Sr.	Item	Cost
No.		(Rs in lakhs)
1	Chiller Systems	
1.1	Various types of water airchilling systems, Cabinets and their AMCs	900
2	Cryo Components	
2.1	Cryo Compatible Magnetic shield	600
2.2	Cryo-compatible linear actuators	350
2.3	Cryocoolers with accessories.	80
2.4	Cryogen free magneto optic cryostat	180
2.5	Cryogenic cernox sensor readout with wire and feed through	70
2.6	Cryogenic control valves, relief valves, gate valves & Fabrication of Vacuum vessel for HB 650 Cryomodule	200
2.7	cryostream cooler for crystal diffraction	65
2.8	Fabrication of SWLS cryostat	400
2.9	Liquid Nitrogen plant , storage systems including Dewars/Tank and accessories and AMCs	700
3	Electrical / Electronic Equipments	
3.1	2D X-ray detectors	60
3.2	320 kVA Diesel generator set alongwith associated LT panels and cables	100
3.3	Arbitrary waveform generator, Tesla-meter and digital integrator, Digital storage oscilloscope, data acquisition and interface card.	160
3.4	Area Radiation Monitors (ARM) and electrometers	180
3.5	Automation & Control System componets and accessories	120
3.6	Baseband spectrum analyzer, Real time spectrum analyser, Spectrum analyser, Spectrum analyser with tracking generator	200
3.7	Beam diagnostic devices and accessories, Digital Beam Position Monitors(BPMs)	320
3.8	Control hardware for AM systems	100
3.9	Controls system and components, DAQ hardware, Data Loggers, DSO, PLC, SCADA and associated systems, Test and measuring equipment (Multichannel data logger, oscilloscopes, current probes, digital multi-meters, VNA, Signal generators etc.), TMP, SIP, SIP Controllers & cables, TSP Controllers & cables, Robotic Arm based workstation	500
3.10	E-beam source	650
3.11	Eddy current scanners and testing intruments	220
3.12	Electron Gun, Gun Modulator, Prebuncher, Accelerating structure, Energy filtering system, Beam extraction system, cooling system of Linacs	150
3.13	Electron Large size permanat magnet spectrograph	100
3.14	Flux gate sensor and meter for low magnetic field measurement	260
3.15	Glass Annealing Oven	85
3.16	Glass Melting Furnace	350
3.17	Heating Elements and Fiber-free High Temperature Insulators	100
3.18	High average power fs laser for material processing, Single and multi-mode fibre lasers, KrF Excimer Laser System	500
3.19	High voltage energy storage capacitor	300
3.20	Hot Isostatic Pressing (HIP) station	450
3.21	I/O Boards for Harmonic Sextupole PS controls, I/O boards for the Upgradation of I-2 MPS DPQPSP	100
3.22	Instruments like pressure transducers, level sensors, cernox temperature sensors, PT100 sensors, Head mounted temperature sensor with transmitter, vaccum guages for HB650 Cryomodule, Piezo actuators, Sensors (Thermocouples, Flowmeters etc)	250
3.23	Intensified CCD camera, Silicon based large area two-dimensional detector system , X-ray CCD camera, X-ray detectors (1D), High dynamic range CCD camera, Indirect x-ray CCD camera	600
3.24	IOT assembly	230
3.25	Klystron-36 kW and Klystron Modulator	600
3.26	Laser Tracker Systems & Accessories and AMCs	350
3.27	Low level RF system components	150

No. (Rs In Jakhs 120 1	Sr.	Item	Cost
Magnets, Solenoid Magnets & Power Supplies 350	No.		(Rs in lakhs)
Microwave power generation and distribution to Prebuncher and Linac 200	3.28	LV and HV power cables.	120
3.31 Modular Instrument racks, housing systems 50	3.29	Magnets, Solenoid Magnets & Power Supplies	350
3.32 Modulator and HV CCPS of various ratings 550	3.30	Microwave power generation and distribution to Prebuncher and Linac	200
3.34 New RSIS system for Indus-2 and spares 3.34 Optical Streak Camera system, Streak Tubes, Image intensifier tubes 3.05 Optical Streak Camera system, Streak Tubes, Image intensifier tubes 3.06 Position sensors, adaptors, reflectors, stages and calibration systems, upkeep of instruments for alignment studies 3.37 Power Conditioning System (PCS) components and AMC 200 Power Supplies for Lasers, thin film coating applications etc. 10kW DC SMPS, 40 kV, 3.5 A modular DC power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, 50V, 1600 A modular water cooled and air cooled DC power supplies for Instruments for alignment DC power supply, 50V, 1600 A modular water cooled and air cooled DC power supplies and accessories, kJ Flash lamp power supply, Magnet power supplies, Power Supplies for Instruments Processing electronics for transverse bunch by bunch feedback system 4.04 Proton / Electron linear accelerator components and accessories 4.04 Proton / Electron linear accelerator components and accessories 4.05 Proton / Electron linear accelerator components and accessories 4.07 Pulse I-V measurement system 4.08 Processing electronics for transverse bunch by bunch feedback system 4.09 Proton / Electron linear accelerator components and accessories 4.09 Proton / Electron linear accelerator components and accessories 4.00 Proton / Electron linear accelerator components and accessories 4.00 Proton / Electron linear accelerator components and contamination monitors, HPGe, low level activity detection instruments and setup, 4.00 Proton / Electron Microscope Systems with detectors 4.01 Proton / Electron Microscope Systems with detectors 4.02 Proton / Electron Microscope Systems with detectors 4.03 Electron Microscope Systems with detectors 4.04 Proton / Electron Microscope Systems with detectors 4.05 Electron Microscope Systems with detectors 4.05 Electron Microscope Systems with detectors 4.06 Electron Microscope Systems with detectors 4.07 Electron Microscope Systems with detectors 4.08 Electron Micr	3.31	Modular Instrument racks, housing systems	50
3.34 Optical Streak Camera system, Streak Tubes, Image intensifier tubes 3.35 Permanent magnet undulator with control system. 200 3.36 Position sensors, adaptors, reflectors, stages and calibration systems, upkeep of instruments for alignment studies 3.37 Power Conditioning System (PCS) components and AMC 200 200 200 200 200 200 200 200 200 20	3.32	Modulator and HV CCPS of various ratings	550
3.35 Permanent magnet undulator with control system. 200 Position sensors, adaptors, reflectors, stages and calibration systems, upkeep of instruments for alignment studies alignment studies Power Conditioning System (PCS) components and AMC Power supplies for Lasers, thin film coating applications etc. 10kW DC SMPS, 40 kV, 3.5 A modular Dc power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supplies, 50 V, 1950 A modular water cooled DC power supplies, 50 V, 1950 A modular water cooled DC power supplies, 50 V, 1950 A modular water cooled DC power supplies, 50 V, 1950 A modular water cooled DC power supplies, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V, 1950 A modular water cooled DC power supply, 50 V pow	3.33	New RSIS system for Indus-2 and spares	75
