



INDIRA GANDHI INSTITUTE OF TECHNOLOGY SARANG,
DHENKANAL (ODISHA) - 759 146

(An Autonomous Institute of Govt. of Odisha)

IGIT/Elect
Advt. No. 47


Date: 29-01-19

Invitation for Quotation

For and on behalf of IGIT Sarang, sealed quotations are invited from eligible reputed agencies / vendors / manufacturer / suppliers having valid GST registration/PAN/TIN clearance for works under laboratory development of Electrical Engineering Department. The details specifications are given in the Annexure which is also available in the office of Electrical Engineering Department and our website www.igitsarang.ac.in. The detail quotation completed in all aspect may be submitted in sealed envelope in the office of the Director I.G.I.T. Sarang, Dist. – Dhenkanal – 759146 (Odisha) by Speed Post / Registered Post under strong sealed cover marked as “Quotation for Energy Conversion Lab” for the Department of Electrical Engineering.

Important Dates & Time

| Sl. No. | Particulars | Important Dates | Time |
|---------|--|-----------------|-----------|
| 1 | Date of notification | 29/01/2019 | 10:30 A M |
| 2 | Last date & time for submission of quotation | 19/02/2019 | 2:00 PM |
| 3 | Date & time of opening of quotation | 20/02/2019 | 11:00 AM |


DIRECTOR
29/01/2019
S.M.

Copy to:

1. Accounts Officer for information and necessary action
2. Dean FARC for information and necessary action
3. Dr. S.Sethi, Asso. Professor & Prof. in charge, Institute Website for kind information and for uploading in the institute Website.

Energy Conversion Laboratory (Room No-105)

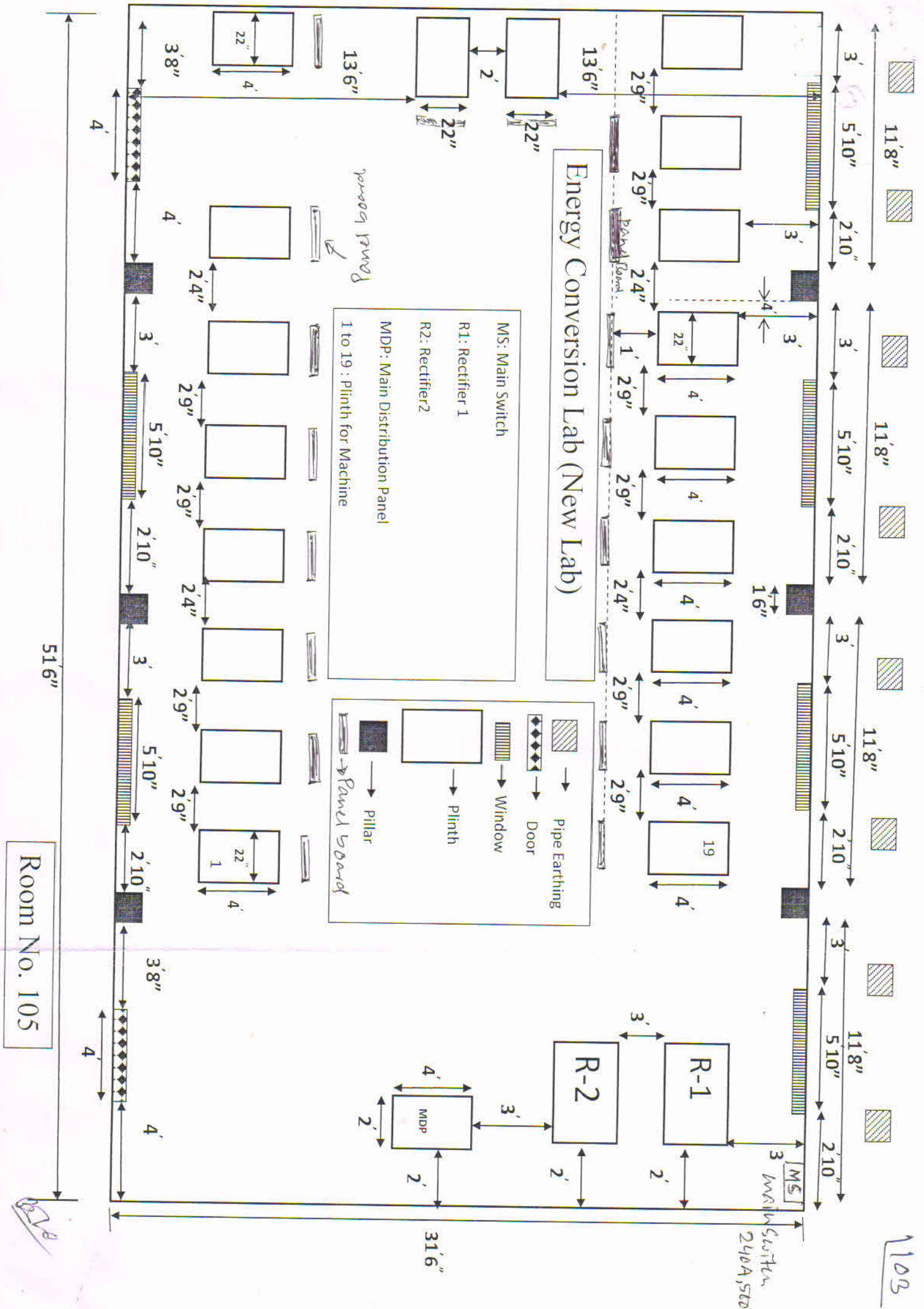
(Format for billing the bid)

| Sl no. | Description of the materials with detail | Specifications | Quantity | Cost unit per in Rupees | Total cost in Rupees including all taxes and all charges |
|--------|--|----------------|-------------|-------------------------|--|
| 1 | Service cable(3-phase) | 76A | 60m | | |
| 2 | Main switch | 240A,500V | 1no | | |
| 3 | Cable | 76 A | 6m | | |
| 4 | Copper cable | 38A | As required | | |
| 5 | Main distribution panel (MDP)with following fittings | 240A,500V | 1no | | |
| | a) Main switch(handle type) for AC | 60A,500V | 4nos | | |
| | b) Main switch(handle type) for AC | 60A,500V | 4nos | | |
| | c) Copper Bus Bars for 3-phase and DC supply | | 6nos | | |
| 6 | Sub Distribution Panel(SDP)/box with following fittings | 60A,500V | 8nos | | |
| | a) Main Switch (AC) | 15A,500V | 19nos | | |
| | b) Main Switch (DC) | 35A, 300V | 19nos | | |
| | c) MCB | | 34nos | | |
| | d) Bus bar | | 8 sets | | |
| 7 | Cables | 15A, | As required | | |
| 8 | Panel board a) Iron Chanel b) Bakelite (L=2'. H=2.5") c) Ammeter 20A d) Voltmeter 500V e) Handle main switch(15A,500V)AC f) Indicators g) Fuses for AC and DC | | 19sets | | |
| 9 | plinth | 22"x4' | 19nos | | |
| 10 | Plinth | 2'x4' | 1no | | |
| 11 | Plinth | 3'x4' | 2no | | |
| 12 | Pipe earthing with copper wire for connections | | 8nos | | |

Energy Conversion Laboratory (Room No-105)

