

# MAHARASHTRA ACADEMY OF ENGINEERING EDUCATION AND RESEARCH

S.NO. 124, PAUD ROAD, KOTHRUD, PUNE-411038, MAHARASHTRA, INDIA

# REQUEST FOR QUOTATION

Maharashtra Academy of Engineering Education and Research, Pune invites the quotations from reputed civil contractors for the Proposed construction work,

Civil works like site preparation, excavation, substructure work, PCC, RCC, Masonry, plastering and waterproofing as per scope of works mentioned in Bill of Quantities (BOQ) including Labour, Material, P&M, Tools & Tackles etc.

Located at,

Site Address: - S. No. 88/1, Tivim, Bardez, North Goa

Requisite supporting Documents are available for downloading from,

https://mitwpu.edu.in/tender-notices

Link will be active till 21<sup>st</sup> October 2025, 5 pm and last date for submission of priced BOQ would be 28<sup>th</sup> October 2025, 5 pm.

Please note that, quotes received beyond this period will not be entertained.

MAEER, Pune reserves right to accept/reject any/all quotations without assigning any reason thereof.

Duly signed/stamped priced quotes on respective company letterheads to be addressed to,

Mr. Amit Bhosale, Senior Manager-Purchase, MIT WPU, Pune

And e-mailed to,

amit.bhosale@mitwpu.edu.in

Contact no.: - 7249533303

# Tender Documen t Vol - II

# **Bill of Quantities**

Propose Accadamic Building MIT WPU GOA





Sun	nmary	Dr. Vishwanath Karad  MIT WORLD PEACE  UNIVERSITY   PUNE  110-POLOGY, RISHMON, SOUL INVOLUTION A PAITHURNING
Sr.	Heading	Amount in Rs
1	Site Preparation & Mobilisation	0.00
2	Excavation & Substructure	0.00
3	Plain Cement Concrete: PCC	0.00
4	Reinforced Cement Concrete: RCC	0.00
5	Masonry & Plastering Works	0.00
6	Waterproofing works	0.00
	Total tender quote Rs.	0.00
	Add SGST @ 9.0%	0.00
	Add IGST @ 9.0%	0.00
	Total after adding GST	0.00
In Wor		0.00

## Notes:

- All items including scaffolding, disposal of debris, cleaning whether specifically mentioned in relevant item
  description or not
- Material testing as per relevant IS codes is included in the quoted rates.
- Expenses towards labour licenses or any other fulfilment of statutory requirements as per the Government rules and regulations are included in the quoted rates.
- Contractor to provide barricade with supporting system as approved by consultant in front of the building for the full length required and 3 meter height. Quoted rates should include the cost of providing and removal after completion of works.
- Contractor to make access roads if required and quoted rates included the cost of for the same.
- Contractor to inform any additional work, additional cost details which may be required during proposed
  execution and not included in the tender drawings, BOQ etc. well in advance before execution of such
  works and provide the detailed rate analysis sheet and get written approval from the client before
  executing the works. Any claims of the extra and additional works executed without such witten approvals
  from the clients will not the acceptable and the client will not be responsible to pay against such claims.

# 1. Site Preparation & Mobilisation -ACCADAMIC

em	Description	Qty.	Unit	Rate	Amt	
				in Rs.	in Rs.	
1.1	Site preparation includes a dispose the spoil to location a Site Clearing: Clearing off the and making ground and destablishing The Benchmark	approved by the e site, levelling t the surrounding	Owner & Lo the ground, c gs_suitable_t	cal Authorities. utting shrubs, removir	ng debris etc.	
		1.00	Job		0.00	
1.2	To cordon off the existing contractor shall provide bar corrugate GI sheet for a he barricade in good condition without any cost to the owr approved temporary constru	ricade consistir ight up to 3m including remo ner, and prepar	ng of MS and to separate to oving the sa	gle/pipe posts runner he working area, ma me after completion	s, bracing & intaining the of the work	
		1.00	Job		0.00	
1.3	Establishing a container <b>Si</b> Meetings and Discussions, a protected from sun, rain, stor	rea for Site En	gineer to worl	k, should be well lit ar	nd ventilated,	
		1.00	Job		0.00	
1.4	Establishing a Labour Camp with clean living and sanita exclusive entry and exit point	tion facility for s that do not dis	the labour. T	The Labour Camp m	ust have its	All The
	To prepare and lay tempor	1.00	Job / roadways	for entry and evit o	0.00 f Machinery	Client will only Space
1.5	Equipment and Apparatus the Statutory traffic regulations in and nothing shall be paid ex authorities. Royalty charges materials shall be borne by to all heights & including arranging own arrangement.	nat shall be requested and shall be trained account of the contractor. The contractors where	uired for Mate considered fo of the restrict n and trans Transporting	erial Delivery/Constructor transporting material ions imposed by the I porting earth, debrise of material, labour, m	ction Activity.  al, labour etc. ocal statuary , and other achinery etc.	suuply connec Electrica connec
		1.00	Job		0.00	
1.6	Preparing and installing all English & Marathi, with the a construction activity and ser complete.	bility to glow in	the dark, at a	Il relevant locations to	indicate the	
		1.00	Job		0.00	
1.7	Scaffolding to be provided to IS 2750 - latest revision subefore using the scaffolding. Providing and removing a consultant for the entire dura site engineer; bracing where	bject to written djustable steel tion of the proje	approval fron tubular prop ect execution	n a certified safety engos at the locations	gineer on site	
		1.00	Job		0.00	
1.8	Temporary Godown: Provi per the instructions of the materials using Steel supp Concrete plinth not less that storm water flowing inside th per his judgement & discretic	Architect / Cor orting structure a 300 mm high e godown; size	nsultant to st with coated from the sur as per the re	ack the raw / semi- d sheet roofing and rounding ground leve	finished etc. side walls; ls to prevent	
		1.00	Job		0.00	
		1.00				

0.00

**Total of Site Preparation & Mobilisation** 

2.	Excavation & Sul	bstructu	ire (ACC	ADAMIC)	
Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
2	Excavation & Filling:				
	Earth work excavation by me etc. in all types of soils inclincluding shoring, dressing of complete as per specifications. Excavation in all types of ordin boulders of all sizes etc. inclu Cleaning away vegetation's, so a lead of 300 meters and with Maintaining all slopes as requestering, strutting, shoring Dewatering (Pumping out groups and the strength of the str	luding soft arthe sides, tri the surplus s, drawings & nary and hard ding: correspondini ired  ound water) ckles and man evels of groun insultant more than the bottom of fe using concret m x 1m x 1m  terial in the s area or at an	nd hard rock mming, ramm earth within as directed by a soils, hard micavated mater g lifts of excavated materials and excavated materials and excavated materials g lifts of earth g	up to depths menti- ing and preparing to a distance of 150 or the Architect / Consumur, sand, includin- ials in the project site  vation,  surface, rain or storation of the architect of the arc	oned below the bed for meters etc. sultant. g removal of e area within  The water or tractor in the I not be paid ame shall be extra cost c and will be ting levering in layers not
	deposing of the still surplus edirected etc. complete.				
	Excavation in Soft Strata:				
2.1	0 -1.5 meter depth	500.00	$M^3$		0.00
2.2	1.5 to 3.0 meter depth	Rate Only	$M^3$		
2.3	3.0 to 4.5 meter depth	Rate Only	$M^3$		
2.4	4.5 meter and above depth	Rate Only	$M^3$		
	Excavation in Hard Strata:				
2.5	0 -1.5 meter depth	1800	M <sup>3</sup>		
2.6	1.5 to 3.0 meter depth	Rate Only	M <sup>3</sup>		
2.7	3.0 to 4.5 meter depth	Rate Only	M <sup>3</sup>		
2.8	4.5 meter and above depth	Rate Only	M <sup>3</sup>		
2.9	Disposing off the surplus ex nearby dumping pits/dumpin Engineer in charge, including specifications & as directed by	cavated mate g areas with g all lifts, load y the Architec	erials by mechin St. Josephing, unloading t / consultant.	h School campus io g, stacking etc. com	dentified by plete as per
		500.00	M <sup>3</sup>		0.00
2.1	Backfilling around foundation demolished structure (servan charge excavated from nearbunloading, stacking, levelling, compaction to give 95% procas directed by the Architect / v	nt quarter) de by borrow are: spreading, in ctor density et	bris / selected as including a layers not ex	d earth approved by Il leads up to 2 km, l ceeding 150 mm thic	Engineer-in- lifts, loading, ck, watering,
		800.00	$M^3$		0.00
2.11	Supplying and spreading pes Insecticides Board as directe sprayer as pre-construction a directed by the manufacturer surfaces of the sub-structure holes made in trenches at 15 II(or latest) specification & as made on the basis of plinth a of operation and vertical faces	d by the manu nti-termite, an ) per sq. m , within the tr 50 mm centre is directed by area measure is will not be m	ufacturer and sti-rodent treatment on vertical an enches, 50% to centre etc. the Engineerment only agreeasured for page 15 to 25 to	spraying the mixture ment at the rate of 7 d 5 litre per sq. m cof the emulsion to be complete all as per lin-charge. (The pay ound floor/stilt area f	uniformly by .5 litre (or as on horizontal e filled in the IS 6313 Part- ment will be for all stages
		1.00	Job		0.00
2.12	The contractor shall have to f maintain the anti-termite treate				performa to
		1.00	Job		0.00

