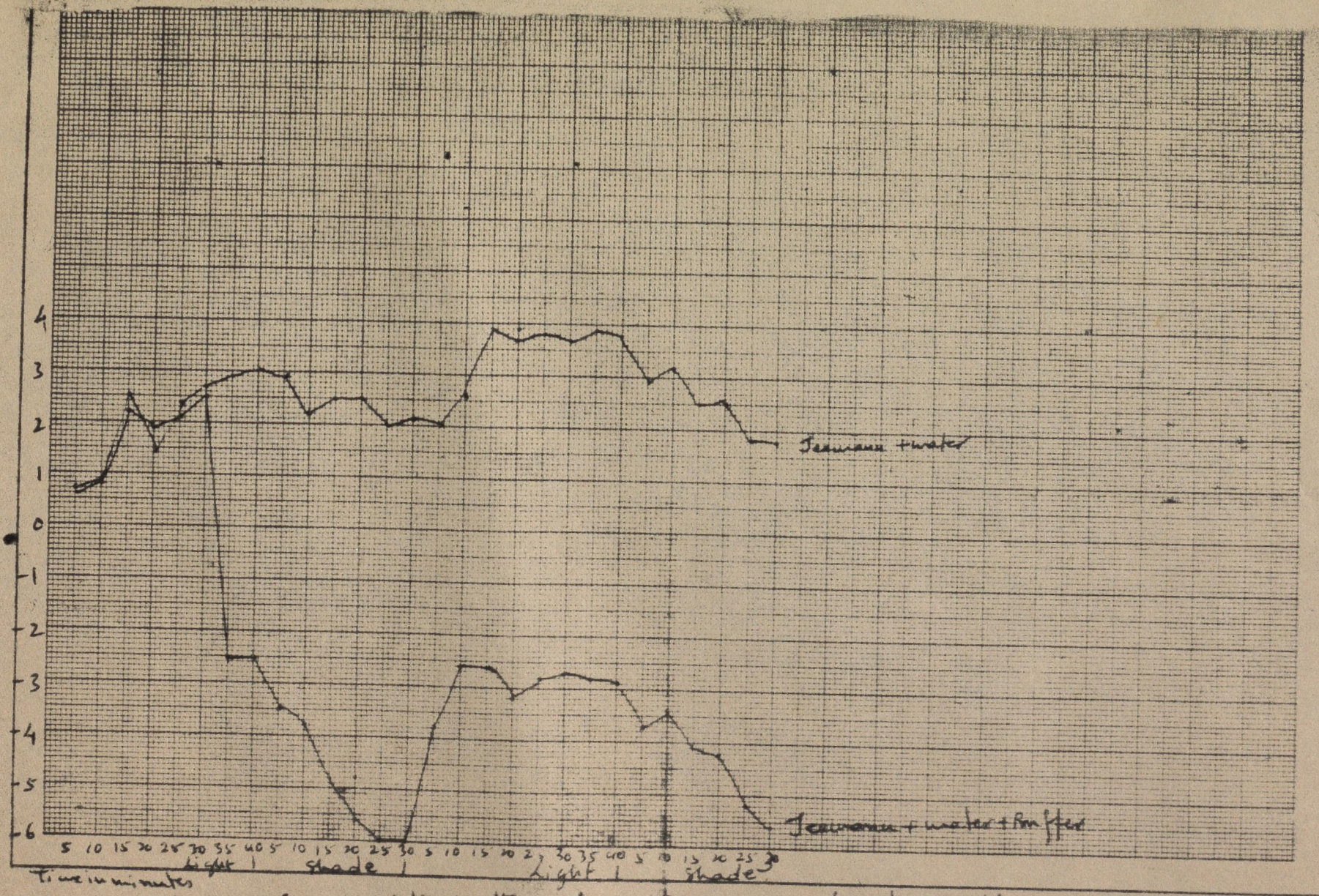


Time in minutes  
 1:2:1:1 Jeevanu with Methanol - with 10.2 Carbonate Buffer  
 Anoxy

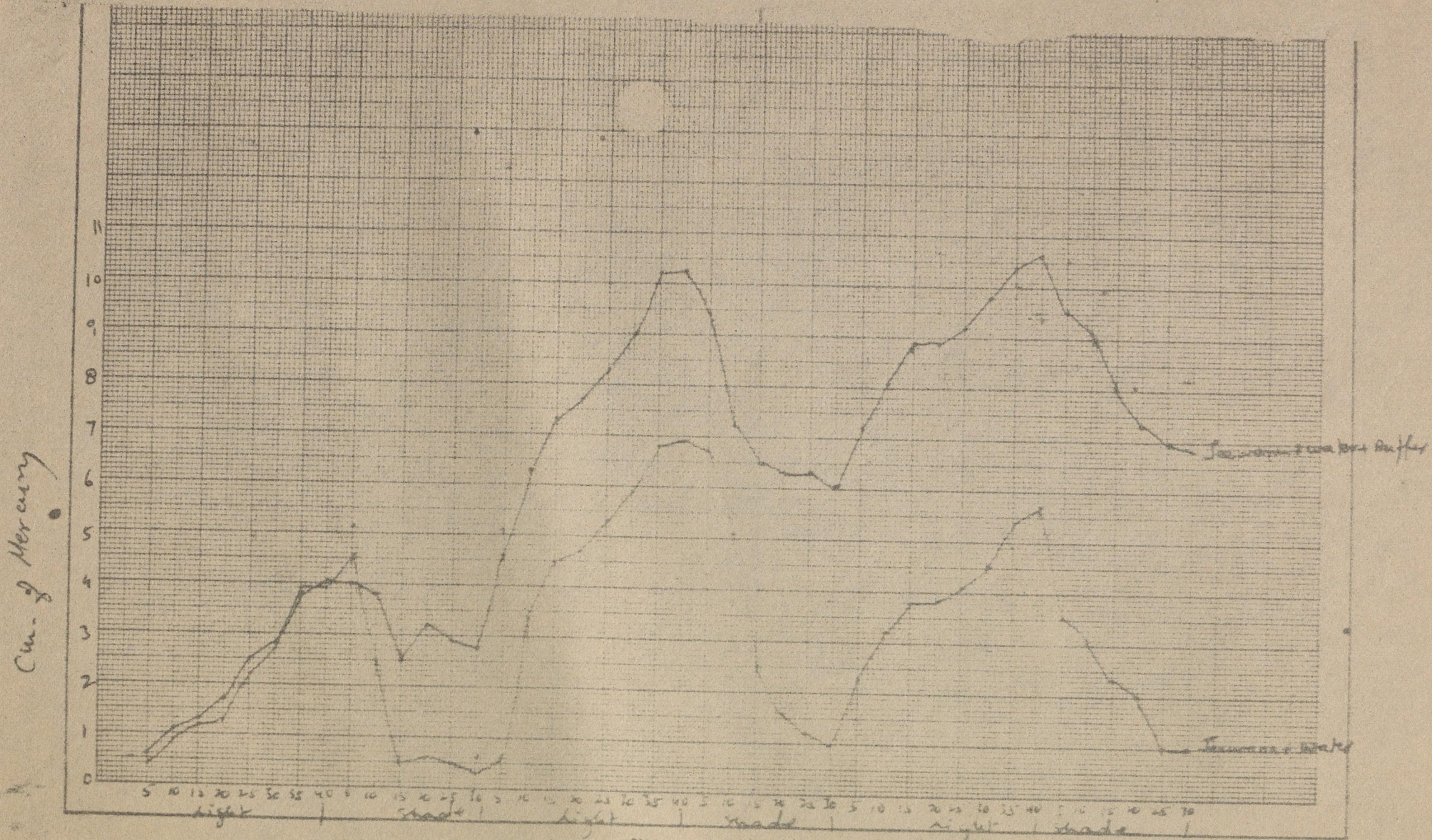
Cum. of Mercury



1.2:1:1 Jasman with Helthand - with 10% <sup>OX4</sup> Carbonate Buffer



1:2:1:1 Jesmanow with Methanol - with 10.2 Carbonate Buffer  
Amoxy

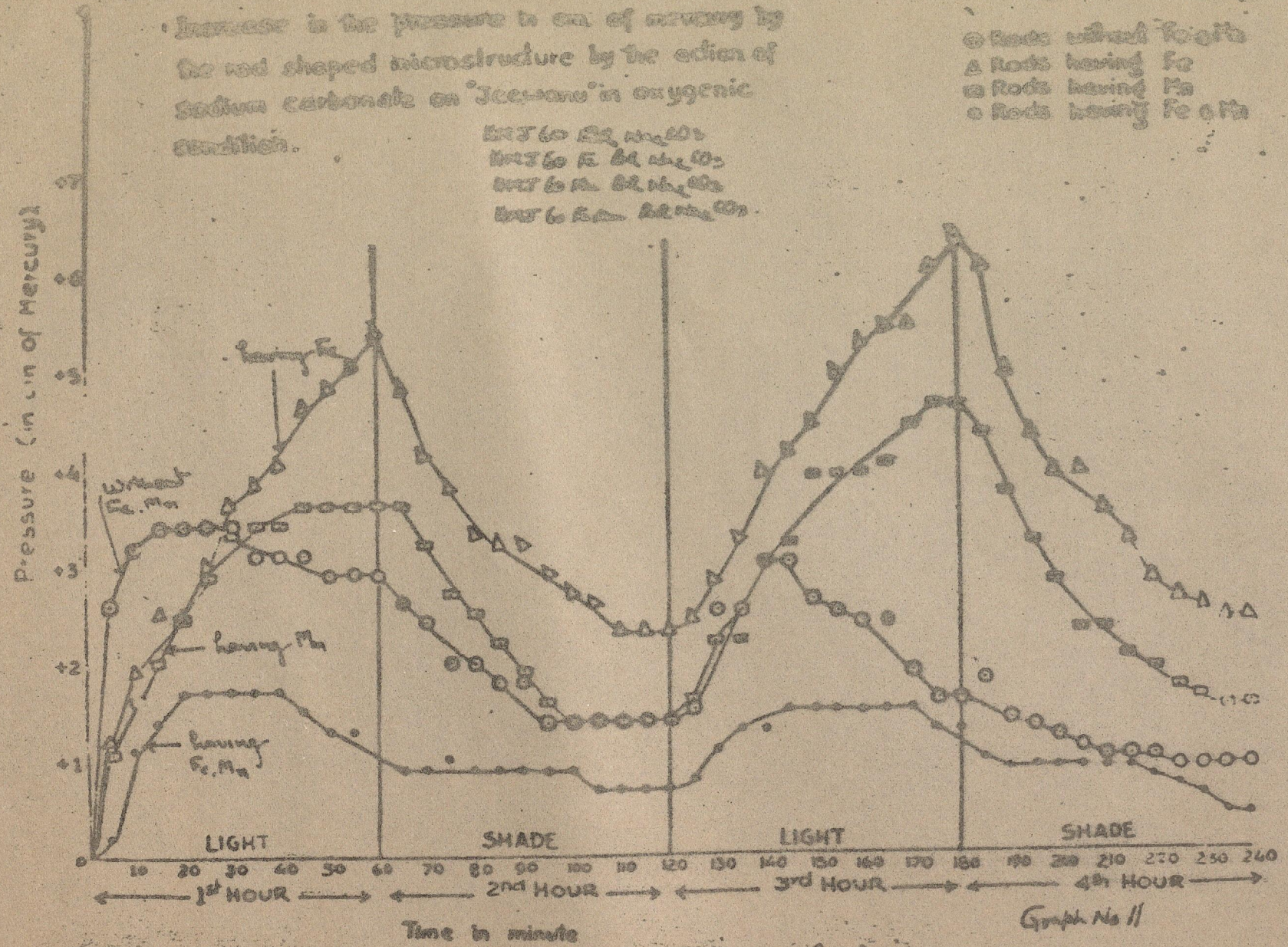


1.2:1:1 Jeansman with MeTanol - <sup>OR 4</sup> with 10.2 carbonate Buffer

Increase in the pressure is on of mercury by  
 the rod shaped microstructure by the action of  
 sodium carbonate on "Jee-sons" in oxygenic  
 condition.

- Rods without Fe or Mn
- △ Rods having Fe
- Rods having Mn
- Rods having Fe & Mn

1st to 60 min. Light  
 60 to 120 min. Shade  
 120 to 180 min. Light  
 180 to 240 min. Shade

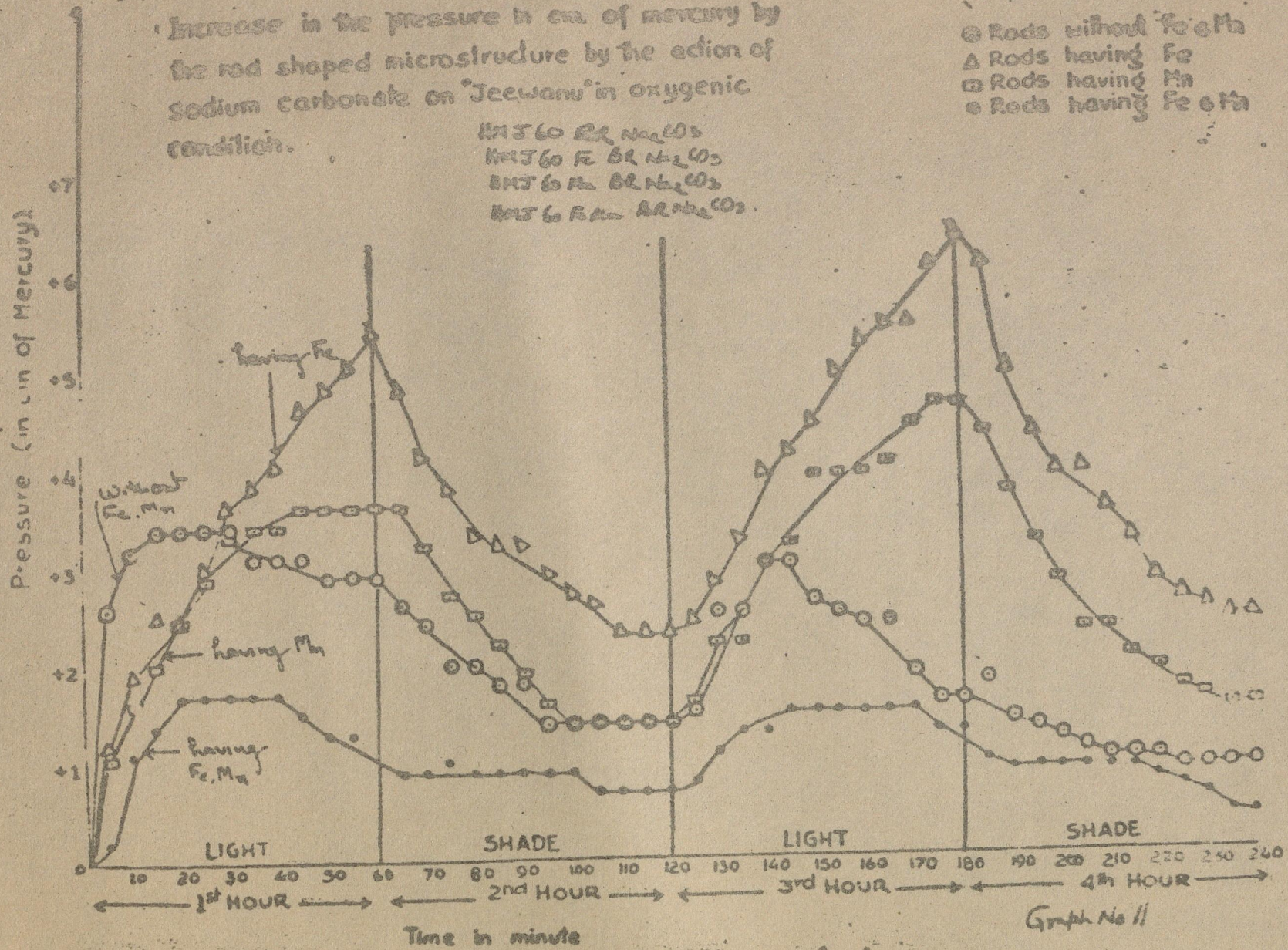


Graph No 11

Increase in the pressure in cm. of mercury by the rod shaped microstructure by the action of sodium carbonate on 'Jeewanu' in oxygenic condition.

