Sealed bids are invited from authorized resellers of Apple for the supply and installation of Desktop and Laptops as per quantities required and detailed specifications appended below.

1. MacBook Air :- 1 Qty	
	Retina display - 13.3-inch (diagonal) LED-backlit
Display	display with IPS technology; 2560x1600 native
	resolution
Touch ID	Integrated Touch ID sensor
Processor	1.6GHz dual-core Intel Core i5, Turbo Boost up to
	3.6GHz, with 4MB L3 cache
Storage1	128GB PCIe-based SSD
Memory	8GB of 2133MHz LPDDR3 onboard memory
	Up to 12 hours wireless web
	Up to 13 hours iTunes movie playback
Battery and Power	Up to 30 days of standby time
battery and Fower	Built-in 50.3-watt-hour lithium-polymer battery
	30W USB-C Power Adapter; USB-C power port
Size and Weight	Height: 0.41–1.56 cm (0.16–0.61 inches)
	Support for Thunderbolt 3-enabled external
Graphics	graphics processors (eGPUs)
	Intel UHD Graphics 617
Camera	720p FaceTime HD camera
Charging and Europeian	Two Thunderbolt 3 (USB-C) ports with support for:
Charging and Expansion	Charging and DisplayPort
Mirologo	802.11ac Wi-Fi wireless networking; IEEE
Wireless	802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
Audio	Stereo speakers, Three microphones, 3.5mm
Audio	headphone jack
2. MacBook Air :- 1 Qty	
Display	Retina display - 13.3-inch (diagonal) LED-backlit
	display with IPS technology; 2560x1600 native
	resolution
Touch ID	Integrated Touch ID sensor
Processor	1.6GHz dual-core Intel Core i5, Turbo Boost up to
Processor	3.6GHz, with 4MB L3 cache
Storage1	256 GB PCIe-based SSD
Memory	8GB of 2133MHz LPDDR3 onboard memory

	Up to 12 hours wireless web
Battery and Power	Up to 13 hours iTunes movie playback
	Up to 30 days of standby time
	Built-in 50.3-watt-hour lithium-polymer battery
	30W USB-C Power Adapter; USB-C power port
	son out one marker, out o power port
Size and Weight	Height: 0.41–1.56 cm (0.16–0.61 inches)
Graphics	Support for Thunderbolt 3-enabled external
Oraphiles	graphics processors (eGPUs) Intel UHD
Camera	720p FaceTime HD camera
Charging and Expansion	Two Thunderbolt 3 (USB-C) ports with support for: -
Charging and Expansion	Charging and DisplayPort
Wireless	802.11ac Wi-Fi wireless networking; IEEE
Will cless	802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
Audio	Stereo speakers, Three microphones, 3.5mm
Addio	headphone jack
3. WIACDOOK PIO I QLV	
3. MacBook Pro :- 1 Qty	
	Retina display 13 3-inch (diagonal) LED-hacklit
	Retina display, 13.3-inch (diagonal) LED-backlit
Display	display with IPS technology; 2560x1600 native
	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for
	display with IPS technology; 2560x1600 native
	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for
Display	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours
Display	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5,
Display Processor	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM
Display Processor Storage1	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD
Display Processor Storage1 Memory	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory
Display Processor Storage1 Memory	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640
Display Processor Storage1 Memory Graphics	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for:
Display Processor Storage1 Memory Graphics	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort
Display Processor Storage1 Memory Graphics	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO)
Display Processor Storage1 Memory Graphics	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO) keys including 12 function keys and four arrow
Processor Storage1 Memory Graphics Charging and Expansion	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO) keys including 12 function keys and four arrow keys, Ambient light sensor, Force Touch trackpad
Processor Storage1 Memory Graphics Charging and Expansion	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO) keys including 12 function keys and four arrow keys, Ambient light sensor, Force Touch trackpad for precise cursor control and pressure-sensing
Processor Storage1 Memory Graphics Charging and Expansion	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO) keys including 12 function keys and four arrow keys, Ambient light sensor, Force Touch trackpad for precise cursor control and pressure-sensing capabilities; enables Force clicks, accelerators,
Processor Storage1 Memory Graphics Charging and Expansion	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO) keys including 12 function keys and four arrow keys, Ambient light sensor, Force Touch trackpad for precise cursor control and pressure-sensing capabilities; enables Force clicks, accelerators, pressure-sensitive drawing and Multi-Touch
Processor Storage1 Memory Graphics Charging and Expansion	display with IPS technology; 2560x1600 native resolution at 227 pixels per inch with support for millions of colours 13-inch model, 2.3GHz dual-core Intel Core i5, Turbo Boost up to 3.6GHz, with 64MB of eDRAM 128GB SSD 8GB of 2133MHz LPDDR3 onboard memory Intel Iris Plus Graphics 640 Two Thunderbolt 3 (USB-C) ports with support for: Charging and DisplayPort Full-sized backlit keyboard with: 78 (US) or 79 (ISO) keys including 12 function keys and four arrow keys, Ambient light sensor, Force Touch trackpad for precise cursor control and pressure-sensing capabilities; enables Force clicks, accelerators, pressure-sensitive drawing and Multi-Touch gestures