| Sl no. | Description of the materials with detail | Specifications | Quantity | Remarks |
|--------|--|----------------|-------------|--|
| 1 | Service cable(3-phase) | 76A | 60m | Pole to main switch |
| 2 | Main switch | 240A,500V | 1no | |
| 3 | Cable | 76 A | 6m | Min switch to main distribution panel(MDP) |
| 4 | Copper cable | 38A | As required | MDP to Sub Distribution bus/box (SDB) |
| 5 | Main distribution panel (MDP) each consisting of the following items (a-c) | 240A,500V | 1no | |
| | a) Main switch(handle type) for AC | 60A,500V | 4nos | For controlling AC supply to SDB |
| | b) Main switch(handle type) for AC | 60A,500V | 4nos | For controlling DC to SDB |
| | c) Copper Bus Bars for 3-phase and DC supply | | 6nos | 4nos for AC 2nos for DC |
| 6 | Sub Distribution Panel(SDP)/box each consisting of the following items (a-f) | 60A,500V | 8nos | 4nos for AC and 4nos for DC |
| | a) Main Switch (AC) | 15A,500V | 19nos | For controlling each setup |
| | b) Main Switch (DC) | 35A,300V | 19nos | For controlling each setup |
| | c) MCB | | 34nos | For each setup |
| | d) Bus bar | | 8 sets | |
| 7 | Cables | 15A, | As required | MCB to penal boards |
| 8 | Panel board a) Iron Chanel b) Bakelite (L=2'. H=2.5") c) Ammeter 20A d) Voltmeter 500V e) Handle main switch(15A,500V)AC f) Indicators g) Fuses for AC and DC | | 19sets | For each set up |
| 9 | plinth | 22"x4' | 19nos | For machines |
| 10 | Plinth | 2'x4' | 1no | For Main Distribution Penal (MDP) |
| 11 | Plinth | 3'x4' | 2no | Rectifiers |
| 12 | Pipe earthing with copper wire for connections | | 8nos | For room no 105 |

