

**RINGKASAN SEBUTHARGA
SUMMARY OF QUOTATION**

Tajuk / Title

Comprehensive maintenance of Lift at Universiti Brunei Darussalam for 6 months

Bil. UBDQ3612022 - [G]
Quotation

Bil. No.	Keterangan / Description	Unit Unit	Kadar Rate	Kuantiti Quantity	Jumlah /Amount (\$ (g)
	<u>MAINTENANCE OF LIFT INSTALLATIONS</u>				
	To carry out twice monthly & half yearly maintenance, annual testing and to provide call back service ap per scope of work (Item A,B,C,D,E & F) of scope of works including additional checks TWELVE (12) MONTHS . The monthly rates shall include the provision of standby services for one technicians as and per required by the client.(during UBD event or organise by UBD)				
1	Faculty of Science (STEP)				
	1.1. Passenger Lift 1	months		6	
	1.2. DUMBWAITER 1	months		6	
	1.3. DUMBWAITER 2	months		6	
2	Sultan Hassanah Bolkihah Institute of Education (SHBIE) (STEP)				
	2.1 Passenger Lift 1				
3	Faculty of Arts and Social Science (FASS) (STEP)				
	3.1. Passenger Lift 1	months		6	
4	Student Staff Centre (otis)				
	4.1. Passenger Lift 1	months		6	
	4.2. DUMBWAITER 1	months		6	
	4.3. DUMBWAITER 2	months		6	
5	Acedemic Service Centre (Library) (otis)				
	5.1. Passenger Lift 1	months		6	
	5.2. Passenger Lift 2	months		6	
	5.3. Passenger Lift 3	months		6	
	JUMLAH DIBAWA DARI DEPAN / AMOUNT BROUGHT FORWARD				

Bil.	Keterangan / Description	Unit	Kadar	Kuantiti	Jumlah /Amount
No.		Unit	Rate	Quantity	(\$) (z)
JUMLAH DIBAWA DARI DEPAN / AMOUNT BROUGHT FORWARD					
6	Administration (otis) 6.1. Passenger Lift 1	months		6	
7	Academy of Brunei Studies - The Language Centre (Faculty of Islamic Studies) (mitsubishi) 7.1. Passenger Lift 1	months		6	
8	Institute for Leadership, Innovation and Advancement (ILIA) (mitsubishi) 8.1 Passenger Lift 1 8.2 Passenger Lift 2	months months		6 6	
9	Pengiran Anak Puteri Rashidah Sa'adatul Bolkihah Institute of Health Science (Institute of Medicine) (sigma) 9.1 Passenger Lift 1	months		6	
10	Information Communication Technology Centre - ICTC new (No 17B) (scindler lift) 10.1 Passenger Lift 1 10.2 Passenger Lift 2	months months		6 6	
11	Chancellor Hall (scindler lift) 11.1 Passenger Lift 1	months		6	
12	Institute of Medicine (Extension) (scindler) Passenger Lift 1 Passenger Lift 2 Passenger Lift 3	months months months		6 6 6	
13	Faculty of Science (Extension) (scindler) Passenger Lift 1 Passenger Lift 2	months months		6 6	
14	School of Business Economic (STEP) Passenger Lift 1	months		6	
15	Library (Extension) (sigma) Passenger Lift 1	months		6	
TOTAL AMOUNT					

Validity Offer : **6 (six) months (from the date of quotation)**

Defect Liability period: **6 (six) months**

.....
(Official Chop / Signature)

Liquidated and Ascertained Damages (LAD): **25.00/ day**
For each day the works remain incomplete
(If none stated, then the Contract Administrator may certify a reasonable sum as compensation for delay).

Contract period
6 MONTHS

Contract / Address:

.....
.....
.....

.....
(Official Chop / Signature)

Tel. (off)

