						FILE No.								
	Creator : Ms Ritika (T	'A)				i A.V.Muralidhar				Ap	prover	: A.K K	amra	
					Refrigerated Cen			Purspose						
			1			: UNSPSC	Code	1	1	1	1	1	1	1
S.N o.	Parameters			Value 1	Value2	Value 3	Value 4	Value 5	Validati on	Golden param eter		$\begin{array}{cccc} p & o & \\ r & r & \\ i & i & \end{array} y$		Demand Aggrega tion
	<u> </u>		l			Standards	L		-	l .	1	l .	1	
1	Confirmity to standards	S	Е	European CE (Notified Body)With 4 Digit Notified Body No.	BIS					G				
2	Confirmity to Quality Management Sytems for Medical Devices	S	Е	ISO 13485						G				
3	Certifications Manufacturer			ISO 9001:2015										
						General Paramete	ers							
1	Purpose	P	Е	samples in different Labs and research	different kinds of ent kinds of Testing rch Labs at room perature									
2	Centrifuge design	P	Е	Bench Top										
3	Assembly Material for manufacture ofGeneral Purpose Lab Centrifuge	M	Е	sheet, Stainle	inum, Aluminum ess Steel, CRC c and Rubber					G				
4	Lid Material of General Purpose Lab Centrifuge	M	Е	or stove painting	with powder coating g or ABS Plastic of a moulding									
5	Body material of General Purpose Lab Centrifuge	M	Е		nish with Powder ove Painting.									
6	Front Panel of General Purpose Lab centrifuge	M	Е	or stove painting	with powder coating g or ABS Plastic of n moulding									

7	Centrifuge Bowl material in General Purpose Cebntrifuge	М	Е	Double walled with PUF Insulat to avoid loss of Cooling. Inne Chamber made of 304 Qualit Stainless Steel Moulded						
8	Material of Rotor	М	Е	Aluminium,						
9	Weight including Rotor	D	N				<150			
10	Auto cut off	A	Е	Yes						
11	Timer provided	A	Е	Yes						
12	Maximum RPM with no load	P	Е	20000						
13	Speed controller availble for Varying RPM and RCF corresspondingly	P	Е	YES						
14	Number of steps of RPM Variation available in the settings (corresspondingly RCF also varies)	P	N				≥ 10			
15	RPM setting accuracy	P	Е	plus minus 5%						
16	Type of Motor	P	Е	Brushless(withou t carbons) With Carbon Brushess				G		
17	Accessories	A	Е	Spanner to tight or loose Nut shaft head puller,spare rot Instruction Manual Book ,	r nuts ,fuse-2,					
18	Type of lid lock	P	Е	Both Manual and Electronic				G		
19	Maximum Noise level whemn working at 1 metere distance in db	P	N				<80			

20	Ambient operating Temperature range in Degree centigrade celcius AND HUMIDITY RANGE	P	Е	0 to 50 and Relative humidity 15 to 90%							
21	Rotor imbalance diagnostics and automatic stop if required	A	Е	Yes							
22	No of accelaration and decelarion profiles in built for rotor speed while automatic braking	A	Е	Seconds i	Programmable from 50 to 200 Seconds in Interval of 5 Seconds				G		
23	Maximum timer set point	P	Е	60 MINUTES							
24	Parameters to be displayed by the digital display			, ,	me,Run time,Rotor i,imbalancing if any						
25	DISPLAY Type	P	Е	LCD					G		
26	Speed controller	P	Е	programme spee	or controlled pre d controller which M as well as RCF						
27	Speed Control tolerance in case of set speed (Plus minus RPM) in percentage	P	N					≤ 5			
28	Micro processor based PID Digital temperature controller cum Indicator, (With LCD Display) to control the Temprature from +40° C up to -20°C. within accuracy of ± 2°C	P	Е	Yes							
29	Configuration of Rotor supplied with centrifuge machine	Р	Е	Swing Out	Angle rotor	swing out and angle rotor			G		
30	Rotor Feature WITH REFERENCE TO Autoclavability	P	Е		Autoclavable Rotor @121 Degree Celsus						
31	Type of Tubes which can be used with centrifuge machine (Hint Max Resistance of Plastic Tubes is upto 20000 RPM depending upon volume of Tube and Max Resistance of Glass Tubes is upto 4000 RPM)			Polypropylene Centrifuge tubes and Glass centrifuge tubes							

32	Size of rotor supplied with centrifuge	4x100 ml(for angle rotor) RPM 13000	6x50 mLfor angle rotor) RPM 13000	8x25 mlfor angle rotor) RPM 13000	12x15mlfor angle rotor) RPM 13000	4 Micro Strips for angle rotor) RPM 13000	Multi select			
		12x2mlfor angle rotor) RPM 20000	24x1.5MLfor angle rotor) RPM 16000	8x5mLfor angle rotor) RPM 16000	24X2 MLfor angle rotor) RPM 16000	8X15MLfor angle rotor) RPM 13000		G		
		24 x 0.5ML for angle rotor) RPM 20000	16X15MLfor angle rotor) RPM 6000	24x15mlfor angle rotor) RPM 6000	16x15ml((For swing out type rotor RPM 5000)	24x15ml(FOR swing out type rotor RPM 5000)				
		32x15ml(FOR swing out type rotor RPM 5000)	4x50ml(FOR swing out type rotor RPM 5000)							

33	Maximum RCF	P	N							G		
34	Power supply	P		220 Volts 50 Hz AC ± 10%								
35	Power consumption in watts	P	N									
36	Length of the General purpose Centrifuge in mm	D	N									
37	Width of the General purpose Centrifuge in mm	D	N									
38	Height of of the General purpose Centrifuge in mm	D	N									
39	Length of Power cord in meters	D	N						≥3			
40	The Equipment shall be installed and demonstrated before Acceptance	Р	Е	Yes	No(No installation and demonstration required and consignee can install)					G		
41	Condensed Water Drainage System			Yes	No							
42	Refrigerant should be CFC free			Yes								
43	Temperature of refrigerator in degree celcius			upto -20°C								
44	Cooling arrangment in Centrifuge through suitable compressor, radiator, Cooling fan and its Cooling Kit											
45	Servo Controller Voltage Stabilizer supplied with Item	A	Е	Yes	No					G		
46	Servo stabilizer ratings in KVA	A	Е	1	2	Not supplied				G		
47	Warrantly period for equipment & Rotor (on site and comprehensive warranty)	P	Е	1	2	3	4	5		G		