

A(b)	CONSUMABLES		
(i)	Consumables Out of CSIR Infra Grant (P07)		
Sr. No.	Division Name	Name Category of Consumables	Approximate Cost (Rupees in Lakhs)
1	Micro & Nano Optics Centre	Photo Resists and Developer (PMMA, SU-8, AZ-5214, S-1813), Positive Photoresist, Negative Photoresist, Electronic Grade Chemical and Etchants (Potassium Ceric Nitrate, H2So4, H2O2, HNO3, Acetic acid, fluoride pellete, Potassium Di-cromate, HF, PDMS and other relevant chemicals), Electronic Components, Silicon wafers, SOI-Wafers, High Resistive Silicon Substrate, Chrome Mask plates, Mica Substrate, Glass-Wafers, Metal and non-metals targets for magnetron sputtering, Solvent like ethanol, propanol, acitone, TMAH, Tricholoroacetate and other relevant, Gas refilling (N2, O2 and Ar), Tweezers, High purity Nitrogen & DI guns, Cleanroom mops, Standard Labware including glasswares and plasticwares, Sample container boxes etc., Disposable sticky mats, ESD Shoes (acid/solvent proof), Gas fittings, Safety Face shields for acids, Acid resistant Gloves, Acoustic detection module, Lock in Amplifer Module, COMSOL basic and acoustic module, Probes for AFM, Germanium and other infrared material, Ansys Zemax OpticStudio Premium TECS for 01 years (Quantity 02), Fabrication of optical components, Fabrication of mechanical components and housing, CMOS Chip, Fused Silica Slab, Germanium Disk/Slab, Silica Disk/Slab, Glass Disk/Slab, Plastic for Optics, Opto-mechanical Components, Micro Display, Interferometry Objectives, Interferometry Reference (Flat reference), Dichroic Mirrors, Holographic films, Fabrication of lenses, Ansys Academic Lumerical Research (5 Tasks) - TECS, Silicon Nitride wafers, collimator and polarizer, Aspheric Condenser Lens, liquid crystal, RAM for Workstation.	15
2	Materials Science & Sensor Applications	Nickel Sulphate, Chromium powder 325 mesh 99.9% (metal basis), Niobium powder 325 mesh 99.9% (metal basis), Tantalum powder 325 mesh 99.9% (metal basis), Vanadium(III) Oxide, Niobium(V) oxide 99.5% metal basis 100 mesh powder, Lithium floride 98.5%, 325 mesh powder, Aluminium oxide, 99%, TMAOH (500mL), Ethanol(5L*4), IPA(2.5*5), Acetone(2.5*5), SnCl4.5H2O, Teflon tape(pack of 25), KOH, Gloves (M) (1 box), HF Dispenser, Clips for the Workstation, Platinum Counter Electrode, Chemicals & Biochemicals, Glasswares,	12

		Plasticwares, Tubings, Ar/N2 gas refill, Quartz Cuvette, Raspberry Pi 5, TFT Display, AMS Multispectral sensor module, Keyboard and mouse, Gloves and other safety apparels (Labcoat, safety goggles).	
3	Manufacturing Science and instrumentation	Optical Polishing Pads, Thin Film Pressure Sensor, Adhesive, Fused Silica Glass Substrates, Abrasives for Lapping and Polishing, Fabrication work for Polishing Setup, Battery replacement for UPS, Printer Cartridge, Software, etc., 3D printing powders and polishing related consumables like polishing cloths, polishing powders (alumina, colloidal silica), diamond suspensions and paste, with lubricants, etchants (different reagents for etching of different materials), cleaning solutions, mounting epoxy and thinner and low speed diamond cutter blades, Microsoft office 2021 or later, Neutral density filter (25mm Diameter) , Plano-Convex Lens (VIS-NIR coated, 25 mm diameter, focal length: 150, 175, 200, 300, 400 mm), Plano-Concave Lens (VIS-NIR coated, 25 mm diameter, focal length: -50 mm, Cylindrical Lens (VIS-NIR coated, 25 mm diameter, focal length: 100, 250 mm), Microscope objective lens (Infinity corrected, Achromatic, 20X/0.4 NA, 10X/0.25 NA), Dichroic Shortpass Filter (25mm Diameter, filter cutoff: 650 nm, 900 nm), Lens Tube, Optic mount, Plano-Convex Lens (VIS-NIR coated, 25 mm diameter, focal length: 150, 175, 200, 300, 400 mm), Plano-Concave Lens (VIS-NIR coated, 25 mm diameter, focal length: -50 mm), End note license (latest), Repair / upgradation of office PC's , Raspberry Pi 4 model B with memory card, HP 278AC Black cartridge , HP 218 AC Black cartridge, LCD Display for Raspberry Pi 7 " , UPS battery and servicing / repair (APC), 3000 model with 8 batteries, Autoclave, Ethanol , Kimwipes, Gloves, Crucible, MS – Office , Antivirus (10 Users), UPS Batteries, Cartridge, Diamond Tool for CNC Grinding, Printer Cartridge (4 Nos.), Antivirus (10 User), UPS Batteries(10 Nos.), Alcohol, Optical Cement, Adhesive, HD Chuck for CNC Grinding and polishing machine, Rubber Sheets, Polyurethane Pads.	12
4	Information Services Division	Antivirus licenses ,SSD, Hard Disks, Security certification of website and application portals, Networking cable, patch cords, connectors, IOs and tools etc.	10
5	Centre of Excellence for Intelligent Sensors and Systems	ZC702, Xilinx APSoC 7000 Series development boards (Qty 2) with 2 FMC connectors, MSO upgrade: Protocol analysis, Electronic components needed for the futuristic display system research and development, Regular electronics R&D consumables and fabrication charges.	8
6	Thin Film Coating Facility	Sputtering Coating Targets, Optical Grade Substrates (Silicon, Sapphire, Glass, Polymer), Chemicals for material synthesis/deposition, Material handling tools, Cleaning reagents	8

7	BioMedical Applications	Ethanol, Methanol, PDMS, PVDF, Glutathione, Nitrobenzoic acid, Nitrile gloves, pH electrode, pH buffer solution, ICG, DOX, Annexin V, HSP inhibitor, Objective lens, Mehtacrylic anhydride, Uricase, Uric acid, Peroxidase, Glucose oxidase, Webcam, tripod, spectrophotometer accessories/service, UPS batteries, Computer consumables & Software, Consumables for Snapmaker 3D printer and Voltera OCB printer, General-Purpose ICs, General purpose Electronics/mechanical/optical/electrical/electromechanical/electrooptical components	6
8	Intelligent Machines and Communication Systems	Electronic components, AMC of Data Acquisition card, Calibration and testing of XE-NSOM/AFM instrument, Quick heal Anti virus with 10 license for 3 years, Raspberry Pi 4 Model B ,8GB RAM, Printer Cartridges (Black and white and color) & Printer Repair etc , One headphone, Software and electronic items, Evaluations Boards, Repair of UPS batteries, lab consumable, antivirus, cartridges etc, UPS battery and Computer repair/ Motherboard replacement, ink , fr4 sheet and copper mesh for R&D , printer cartridge, Single Board evaluation Module, accessories and cables.	5
9	Indo Swiss Training Centre	<ul style="list-style-type: none"> <li>• Milling Cutters, carbide inserts, HSS drill bits, Tap sets, Reamer, cutting blades, tool bits, drill chuck, Die &amp; Die stock, Number punch , Letter Punch, Edge Finder, Dial indicator</li> <li>• Raw material like MS , Brass, Aluminium rod and flats, 3D printer filaments, etc.</li> </ul> <p>Electronic Consumables:</p> <ul style="list-style-type: none"> <li>• Resistance, capacitors, diodes, breadboard, soldering iron, thermistors, wire strippers, transformers, battery, LDR, plastic storage boxes, soldering iron, Multimeter, DPDT Relay, SMPS power supply, Indicator, Push buttons, Proximity PNP, PLC, Digital Timer and Counter, Heart Gun, Spirit level, Clamp meter, DIN Rail, PVC channel, Bending spring, Wire types, Contactor,</li> <li>• Argon and Co2 gas,</li> <li>• Development kits for GSM, IOT, Wifi, SMD, etc.</li> <li>• Servo motor controller, etc.</li> <li>• Pneumatic components, sensors, spare for hardwire logic, etc., Preventive Maintenance and servicing of 02 CNC machines, Computers peripherals :</li> <li>• USB drive, Hard disk, printer cartridges, cartridges refilling, repair of peripherals, Electrical consumables:</li> <li>• One Way Switch 5A, Two Way Switch 5A, Socket 5A, MCB SP 6A, MCB DP 16A, MCB TPN 32A, Electromagnetic Contactor, Over load relay, ADD ON BLOCK, Push button (NO/NC), Wires, PVC Tape Roll, Line Tester, Wire Cutter, Combination Plier, Bulb Holder, Fan Capacitor, Plug Top.</li> </ul>	5