H/phone

Fax. No

**** Class : I and above**

**** Category: KPME02**

QUOTATION NO UBD

TITLE: **COMPREHENSIVE MAINTENANCE OF LIFT FOR 6 MONTHS**

SCOPE OF WORKS

Item A .Service to preformed every two week

- Oil and grease hoist ropes, bearings, compensating chain, guide rails and bearings if required, all Machine should be carefully checked for abnormal temperature rise and top up oil if necessary .
- Check and replace all relays and contacts, faulty switched, fused indicator bulbs. Blown fuses etc. at the lift supervisory panel if installed.
- Clean traction machine N- G set, relay panel control panel, starting panel, selector, governor, car top, car gate, sill and pit.
- Check that the car door sill are clear of debris, inspect the car doors for even movement for opening and closing , adjust or repair if movement is erratic. Check that the door safety devices gate switches and emergency stop switches are functioning correctly.
- Replace unserviceable hall and car indicating bulbs, annunciator lights, buzzer and car lighting lamps car top and underneath Inspection Lamp & fluorescent fittings, at lift Pit car position indicators and arrival gong.
- Check leveling difference, brake slippage, acceleration, deceleration and riding comfort. Check the car floor at each hall is within max. Tolerance of +/- 1.0 cm for all permissible loads. Adjust if out of tolerance.
- Check operation of weighting device.
- Inspect all relay contacts for pitting and cleanliness. Clean if necessary with a contact abrading tool and then adjust contact gap and follow through to manufacturer's specification. Replace worn out contacts.
- Inspect printed circuit boards for over heated components, replace if confirmed
- Replace faulty charger circuit, indicating bulbs & meter, weak batteries with suitable capacity Ni – Cad wet type battery bank or maintenance free battery. Top up inverter supply batteries & ARD panel batteries & ARD panel batteries with distilled water where applicable
- Clean motor room and ensure cooling/ventilation is sufficient.
- Inspect hoistway pits for accumulation of water, report to authority if confirmed. If the raising level damage the equipment or unsafe for passenger using the lift, pump out the water immediately until further repair works are carried out by the building maintenance authority.
- Clean and vacuum the lift car. Use appropriate Johnson Aerosol wax to clean & polish the lift car interior finishing (Formica, louvers etc)

- Test emergency alarm/Intercom system and replaces faulty equipment & batteries.
- Check all safety micro switches in the Escalator/Dumbwaiter for proper function and replace if found defective.
- Check alignment of comb plate to steps for Escalator and replace broken comb plate. Also replace all the fused balustrade lighting where applicable.

B. Service to be performed every month

- Turn grease cups for speed governor and compensating pulley.
- Check and oil selector.
- Top up rail lubricator.
- Clean ropes. Oil if necessary.
- Clean M – G set's brush, brush holder and inside frame. Adjust slip ring is necessary . Check commutator.
- Oil electric brake pin.
- Oil all pins of door operator, door opening mechanism and door lever
- Clean, oil and adjust door closer and lever.
- Clean hoistway, beam slow-down cams, outside cage, rails and counterweight rails.
- Clean main sheave, secondary sheaves and rope sheaves on car top and counterweight top
- Clean brake wheel.
- Oil compensating rope extensioning pulley

C. Service to be performed Every two months

- Clean and oil door hangers, door rails, interior of hanger case. If necessary, adjust eccentric roller, car door hanger, door connecting ropes and chain.
- Check door shoes.
- Clean and oil safety gear.
- Clean and oil interior of terminal limit switch and position switch. Check rubber roller of terminal limit switch.
- Clean and oil car and counterweight guide shoe.
- Check flexible cable.
- Check movement of limit switches.
- Clean and check push buttons of car control switches.
- Clean and check push buttons of car control panel.

- Check the voltage of exciter and automatic voltage regulator.
- Check the condition of commutator brushes of traction motor.
- Check and clean the sleeve and plunger of the electro-magnetic brake.

D. Service to be performed Every three months

- Check the operation of terminal limit switches and final limit switches.
- Check the governor switch.
- Clean the brush holder and commutator of the door motor.
- Check the traction rope for broken wire, wear, elongation and even tension. Adjust id necessary.
- Using electric blower, remove the dust inside the M-G set, traction machine and control panel.
- Clean the indicator.
- Check the voltage of rectifier.

E. Services to be performed Every six months

- Check and clean the hall buttons and contact.
- Check the compensating chain or rope.
- Check and oil the bearing of door motor.
- Grease the secondary sheave, car top sheave and counterweight top sheave.
- Check the wear of guide shoes of car and counterweight.
- Grease the bearing of generator
- Inspect hoist ropes for wear and possible renewal. Equalise tension on all hoist ropes.
- Inspect all electro-mechanical parts for wear relating to the car door mechanism, replace if necessary.
- Inspect all the electrical & mechanism parts within the lift motor room for wear, replace if neccessaary . Lubricate gear wheel & bearing if required and change gear/ motor oil.
- Inspect all relays, contactors, PC boards for possible wear & overheating, replace if necessary.
- Inspect all safety devices, governors and to carry out normal safety tests and loads test to ensure the function of over load safety device.
- Check that the motor overload protection dashpots and oil buffer have an adequate oil level, if fitted.

- Test emergency inverter supply circuit & Automatic Rescue Device circuit if installed. If defective replace faulty PC boards, relay, charger circuit, Ni –Cad battery bank etc. Top-up battery where applicable. Cleaning , removing of rust and painting lift car top equipments, car exterior and all motor room equipments with the original matching colour, wherever necessary.

F Services to be performed every years

- Clean the connection on box of every floor, car cage. Tighten all screws and check the condition of cables at conduit inlet and outlet.
- Check and condition of worm gear and thrust bearing of the gear box
- Check and tighten screws of control panel, starting panel and relay panel.
- Remove the dust inside the landing inductor switch by electric blower
- Test all safety devices.
- Dismantle, clean and adjust the electro-magnetic brake of gearless machine.
- To clean and polish lift car interior and escalator step panel.
- Change gear oil motor oil
- Check and tighten screws and foundation bolts of traction machine, secondary sheaves, exterior of lift frame, guide rail guide rail clamp and brackets etc.
- Test the over current relays
- Dismantle, clean and check the bell bearing etc. of M-G set.