Position sensors, adaptors, reflectors, stages and calibration systems, upkeep of instruments for alignment studies 3.37	3.34	Optical Streak Camera system,Streak Tubes, Image intensifier tubes	300
alignment studies 3.37 Power Conditioning System (PCS) components and AMC Power supplies for Lasers, thin film coating applications etc,10kW DC SMPS, 40 kV, 3.5 A modular DC power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, 50 V, 1900 A modular water cooled and air cooled DC power supply, 50 V, 1900 A modular water cooled DC power supply, Magnet power supplies for lon Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies and accessories, kJ Flash lamp power supply, Precision high stability power supplies for lon Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies and accessories, kJ Flash lamp power supply, Precision high stability power supplies for lon Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies and accessories kJ Flash lamp power supply, Precision high stability power supplies for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies and accessories for lone Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current sources for Constant pumps for Systems with detectors and Contamination monitors, HPGe, low 42 for Systems with detectors and Contamination monitors, HPGe, low 42 for Systems with detectors and Contamination monitors, HPGe, low 42 for Systems with detectors and Contamination monitors, HPGe, low 42 for Systems with detectors and Contamination monitors, HPGe, low 42 for Systems with detectors and Contamination	3.35	Permanent magnet undulator with control system.	200
Power supplies for Lasers, thin film coating applications etc, 10kW DC SMPS, 40 kV, 3.5 A modular DC power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, sport 1900, 1900 A modular water cooled DC power supply, Magnet power supplies, Power Supplies for Ion Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies and accessories, kJ Flash lamp power supply, Precision high stability power supplies and accessories, kJ Flash lamp power supply, Precision high stability power supplies and accessories (acceptance) and accessories (accept	3.36		125
modular DC power supply, 50 V, 1800 A modular water cooled and air cooled DC power supplys for 190 A modular water cooled DC power supply, Magnet power supplies Power Supplies for 10n Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power supplies and accessories, kJ Flash lamp power supply, Precision high stability power supplies and accessories kJ Flash lamp power supply, Precision high stability power supplies Proton / Electron linear accelerator components and accessories 500 3.40 Proton / Electron linear accelerator components and accessories 500 3.41 Pulse I-V measurement system 80 3.42 Pulsed Source meter calibrator 660 3.43 Rare earth permanent magnets 60 3.44 Real-time dosimetry devices, Radiation Survey meters and Contamination monitors, HPGe, low level activity detection instruments and setup, 120 3.45 RF system components 150 3.46 Scanning Electron Microscope Systems with detectors 700 3.47 SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc) 150 3.48 Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 100 3.49 Test platforms for developing and testing of RF powering system designs 150 3.50 Theodolites 110 3.51 Thyratron 150 3.52 Trace Water Vapour Sensor 50 3.53 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 60 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 4 Tequipments / Software 50 4 Trace Waystem for Ti:sapphire laser 50 4 Trace Josephire laser 50 4 Trace Josephire laser 50 4. CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 61 4. CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 67 and Electromagnetic design and analysis of radiofrequency accelerating structures. 80	3.37	Power Conditioning System (PCS) components and AMC	200
Proton / Electron linear accelerator components and accessories 500	3.38	modular DC power supply, 50 V, 1600 A modular water cooled and air cooled DC power supply, .50V, 1950 A modular water cooled DC power supply, Magnet power supplies , Power Supplies for Ion Pumps/Getter Pumps, Multi Output SMPS for VME systems, HV Constant current power	3200
Pulse I-V measurement system	3.39	Processing electronics for transverse bunch by bunch feedback system	140
Rael arth permanent magnets 100	3.40	Proton / Electron linear accelerator components and accessories	500
Rael-time dosimetry devices, Radiation Survey meters and Contamination monitors, HPGe, low level activity detection instruments and setup. 3.44 Real-time dosimetry devices, Radiation Survey meters and Contamination monitors, HPGe, low level activity detection instruments and setup. 3.45 RF system components 150 Scanning Electron Microscope Systems with detectors 700 3.47 SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc) 150 Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 100 (Keithley) 110 Rest platforms for developing and testing of RF powering system designs 150 Theodolites 1110 3.51 Thyratron 150 Trace Water Vapour Sensor 150 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 60 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 100 3.60 XPW system for Ti:sapphire laser 4 PRepet NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.4 Centralized DATA Storage facility 100 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.41	Pulse I-V measurement system	80
Real-time dosimetry devices, Radiation Survey meters and Contamination monitors, HPGe, low level activity detection instruments and setup. 3.45 RF system components 3.46 Scanning Electron Microscope Systems with detectors 3.47 SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc.,) 3.48 Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 3.49 Test platforms for developing and testing of RF powering system designs 3.50 Theodolites 3.51 Thyratron 3.52 Trace Water Vapour Sensor 3.53 Tuner for HB650 cavity 3.54 Ultrasonic immersion testing System along with probes and accessories 3.55 UPS and batteries 3.56 Vector Network Analyzer & associated equipment 3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 4.1 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic computational Solver Software 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic System, cameras, electric fence etc 4.5 accelerating structures. 4.6 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.42	Pulsed Source meter calibrator	60
