Sr no Description HSN/SAC Code Unit Qtv Rate Total 1 Pump set		Sub:Replacement of Condenser pump at service block, ACTREC						
1 Pump set Image: Construction of the set		Name of Agency						
Pump set Image: Construction of the set of the s	Srno	Description	HSN/SAC Code	Unit	Otv	Pate	Total	
Supply installation testing and commissioning of centrifugal pumps set factory assembled & tested for rated efficiency complete with TEC more TEPT trains, common base frame, mechanical seaks, vibration isolators including flexible connections, set for retroculation of condenser water for the central air conditioning system. The pumps shall be auduble for operation on 415 - 71 MV wolts, 5012; 3p1 AG supply, and all other accessories i.e. Base frame, coupling, coupling guard in of hundation boths, etc. require to install & commissioning of pump as per instruction & & directed by engineering in - charge. The pump parameters what be a given. Nos 1 0 Head 40m Capacity m3 / h 170 Nos 1 0 Power rating. 40 hp Nos 1 0 Ren 1470 Casacity and a lother accessories in struction & directed by the power rating. 40 hp Nos 1 0 Ren 1470 Capacity m3 / h 170 Nos 1 0 Power rating. 40 hp Nos 1 0 Ren 1470 Ren 1470 Nos 1 0 Casacity m3 / h 170 Nos 1 0 0 Power rating. 40 hp Nos 1 0 0 Ren 1470 Ren 1470 Nos 1 0 Casacity and a present structure and the depth of foundation so to be kept with pockets for Foundation but with not. The d	51 110	Description	H3N/SAC Coue	Unit	Qty	Kate	Total	
Supply installation testing and commissioning of centrifugal pumps set factory assembled & tested for rated efficiency complete with TEC motor PETrating, common hase frame, mechanical seak, vitration isolators including flexible concentral air conditioning system. The pumps shall be sublek for operation on 13 + / 10 % volts, 50 http:// 10 % volts.50 http:// 10 %	1	Pump set						
Power rating: 40 up Rpn 1470 No. 2 RCC foundation Providing & Casting Reinforced cement concrete For Pump foundation as per specific grade [1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size] consolidation with vibrator & needed or required capacity including finishing Curing, excluding form work, shuttering and steel reinforcement etc. complete all as directed by the Engineer-in-Charge. The foundation sot to be kept with pockets for Foundation bolt with modofied concrete/grout material. Also dismatling of existing foundation is in scope of contractor. 1 3 Dismantling of Existing Pumps, pipe line , valves, foundation tet. from the service Block and to be keep as per instructions & as directed by 0-1-C, ES. 1 4 Modification in piping work: Modification in existing piping work of inlet/outlet water line using class 'C' MS pipes, flanges, strainers, bends, reducer with all welding, cutting & piping and Tee connections for all gauges (pressure/ temperature /flow Varianag / descaling), complete with proper support of angle/channel etc, paint/genaml paint etc. as per requirement, all as per specifications, instructions & as per directions of 0-1-C, ES. 4.1 200 mm class' C'MS pipes Rmt 2 5 Butterfly valves if the valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizes Nos 1 5.1 Butterfly valve of 200 mm Nos 1 1 6 Pressure gauges with S siphon tube.and all other assesories and		Supply installation testing and commissioning of centrifugal pumps set factory assembled & tested for rated efficiency complete with TEFC motor EFF1rating, common base frame, mechanical seals, vibration isolators including flexible connections. etc for recirculation of condenser water for the central air conditioning system. The pumps shall be suitable for operation on 415 +/- 10% volts, 50Hz 3ph AC supply. and all other accesories i.e. Base frame, coupling, coupling guard and foundation bolts, etc. require to install & commissioning of pump as per instruction & directed by engineering -in -charge. The pump parameters shall be as given, Head. 40m						
2 RCC foundation Providing & Casting Reinforced cement concrete For Pump foundation as per specific gradel [1:15:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size] consolidation with vibrator & needed of required capacity including finishing Curing, excluding form work, shuttering and steel reinforcement etc. complete all as directed by the Engineer-inCharge. The foundation os to be kept with pockets for Foundation bolt with modofied concrete/grout material. Also dismatling of existing foundation is in scope of contractor. 1 3 Dismantling of Existing Pumps, pipe line , valves, foundation to the refrected by Ch-C, ES. 1 4 Modification in piping work: Modification in existing piping work of inter/outlet water line using class 'C MS pipes, flages, strainers, bends, reducer with all Welding, cutting & joining and Tee connections for all gauges (pressure/ temperature /flow Virainage / descaling), complete with proper support of angle/channel etc, painting of entire installation with two coard of bituminous paint/enamal paint etc. as per requirement, all as per specifications, instructions & as per directions of 0-1-C, ES. 4.1 200 mm class 'c' MS pipes Rmt 2 5 Butterfly valves of 200 mm Rmt 2 5.1 Butterfly valve of 150 mm Nos 1 6 Pressure gauges with SS siphon tube, and all other assessories and hardware as per instructed and as directed by OIC-ES Nos 1 6 Pressure gauges with SS siphon tube, and all other assessories and haradware asper instructed and as directed by OIC-ES	1.1	Power rating . 40 hp		NOS	1		0	