0.00

**Total of Excavation and Substructure** 

# 3. Plain Cement Concrete: ACCADAMIC BLOCK

 Item
 Description
 Qty.
 Unit
 Rate
 Amt

 in Rs.
 in Rs.

Providing and laying of **Plain Cement Concrete (PCC)** as levelling course for foundation, basement, vertical surfaces of soil retention system and all locations of all depths with Ready Mixed Concrete conforming to IS 4926 (latest revision). Plain Cement Concrete grade **M:15** conforming to IS 456-2000 as per specifications manufactured in fully automatic batching plant and transported to site of work, having continuous agitated mixer, manufactured as per mix design of specified grade for Plain Cement Concrete work, including transportation from manufacturer site to site of work, pumping of R.M.C from transit mixer to site of laying, cost of admixtures in recommended proportions as per IS 9103 (latest) to accelerate / slow down setting of concrete, improve workability without impairing strength and durability, mechanical conveying, placing in position mechanical compaction, finishing, curing, scaffolding including necessary form work, consolidation,

#### Note:

- 1. Prior approval of Engineer in charge for the supplier of R.M.C to be taken.
- 2. On prior approval of Engineer in charge Fly ash conforming to Grade I of IS 3812 (Part I) may be used as part replacement of OPC provided uniform blending with cement is ensured in accordance with Clauses 5.2 and 5.2.1 of IS 456 2000 in the items of B.M.C and R.M.C

Foundation BED in Plain
3.1 cement concrete of Strength 324.00 M³ 0.00
M15

Total of Plain Cement Concrete 0.00

## Reinforced Cement Concrete: ACCADAMIC

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.

#### NOTES:

- a) All RCC shall be as specified and shall be carried out strictly in accordance with the drawings and specifications
- b) The rates for RCC works shall be inclusive of all depths below G.L slabs at all heights as detailed in the drawing but exclusive of cost of reinforcement unless otherwise mentioned.
- c) All coarse aggregate to be 20 mm maximum size and uniformly graded unless otherwise
- d) For all RCC items, the rates quoted shall include the following without any extra cost to
- i) Spacers to maintain clear cover for reinforcement
- ii) Fixing at correct level & in proper alignment to the inserts, pipe sleeves, pipe bends, fan
- iii) Test for concrete shall be done as per IS 456-2000 and the cost of the testing to be carried out shall be borne by the contractor.
- e) Precaution to be taken to avoid uplifting forces on the raft of water tanks
- As per the soil report, water table could be expected near the ground level and contractor is advised to use following sequence during concreting of the water tank.

- Dewatering to keep the area dry during construction.
   Plum concrete to be completed as shown in the drawing.
   Backfilling in layers and compaction for full height of the backfill as directed by the EIC,

	over the raft projection.			
4.1	RCC work including material,	equipment and	labour for all Structural members such	n as
4.1.1	For M20 Grade	R.O.	$M^3$	
4.1.2	For M30 Grade	R.O.	$M^3$	
4.1.3	For M35 Grade	9048.00	$M^3$	0.00

#### FORMWORK FOR CONCRETE:

Providing, erecting, fixing in position striking / removing and cleaning steel / plywood or any other approved material shuttering and cantering for formwork in substructure at all depths for all geometrical shapers, as per details shown in drawings and as required for specific design of formwork wherever specified, including proper bracing, ties, anchors, bolts, nuts, washers, packing plates, fasteners of adequately designed capacities, producing finished concrete surfaces, at all locations including chamfers, splays, keys, wedges, props, rails, bracings, brackets, cutting holes if specified for pipes etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete including close hacking of all exposed concrete work wherever required to receive other type of finishing after removal of form work, all materials, labour etc.complete as per specifications, drawings and as directed by the Engineer in Charge. (Area of formwork in contact with concrete shall only be measured for payment and stop boards for construction joints will not be measured for payment). Note: Prior approval of Engineer in charge to be obtained for clearance of form work for laving RCC

4.2.1	Foundations, footings, bases of columns, etc. for mass concrete and Raft.	2440.00	$M^2$	0.00
4.2.2	Columns & Shear walls	11692.00	$M^2$	0.00
4.2.3	Lintels, beams & cantilevers	15423.00	M <sup>2</sup>	0.00
4.2.4	Slabs	28158.00	M <sup>2</sup>	0.00

Reinforcement for RCC work including supplying, delivering and storing of various diameters as required at site of work transporting, de-coiling, straightening, cutting, bending, placing in position at all depths, levels and binding with 18-20 gauge, soft drawn locations annealed steel binding wire complete as per specifications and drawings. (Cost of binding wire shall be borne by the contractor & binding wire shall not be measured for payment. Rate includes cost of tests of materials by Contractor as specified in the Specifications and IS) and preparing and obtaining prior approval of bar bending schedule.

Preparing shop drawings, obtaining consultant's approval, supplying, fabricating, delivering at site, hoisting and fixing in position including all temporary staging and supporting work and making all structural steel work in accordance with the design, drawings prepared by the consultants. The rate of steel work shall include one coat of red oxide primer and two coats of enamel paint assembly, welding, jointing, building up new sections using plates / rolled section, /chs/rhs coat of fasteners, nuts, bolts and washers, pre-heating the sections to temperatures up to 250°C if thickness of the section is equal to or more than 25mm, and to temperatures up to 250°C if thickness of the section is equal to or more than 25mm, and fabrication out of the following types of structural steel material for trusses, purlins, girders, brackets, etc. with connections using plates, channels and angles, gusset plate, connection bolts, cleats, fasteners etc. as per drawing, steel conforming to 15:226 and 15:2265-GrA with minimum yield strength of 335 Mpa for plates. (Fasteners, welding electrodes, consumables will not be paid separately. Rates inclusive of necessary tests as per technical reportification. specification)

o Machanically Treated ha re of grade Eo E00 TMT: manufactured by

Metric Tonne 1495.00

## Structural Steel:

4.3

4.4

Providing and fabricating and erecting in position structural steel (All sections, plates bolts etc.) of all sizes and dimensions at all levels and positions as per drawings including bolts of various diameters, cutting, splicing, welding etc. with all nuts, bolts, sag rods, washer, shear connectors, rivets, anchor bolts, studs, welding electrodes, binding wires, base plates etc. with a coat of red oxide primer, two coats of synthetic enamel paint of approved brand, etc. complete.

