

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT DEPARTMENT OF BIOSCIENCE AND ENGINEERING

COMMON REQUISITION FORM FOR EXTERNAL APPLICANTS

1.	Name of Applicant:			
2.	Name & Address of the Organization/Institute:			
3.	Contact Number:			
4.	Email ID:			
5.	Name of the Laboratory intend to be used:			
6.	Name of the Instrument to be used:			
7.	How long the instrument to be used? (In hours):			
8.	Purpose of Usage: Training/Project/Consultancy/Others :			
9.	Result Delivery: E-mail CD* (By Hand) Pen-drive* (By Hand)			
10.Payment details				
	(i) Amount Paid:			
	(ii) Date of Payment:			
	(iii) Transaction ID/Reference Number:			



11. Storage conditions of samples in detail:		
12. Confirm the following:	Non-Corrosive	
13. Recommendation from Guide/Supervisor (Only	for institutional samples)	
Name of Guide/Supervisor: Institute & Department:		
Certify that Mr/Ms/Mrs/Dr working under my guidance and he/she is using (Name of the equipment to be used) for his/he	academic research purpose only.	_ is
Signature of Student/Scholar Date:	Signature of Guide (with date)	

Place:

Terms and conditions

• All the supporting consumables like solvents/reagents/tubes/other relevant materials should be given by the user.

Seal:

- Only the test results will be provided. If any interpretation of the results needed, it should be done by the user only.
- *- The test results will be shared through Email/CD/Pen-drive of the user.
- Payment can be done through UPI only.
- The sample should be brought by the user on the day of analysis/test in appropriate storage conditions. If any sample is left after the analysis, it will be returned to the user.



The detailed instructions for using each equipment is mentioned below.

(1) <u>3D Bio-printer</u>

- The user should indicate the nature of the sample: _____
- The user should have an approximate idea of pressure, print speed, temperature etc. (Print parameters) while submitting the sample.
- If the ink is developed by the user, the ink should be uniform without any clumps. The viscosity of the ink should be in the printable range (Please refer to specifications of BioX Gen III bioprinter).
- Please specify if the ink is mixed with the cells.
 If yes, specify the cells used:



- > The print model should be provided in .stl or Google formats.
- The printer uses DNA studio, which has capability of drawing sample structures, however the time required for drawing using DNA studio will be payable.
- 100mm Petri dish, well plates (6, 12, 24, 48, 96) and glass slides can be used for printing. If the model needs to be transported attached on the print surface, the printing glassware should be brought by the user.

(2) Nanodrop Spectrophotometer

- Minimum Sample Required: 10μL
- Solvent should be non-corrosive to all types of plastics.
- Samples should be prepared in water or buffer.
- Samples prepared in organic solvents cannot be used.
- Analysis Details

,	Material: DS DNA	SS DNA	RNA		
	Oligo DNA	Oligo RNA			
Protein* (BCA, Lowry, Pierce 660, Bradford)					
	Wavelength: OD 600				
	Custom Wavelength (M	lention)	nm	1	
	Custom Wavelength Ra	nge:	nm to	nm	

*Standard/Reference values should be provided. If reference values are to be performed, it will be considered as different samples.



(3) Fluorescent Microscope

- > The biological specimen should be transparent and sealed on a glass slide.
- Non-transparent cannot be observed and imaged.
- The sample should be fixed on the glass slide and stained with a fluorophore or a fluorophore-conjugated antibody.
- Samples will be charged depending on the number of minutes/hours used.

(4) <u>High Performance Liquid Chromatography (HPLC)</u>

- > The samples must be brought along with the solvent used for detection.
- > For quantification, the standard of the sample solution must be brought.
- All the chemicals and water used for the solvent preparation must be of HPLC grade only.

NB: The solvent must be compatible with C18 column

(5) <u>RT PCR</u>

- Only RT PCR equipment is provided. Hence all the supporting materials (mentioned below) has to be brought for performing the test.
 - ✓ cDNA 100x/appropriate dilution has to be done.
 - ✓ SYBR Mix or any such fluorescent DNA binding dye has to be used in the form of whole PCR Mix.
 - ✓ 100/200 μ L BR white tube with transparent cap.
 - ✓ Pipette tip of 2-20 µL
 - Primers: 2 Primers should be designed for amplifying the product in the range of 150-250 bp.
- > Only molecular biology grade water can be used.



Declaration

l,	(Name) have read all the terms and
conditions mentioned above and accep	t the same.

Signature of Applicant

Place:

Date:

For Office Use only

Permission Remark:			
Payment Details			
Receipt No:	Amount:	Date:	

Signature of Lab in-charge

Head of the Department, BSED