Providing & Casting Reinforced cement concrete For Pump foundation as per specific grade [1:1.5:3 (1 cement: 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size] consolidation with vibrator & needle of required capacity including finishing. Curing, excluding form works, shuttering and steel reinforcement etc. complete all as directed by the Engineer-inCharge. The foundating form works, shuttering and steel reinforcement etc. complete all as directed by the Engineer-inCharge. The foundation so to be kept with pockets for Foundation bolt with modofied concrete/grout material. Also dismatling of existing foundation is in scope of contractor. LS 1 3 Dismantling of Existing Pumps, pipe line , valves, foundation etc. from the service Block and to be keep as per instructions & as directed by O-1-C, ES. LS 1 4 Modification in piping work: Modification in existing piping work of inlet/outlet water line using class 'C' MS pipes, flanges, strainers, bends, reducer with all welding, cutting & joining and Tee connections for all gauges (pressure/ temperature /flow /drainage / descaling), complete with proper support of angle/channel etc, paint/genaml paint etc. as per requirement, all as per specifications, instructions & as per directions of O-1-C, ES. Rmt 2 4.1 200 mm class 'c' MS pipes Rmt 2 5.1 Butterfly valves The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizes Nos 1 6 Pressure gauges with SS shiphon tube,and all other assesories and hardware as per instructed and a sdirected by U0-ES </td <td>.<u> </u></td> <td>Rpm 1470</td> <td></td> <td></td> <td></td> <td></td> <td></td>	. <u> </u>	Rpm 1470						
foundation etc. from the service Block and to be keep as per instructions & as directed by 0-1-C, ES.LS14Modification in piping work: Modification in existing piping work of inlet/outlet water line using class 'C' MS pipes, flanges, strainers, bends, reducer with all welding, cutting & joining and Tee connections for all gauges (pressure/ temperature /flow /drainage / descaling), complete with proper support of angle/channel etc. painting of entire installation with two coat of bituminous paint/enamal paint etc. as per requirement, all as per specifications, instructions & as per directions of 0-1-C, ES.Rmt24.1200 mm class 'C' MS pipesRmt24.2150 mm class 'C' MS pipesRmt25Butterfly valves: The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizesNos15.1Butterfly valve of 150 mmNos16Pressure gauges with SS siphon tube,and all other assesories and hardware as per instructed and as directed by 01C-ESNos27Ammeter, Selector switch, indication lamp, control fuse,timer etc. suitable for 40HP pump. The above itemsLot1		Providing & Casting Reinforced cement concrete For Pump foundation as per specific grade [1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size] consolidation with vibrator & needle of required capacity including finishing Curing,exlcuding form work, shuttering and steel reinforcement etc. complete all as directed by the Engineer-inCharge. The foundation os to be kept with pockets for Foundation bolt with nuts. The depth of foundation bolt is not less than 300 mm & of M-20 grade. Grouting this foundation bolt with modofied concrete/grout material. Also dismatling of existing foundation is in scope		LS	1		-	
piping work of inlet/outlet water line using class 'C' MS pipes, flanges, strainers, bends, reducer with all welding, cutting & joining and Tee connections for all gauges (pressure/ temperature /flow /drainage / descaling), complete with proper support of angle/channel etc, painting of entire installation with two coat of bituminous paint/enamal paint etc. as per requirement, all as per specifications, instructions & as per directions of 0-1-C, ES. 4.1 200 mm class 'c' MS pipes Rmt 2 4.2 150 mm class 'c' MS pipes Rmt 2 5 Butterfly valves: The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizes Nos 1 5.1 Butterfly valve of 200 mm Nos 1 6 Pressure gauges with SS siphon tube, and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 7 Ammeter, Selector switch, indication lamp, control fuse, timer etc. suitable for 40HP pump. The above items Lot 1	3	foundation etc. from the service Block and to be keep as per		LS	1		-	