> Metric 50 Tonne

**Total of Reinforced Cement Concrete** 

0.00

0.00595122 1358.562244 0.028517073 6509.963015

8587.338315

0.068678049 15678.03101

0.037617073

The Provincial Society of Congregation of Jesus

#### 5. Masonry & Plastering Works: ACCADAMIC

Item Description Qty. Unit Rate Amt in Rs. in Rs.

Providing and constructing 650 x 230 x 200 mm SIPOREX or equivalent Autoclave Aerated Concrete (AAC) blocks masonry in super structure at all levels in CM 1:6 with 10-12 mm the joints or by using the company provided Block adhesive compound in the prescribed process; with necessary scaffolding, watering, raking of joints etc. complete.

> 29691.00 0.00

Providing and constructing 650 x 230 x 150 mm SIPOREX or equivalent Autoclave Aerated Concrete (AAC) blocks masonry in super structure at all levels in CM 1:6 with 10-12 mm the joints or by using the company provided Block adhesive compound in the prescribed process; with necessary scaffolding, watering, raking of joints etc. complete.

> 0.00  $M^2$ 0.00

### Internal plastering of walls:

Providing and applying internal Cement Plaster in CM 1:4 up to average 12 mm thickness at all positions for all vertical and inclined faces of concrete, block masonry, rubble masonry, etc. including providing and fixing 200 mm wide GI Chicken wire mesh (20 x 20 mm x 24 SWG) before applying plaster on the joints of block work and RCC columns and beams; cutting and fixing with concrete nails, raval plugs, if instructed by architect or consultant, providing bands, drip moulds, grooves, scaffoldings, curing for minimum 7 days, levelling in plumb and in right angles of the room etc. complete.

5 1

52

5.3

The sand shall be screened and washed for slip content less than 5% and grade confirms to IS 383 zone II.

Plastering carried out to fill undulations in block masonry or to match line and level etc. will not be paid separately.

14845.00

# Internal plastering of walls:

Providing and applying internal Gypsum Plaster up to average 12 mm thickness at all positions for all vertical and inclined faces of concrete, block masonry, rubble masonry, etc. including providing and fixing 200 mm wide fiber wire mesh (20 x 20 mm x 24 SWG) before applying plaster on the joints of block work and RCC columns and beams; cutting and fixing with concrete nails, raval plugs, if instructed by architect or consultant, providing bands, drip moulds, grooves, scaffoldings, levelling in plumb and in right angles of the room etc. complete.

Notes:

 $M^2$ 0.00 50899 00

# External plastering of walls:

Two coats of Sand Faced plaster; providing and applying 20 mm thick sand faces cement plaster in two coats; first coat of 14 mm thickness in C.M. 1:4 and second coat of 6 mm thick in C.M. 1:4 with approved waterproofing compound and super plasticiser as per the manufacturers instructions in both the coats; including providing bands, drip moulds, grooves, curing for minimum 7 days for both the boards scaffolding, cleaning etc. complete.

### Notes:

5.5

The sand shall be screened and washed for slip content less than 5% and grade confirms

Plastering carried out to fill undulations in block masonry or to match line and level etc.

 $M^2$ 19087 00 0.00

**Total of Masonry & Plastering Works** 0.00

# 6. Waterproofing works: Accadamic Building

Item	Description	Qty.	Unit	Rate	Amt
				in Do	in Do

#### i errace water prooting:

BB COBA with IPS - Average thickness of 120 mm

Providing and laying waterproofing treatment of over terraces using brickbat COBA (Average thickness of 120 mm, slope 1:100)

Through cleaning of terrace using water

Flooding terrace by cement water (1:1:5) slurry for over 12 hours; continuously stirring the slurry and draining out after prescribed duration, washing surface with clean water. Including blocking of the rainwater outlets by cement mortar 1:4 ad removal of blocking materials after testing.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

#### N - 4 -

6.1

6.3

First layer of Brickbat COBA, waterproofing compound as per manufacturers instructions, pounding water for 7 days, cleaning after draining out of water.

Finishing layer (2nd layer) of Brickbat COBA after spreading cement slurry, waterproofing compound as per the manufacturers instructions, finished with smooth cement finish with DORI marks to prevent cracking.

Corner curbs of 300 mm radius above finished level of terrace water proofing final coat on all sides, mixing aggregates 10 - 20 mm size as per the Architect's or consultants instructions etc. complete.

 $M^2$  0.

#### Waterproofing of toilets floors:

Chemical waterproofing of the toilet floors using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the mother concrete slab; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mix instructions; sealing the under deck plumbing pipes joints using sealant paste and covering tape; sealing the wall and floor corners using sealant paste and covering tapes as per the instruction of the manufacture; coating up to at least 1 meter high on the side walls; etc. complete.

Treatment would be guaranteed for 10 years and such a guarantee shall be given in writing on

 $M^2$  0

### vvaterprooning or canthever slabs

Chemical waterproofing of the cantilever slabs using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the cantilevered concrete slabs; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and slab joints using sealant paste and covering tape; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on

 $M^2$  0

### Waterproofing of Water Tanks:

Chemical waterproofing of Underground and Overhead Water Tanks using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the concrete walls and floor of the water tanks; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and floor joints using sealant paste and covering tape; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

550.00 M<sup>2</sup> 0.00

# Waterproofing of Retaining walls & Rafts: BOX Type waterproffing

Box Type shabad stonel waterproofing of Underground Basement using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the concrete walls and floor of the water tanks; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and floor joints using sealant paste and covering tape; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

 $M^2$  0.00

Total of Waterproofing Works 0.00

# Tender Documen t Vol - II

# **Bill of Quantities**

Propose FACULTY Building MIT WPU GOA





Sun	nmary	Dr. Vishwanath Karad  MIT WORLD PEACE  UNIVERSITY   PUNE  110-POLOGY, RISHMON, SOUL INVOLUTION A PAITHURNING
Sr.	Heading	Amount in Rs
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	Total after adding GST	0.00
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#### Notes:

- All items including scaffolding, disposal of debris, cleaning whether specifically mentioned in relevant item
- Material testing as per relevant IS codes is included in the quoted rates.
- Expenses towards labour licenses or any other fulfilment of statutory requirements as per the Government rules and regulations are included in the quoted rates.
- Contractor to provide barricade with supporting system as approved by consultant in front of the building for the full length required and 3 meter height. Quoted rates should include the cost of providing and removal after completion of works.
- Contractor to make access roads if required and quoted rates included the cost of for the same.
- Contractor to inform any additional work, additional cost details which may be required during proposed execution and not included in the tender drawings, BOQ etc. well in advance before execution of such works and provide the detailed rate analysis sheet and get written approval from the client before executing the works. Any claims of the extra and additional works executed without such written approvals from the clients will not the acceptable and the client will not be responsible to pay against such claims.

# Site Propagation & Mobilication Faculty Housing

ltem	Description	Qty.	Unit	Rate	Ami
				in Rs.	in Rs
1.1	Site preparation include dispose the spoil to locatic Site Clearing: Clearing off and making ground and the The Benchmark Level etc.	on approved by the site, levelling see surroundings s	ne Owner & Loc g the ground, c	al Authorities. utting shrubs, removir	ng debris etc
1.2	To cordon off the existicontractor shall provide a corrugate GI sheet for a barricade in good condition without any cost to the approved temporary consistency.	barricade consis height up to 3n tion including re- owner, and prep	ting of MS and to separate t moving the sa	gle/pipe posts runner he working area, ma me after completion	s, bracing 8 aintaining the of the work

Establishing a container Site Office having facilities and infrastructure to support Site Meetings and Discussions, area for Site Engineer to work, should be well lit and ventilated, protected from sun, rain, storm, to have electricity connection and drink water, etc. complete.

