



NIQ No: 18/IISER/Tirupati/NIQ/2021-2022

Date: 25.02.2022

**NOTICE INVITING QUOTATION**

Item rate sealed quotation are invited by the undersigned on behalf of Director IISER Tirupati for the following work.

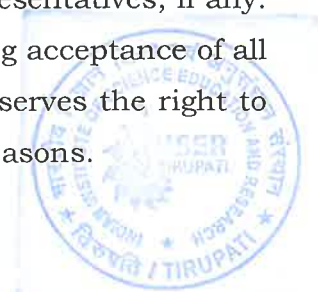
Sl. No	Name of Work	Time Allowed	Start Date of Bid	End Date & time of Bid	Opening Date & time of Bid
1	Providing Ductable Air conditioning in Cell Culture Room at UG building for IISER Tirupati permanent campus, Yerpedu Mandal, Andhra Pradesh.	30 Days	25.02.2022	03.03.2022 at 03:00 p.m.	03.03.2022 at 03:30 p.m.

Quotation can be obtain from IISER Tirupati website

<http://www.iisertirupati.ac.in/tenders/>

**TERMS AND CONDITIONS**

- 1) Please fill the Check list provided and submit the necessary supporting documents along with the quotation.
- 2) No advance payment shall be made by IISER Tirupati.
- 3) The applicant must be a registered contractor, and should have executed similar works like providing ductable air conditioning systems in any reputed organizations / government institutes, and the proof of same has to be submitted along with the quotation, **failing to produce the proof will lead to disqualification of the agency from this bid.**
- 4) All agencies need to submit their quotation in hard copy duly attested, in a sealed cover so as to reach the office on or before 3 PM on 03/03/2022. **Quotation received after the date & time specified above shall not be accepted. Any delays, postal delay etc. will not be entertained.** Agency should quote for all the items in the BOQ. The bid shall be submitted in the original bid document (as uploaded by the IISER, Tirupati) super scribing the name of work. Quotations will be opened on the same day i.e., 03/03/2022 at 3.30 PM in the presence of bidder or their authorized representatives, if any. The offer of the firm should be commercially clear including acceptance of all terms and conditions of this tender by the firm. IISER reserves the right to accept or reject all the quotations without assigning any reasons.





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INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI  
(An Autonomous Institution of Ministry of Education, Govt. of India)  
Transit Campus: C/o. Sree Rama Engineering College, Karakambadi Road,  
Mangalam (P.O.), Tirupati, Andhra Pradesh – 517 507.

- 5) Time period for completion of work shall be **(30) Days** from the date of placing the confirm order by IISER Tirupati. The act of backing-out after quotation will debar such agencies for participating in future quotations of IISER Tirupati. Bidder may e-mail queries on [engineering@iisertirupati.ac.in](mailto:engineering@iisertirupati.ac.in) or submit to the IISER Tirupati office in hard copy on all working days before a day of the submission date of quotation.
- 6) Quoted rates should be inclusive of cost of all the materials, labour cost, GST, octroi, duties, cost of sample and fees towards testing of materials in labs, royalties etc. complete. Nothing extra shall be paid.
- 7) All approved makes shall be as specified in BOQ and as per CPWD specifications, agency should put-up technical data and obtain prior approval on makes of various materials of IISER Tirupati before taking-up work.
- 8) The successful agency shall make his own arrangement for all Tools & tackles for work etc complete in view of completion of work. Electricity shall be provided free of cost to agency at one source, agency should make own arrangement to safely tap of power from source to work location.
- 9) TDS and other applicable taxes and cess will be deducted from the bills as of the work.
- 10) Security deposit @ 2.5% shall be deducted from RA Bills. The same shall be released after satisfactory completion of **01 (One) year** DLP from the date of handing over.
- 11) Specification for the work to be carried out as per BOQ, latest CPWD specification, IS specifications & as per instruction of IISER Tirupati wherever CPWD/ IS specification are not available.
- 12) The contractor shall ensure that minimum wages should be paid to the labour and employees in accordance with labour laws.
- 13) Agency to submit computerized measurement and abstract sheets to IISER Tirupati for payments.
- 14) Amount quoted for items should be as specified in the BOQ.