KMS 60 RR Na<sub>2</sub>CO<sub>3</sub>  
 KMS 60 F RR Na<sub>2</sub>CO<sub>3</sub>  
 KMS 60 Mn RR Na<sub>2</sub>CO<sub>3</sub>  
 KMS 60 Fe Mn RR Na<sub>2</sub>CO<sub>3</sub>

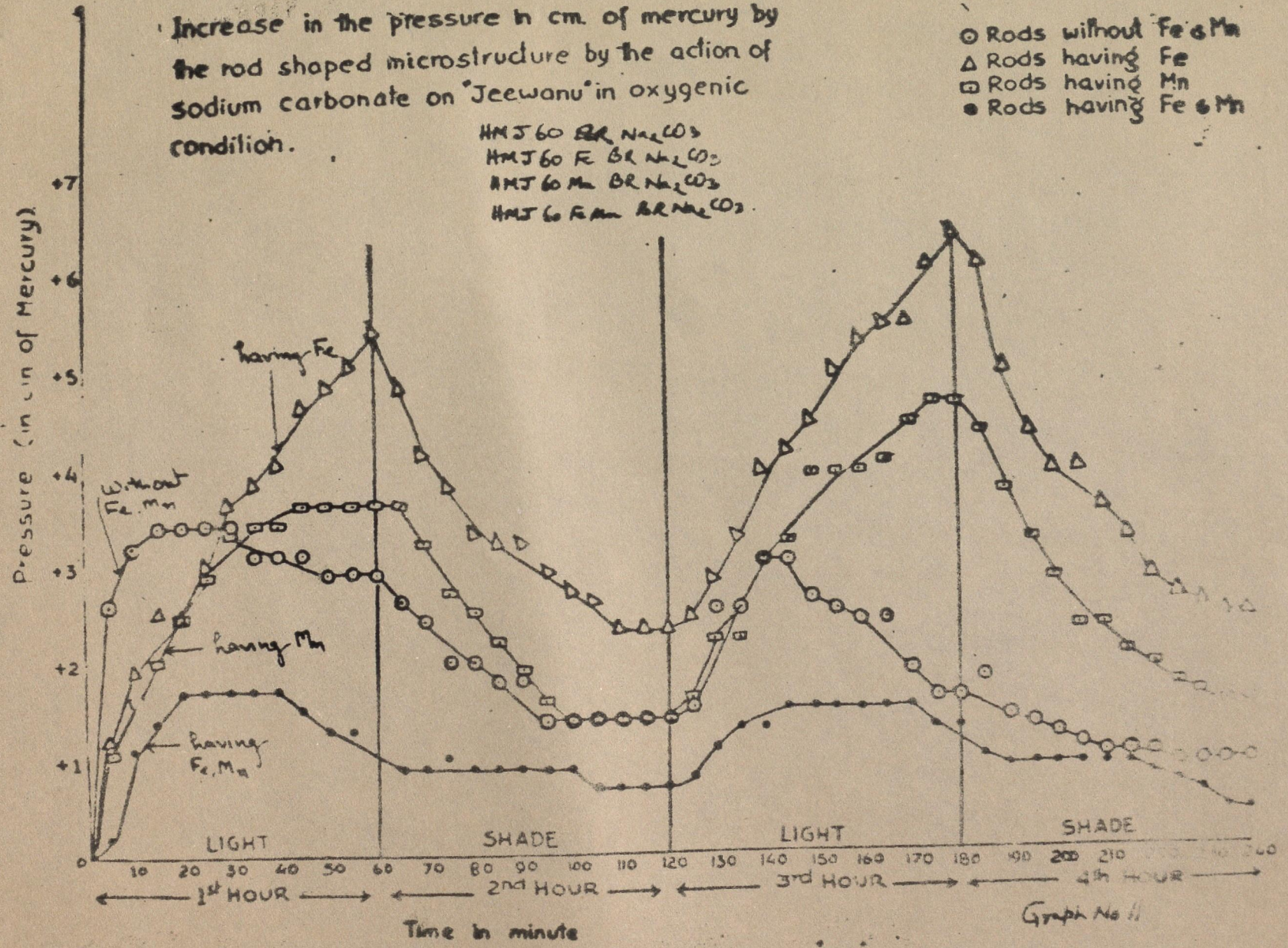
- Rods without Fe & Mn
- △ Rods having Fe
- Rods having Mn
- Rods having Fe & Mn



Increase in the pressure in cm. of mercury by the rod shaped microstructure by the action of sodium carbonate on "Jeewanu" in oxygenic condition.

HMJ 60 BR  $\text{Na}_2\text{CO}_3$   
 HMJ 60 F BR  $\text{Na}_2\text{CO}_3$   
 HMJ 60 Mn BR  $\text{Na}_2\text{CO}_3$   
 HMJ 6 F Mn BR  $\text{Na}_2\text{CO}_3$

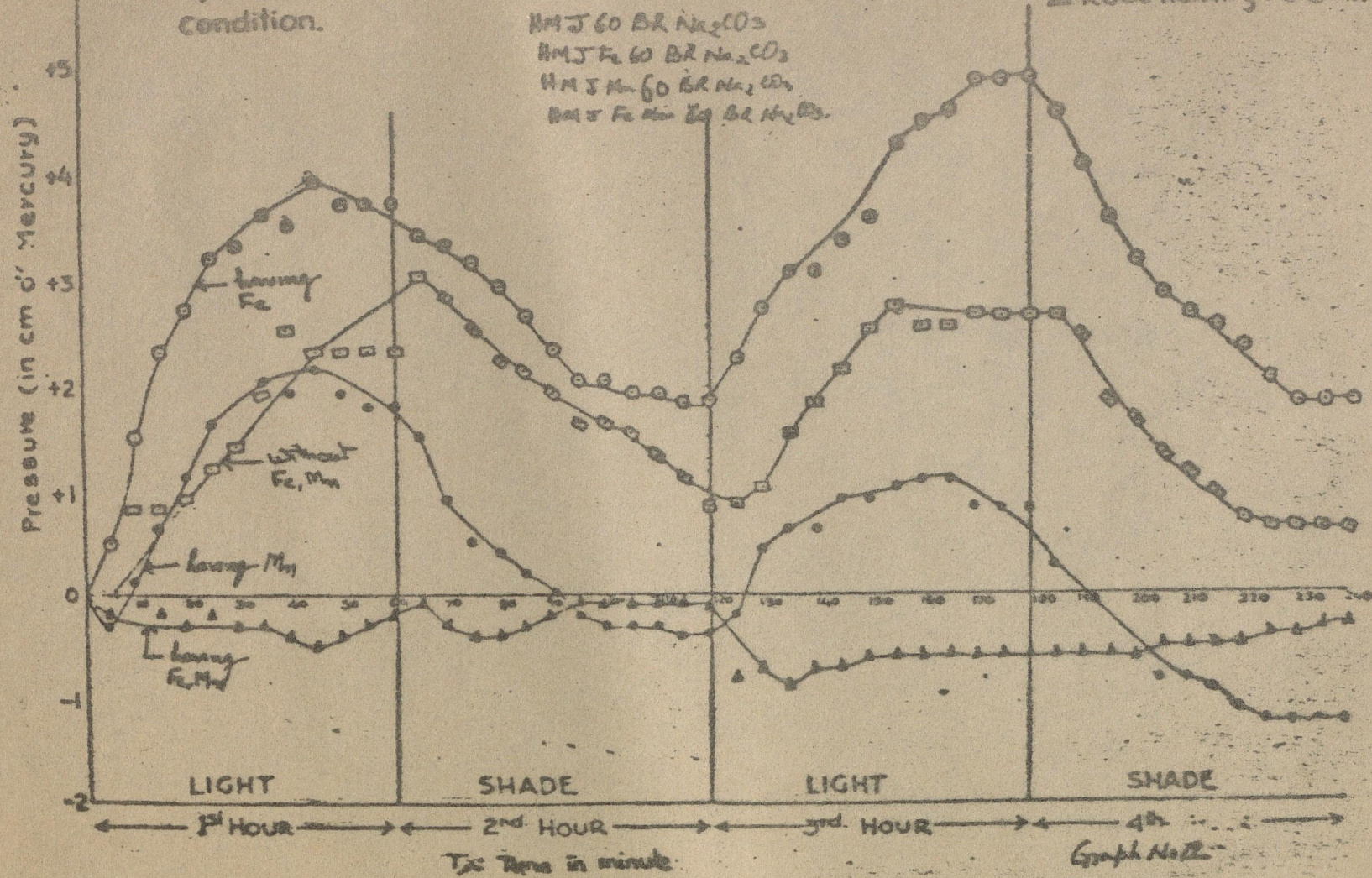
- Rods without Fe & Mn
- △ Rods having Fe
- Rods having Mn
- Rods having Fe & Mn



Graph No 11

Increase in the pressure in cm of mercury by red shaped Microstructures produced by action of Sodium carbonate on "Jeewanu" in Anoxygenic Condition.

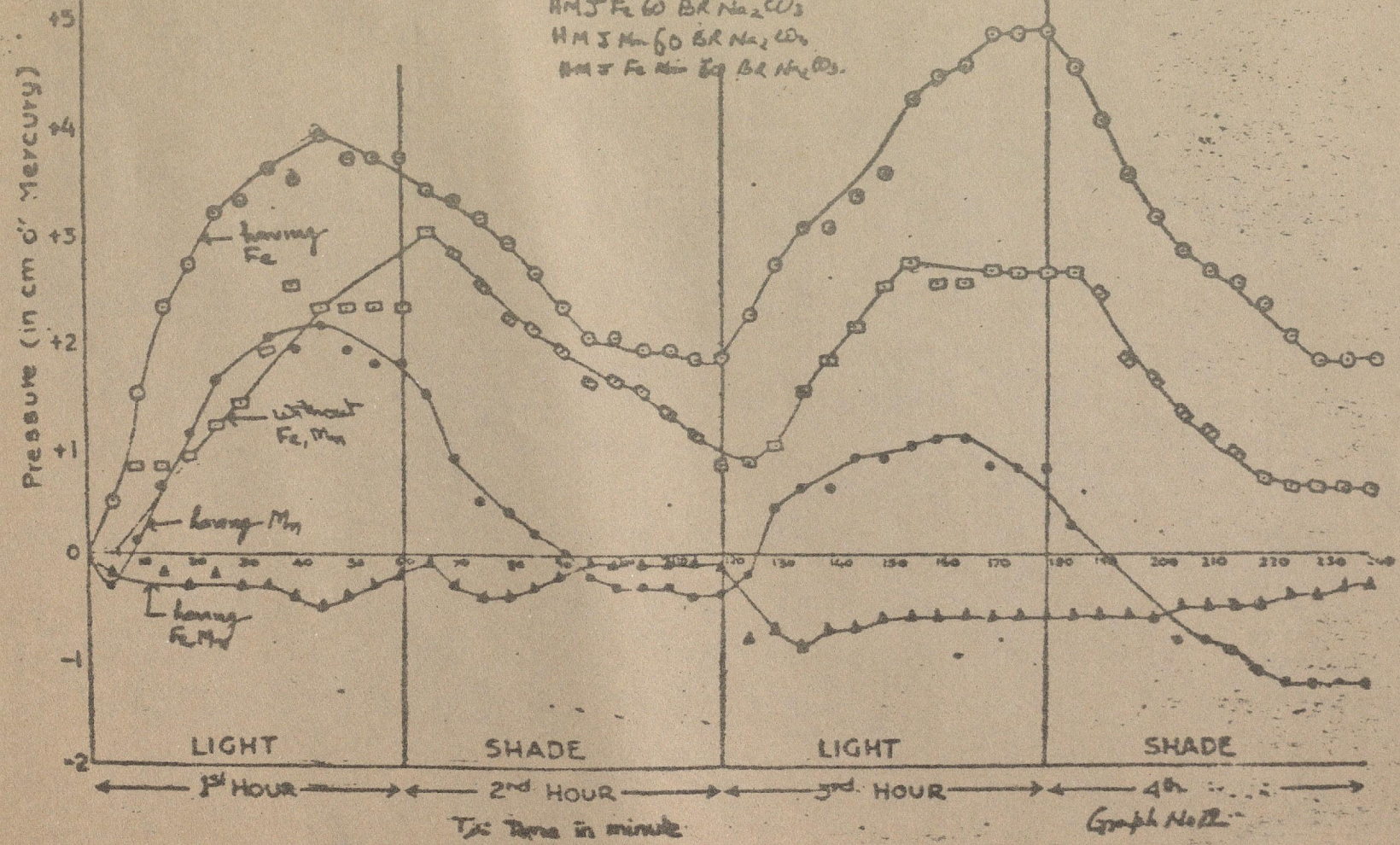
- Rods without Fe & Mn
- Rods having Fe
- Rods having Mn
- ▲ Rods having Fe & Mn