level activity detection instruments and setup, 120 3.45 RF system components 150 3.46 Scanning Electron Microscope Systems with detectors 700 3.47 SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc.,) 150 3.48 Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 100 3.49 Test platforms for developing and testing of RF powering system designs 150 3.50 Theodolites 110 3.51 Thyratron 150 3.52 Trace Water Vapour Sensor 50 3.53 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 60 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 3.58 Workstation & Job manipulators 80 3.59 WR-284 waveguide circulator and window 100 3.60 XPW system for Ti:sapphire laser 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 200 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic 200 4.3 Centralized DATA Storage facility 100 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 200 2	3.43	Rare earth permanent magnets	100
3.46 Scanning Electron Microscope Systems with detectors 3.47 SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc) 3.48 Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 3.49 Test platforms for developing and testing of RF powering system designs 3.50 Theodolites 3.51 Thyratron 3.52 Trace Water Vapour Sensor 3.53 Tuner for HB650 cavity 3.54 Ultrasonic immersion testing System along with probes and accessories 3.55 UPS and batteries 3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 4.8 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80 80 80 80 80 80 80 80 80 80 80 80 80	3.44		120
3.47 SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc) 3.48 Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 3.49 Test platforms for developing and testing of RF powering system designs 3.50 Theodolites 3.51 Thyratron 3.52 Trace Water Vapour Sensor 3.53 Tuner for HB650 cavity 3.54 Ultrasonic immersion testing System along with probes and accessories 3.55 UPS and batteries 3.70 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4.1 IT equipments / Software 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80	3.45	RF system components	150
Stable Tunable Source for photo detector calibration setup, Ultra-sensitive current sources (Keithley) 100	3.46	Scanning Electron Microscope Systems with detectors	700
100 3.49 Test platforms for developing and testing of RF powering system designs 150 3.50 Theodolites 110 3.51 Thyratron 150 3.52 Trace Water Vapour Sensor 50 3.53 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 370 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 3.58 Workstation & Job manipulators 80 3.59 WR-284 waveguide circulator and window 100 3.60 XPW system for Ti:sapphire laser 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 200 4.2 Centralized DATA Storage facility 100 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency 80 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency 80 Perpetual license of software for 3-D Electromagnetic design and analy	3.47	SEY Measurement setup (E-Gun & Power supplies, Electron Energy analyzer system etc.,)	150
3.50 Theodolites 110 3.51 Thyratron 150 3.52 Trace Water Vapour Sensor 50 3.53 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 60 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 3.58 Workstation & Job manipulators 80 3.59 WR-284 waveguide circulator and window 100 3.60 XPW system for Ti:sapphire laser 50 4 IT equipments / Software 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 200 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.1 Centralized DATA Storage facility 100 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 80 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80	3.48	·	100
3.51 Thyratron 150 3.52 Trace Water Vapour Sensor 50 3.53 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 60 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 3.58 Workstation & Job manipulators 80 3.59 WR-284 waveguide circulator and window 100 3.60 XPW system for Ti:sapphire laser 50 4 IT equipments / Software 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 200 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 200 4.3 Centralized DATA Storage facility 100 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 500 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.49	Test platforms for developing and testing of RF powering system designs	150
3.52 Trace Water Vapour Sensor 50 3.53 Tuner for HB650 cavity 100 3.54 Ultrasonic immersion testing System along with probes and accessories 60 3.55 UPS and batteries 370 3.56 Vector Network Analyzer & associated equipment 125 3.57 Vortex flow meter , Electromagnetic flow meters and switches 220 3.58 Workstation & Job manipulators 80 3.59 WR-284 waveguide circulator and window 100 3.60 XPW system for Ti:sapphire laser 50 4 IT equipments / Software 4.1 Associated equipment 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 750 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 200 4.3 Centralized DATA Storage facility 100 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 500 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80	3.50	Theodolites	110
3.53 Tuner for HB650 cavity 3.54 Ultrasonic immersion testing System along with probes and accessories 3.55 UPS and batteries 3.50 Vector Network Analyzer & associated equipment 3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.51	Thyratron	150
3.54 Ultrasonic immersion testing System along with probes and accessories 3.55 UPS and batteries 3.56 Vector Network Analyzer & associated equipment 3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.52	Trace Water Vapour Sensor	50
3.55 UPS and batteries 3.56 Vector Network Analyzer & associated equipment 3.57 Vortex flow meter , Electromagnetic flow meters and switches 2.59 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 4.1 Components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.53	Tuner for HB650 cavity	100
3.56 Vector Network Analyzer & associated equipment 3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 50 4 IT equipments / Software 4.1 components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.54	Ultrasonic immersion testing System along with probes and accessories	60
