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 21st October 2025, 5 pm and last date for submission of priced BOQ would be 28th 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 Document Vol - II

Bill of Quantities

Propose Accadamic Building
MIT WPU GOA

Summary

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 Words:

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 written 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

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
1.1	**Site preparation** includes all the demolition work required for this project, remove and dispose the spoil to location approved by the Owner & Local Authorities. Site Clearing: Clearing off the site, levelling the ground, cutting shrubs, removing debris etc. and making ground and the surroundings suitable for proper line out of building, establishing The Benchmark Level etc. complete.	1.00	Job		0.00
1.2	To cordon off the existing playground area where College is to be constructed. The contractor shall provide barricade consisting of MS angle/pipe posts runners, bracing & corrugate GI sheet for a height up to 3m to separate the working area, maintaining the barricade in good condition including removing the same after completion of the work without any cost to the owner, and preparing temporary playground for children as per approved temporary construction plan.	1.00	Job		0.00
1.3	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.	1.00	Job		0.00
1.4	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.	1.00	Job		0.00
1.5	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 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.	1.00	Job		0.00
1.6	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 construction activity and serve as warnings to prevent any kind of mishaps, injuries, etc. complete.	1.00	Job		0.00
1.7	**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.	1.00	Job		0.00
1.8	**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.	1.00	Job		0.00
	Total of Site Preparation & Mobilisation				**0.00**

All These In Vendor Scope. Client will provide only Space, water suuply one connection & Electrical one connection.

2. Excavation & Substructure (ACCADAMIC)

Item	Description	Qty.	Unit	Rate	Amt
				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 cost 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	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^3		
2.6	1.5 to 3.0 meter depth	Rate Only	M^3		
2.7	3.0 to 4.5 meter depth	Rate Only	M^3		
2.8	4.5 meter and above depth	Rate Only	M^3		
2.9	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 per specifications & as directed by the Architect / consultant. All types of soils.				
		500.00	M^3		0.00
2.1	**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.				
		800.00	M^3		0.00
2.11	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 litre (or as directed by the manufacturer) per sq. m on 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
2.12	The contractor shall have to furnish **Ten years guarantee** in the a prescribed performa to maintain the anti-termite treated area /structure free from termite.				
		1.00	Job		0.00
	Total of Excavation and Substructure				**0.00**

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				
3.1	Foundation BED in Plain cement concrete of Strength **M15**	324.00	M^3		0.00
	Total of Plain Cement Concrete				**0.00**

4. Reinforced Cement Concrete: ACCADAMIC

Item	Description	Qty.	Unit	Rate in Rs.	Amt 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 mentioned. d) For all RCC items, the rates quoted shall include the following without any extra cost to the Owner: i) Spacers to maintain clear cover for reinforcement. ii) Fixing at correct level & in proper alignment to the inserts, pipe sleeves, pipe bends, fan hooks, 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 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. i) Dewatering to keep the area dry during construction. ii) Plum concrete to be completed as shown in the drawing. iii) 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 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
4.2	**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 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 laying RCC.				
4.2.1	Foundations, footings, bases of columns, etc. for mass concrete and Raft.	2440.00	M^2	0.00595122	1358.562244
4.2.2	Columns & Shear walls	11692.00	M^2	0.028517073	6509.963015
4.2.3	Lintels, beams & cantilevers	15423.00	M^2	0.037617073	8587.338315
4.2.4	Slabs	28158.00	M^2	0.068678049	15678.03101
4.3	**REINFORCEMENT 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 temperatures up to 250ºC 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) Thermo Mechanically Treated bars of grade **Fe 500 TMT**, manufactured by recommended	1495.00	Metric Tonne		0.00
4.4	**Structural Steel:** 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.	50	Metric Tonne		
	Total of Reinforced Cement Concrete				**0.00**

5. Masonry & Plastering Works: ACCADAMIC

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
5.1	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	M^2		0.00
5.2	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
5.3	**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**: 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	M^2		0.00
5.4	**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**:	50899.00	M^2		0.00
5.5	**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**: 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.	19087.00	M^2		0.00
	Total of Masonry & Plastering Works				**0.00**

6. Waterproofing works: Accadamic Building

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
6.1	**Terrace water proofing:** 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) **Notes**: 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	2808.00	M^2		0.00
6.2	**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	800.00	M^2		0.00
6.3	**Waterproofing of cantilever 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 appropriate Stamp Paper and Notarised with registered court Notary)	220.00	M^2		0.00
6.4	**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^2		0.00
6.4	**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^2		0.00
	Total of Waterproofing Works				**0.00**

Tender Document t Vol - II

Bill of Quantities

Propose FACULTY Building
MIT WPU GOA

Summary

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 Words:

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 written approvals from the clients will not the acceptable and the client will not be responsible to pay against such claims.