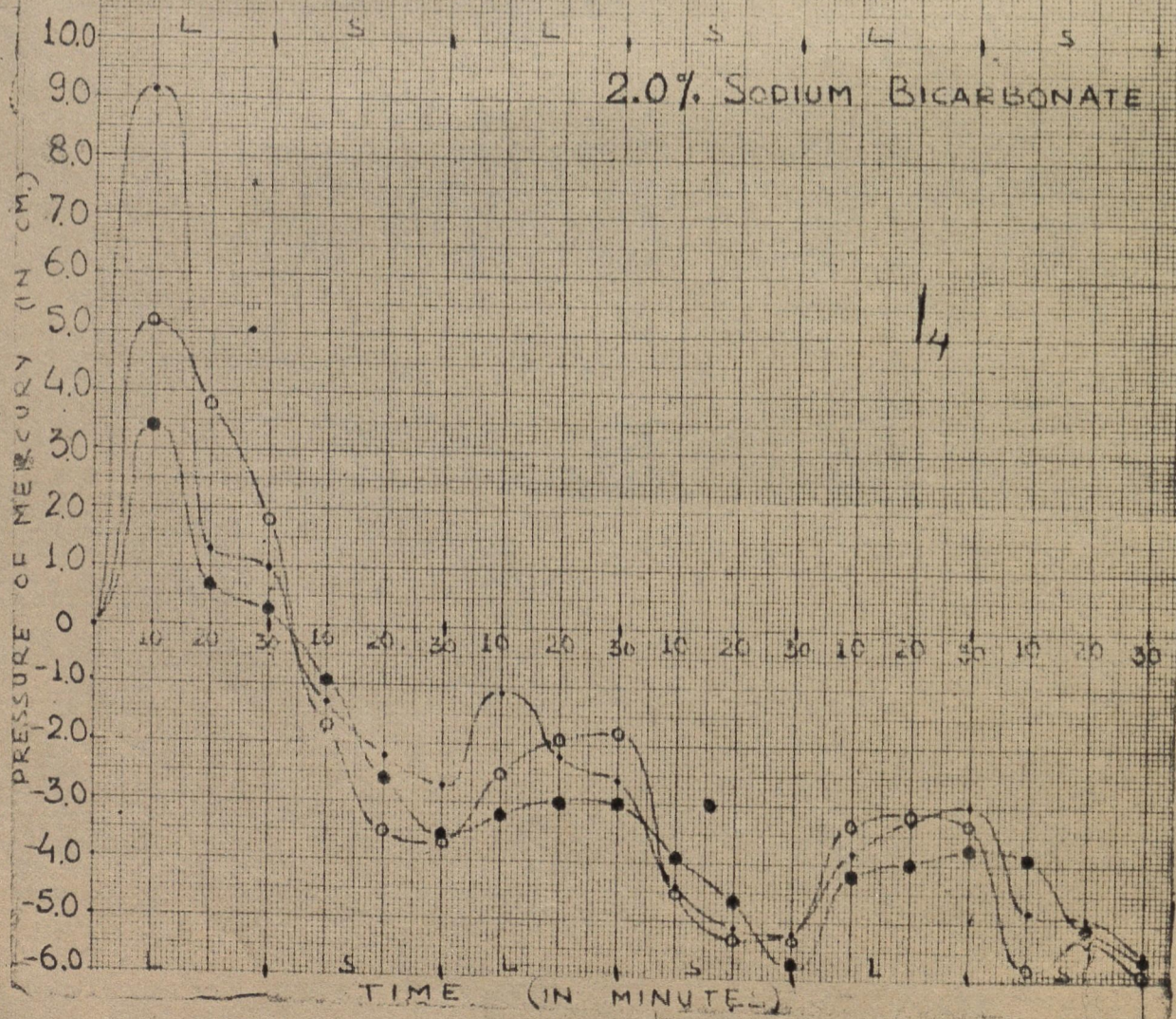
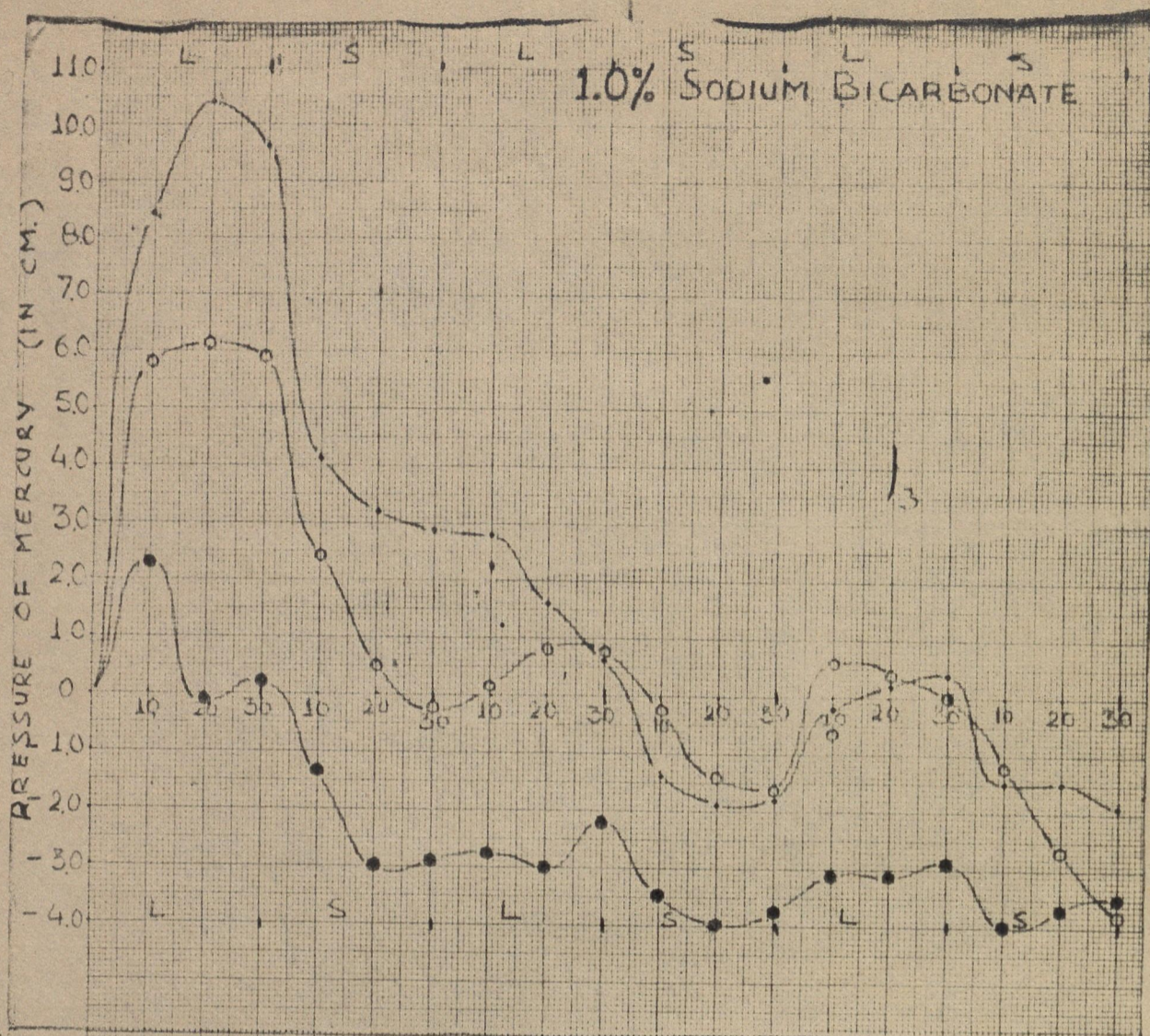


Increase in the pressure in cm of mercury by rod shaped Microstructures produced by action of Sodium carbonate on "Jeewanu" in Anoxygenic Condition.

- Rods without Fe & Mn
- Rods having Fe
- Rods having Mn
- ▲ Rods having Fe & Mn

HMJ 60 BR Na<sub>2</sub>CO<sub>3</sub>  
 HMJ Fe 60 BR Na<sub>2</sub>CO<sub>3</sub>  
 HMJ Mn 60 BR Na<sub>2</sub>CO<sub>3</sub>  
 HMJ Fe Mn 60 BR Na<sub>2</sub>CO<sub>3</sub>





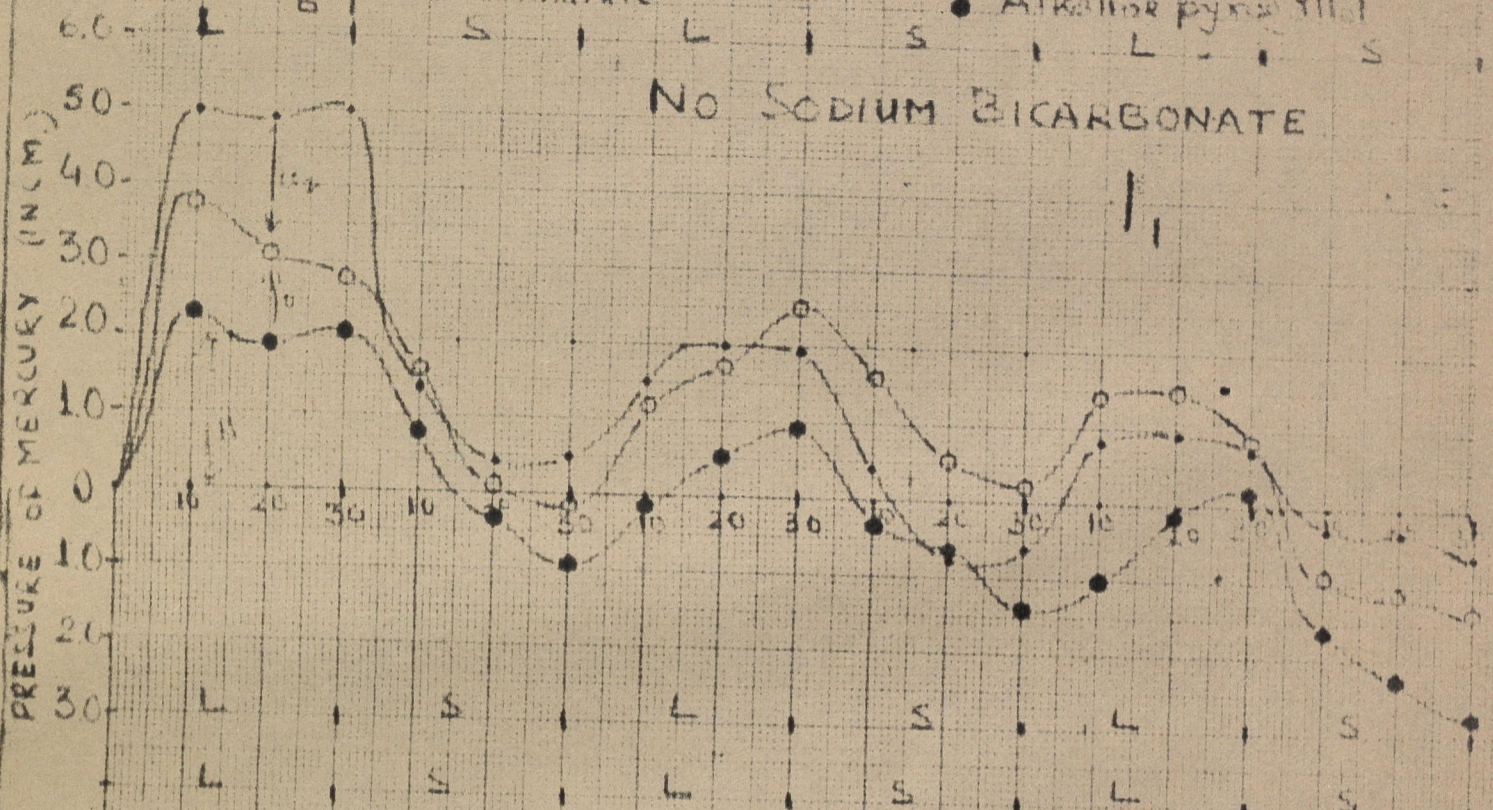
# EFFECT OF DIFFERENT CONCENTRATIONS OF SODIUM BICARBONATE ON EXCHANGE OF GASES BY AQUEOUS MIXTURES OF JEEWANU UNDER DIFFERENT ENVIRONMENTAL CONDITIONS