Establishing a Labour Camp for Labour Hutments as the location approved by the Owner with clean living and sanitation facility for the labour. The Labour Camp must have its exclusive entry and exit points that do not disturb the remaining College.

All These In Vendor Scope. Client will Electrical one connection.

To prepare and lay temporary pathways / roadways for entry and exit of Machinery, Equipment and Apparatus that shall be required for Material Delivery/Construction Activity.

Statutory traffic regulations in force shall be a provided in the connection & connection Statutory traffic regulations in-force shall be considered for transporting material, labour etc. and nothing shall be paid extra on account of the restrictions imposed by the local statuary authorities. Royalty charges for excavation and transporting earth, debris, and other materials shall be borne by the contractor. Transporting of material, labour, machinery etc. to all heights & including locations where direct access is non existing and including arranging own arrangement for the same.

Preparing and installing all the relevant construction site signages, that are legible in English & Marathi, with the ability to glow in the dark, at all relevant locations to indicate the 1.6 construction activity and serve as warnings to prevent any kind of mishaps, injuries, etc. complete.

Scaffolding to be provided for execution, that shall be of Independent Scaffold Conforming to IS 2750 - latest revision subject to written approval from a certified safety engineer on site before using the scaffolding.

Providing and removing adjustable steel tubular props at the locations directed by consultant for the entire duration of the project execution of 15 months, as instructed by the site engineer; bracing wherever required; etc. complete.

Temporary Godown: Providing and constructing a temporary godown (Ground Level) as per the instructions of the Architect / Consultant to stack the raw / semi finished etc. materials using Steel supporting structure with coated sheet roofing and side walls; Concrete plinth not less than 300 mm high from the surrounding ground levels to prevent storm water flowing inside the godown; size as per the requirement of the contractor and as per his judgement & discretion etc. complete.

**Total of Site Preparation & Mobilisation** 

#### **Excavation & Substructure (FACULTY)** Item Description Unit in Rs. in Rs 2 Excavation & Filling: Earth work **excavation** by mechanical means / labour means for foundation pits, trenches etc. in all types of soils including soft and hard rock up to depths mentioned below including shoring, dressing the sides, trimming, ramming and preparing the bed for foundation and disposing of the surplus earth within a distance of 150 meters etc. complete as per specifications, drawings & as directed by the Architect / Consultant. Excavation in all types of ordinary and hard soils, hard murmur, sand, including removal of boulders of all sizes etc. including: Cleaning away vegetation's, stacking of excavated materials in the project site area within a lead of 300 meters and with corresponding lifts of excavation, Maintaining all slopes as required Benching, strutting, shoring Dewatering (Pumping out ground water) of seepage, surface, rain or storm water or subsoil water Temporary supports, tools, tackles and machinery Before excavation, reduced levels of ground surface shall be recorded by contractor in the presence of the Architect / Consultant In case contractor excavates more than the required size and depth he shall not be paid anything extra, moreover if the bottom of foundation pit / trench is uneven, same shall be made good by the contractor using concrete of grade not less than M15 at no extra Boulders of size more than 1 m x 1m x 1m size will be termed as hard rock and will be measured under hard strata. Backfilling of excavated material in the sides of trenched and / or spreading levering surplus each inside the plinth area or at any place within the plot as directed in layers not exceeding 200 mm, watering and consolidating the earth with mechanical rammer and deposing of the still surplus earth anywhere in owners premies or away from the site as directed etc. complete. Excavation in Soft Strata: 2.1 0 -1.5 meter depth 2000.00 $M^3$ 0.00 2.2 1.5 to 3.0 meter depth Rate Only M 2.3 3.0 to 4.5 meter depth Rate Only M<sup>3</sup> 4.5 meter and above depth Rate Only M<sup>3</sup> Excavation in Hard Strata: 2.5 0 -1.5 meter depth 3000 $M^3$ 1.5 to 3.0 meter depth Rate Only 2.7 3.0 to 4.5 meter depth Rate Only $M^3$ Rate Only 2.8 4.5 meter and above depth M Disposing off the surplus excavated materials by mechanical transport lead up to the nearby dumping pits/dumping areas within St. Joseph School campus identified by Engineer in charge, including all lifts, loading, unloading, stacking etc. complete as pe specifications & as directed by the Architect / consultant. All types of soils. 2.9 500.00 Backfilling around foundation and in plinth with available murrum / excavated earth / demolished structure (servant quarter) debris selected earth approved by Engineer-in-charge excavated from nearby borrow areas including all leads up to 2 km, lifts, loading, unloading, stacking, levelling, spreading, in layers not exceeding 150 mm thick, watering, compaction to give 95% proctor density etc. complete as per specifications, drawings & as directed by the Architect / consultant. 4000.00 $M^3$ 0.00 Supplying and spreading pesticides 'Chlorpyrifos' or other chemical approved by Central Insecticides Board as directed by the manufacturer and spraying the mixture uniformly by sprayer as pre-construction anti-termite, anti-rodent treatment at the rate of 7.5 itter (or as directed by the manufacturer) per sq. m or vertical and 5 litre per sq. m on horizontal surfaces of the sub-structure, within the trenches, 50% of the emulsion to be filled in the holes made in trenches at 150 mm centre to centre etc. complete all as per IS 6313 Part-II(or latest) specification & as directed by the Engineer-in-charge. (The payment will be made on the basis of plinth area measurement only aground floor/stilt area for all stages of operation and vertical faces will not be measured for payment). 1.00 Job 0.00 The contractor shall have to furnish Ten years guarantee in the a prescribed performa to maintain the anti-termite treated area 2.12 /structure free from termite. 1.00 Job 0.00

0.00

**Total of Excavation and Substructure** 

# 3. Plain Cement Concrete: FACULTY BLOCK

Item Description Qty. Unit Rate Amt

in Rs. in Rs.

Providing and laying of **Plain Cement Concrete (PCC)** as levelling course for foundation, basement, vertical surfaces of soil retention system and all locations of all depths with Ready Mixed Concrete conforming to IS 4926 (latest revision). Plain Cement Concrete grade **M:15** conforming to IS 456-2000 as per specifications manufactured in fully automatic batching plant and transported to site of work, having continuous agitated mixer, manufactured as per mix design of specified grade for Plain Cement Concrete work, including transportation from manufacturer site to site of work, pumping of R.M.C from transit mixer to site of laying, cost of admixtures in recommended proportions as per IS 9103 (latest) to accelerate / slow down setting of concrete, improve workability without impairing strength and durability, mechanical conveying, placing in position mechanical compaction, finishing, curing, scaffolding including necessary form work, consolidation,

#### Note:

- 1. Prior approval of Engineer in charge for the supplier of R.M.C to be taken.
- 2. On prior approval of Engineer in charge Fly ash conforming to Grade I of IS 3812 (Part I) may be used as part replacement of OPC provided uniform blending with cement is ensured in accordance with Clauses 5.2 and 5.2.1 of IS 456 2000 in the items of B.M.C and R.M.C
- Foundation BED in Plain
  3.1 cement concrete of Strength

