

क्र.संगाबाअवि/११/ 210/२०१६  
दिनांक :- २/२/२०१६

प्रति,  
से.चेतन रेक्रिजरेशन,  
अमरावती.

**विषय :- करारनामाबाबत..**  
Maintenance of Air Conditioners , Water Coolers, Water  
Purifier & its Components through Break Down Service  
Mechanism

- संदर्भ :- १) निविदा सूचना क्र.२५/२०१५  
२) क्र.संगाबाअवि/११/२९/२०१६ दि.२२/१/२०१६  
३) आपले दि.२५/१/२०१६ ला प्राप्त झालेले पत्र

महोदय,  
उपरोक्त विषयाकित कामासंबंधी आपण संदर्भाकित पत्र क्र.३ द्वारे सुरक्षा  
रक्कम रु.५०,०००/- (रु.पन्नास हजार फक्त) पावती क्र.०२४१७८०, दि.२५/१/२०१६  
नुसार जमा केलेली असल्याने आपल्या सोबत दिनांक २/२/२०१६ रोजी वार्षिक  
देखभाल करारनामा करण्यांत आलेला आहे. तसेच, सदर करारनामा हा  
दि.०३/०२/२०१६ पासून एक वर्षाच्या कालावधीसाठी राहिल.

तरी, आपण वरीलप्रमाणे देखभालीची कामे करारनामा व नियमावली  
क्र.१७/२०१० नुसार वेळोवेळी संबंधितांकडून प्राप्त होणाऱ्या सूचनेप्रमाणे करावी.  
सदर करारनामा, नियमावली, विहित प्रपत्रे व यंत्रांची यादी यांची प्रत सोबत  
जोडलेली आहेत.

सहपत्र-वरीलप्रमाणे

  
कार्यकारी अभियंता  
संत गाडगे बाबा अमरावती विद्यापीठ

प्रतिलिपी-

वित्त व लेखा अधिकारी, संत गाडगे बाबा अमरावती विद्यापीठ, अमरावती.

  
21/2/16

258/2



महाराष्ट्र MAHARASHTRA

2015

MS 139426

सौ. एस. एस. गिरार्जि  
मुद्रांक विवेता, कॅम्प,  
कान्हागोली # 1/2/3/4-9/1

24005  
13/11/15  
श्री. अम  
प. काले



AGREEMENT OF MAINTENANCE OF AIR CONDITIONERS, WATER COOLERS, WATER PURIFIER AND ITS COMPONENTS THROUGH BREAKDOWN SERVICE MECHANISM

1) This deed of agreement made on this 2<sup>nd</sup> day of February 2016 between Sant Gadge Baba Amravati University, Amravati through it's Registrar hereinafter called the University on one part.

And

M/s Chetan Refrigeration

hereinafter called "Service Provider" on the other part, which expressions shall include his legal heirs and successors.

The charges for replacement of spares, repair of spares, service charges if any shall be as per Annexure-I for one year required for maintenance of Air Conditioners, Water Coolers, Water Purifier and its Components.

Whereas the Service Provider has agreed to accept the terms & conditions mentioned as under:

(Contd..)

This deed of Agreement witnesses as under :