1211. Fe. Mn. 24 JEEWANU  
40mg J / 5.0 ml mixture

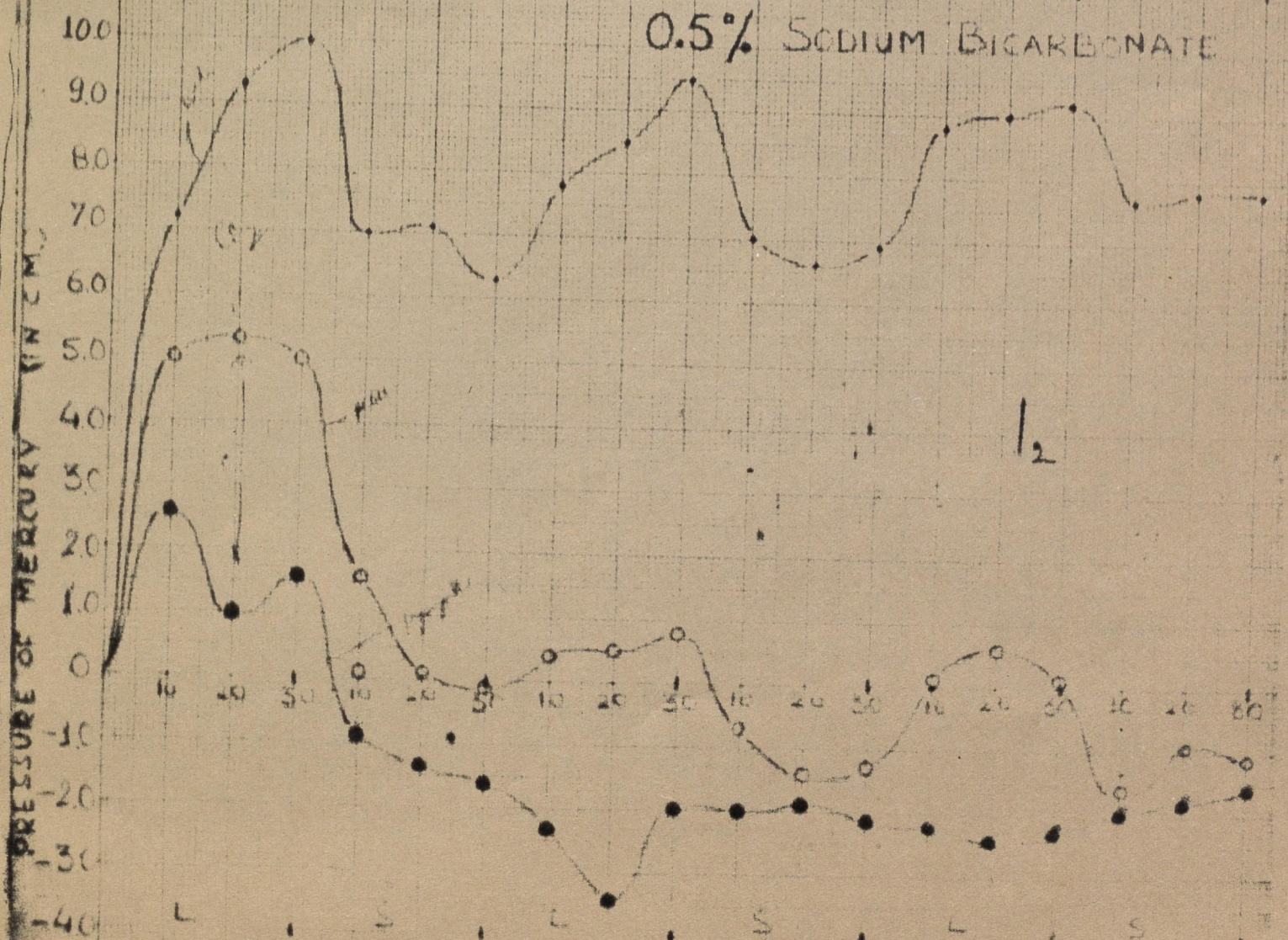
Side lobe moving

- Distilled water
- 60% Potassium hydroxide
- Alkaline pyruvate

No SODIUM BICARBONATE



0.5% SODIUM BICARBONATE



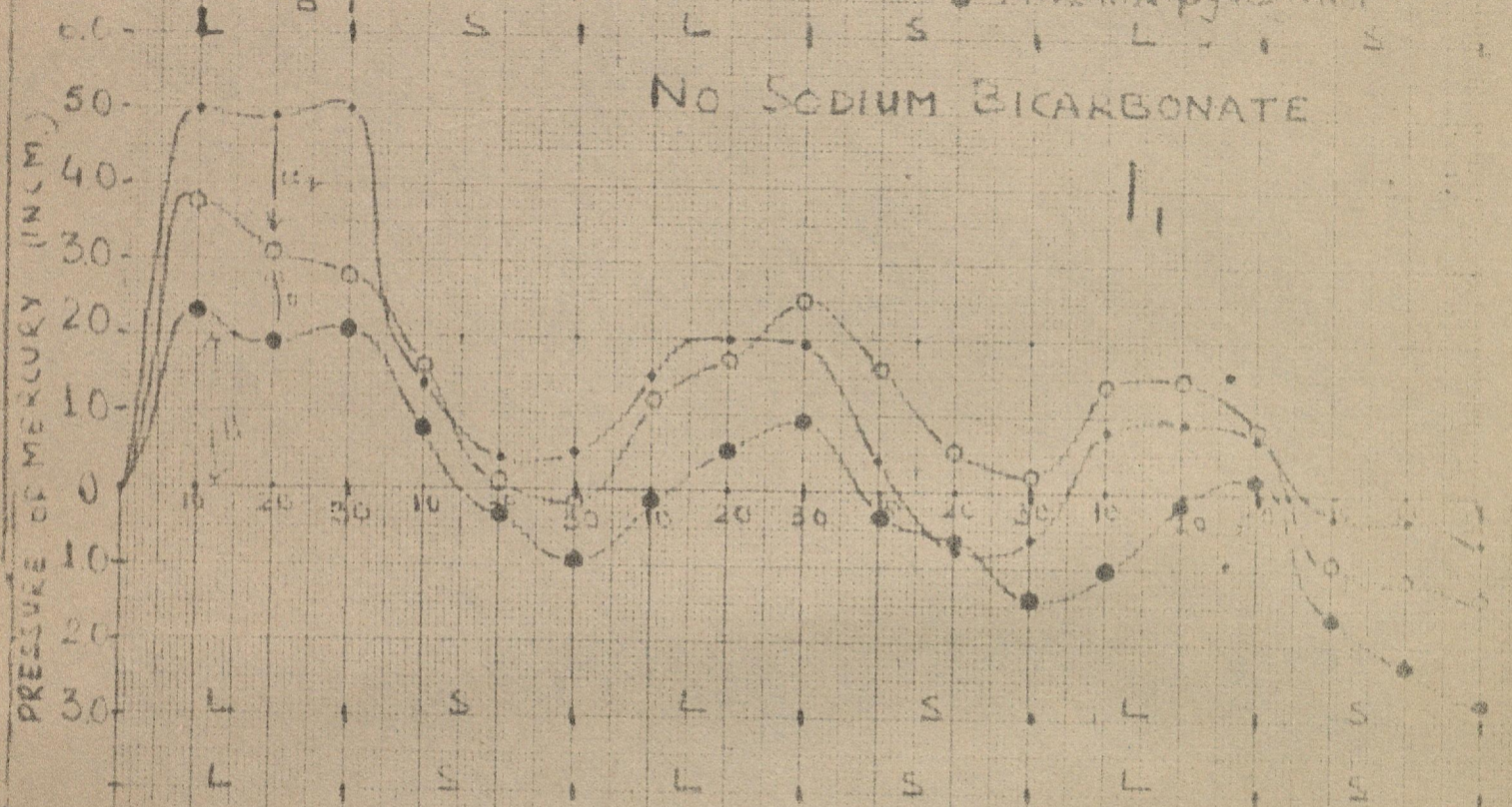
# EFFECT OF DIFFERENT CONCENTRATIONS OF SODIUM BICARBONATE ON EXCHANGE OF GASES BY AQUEOUS MIXTURES OF JEEWANU UNDER DIFFERENT ENVIRONMENTAL CONDITIONS

1211. Fe. Mn. 24 JEEWANU  
40mg J / 5.0 ml mixture

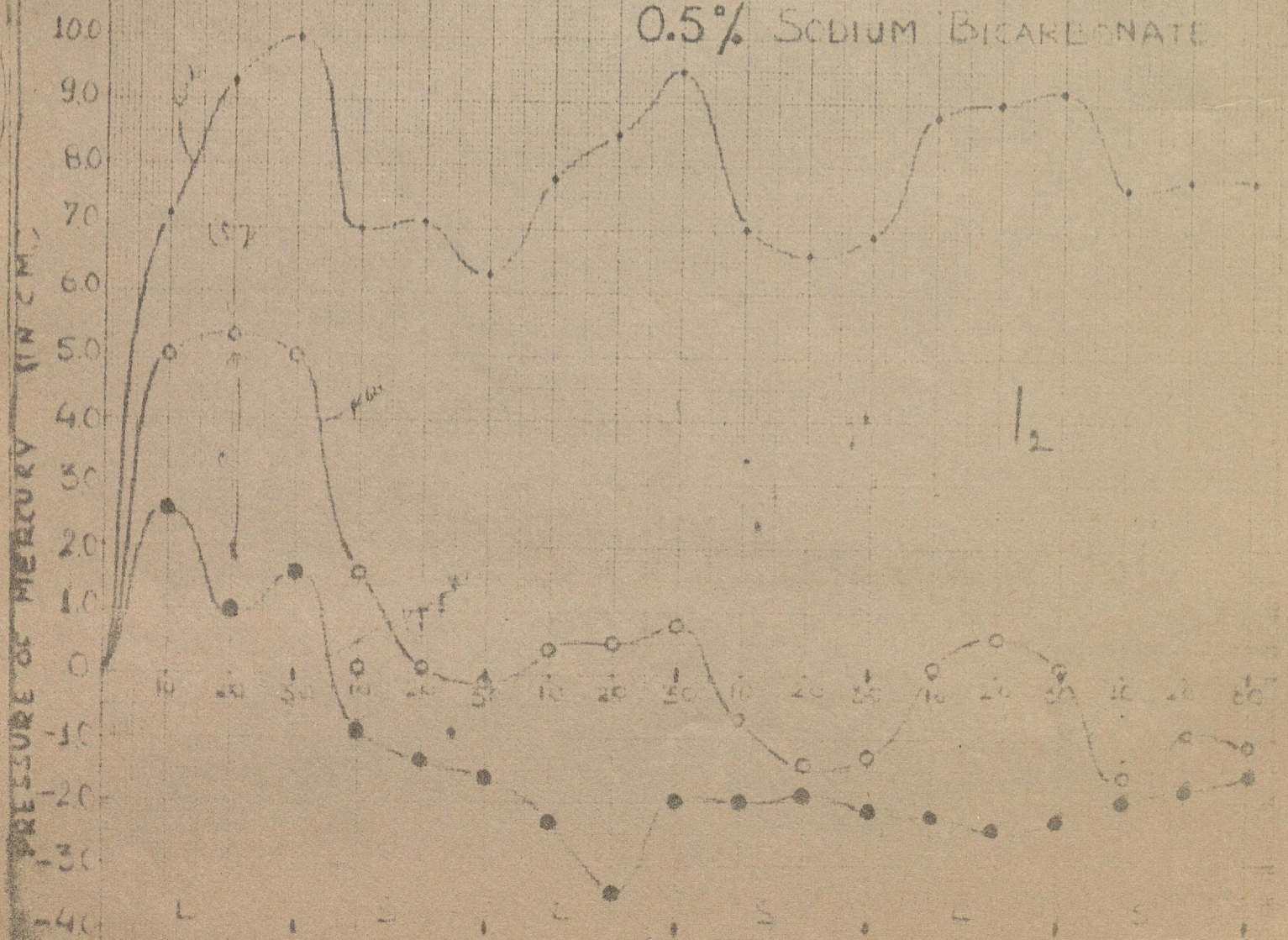
Side-labs moving

- Distilled water
- 50% Potassium hydroxide
- Alkaline pyruvate III

## NO SODIUM BICARBONATE



## 0.5% SODIUM BICARBONATE



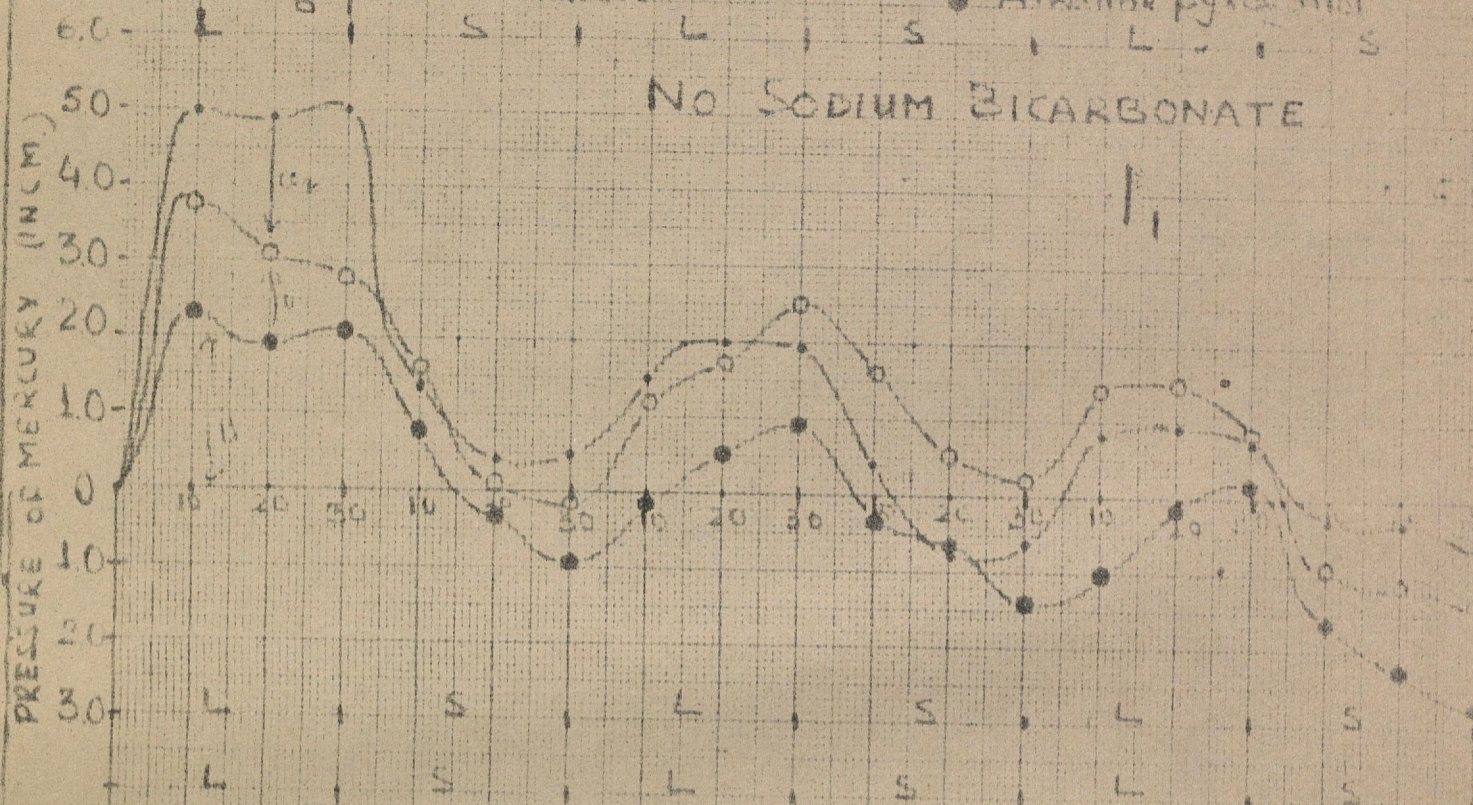
# EFFECT OF DIFFERENT CONCENTRATIONS OF SODIUM BICARBONATE ON EXCHANGE OF GASES BY AQUEOUS MIXTURES OF JEEWANU UNDER DIFFERENT ENVIRONMENTAL CONDITIONS

