## **Item Nos. 1-6: Detailed specification and quantities**

Sl. No	Details of the material	Purity	Quantity
1	High purity materials: in the form of wire (diameter: 1-2mm) Au (gold), Ag (silver), <sup>56</sup> Fe(iron), <sup>57</sup> Fe (iron isotope), Pt (platinum), W (tungsten), Mo (Molybdenum), Ta (Tantalum), Sn (tin), Cr(Chromium), Zr (Zirconium), Bi(Bismuth), Mn(Manganeese),	99.5- 99.99 % or above	For each material: 5gm,10gm, 20gm, 50gm, 100gm, 200 gm, and 500gm pack sizes maybe quoted
2	High purity materials in fine powder form: Lithium Hydride, Calcium Hydride, Iron Phosphide, Iron Sulphide, Silver Iodide, Cesium Iodide, Silver Chloride, Calcium Fluoride, Boron Nitride, Zinc Oxide, Berylium oxide, Decaboron (B <sub>10</sub> H <sub>14</sub> ). Enriched Lithium ( <sup>6</sup> Li), Iron <sup>57</sup> Fe & <sup>56</sup> Fe, Co, Sb, Mn, V, Bi, Ge, Cr, Fe <sub>2</sub> O <sub>3</sub> , and TiO <sub>2</sub>	99.5- 99.99% or above	5 gm, 10 gm, 20gm, 50 gm, 100 gm, 200 gm, and 500 gm pack sizes can be quoted.
3	Metal Oxides  LaO, Lanthanum Oxide (LaO), BaCO3, Barium carbonate (BaCO <sub>3</sub> ) CaCO3, Calcium Carbonate (CaCO <sub>3</sub> ) SrCO3, Strontium Carbonate (SrCO <sub>3</sub> ) Praseodimium Oxide (Pr <sub>2</sub> O <sub>3</sub> ) Manganese Oxide (MnO <sub>2</sub> ) Titanium Oxide (TiO <sub>2</sub> ) Lead Oxide (PbO <sub>2</sub> ) Bismuth Oxide (BiO) Copper Oxide (CuO)	4N	20 gm 25 gm 25 gm 25 gm 10 gm 10 gm 10 gm 10 gm 20 gm 20 gm
4	High purity and single crystalline wafers:  2-4" diameter and up to 0.5 mm thickness & One-side polished (unless mentioned with different dimensions)  (a) p-Si<100>; resistivity: 0.01-0.5 Ω-cm		30 pcs. 20 pcs.
	(b) p-Si<100>; resistivity: 1- 15 $\Omega$ -cm		zu pcs.

(c) p-Si<100> resistivity: 50-100 Ω-cm	20 pcs.
(d) n-Si<100> resistivity : 0.01-0.5 $\Omega$ -cm	30 pcs.
(e) p-Si<111> resistivity: 0.01- 5 $\Omega$ -cm	30 pcs.
(f) n-Si<111> resistivity: 0.01- 5 $\Omega$ -cm	20 pcs.
(g) n-Si<100> CZ grown, resistivity up to 5 $\Omega$ -cm	20 pcs.
(h) p-Si<100> CZ grown, resistivity up to 5 $\Omega$ -cm	20 pcs.
(i) p-Si<111> CZ grown, resistivity up to 5 $\Omega$ -cm	20 pcs.
(j) p-Ge <100> resistivity : 0.01-5 $\Omega$ -cm	20 pcs.
(k) n-Ge <111> resistivity : $0.01 - 5 \Omega$ –cm	10 pcs.
(1) p-GaSb <100> resistivity:0.01-5 $\Omega$ -cm	23 pcs.
(m) ZnO <0001> (thickness: 0.5mm): 10×10 mm <sup>2</sup> (should be free from or extremely low impurity contents so far their magnetic sensitivity is concerned: Samples are meant for magnetic measurements)	30 pcs.
(n) Single crystalline ZnO <100> (thickness: 1mm); 1 cm. dia and one side polished	6 pcs.
(o) Single crystalline Al <sub>2</sub> O <sub>3</sub> (sapphire) (thickness: 0.5mm): 2 in. dia.	30 pcs.
(p) $Al_2O_3$ <0001> (thickness: 1mm): 1 cm. dia. and one side polished	8 pcs.
(q) $SiO_2 < 111 >$ (thickness: 1 mm, 2 in. dia. one side polished)	4 pcs.
(r) Single crystalline SiO <sub>2</sub> (thickness: 0.5mm to1mm): 2 in. dia.	30 pcs.

	(s) Highly Oriented Pyrolitic Graphite (HOPG) <0001>		3 pcs.
	(t) InP <111> (S doped), thickness: 0.5 mm, resistivity: 0.04 $\Omega$ -cm, one-side polished		3 pcs.
	(u) InP		5 pcs.
	(v) MgO <100> (1 cm. dia. thickness: 1 mm, one-side polished)		11 pcs.
	(w) GaAs <111>, Resistivity: 0.04 Ω-cm, thickness 0.5 mm, one-side polished		3 pcs.
	(x) GaAs <100>, Resistivity: 0.04 Ω-cm, thickness 0.5 mm, one-side polished		3 pcs.
	(y) GaAs		5 pcs.
	(z) Fe <sub>2</sub> O <sub>3</sub> <0001> 1 cm dia, 1mm thick, one- side polished		3 pcs.
	(aa) InSb<111> (Te doped) Resistivity: 0.04 $\Omega$ -cm, thickness 0.5 mm, one-side polished		3 pcs.
	(ab) Mica (pack of 100gms)		3 pkts.
	(ac) HOPG ZYA Grade 10×10×2 mm <sup>3</sup>		10 pcs.
5	Single Crystals		
	(1) Ni, 5×5×2 mm <sup>3</sup> , (100) (2) Au, 5×5×2 mm <sup>3</sup> (100) (3) Cu, 5×5×2 mm <sup>3</sup> (100) (4) NiO, 5×5×2 mm <sup>3</sup> (110)	4 N 4N 4N 4N	1 pc. 1 pc. 1 pc. 1 pc.
6	Metal Foils		
	(1) Au, 25 × 25 mm <sup>2</sup> (2) Ni, 25 × 25 mm <sup>2</sup> (3) Ag, 25 × 25 mm <sup>2</sup> (4) Cu, 25 × 25 mm <sup>2</sup>	4 N 4N 4N 4N	1 pc. 1 pc. 1 pc. 1 pc.
7	Polymers:		

	PMMA (Quote for various molecular wt.) PS (various molecular weight) DNA "5'-GCAAGCGGTGAACCAGTTGTG "5'-CGTTCGCCACTTGGTCAACAC "5'-GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	25 gms 25 gms 324 base (162×2) (includes 6 Oligos with 2 volumes each)
8	Silver epoxy	50 gms

## Conditions apply:

- i) The suppliers should try to provide samples with quotations (in some cases like wire or powder)
- ii) The suppliers should provide the list of customers where they have supplied materials (over the last two years) in India or abroad
- iii) For the foreign suppliers only the authorized Indian agent (if any) should quote for the principal. Their quotations should be accompanied by an authorization certificate towards their agency.