

E cart for garbage with tipping facility									
S.No.	Technical Parameters	N or Ch	Value 1	Value 2	Value3	Value 4	Value 5	Whether Filter Required	Unit
Generic Parameters									
1	Type of E Cart	En	Fully Electric, Battery Operated Motor Driven for Carrying Bins						
2	Model Number of E- Cart	Ch							
3	Colour of E Cart	Ch							
4	The E Cart Must Fabricated From Good Quality Steel properly Painted to avoid Rusting for more than 5 Years,	En	Yes						
5	Name and Grade of Steel from which E Cart Body Framed	Ch							
6	Kerb Weight of E- Cart	N							Kg
7	Garbage Carrying Capacity	N	<=310					Y	Kg
8	Run Distance (for a Full Charge of Battery , to be tested with full load at maximum AIS-040))	N	>=50					Y	Km
9	Number of Bins	N						Y	
10	Capacity of Individual Bins	N						Y	Ltr
11	Type of Chassis for E cart	Ch							
12	Ground Clearance as per IS : 9435	N	>=180					Y	mm
13	Wheel Base	N						Y	mm
14	Turning Radius	N						Y	mm

15	Power Transmission from Motor Shaft to Wheels	En	Direct Mounting	Chain	Sprocket Type	Other Mechanical Mechanisms		Y	
16	Please Specify the Mechanical Mechanism otherwise Put NA	Ch						Y	
17	Tipping Facility	En	Yes						
18	Tipping Angle	N	75-90					Y	Degree
19	Method of Tipping	En	Manual	Hydraulic	Others			Y	
20	If Others, mention the method of Tipping	Ch						Y	
21	Type of Battery as per AIS-048	En	Lead Acid	EV Grade	Tubular Deep Discharge			Y	
22	Capacity of the Battery approved by ICAT/ARAI	N	>=100					Y	Ah
23	Battery Voltage ,Nominal	En	48V	60 V				Y	
24	Maximum Overall Dimensions of the Battery (L x Wx H) (mm3)	Ch						Y	
25	Nominal Filled Weight of the Battery	N						Y	kg
26	Motor Controller (Must Suitable for starting, accelerating, decelerating, driving , and stopping of E Cart	Ch						Y	
27	Battery Charger	En	220/230 V Nominal Input Voltage , High Efficiency Type						
28	Charging Current	N						Y	Amp
29	Type of Motor	En	Brushless DC Motor						
30	Motor Output Power ,48V/60V at Full Load	N	850 - 2000					Y	watt

31	Overall Efficiency of the E Cart (to be tested at Full Load with maximum speed as per Concerned AIS standards	N	75 - 100					Y	%
32	Gradeability of E-cart , (to be tested at full procedure as per AIS -003 Load	N						Y	Degree
Certification									
33	Vehicle Certification	En	ARAI	VRDE	ICAT	OTHERS		Y	
34	If Vehicle Certification from Others Agency ,Name of the Agency otherwise put NA	Ch						Y	
35	Vehicle Certification Number and Date	Ch							
Constructional Parameters									
36	Seating Facility	En	For Driver only						
37	Length of E -cart as per Gazette Notification by Ministry of Road and Transport Oct , 2014	N	<=2.8					Y	mtr
38	Width of E -Cart as per Gazette Notification by Ministry of Road and Transport Oct, 2014	N	<=1					Y	mtr
39	Height of E -Cart as per Gazette Notification by Ministry of Road and Transport Oct , 2014	N	<=1.8					Y	mtr
40	Dimensions of the cabin Provided for Bins (mm x mm x mm) (mm3)	Ch						Y	
41	Size of Front Tyre	Ch						Y	
42	Size of Rear Tyre	Ch						Y	
43	Brake Type (Front)	Ch						Y	

44	Brake Type (Rear)	Ch						Y	
45	Suspension System (Front)	Ch						Y	
46	Suspension System (Rear)	Ch						Y	
47	Reverse Gear Facility	En	Yes						
48	The Mounting of Batteries (in E- vehicles shall be such that they are not displaced from their place and there is no spillage of electrolyte when vehicle is driven on Gradient or any aother type of road)	En	Yes						
49	Vehicle lighting System	En	Filament Type	LCD Based	LED Based			Y	
50	Instrument Panel Containing Speedometer and Battery Charging Indicator	En	Yes						
51	Glass Windshield with wiper motor as approved by ICAT/ARAI	En	Yes	No				Y	
52	Battery Make as per AIS :048:2009	En	Okaya	Exide	ceil	Amaron	Others	Y	
53	If others please specify the Name of Brand ,Otherwise put NA (as per AIS048 2009)	Ch							
54	Equipped with Start and Stop Button, parking Lights , Back lights with Reverse Gear Facility	En	Yes						
55	Equipped with Fire Extinguisher	En	Yes	No				Y	
56	Equipped with First Aid Box	En	Yes	No				Y	

57	Yellow Color reflective tape on Front and Rear Side of the E Cart	En	Yes						
58	E Cart Integration (packing of Electrical and electronics wires and devices shall be such that the vehicle can run in rainy Season without any problem)	En	Yes						
Performance Parameters									
59	Speed of the E- Rickshaw as per CMVR -2014 with latest amndmt (to be tested with Full Load)	N	20 - 25					Y	kmph
60	Battery Warranty	En	1	2	3			Y	years
61	No. Of Free Service	En	1	2	3	4	5	Y	
62	Compliance of Centre of Gravity of E Cart as a Compulsory Norms for Safety	En	Yes						
63	Confirming to Applicable Environmental Test	En	Yes						
64	Noise level must be Low during Operation	En	Yes						