

**TECHNICAL BID****I VENDOR ELIGIBILITY CRITERIA**

<b>S.No.</b>	<b>Description</b>	<b>Compliance (Yes / No)</b>	<b>Page No.</b>	<b>Remarks</b>
1	(i) The OEM should have 10 years' experience in manufacturing of computers and computer related items as called for in the tender. (Necessary proof to be submitted).			
	(ii) The business turnover of the OEM should be more than Rupees Ten Crores per year (each in the last 5 years). Last 5 years' financial statements / certificates issued by Chartered Accountant should be submitted as proof or a self-declaration from the OEM.			
	(iii) The OEM should be / should have been a registered Rate Contract vendor for the supply of computer and computer related items with Government organizations / Public Sector Undertakings / Reputed Organizations. Proof of contract should be submitted.			
	(iv) The OEM should authorize not more than 2 Premium Partners to bid, supply and provide service for the items quoted in this tender. Authorization Form as per Annexure D issued by OEM authorizing the premium partners should be submitted.			
2	(i) The OEM authorized premium partner should have experience in executing the similar rate contract in Government organizations / Public Sector Undertakings / Reputed Organizations.			
	(ii) The business turnover of the Premium Partner should not be less than Rupees One Crore per year for the last 2 years. Last 3 years' financial statements / certificates issued by Chartered Accountant should be submitted as proof.			
	(iii) The Premium Partner of the OEM should have an Office at Chennai with experts / specialists to handle installation, configuration and to solve all types of issues in time.			
3	BIS Certificate has to be provided for all items with model number for which the vendor is bidding.			

**II TECHNICAL COMPLIANCE SHEET**

**LIST 1**

**1. ALL IN ONE**

Sl. No.	Spec ID	Specification (ALL IN ONE)	Proposed specification	Brand, Model & BIS No.	Relevant Supporting Document Page No.	Remarks
1	AIO1	1 X Intel core i3-8300 Quad Core(4 Core/8MB/4T/3.7GHz/62~65W) 1 X H370 chipset or higher 1 X 8GB DDR4 2666MHz 1 X 1TB HDD 7.2K RPM 1 X USB Keyboard 1 X USB Mouse 1 X DVD RW 1 X VGA, HDMI, DP 1 X 21.0 – 24.0 inch Display 3 Years Support				
2	AIO2	1 X Intel core i5-8500 (6 Core/9MB/6T/3.0 GHz,Turbo 4.10GHz/62~65W) 1 X H370 Chipset or Higher 1 X 8GB DDR4 2666 1 X 1TB HDD 7.2K RPM 1 X USB Keyboard 1 X USB Mouse 1 X DVD RW 1 X VGA,HDMI,DP 1 X 21.0 – 24.0 inch Display 3 Years Support				

Sl. No.	Spec ID	Specification (ALL IN ONE)	Proposed specification	Brand, Model & BIS No.	Relevant Supporting Document Page No.	Remarks
3	AIO3	1 X Intel core i7-8700 (6 Core/12MB/12T/3.2 GHz upto 4.6 GHz/62~65W) 1 X H370 Chipset or Higher 1 X 8GB DDR4 2666 1 X 1TB HDD 7.2K 1 X USB Keyboard 1 X USB Mouse 1 X DVD RW 1 X VGA,HDMI,DP 1 X 21.0 – 24.0 inch Display 3 Years Support				
4	AIO4	1 X AMD Ryzen™ 7 3700X 1 X X570 Chipset Equivalent or Higher 1 X 8GB DDR4 - 3/4 additional Memory Bank 1 X 1TB HDD 7.2K RPM 1 X DVD RW 1 X USB Keyboard 1 X USB Mouse 1 X VGA, HDMI, DP 1 X 21.0 – 24.0 inch Display 3 Years Support				
5	AIO5	1 X AMD Ryzen™ Threadripper™ 2950X 1 X X470 Chipset Equivalent or Higher 1 X 8GB DDR4 - 3/4 additional Memory Bank 1 X 1TB HDD 7.2K RPM 1 X DVD RW 1 X USB Keyboard 1 X USB Mouse 1 X VGA, HDMI, DP 1 X 21.0 – 24.0 inch Display 3 Years Support				

