



STANDARD OPERATING PROCEDURE

Department: Microbiology	SOP No.:
Title: Procedure for Operation and Calibration of Heating Block	Effective Date:
Supersedes: Nil	Review Date:
Issue Date:	Page No.:

1.0 OBJECTIVE:

To lay down a Procedure for Operation and Calibration of Heating Block.

2.0 SCOPE:

This SOP is applicable for Operation and Calibration of Heating Block in Microbiology Section of Quality Control Laboratory.

Make : Neo Lab

Instrument ID :

3.0 RESPONSIBILITY:

Officer / Executive - Microbiology

4.0 ACCOUNTABILITY:

Head – QC

5.0 ABBREVIATIONS:

Ltd. Limited
No. Number
QA Quality Assurance
QC Quality Control
SOP Standard Operating Procedure

6.0 PROCEDURE:

6.1 OPERATION OF HEATING BLOCK:

6.1.1 Connect the Power Cord to Main Supply and switch “ON” the mains.

6.1.2 Switch “ON” the Red Power Switch situated on the Control Panel, which is indicated by glowing of switch itself.

6.1.3 Adjust the Heating Block temperature 37.0°C by pushing the “SET” button of the equipment placed on the control panel.

6.1.4 Confirm the temperature that is shown on digital display.

6.1.5 Now the heater will start which is indicated by glowing of Red Indicator.

6.1.6 Observe 15 min. after attaining the set temperature, if the displayed temperature is stable at set temperature, then equipment is ready for use.

6.1.7 Record the Operation Details in **Annexure-I**, Titled “**Heating Block Operation Log Book**”.



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6.2 CALIBRATION:

- 6.2.1** Insert Calibrated Thermometer at five locations. Set the Heating Block Temperature at 37.0°C.
- 6.2.2** Allow the Heating Block to attain the Set Temperature.
- 6.2.3** Set the thermometer in five location of heating block (four thermometers in four corners and one in middle of heating block). After attainment of Set Temperature observed first reading of temperature at 00 minute and further temperature observed at interval of 15 Minutes, 30 Minutes, 45 Minutes and 60 Minutes for each location.
- 6.2.4** Internal calibration frequency: Yearly \pm 30 days.
- 6.2.5** Record the reading in **Annexure-II**, Titled “**Calibration Report of Heating Block**”.
- 6.2.6** PID controller calibration performs by external agency.
- 6.2.7** External calibration frequency: Yearly \pm 30 days.

7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure – I	Heating Block Operation Log Book	
Annexure – II	Calibration Report of Heating Block	

ENCLOSURES: SOP Training Record.

8.0 DISTRIBUTION:

- Controlled Copy No. 01 Quality Assurance
- Controlled Copy No. 02 Microbiology
- Master Copy Quality Assurance

9.0 REFERENCES:

Not Applicable

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By



PHARMA DEVILS

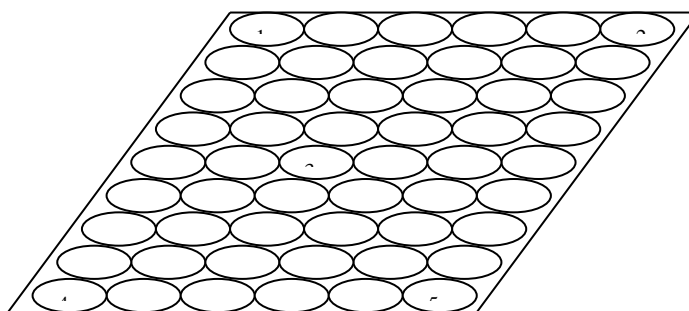
MICROBIOLOGY DEPARTMENT

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ANNEXURE – II CALIBRATION REPORT OF HEATING BLOCK

Instrument ID No.		Make	
Calibrated Thermometer ID No.		Thermometer Calibration Due Date	
Calibration Date		Calibration Due Date	
Calibration Start Time:		Calibration End Time:	



OBSERVATION TABLE:

S.No.	Temperature shown by Thermometer					Display Temperature	Set Temperature	Difference					Average Difference	Acceptance Criteria
	L 1	L 2	L 3	L 4	L 5			L 1	L 2	L 3	L 4	L 5		
1.							37°C						37±1°C	
2.														
3.														
4.														
5.														

Remarks: The Calibration of Heating Block Complies/Doesn't Comply as per requirement.

Microbiologist
Date:

Checked By
Date: