List of Supplies and Equipment for the Upgrading of Network / Internet Connectivity

Item No.	Unit	Item Description	Quantity	Unit Cost	Total Cost	End-user
1	unit	Router, 1U rackmount, TILE Architecture, 36 cores x 1.2GHz CPU, 8x 10/100/1000 Ethernet ports, 2x SFP+ cages, LCD, 8GB RAM, 1GB NAND storage, 41.5 mpps fastpath, Up to 28 Gbit/s throughput, SFP DDMI, RouterOS L6, 100-240VAC Dual PSU @ 73W Maximum power consumption, RJ45 Serial port, -20°C to 60°C tested ambient temperature, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management.	2	106,000.00	212,000.00	ICT
2	unit	Layer 3 Smart Switch, 1x Gigabit Ethernet port, 16x SFP+ cages, ARM 32bit Architecture, Dual Core 800MHz CPU, 1GB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L6, 100-240VAC Dual PSU @ 44W Maximum power consumption, RJ45 Serial port, -20°C to 60°C tested ambient temperature, hardware-based STP and LACP.	6	34,000.00	204,000.00	ICT
3	unit	Layer 3 Smart Switch, 24x Gigabit Ethernet PoE ports, 4x SFP+ cages, ARM 32bit Architecture, 800MHz CPU, LCD, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, 802.3af/at PoE out, RJ45 Serial port, Metal desktop case, RouterOS L5, 100-240VAC PSU @ 20A Maximum total output and 494W Maximum power consumption (44W without attachments), RJ45 Serial port, -20°C to 60°C tested ambient temperature.	21	34,000.00	714,000.00	ICT

Item No.	Unit	Item Description	Quantity	Unit Cost	Total Cost	End-user
4	unit	Layer 3 Smart Switch, 24x Gigabit Ethernet PoE ports, 4x SFP+ cages, ARM 32bit Architecture, 800MHz CPU, LCD, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, 802.3af/at PoE out, RJ45 Serial port, Metal desktop case, RouterOS L5, 100-240VAC PSU @ 20A Maximum total output and 494W Maximum power consumption (44W without attachments), RJ45 Serial port, -20°C to 60°C tested ambient temperature.	7	16,500.00	115,500.00	ICT
5	unit	ARM 32bit Architecture, 4x 716MHz CPU, 128MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L4, 802.3af/at PoE In, Passive PoE Out up to 57V, 500mA maximum output, 24W Maximum power consumption, AC1200, 2dBi Antenna Gain for 2.4GHz, 2.5dBi Antenna Gain for 5GHz, 802.11b/g/n Dual Chain wireless, 802.11a/n/ac Dual Chain wireless, 300Mbps maximum data rate for 2.4GHz, 867Mbps maximum data rate for 5GHz, 2x Gigabit Ethernet ports, supports, IPsec hardware acceleration, -40°C to 50°C tested ambient temperature.	95	6,500.00	617,500.00	ICT
6	pc	1310nm, for up to 10 kilometer Single Mode fiber connections.	8	12,500.00	100,000.00	ICT
7	pc	10G SFP+ transceiver, Dual LC UPC connector, 850nm, 300 meter Multi-Mode fiber connections.	20	5,000.00	100,000.00	ICT
8	pc	1.25G SFP transceiver, Dual LC UPC connector, 850nm, 500 meter Multi-Mode fiber connections.	12	2,500.00	30,000.00	ICT
9	pc	6-speed RJ-45 module for up to 10 Gbps and up to 200 meter distance, supports Jumbo frames up to 10218 Bytes, supports DDM monitoring.	114	6,100.00	695,400.00	ICT

Item No.	Unit	Item Description	Quantity	Unit Cost	Total Cost	End-user
10	unit	1KVA Uninteruptable Power Supply, IEC outlet	24	12,000.00	288,000.00	ICT
11	unit	500VA Uninteruptable Power Supply, IEC outlet	8	5,500.00	44,000.00	ICT
12	pc	Motherboard Socket, X470 Chipset, 64GB maximum supported memory, supports DDR4 3600MHz, Onboard M.2 heatsink for M.2 drives, dual M.2 support, Gigabit Ethernet, USB3.1 support, USB2.0 support, SATA 6Gb/s support	2	11,000.00	22,000.00	ICT
13	pc	8-core compatible socket processor to above-defined motherboard 3.4GHz or higher base clock	2	8,500.00	17,000.00	ICT
14	pc	16 GB DDR4 memory	8	5,000.00	40,000.00	ICT
15	pc	Compatible to above defined-motherboard True-rated power supply 600W, 80Plus Silver or higher	2	4,000.00	8,000.00	ICT
16	pc	50 - 55" full HD TV	3	30,000.00	90,000.00	ICT
17	pc	500GB SSD compatible to above-defined motherboard	7	6,000.00	42,000.00	ICT
18	pc	1TB HDD SATA compatible to above-defined motherboard	2	6,000.00	12,000.00	ICT
19	pc	ATX Desktop case with 4 120mm fans or more	2	3,000.00	6,000.00	ICT
20	pc	Heavy-duty Keyboard and Mouse with XL mousepad	2	800.00	1,600.00	ICT
21	box	1000 pcs RJ45	1	10,000.00	10,000.00	ICT
22	box	UTP CABLE: Cat5e Unshielded Twisted Pair Cable #24AWG Bare Copper (Gray) acble, 305 meters	4	10,000.00	40,000.00	ICT
TOTAL					3,409,000.00	

Republic of the Philippines
BENGUET STATE UNIVERSITY
La Trinidad, Benguet

PURCHASE REQUEST

Fund Cluster: _____

Office/Section:	PR No.: _2020_ _06_ _0683_		Date:
ICT Division	Responsibility Center Code: _____		6 - 12 . 2020

Item No.	Stock/ Property No.	Unit	Item Description	Q3	Q4	Quantity	Unit Cost	Total Cost	End-user
			Network Infrastructure supplies and equipments					3,409,000.00	
1		unit	Router, 1U rackmount, TILE Architecture, 36 cores x 1.2GHz CPU, 8x 10/100/1000 Ethernet ports, 2x SFP+ cages, LCD, 8GB RAM, 1GB NAND storage, 41.5 mpps fastpath, Up to 28 Gbit/s throughput, SFP DDMI, RouterOS L6, 100-240VAC Dual PSU @ 73W Maximum power consumption, RJ45 Serial port, -20°C to 60°C tested ambient temperature, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management.			2	106,000.00	212,000.00	ICT
2		unit	Layer 3 Smart Switch, 1x Gigabit Ethernet port, 16x SFP+ cages, ARM 32bit Architecture, Dual Core 800MHz CPU, 1GB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L6, 100-240VAC Dual PSU @ 44W Maximum power consumption, RJ45 Serial port, -20°C to 60°C tested ambient temperature, hardware-based STP and LACP.			6	34,000.00	204,000.00	ICT
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4		unit	Layer 3 Smart Switch, 24x Gigabit Ethernet PoE ports, 4x SFP+ cages, ARM 32bit Architecture, 800MHz CPU, LCD, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, 802.3af/at PoE out, RJ45 Serial port, Metal desktop case, RouterOS L5, 100-240VAC PSU @ 20A Maximum total output and 494W Maximum power consumption (44W without attachments), RJ45 Serial port, -20°C to 60°C tested ambient temperature.			7	16,500.00	115,500.00	ICT

#		unit	Description			Qty	Unit Price	Total	Dept
5		unit	ARM 32bit Architecture, 4x 716MHz CPU, 128MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L4, 802.3af/at PoE In, Passive PoE Out up to 57V, 500mA maximum output, 24W Maximum power consumption, AC1200, 2dBi Antenna Gain for 2.4GHz, 2.5dBi Antenna Gain for 5GHz, 802.11b/g/n Dual Chain wireless, 802.11a/n/ac Dual Chain wireless, 300Mbps maximum data rate for 2.4GHz, 867Mbps maximum data rate for 5GHz, 2x Gigabit Ethernet ports, supports, IPsec hardware acceleration, -40°C to 50°C tested ambient temperature.			95	6,500.00	617,500.00	ICT
6		pc	1310nm, for up to 10 kilometer Single Mode fiber connections.			8	12,500.00	100,000.00	ICT
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9		pc	6-speed RJ-45 module for up to 10 Gbps and up to 200 meter distance, supports Jumbo frames up to 10218 Bytes, supports DDM monitoring.			114	6,100.00	695,400.00	ICT
10		unit	1KVA Uninteruptable Power Supply, IEC outlet			24	12,000.00	288,000.00	ICT
11		unit	500VA Uninteruptable Power Supply, IEC outlet			8	5,500.00	44,000.00	ICT
12		pc	Motherboard AM4 Socket, X470 Chipset, 64GB maximum supported memory, supports DDR4 3600MHz, Onboard M.2 heatsink for M.2 drives, dual M.2 support, Gigabit Ethernet, USB3.1 support, USB2.0 support, SATA 6Gb/s support			2	11,000.00	22,000.00	ICT
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17		pc	500GB SSD compatible to above-defined motherboard			7	6,000.00	42,000.00	ICT
18		pc	1TB HDD SATA compatible to above-defined motherboard			2	6,000.00	12,000.00	ICT

19		pc	ATX Desktop case with 4 120mm fans or more			2	3,000.00	6,000.00	ICT
20		pc	Heavy-duty Keyboard and Mouse with XL mousepad			2	800.00	1,600.00	ICT
21		box	1000 pcs RJ45			1	10,000.00	10,000.00	ICT
22		box	UTP CABLE: Cat5e Unshielded Twisted Pair Cable #24AWG Bare Copper (Gray) acble, 305 meters			4	10,000.00	40,000.00	ICT
			xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx						

TOTAL								3,409,000.00	

Purpose: University Network Infrastructure Supplies and Equipments upgrade

Source of Fund: 161 - CO

Requested by:	Approved by:
Signature: Printed Name: Designation: Date:	
OLIVER G. TABDI OIC, ICT Division	**DANILO B. BOSE** OIC-University President
Funds Appropriated:	Funds Available
ESTRELLITA M. DACLAN SAO, BUDGET BD# 06-133	**IMELDA B. GALINATO** ACCOUNTANT IV JUL 0 6 2020