  M15

  M3

  0.00

Total of Plain Cement Concrete 0.00

4.	Reinforced Ceme	nt Conc	rete: FA	CULTY			
Item	Description	Qty.	Unit	Rate Am			
				in Rs. in Rs			
	NOTES:						
	<ul> <li>a) All RCC shall be as specifications.</li> </ul>	fied and shall	be carried of	ut strictly in accordance with the			
				s below G.L slabs at all heights as ent unless otherwise mentioned.			
	c) All coarse aggregate to be 20 mm maximum size and uniformly graded unless mentioned.						
	d) For all RCC items, the rates quoted shall include the following without any extra or the Owner: i) Spacers to maintain clear cover for reinforcement.						
	i) Spacers to maintain clear cover for reinforcement. ii) Fixing at correct level & in proper alignment to the inserts, pipe sleeves, pipe bends, thooks, other pipe specials etc. supplied by Contractor iii) Test for concrete shall be done as per IS 456-2000 and the cost of the testing to carried out shall be borne by the contractor.						
	e) Precaution to be taken to avoid uplifting forces on the raft of water tanks. As per the soil report, water table could be expected near the ground level and contractor advised to use following sequence during concreting of the water tank. i) Dewatering to keep the area dry during construction. ii) Plum concrete to be completed as shown in the drawing.						
	<ul><li>iii) Backfilling in layers and cor over the raft projection.</li></ul>	npaction for fo	ull height of the	ne backfill as directed by the EIC			
4.1 4.1.1		quipment and R.O.	labour for all	Structural members such as Raft			
4.1.2	For M30 Grade	R.O.	M <sup>3</sup>				
4.1.3	For M35 Grade FORMWORK FOR CONCRET	3634.42	$M^3$	0.00			
4.2	washers, packing plates, faste concrete surfaces, at all location bracings, brackets, cutting hole form oil on all surfaces of form of all exposed concrete work removal of form work, all mate as directed by the Engineer in be measured for payment and	eners of adeq ions including es if specified work coming i wherever red rials, labour et Charge. (Area stop boards	uately design chamfers, sy for pipes etc. n contact with quired to rec tc.complete a n of formwork for constructi	bracing, ties, anchors, bolls, nuts ed capacities, producing finished plays, keys, wedges, props, rails Providing and applying approve o concrete including close hacking eive other type of finishing afte s per specifications, drawings an in contact with concrete shall only on joints will not be measured fo be obtained for clearance of form			
4.2.1	Foundations, footings, bases of columns, etc. for mass concrete and Raft.	3491.00	M <sup>2</sup>	0.00			
4.2.2	Columns & Shear walls	16729.00	M <sup>2</sup>	0.00			
4.2.3	Lintels, beams & cantilevers	22068.00	M <sup>2</sup>	0.00			
4.2.4	Slabs	40290.00	M <sup>2</sup>	0.00			
	as required at site of work tran position at all depths, levels a steel binding wire complete as be borne by the contractor & b cost of tests of materials by preparing and obtaining prior at the property of	sporting, de-cond binding wite per specification inding wire shipment of the contractor approval of bar aining consultation including kin accordar work shall including, jointing,	oiling, straigh h 18-20 gauge tions and dra all tons and dra all temporar all temporar and demand all temporar building up	, supplying, fabricating, delivering y staging and supporting work and design, drawings prepared by the of red oxide primer and two coats new sections using plates / rollec			
4.3	fabrication out of the following brackets, etc. with connections bolts, cleats, fasteners etc. as with minimum yield strength	types of structions using plates, per drawing, of 335 Mpa	e section is e ctural steel man channels and steel confor for plates.	qual to or more than 25mm, and aterial for trusses, purlins, girders d angles, gusset plate, connection ming to IS:226 and IS:2062-Gr.A (Fasteners, welding electrodes			
4.3	temperatures up to 250°C if the fabrication out of the following brackets, etc. with connections bolts, cleats, fasteners etc. as with minimum yield strength consumables will not be paid a specification)	nickness of the types of struct susing plates, per drawing, of 335 Mpa eparately. Rat	e section is e stural steel man channels and steel confor i for plates. ses inclusive of	qual to or more than 25mm, and aterial for trusses, purlins, girders d angles, gusset plate, connection ming to IS:226 and IS:2062-Gr.A			
4.4	temperatures up to 250°C if the fabrication out of the following brackets, etc. with connections bolts, cleats, fasteners etc. as with minimum yield strength consumables will not be paid sepecification)  **Thermo_Machanically_Treated**  Structural Steel:  Providing and fabricating and etc.) of all sizes and dimension various diameters, cutting, splic connectors, rivets, anchor bolt connectors.	nickness of the types of struct so using plates, so per drawing, of 335 Mpa eparately. Rat 427.89  erecting in post at all levels sing, welding as, studs, welding as as a supplementation of the supplementation of th	e section is e tural steel m. channels and steel confor for plates. des inclusive c  E. FOLTMT  Metric  Tonne  sition structurand positions etc. with all nu ing electrode	qual to or more than 25mm, and aterial for trusses, purlins, girders angles, gusset plate, connection ming to IS:226 and IS:2062-Gr.# (Fasteners, welding electrosis for necessary tests as per technical maguifactured buccommended.			

Total of Reinforced Cement Concrete

# 5. Masonry & Plastering Works: FACULTY

 Item
 Description
 Qty.
 Unit
 Rate
 Amt

 in Rs.
 in Rs.

Providing and constructing 650 x 230 x 200 mm SIPOREX or equivalent **Autoclave Aerated Concrete (AAC) blocks** masonry in super structure at all levels in CM 1:6 with 1012 mm the joints or by using the company provided Block adhesive compound in the prescribed process; with necessary scaffolding, watering, raking of joints etc. complete.

13913.25  $M^2$  0.00

Providing and constructing 650 x 230 x **150** mm SIPOREX or equivalent **Autoclave Aerated Concrete (AAC) blocks** masonry in super structure at all levels in CM 1:6 with 1012 mm the joints or by using the company provided Block adhesive compound in the prescribed process; with necessary scaffolding, watering, raking of joints etc. complete.

 $0.00 M^2 0.00$ 

# Internal plastering of walls:

Providing and applying internal Cement Plaster in CM 1:4 up to average 12 mm thickness at all positions for all vertical and inclined faces of concrete, block masonry, rubble masonry, etc. including providing and fixing 200 mm wide GI Chicken wire mesh (20 x 20 mm x 24 SWG) before applying plaster on the joints of block work and RCC columns and beams; cutting and fixing with concrete nails, raval plugs, if instructed by architect or consultant, providing bands, drip moulds, grooves, scaffoldings, curing for minimum 7 days, levelling in plumb and in right angles of the room etc. complete.

#### Notes

5 1

52

5.3

5.4

The sand shall be screened and washed for slip content less than 5% and grade confirms to IS 383 zone II.

Plastering carried out to fill undulations in block masonry or to match line and level etc. will not be paid separately.

6956.62  $M^2$  0.00

## Internal plastering of walls:

Providing and applying internal Gypsum Plaster up to average 12 mm thickness at all positions for all vertical and inclined faces of concrete, block masonry, rubble masonry, etc. including providing and fixing 200 mm wide fiber wire mesh (20 x 20 mm x 24 SWG) before applying plaster on the joints of block work and RCC columns and beams; cutting and fixing with concrete nails, raval plugs, if instructed by architect or consultant, providing bands, drip moulds, grooves, scaffoldings, levelling in plumb and in right angles of the room etc. complete.

Notes:

 $M^2$  0.00

# External plastering of walls:

Two coats of Sand Faced plaster; providing and applying 20 mm thick sand faces cement plaster in two coats; first coat of 14 mm thickness in C.M. 1:4 and second coat of 6 mm thick in C.M. 1:4 with approved waterproofing compound and super plasticiser as per the manufacturers instructions in both the coats; including providing bands, drip moulds, grooves, curing for minimum 7 days for both the boards scaffolding, cleaning etc. complete.

