

# 79th TRAINING PROGRAMME OF NITUB



## TRAINING PROGRAMME ON THE USE, MAINTENANCE AND TROUBLE-SHOOTING OF COMMON MEDICAL INSTRUMENTS

**04-09 June 2022**

### *Organized by*

Network of Instrument Technical personnel and User scientists of Bangladesh (NITUB)

### *Venue*

Bangladesh University of Health Sciences (BUHS), 125/1, Darus Salam, Mirpur, Dhaka.

### *Organizing Committee*

Professor Begum Rokeya Convener  
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### *Background*

The network of Instrument Technical personnel and user scientists of Bangladesh (NITUB), a voluntary, non-profit, non-political learned society, is functioning since 1994 with the aim to improve the capability of scientists and technical personnel to use, maintain and repair of scientific equipment properly.

NITUB is regularly conducting training programmes on the use and maintenance of specific groups of instruments such as AAS, HPLC, GC, UV-VIS, IR and X-ray etc. Other than specific groups of instruments, NITUB also conducts training programme on common laboratory equipment and also on common medical instruments. NITUB has already trained more than 1107 scientists and technical personnel through its training programmes. Other than training programmes, NITUB is also conducting Instrument Repair Programme through which non-functioning scientific instruments are being repaired. So far, NITUB has repaired 1757 scientific equipment of different educational and research organizations of Bangladesh

NITUB already has organized nine training programmes on common medical instruments and the last one was organized in 2018. NITUB is getting requests from the user scientists and medical technologists from different hospitals and laboratories to organize training programme on common medical instruments on a regular basis. Therefore, NITUB plans to organize its 79<sup>th</sup> training programme on the use and maintenance of common medical instruments.

## Training Programme

The 79<sup>th</sup> training programme of NITUB will include theoretical lectures and practical training sessions on operation, maintenance and trouble-shooting of common medical instruments, such as **Microscope, Incubator, pH Meter, Colorimeter, Semiauto and Autoanalyzer, ELISA Reader Hematology analyzer, PCR, Digital Balance, X-ray** and on other routine diagnostic laboratory equipment. The training will be conducted by professors, senior scientists and NITUB technical experts.

## Participants

A maximum of **20 (Twenty)** participants will be selected from among the applicants of various public/private hospitals and health centers. The detailed programme will be sent later to the selected participants. Selected participants may bring one/two of their non-functioning portable medical equipment and try to repair the instruments during the practical sessions of the training programme.

## Registration

Applications for the 79<sup>th</sup> training programme on common medical instruments should reach the **General Secretary of NITUB** on or **before 20 May 2022** in the form given in the circular. Application must be sent through proper channel **along with a training fee of Tk. 5000/- (Taka Five thousand) in the form of a bank draft, pay order or on-line pay in the name of "NITUB" (Sonali Bank Limited, Dhaka University Branch, Account No. 4405734255099)**. Training fee will include **registration, instruction materials, lunch, and tea.**

Selected participants will be informed by **30<sup>th</sup> May 2022** and the training fee of the applicants who could not be accommodated will be refunded.

## Tentative Programme

### 04 June 2022 (Saturday)

09.00 – 10.00	Inaugural Session
10.00 – 10.30	Tea / Coffee
10.30 – 11.30	<b>Lecture-1:</b> Common Medical Equipment: microscope use, maintenance and trouble shooting
11.30 – 12.30	<b>Lecture-2:</b> Quality Sample Collection, Handling and Preservation for an Effective Microbial Testing
12.30 – 13.15	<b>Practical Session:</b> Group -A: Specimen Collection Group -B: Microscope
12.30 – 13.15	Prayer & Lunch
14.00 – 16.00	Practical: Rotation of Group A and B
16.00 – 16.30	Tea / Coffee

### 05 June 2022 (Sunday)

09.00 – 10.00	<b>Lecture-3:</b> Automated Blood Cell Counter
10.00 – 11.00	<b>Lecture-4:</b> Detection of SARS-COV2 by RT-PCR
11.00 – 11.30	Tea / Coffee
11.30 – 13.00	<b>Practical Session:</b> Group -A: Automated Blood Cell Counter Group -B: RT-PCR for SARS-COV-2
13.00 – 14.00	Prayer & Lunch
14.00 – 16.00	Practical: Rotation of Group A and B
16.00 – 16.30	Tea / Coffee

### 06 June 2022 (Monday)

09.00 – 10.00	<b>Lecture-5:</b> Photometric techniques in clinical laboratory
10.00 – 11.00	<b>Lecture-6:</b> Safety in a clinical laboratory
11.00 – 11.30	Tea / Coffee
11.30 – 13.00	<b>Practical Session:</b> Group -A: Spectrophotometer Group -B: Semi Auto & Automated Biochemistry Analyzer,
13.00 – 14.00	Prayer & Lunch

14.00 – 16.00	Practical: Rotation of Group A and B
16.00 – 16.30	Tea / Coffee

### 07 June 2022 (Tuesday)

09.00 – 10.00	<b>Lecture-7:</b> Introduction of Principles of Enzyme Linked Immunosorbant Assay (ELISA) and it's trouble shooting
10.00 – 11.00	<b>Lecture-8:</b> Microtom, a useful tool in histopathology laboratory
11.00 – 11.30	Tea / Coffee
11.30-13.00	<b>Practical Session:</b> Group -A: ELISA Group -B: Microtom maintenance
13.00 – 14.00	Prayer & Lunch
14.00 – 16.00	Practical: Rotation of Group A and B
16.00 – 16.30	Tea / Coffee

### 08 June 2022 (Wednesday)

09.00 – 10.00	<b>Lecture-9:</b> Medical equipments and their principles used in diagnostic radiology and imaging
10.00 – 11.00	<b>Lecture-10:</b> Safety in radiology
11.00 – 11.30	Tea / Coffee
11.30 – 13.00	<b>Practical Session:</b> Group -A: X- ray/ imaging Group -B: Ultra sonogram
13.00 – 14.00	Prayer & Lunch
14.00 – 16.00	Practical: Rotation of Group A and B
16.00 – 16.30	Tea / Coffee

### 09 June 2022 (Thursday)

09.00 – 10.00	<b>Lecture-11:</b> Use and maintenance of small laboratory instruments
10.00 – 11.00	<b>Practical Session</b> Group -A: pH Meter, Incubator Group -B: Sonicator, Digital Balance, Dessicator
11.00 – 11.30	Tea / Coffee
11.30 – 13.00	<b>Practical Session:</b> Rotation of Group A and B
13.00 – 14.00	Prayer & Lunch
14.00 – 16.00	Open discussion, Concluding Session and Certificate Distribution

**MAINTENANCE OF COMMON MEDICAL INSTRUMENTS.**

**04-09 June 2022**

**APPLICATION FORM**

**Name of the applicant :**

**Date of birth :**

**Academic qualification :**

**Designation :**

**Institution/Organization  
with address :**

**Phone and Cell number :**

**E-mail Address :**

**Any previous training,  
If yes, please specify :**

**Date: Signature of the applicant**

**Recommendation from the Head of  
Institution / Organization.**

**Date: Signature :  
Name :  
Designation :**