6 Appendix

6.1 List of Machines

Sr. No.	Machine	Year of Investment	Estimated Cost	Purpose	
4	IoT Lab - High End IoT Trainer Kits - Raspberry Kits - 10-25 Nos ((All varied versions)	2019-20	0.1	Training	
5	Embedded Training System (Modular Embedded Development Platform NV5004B, Nvisduno) - 2 Nos	2019-20	0.04	Training	
7	AI, AR, VR & ML Lab	2019-20	0.6	Production/Training	
11	3D Printer Accessories/RE Sw	2019-20	0.13	Training	
13	New Software's (a) MATLAB - 10 User Perpetual license	2019-20	0.03	Training	
14	Electronics Design Software – LabVIEW Professional Development System Suite (Academic Version) 04 Users	2019-20	0.05	Training	
16	All Labs Anti-Static Matting 10000 sqft area	2019-20	0.05	Training	
19	PCB printer with PTH process for double side - 1 No	2019-20	0.14	Training	
20	Advance photo plotter with Developer Machine - 1 No	ice photo plotter with Developer Machine - 1 No 2019-20 0.22 Trainin		Training/Production	
21	CNC Wire Cut Machine (Including Standard Accessories & Tooling) 1 No	2019-20	0.16	Training	
22	3D Printer (3D Printing/CNC Carving/Laser Engraving/Scanner) - 1 No	2019-20	0.08	Training	

Sr. No.	Machine	Year of Investment	Estimated Cost	Purpose
23	Piller Type Drill Machine (Including Standard Accessories & Tooling) - 1 No			Training/Production
24	Hydraulic Surface Grinder (Including Standard Accessories & Tooling) - 1 No	2019-20	0.085	Training/Production
25	Smart Boards - 5 Nos	2019-20	0.07	Training
26	26 Center Lathe Machine (Including Standard Accessories & 2020-21 0.4		0.4	Training/Production
27	CNC Turning Center (Trainer) (Including Standard Accessories & Tooling)	2020-21	0.15	Training/Production
28	CNC Vertical Machining Center (Trainer) (Including Standard Accessories & Tooling)	2020-21	0.15	Training/Production
29	CNC Turning Center (Including Standard Accessories & Tooling)	2020-21	0.35 Training/Production	
30	Vertical Profile Projector	2020-21	0.06	Training
31	Hand Tools	2020-21	0.015 Training	
32	Measuring Instruments (Mitutoyo)	2020-21	0.01 Training	
33	Solidworks (Standard 2019)	2020-21	0.05	Training
34	Catia (V5 Academic)	2019-20	0.03	Training
35	CAM (Master CAM)	2019-20	0.03	Training
36	CAE (MATLAB)	2020-21	0.03	Training
37	Injection Molding Machine (Including Standard Accessories & Tooling)	2020-21	0.18	Training/Production
38	All in One PC - 50 Nos	2020-21	0.45	Training

Sr. No.	Machine	Year of Investment	Estimated Cost	Purpose	
39	5 - Axis VMC (Including Standard Accessories & Tooling)	2020-21	0.25	Training/Production	
40	PLC Trainer (2 Each) (Siemens, Allen Bradley-, Mitsubishi) with software and communication cables	2019-20	0.3	Training	
41	PIC16 & 18 Microcontroller Trainer Kit - 4 Each	2019-20	0.04	Training	
42	Arduino Trainer Kit (4 Nos.)	2019-20	0.02	Training	
43	Mobile Lab Equiptments Glass Absorber-01 Nos TSP Form Tape-01 Nos Window Press Jig with Window Press Pad -01 Nos OCTA Disassembly Jig Upper and lower-1 Set Infrared Workstation-1No Ultrasonic pcb cleaner-1No Hot plate-1No	2019-20	0.015	Training	
44	FAX Trainer kit-02 Nos	2019-20	0.0075	Training	
45	EPABX Trainer kit-02 Nos	2019-20	0.0075	Training	
46	Telephone Trainer kit-02 Nos	2019-20	0.0025	Training	
47	Magnifier with Lamp - 02 No	2019-20	0.015	Training	
48	RF Signal Generator-02 Nos 2019-20 0.00		0.0025	Training	
49	SMPS Repair Trainer-1No	2019-20	0.0025	Training	
50	Amplitude modulation/demodulation trainer-02 Nos	2019-20	0.003	Training	