**2 APPLE (BRAND ITEMS)**

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
2	APP02	Brand : APPLE Type : MacBook Air Size : 13.3 (inch) Retine 4k : Retine 5k : <b>Processor 8th Gen : Intel i5</b> Cache : 4MB L3 <b>Ram Size : 8GB – LPDDR3</b> Ram Speed : 2133 HDD Type : SSD HDD Size : 256 GB Ethernet : - Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : v3 Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - Graphic Processor : Intel UHD Graphics 617 Blacklit : required Hyper Threading : required Turbo Boost : required Multi Card Slot : - Finger Print Sensor/Touch ID : required Web Cam : 720p Face Time HD Active Stylus Pen : - Warranty : 3 years and above Accessories : PowerCord+Charger Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
3	APP03	Brand : APPLE Type : MacBook Pro Size : 13.3 (inch) Retine 4k : Retine 5k : Processor 8th Gen : Intel i5 Cache : 4MB L3 <b>Ram Size : 8GB – LPDDR3</b> Ram Speed : 2133 HDD Type : SSD HDD Size : 512 GB Ethernet : - Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : v3 Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - Graphic Processor : Intel Iris Plus Graphics 640 Blacklit : required Hyper Threading : required Turbo Boost : required Multi Card Slot : - Finger Print Sensor/Touch ID : required Web Cam : 720p Face Time HD Active Stylus Pen : - Warranty : 3 years and above Accessories : PowerCord+Charger Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
4	APP04	Brand : APPLE Type : MacBook Pro Size : 16 (inch) Retine 4k : Retine 5k : Processor 9th Gen : Intel i5 Cache : 6MB L3 Ram Size : 8GB - DDR4 Ram Speed : 2133 HDD Type : SSD HDD Size : 512 GB Ethernet : - Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : v3 Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - <b>Graphic Processor : Intel UHD Graphics 630</b> Blacklit : required Hyper Threading : required Turbo Boost : required Multi Card Slot : - Finger Print Sensor/Touch ID : required Web Cam : 720p Face Time HD Active Stylus Pen : - Warranty : 3 years and above Accessories : PowerCord+Charger Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
5	APP05	Brand : APPLE Type : iMac Size : 21.5 (inch) Retine 4k : Retine 5k : <b>Processor 8th Gen : Intel Core</b> Cache : 6MB L3 Ram Size : 8GB - DDR4 Ram Speed : 2333 <b>HDD Type : Hard Drive</b> HDD Size : 512 GB Ethernet : required Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - <b>Graphic Processor : Radeon Pro 555X with 2GB of GDDR5 Memory</b> Blacklit : - Hyper Threading : required Turbo Boost : required Multi Card Slot : required Finger Print Sensor/Touch ID : - Web Cam : Face Time HD Active Stylus Pen : - Warranty : 3 years and above <b>Accessories : PowerCord</b> Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
6	APP06	Brand : APPLE Type : iMac Size : 21.5 (inch) Retine 4k : Retine 5k : <b>Processor 8th Gen : Intel Core</b> Cache : 6MB L3 Ram Size : 8GB - DDR4 Ram Speed : 2333 <b>HDD Type : Fusion Drive</b> HDD Size : 512 GB Ethernet : required Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - <b>Graphic Processor : Radeon Pro 560X with 4GB of GDDR5 memory</b> Blacklit : - Hyper Threading : required Turbo Boost : required Multi Card Slot : required Finger Print Sensor/Touch ID : - Web Cam : Face Time HD Active Stylus Pen : - Warranty : 3 years and above <b>Accessories : PowerCord</b> Operating System : Catalina(10.15)				



Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	APP07	Brand : APPLE Type : iMac Size : 27 (inch) Retine 4k : Retine 5k : <b>Processor 8th Gen : Intel Core</b> Cache : 6MB L3 Ram Size : 8GB - DDR4 Ram Speed : 2666 <b>HDD Type :Fusion Drive</b> HDD Size : 512 GB Ethernet : required Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - Graphic Processor : Radeon Pro 570X, 575X, or 580X graphics processor Blacklit : - Hyper Threading : required Turbo Boost : required Multi Card Slot : required Finger Print Sensor/Touch ID : - Web Cam : Face Time HD Active Stylus Pen : - Warranty : 3 years and above <b>Accessories : PowerCord</b> Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
8	APP08	Brand : APPLE Type : iMac Pro Size : 27 (inch) Retine 4k : Retine 5k : <b>Processor: Intel Xeon W</b> Cache : 6MB L3 Ram Size : 8GB - DDR4 Ram Speed : 2666 HDD Type : SSD HDD Size : 512 GB Ethernet : required Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : required Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - <b>Graphic Processor : Radeon Pro Vega 56</b> Blacklit : - Hyper Threading : required Turbo Boost : required Multi Card Slot : required Finger Print Sensor/Touch ID : - Web Cam : Face Time HD Active Stylus Pen : - Warranty : 3 years and above <b>Accessories : PowerCord</b> Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
9	APP09	Brand : APPLE Type : Mac Pro Size : - (inch) Retine 4k : Retine 5k : Processor 9th Gen : Intel i7 Cache : 12MB Ram Size : 8GB - DDR4 Ram Speed : 2666 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : 4.2v required Wifi : - Thunderbolt : - Mini Display Port : - Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - Graphic Processor : Dual AMD FirePro graphics Blacklit : - Hyper Threading : required Turbo Boost : required Multi Card Slot : required Finger Print Sensor/Touch ID/Face ID: - Web Cam : - Active Stylus Pen : - Warranty : 1+2 years Accessories : PowerCord+DVDRW(External) Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
10	APP10	Brand : APPLE Type : Mac Mini Size : - (inch) Retine 4k : Retine 5k : <b>Processor 8<sup>th</sup> Gen Intel Core i5</b> Cache : required Ram Size : 8GB - DDR4 Ram Speed : 2666 HDD Type : SSD <b>HDD Size : 256GB</b> Ethernet : required Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : - Audio Ports : required USB/USB-C : required Color : unspecified Touch Screen : - Battery Life : - Anti-Glare : - Graphic Processor : Intel UHD graphics 630 Blacklit : - Hyper Threading : required Turbo Boost : required Multi Card Slot : required Finger Print Sensor/Touch ID : - Web Cam : - Active Stylus Pen : Warranty : 3 years and above <b>Accessories : PowerCord+Magic K/B + Magic Mouse</b> Operating System : Catalina(10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
11	APP11	Brand : APPLE Type : iPad Pro Size : 12.9 (inch) Retine 4k : Retine 5k : Processor 9th Gen : A12X Bionic chip Cache : - <b>Ram Size : -</b> Ram Speed : - HDD Type : - HDD Size : 512 GB <b>Ethernet : Wifi</b> Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : - <b>Audio Ports : N/A</b> USB/USB-C : USB-C connector for charging and accessories Color : unspecified Touch Screen : required Battery Life : 10 hours of battery life Anti-Glare : required Graphic Processor : - Blacklit : - <b>Hyper Threading : -</b> <b>Turbo Boost : -</b> <b>Multi Card Slot : -</b> Finger Print Sensor/Touch ID : required Web Cam : 12mp Back + 7mp Front cam Active Stylus Pen : Optional <b>Warranty : 2 years</b> <b>Accessories : Power Adaptor + Cable</b> <b>Operating System : iPad OS</b>				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
12	APP12	Brand : APPLE Type : iPad Pro Size : 11 (inch) Retine 4k : Retine 5k : Processor 9th Gen : A12X Bionic chip Cache : - <b>Ram Size : -</b> Ram Speed : - HDD Type : - HDD Size : 512 GB <b>Ethernet : Wifi+Cellular</b> Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : - <b>Audio Ports : N/A</b> USB/USB-C : USB-C connector for charging and accessories Color : unspecified Touch Screen : required Battery Life : 10 hours of battery life Anti-Glare : required Graphic Processor : - Blacklit : - <b>Hyper Threading : -</b> <b>Turbo Boost : -</b> <b>Multi Card Slot : -</b> Finger Print Sensor/Touch ID : required Web Cam : 12mp Back + 7mp Front cam Active Stylus Pen : Optional <b>Warranty : 2 years</b> <b>Accessories : Power Adaptor+ Cable</b> <b>Operating System : iPad OS</b>				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	APP13	Brand : APPLE Type : iPad Air Size : 10.5 (inch) Retine 4k : Retine 5k : <b>Processor 9th Gen : A12 Bionic Chip</b> Cache : - <b>Ram Size : -</b> Ram Speed : - HDD Type : - HDD Size : 256 GB <b>Ethernet : Wifi+Cellular</b> Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : -- Mini Display Port : - Audio Ports : required <b>USB/USB-C : Lightning to USB Charging cable</b> Color : unspecified Touch Screen : required Battery Life : 10 hours of battery life Anti-Glare : required Graphic Processor : - Blacklit : - <b>Hyper Threading : -</b> <b>Turbo Boost : -</b> <b>Multi Card Slot : -</b> Finger Print Sensor/Touch ID : required Web Cam : 8mp Back + 7mp Front cam Active Stylus Pen : Optional <b>Warranty : 2 years</b> <b>Accessories : Power Adapter + Cable</b> <b>Operating System : iPad OS</b>				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
14	APP14	Brand : APPLE Type : iPad <b>Size : 10.2 (inch)</b> Retine 4k : Retine 5k : Processor 9th Gen : A10 Fusion chip Cache : - Ram Size : -GB - DDR4 Ram Speed : - HDD Type : - HDD Size : 128 GB <b>Ethernet : Wifi</b> Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : - Audio Ports : required <b>USB/USB-C : Lightning to USB Charging cable</b> Color : unspecified Touch Screen : required Battery Life : 10 hours of battery life Anti-Glare : required Graphic Processor : - Blacklit : - <b>Hyper Threading : -</b> <b>Turbo Boost : -</b> <b>Multi Card Slot : -</b> Finger Print Sensor/Touch ID : required Web Cam : 8MP Back + 1.2MP Face Time Active Stylus Pen : Optional <b>Warranty : 2 years</b> <b>Accessories : Power Adapter + Cable</b> <b>Operating System : iPad OS</b>				



Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
15	APP15	Brand : APPLE Type : iPad Mini Size : 7.9 (inch) Retine 4k : Retine 5k : <b>Processor 9th Gen : A12 Bionic Chip</b> Cache : - Ram Size : -GB - DDR4 Ram Speed : - HDD Type : - HDD Size : 128 GB <b>Ethernet : Wifi+Cellular</b> Bluetooth : 4.2v required Wifi : IEEE 802.11a/b/g/n Thunderbolt : - Mini Display Port : - Audio Ports : required <b>USB/USB-C : Lightning to USB Charging Cable</b> Color : unspecified Touch Screen : required Battery Life : 10 hours of battery life Anti-Glare : required Graphic Processor : - Blacklit : - <b>Hyper Threading : -</b> <b>Turbo Boost : -</b> <b>Multi Card Slot : -</b> Finger Print Sensor/Touch ID : required Web Cam : 8mp Back + 7mp Front cam Active Stylus Pen : Optional <b>Warranty : 2 years</b> <b>Accessories : Power Adapter + Cable</b> <b>Operating System : iPad OS</b>				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
16	APP16	BRAND: APPLE Type: MacBook Pro Size: 13.3" Retine 4k: Retine 5k: Processor: 2.8Ghz 8th-generation Intel Core i7 Cache: RAM Size: 16GB RAM Speed: 2133 MHZ HDD Type: 256GB HDD Size: SSD Ethernet: Bluetooth: Wifi: Thunderbolt: Mini Display Port: required Audio Ports: required USB/USB-C: required Color: unspecified Touch Screen: Battery Life: Anti-Glare: Graphics: Intel Iris Plus Graphics 655 Backlit: required Hyper Threading: required Turbo Boost: required Multi Card Slot: Finger Print Sensor/Touch ID/Face ID: required Web Cam: 720p Face Time HD Active Stylus Pen: Warranty: Three Years Warranty Accessories: PowerCord+Charger Operating System: Catalina (10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
17	APP17	BRAND: APPLE Type: MacBook Pro Size: 13.3" Retine 4k: Retine 5k: Processor: 2.8Ghz 8th-generation Intel Core i5 Cache: RAM Size: 16GB RAM Speed: 2133 MHZ HDD Type: 512GB HDD Size: SSD Ethernet: Bluetooth: Wifi: Thunderbolt: Mini Display Port: required Audio Ports: required USB/USB-C: required Color: unspecified Touch Screen: Battery Life: Anti-Glare: Graphics: Intel Iris Plus Graphics 655 Backlit: required Hyper Threading: required Turbo Boost: required Multi Card Slot: Finger Print Sensor/Touch ID/Face ID: required Web Cam: 720p Face Time HD Active Stylus Pen: Warranty: Three Years Warranty Accessories: PowerCord+Charger Operating System: Catalina (10.15)				