### Notes:

5.5

The sand shall be screened and washed for slip content less than 5% and grade confirms to IS 383 zone II.

Plastering carried out to fill undulations in block masonry or to match line and level etc. will

 $\frac{8944.23}{M^2}$   $M^2$  0.00

Total of Masonry & Plastering Works 0.00

# Waterproofing works: FACULTY Building

 Item
 Description
 Qty.
 Unit
 Rate
 Amt

 in Rs.
 in Rs.

#### i errace water prooting:

BB COBA with IPS - Average thickness of 120 mm

Providing and laying waterproofing treatment of over terraces using brickbat COBA (Average thickness of 120 mm, slope 1:100)

Through cleaning of terrace using water

Flooding terrace by cement water (1:1:5) slurry for over 12 hours; continuously stirring the slurry and draining out after prescribed duration, washing surface with clean water. Including blocking of the rainwater outlets by cement mortar 1:4 ad removal of blocking materials after testing.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

#### N - 4 -

6.3

First layer of Brickbat COBA, waterproofing compound as per manufacturers instructions, pounding water for 7 days, cleaning after draining out of water.

Finishing layer (2nd layer) of Brickbat COBA after spreading cement slurry, waterproofing compound as per the manufacturers instructions, finished with smooth cement finish with DORI marks to prevent cracking.

Corner curbs of 300 mm radius above finished level of terrace water proofing final coat on all sides, mixing aggregates 10 - 20 mm size as per the Architect's or consultants instructions etc. complete

 $M^2$  0.

#### Waterproofing of toilets floors:

Chemical waterproofing of the toilet floors using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the mother concrete slab; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mix instructions; sealing the under deck plumbing pipes joints using sealant paste and covering tape; sealing the wall and floor corners using sealant paste and covering tapes as per the instruction of the manufacture; coating up to at least 1 meter high on the side walls; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

 $M^2$  0.0

### vvaterprooning or canthever slabs

Chemical waterproofing of the cantilever slabs using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the cantilevered concrete slabs; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and slab joints using sealant paste and covering tape; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on

 $M^2$  0

### Waterproofing of Water Tanks:

Chemical waterproofing of Underground and Overhead Water Tanks using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the concrete walls and floor of the water tanks; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and floor joints using sealant paste and covering tape; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

550.00 Ma<sup>2</sup> 0.00

# Waterproofing of Retaining walls & Rafts: BOX Type waterproffing

Box Type shabad stonel waterproofing of Underground Basement using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the concrete walls and floor of the water tanks; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and floor joints using sealant paste and covering tape; etc. complete.

Treatment would be **guaranteed for 10 years** and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

500.00 M<sup>2</sup> 0.00

Total of Waterproofing Works 0.00

, ,

# Tender Documen t Vol - II

# **Bill of Quantities**

Propose HOSTEL Building MIT WPU GOA





Sun	nmary	Dr. Vishwanath Karad  MIT WORLD PEACE  UNIVERSITY   PUNE  110-POLOGY, RISHMON, SOUL INVOLUTION A PAITHURNING
Sr.	Heading	Amount in Rs
1	Site Preparation & Mobilisation	0.00
2	Excavation & Substructure	0.00
3	Plain Cement Concrete: PCC	0.00
4	Reinforced Cement Concrete: RCC	0.00
5	Masonry & Plastering Works	0.00
6	Waterproofing works	0.00
	Total tender quote Rs.	0.00
	Add SGST @ 9.0%	0.00
	Add IGST @ 9.0%	0.00
	Total after adding GST	0.00
In Wor		0.00

## Notes:

- · All items including scaffolding, disposal of debris, cleaning whether specifically mentioned in relevant item
- Material testing as per relevant IS codes is included in the quoted rates.
- Expenses towards labour licenses or any other fulfilment of statutory requirements as per the Government rules and regulations are included in the quoted rates.
- Contractor to provide barricade with supporting system as approved by consultant in front of the building for the full length required and 3 meter height. Quoted rates should include the cost of providing and removal after completion of works.
- Contractor to make access roads if required and quoted rates included the cost of for the same.
- Contractor to inform any additional work, additional cost details which may be required during proposed
  execution and not included in the tender drawings, BOQ etc. well in advance before execution of such
  works and provide the detailed rate analysis sheet and get written approval from the client before
  executing the works. Any claims of the extra and additional works executed without such written approvals from the clients will not the acceptable and the client will not be responsible to pay against such claims.

judgement & discretion etc. complete.

**Total of Site Preparation & Mobilisation** 

1.00

0.00

	Site Preparati	on & Mobili	sation - I	HOSTEL		
ltem	Description	Qty.	Unit	Rate	Amt	
				in Rs.	in Rs.	
1.1	Site preparation includispose the spoil to local Site Clearing: Clearing and making ground and The Benchmark Level et al.	ition approved by the off the site, levelling the surroundings s	e Owner & Loo the ground, c	al Authorities. utting shrubs, removi	ng debris etc.	
		1.00	Job		0.00	
1.2	To cordon off the exi contractor shall provide corrugate GI sheet for barricade in good con without any cost to the approved temporary con	e barricade consist a height up to 3m dition including rer e owner, and prep	ting of MS and to separate to moving the sa	gle/pipe posts runne the working area, ma me after completion	rs, bracing & aintaining the of the work	
		1.00	Job		0.00	
1.3	Establishing a contain Meetings and Discussion protected from sun, rain	ons, area for Site E	ngineer to worl	k, should be well lit a	nd ventilated,	
		1.00	Job		0.00	
1.4	Establishing a Labour ( with clean living and s exclusive entry and exit	anitation facility fo	r the labour.	The Labour Camp r	nust have its	All These In Ve
		1.00	Job		0.00	Scope. Client
1.5	To prepare and lay te Equipment and Appara Statutory traffic regulati and nothing shall be pa authorities. Royalty ch materials shall be borne all heights & including I own arrangement for th	ons in-force shall be id extra on accountages for excavate by the contractor.	e considered for t of the restrict ion and trans Transporting of	or transporting materi ions imposed by the porting earth, debri material, labour, maderial, labour, labo	al, labour etc. local statuary s, and other chinery etc. to	water suuply of connection Electrical on connection
		1.00	Job		0.00	
1.6	Preparing and installin English & Marathi, with construction activity an complete.	the ability to glow ir d serve as warning	n the dark, at a gs to prevent a	Il relevant locations t	o indicate the injuries, etc.	
		1.00	Job		0.00	
1.7	Scaffolding to be provi to IS 2750 - latest revisi before using the scaffol Providing and removing for the entire duration engineer; bracing where	on subject to writter ding. adjustable steel tul of the project exe	n approval fron bular props at t ecution of 15	n a certified safety en the locations directed	gineer on site by consultant	
		1.00	Job		0.00	
1.8	Temporary Godown: per the instructions of materials using Steel su plinth not less than 300 flowing inside the godo	the Architect / Co pporting structure w mm high from the sown; size as per th	onsultant to st vith coated she surrounding gr	ack the raw / semi et roofing and side wo ound levels to prever	finished etc. alls; Concrete at storm water	