1211. Fe. Mn. 24 JEEWANU  
40mg J / 5.0 ml mixture

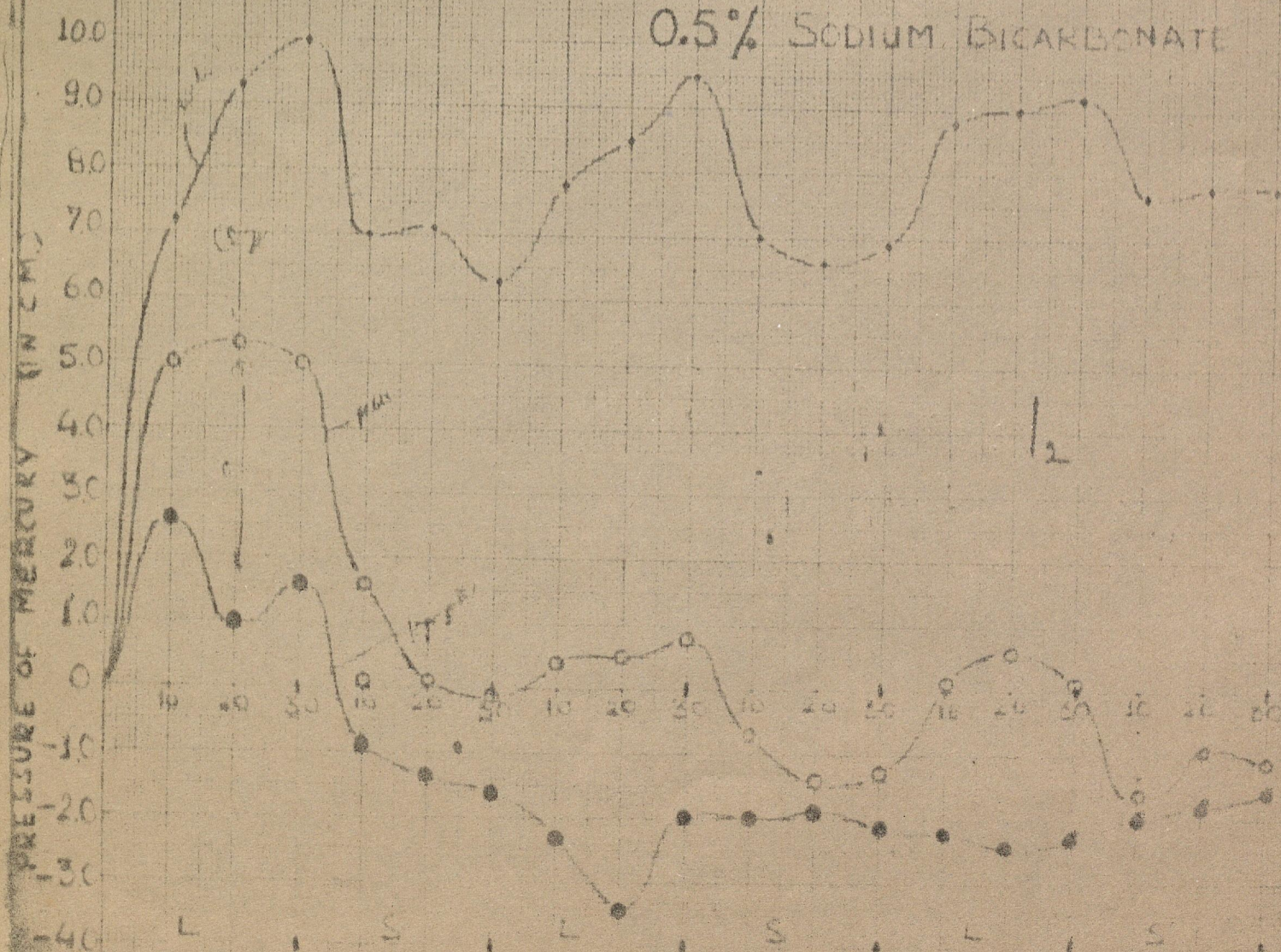
Side lobe moving

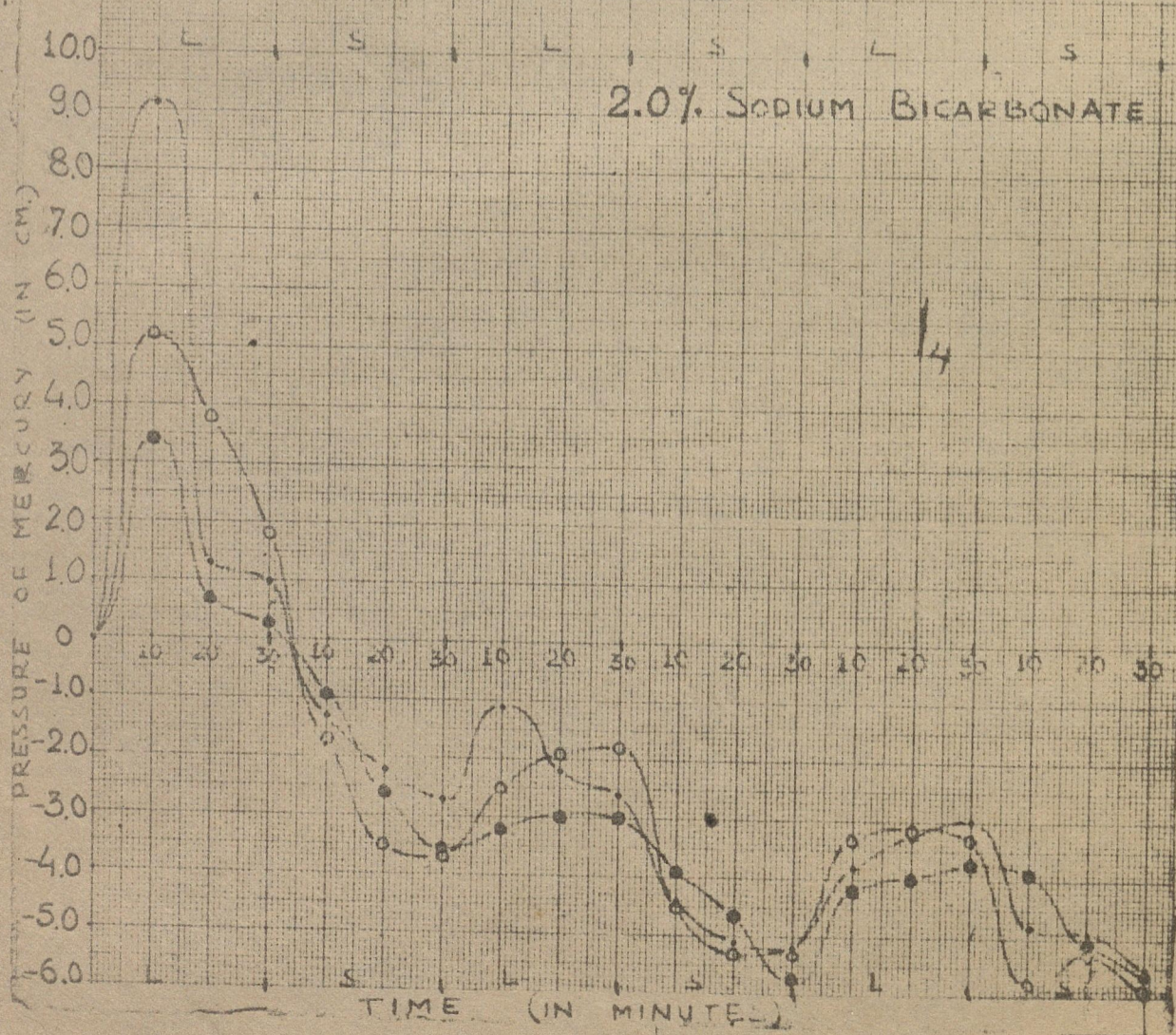
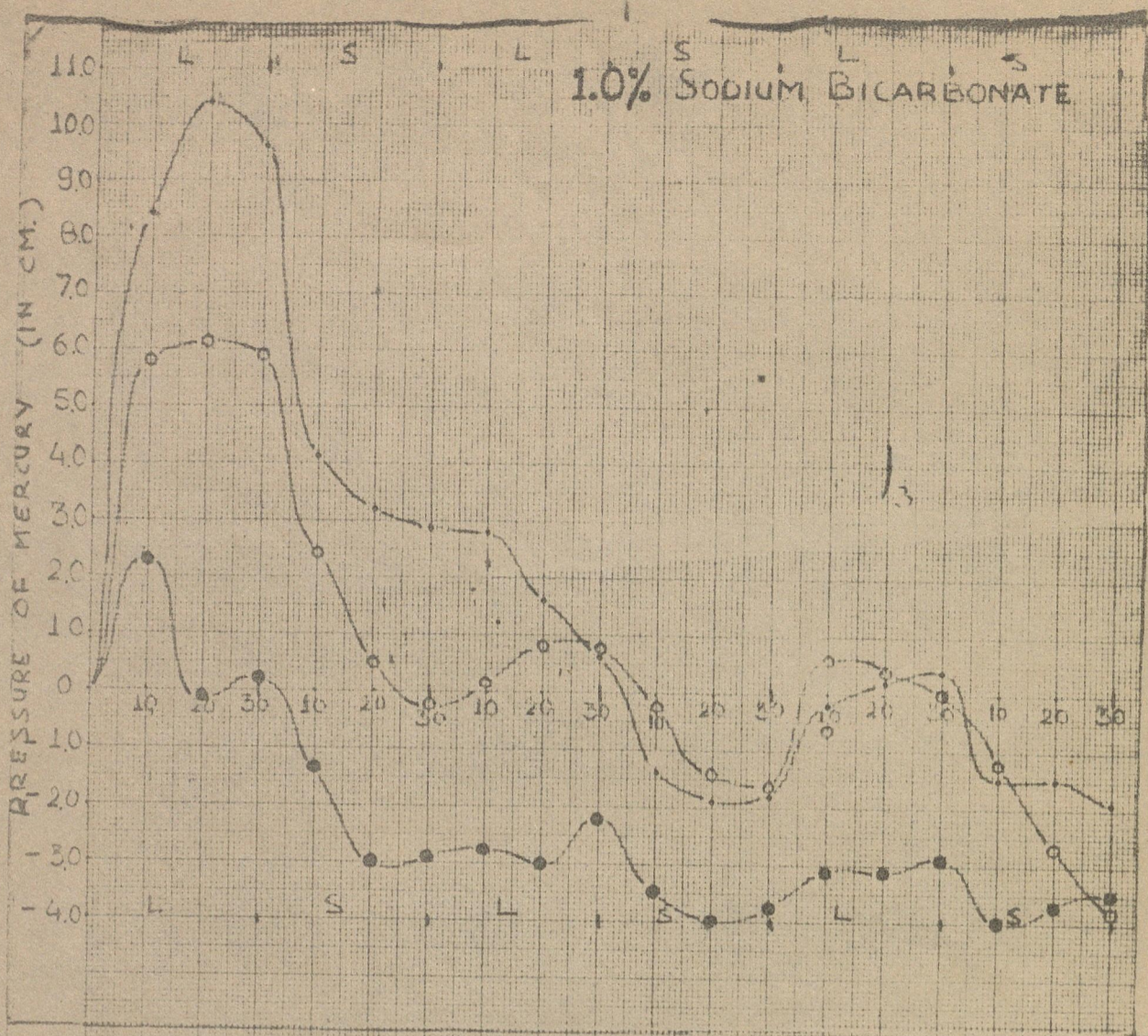
- Distilled water
- 50% potassium hydroxide
- Alkaline pyrocatechol