1. The Service Provider shall make available Service Engineer round the clock at University office during the contract period.
2. The Service Provider will provide spares, repair of spares, service charges if any which may be needed for Air Conditioners, Water Coolers, **Water Purifier** and it's Components during the contract services as per the approved rates.
3. The Service Provider will extend one year's working warranty for Compressors & Six months working warranty for all other spares replaced during contract period.
4. The contract service is not transferable.
5. Payment of the Service Provider will be made on quarterly basis after receiving the bills of all repaired/replaced spares/service charges, if any, carried out during the quarter and necessary documentary evidence i.e. certification from the Controlling Officer about the satisfactory working of the repaired Air Conditioners, Water Coolers, **Water Purifier** and it's Components.
6. The Service provider shall deposit Rs.50,000/- (Rs. Fifty Thousand only) as security deposit at the time of execution of agreement.
7. Response time to attend any fault should be less than two days and repair and replacement of the parts should be as per Annexure-E. If the Service Provider will not do the repair of any machines as mentioned in Annexure-E in a specified time then University will be free to get done the repair of work from the outside agency and all the expenses (i.e. repairs, replacement, services and any other) will be deducted from the payment of the Service Provider. In addition to this, penalty will be levied i.e. Rs. 100/- per day.
8. Payment will be made after making deduction on account of down time penalty for the quarter period. Penalty will be calculated on the basis of down time reports from the Controlling Officer. If the services are satisfactory then the payment will be released within 15 days after the expiry of the quarter.
9. No advance payment will be made by this office for the contract service.
- 10 If the service provider will not carry out the work within specified period, the security deposit will be forfeited.
11. The Service Provider will attend the complaint as per complaint register maintained by Controlling Officer. The format of the complaint register is enclosed in Annexure-A.
12. The provision made in the Rule No. 17 /2010 shall be binding on the Service Provider. The copy of the rule is enclosed in Annexure-III.
13. The Service Provider shall not make or send offensive, indecent, menacing, nuisance or hoax calls or communications or to cause annoyance, inconvenience or needless anxiety, if it happens the Service Provider shall be entitled to immediate termination of the contract.

(Contd..)

- 14. University will review the services of the contractor after Six months, in case services are not found as per Agreement then University will terminate the Agreement.
- 15. The Service Provider agreed that infringement of any of the above conditions will result in the termination of the contract. The decision of the Hon' ble Vice-Chancellor shall be final with regard to this contract. If the contract remains inoperative as a result of inaction of the Service Provider, the Hon' ble Vice-Chancellor shall instantly terminate the contract by giving one month's notice to the Service Provider resulting in forfeiture of the security deposit.
- 16. In case of dispute; the matter shall be decided in Amravati Jurisdiction.
- 17. The Controlling Officer will be satisfying officer for all repairs and maintenance.

Party No.1      **M/s Chetan Refrigeration, Amravati**  
Party No.2      Registrar, Sant Gadge Baba Amravati University, Amravati.

Witness :  
1)  Party No.1  
(M/s Chetan Refrigeration, Amravati)  
(Service Provider)  
2)  Party No.2  
(Registrar)  
Sant Gadge Baba Amravati University

Prepared by      Checked & Verified by      Approved by M.C. Vide  
            Item No. 103 dated 3/6/2015  
University Deputy Engineer (Elect.)      Executive Engineer      Registrar  
Sant Gadge Baba Amravati University.



Annexure-D

Sant Gadge Baba Amravati University

**Maintenance of Air-Conditioners , Water Coolers, Water Purifiers & its's Components by adopting "Break Down Service Mechanism".**