3.57 Vortex flow meter , Electromagnetic flow meters and switches 3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 50 4 IT equipments / Software 4.1 components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.55	UPS and batteries	370
3.58 Workstation & Job manipulators 3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 4.1 Components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.56	Vector Network Analyzer & associated equipment	125
3.59 WR-284 waveguide circulator and window 3.60 XPW system for Ti:sapphire laser 4 IT equipments / Software 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.57	Vortex flow meter , Electromagnetic flow meters and switches	220
3.60 XPW system for Ti:sapphire laser 48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.58	Workstation & Job manipulators	80
48 port NDR 200 Gbps InfiniBand Switch for Computing setup, Power Backup and related components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.59		100
4.1 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.2 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	3.60	XPW system for Ti:sapphire laser	50
4.1 components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls and other allied equipment 4.2 CAD, Design for Additive Manufacturing (DfAM) and Simulation Software, Electro-Magnetic Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	4	IT equipments / Software	
4.2 Computational Solver Software 4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures. 80	4.1	components, Precision Air Conditioners, fire alarm & suppression systems for Data Centre Halls	
4.3 Centralized DATA Storage facility 4.4 High-end computing servers and file servers, of 128 Channels IP based Video surveillance system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	4.2		200
4.4 system, cameras, electric fence etc 4.5 Perpetual license of software for 3-D Electromagnetic design and analysis of radiofrequency accelerating structures.	4.3	·	100
accelerating structures.	4.4		500
4.6 Peta-Flop High Performance Computing Cluster 3200	4.5	accelerating structures.	80
	4.6	Peta-Flop High Performance Computing Cluster	3200

Sr.	(The items indicate consolidated requirements to be processed as and when required) Item	Cost
No.		(Rs in lakhs)
4.7	Storage and networking devices, Ethernet Switches	125
5	Machines and Systems	
5.1	0.5 m diameter 5 axis Aspheric Polisher / Float Polisher,	1000
5.2	3-Axes Probe Positioning System	135
5.3	5 axis Ultrasonic Grinding Machine	1550
5.4	Adiabatic/hybrid cooling system, accessories and hardware	70
5.5	CMT (Cold Metal Transfer) welding Station with accessories, CNC double column drilling/milling machine/ machining center	130
5.6	Controlled atmosphere brazing facility	500
5.7	Co-ordinate Measuring Machine (0.75m diameter) and Submicron Coordinate Measuring Machine	1000
5.8	Electron Beam Welding Machine and alied systems & components and their AMCs	2100
5.9	Fabrication and precision machining of Level pots	50
5.10	Growth chamber assembly for crystal puller	130
5.11	High temperature indentation-based Creep Test System	100
5.12	High Temperature Micro-Universal Testing Machine	150
5.13	High Temperature TGA-DSC calorimeter	150
5.14	HPGe based gamma spectrometry system	55
5.15	Indoor units for LCW cooling	60
5.16	Ion beam Figuring system (0.5 m)	1080
5.17	Liquid Jet polishing Machine (0.5 m)	185
5.18	Nano-indenter	150
5.19	Ozonated cleaning system	60
5.20	Precision motion system along with necessary automated drive system	60
5.21	Precision vertical stages	70
5.22	Six axis Laser welding robot	50
5.23	Ultra high vacuum goniometer for beamline experimental station	335
5.24	Upgradation of SatisLOH GII & PII machines	150
6	Materials	
6.1	Consumables for optical coating facility	65
6.2	Fumed nano-silica suspension	65
6.3	Fused Silica blanks, Fused Silica Crucibles	700
6.4	Helium Gas and Helium Gas Cascade	700
6.5	Magnetic elements of linacs	200
6.6	Mazzle crystal for Ti:sapphire laser	50
6.7	Metals and alloys (Stainless Steel and Aluminum Alloys)	50
6.8	Meta-phosphates (Al, Ba, K)	450
6.9	Micro channel plate (MCP)	100
6.10	Oxygen free High conductivity / electronic grade copper shapes and sizes, Copper bars, High purity Copper	450
6.11	Packing design and implementation and transportation of HTS cryostat to Chicago	55
6.12	Platinum, Platinum Stirrers and Homogenisers , DPH Platinum Vessel (18 Litre)/liners	1000
6.13	Polishing compounds	120
6.14	Procurement of Ferrous/Non-ferrous metals	600
6.15	Refining Chemicals	80
6.16	Silicon substrates	150
6.17	Special material like Niobium, Titanium, Platinum and alloys	4000
6.18	Tin laps	70
6.19	Titanium bellows	50
6.20	UHV Hardware, Seals etc.	50
6.21	Ultra-high Purity Gases (Oxygen, Nitrogen. Chlorine etc.)	110

No. (Rs in lakins)	Sr.	Item	Cost
7.1 Air bearing components 350 7.2 Ail metal gate valves 550 7.3 Clean room facilities, equpments, oven, consumables and motorised pallet 1100 7.4 Controlled environment glove box 100 7.5 Conveyor systems 500 7.6 Conveyor systems 500 7.7 Courting tools, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 300 7.8 EaAM Processing chamber 600 7.9 EBAM Processing chamber 600 7.9 EBAM Processing chamber 600 7.10 Fabrication and supplies of insulated containers 600 7.11 Fabrication and supplies of insulated containers 600 7.12 Fabrication of riyostat for superconducting magnets 400 7.13 Fabrication of riyostat for superconducting magnets 400 7.14 Fabrication of insulated containers 600 7.15 Fabrication of insulated containers 600 7.16 Fabrication of insulated containers 600 7.17 Fabrication of insulated containers 600 7.18 Fabrication of fixtures and toolings for Coldmass Assembly 600 7.19 Fabrication of insulated containers 700 7.10 Fabrication of insulated containers 700 7.11 Fabrication of insulated containers 700 7.12 Fabrication of insulated containers 700 7.13 Fabrication of insulated containers 700 7.14 Gas dosing system (MC-CEP tubes, Sate valves etc., Gauges, controllers, gas cylinders) 700 7.16 Helium Leak Detectors and spares 700 7.17 High precision CNC machining centre 700 7.18 Induction brazing system 700 7.19 Laser valter micro jet cutting machine 700 7.20 Conductivity Water plant components, Pumps & Accessories and AMCs 700 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 700 7.22 Low Conductivity Water plant components, Pumps & Accessories and AMCs 700 7.23 None Evaporable Bulk Getter Modules 700 7.24 On-site Upgradation of Physical Properties Measurement System 700 7.25 Oxfordated delaning system 700 7.26 Oxfordation of Physical Properties Measurement System 700 7.27 Passar Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 700 7.28 Plasma Enhanced Chemical Vapor Deposition System with Dire	No.		(Rs in lakhs)