Sl. No.	Spec ID	Specification (APPLE)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
18	APP18	BRAND: APPLE Type: MacBook Air Size: 13.3" Retine 4k: Retine 5k: Processor: 1.6Ghz 8th-generation Intel Core i5 Cache: RAM Size: 16GB RAM Speed: 2133 MHZ HDD Type: 512GB HDD Size: SSD Ethernet: Bluetooth: Wifi: Thunderbolt: Mini Display Port: required Audio Ports: required USB/USB-C: required Color: unspecified Touch Screen: Battery Life: Anti-Glare: Graphics: Intel Iris Plus Graphics 617 Blacklit: required Hyper Threading: required Turbo Boost: required Multi Card Slot: Finger Print Sensor/Touch ID/Face ID: required Web Cam: 720p Face Time HD Active Stylus Pen: Warranty: Three Years Warranty Accessories: PowerCord+Charger Operating System: Catalina (10.15)				

### 3 DESKTOP

Sl. No.	Spec ID	Specification (DESKTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	DSK1	1 X Intel core i3-8300 Quad Core(4 Core/8MB/4T/3.7GHz/62~65W) 1 X H370 chipset or higher 1 X 8GB DDR4 2666MHz 1 X 1TB HDD 7.2K RPM 1 X USB Keyboard 1 X USB Mouse 1 X DVD RW 1 X VGA, HDMI, DP 3 Years Support				
2	DSK2	1 X Intel core i5-8500 (6 Core/9MB/6T/3.0 GHz,Turbo 4.10GHz/62~65W) 1 X H370 Chipset or Higher 1 X 8GB DDR4 2666 MHz 1 X 1TB HDD 7.2K RPM 1 X USB Keyboard 1 X USB Mouse 1 X DVD RW 1 X VGA,HDMI,DP 3 Years Support				
3	DSK3	1 X Intel core i7-8700 (6 Core/12MB/12T/3.2 GHz upto 4.6 GHz/62~65W) 1 X Q370 Chipset or Higher 1 X 8GB DDR4 2666 - 3/4 additional Memory Bank 1 X 1TB HDD 7.2K 1 X USB Keyboard 1 X USB Mouse 1 X DVD RW 1 X VGA,HDMI,DP 3 Years Support				