M/s Chetan Refrigeration, 22-A, Malu Nagar, Gopal Nagar, Amravati 9422843841

Sr. No.	Name of spares in Air conditioner , Water Coolers & Aqua guard.	Expected Frequency of failure/ year	Unit	Cost of the spare Rs.	Repair charges, (if any)	Service charges	Total Cost	Frequency (X) Total cost
1	Running Capacitor	3	4	Rs. 10	Rs. 11	Rs. 12	Rs. 13	14
	a) 36 mfd	3	Each	900		50	950	2850
	b) 40 mfd	3	Each	110		20	130	390
	c) 45 mfd	3	Each	950		50	1000	3000
	d) 50 mfd	3	Each	140		10	150	450
	e) 60 mfd			140		10	150	
2	Starting capacitor							
	a) 60 – 80 mfd	3	Each	60		10	70	210
	b) 80-100 mfd	3	Each	600		200	800	2400
	c)100-120 mfd	3	Each	70		10	80	240
3	Relay	2	Each	350		120	470	940
4	Thermostat	1	Each	250		50	300	300
5	Gas charging							
	a) R-410	2	Kg	1200		2000	3200	6400
	b) R-22	2	Kg	1600		2000	3600	7200
	c) R-134	2	Kg	150		25	175	350
	d) R-32			150		25	175	
6	Fan motor Rewinding	1	Job		500	200	700	700
7	Fan motor shafting and bushing	1	Job		300	100	400	400
8	Capillary	1	Feet	2		1	3	3
9	Filter	2	Each	5		2	7	14
10	Internal wiring / Cable (ISI mark)	1	Feet	5		2	7	7
11	Copper piping							
	a) 3/16" dia	0.2	Feet	4		2	6	1.2
	b) 1/4" dia	0.2	Feet	10		2	12	2.4
	c) 3/8" dia	0.2	Feet	10		2	12	2.4
	d) 1/2" dia	0.2	Feet	15		2	17	3.4
	e) 5/8" dia	0.2	Feet	17		2	19	3.8
12	Fan motor capacitor							
	a) 4 mfd	1	Each	10		2	12	12
	b) 6 mfd	1	Each	11		2	13	13
13	Contactor for split & package type A/c							
	a) Single Phase	0.5	Each	900		300	1200	600
	b) Three Phase	0.5	Each	1200		300	1500	750
14	Valves, three way with different types	0.5	Each	50		20	70	35
15	Remote PCB Repairing (Split / Window A/c)	0.5	Job		1600	200	1800	900
16	Remote PCB Repairing (cassette type A/c)	0.5	Job		2600	100	2700	1350
17	Remote PCB Repairing (Package type A/c's)	0.5	Job		2400	100	2500	1250
18	Remote for Split / Window types of A/c's	0.3	Each	200		50	250	75
19	Remote kit for Package type A/c's	0.3	Each	600		100	700	210
20	Connector	0.25	Each	5		2	7	1.75
21	Fan Blade for							
	a) Split type A/c of various Capacities	0.25	Each	100		10	110	27.5
	b) Window type A/c of various Capacities	0.25	Each	100		10	110	27.5

Sr. No.	Name of spares in Air conditioner , Water Coolers & Aqua guard.	Expected Frequency of failure/ year	Unit	Cost of the spare Rs.	Repair charges, (if any) Rs.	Service charges Rs.	Total Cost Rs.	Frequency (X) Total cost
1	2	3	4	Rs. 10	Rs. 11	Rs. 12	Rs. 13	14
	c) Package type A/c of various Capacities	0.25	Each	100		10	110	27.5
	d) Water Coolers of various Capacities	0.25	Each	100		10	110	27.5
	e) Cassette type A/c of various capacities	0.25	Each	100		10	110	27.5
22	Blower motor of various capacities	0.25	Each	1400		200	1600	400
23	Repairing of cooling coil of various Capacities	0.3	Job		30	10	40	12
24	Repairing of Condensing coil of various Capacities	0.3	Job		30	10	40	12
25	Cooling coil for window type A/c							
	a) 1.5 Tonne	0.2	Each	400		50	450	90
	b) 2.0 Tonne	0.2	Each	500		50	550	110
26	Cooling coil for Split type A/c							
	a) 1.5 Tonne	0.2	Each	400		50	450	90
	b) 2.0 Tonne	0.2	Each	500		50	550	110
	c) 3.0 Tonne	0.2	Each	600		50	650	130
27	Cooling coil for Cassette type A/c							
	a) 2.0 Tonne	0.2	Each	500		50	550	110
	b) 3.0 Tonne	0.2	Each	600		50	650	130
	c) 4.0 Tonne	0.2	Each	700		50	750	150
28	Cooling coil for Package type A/c							
	a) 5.5 Tonne	0.2	Each	600		50	650	130
	b) 8.5 Tonne	0.2	Each	700		50	750	150
29	Condensing coil for A/c							
	a) 1.5 Tonne	0.2	Each	400		50	450	90
	b) 2.0 Tonne	0.2	Each	500		50	550	110
	c) 5.5 Tonne	0.2	Each	700		50	750	150
	d) 8.5 Tonne	0.2	Each	900		50	950	190
27	Condensing coil for Water Coolers							
	a) 30 ltrs capacity	0.2	Each	150		50	200	40
	b) 40 ltrs capacity	0.2	Each	250		50	300	60
	c) 120 ltrs capacity	0.2	Each	300		50	350	70
	d) 150 / 240 ltrs capacity	0.2	Each	1800		50	1850	370
31	Puff insulation for Water Coolers	0.2	Job		50	10	60	12
32	Door Gasket for Water Cooler of various capacities	0.3	Running Feet	5		5	10	3
33	Painting of water cooler body	0.3	Job		1500	300	1800	540
34	Water cooler drainage tray	0.3	Each	150		300	450	135
35	Repairs of water cooler of different capacities.							
	a) Top door	0.3	Job		500	100	600	180
	b) Front panel	0.3	Job		500	100	600	180
	c) Side panels	0.3	Job		500	100	600	180
	d) Back panel	0.3	Job		500	100	600	180
36	Repairing of water cooler base / frame	0.3	Job		2500	100	2600	780
37	Stainless steel Tap push type (Front & Upper Type)	0.5	Each	600		250	850	425
38	Repairs of voltage stabilizers with different capacities							
	a) 4 KVA	0.3	Job		100	50	150	45
	b) 5 KVA	0.3	Job		100	50	150	45
39	Electric cable wire (4 square mm) with different sizes ISI Mark	0.2	Feet	10		5	15	3
40	Over load protector for water cooler	0.5	Each	10		10	20	10