7.1 Air bearing components 350 7.2 Ail metal gate valves 560 7.3 Clean room facilities, equpments, oven, consumables and motorised pallet 1100 7.4 Controlled environment glove box 100 7.5 Conveyor systems 500 7.6 Controlled environment glove box 500 7.7 Conveyor systems 500 7.8 Cutting tools, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 300 7.7 Die Bonder for Laser Diodes 600 7.8 EBAM Processing chamber 600 7.9 EBAM Processing chamber 600 7.9 EBAM Processing chamber 600 7.9 EBAM Processing chamber 600 7.10 Fabrication and supplies of insulated containers 600 7.11 Fabrication and supplies of insulated containers 600 7.12 Fabrication of cryostat for superconducting magnets 400 7.13 Fabrication of fligh RRR Nb multi-cell cavity 772 7.14 Gas dosing system (MFC,EP tubes, Gate valves etc., Gauges, controllers, gas cylinders) 500 7.15 Hellum Leak Detectors and spares 710 7.16 Hellum reliquifier system 100 7.17 High precision CNC machining centre 100 7.18 Induction brazing system 100 7.19 Laser water micro jet cutting machine 150 7.10 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 100 7.25 Non Evaporable Bulk Getter Modules 100 7.26 Ozonoated cleaning system 100 7.27 Patrick day dray Utrasonic Detector 100 7.28 Passed Array Utrasonic Detector 100 7.29 Passed Array Utrasonic Detector 100 7.30 Powder atomizer unit 100 7.31 Reloaded Prezo Actuator 100 7.32 Reloaded Prezo Actuator 100 7.33 Rail System for Cryomorule Assembly 100 7.34 Recovery Compressor 170 7.35 Light of the properties of the lineas (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, vaporn and qualifications systems, etc.) 5400 7.36 Utrase systems for three lineas (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet	6.22	Ultra-high purity reagents	70
7.1 Air Desaring components 350 7.2 All metal gate valves 50 7.3 Clean room facilities, equpments, oven, consumables and motorised pallet 1100 7.4 Controlled environment glove box 100 7.5 Conveyor systems 500 7.6 Cutting tools, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 300 7.7 Die Bonder for Laser Diodes 60 7.8 EBAM Processing chamber 80 7.9 EPR Dosimetry equipment, HPLC system, Sodium lodide detectors, cold facility, shielded containers, Laboratory equipment, etc. 100 7.10 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.11 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of fixtures and toolings for Coldmass Assembly 720 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Hellum Leak Detectors and spares 100 101 High precision CNC machining centre 400 7.19 Laser water micro jet cutting machine 400 1.16 Hellum reliquifier system 100	6.23	Zerodur blanks	800
7.2 All metal gate valves 50 7.3 Clean room facilities, equpments, oven, consumables and motorised pallet 1100 7.4 Controlled environment glove box 100 7.5 Conveyor systems 500 7.6 Cutting tools, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 17.7 Die Bonder for Laser Diodes 60 7.7 Die Bonder for Laser Diodes 60 7.8 EBAM Processing chamber 60 7.9 EPR Dosimetry equipment, HPLC system, Sodium lodide detectors, cold facility, shielded ontainers, Laboratory equipment, etc. 100 7.1 Fabrication and supplies of insulated containers 60 7.1 Fabrication or dryostat for superconducting magnets 400 7.1 Fabrication of high RRR Nb multi-cell cavity 720 7.1 Fabrication of high RRR Nb multi-cell cavity 720 7.1 Helium Leak Detectors and sparse 91 7.1 Helium Leak Detectors and sparse 91 7.1 High precision CNC machining centre 91 7.1 High urreliquifier system 95 7.2 Laser water micro jet cutting machine 95 7.2 Laser water micro jet cutting machine 95 7.2 Low Conductivity Water plant components. Pumps & Accessories and AMCs 150 7.2 Low Conductivity Water plant components. Pumps & Accessories and AMCs 150 7.2 Low Conductivity Water plant components. Pumps & Accessories and AMCs 150 7.2 Low Conductivity Water plant components. Pumps & Accessories and AMCs 150 7.2 Low Conductivity Water plant components. Pumps & Accessories and AMCs 150 7.2 Low Conductivity Water plant components. Pumps & Accessories and AMCs 150 7.3 Non Evaporable Bulk Getter Modules 100 7.3 Palased Array Utrasonic Detector 140 7.3 Rall System for Cryomodule Assembly 90 7.3 Rall System for System of three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, support and qualifications systems, etc.) 90 7.3 Robotic welding machines with accessories 90 7.3 Robotic welding machines with accessories 90 7.3 Surface profiler	7	Mechanical Equipments	
7.3 Clean room facilities, equpments, oven, consumables and motorised pallet 7.4 Controlled environment glove box 7.5 Conveyor systems 7.6 Cutting tools, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 7.7 Die Bonder for Laser Diodes 7.8 EBAM Processing chamber 8.0 EBAM Processing chamber 9. EBAM Drocessing chamber 1.0 EBAM Drocessing chamber 1.0 EBAM Drocessing chamber 1.0 EBAM Drocessing chamber 1.1 Fabrication of system of insulated containers 1.1 Fabrication of right and supplies of insulated containers 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of fixtures and toolings for Coldmass Assembly 1.1 Fabrication of Migh RRR Nb multi-cell cavity 1.2 Fabrication of Migh RRR Nb multi-cell cavity 1.3 Fabrication of Migh RRR Nb multi-cell cavity 1.4 Fabrication of Migh RRR Nb multi-cell cavity 1.5 Conductivity Migh RR Nb multi-cell cavity 1.6 Fabrication of Program Assembly 1.7 Fabrication of Program Assembly 1.8 Fabrication of Program Asse	7.1	Air bearing components	350
7.4 Controlled environment glove box 7.5 Conveyor systems 500 Conversion systems 500 Conversion systems 500 Conversion system system system sodium lodide detectors, cold facility, shielded 500 Conversion system systems, sodium lodide detectors, cold facility, shielded 501 Conversion system systems, sodium lodide detectors, cold facility, shielded 502 Conversion system systems, sodium lodide detectors, cold facility, shielded 503 Conversion system systems, sodium lodide detectors, cold facility, shielded 504 Conversion system systems, sodium lodide detectors, cold facility, shielded 505 Conversion system systems, sodium lodide detectors, cold facility, shielded 506 Conversion system systems 507 Conversion system system systems 507 Conversion system system systems 508 Conversion system system, system, systems,	7.2	All metal gate valves	50