Sl. No.	Spec ID	Specification (DESKTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
4	DSK4	1 X Intel Core i9-7900X (8 Core/3.30~4.30 Ghz/13.75MB"L3"/) 1 X Q370 Chipset or Higher 1 X 8GB DDR4 2666 - 3/4 additional Memory Bank 1 X 1TB HDD 7.2K RPM 1 X DVD RW 1 X USB Keyboard 1 X USB Mouse 1 X VGA, HDMI, DP 3 Years Support				
5	DSK5	1 X AMD Ryzen™ 7 3700X 1 X X570 Chipset Equivalent or Higher 1 X 8GB DDR4 - 3/4 additional Memory Bank 1 X 1TB HDD 7.2K RPM 1 X DVD RW 1 X USB Keyboard 1 X USB Mouse 1 X VGA, HDMI, DP 3 Years Support				
6	DSK6	1 X AMD Ryzen™ Threadripper™ 2950X 1 X X470 Chipset Equivalent or Higher 1 X 8GB DDR4 - 3/4 additional Memory Bank 1 X 1TB HDD 7.2K RPM 1 X DVD RW 1 X USB Keyboard 1 X USB Mouse 1 X VGA, HDMI, DP 3 Years Support				

#### 4 GRAPHICS CARD

Sl. No.	Spec ID	Specification (GRAPHICS CARD)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	GRP01	Category : Graphic Card Brand : NVIDIA GPU Memory : 5 GB GDDR5 Core : CUDA 1024 Chipset : NVIDIA Quadro P2000 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
2	GRP02	Category : Graphic Card Brand : NVIDIA GPU Memory : 16 GB HBM2 Core : CUDA 5120 Chipset : NVIDIA V100 PCIe Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
3	GRP03	Category : Graphic Card Brand : NVIDIA GPU Memory : 32 GB HBM2 Core : CUDA 5120 Chipset : NVIDIA V100 SXM2 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (GRAPHICS CARD)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
4	GRP04	Category : Graphic Card Brand : NVIDIA GPU Memory : 8 GB Core : CUDA 2304 Chipset : NVIDIA RTX 4000 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
5	GRP05	Category : Graphic Card Brand : NVIDIA GPU Memory : 16 GB GDDR6 Core : CUDA 3072 Chipset : NVIDIA RTX 5000 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
6	GRP06	Category : Graphic Card Brand : NVIDIA GPU Memory : 24 GB GDDR6 Core : CUDA 4608 Chipset : NVIDIA RTX 6000 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				



Sl. No.	Spec ID	Specification (GRAPHICS CARD)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	GRP07	Category : Graphic Card Brand : NVIDIA GPU Memory : 48 GB GDDR6 Core : CUDA 4608 Chipset : NVIDIA RTX 8000 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
8	GRP08	Category : Graphic Card Brand : NVIDIA GPU Memory : 32 GB HBM2 Core : CUDA 5120 Chipset : NVIDIA QUADRO GV100 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
9	GRP09	Category : Graphic Card Brand : NVIDIA GPU Memory : 16 GB HBM2 Core : CUDA 3584 Chipset : NVIDIA Quadro GP100 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (GRAPHICS CARD)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
10	GRP10	Category : Graphic Card Brand : NVIDIA GPU Memory : 24 GB GDDR6 Core : CUDA 4608 Chipset : TITAN RTX Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
11	GRP11	Category : Graphic Card Brand : AMD GPU Memory : 8 GB HBM2 Core : Stream Processors: 3584 Chipset : AMD Radeon Pro WX 8200 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
12	GRP12	Category : Graphic Card Brand : AMD GPU Memory : 8 GB GDDR5 Core : Stream Processors: 2304 Chipset : AMD Radeon Pro WX 7100 Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (GRAPHICS CARD)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	GRP13	Category : Graphic Card Brand : AMD GPU Memory : 16GB HBM2 Core : Stream Processors: 4096 Chipset : AMD Radeon Vega Frontier Edition Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
14	GRP14	Category : Graphic Card Brand : AMD GPU Memory : 16 GB HBM2 Core : Stream Processors: 4096 Chipset : Radeon Pro SSG Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				
15	GRP15	Category : Graphic Card Brand : AMD GPU Memory : 32 GB GDDR5 Core : Stream Processors: 4608 (2x2304) Chipset : Radeon Pro Duo Compute Api's : Power Consumption : Operating System : Windows & Linux Warranty : 3+ Years				