1. Site Preparation & Mobilisation - Faculty Housing

Item	Description	Qty.	Unit	Rate	Amt	
				in Rs.	in Rs.	
1.1	**Site preparation** includes all the demolition work required for this project, remove and dispose the spoil to location approved by the Owner & Local Authorities. Site Clearing: Clearing off the site, levelling the ground, cutting shrubs, removing debris etc. and making ground and the surroundings suitable for proper line out of building, establishing The Benchmark Level etc. complete.					
1.2	To cordon off the existing playground area where College is to be constructed. The contractor shall provide barricade consisting of MS angle/pipe posts runners, bracing & corrugate GI sheet for a height up to 3m to separate the working area, maintaining the barricade in good condition including removing the same after completion of the work without any cost to the owner, and preparing temporary playground for children as per approved temporary construction plan.					
1.3	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.					
1.4	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 provide only Space, water suuply one connection & Electrical one connection.
1.5	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 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.					
1.6	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 construction activity and serve as warnings to prevent any kind of mishaps, injuries, etc. complete.					
1.7	**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.					
		1.00	Job		0.00	
1.8	**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				**0.00**	

2. Excavation & Substructure (FACULTY)

Item	Description	Qty.	Unit	Rate in Rs.	Amt 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 cost 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^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	3000	M^3		
2.6	1.5 to 3.0 meter depth	Rate Only	M^3		
2.7	3.0 to 4.5 meter depth	Rate Only	M^3		
2.8	4.5 meter and above depth	Rate Only	M^3		
2.9	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 per specifications & as directed by the Architect / consultant. All types of soils.	500.00	M^3		0.00
2.1	**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
2.11	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 litre (or as directed by the manufacturer) per sq. m on 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
2.12	The contractor shall have to furnish **Ten years guarantee** in the a prescribed performa to maintain the anti-termite treated area /structure free from termite.	1.00	Job		0.00
	Total of Excavation and Substructure				**0.00**

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				
3.1	Foundation BED in Plain cement concrete of Strength **M15**	151.43	M^3		0.00
	Total of Plain Cement Concrete				**0.00**

4. Reinforced Cement Concrete: FACULTY

Item	Description	Qty.	Unit	Rate in Rs.	Amt 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 mentioned. d) For all RCC items, the rates quoted shall include the following without any extra cost to the Owner: i) Spacers to maintain clear cover for reinforcement. ii) Fixing at correct level & in proper alignment to the inserts, pipe sleeves, pipe bends, fan hooks, 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 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. i) Dewatering to keep the area dry during construction. ii) Plum concrete to be completed as shown in the drawing. iii) 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 as Raft,				
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	3634.42	M^3		0.00
4.2	**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 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 laying RCC.				
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^2		0.00
4.3	**REINFORCEMENT 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 temperatures up to 250ºC 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) Thermo Mechanically Treated bars of grade **Fe 500 TMT**, manufactured by recommended	427.89	Metric Tonne		0.00
4.4	**Structural Steel:** 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.	45	Metric Tonne		
	Total of Reinforced Cement Concrete				**0.00**

5. Masonry & Plastering Works: FACULTY

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
5.1	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.				
		13913.25	M^2		0.00
5.2	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
5.3	**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**: 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
5.4	**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**:				
		23851.28	M^2		0.00
5.5	**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**: 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				
		8944.23	M^2		0.00
	Total of Masonry & Plastering Works				**0.00**

6. Waterproofing works: FACULTY Building

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
6.1	**Terrace water proofing:** 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) **Notes**: 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	2808.00	M^2		0.00
6.2	**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	M^2		0.00
6.3	**Waterproofing of cantilever 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 appropriate Stamp Paper and Notarised with registered court Notary)	220.00	M^2		0.00
6.4	**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^2		0.00
6.4	**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^2		0.00
	Total of Waterproofing Works				**0.00**

Tender Document Vol - II

Bill of Quantities

Propose HOSTEL Building
MIT WPU GOA

Dr. Vishwanath Karad
MIT WORLD PEACE UNIVERSITY | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

Summary

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 Words:

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 written approvals from the clients will not the acceptable and the client will not be responsible to pay against such claims.