No SODIUM BICARBONATE



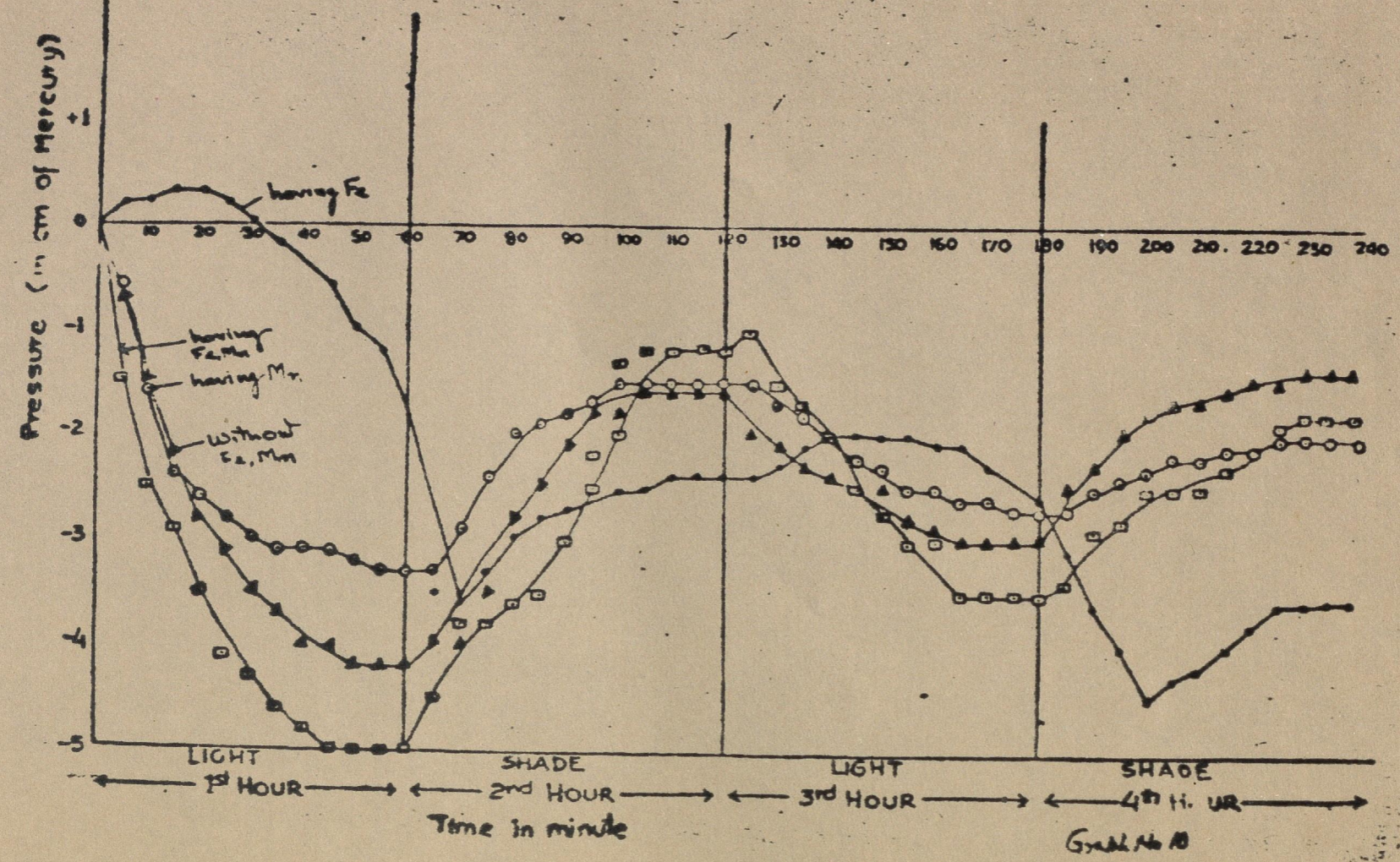
0.5% SODIUM BICARBONATE





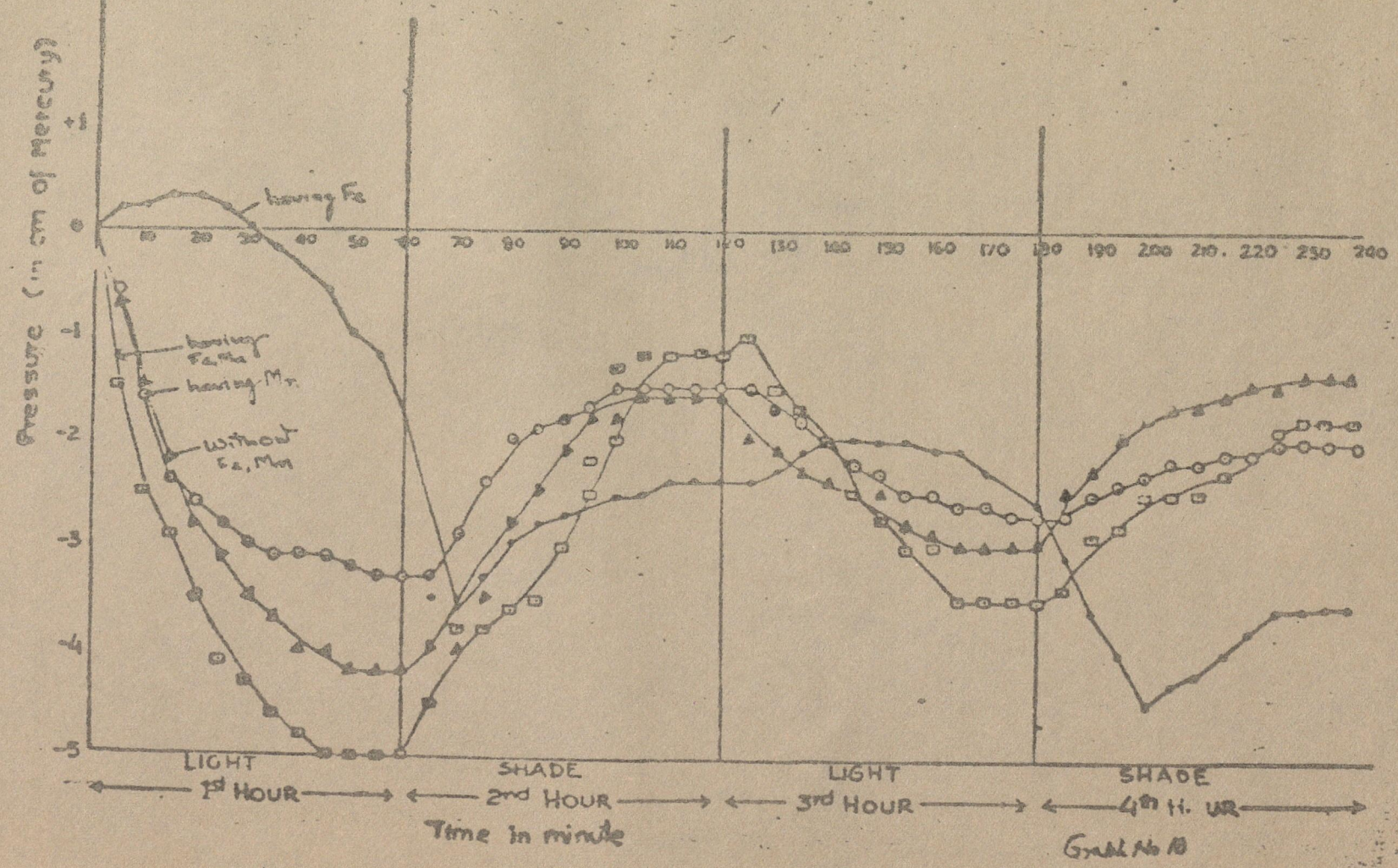
change Increase in the pressure in cm of mercury by  
 "Jeewanu" in anoxygenic condition

HMT 60     ▲ Jeewanu without Fe & Mn  
 HMT R 60    ● Jeewanu having Fe  
 HMT M 60    ○ Jeewanu having Mn  
 HMT F 60    □ Jeewanu having Fe & Mn



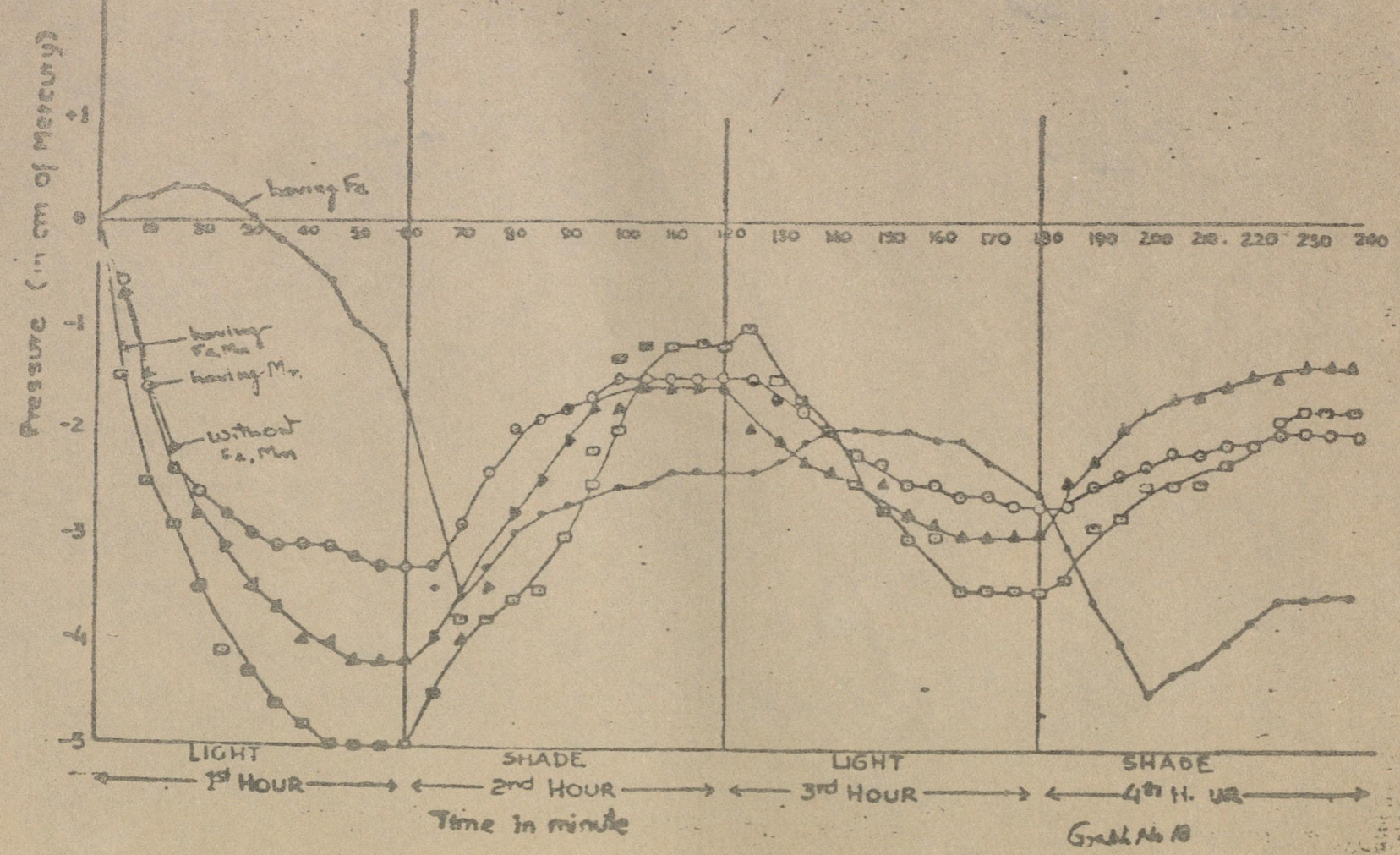
Change Increase in the pressure in cm of mercury by 'Jeewanu' in anoxygenic condition

HMT 60     ▲ Jeewanu without Fe & Mn  
 HMT R 60     ● Jeewanu having Fe  
 HMT M 60     ○ Jeewanu having Mn  
 HMT FM 60     □ Jeewanu having Fe & Mn



Change Increase in the pressure in cm of mercury by  
"Jeewanu" in anoxygenic condition

HMT 60     ▲ Jeewanu without Fe & Mn  
 HMT A 60    ● Jeewanu having Fe  
 HMT M 60    ○ Jeewanu having Mn  
 HMT Fe Mn 60    □ Jeewanu having Fe & Mn



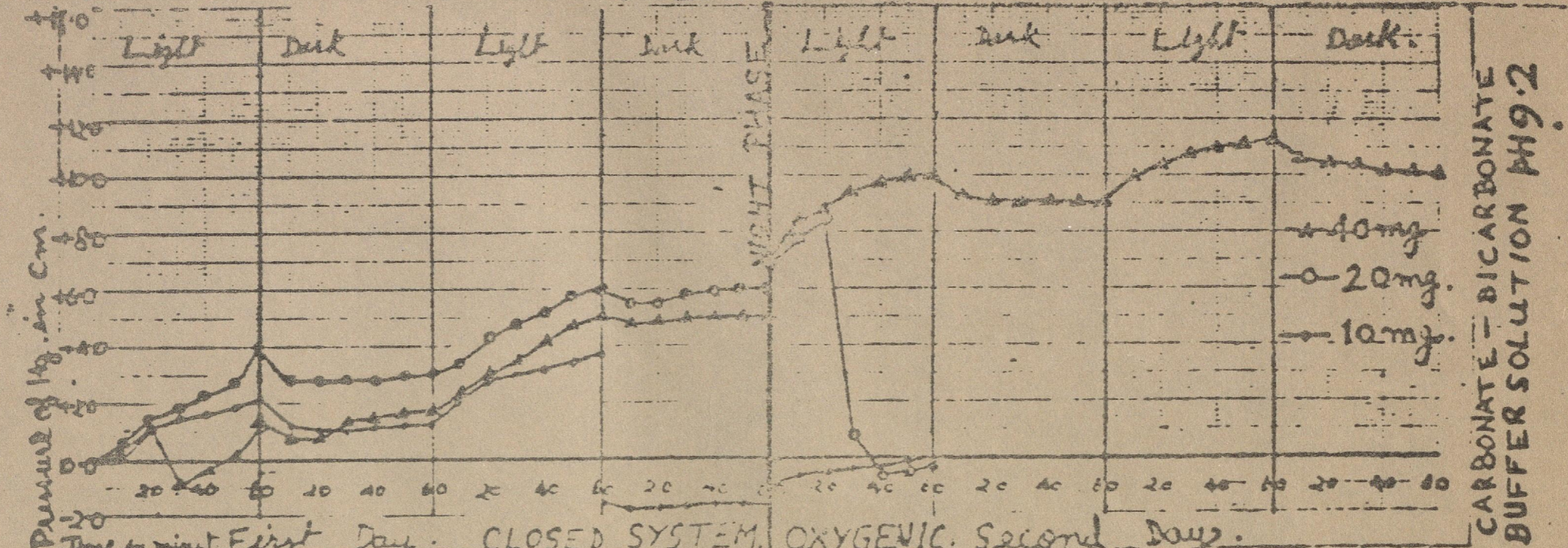
*[Faint, illegible markings and bleed-through from the reverse side of the page]*

*[Faint, illegible markings]*

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*[Faint, illegible markings]*

3111 J24

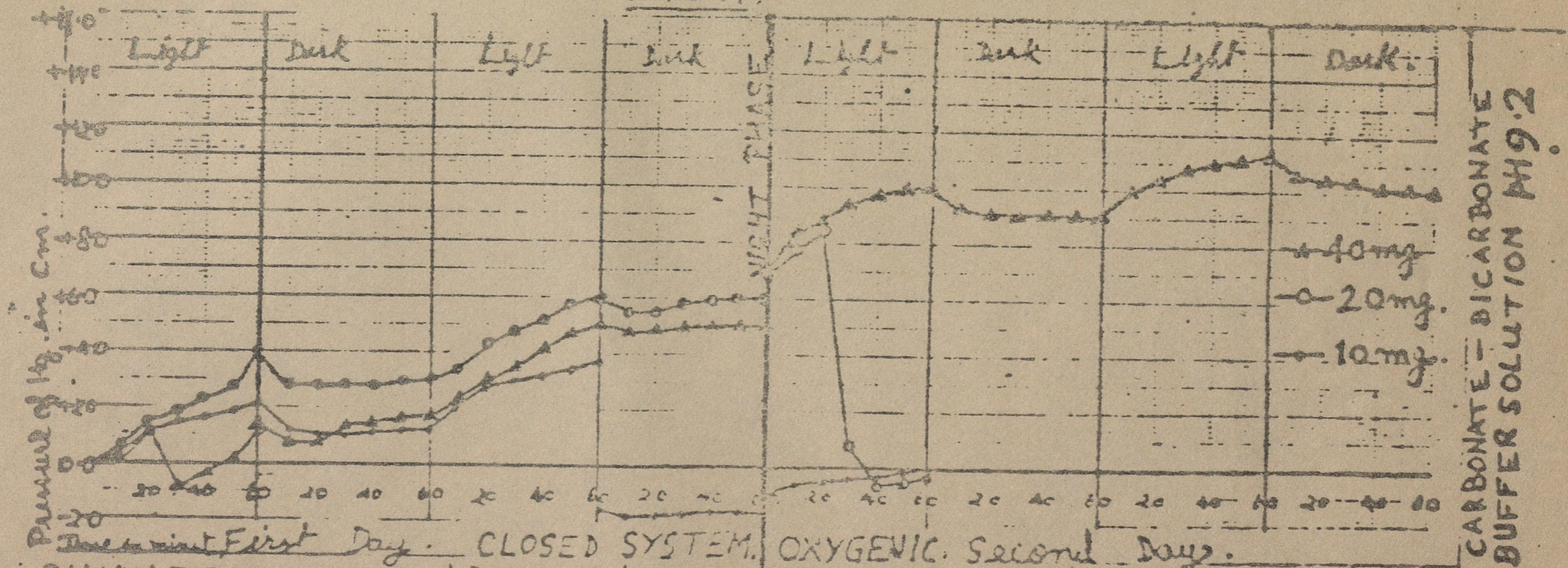


CARBONATE-BICARBONATE  
BUFFER SOLUTION PH 9.2

Time in min First Day. CLOSED SYSTEM. OXYGENIC. Second Day.  
 3:1:1:1 JEEWANU + 1.0 ml Buffer solution of pH 9.2 + 3.7 ml distilled water + 0.3 ml distilled water  
 in side lobe. (—■— Jeevanu 10 mg) (—○— Jeevanu 20 mg) (—▲— Jeevanu 40 mg)