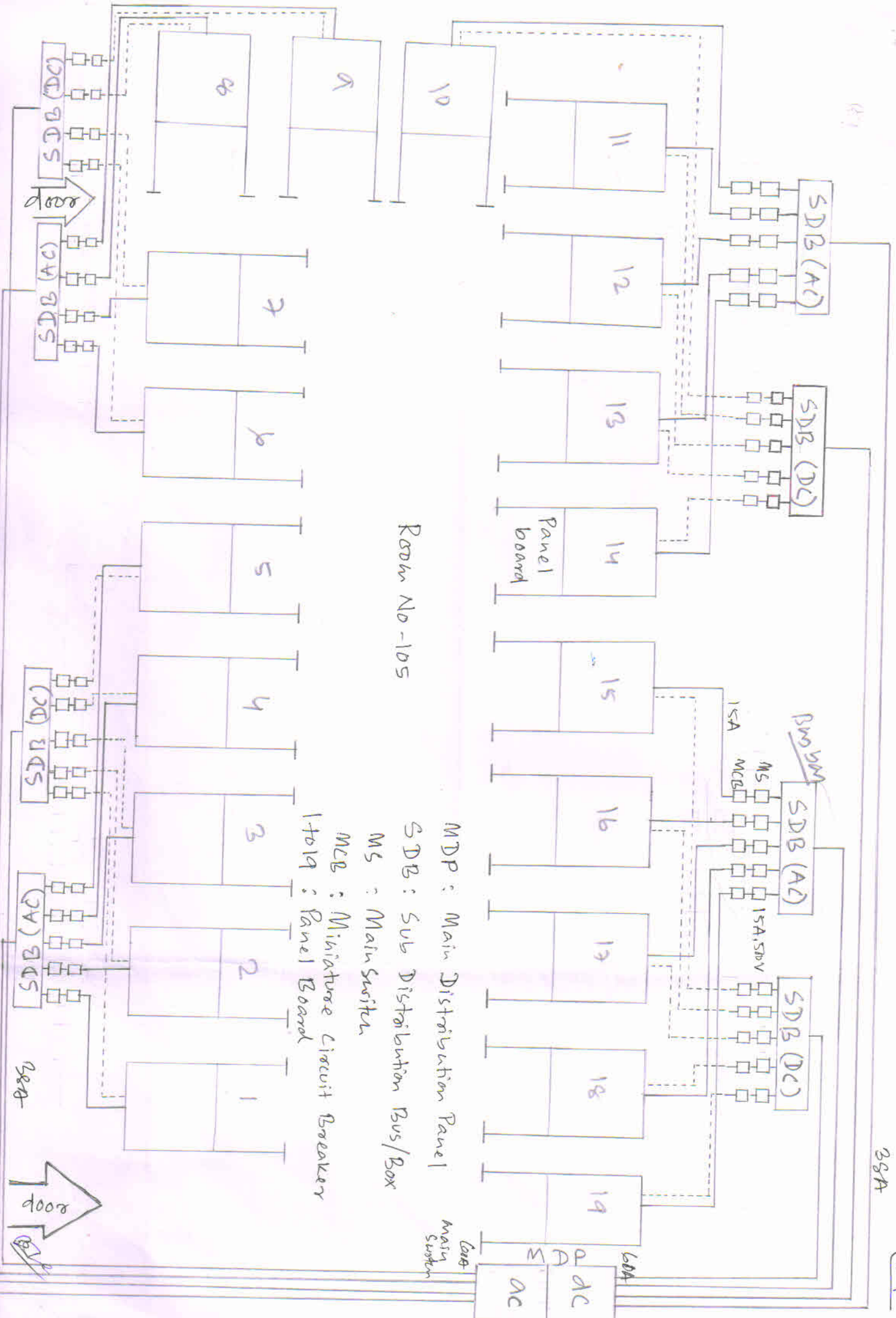
BTR



List of the Machines to be installed for Energy Conversion Laboratory (New Lab)

| Plinth no | Machine Setup | Specifications |
|-----------|---|---|
| 1 | Induction Generator with D.C. shunt motor as suitable prime mover | induction generator 415V, 3 kVA, 50 Hz, 3 phase A.C power supply D.C Shunt Motor 220V, 5 kW, D.C power supply |
| 2 | Synchronous Generator Suitable Prime mover | Alternator: 415V, 3 phase, 3 kVA, 50 Hz A.C power supply D.C Shunt Motor, 220V, 5 kW, D.C power supply |
| 3 | Permanent Magnet Synchronous Motor Drive and other accessories | 415V, 5hp, 50 Hz, 3 phase A.C power supply with belt and pulley arrangement and spring balance fitted there on |
| 4 | Switched Reluctance Motor | 415V, 5hp, 50Hz, 3-phase AC power supply with belt and pulley arrangement and spring balance fitted there on |
| 5 | Synchronous Motor with D.C shunt Generator and other accessories | Synchromotor 415V, 5hp, 3 phase, 50 Hz as power supply DC Generator: 220V, 5 kW, D.C power output |
| 6 | Squirrel cage Induction Motor | 415 V, 5hp, 3 phase, 50 Hz A.C power supply |

Total load = 50KVA (approx)