Sr. No.	Name of spares in Air conditioner , Water Coolers & Aqua guard.	Expected Frequency of failure/year	Unit	Cost of the spare Rs.	Repair charges, (if any) Rs.	Service charges Rs.	Total Cost Rs.	Frequency (X) Total cost	
1	2	3	4	Rs. 10	Rs. 11	Rs. 12	Rs. 13	14	
41	Transportation (to & fro) (University Campus to Workshop and vice versa)	0.2	Job				300	60	
42	Heatlon sheet (Felt) with cotton tape	0.5	Mtrs	10		10	20	10	
43	Heatlon pipe with cotton tape of required size	0.5	Mtrs	10		10	20	10	
44	Selector Switch for window A/c's	0.2	Each	20		10	30	6	
44	Swing motor for indoor unit	0.3	Each	700		50	750	225	
45	Swing motor for indoor unit cassette type A/c	0.3	Each	700		50	750	225	
46	Installation charges for air-conditioner								
	a) Window A/c's of all types & capacities	0.2	Job				200	40	
	b) Multispilt A/c's of all types & capacities	0.2	Job				400	80	
	c) Single split A/c's of all types & capacities	0.2	Job				1500	300	
	d) Cassette A/c's of all types & capacities						400	0	
	e) Package A/c's of all types & capacities						400	0	
47	Brazing Rods	0.5	Dozen	30		10	40	20	
48	Blower for Indoor units with different capacities (Split & Window)								
	a) 1.5 Tonne	0.2	Job		200	10	210	42	
	b) 2.0 Tonne	0.2	Job		200	10	210	42	
49	Ball cock for water cooler ½"	1	Each	450		150	600	600	
50	Stainless Steel Nipple for water cooler ½"	0.5	Each	40		10	50	25	
51	P.V.C. Drain pipe for water cooler 1"	1	Each	40		10	50	50	
52	P.V.C. overflow pipe for water cooler ½"	1	Each	20		10	30	30	
53	Pin top 16 A.	0.5	Each	20		10	30	15	
54	Plug sockets 6A	0.5	Each	10		5	15	7.5	
55	Switch 6A.	0.5	Each	10		5	15	7.5	
56	Plug socket 16A.	0.5	Each	10		5	15	7.5	
57	Carbon Filter	1	Each	750		150	900	900	
58	Candle Filter	2	Each	350		300	650	1300	
59	Ultra Violet Tube	0.5	Each	350		50	400	200	
60	Holder for Ultra Violet Tube	0.25	Each	10		2	12	3	
61	PCB Repair	1	Job		1600	300	1900	1900	
62	Sensor	0.5	Each	150		50	200	100	
63	½ inch PVC pipe	1	Per feet	30		10	40	40	
64	½ inch PVC Hose Pipe	1	Per feet	20		10	30	30	
65	Solenoid volve	0.5	Each	450		100	550	275	
66	Glass Tube for Aquaguard	1	Each	300		100	400	400	
67	Nipple PVC ½ inch	0.5	Each	20		10	30	15	
68	<b>REPLACEMENT OF COMPRESSOR FOR VARIOUS AIRCON</b>								
	<b>i) Reciprocating type</b>								
	a) 1.0 Tonne	0.2	Each	2000		400	2400	480	
	b) 1.5 Tonne	0.2	Each	10000		400	10400	2080	
	c) 2.0 Tonne	0.2	Each	10400		400	10800	2160	
	<b>ii) Scroll type</b>								
	a) 1.0 Tonne	0.2	Each	2000		400	2400	480	
	b) 1.5 Tonne			3000		400	3400	0	
	c) 2.0 Tonne			3200		400	3600	0	
	d) 5.5 Tonne Ductable scroll type			19000		400	19400	0	