7.5 Conveyor systems 500 7.6 Cutting toos, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 300 7.7 Die Bonder for Laser Diodes 60 7.8 EBAM Processing chamber 80 7.9 EPR Dosimetry equipment, HPLC system, Sodium lodide detectors, cold facility, shielded containers, Laboratory equipment, etc. 100 7.10 Fabrication of cryostat for superconducting magnets 400 7.11 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Helium Leak Detectors and spares 100 1-16 Helium selludier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 1.0 <td>7.3</td> <td>Clean room facilities, equpments, oven, consumables and motorised pallet</td> <td>1100</td>	7.3	Clean room facilities, equpments, oven, consumables and motorised pallet	1100
7.6 Cutting tools, Diamond tools, General purpose tools and equipment with accessories for manufacturing and chemical treatment facility 300 7.7 Die Bonder for Laser Diodes 60 7.8 EBAM Processing chamber 80 FPR Dosimetry equipment, HPLC system, Sodium lodide detectors, cold facility, shielded containers, Laboratory equipment, etc. 100 7.10 Fabrication and supplies of insulated containers 60 7.11 Fabrication of frystate for superconducting magnets 400 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.14 Gas dosing system (MFC,EP tubes, Gate valves etc., Gauges, controllers, gas cylinders) 720 7.15 Helium Leak Detectors and spares 100 7.16 Helium reliquifler system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lowe Cold mass assembly 100	7.4	Controlled environment glove box	100
	7.5	Conveyor systems	500
7.8 EBAM Processing chamber 80 7.9 cDRT Dosimetry equipment, HPLC system, Sodium Iodide detectors, cold facility, shielded containers. Laboratory equipment, etc. 100 7.10 Fabrication and supplies of insulated containers 60 7.11 Fabrication of cryostat for superconducting magnets 400 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of high RRR Nb multi-cell cavity 720 7.14 Gas dosing system (MFC.EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Helium Leak Detectors and spares 100 7.16 Helium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 Low plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 50 7.21 Low Conductivity Water plant components,Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non E	7.6	· · · · · · · · · · · · · · · · · · ·	300
7.9 EPR Dosimetry equipment, HPLC system, Sodium lodide detectors, cold facility, shielded containers, Laboratory equipment, etc. 7.10 Fabrication and supplies of insulated containers 60 7.11 Fabrication of cryostat for superconducting magnets 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of high RRR Nb multi-cell cavity 720 731 Fabrication of high RRR Nb multi-cell cavity 720 731 Fabrication of high RRR Nb multi-cell cavity 732 731 Fabrication of high RRR Nb multi-cell cavity 732 731 Fabrication of high RRR Nb multi-cell cavity 732 731 Helium Leak Detectors and spares 732 733 Helium Leak Detectors and spares 734 735 Helium reliquiffer system 735 Laser water micro jet cutting machine 736 737 738 739 730 730 730 730 731 731 731 731 732 732 733 733 734 735 735 735 736 736 737 737 737 737 737 737 737 737	7.7	Die Bonder for Laser Diodes	60
7.19 containers, Laboratory equipment, etc. 100 7.10 Fabrication and supplies of insulated containers 60 7.11 Fabrication of cryostat for superconducting magnets 400 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of high RRR Nb multi-cell cavity 720 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Helium Leak Detectors and spares 100 7.16 Helium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 Low part least exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Low Evaporable Bulk Getter Modules 100 7.23 No Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System	7.8		80
7.11 Fabrication of cryostat for superconducting magnets 400 7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of high RRR Nb multi-cell cavity 720 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Helium Leak Detectors and spares 100 7.16 Helium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 1.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 210 7.26 Ozonoated cleaning system 100	7.9		100
7.12 Fabrication of fixtures and toolings for Coldmass Assembly 60 7.13 Fabrication of high RRR Nb multi-cell cavity 720 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Helium Leak Detectors and spares 100 7.16 Helium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 1.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Indicate Upgradation of Physical Properties Measurement System 210 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 210 7.26 Oxide layer deposition system 400 7.27 Particle shape Analyser 80	7.10	Fabrication and supplies of insulated containers	60
7.13 Fabrication of high RRR Nb multi-cell cavity 7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 7.15 Helium Leak Detectors and spares 7.16 Helium reliquiffer system 7.17 High precision CNC machining centre 7.18 Induction brazing system 7.19 Laser water micro jet cutting machine 7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 7.22 Lower Cold mass assembly 7.23 Non Evaporable Bulk Getter Modules 7.24 On-site Upgradation of Physical Properties Measurement System 7.25 Oxide layer deposition system 7.26 Ozonoated cleaning system 7.27 Particle shape Analyser 7.28 Phased Array Ultrasonic Detector 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 7.30 Powder atomizer unit 7.31 Preloaded Piezo Actuator 7.32 Radiation shielding hutch 7.33 Rail System for Cryomodule Assembly 7.34 Recovery Compressor 7.35 Robotic welding machines with accessories 7.36 Supply of Linac systems in three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, angnet systems, vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 7.37 Surface profiler 7.38 Table-top XRF system 7.39 Thermal Imager / Pyrometer 7.40 Titanium vessel for 650 MHz RF cavity 7.41 Vision Measuring Machine with accessories	7.11		400
7.14 Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders) 50 7.15 Hellium Leak Detectors and spares 100 7.16 Hellium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Particle shape Analyser 80 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomi	7.12	Fabrication of fixtures and toolings for Coldmass Assembly	60