4.2 150 mm class 'c' MS pipes Rmt 2 5 Butterfly valves :The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizes Nos 1 5.1 Butterfly valve of 200 mm Nos 1 5.2 Butterfly valve of 150 mm Nos 1 6 Pressure gauges with SS siphon tube, and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 6 Electrical Panel :- SITC of switch gear items comprising of TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse, timer etc suitable for 40HP pump. The above items Lot 1	4	piping work of inlet/outlet water line using class 'C' MS pipes, flanges, strainers, bends, reducer with all welding, cutting & joining and Tee connections for all gauges (pressure/ temperature /flow /drainage / descaling), complete with proper support of angle/channel etc, painting of entire installation with two coat of bituminous paint/enamal paint etc. as per requirement, all as per						
4.2 150 mm class 'c' MS pipes Rmt 2 5 Butterfly valves :The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizes Nos 1 5.1 Butterfly valve of 200 mm Nos 1 5.2 Butterfly valve of 150 mm Nos 1 6 Pressure gauges with SS siphon tube, and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 6 Electrical Panel :- SITC of switch gear items comprising of TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse, timer etc suitable for 40HP pump. The above items Lot 1	4.1	200 mm_class 'c' MS pipes		Rmt	2		-	
5 Butterfly valves :The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing Cast iron double flange Butterfly Valve of following sizes Nos 1 5.1 Butterfly valve of 200 mm Nos 1 5.2 Butterfly valve of 150 mm Nos 1 6 Pressure gauges with SS siphon tube, and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 7 Electrical Panel :- SITC of switch gear items comprising of TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse, timer etc suitable for 40HP pump. The above items Lot 1		* *					-	
5.2 Butterfly valve of 150 mm Nos 1 6 Pressure gauges with SS siphon tube,and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 6 Electrical Panel SITC of switch gear items comprising of TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse,timer etc suitable for 40HP pump. The above items Lot 1		Butterfly valves :The valves used at the inlet and outlet of the pumps shall be PN16 rating. Supplying and Installing			_			
5.2 Butterfly valve of 150 mm Nos 1 6 Pressure gauges with SS siphon tube, and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 6 Electrical Panel -: SITC of switch gear items comprising of TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse, timer etc suitable for 40HP pump. The above items Lot 1	5.1	Butterfly valve of 200 mm		Nos	1		-	
6 Pressure gauges with SS siphon tube,and all other assesories and hardware as per instructed and as directed by OIC-ES Nos 2 6 Electrical Panel SITC of switch gear items comprising of TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse,timer etc suitable for 40HP pump. The above items Lot 1	5.2	Butterfly valve of 150 mm		Nos	1		-	
7 TPN SFU, HRC fuses, contactor, over load relay, CTS, 7 Ammeter, Selector switch, indication lamp, control fuse, timer etc. suitable for 40HP pump. The above items		Pressure gauges with SS siphon tube,and all other assesories			2		-	
should be accommodate in existing available feeder size as per instructed and as directed by OIC-ES	7	TPN SFU, HRC fuses, contactor, over load relay, CTS, Ammeter, Selector switch, indication lamp, control fuse,timer etc suitable for 40HP pump. The above items should be accommodate in existing available feeder size as		Lot	1		-	
Total					Total		-	

Tata Memorial centre ACTREC Sub:Replacement of Condenser pump at service block, ACTREC

Note: 1. Agency is suggested to visit the site to know actual scope of work before quoting.

2. The value shall be exclusive of all taxes

 The value shall be considered.
Deviations/suggestions may be put on separate page in order to attain higher quality performance. Competent authority 5. Agency will have to prepare detailed drawing/plan of work for necessary concurrence before actual execution. Agency

will have to make time bound work schedule for carrying out the work.

6. Agency will have to give guarantee of 1 year for the installations.

7.Agency will have to maintain the installation by undertaking preventive maintenance on regular basis for smooth operation during defect liability period on quarterly basis. Security deposit will be released after defect liability period.

8.Payment will be released for consumed quantity on satisfactory completion on providing necessary certifications/documentation etc.Hence before procurement, the agency may make survey of site and bring the required quantity of material.

9. Bill will be settled as per actual measurement 10. Factory inspection of Pump to be carried out in presence of ACTREC engineer