Sr. No.	Name of spares in Air conditioner , Water Coolers & Aqua guard.	Expected Frequency of failure/year	Unit	Cost of the spare Rs.	Repair charges, (if any) Rs.	Service charges Rs.	Total Cost Rs.	Frequency (X) Total cost
1	2	3	4	Rs. 10	Rs. 11	Rs. 12	Rs. 13	14
*	8.5 Tonne Ductable Scroll Type			12500		400	12900	
	(USHA / VOLTAS / VIDEOCON / CARRIER / KIRLOSKAR COPELAND / BLUE STAR / LG							
69	<b>REPLACEMENT OF COMPRESSOR FOR VARIOUS WATER</b>							
	a) 40/80 litres capacity	0.25	Each	6000		400	6400	1600
	b) 120/150 litres capacity	0.25	Each	6000		400	6400	1600
	c) 150/240 litres capacity	0.25	Each	10400		400	10800	2700
	<b>(VOLTAS / TUSHAR / BLUE STAR / USHA)</b>							
70	Checking & servicing of the units shall be done quarterly with an entry in the maintenance card (Annexure D) & complaint Register (Annexure A). Preventive maintenance shall consist the following -	4	Job			800	800	3200
	i) Complete servicing of unit with oiling & greasing of moving parts							
	ii) Cleaning of Air filter							
	iii) Cleaning of evaporator coil							
	iv) Cleaning of condensor coil with the help of blower & water as required							
	v) Leakage testing of refrigeration line							
	vi) Checking & adjusting controls such as overload relay, thermostat, expansion valve etc.							
	vii) Checking & tightening of electrical connection of switchgears / controls & cleaning the strips of connectors/contactors/ relay etc.							
	viii) Complete system checking inview of maintaining desired temperature.							
	<b>Total Cost</b>	<b>76.75</b>	<b>0.00</b>	<b>111889</b>	<b>15710</b>	<b>15368</b>	<b>146167</b>	<b>57888.95</b>
	<b>Frequency (X) Total cost (A) Total Frequency</b>							<b>754.25</b>
	<b>Executive Engineer</b> <b>Sant Gadge Baba Amravati University</b>  <b>Registrar</b> <b>Sant Gadge Baba Amravati University, Amravati.</b>							
	 <b>Registrar</b> <b>Sant Gadge Baba Amravati University, Amravati.</b>							