	13-inch model, Stereo speakers with high dynamic
	range, Two microphones , 3.5mm headphone jack
Audio	
	Up to 10 hours wireless web, 61W USB-C Power
Battery and Power	Adapter
4. MacBook Pro :- 1 Qty	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
N.	Retina display, 13.3-inch (diagonal) LED-backlit
	display with IPS technology; 2560x1600 native
Display	resolution at 227 pixels per inch with support for
	millions of colours
Processor	13-inch model, 2.3GHz dual-core Intel Core i5,
	Turbo Boost up to 3.6GHz, with 64MB of eDRAM
Storage1	256GB SSD
Memory	8GB of 2133MHz LPDDR3 onboard memory
Graphics	Intel Iris Plus Graphics 640
Crapines	Two Thunderbolt 3 (USB-C) ports with support for:
Charging and Expansion	Charging and DisplayPort
enarging and Expansion	Full-sized backlit keyboard with: 78 (US) or 79 (ISO)
	keys including 12 function keys and four arrow
	keys, Ambient light sensor, Force Touch trackpad
Keyboard and Trackpad	for precise cursor control and pressure-sensing
Reyboard and Trackpad	capabilities; enables Force clicks, accelerators,
	pressure-sensitive drawing and Multi-Touch
	gestures
	802.11ac Wi-Fi wireless networking; IEEE
Wireless	802.11a/b/g/n compatible
Camera	720p FaceTime HD camera
Cumeru	13-inch model, Stereo speakers with high dynamic
	range, Two microphones , 3.5mm headphone jack
Audio	range, rwo microphones, s.smii neauphone jack
Addio	Up to 10 hours wireless web, 61W USB-C Power
Battery and Power	Adapter
5. MacBook Pro :- 1 Qty	raupter
The state of the s	Retina display, 13.3-inch (diagonal) LED-backlit
	display with IPS technology; 2560x1600 native
Display	resolution at 227 pixels per inch with support for
	millions of colours
	13-inch model with Touch Bar, 2.3GHz quad-core
Processor	Intel Core i5, Turbo Boost up to 3.8GHz, with
1 10003301	128MB of eDRAM
Storago1	256GB SSD
Storage1	
Memory	8GB of 2133MHz LPDDR3 onboard memory

Intel Iris Plus Graphics 655
Four Thunderbolt 3 (USB-C) ports with support for:
Charging and DisplayPort
Full-sized backlit keyboard with: 64 (US) or 65 (ISO)
keys including four arrow keys, Touch Bar with
integrated Touch ID sensor, Ambient light sensor &
Force Touch trackpad for precise cursor control and
pressure-sensing capabilities; enables Force clicks,
accelerators, pressure-sensitive drawing and Multi-
Touch gestures
802.11ac Wi-Fi wireless networking; IEEE
802.11a/b/g/n compatible
720p FaceTime HD camera
13-inch model with Touch Bar, Stereo speakers with
high dynamic range, Three microphones , 3.5mm
headphone jack
Up to 10 hours wireless web, 61W USB-C Power
Adapter
Retina display, 13.3-inch (diagonal) LED-backlit
display with IPS technology; 2560x1600 native
resolution at 227 pixels per inch with support for
millions of colours
13-inch model with Touch Bar, 2.3GHz quad-core
Intel Core i5, Turbo Boost up to 3.8GHz, with
128MB of eDRAM
512GB SSD
8GB of 2133MHz LPDDR3 onboard memory
Intel Iris Plus Graphics 655
Four Thunderbolt 3 (USB-C) ports with support for:
Charging and DisplayPort
Full-sized backlit keyboard with: 64 (US) or 65 (ISO)
keys including four arrow keys, Touch Bar with
integrated Touch ID sensor, Ambient light sensor &
Force Touch trackpad for precise cursor control and
pressure-sensing capabilities; enables Force clicks,
accelerators, pressure-sensitive drawing and Multi-
Touch gestures
802.11ac Wi-Fi wireless networking; IEEE
802.11a/b/g/n compatible
502.11d/ 5/ g/ 11 companie