Sr. No.	Machine	Year of Investment	Estimated Cost	Purpose	
51	Frequency modulation/demodulation trainer-02 Nos	2019-20	0.003	Training	
52	Pulse amplitude modulation/demodulation trainer-02 Nos	2019-20	0.003	Training	
53	Pulse width modulation/demodulation trainer-02 Nos	2019-20	0.003	Training	
54	Pulse code modulation/demodulation trainer-02 Nos	2019-20	0.004	Training	
55	Delta modulation/demodulation trainer-02 Nos	2019-20	0.004	Training	
56	Frequency shift keying modulation/demodulation trainer-02 Nos	2019-20	0.004	Training	
57	Digital Watt Meter-02 Nos.	2019-20	0.004	Training	
58	Induction Cooker -02 nos.	2019-20	0.001	Training	
59	Complete Electronics Components trainer kit-02 no	2019-20	0.007	Training	
60	Multimeter Analog -02 Nos.	2019-20	0.002	Training	
61	Inverter 650 VA with Battery 150 Ah,12 V	2019-20	0.0025	Training	
61	Varied Model Mobile Phones - 10 Nos	2019-20	0.01	Training	
61	Welding Lab 1. Welding Simulator - 1 No 2. PVC Welding M/C - 1 No 3. Air Plasma Custting Machine - 1 No	2019-20	0.15	Training	
61	Class Room Benches - 30	2019-20	0.05	Training	

Sr. No.	Machine	Year of Investment	Estimated Cost	Purpose
61	Animation Lab H/w S/w 1. DSLR Camera - 02 Nos 2. MAYA, Illustrator, After Effects, 3DS Max, Photoshop, Premier Pro Software - 5 Users	2019-20	0.12	Training
62	Lab Chairs - 50	2019-20	0.03	Training
	Total			4.73

6.2 ART-D

Sr. No.	Head	
1	Building 1500 SQM@ Rs 40000/SQM	
2	Entrepreneurship Development cum Incubation center	
3	3 Rural artisan, Craftsman & technician Training (Footwear, handicrafts, electrical appliances etc)	
4	Farm Machinery Repair & maintenance (Threshers, tillers etc)	
5	5 Solar & Biomass/Bio Gas plant-Design, Operation & Maintenance	
6	Two/Three-Wheeler Repair & Servicing	
7	Construction skills- Mason, Plumber, Welder etc	

▶ The proposed amount for ART-D is 16.5 Cr

> These heads are indicative and TCs shall customize based on their needs

6.3 Infrastructure

Sr. No.	Head	Proposed Civil Works	Investment in Rs Cr	Estimating Agency
1	Campus beautification	Complete Roof Water-Proofing, Periodic Building Maintenance ,Uplift - Façade and Facia ,Re-Electrification (Complete Wiring Change), Renovation of Road, Beautification of Park	1	Irrigation Circle - Ramnagar
2	Capacity Expansion (Main Building)	Diploma Block as per AICTE norms - Plan Design and Approval by DDA	11	Irrigation Circle - Ramnagar
3	Capacity Expansion (Hostel)	Girls Hostel = 1000 Sq m Boys Hostel Expansion = 500 Sq m	3	Irrigation Circle - Ramnagar
4	Student Amenities & Other Utilities	AC, Street Lights, Heaters, Canteen Furniture, Recreation Facility	0.5	E-Procurement/GEM
5	Zero Waste campus	Mini Bio Gas Plant	0.05	E-Procurement
6	Plug and Play	-	-	-
7	Extension or Sub centres (considered under GC)	Haldwani EC (500 Sqm) -Computers ,Software Licences, Mechanical Machines, Electronics and Other Labs, Furniture/Office Setup/Misc.	10	E-Procurement
8	ICT Infrastructure	Computers, Smart Boards	0.45	E-Procurement
	Total		26	