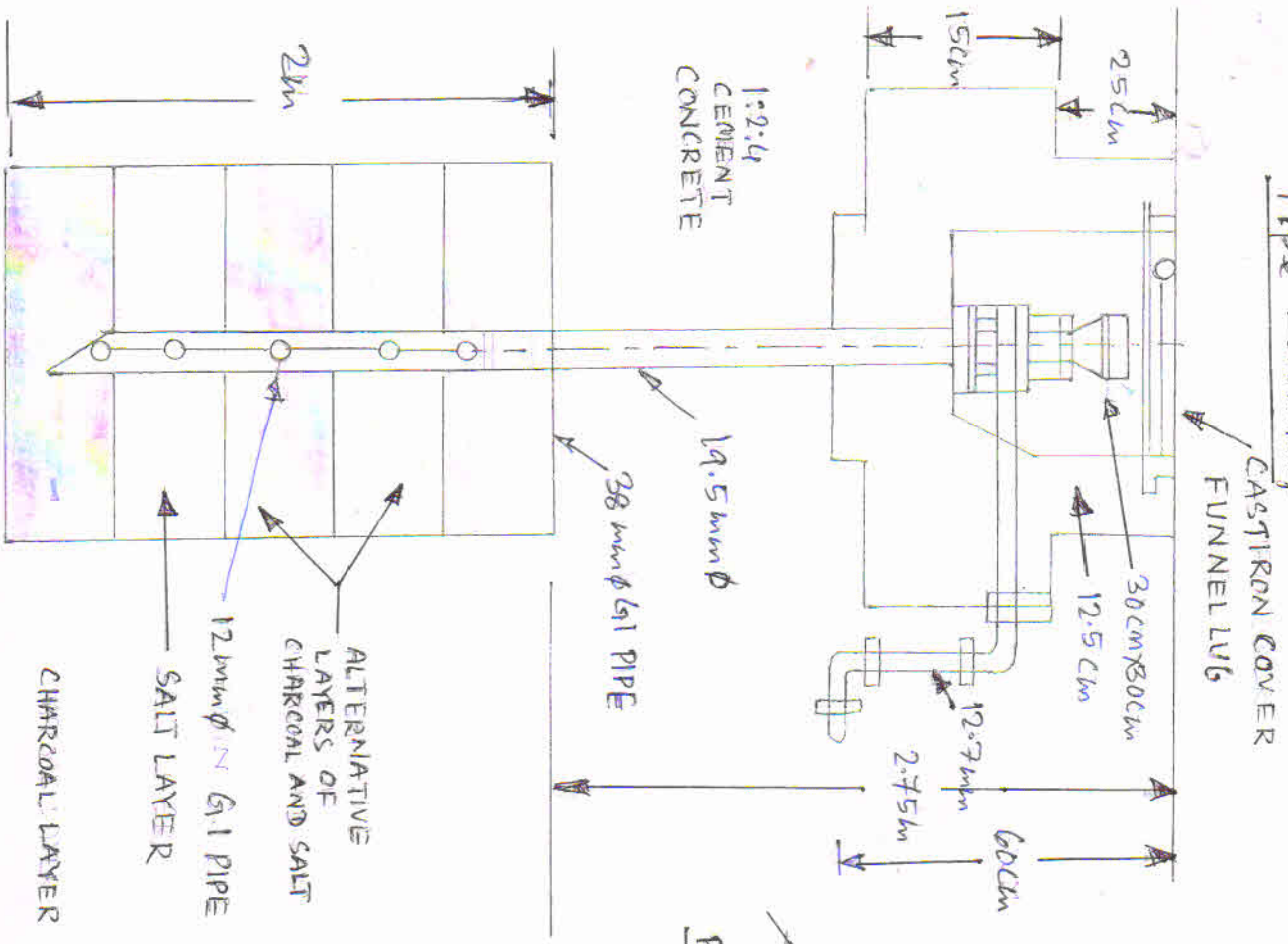


Room No-105

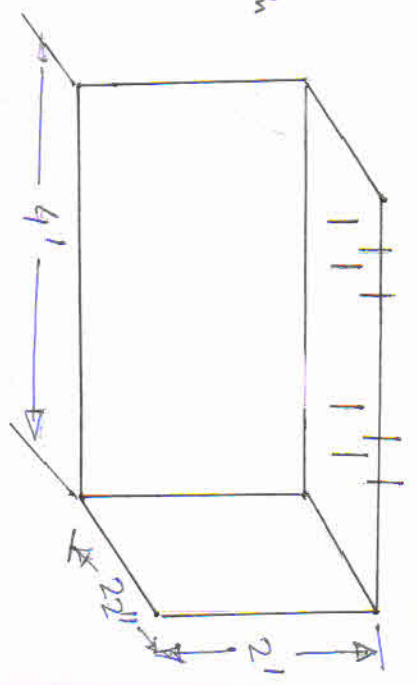
- MDP : Main Distribution Panel
- SDB : Sub Distribution Bus/Box
- MS : Main Switch
- MCB : Miniature Circuit Breaker
- 1 to 19 : Panel Board

38A

Pipe Earthing



PLINTH DIMENSION DETAIL



PANEL BOARD DETAILS