	13-inch model with Touch Bar, Stereo speakers with
	high dynamic range, Three microphones , 3.5mm
Audio	headphone jack
	Up to 10 hours wireless web, 61W USB-C Power
Battery and Power	Adapter
7. I MAC Desktop 21.5-inch :- 1 Qty	
7. TWINE DESKLOP 21.5 Ment. 1 Qty	Retina 4K display, 21.5-inch (diagonal) Retina 4K
	display, 4096x2304 resolution with support for one
Display	billion colours, 500 nits brightness, Wide colour (P3)
D	3.0GHz quad-coreIntel Core i5 (Turbo Boost up
Processor	to 3.5GHz)
Memory	8GB of 2400MHz DDR4 onboard memory
Storage	1TB (5400-rpm) hard drive
Graphics	Radeon Pro 555 with 2GB of VRAM
	Stereo speakers, Microphone, 3.5mm headphone
	jack, Support for Apple iPhone headset with
Audio	microphone
	3.5mm headphone jack, SDXC card slot, Four USB 3
	ports (compatible with USB 2), Two Thunderbolt 3
	(USB-C) ports with support for: DisplayPort,
Connections and Expansion	Thunderbolt (up to 40 Gbps), USB 3.1 Gen 2 (up to
	10 Gbps), Thunderbolt 2, HDMI, DVI and VGA
	supported using adapters (sold separately),
	10/100/1000BASE-T Gigabit Ethernet (RJ-45
	connector), Kensington lock slot
	802.11ac Wi-Fi wireless networking, IEEE
Wireless	802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
	Magic Keyboard - with Numeric Keypad, Magic
Input	Mouse 2 with Trackpad
8. I MAC Desktop 21.5-inch :- 1 Qty	
	Retina 4K display, 21.5-inch (diagonal) Retina 4K
Display	display, 4096x2304 resolution with support for one
Display	billion colours, 500 nits brightness, Wide colour (P3)
Processor	3.4GHz quad-coreIntel Core i5 (Turbo Boost up
1 10003301	to 3.8GHz)
Memory	8GB of 2400MHz DDR4 onboard memory
Storage	1TB Fusion Drive
Graphics	Radeon Pro 560 with 4GB of VRAM

	Stereo speakers, Microphone, 3.5mm headphone
	jack, Support for Apple iPhone headset with
Audio	microphone
	3.5mm headphone jack, SDXC card slot, Four USB 3
	ports (compatible with USB 2), Two Thunderbolt 3
	(USB-C) ports with support for: DisplayPort,
Connections and Expansion	Thunderbolt (up to 40 Gbps), USB 3.1 Gen 2 (up to
	10 Gbps), Thunderbolt 2, HDMI, DVI and VGA
	supported using adapters (sold separately),
	10/100/1000BASE-T Gigabit Ethernet (RJ-45
	connector), Kensington lock slot
Wireless	802.11ac Wi-Fi wireless networking, IEEE
Wil cless	802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
	Magic Keyboard - with Numeric Keypad, Magic
Input	Mouse 2 with Trackpad
9. I MAC Desktop 27-inch: 1 Qty	
	Retina 5K display, 27-inch (diagonal) Retina 5K
	display, 5120x2880 resolution with support for one
Display	billion colours, 500 nits brightness, Wide colour (P3)
Processor	3.4GHz quad-core Intel Core i5 (Turbo Boost up to
	3.8GHz)
Memory	8GB (two 4GB) of 2400MHz DDR4 memory; four SO-
·	DIMM slots, user accessible
Storage	1TB Fusion Drive
Graphics	Radeon Pro 570 with 4GB of VRAM
	Stereo speakers, Microphone, 3.5mm headphone
Audio	jack, Support for Apple iPhone headset with
	microphone
	3.5mm headphone jack, SDXC card slot, Four USB 3
	ports (compatible with USB 2), Two Thunderbolt 3
	(USB-C) ports with support for: DisplayPort,
Connections and Expansion	Thunderbolt (up to 40 Gbps), USB 3.1 Gen 2 (up to
	10 Gbps), Thunderbolt 2, HDMI, DVI and VGA
	supported using adapters (sold separately),
	10/100/1000BASE-T Gigabit Ethernet (RJ-45
	connector), Kensington lock slot
Wireless	