1. Site Preparation & Mobilisation - HOSTEL

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
1.1	**Site preparation** includes all the demolition work required for this project, remove and dispose the spoil to location approved by the Owner & Local Authorities. Site Clearing: Clearing off the site, levelling the ground, cutting shrubs, removing debris etc. and making ground and the surroundings suitable for proper line out of building, establishing The Benchmark Level etc. complete.	1.00	Job		0.00
1.2	To cordon off the existing playground area where College is to be constructed. The contractor shall provide barricade consisting of MS angle/pipe posts runners, bracing & corrugate GI sheet for a height up to 3m to separate the working area, maintaining the barricade in good condition including removing the same after completion of the work without any cost to the owner, and preparing temporary playground for children as per approved temporary construction plan.	1.00	Job		0.00
1.3	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.	1.00	Job		0.00
1.4	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.	1.00	Job		0.00
1.5	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 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.	1.00	Job		0.00
1.6	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 construction activity and serve as warnings to prevent any kind of mishaps, injuries, etc. complete.	1.00	Job		0.00
1.7	**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.	1.00	Job		0.00
1.8	**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.	1.00	Job		0.00
	Total of Site Preparation & Mobilisation				**0.00**

All These In Vendor Scope. Client will provide only Space, water suuply one connection & Electrical one connection.

2. Excavation & Substructure (ACCADAMIC)

Item	Description	Qty.	Unit	Rate	Amt
				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 cost 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	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^3		
2.6	1.5 to 3.0 meter depth	Rate Only	M^3		
2.7	3.0 to 4.5 meter depth	Rate Only	M^3		
2.8	4.5 meter and above depth	Rate Only	M^3		
2.9	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 per specifications & as directed by the Architect / consultant. All types of soils.				
		500.00	M^3		0.00
2.1	**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.				
		1800.00	M^3		0.00
2.11	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 litre (or as directed by the manufacturer) per sq. m on 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
2.12	The contractor shall have to furnish **Ten years guarantee** in the a prescribed performa to maintain the anti-termite treated area /structure free from termite.				
		1.00	Job		0.00
	Total of Excavation and Substructure				**0.00**

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				
3.1	Foundation BED in Plain cement concrete of Strength **M15**	462.00	M^3		0.00
	Total of Plain Cement Concrete				**0.00**

4. Reinforced Cement Concrete: ACCADAMIC

Item	Description	Qty.	Unit	Rate in Rs.	Amt 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 mentioned. d) For all RCC items, the rates quoted shall include the following without any extra cost to the Owner: i) Spacers to maintain clear cover for reinforcement. ii) Fixing at correct level & in proper alignment to the inserts, pipe sleeves, pipe bends, fan hooks, 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 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. i) Dewatering to keep the area dry during construction. ii) Plum concrete to be completed as shown in the drawing. iii) 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 as Raft,				
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	11097.00	M^3		0.00
4.2	**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 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 laying RCC.				
4.2.1	Foundations, footings, bases of columns, etc. for mass concrete and Raft.	3491.00	M^2	0.015292422	0.00
4.2.2	Columns & Shear walls	16729.00	M^2	0.073281848	0.00
4.2.3	Lintels, beams & cantilevers	22068.00	M^2	0.096669485	0.00
4.2.4	Slabs	40290.00	M^2	0.17649146	0.00
4.3	**REINFORCEMENT 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 temperatures up to 250ºC 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) Thermo Mechanically Treated bars of grade **Fe 500 TMT**, manufactured by recommended	1861.00	Metric Tonne		0.00
4.4	**Structural Steel:** 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.	70	Metric Tonne		
	Total of Reinforced Cement Concrete				**0.00**

5. Masonry & Plastering Works: ACCADAMIC

Item	Description	Qty.	Unit	Rate	Amt
				in Rs.	in Rs.
5.1	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	M^2		0.00
5.2	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
5.3	**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**: 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	M^2		0.00
5.4	**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**:	72850.00	M^2		0.00
5.5	**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**: 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	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 Rs.	in Rs.
6.1	**Terrace water proofing:** 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) **Notes**: 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	2808.00	M^2		0.00
6.2	**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	M^2		0.00
6.3	**Waterproofing of cantilever 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 appropriate Stamp Paper and Notarised with registered court Notary)	220.00	M^2		0.00
6.4	**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^2		0.00
6.4	**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^2		0.00
	Total of Waterproofing Works				**0.00**