7.15 Helium Leak Detectors and spares 100 7.16 Helium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 150 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozonoated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60 7.33 Rail System for Cryomodule Assembly 90 7.34 Recovery Compressor 70 7.35 Robotic welding machines with accessories	7.13	Fabrication of high RRR Nb multi-cell cavity	720
7.16 Helium reliquifier system 100 7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozoncated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomizer unit 500 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60	7.14	Gas dosing system (MFC,EP tubes,Gate valves etc.,Gauges, controllers, gas cylinders)	50
7.17 High precision CNC machining centre 400 7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozonoated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomizer unit 500 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60 7.33 Raifsystem for Cryomodule Assembly 90 7.34 Recovery Compressor 70 7.35 Robotic welding machines with accessories 70 7.36 Surface profiler 70	7.15	Helium Leak Detectors and spares	100
7.18 Induction brazing system 50 7.19 Laser water micro jet cutting machine 150 7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozonoated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomizer unit 500 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60 7.33 Radiation shielding hutch 90 7.34 Recovery Compressor 170 7.35 Robotic welding machines with accessories 70 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, vacuum systems, Power	7.16	Helium reliquifier system	100
7.19 Laser water micro jet cutting machine 150 7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozonoated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomizer unit 500 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60 7.33 Rail System for Cryomodule Assembly 90 7.34 Recovery Compressor 170 7.35 Robotic welding machines with accessories 70 7.36 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating diagnostic systems, control systems, vacuum systems, Power supplies, beam diagnostic systems, magnet systems, support and qualifica	7.17	High precision CNC machining centre	400
7.20 LCW plant, Heat exchangers, Cooling and pumping system equipment, cooling tower, piping system instrumentation, controls etc. 60 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 150 7.22 Lower Cold mass assembly 100 7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozonoated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomizer unit 500 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60 7.33 Rail System for Cryomodule Assembly 90 7.34 Recovery Compressor 170 7.35 Robotic welding machines with accessories 70 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating diagnostic systems, control systems, vacuum systems, Power supplies, beam di	7.18	Induction brazing system	50
system instrumentation, controls etc. 7.21 Low Conductivity Water plant components, Pumps & Accessories and AMCs 7.22 Lower Cold mass assembly 7.23 Non Evaporable Bulk Getter Modules 7.24 On-site Upgradation of Physical Properties Measurement System 7.25 Oxide layer deposition system 7.26 Ozonoated cleaning system 7.27 Particle shape Analyser 7.28 Phased Array Ultrasonic Detector 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 7.30 Powder atomizer unit 7.31 Preloaded Piezo Actuator 7.32 Radiation shielding hutch 7.33 Raii System for Cryomodule Assembly 7.34 Recovery Compressor 7.35 Robotic welding machines with accessories 7.36 Supply of Linac systems, control systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 7.37 Surface profiler 7.38 Table-top XRF system 7.39 Thermal Imager / Pyrometer 7.40 Titanium vessel for 650 MHz RF cavity 7.41 Vision Measuring Machine with accessories 90	7.19	Laser water micro jet cutting machine	150
7.22Lower Cold mass assembly1007.23Non Evaporable Bulk Getter Modules1007.24On-site Upgradation of Physical Properties Measurement System2107.25Oxide layer deposition system4007.26Ozonoated cleaning system1007.27Particle shape Analyser807.28Phased Array Ultrasonic Detector1407.29Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection3507.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories707.36Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.20		60
7.23 Non Evaporable Bulk Getter Modules 100 7.24 On-site Upgradation of Physical Properties Measurement System 210 7.25 Oxide layer deposition system 400 7.26 Ozonoated cleaning system 100 7.27 Particle shape Analyser 80 7.28 Phased Array Ultrasonic Detector 140 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 350 7.30 Powder atomizer unit 500 7.31 Preloaded Piezo Actuator 50 7.32 Radiation shielding hutch 60 7.33 Rail System for Cryomodule Assembly 90 7.34 Recovery Compressor 170 7.35 Robotic welding machines with accessories 70 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 5400 7.36 Table-top XRF system 50 7.39 Thermal Imager / Pyrometer 55 7.40 Titanium vessel for 650 MHz RF cavity 100 7.41 Vision Measuring Machine with accessories 90	7.21	Low Conductivity Water plant components, Pumps & Accessories and AMCs	150
7.24On-site Upgradation of Physical Properties Measurement System2107.25Oxide layer deposition system4007.26Ozonoated cleaning system1007.27Particle shape Analyser807.28Phased Array Ultrasonic Detector1407.29Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection3507.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.22	Lower Cold mass assembly	100
7.25Oxide layer deposition system4007.26Ozonoated cleaning system1007.27Particle shape Analyser807.28Phased Array Ultrasonic Detector1407.29Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection3507.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.36Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.23	Non Evaporable Bulk Getter Modules	100
7.26Ozonoated cleaning system1007.27Particle shape Analyser807.28Phased Array Ultrasonic Detector1407.29Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection3507.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.36Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.24	On-site Upgradation of Physical Properties Measurement System	210
7.27 Particle shape Analyser 7.28 Phased Array Ultrasonic Detector 7.29 Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection 7.30 Powder atomizer unit 7.31 Preloaded Piezo Actuator 7.32 Radiation shielding hutch 7.33 Rail System for Cryomodule Assembly 7.34 Recovery Compressor 7.35 Robotic welding machines with accessories 7.36 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 7.37 Surface profiler 7.38 Table-top XRF system 7.39 Thermal Imager / Pyrometer 7.40 Titanium vessel for 650 MHz RF cavity 7.41 Vision Measuring Machine with accessories 80 80 80 81 82 84 85 86 87 88 88 88 88 88 88 88 88	7.25	Oxide layer deposition system	400