Exp No 15

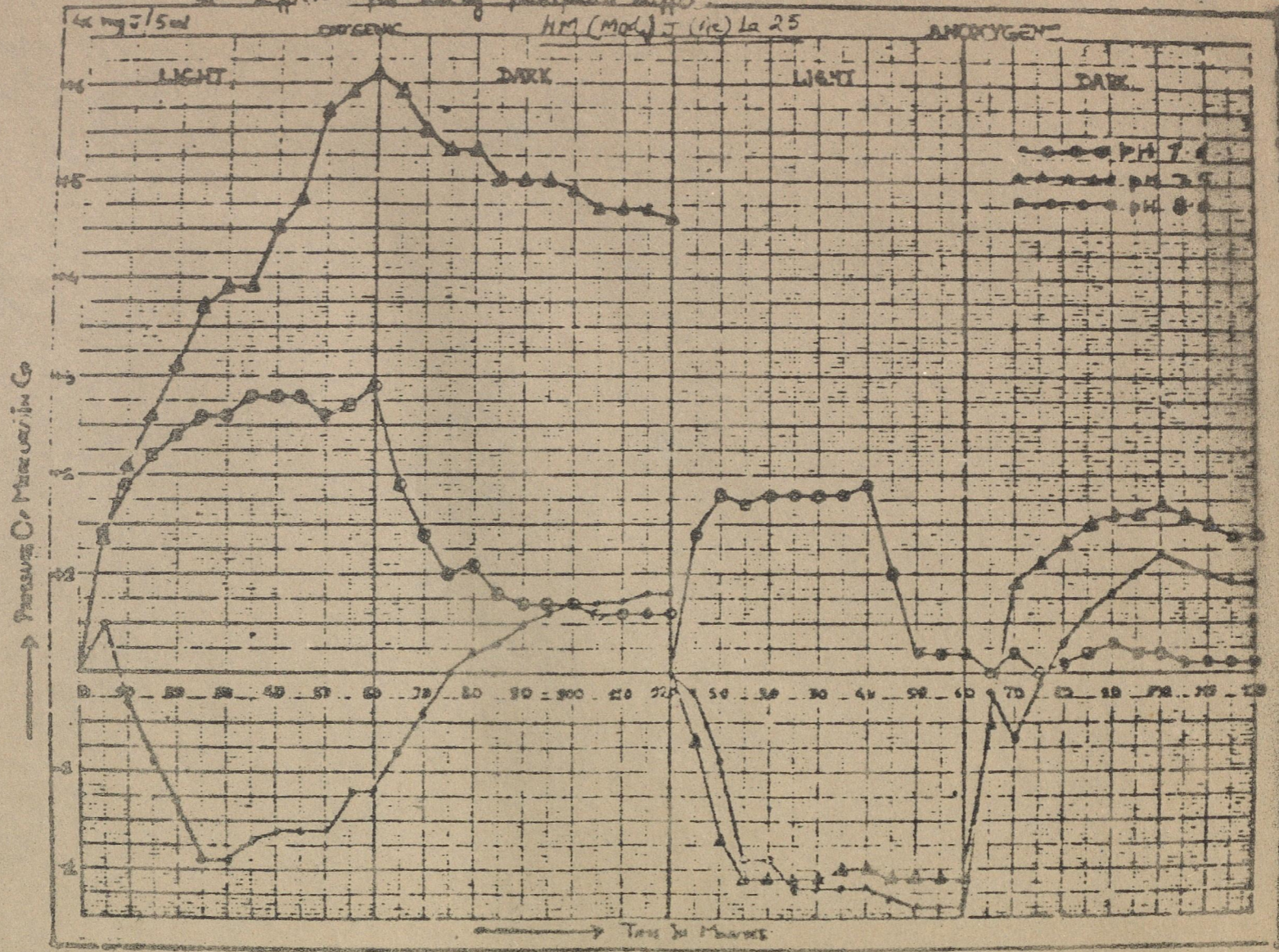
3111 J24



Measurement First Day. CLOSED SYSTEM. OXYGENIC. Second Day.  
 3:1:1:1 JEEWANU + 1.0 ml Buffer solution of pH 9.2 + 3.7 ml distilled water + 0.3 ml distilled water  
 in side lobe. (—▲— Jeevanu 10 mg) (—○— Jeevanu 20 mg) (—•— Jeevanu 40 mg)

Exp No 15

PROPERTIES OF HYDROLYSIS AND CATALASE ACTIVITY IN HEPATOCYTES OF THE ZEBRA-FISH  
 at pH 7.6, 7.8, 8.0 in being phosphate buffer



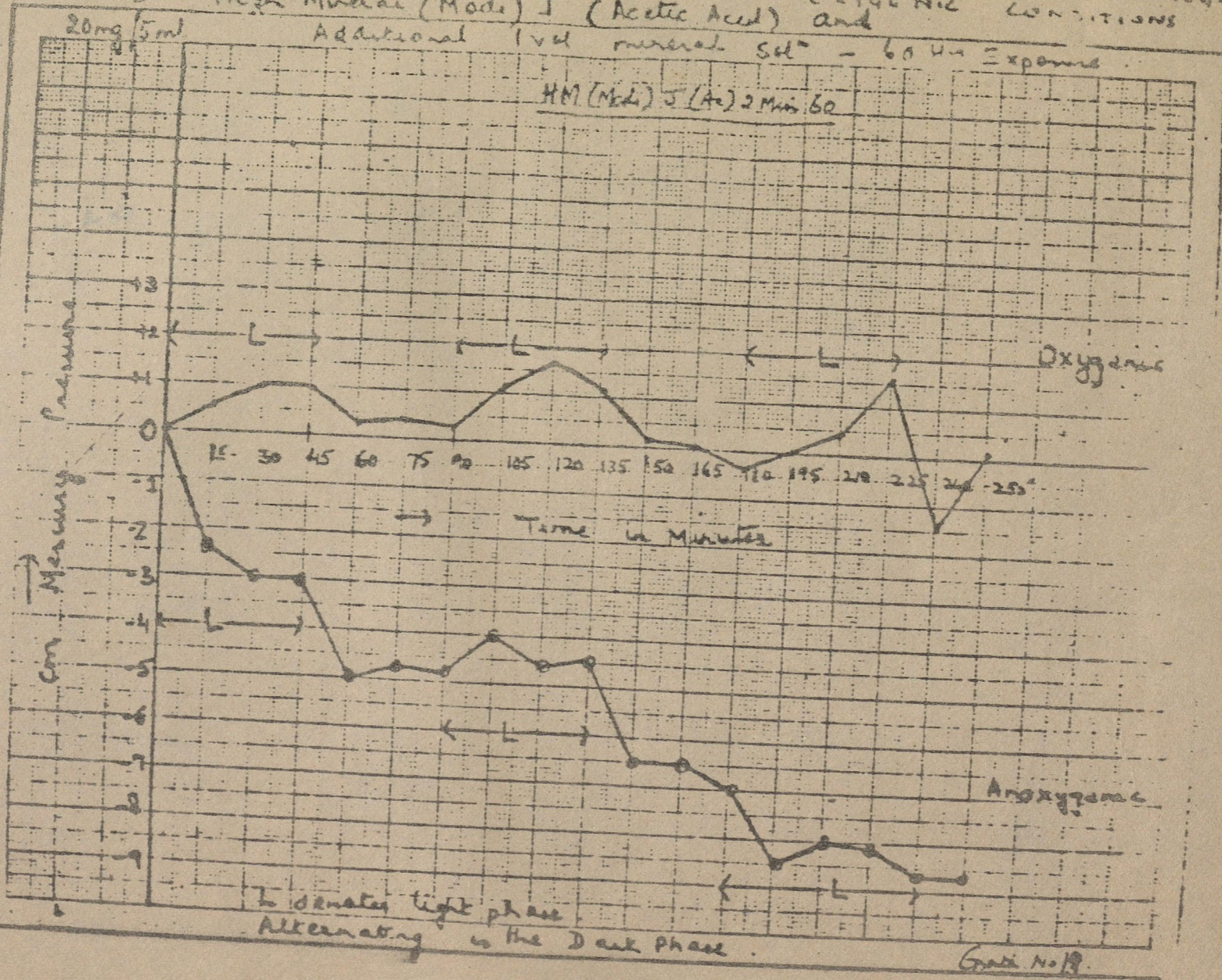
Graph No 18

STUDY OF THE PHOTOLYTIC SPLITTING OF WATER AND NITROGEN  
 OXIDATION UNDER ANOXYGENIC & OXYGENIC CONDITIONS  
 By High Mineral (Modi) J (Acetic Acid) and

20mg/5ml

Additional 1ml mineral sol<sup>n</sup> - 60 H<sub>2</sub> Exposure

HM (Modi) J (Ac) 2 Min 60



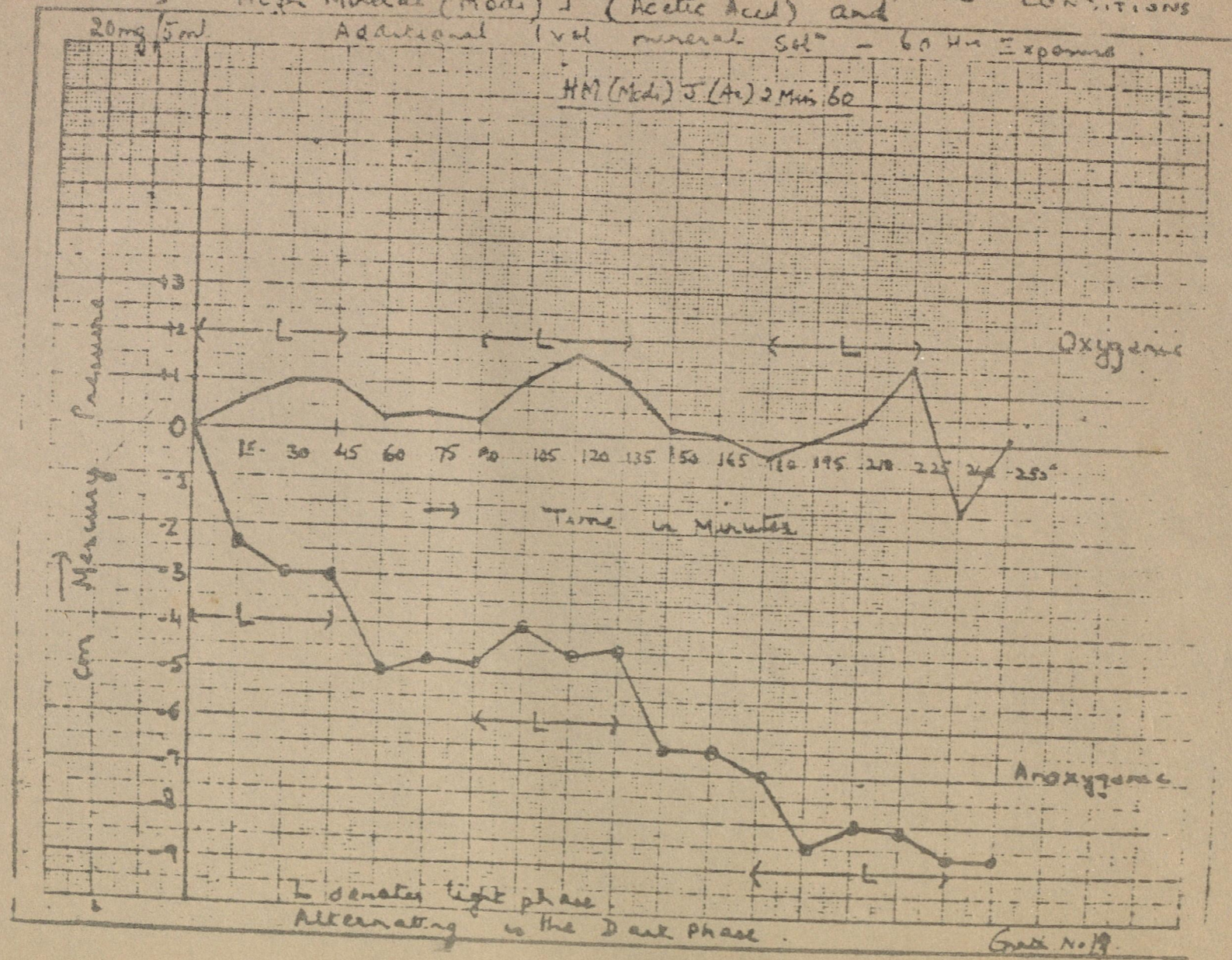
L denotes light phase  
 Alternating to the Dark phase