2.	Excavation & Sub	ostructu	ire (ACC	ADAMIC)	
Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
2	Excavation & Filling:				
	Earth work excavation by me etc. in all types of soils inclinding shoring, dressing of complete as per specifications Excavation in all types of ordin boulders of all sizes etc. includ Cleaning away vegetation's, so a lead of 300 meters and with Maintaining all slopes as required Benching, strutting, shoring Dewatering (Pumping out groups and with the strength of the presence of the Architect / Cool in case contractor excavates anything extra, moreover if the made good by the contractor to Boulders of size more than 1 measured under hard strata.	luding soft at the sides, transcription that sides, transcription that sides and the s	and hard rock imming, ramn earth within as directed by disoils, hard microavated material lifts of excavors of seepage, chinery disurface shall be required size oundation pit disorder imministration of grade not grade not earth.	up to depths menning and preparing and preparing a distance of 150 the Architect / Consurmur, sand, including rials in the project situation,  surface, rain or store and depth he shad trench is uneven, seless than M15 at no	tioned below the bed for meters etc. sultant. ng removal of the area within orm water or intractor in the Ill not be paid lame shall be extra cost
	Backfilling of excavated ma surplus each inside the plinth exceeding 200 mm, watering deposing of the still surplus ed directed etc. complete.	area or at ar and consoli	ny place within idating the ea	the plot as directed rth with mechanical	in layers not rammer and
	Excavation in Soft Strata:				
2.1	0 -1.5 meter depth	1000.00	$M^3$		0.00
2.2	1.5 to 3.0 meter depth	Rate Only	$M^3$		
2.3	3.0 to 4.5 meter depth	Rate Only	$M^3$		
2.4	4.5 meter and above depth	Rate Only	$M^3$		
	Excavation in Hard Strata:				
2.5	0 -1.5 meter depth	2800	M <sup>3</sup>		
2.6	1.5 to 3.0 meter depth	Rate Only	M <sup>3</sup>		
2.7	3.0 to 4.5 meter depth	Rate Only	M <sup>3</sup>		
2.8	4.5 meter and above depth	Rate Only	M <sup>3</sup>		
2.9	Disposing off the surplus ex nearby dumping pits/dumpin Engineer in charge, including specifications & as directed by	cavated mat g areas with	erials by mec hin St. Josep ding, unloadin	oh School campus g, stacking etc. con	identified by
2.1	Backfilling around foundation demolished structure (servan charge excavated from nearb unloading, stacking, levelling, compaction to give 95% proct directed by the Architect / con-	t quarter) de by borrow are spreading, in or density etc	bris / selected as including a n layers not ex	d earth approved by ill leads up to 2 km, kceeding 150 mm th	Engineer-in- lifts, loading, ick, watering,
		1800.00	$M^3$		0.00
2.11	Supplying and spreading <b>pesticides</b> 'Chlorpyrifos' or other chemical approved by Central Insecticides Board as directed by the manufacturer and spraying the mixture uniformly be sprayer as pre-construction anti-termite, anti-rodent treatment at the rate of 7.5 litro (or a directed by the manufacturer) per sq. m on vertical and 5 litre per sq. m on horizont surfaces of the sub-structure, within the trenches, 50% of the emulsion to be filled in the 1 holes made in trenches at 150 mm centre to centre etc. complete all as per IS 6313 Par II(or latest) specification & as directed by the Engineer-in-charge. (The payment will be made on the basis of plinth area measurement only aground floor/stilt area for all stage of operation and vertical faces will not be measured for payment).				e uniformly by 7.5 litre (or as on horizontal he filled in the IS 6313 Part- yment will be for all stages
		1.00	Job		0.00
2.12	The contractor shall have to fi maintain the anti-termite treate				d performa to
2.12		1.00	Job		0.00

0.00

**Total of Excavation and Substructure** 

# 3. Plain Cement Concrete: ACCADAMIC BLOCK

 Item
 Description
 Qty.
 Unit
 Rate
 Amt

 in Rs.
 in Rs.

Providing and laying of **Plain Cement Concrete (PCC)** as levelling course for foundation, basement, vertical surfaces of soil retention system and all locations of all depths with Ready Mixed Concrete conforming to IS 4926 (latest revision). Plain Cement Concrete grade **M:15** conforming to IS 456-2000 as per specifications manufactured in fully automatic batching plant and transported to site of work, having continuous agitated mixer, manufactured as per mix design of specified grade for Plain Cement Concrete work, including transportation from manufacturer site to site of work, pumping of R.M.C from transit mixer to site of laying, cost of admixtures in recommended proportions as per IS 9103 (latest) to accelerate / slow down setting of concrete, improve workability without impairing strength and durability, mechanical conveying, placing in position mechanical compaction, finishing, curing, scaffolding including necessary form work, consolidation,

#### Note:

- 1. Prior approval of Engineer in charge for the supplier of R.M.C to be taken.
- 2. On prior approval of Engineer in charge Fly ash conforming to Grade I of IS 3812 (Part I) may be used as part replacement of OPC provided uniform blending with cement is ensured in accordance with Clauses 5.2 and 5.2.1 of IS 456 2000 in the items of B.M.C and R.M.C

Foundation BED in Plain
3.1 cement concrete of Strength 462.00 M³ 0.00
M15

Total of Plain Cement Concrete 0.00

## Reinforced Cement Concrete: ACCADAMIC

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.

#### NOTES:

- a) All RCC shall be as specified and shall be carried out strictly in accordance with the drawings and specifications
- b) The rates for RCC works shall be inclusive of all depths below G.L slabs at all heights a detailed in the drawing but exclusive of cost of reinforcement unless otherwise mentioned.
- c) All coarse aggregate to be 20 mm maximum size and uniformly graded unless otherwise
- d) For all RCC items, the rates quoted shall include the following without any extra cost to
- ii) Fixing at correct level & in proper alignment to the inserts, pipe sleeves, pipe bends, far
- iii) Test for concrete shall be done as per IS 456-2000 and the cost of the testing to be carried out shall be borne by the contractor.
- e) Precaution to be taken to avoid uplifting forces on the raft of water tanks
- As per the soil report, water table could be expected near the ground level and contractor is advised to use following sequence during concreting of the water tank.

- Dewatering to keep the area dry during construction.
   Plum concrete to be completed as shown in the drawing.
   Backfilling in layers and compaction for full height of the backfill as directed by the EIC.

4.1.3	For M35 Grade	11097.00	$M^3$		0.00
4.1.2	For M30 Grade	R.O.	$M^3$		
4.1.1	For M20 Grade	R.O.	$M^3$		
4.1	RCC work including material,	equipment and	l labour for	all Structural members such as	Raft,
	over the raft projection.				

#### FORMWORK FOR CONCRETE:

Providing, erecting, fixing in position striking / removing and cleaning steel / plywood or any other approved material shuttering and cantering for formwork in substructure at all depths for all geometrical shapes, as per details shown in drawings and as required for specific design of formwork wherever specified, including proper bracing, ties, anchors, bolts, nuts, washers, packing plates, fasteners of adequately designed capacities, producing finished concrete surfaces, at all locations including chamfers, splays, keys, wedges, props, rails, bracings, brackets, cutting holes if specified for pipes etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete including close hacking of all exosped concrete work wherever required to receive other type of finishing after of all exposed concrete work wherever required to receive other type of finishing after removal of form work, all materials, labour etc. complete as per specifications, drawings and as directed by the Engineer in Charge. (Area of formwork in contact with concrete shall only be measured for payment and stop boards for construction joints will not be measured for payment). Note: Prior approval of Engineer in charge to be obtained for clearance of forn work for laving RCC

	wont for laying reco.			
4.2.1	Foundations, footings, bases of columns, etc. for mass concrete and Raft.	3491.00	$M^2$	0.00
4.2.2	Columns & Shear walls	16729.00	$M^2$	0.00
4.2.3	Lintels, beams & cantilevers	22068.00	$M^2$	0.00
4.2.4	Slabs	40290.00	M <sup>2</sup>	0.00

Structural Steel:

Reinforcement for RCC work including supplying, delivering and storing of various diameters as required at site of work transporting, de-coiling, straightening, cutting, bending, placing in position at all depths, levels and binding with 18-20 gauge, soft drawn locations annealed steel binding wire complete as per specifications and drawings. (Cost of binding wire shall be borne by the contractor & binding wire shall not be measured for payment. Rate includes cost of tests of materials by Contractor as specified in the Specifications and IS) and preparing and obtaining prior approval of bar bending schedule.

