

SCHEDULE 'A'

Annexure: I

Name of work : Mechanical & electrical maintenance/repair/rehabilitation of various machinery and equipment installed at BHEL Water Treatment Plant, Jail Hill.

S.No	It. Code	Description of items	Qty.	Unit	Rate	Amount
1		Overhauling and repair of filter's outlet valves:- complete overhauling and repair of filter's outlet valves (gate valve) including dismantling from site, transportation to factory repair, replacement of spare parts, machining, grinding, turning etc. all operation bringing to plant re-installation including replacement of anchor bolts for mounting in position, testing and handing over as per direction of the Engineer Incharge.	3.00	No.	25603.00	76809.00
2		Rehabilitation of alum dosing system :- Rehabilitation of chemical dosing system includes repair of drive system replacement of wooden mixing paddles, fixing of rotary axis at centre, repair of level indicators, provision of outlet of 50 mm dia S.S. pipe etc. complete with replacement of bearings, couplings etc. complete along with complete cleaning of the units and re-commissioning upto the satisfaction of Engineer Incharge.	3.00	No.	22370.00	67110.00
3		Replacement of Gate valves at Flash mixer unit : Replacement of M.S. gate valves including fabrication of frame and shutters, replacement of lead screws with gun metal check nuts as per sample, removal of existing unit and erection, testing and handing over after one coat of approved steel primer paint including all welding and machining work complete as per direction of the Engineer Incharge.	3.00	Unit	29645.00	88935.00
4		Overhauling of Flocculator unit :- Over hauling of flocculator mechanical system including servicing of gear mechanism, drive motor with replacement of bearing etc. and repair of submerged mixing fan including replacement of structural component, welding, machining, bolting wherever required, provision of new scraper blades made of M.S. flat, re-assembly, painting with one coat of approved steel primer, two coat of black enamel paint, greasing and oiling wherever required, testing and handing over upto the satisfaction of Engineer Incharge.	1.00	Unit	74115.00	74115.00
5		Rehabilitation of system of Hydro Clarifier unit :- Rehabilitation of de-sludging system of hydro clarifier unit including emptying the unit, cleaning of accumulated sludge at bottom, washing with water jet pressure, dismantling of valves, drive shafts, replacement of broken or damaged spare parts including all machining work such as bracket, gun metal check nut & brass spindle, greasing, re-assembly, testing and handing over complete as per direction of the Engineer Incharge.	2.00	Unit	48512.00	97024.00
6		Replacement of M.S. Gate valves :- Replacement of M.S. Gate valves including fabrication of frame and shutters, replacement of lead screws with gun metal check nuts as per sample, removal of existing unit and erection, testing and handing over after one coat of approved steel primer paint including all welding & machining work complete as per direction of Engineer Incharge.	5.00	Unit	24795.00	123975.00
7		Rehabilitation of Rotor mechanism of Clariflocculator :- Dis-assembly, servicing, repair, replacement of drive chain, CI roller drum, rewinding of electric motor, replacement of bearing, fasteners, axis bracket etc. primer coat with approved steel primer, two coats of sythetic enamel paint of approved brand & colour, re-assembly, re-alignment, greasing, testing, commissioning and handing over complete as per direction of the Engineer Incharge.	2.00	Unit	24525.00	49050.00

8	Re-alignment of rail track clariflocculator :- Re-alignment of rail track including dismantling, refixing after realignment, providing M.S. calmping plates at the interval of 1 m c/c anchored with 2 nos. x M-10 anchor bolts fixed in concrete slab, including all machining work required, painting with one coat of approved steel primer and two coats of sythetic enamel paint of approved brand & colour testing with bridge rotor system etc. complete and handing over as per satisfaction of Engineer Incharge.	2.00	Unit	35036.00	70072.00
9	Rehabilitation of Clariflocculators mixing drive system:- Rehabilitation of clariflocculator's mixing drive system including rewinding of motors, replacement of bearings, realignment of gear mechanism, providing proper foundation bolts, replacement of spares (worms & bevel gears) including all machining, grinding etc. repair of mixing paddles including replacement of corroded submerge structure etc. complete one coat of approved steel primer, two coats of black sythetic enamel paint testing and handing over complete work to the satisfaction of Engineer Incharge.	8.00	Unit	26277.00	210216.00
10	Provision of modified slip ring assembly for clariflocculators I & II : Providing & fixing modified slip ring assembly on the axis of clariflocculator's bridge, made from high quality brass rings mounted on glass fibre bush with adjustable carbon brush holders and carbon brushes etc. complete along with fabrication of weather canopy etc. complete including erection testing, commissioning and handing over up to the satisfaction of Engineer Incharge.	2.00	Unit	25605.00	51210.00
11	Provision of thrust bearing assembly to the various sluice valves to reduce torque :- Provision of thrust bearing assembly of suitable size to the sluice valve operating staff to reduce the operational torque including supply of taper roller bearing mounting brackets/flanges, all machining work disassembly of existing system, assembly, lubrication etection, testing and commissioning complete up to the satisfaction of Engineer Incharge.				
	(i) 300 mm dia valve	20.00	No.	5255.00	105100.00
	(ii) 450 mm dia valve	6.00	No.	7413.00	44478.00
12	Servicing of various Sluice valves :- Disassembly inspection of parts, replacement/repair of worned out components (Check nuts, spindles, shutter etc.) greasing assembly complete as per direction of Engineer incharge.				
	(i) 150 mm dia valve	10.00	No.	2800.00	28000.00
	(ii) 200 mm dia valve	10.00	No.	3200.00	32000.00
	(iii) 250 mm dia valve	10.00	No.	4100.00	41000.00
	(iv) 300 mm dia valve	10.00	No.	5219.00	52190.00
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1211284.00					

Percentage quoted by the Contractor	%	Above	Below	At Par
Percentage quoted by the Contractor in words				

Signature of Contractor

Signature of Officer