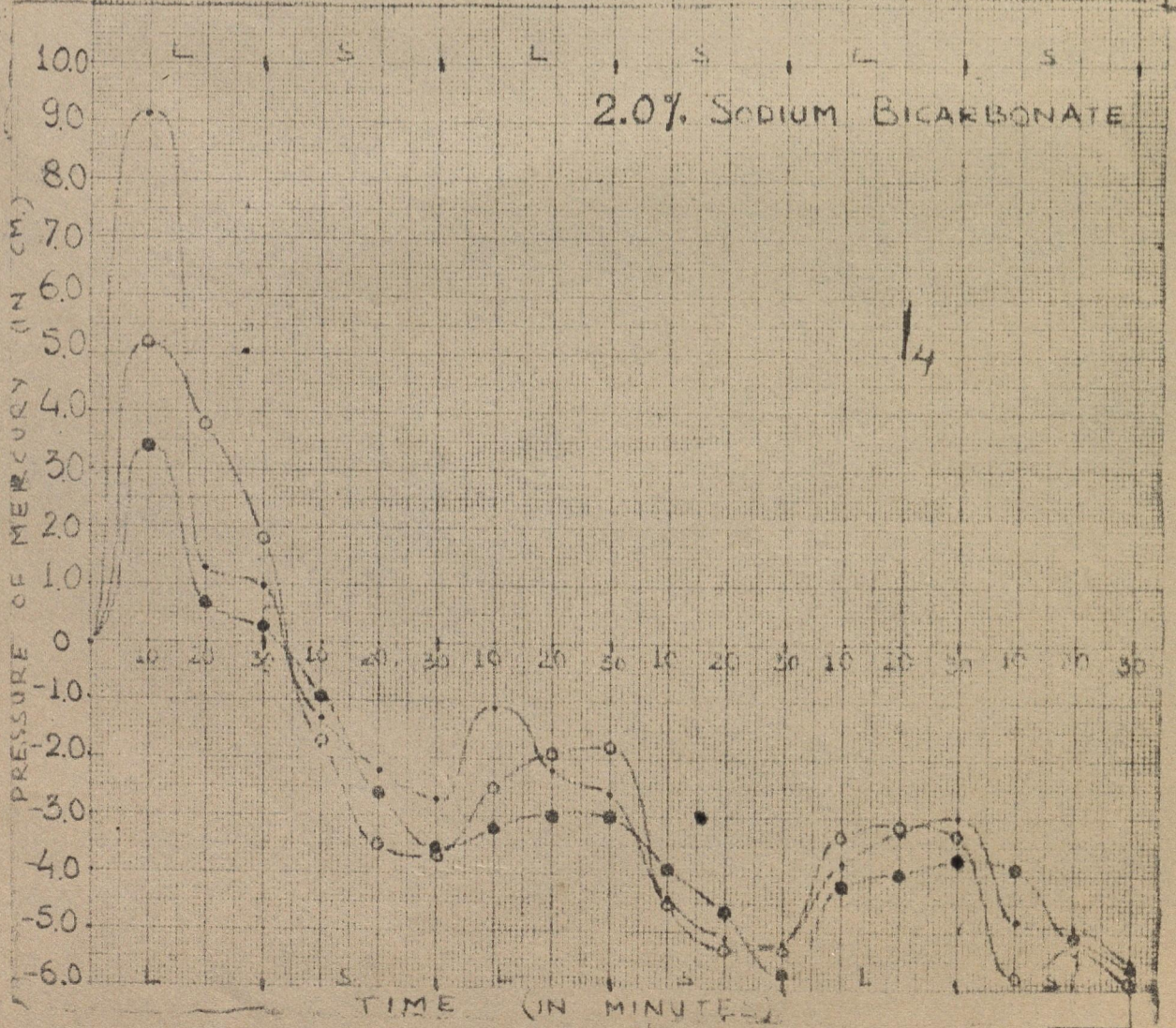
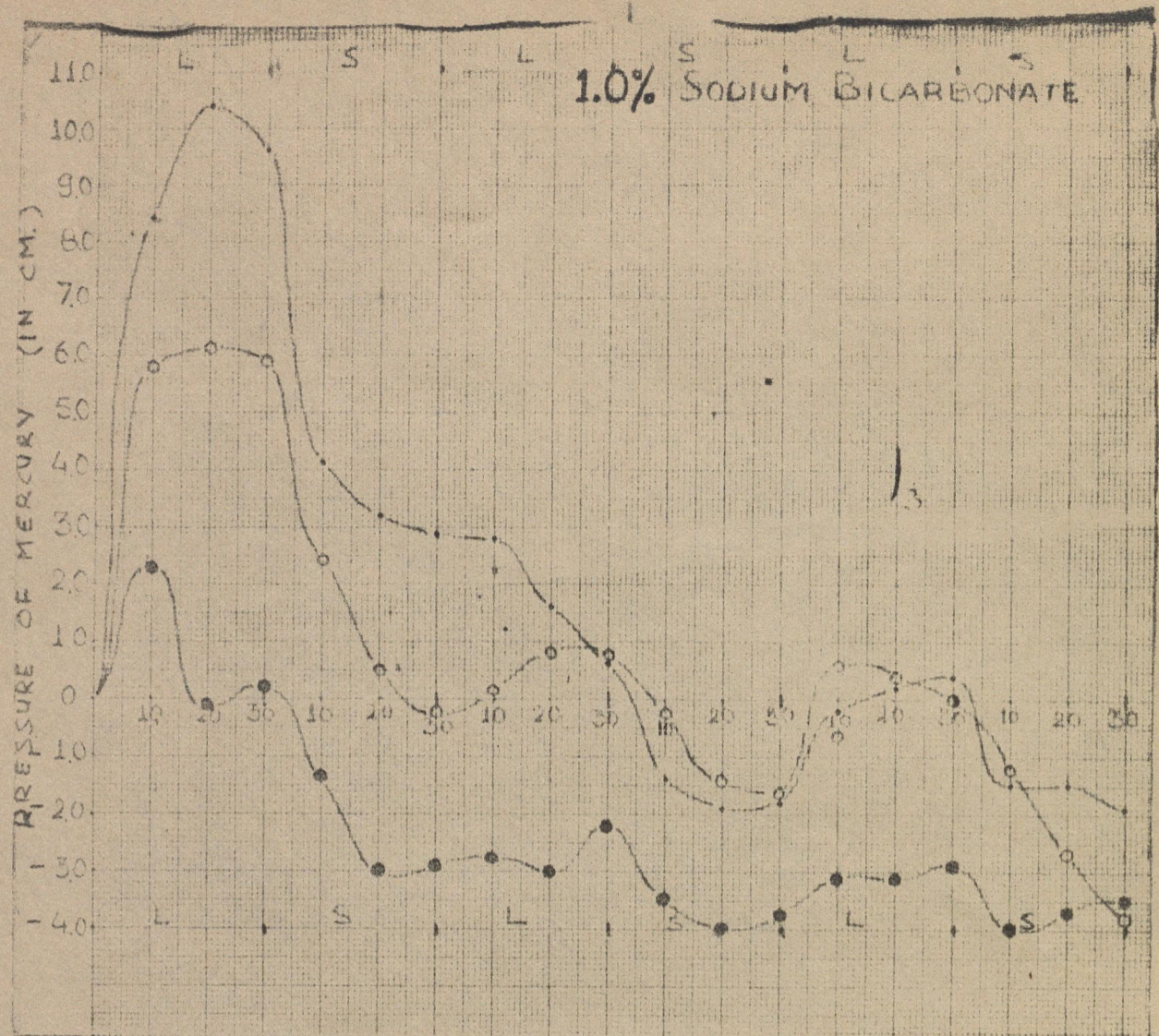
Graph No. 19

STUDY OF THE PHOTOLYTIC SPLITTING OF WATER AND NITROGEN  
 UNDER ANOXYGENIC AND OXYGENIC CONDITIONS  
 By High Mineral (Modi) J (Acetic Acid) and

Additional 1 vol mineral sol<sup>n</sup> - 60 Hr Exposure

HM (Modi) J (Ac) 2 Min 60

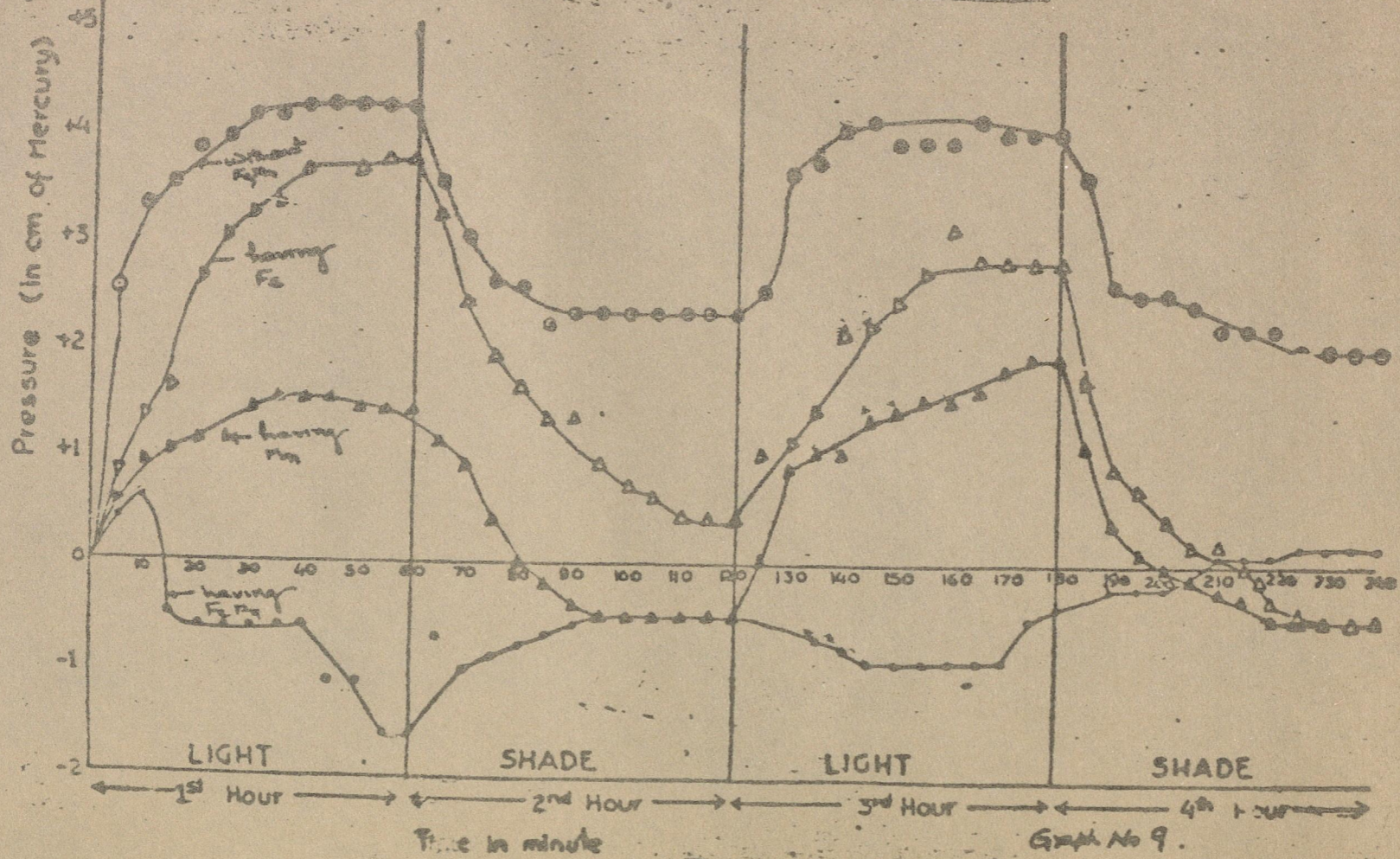




Increase in pressure in cm of mercury by  
 Jeevanu in oxygenic condition.

HMJ 60  
 HMJ R 60  
 HMJ M 60  
 HMJ A 60

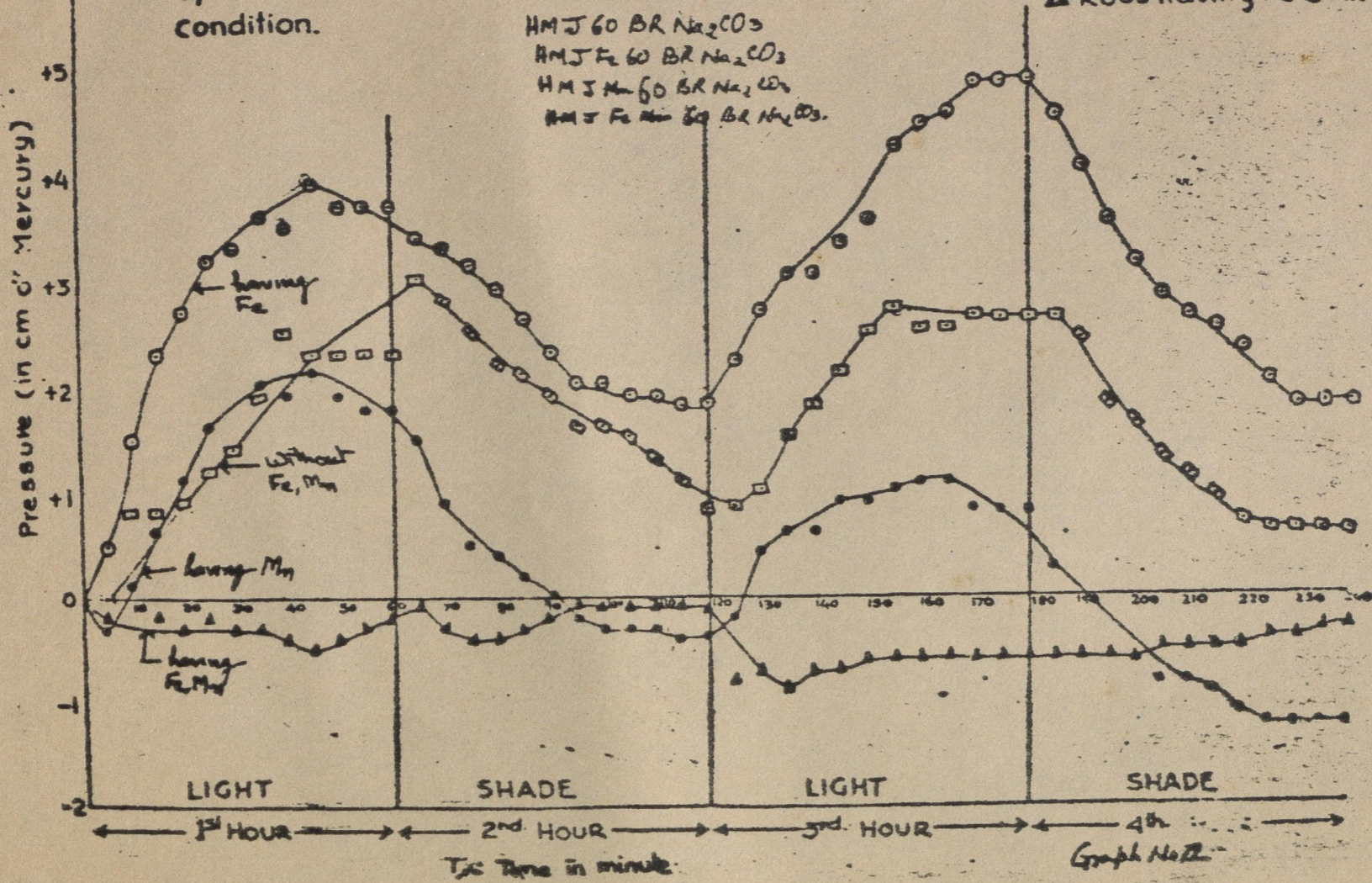
○ Jeevanu without Fe & Mn  
 △ Jeevanu having Fe  
 ▲ Jeevanu having Mn  
 ⊙ Jeevanu having Fe & Mn



Increase in the pressure in cm of mercury by rod shaped Microstructures produced by action of Sodium carbonate on "Jeewanu" in Anoxygenic condition.

- Rods without Fe & Mn
- Rods having Fe
- Rods having Mn
- ▲ Rods having Fe & Mn

HMJ 60 BR Na<sub>2</sub>CO<sub>3</sub>  
 HMJ Fe 60 BR Na<sub>2</sub>CO<sub>3</sub>  
 HMJ Mn 60 BR Na<sub>2</sub>CO<sub>3</sub>  
 HMJ Fe Mn 60 BR Na<sub>2</sub>CO<sub>3</sub>



Increase in the pressure in cm of mercury by  
"Jeewanu" in oxygenic condition.

HMJ 60  
HMJK (M)  
HMJM 60  
HMTM 60

○ Jeewanu without Fe & Mn  
△ Jeewanu having Fe  
▲ Jeewanu having Mn  
● Jeewanu having Fe & Mn



Graph No 9.