Preparing shop drawings, obtaining consultant's approval, supplying, fabricating, delivering at site, hoisting and fixing in position including all temporary staging and supporting work and making all structural steel work in accordance with the design, drawings prepared by the consultants. The rate of steel work shall include one coat of red oxide primer and two coats of enamel paint assembly, welding, jointing, building up new sections using plates / rolled section, /chs/rhs cost of fasteners, nuts, bolts and washers, pre-heating the sections to 4.3 temperatures up to 250°C if thickness of the section is equal to or more than 25mm, and fabrication out of the following types of structural steel material for trusses, purlins, girders brackets, etc. with connections using plates, channels and angles, gusset plate, connection bolts, cleats, fasteners etc. as per drawing, steel conforming to IS:226 and IS:2062-Gr.A with minimum yield strength of 335 Mpa for plates. (Fasteners, welding electrodes, consumables will not be paid separately. Rates inclusive of necessary tests as per technical specification)

o Machanically Treated ha re of grade Eo E00 TMT: manufactured by

#### Metric Tonne 1861.00

Providing and fabricating and erecting in position structural steel (All sections, plates bolts etc.) of all sizes and dimensions at all levels and positions as per drawings including botts of various diameters, cutting, splicing, welding etc. with all nuts, botts, sag rods, washer, shear connectors, rivets, anchor botts, studs, welding electrodes, binding wires, base plates etc. 4.4 with a coat of red oxide primer, two coats of synthetic enamel paint of approved brand, etc complete.

> Metric 70 Tonne

**Total of Reinforced Cement Concrete** 

0.00

0.015292422 4995.177933

0.073281848 23937.07581 0.096669485 31576.5072

0.17649146 57649.87651

#### 5. Masonry & Plastering Works: ACCADAMIC

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.

Providing and constructing 650 x 230 x 200 mm SIPOREX or equivalent Autoclave Aerated Concrete (AAC) blocks masonry in super structure at all levels in CM 1:6 with 10-12 mm the joints or by using the company provided Block adhesive compound in the prescribed process; with necessary scaffolding, watering, raking of joints etc. complete.

> 42484 00 0.00

Providing and constructing 650 x 230 x 150 mm SIPOREX or equivalent Autoclave Aerated Concrete (AAC) blocks masonry in super structure at all levels in CM 1:6 with 10-12 mm the joints or by using the company provided Block adhesive compound in the 52 prescribed process; with necessary scaffolding, watering, raking of joints etc. complete.

> 0.00 0.00

#### Internal plastering of walls:

Providing and applying internal Cement Plaster in CM 1:4 up to average 12 mm thickness at all positions for all vertical and inclined faces of concrete, block masonry, rubble masonry, etc. including providing and fixing 200 mm wide GI Chicken wire mesh (20 x 20 mm x 24 SWG) before applying plaster on the joints of block work and RCC columns and beams; cutting and fixing with concrete nails, raval plugs, if instructed by architect or consultant, providing bands, drip moulds, grooves, scaffoldings, curing for minimum 7 days, levelling in plumb and in right angles of the room etc. complete.

5.3

5.4

5 1

The sand shall be screened and washed for slip content less than 5% and grade confirms to IS 383 zone II.

Plastering carried out to fill undulations in block masonry or to match line and level etc. will not be paid separately.

21242.00

# Internal plastering of walls:

Providing and applying internal Gypsum Plaster up to average 12 mm thickness at all positions for all vertical and inclined faces of concrete, block masonry, rubble masonry, etc. including providing and fixing 200 mm wide fiber wire mesh (20 x 20 mm x 24 SWG) before applying plaster on the joints of block work and RCC columns and beams; cutting and fixing with concrete nails, raval plugs, if instructed by architect or consultant, providing bands, drip moulds, grooves, scaffoldings, levelling in plumb and in right angles of the

room etc. complete.

72850.00

 $M^2$ 

# External plastering of walls:

Two coats of Sand Faced plaster; providing and applying 20 mm thick sand faces cement plaster in two coats; first coat of 14 mm thickness in C.M. 1:4 and second coat of 6 mm thick in C.M. 1:4 with approved waterproofing compound and super plasticiser as per the manufacturers instructions in both the coats; including providing bands, drip moulds, grooves, curing for minimum 7 days for both the boards scaffolding, cleaning etc. complete.

### Notes:

5.5

Notes:

The sand shall be screened and washed for slip content less than 5% and grade confirms

Plastering carried out to fill undulations in block masonry or to match line and level etc. will

27311 00  $M^2$ 0.00

**Total of Masonry & Plastering Works** 0.00

#### 6. Waterproofing works: Accadamic Building

Item	Description	Qty.	Unit	Rate	Amt
				in Do	in Bo

#### i errace water prooting:

BB COBA with IPS - Average thickness of 120 mm

Providing and laying waterproofing treatment of over terraces using brickbat COBA (Average thickness of 120 mm, slope 1:100)

Through cleaning of terrace using water

Flooding terrace by cement water (1:1:5) slurry for over 12 hours; continuously stirring the slurry and draining out after prescribed duration, washing surface with clean water. Including blocking of the rainwater outlets by cement mortar 1:4 ad removal of blocking materials after testing.

Treatment would be quaranteed for 10 years and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

6.1

6.3

First layer of Brickbat COBA, waterproofing compound as per manufacturers instructions, pounding water for 7 days, cleaning after draining out of water.

Finishing layer (2nd layer) of Brickbat COBA after spreading cement slurry, waterproofing compound as per the manufacturers instructions, finished with smooth cement finish with DORI marks to prevent cracking.

Corner curbs of 300 mm radius above finished level of terrace water proofing final coat on all sides, mixing aggregates 10 - 20 mm size as per the Architect's or consultants instructions etc.

2808.00

#### Waterproofing of toilets floors:

Chemical waterproofing of the toilet floors using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the mother concrete slab; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mix instructions; sealing the under deck plumbing pipes joints using sealant paste and covering tape; sealing the wall and floor corners using sealant paste and covering tapes as per the instruction of the manufacture; coating up to at least 1 meter high on the side walls; etc. complete.

Treatment would be guaranteed for 10 years and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

800.00

### vvaterprooffing of carrillever stabs.

Chemical waterproofing of the cantilever slabs using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the cantilevered concrete slabs; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and slab joints using sealant paste and covering tape; etc. complete.

Treatment would be guaranteed for 10 years and such a guarantee shall be given in writing on pariate Stamp Depar and Natoricad with registered a

220.00

### Waterproofing of Water Tanks:

Chemical waterproofing of Underground and Overhead Water Tanks using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the concrete walls and floor of the water tanks; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and floor joints using sealant paste and covering tape; etc. complete.

Treatment would be guaranteed for 10 years and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

# Waterproofing of Retaining walls & Rafts: BOX Type waterproffing

500.00

Box Type shabad stonel waterproofing of Underground Basement using ARDEX or DR.FIXIT or KEMPAROL or equivalent standard manufacturers Single component, ready to use, liquid applied elastomeric waterproof membrane; washing good the concrete walls and floor of the water tanks; applying primer and multiple cots of water proofing resin / compound as per the manufacturers specifications and mixing instructions; sealing the wall and floor joints using sealant paste and covering tape; etc. complete.

Treatment would be guaranteed for 10 years and such a guarantee shall be given in writing on appropriate Stamp Paper and Notarised with registered court Notary)

 $M^2$ 

**Total of Waterproofing Works** 0.00