7.28Phased Array Ultrasonic Detector1407.29Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection3507.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.36Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.26	Ozonoated cleaning system	100
7.29Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection3507.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.27	Particle shape Analyser	80
7.30Powder atomizer unit5007.31Preloaded Piezo Actuator507.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.28	Phased Array Ultrasonic Detector	140
7.31 Preloaded Piezo Actuator 7.32 Radiation shielding hutch 60 7.33 Rail System for Cryomodule Assembly 90 7.34 Recovery Compressor 7.35 Robotic welding machines with accessories 70 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 7.37 Surface profiler 7.38 Table-top XRF system 7.39 Thermal Imager / Pyrometer 7.40 Titanium vessel for 650 MHz RF cavity 7.41 Vision Measuring Machine with accessories 90	7.29	Plasma Enhanced Chemical Vapor Deposition System with Direct Liquid Injection	350
7.32Radiation shielding hutch607.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.30	Powder atomizer unit	500
7.33Rail System for Cryomodule Assembly907.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.31	Preloaded Piezo Actuator	50
7.34Recovery Compressor1707.35Robotic welding machines with accessories70Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.32	Radiation shielding hutch	60
7.35 Robotic welding machines with accessories 70 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 7.37 Surface profiler 7.38 Table-top XRF system 7.39 Thermal Imager / Pyrometer 7.40 Titanium vessel for 650 MHz RF cavity 7.41 Vision Measuring Machine with accessories	7.33	Rail System for Cryomodule Assembly	90
7.36 Supply of Linac systems for three linacs (including Microwave systems, Electron gun, Accelerating structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.) 7.37 Surface profiler 7.38 Table-top XRF system 7.39 Thermal Imager / Pyrometer 7.40 Titanium vessel for 650 MHz RF cavity 7.41 Vision Measuring Machine with accessories 90	7.34	Recovery Compressor	170
7.36structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam diagnostic systems, control systems, cooling systems, support and qualifications systems, etc.)54007.37Surface profiler707.38Table-top XRF system507.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90	7.35	Robotic welding machines with accessories	70
7.38 Table-top XRF system 50 7.39 Thermal Imager / Pyrometer 55 7.40 Titanium vessel for 650 MHz RF cavity 100 7.41 Vision Measuring Machine with accessories 90	7.36	structure, Beam delivery systems, magnet systems, Vacuum systems, Power supplies, beam	5400
7.38 Table-top XRF system 50 7.39 Thermal Imager / Pyrometer 55 7.40 Titanium vessel for 650 MHz RF cavity 100 7.41 Vision Measuring Machine with accessories 90	7.37	Surface profiler	70
7.39Thermal Imager / Pyrometer557.40Titanium vessel for 650 MHz RF cavity1007.41Vision Measuring Machine with accessories90		·	
7.40 Titanium vessel for 650 MHz RF cavity 100 7.41 Vision Measuring Machine with accessories 90		· · · · · · · · · · · · · · · · · · ·	
7.41 Vision Measuring Machine with accessories 90		,	
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Sr.	Item	Cost
No.		(Rs in lakhs)
8	Optics and Equipments	
8.1	Angle Dekkor	75
8.2	Aperture stitching Interferometer for 0.5 m diameter optics	870
8.3	Assorted Fiber optic units like couplers, splitters, filters, multiplexers, laser diodes and drivers	160
8.4	Beamline mirrors, Deformable mirror, Large size broad band dielectric coated mirror	400
8.5	Cylindrical References	150
8.6	Dielectric coated off-Axis Parabola for PW laser	150
8.7	Diode pumped Nd:YAG laser at second harmonic	50
8.8	Double crystal monochromator	600
8.9	Double pulse nano-second laser system for LIBS	70
8.10	Dry ice optics cleaning station	150
8.11	DUV Optics Cleaner	155
8.12	Echelle spectrometer with ICCD	150
8.13	Fiber Optic Pump & Signal Combiner Fabrication Workstation	400
8.14	Flat & Spherical References	670
8.15	fs- broad spectrum oscillator	50
8.16	Fusion splicing workstation for large diameter optical fibers	150
8.17	Glass Casting Moulds (Pt)	180
8.18	High dynamic range Scatterometer	85
8.19	High dynamic range Spectrophotometer (375nm to 2700 nm)	165
8.20	High energy XPS system	1000
8.21	High resolution optical spectrum analyser	60
8.22	High resolution Refractometer	100
8.23	Large aperture double Pockel cell	60
8.24	Large size broad band polarizer	50
8.25	Large size Nd:Phosphate glass rods	50
8.26	Laser interferometer (100 m)	100
8.27	Long trace profilometers	860
	Mirror chambers	70
8.29	Optical polishing felt laps	50
8.30	Prism-Coupler Based Refractive Index Measurement System	90
8.31	Semi Automatic Optical Lapping Machine	70
8.32	Sputter Coater for 0.5 m diameter optics (Au)	540
8.33	Synchrotron beamline optics Test bench	200
8.34	Upgradation of optical coating facility and characterization setups	400
9	Vacuum / UHV	
9.1	Ceramic Vacuum Chambers	100
9.2	Evaporable/ Non Evaporable Getter Pumps	50
9.3	Fabrication of vacuum chamber and associated components	180
9.4	Fabrication of cryostat, vacuum chamber miscellaneous pipings, valves etc.	190
9.5	Fabrication of Vacuum chambers & components and vessel	700
9.6	HV/UHV compatible Gate Valves	50
9.7	Large aperture optical Faraday isolator	50
9.8	Large capacity dry vacuum pump, TMP Vacuum pump	200
9.9	Micro CT station	500
9.9	Precision Machining of UHV chambers	75
	Radiation Resistant Pirani/UHV Gauges & controllers, RGA, RGA spares, Radiation Resistant	
9.11	Pirani/Inverted Magnetron/B-A gauge heads & controllers , vacuume gauges, spares for gauges	1000
9.12	Spare radiation resistant all metal UHV valves(Gate/Angle)	90
9.13	Sputter Ion Pumps	50
0.10	- p	50

Sr.	Item	Cost
No.		(Rs in lakhs)
9.14	Stylus Profilometer with data logger system	50
9.15	TMP Stations and spares	200
9.16	TMP Stations with controllers and UHV Gauge Heads	60
9.17	Vacuum compitable Large translational linear stages	50
9.18	Vacuum deaerator	50
9.19	Vacuum Seals (OFE Copper/Silver plated OFE Copper /Helicoflex gaskets)	50
9.20	Vacuum system of linacs	100