*V. Suresh Kumar*

**Executive Engineer (E), IISER Tirupati**

On behalf of Director IISER, Tirupati



## TECHNICAL SPECIFICATIONS

1. The system shall be designed, manufactured and tested in accordance with the CPWD, General Specification for heating, ventilation & Air conditioning (HVAC) works – 2004, Internal EI - 2005 and latest Indian Standards, as specifically mentioned in tender document.
2. The ductable split AC should be microprocessor-based Ductable Air conditioning unit with scroll type compressor along with first charge of refrigerant complete with all components & controls, electrical cabling, canvas connections, electronic expansion valve, condensing unit, condenser fan, liquid receiver and Etc.as required.
3. The indoor unit should be high static 4.0 TR with minimum airflow of 1000 CFM of capacity ductable ceiling suspended indoor unit with corded remote to control the temperature. The indoor unit is connected with outdoor unit with suitable copper piping
4. The copper piping should be insulated with superlon insulation of minimum thickness of 20mm. The ductable AC should work in an ambient condition of 40 degrees Celsius. The refrigerant in the unit should be of any green gas.
5. The HEPA modules should be inbuilt with a fan with 3 speed controller for increasing the static pressure of the HEPA. (Make – Envirco Mac 10).
6. The section of filters shall be normally designed for deep folded disposable synthetic fibers for Class EU13 with efficiency of 99.97 % down to 0.3 micron. The filters should pass a minimum of 400 To 600 CFM & a pressure drop of 25 mm of WG.
7. All test certificates issued by the manufacturer and all types routine test certificates shall also be furnished before the final payment of the contract.





## **COMMERCIAL TERMS AND CONDITIONS**

### **2.1 General:**

The works awarded by these specifications, wherever installation and commissioning along with supply is included shall be treated as indivisible works contract.

### **2.2 Prices:**

The price quoted shall be inclusive of all taxes & GST and duties as applicable. Nothing extra shall be paid separately by the department.

### **2.3 Erection equipment:**

The successful tenderer shall make his own arrangement for all Tools & tackles for dismantling / erection of the equipment.

### **2.4 Test certificate:**

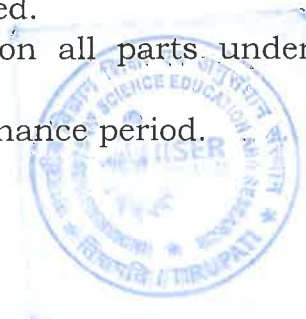
The copies of all routine and test certificate of the equipment carried at the manufacture's premises or otherwise shall be furnished to the consignee.

### **2.5 Guarantee and warranty:**

The contractor shall guarantee the entire installation as per specifications both for components and for system as a whole. All equipment's shall have guaranteed for one year from the date of acceptance against unsatisfactory performance or break down due to defective materials, design, manufacture or installation. The work shall be covered by the condition that the whole installation or any part /material there of found defective within one year from the date of taking over shall be replaced or repaired by the contractor at free of charge as decided by the department.

The warranty shall cover consequential damages to the equipment supplied and installed, due to poor workmanship or materials. All such repairs shall be done promptly within a reasonable period. The warranty period will commence from the date of acceptance of the equipment as fitting for service or handing over whichever is later and will cover the following:

- a. Quality and performance of materials used.
- b. Safe mechanical and electrical stress on all parts under all specified conditions of Operation.
- c. Satisfactory operation during the maintenance period.





**2.6 After Sales Service:**

The contractor shall ensure adequate and prompt service from of maintenance personal and spares as and when required with a view to minimize the break down period.

**2.7** After testing, commissioning, the work shall be handed over to the department. There after contractor shall maintain the whole installation for the period of one Year.