Bluetooth	Bluetooth 4.2 wireless technology
lanut	Magic Keyboard - with Numeric Keypad, Magic
Input	Mouse 2 with Trackpad
10. I MAC Desktop 27-inch : 1 Qty	
	Retina 5K display, 27-inch (diagonal) Retina 5K
	display, 5120x2880 resolution with support for one
Display	billion colours, 500 nits brightness, Wide colour (P3)
Processor	3.5GHz quad-core Intel Core i5 (Turbo Boost up to
110003301	4.1GHz)
Memory	8GB (two 4GB) of 2400MHz DDR4 memory; four SO-
·	DIMM slots, user accessible
Storage	1TB Fusion Drive
Graphics	Radeon Pro 575 with 4GB of VRAM
	Stereo speakers, Microphone, 3.5mm headphone
Audio	jack, Support for Apple iPhone headset with
	microphone
	3.5mm headphone jack, SDXC card slot, Four USB 3
	ports (compatible with USB 2), Two Thunderbolt 3
	(USB-C) ports with support for: DisplayPort,
Connections and Expansion	Thunderbolt (up to 40 Gbps), USB 3.1 Gen 2 (up to
	10 Gbps), Thunderbolt 2, HDMI, DVI and VGA
	supported using adapters (sold separately),
	10/100/1000BASE-T Gigabit Ethernet (RJ-45
	connector), Kensington lock slot
	802.11ac Wi-Fi wireless networking, IEEE
Wireless	802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
Input	Magic Keyboard - with Numeric Keypad, Magic
	Mouse 2 with Trackpad
11. I MAC Desktop 27-inch: 1 Qty	
	Retina 5K display, 27-inch (diagonal) Retina 5K
	display, 5120x2880 resolution with support for one
Display	billion colours, 500 nits brightness, Wide colour (P3)
Processor	3.8GHz quad-core Intel Core i5 (Turbo Boost up to
	4.2GHz)
Memory	8GB (two 4GB) of 2400MHz DDR4 memory; four SO-
•	DIMM slots, user accessible
Storage	2TB Fusion Drive
Graphics	Radeon Pro 580 with 8GB of VRAM

Audio	Stereo speakers, Microphone, 3.5mm headphone jack, Support for Apple iPhone headset with microphone
Connections and Expansion	3.5mm headphone jack, SDXC card slot, Four USB 3 ports (compatible with USB 2), Two Thunderbolt 3 (USB-C) ports with support for: DisplayPort, Thunderbolt (up to 40 Gbps), USB 3.1 Gen 2 (up to 10 Gbps), Thunderbolt 2, HDMI, DVI and VGA supported using adapters (sold separately), 10/100/1000BASE-T Gigabit Ethernet (RJ-45
	connector), Kensington lock slot
Wireless	802.11ac Wi-Fi wireless networking, IEEE 802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
	Magic Keyboard - with Numeric Keypad, Magic
Input	Mouse 2 with Trackpad
	·
12. I MAC Pro Desktop : 1 Qty	
Display	5K Retina display, 27-inch (diagonal) Retina 5K
Processor	8-Core 3.2GHz Intel Xeon W, Turbo Boost up to
Frocessor	4.2GHz, 19MB cache
	32GB
	32GB of 2666MHz DDR4 ECC memory
Memory	Quad-channel memory controller
Storage	1TB SSD
Graphics	Vega 56 Radeon Pro Vega 56 graphics processor with 8GB of HBM2 memory 56 compute units, 3584 stream processors, 9 teraflops single precision, 18 teraflops half precision
Audio	Stereo speakers, Four Microphone, 3.5mm headphone jack
Connections and Expansion	10Gb Ethernet - Nbase-T Ethernet with support for 1Gb, 2.5Gb, 5Gb and 10Gb Ethernet using RJ-45 connector, SDXC card slot with support for UHS-II, Four USB 3 ports, Four Thunderbolt 3 (USB-C) ports with support for: DisplayPort 1.2, Thunderbolt (up to 40 Gbps), USB 3.1 Gen 2 (up to 10 Gbps), Thunderbolt 2, HDMI, DVI and VGA supported using adapters (sold separately)

	802.11ac Wi-Fi wireless networking, IEEE
Wireless	802.11a/b/g/n compatible
Bluetooth	Bluetooth 4.2 wireless technology
	Space Grey Magic Keyboard with Numeric Keypad,
Input	Space Grey Magic Mouse 2, Optional Space Grey
	Magic Trackpad 2

Discount for academic institutions should be given, if any.

Separate rates should be quoted for extended warranty of 2 years in addition to standard warranty of one year. The last date of receiving sealed bids is February 15, 2019.

Sd/-Director

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