	UNIVERSITY OF KERALA									
			ENGINEERING UNIT, KARI							
TEN	TENDER SCHEDULE FOR THE ELECTRICAL INSTALLATIONS FOR SETTING UP OF NANOPHOTONICS LABORATORY-PHASE III AT DEPARTMENT OF									
	OPTO-ELECTRONICS, KARIAVATTOM CAMPUS.(RETENDER)									
SI No	Qty	Unit	Description of Item ELECTRICAL WOR	unit	Rate	Rate in words	Amount			
1			Supply and wiring points according to IS 732-1989 using rigid PVC conduit of minimum size 20 mm with specials conforming to IS 9537 part III 1983 and with suitable size specials conforming to IS 3419-1988, fixing the conduit using metal saddles spacing not exceeding 50 cm or concealed suitably and with 1.00 sq mm FR PVC insulated stranded single core copper conductor cable 650V grade, including <i>providing switch board main and continuous</i> <i>earthing with No.14 SWG bare copper</i> , required quantity of copper earth socket, brass bolt and nut crimping/ soldering etc complete with suitable size modular type metal switch boxes, <i>modular type</i> <i>front plates (white)</i> etc. up to and including 6A modular type SP switches and making good the surface of wall, colour washing etc. complete. All the terminations in the switch boards and DB's shall be tinned and the wires shall be drawn and fixed along the periphery of the box using suitable ties, tie mounts etc as required. ( <i>Group B/ RoHS compliant modular accessories</i> ).							
a	4	Nos.	Single control light point with 6A, 3 plate ceiling rose	Е	841.00	Rupees Eight hundred and forty one only	3,364.00			
b	4	Nos.	Single control ceiling fan point with 6 A, 3 plate ceiling rose & with socket size stepped electronic regulator.	E	1498.00	Rupees One thousand Four hundred and ninety eight only	5,992.00			

2			<i>Supply,</i> conveyance installation testing and commissioning the light fittings of following types made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVC <i>round block</i> neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required.				
a	4	Nos.	1x28w T5 fitting with APF electronic ballast suitable for continuous operation with THD <10%, power factor >0.98, RoHS compliant, high lumen tube .		1717.00	Rupees One thousand Seven hundred and seventeen only	6,868.00
3	4	Nos.	Supply and installation of suitable size <i>MS rod type fan clamp</i> as per IS 732 as required.	Е	124.00	Rupees One hundred and twenty four only	496.00
4			<i>Supply</i> , conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories <i>excluding resistance type regulator</i> , wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.				
a	4	Nos.	1200 mm sweep - 5 star rated	Е	1853.00	Rupees One thousand Eight hundred and fifty three only	7,412.00
5			Supply and fixing the following sizes of <i>PVC Conduit</i> conforming to IS 9537 / 1983 part III along with all required accessories <i>on surface</i> including making good the damages etc as required.				
a	25	m	20 mm dia light gauge	m	83.00	Rupees Eighty three only	2,075.00

6			Supply and drawing 650/1100 V grade <i>PVC insulated stranded</i> <i>single core copper conductor cables</i> conforming to IS 694 part I 1990 in the existing surface / recess conduit as required including giving necessary connections of the following sizes.				
a	20	Nos.	2.50 sq mm 1 run	m	55.00	Rupees Fifty five only	1,100.00
с	20	Nos.	4.00 sq mm 2 run	m	106.00	Rupees One hundred and six only	2,120.00
7			Supply & Fixing the following types/ sizes of boxes suitable for modular accessories in surface/ recess including making good the damages, colour washing etc as required ( <i>Group B/ RoHS compliant</i> )				
а	4	Nos.	2 module metal box in recess	E	165.00	Rupees One hundred and sixty five only	660.00
8			Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. ( <i>Group B/ RoHS compliant</i> )				
а	4	Nos.	2 module white/ off-white	E	101.00	Rupees One hundred and one only	404.00
9			Supply and Fixing the following modular switches & accessories in the existing front plates and giving necessary connections as required ( <i>Group B RoHS compliant</i> )				
a	2	Nos.	20 A DP switch with indicator	Е	304.00	Rupees Three hundred and four only	608.00
b	2	Nos.	20 A 3 pin socket	Е	223.00	Rupees Two hundred and twenty three only	446.00

c	2	Nos.	6-32A( C curve)	E	219.00	Rupees Two hundred and nineteen only	438.00
TOTAL Rs.							31,983.00

## PAC Rs.31,983 /- (Rupees Thirty one thousand nine hundred and eighty three only)

I/We agreed to execute the work. 1. .....% below the estimate rate.

2. .....% above the estimate rate. 3. At the estimate rate.

Sd/-

CONTRACTOR

**UNIVERSITY ENGINEER**