**2.8** During Maintenance period, the contractor shall submit the fortnightly perform test, checking of general operating state of all control panels etc.

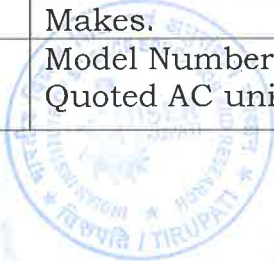
**2.9** List of items which need replacement during servicing shall be submitted to department. The replacement shall be done without claiming any extra payment during maintenance period.

**LIST OF APPROVED MAKES OF MATERIALS**

S.No	Material	Make
1	Ductable AC	Daikin/ Mitsubishi
2	Ducting Sheet	JSW / Tata Steel/ Equivalent
3	Ducting Insulation	K-Flex/ Twiga/ Equivalent
4	Diffuser	Cosmos/ System Air/ Equivalent
5	UPVC Pipe	Finolex/Supreme/ Equivalent
6	HEPA Module	Envirco MAC 10/ Dyna Filter/ American Air Filter/ Equivalent

**CHECK LIST\* (Mandatory) to be filled by agency**

Sl. No	Description	Response
1	PAN Number.	
2	GSTIN Number.	
3	Declaration for Approved Makes.	
4	Model Number & details of Quoted AC unit.	





**SCHEDULE OF QUANTITIES**

**Name of Work:** Providing Ductable Air conditioning in Cell Culture Room at UG building for IISER Tirupati permanent campus, Yerpedu Mandal, Andhra Pradesh.

S. No	Description of Items	Unit	Qty	Rate	Amount
1	Supply Installation testing and commissioning of ceiling suspended ductable Air conditioning unit of capacity 4.0 TR with a minimum airflow of 1000 CFM. The unit should be complete with indoor and outdoor units. The outdoor unit consists of condensing unit, microprocessor control panel, scroll compressor, condensing fan, liquid receiver & Etc. And the indoor unit consists of blower fan, evaporator coil and a controller connected with corded remote controller for controlling the temperature.	1	Each		
2	Supply installation testing and commissioning of hard refrigerant copper piping of suitable size with 13 mm thick nitrile insulation (Both Suction & Discharge) and fittings like elbows, couplers, tee, joints, brass fittings, U loops, expansion loops Etc with supports at every 5 feet of interval.	20	Metre		
3	Supply & fixing of ducting with supports, flanges, felts, sealants, fasteners etc. (sheet thickness, zinc coating, joinery details and support spacing to be as per IS 277 / IS 655 for site fabricated ducts).				
3.1	24 G	28	Sqm		
4	Providing and fixing of filter plenum for 600-1000 CFM with terminal HEPA filters with 99.97 % efficiency down to 0.3 microns for clean room area with extra fan inbuilt with HEPA with 3 speed controller for creating the static pressure with necessary mounting frame work, perforated aluminium sheet complete as per specifications and as required				
4.1	size - 600*600	2	Each		
5	Supply and installation of Supply air diffusers of extruded aluminum with VCD, powder coated as specified and complete with Flush or stepdown, 20mm flanges with PVC gasket, removable core type, square, rectangular or as shown on drawings. 1-way, 2-way, 3-way as specified.	2	Sqm		





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6	Thermal and acoustic insulation				
6.1	Supply and fixing of 13 mm thick nitrile rubber / cross linked polyethylene duct insulation with factory backed aluminium foil.	30	Sqm		
7	Supply and fixing of acoustic lining of ducts with 25 mm thick, density 48 kg/Cum resin bonded glass fibre insulation rigid board fixed in frame work as per specifications covered with reinforced fibre glass tissue and finished with 0.50 mm perforated aluminium sheet.	5	Sqm		
8	Supply and fixing of 25mm size hard PVC pipe for drain with 6mm thick insulation for avoiding the condensation. Necessary supports as required as per specification.	15	Metre		
<b>Total</b>					

**Total Amount in Words:** \_\_\_\_\_  
\_\_\_\_\_

**Note: -**

- Amount quoted above shall be inclusive of GST, transportation, statutory, labour fees etc. nothing extra shall be payable.