10	CSIO Analytical Facilities	Cartridges (for B&W and Color Printers), Chemicals, MS Office, Antivirus etc, Spares for equipment, Plastic ware, Glass ware, Safety items (lab slippers, eyewear, respirators, gloves etc), IT Consumables (Hard Disk, CD, Pen drive, Earphone, Webcam etc), Services for major/minor equipment, Registration fee for seminars/workshop/conferences etc., Other miscellaneous item for lab use	5
11	Mechanical Design and Fab Facility	Tools for milling, lathe, accessories, Maintenance/repair of machines, machine tools, Purchase of materials/ blocks such as Aluminium , Purchase of consumables for glass polishing etc.	5
12	Project Management Establishment	Printer cartridges, stationery items and miscellaneous consumables	2
13	Business Development Group	Printer cartridges, stationery items and miscellaneous consumables	2

<b>(ii) Consumables Out of CSIR Funded Projects</b>		
<b>Sr. No.</b>	<b>Project Number</b>	<b>Approximate Cost (Rupees in Lakhs)</b>
1	HCP0057	38.32
2	MMP 015201	18.00
3	HCP0052	14.00
4	NWP100	12.00
5	NCP 040306	10.00
6	FTT 010507	10.00
7	FTT 010506	10.00
8	HCP0036	8.52
9	CSPS24/RDSF/CSIO/IHP24/08	6.65
10	FBR 010304	6.00
11	CSPS24/RDSF/CSIO/IHP24/06	5.96
12	CSPS24/RDSF/CSIO/IHP24/02	5.60
13	HCP 0101-1	5.00
14	HCP0059	5.00
15	CSPS24/RDSF/CSIO/IHP24/05	5.00
16	CSPS24/RDSF/CSIO/IHP24/03	4.50
17	HCP0042	4.00
18	CSPS24/RDSF/CSIO/IHP24/07	4.00
19	CSPS24/RDSF/CSIO/IHP24/09	4.00
20	CSPS24/RDSF/CSIO/IHP24/10	3.50
21	MLP2030	3.00
22	FTT 060504	3.00
23	CSPS24/RDSF/CSIO/IHP24/01	1.80
24	CSPS24/RDSF/CSIO/IHP24/04	1.15
25	HCP0044	1.00
26	EMR0004	0.25

<b>(iii) Consumables Out of Externally Funded Projects</b>			
<b>Sr. No.</b>	<b>Name Category of Consumables</b>	<b>Project Number /Code</b>	<b>Approximate Cost (Rs in Lakhs)</b>
1	Chemical and consumables such as coating materials, fruits and vegetables for the experiments, oils, essentials oils etc.	GAP 0467	2.2
2	Minor mechanical raw materials for device fabrication etc. such Teflon, Nylon, Delrin Aluminium etc.		
3	General purpose electronic and electrical components such as capacitors, registers, inductors, high voltage components, LCD, LED, electrical cables, software, hardware, embedded components, sensors, transducers etc.	GAP0481	1
4	Minor mechanical raw materials for device fabrication etc. such Teflon, nylon, delrin,		
6	Electronic components	GAP 0434/SSP 0054/SSP 0052	30
7	Al 6061 Blocks		
8	Brass Rod		
9	Screws /fastners		
10	Adhesives/glues		
11	Optical glass		
12	RTV		
13	Paint		
14	Software, Software upgrade	GAP 0470	7
15	Inert gases		
16	filaments		
17	resin		
18	Machine spares		
19	Printer toners		
20	Stationery items		

21	Metal powder (additive & non-additive grade)				
22	chemicals				
23	Misc. items				
24	implants				
25	Chemicals for vacuum deposition/coating	SSP 0059/SSP 0060	400		
26	Optical Substrates (Sapphire, Glass, Silicon, ZnS, ZnSe, Quartz, Fused Silica, Plastic)				
27	Software licenses (fixed duration)				
28	AMC of Equipment				
29	Spare parts of Vacuum Coating Systems				
30	Testing and Certification Services				
31	Calibration Services				
32	Spares for SPDT, Optical Grinding and Polishing Equipment				
33	Opto-Mechanical Fabrication, Glassware, Mechanical Tools				
34	Consumables for substrate cleaning, handling and storage				
35	Software or its modules required for algorithms development, Imaging sensor modules, optical components, real-time embedded circuit board/ single board computing modules, embedded storage modules, circuit power switching modules, Electronics components interfacing cables for interfacing with computing device.			GAP 0487	2
36	Special purpose diamond tools for structuring			GAP 0496	3
37	Optical cements and resins				
38	PDMS with curing agent/ Polymer resin				
39	PMMA/PET sheets				
40	Material for roller mold Ni-P plated cylinders				
41	Miscellaneous electronic				

	components		
42	Optical and mechanical components		