*V. Jayaraman*

**Executive Engineer (E), IISER Tirupati**  
On behalf of Director IISER, Tirupati



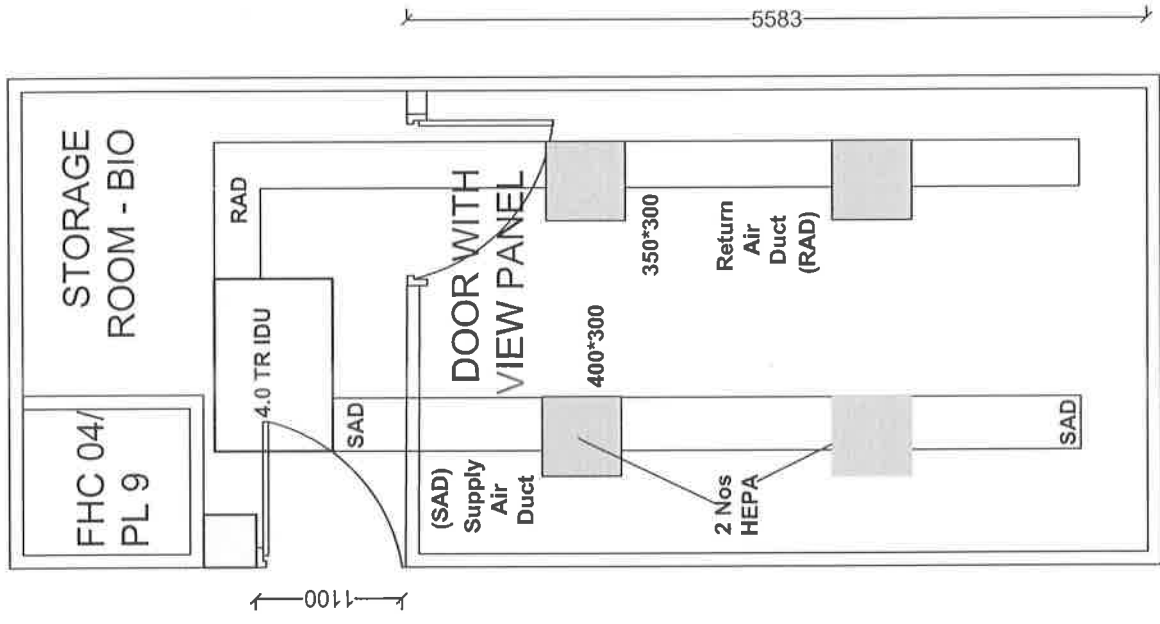
**(To be filled by the Agency)**

**Signature of the bidder :**

**Name of the Agency :**

**Mobile Number & E-mail ID :**

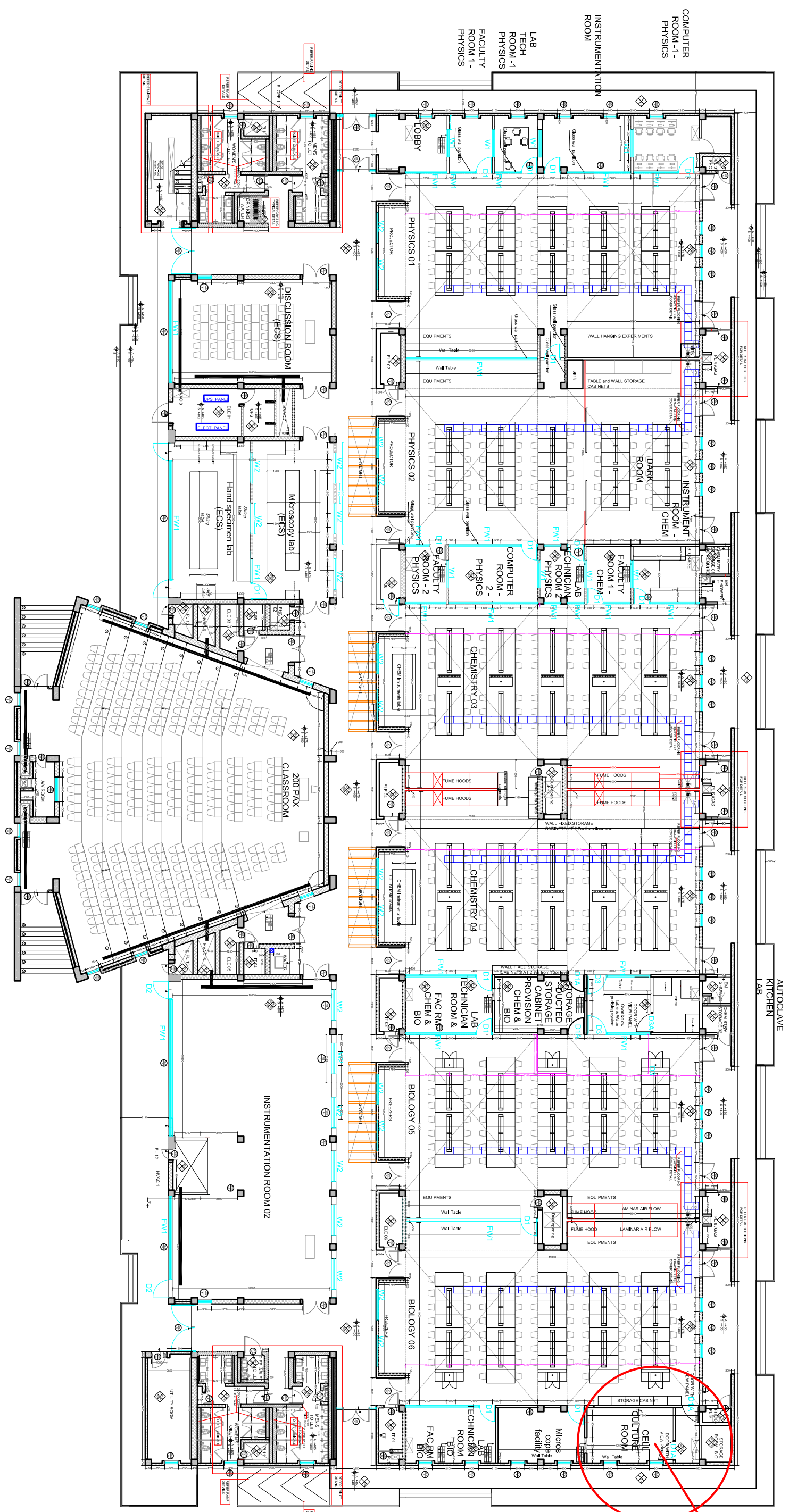
**Correspondence Address :**



*(Signature)*  
 (A/E)

# CELL CULTURE ROOM





COMPUTER ROOM 1 - PHYSICS

INSTRUMENTATION ROOM

LAB TECH ROOM 1 - PHYSICS  
FACULTY ROOM 1 - PHYSICS

INSTRUMENT ROOM - CHEM

TECHNICIAN ROOM 2 - PHYSICS  
COMPUTER ROOM 2 - PHYSICS  
FACULTY ROOM 2 - PHYSICS

LAB TECH ROOM 2 - PHYSICS

CHEMISTRY 03

CHEMISTRY 04

LAB TECHNICIAN ROOM & FAC ROOM CHEM & BIO

BIOLOGY 05

BIOLOGY 08

LAB TECHNICIAN ROOM & FAC ROOM CHEM & BIO

CELL CULTURE ROOM

AUTOCLAVE  
KITCHEN  
LAB

INSTRUMENTATION ROOM 02

UTILITY ROOM

PROPOSED CELL CULTURE