## 5 HARD DISK

Sl. No.	Spec ID	Specification (HARD DISK)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	HDD01	Type : SAS Capacity : 300 Interface : 12Gb/s Speed : 10k Size : 2.5 (inch)				
2	HDD02	Type : SAS Capacity : 300 Interface : 12Gb/s Speed : 15k Size : 2.5(inch)				
3	HDD03	Type : SAS Capacity : 600 Interface : 12Gb/s Speed : 10k Size : 2.5(inch)				
4	HDD04	Type : SAS Capacity : 600 Interface : 12Gb/s Speed : 15k Size : 2.5(inch)				
5	HDD05	Type : SAS Capacity : 900 Interface : 12Gb/s Speed : 10k Size : 2.5(inch)				
6	HDD06	Type : SAS Capacity : 900 Interface : 12Gb/s Speed : 15k Size : 2.5(inch)				

Sl. No.	Spec ID	Specification (HARD DISK)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	HDD07	Type : SATA 3 Capacity : 10000 Interface : 6Gb/s Speed : 7.2k Size : 3.5(inch)				
8	HDD08	Type : SATA 3 Capacity : 12000 Interface : 6Gb/s Speed : 7.2k Size : 3.5(inch)				
9	HDD09	Type : SATA 3 Capacity : 10000 Interface : 6Gb/s Speed : 7.2k Size : 2.5(inch)				
10	HDD10	Type : SATA 3 Capacity : 12000 Interface : 6Gb/s Speed : 7.2k Size : 2.5(inch)				
11	HDD11	Type : SSD Capacity : 480 Interface : 6Gb/s Speed : 85K – 95k RIO Size : 2.5(inch)				
12	HDD12	Type : SSD Capacity : 960 Interface : 6Gb/s Speed : 85K – 95k RIO Size : 2.5(inch)				

Sl. No.	Spec ID	Specification (HARD DISK)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	HDD13	Type : SSD Capacity : 1920 Interface : 6Gb/s Speed : 85K – 95k RIO Size : 2.5(inch)				
14	HDD14	Type : SSD Capacity : 1920 Interface : 6Gb/s Speed : 85K – 95k RIO Size : 3.5(inch)				
15	HDD15	Type : SSD Capacity : 3840 Interface : 6Gb/s Speed : 85K – 95k RIO Size : 2.5(inch)				

**6 LAPTOP**

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	LAP01	Brand : - Type : Surface Pro Size : 12.0 – 12.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 512 GB Ethernet : - Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Mini Display Port HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : 5.0 Front / 8.0 Rear Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Windows 10				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
2	LAP02	Brand :- Type : Surface Pro 6 Size : 12.0 – 12.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 512 GB Ethernet : - Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Mini Display Port HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : 5.0 Front / 8.0 Rear Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Windows 10 pro				



Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
3	LAP03	Brand :- Type : Surface Laptop Size : 13.3 – 13.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 512 GB Ethernet : - Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Mini Display Port HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : 5.0 Front / 8.0 Rear Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Windows 10				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
4	LAP04	Brand :- Type : Surface Laptop Size : 13.3 – 13.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 512 GB Ethernet : - Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Mini Display Port HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : 5.0 Front / 8.0 Rear Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Windows 10 pro				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
5	LAP05	Brand :- Type : Thin and Light Size : 13.3 – 13.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 512 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
6	LAP06	Brand :- Type : Thin and Light Size : 13.3 – 13.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 512 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	LAP07	Brand :- Type : 2 in 1 Size : 12.25 – 14.0 (inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 512 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Required Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : yes Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source It has to be detachable or should have 360 degree rotation				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
8	LAP08	Brand :- Type : 2 in 1 Size : 12.25 – 14.0 (inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 512 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Required Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : yes Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source It has to be detachable or should have 360 degree rotation				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
9	LAP09	Brand :- Type : Thin and Light Size : 14.0 – 14.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
10	LAP10	Brand :- Type : Thin and Light Size : 14.0 – 14.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				



Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
11	LAP11	Brand :- Type : 2 in 1 Size : 12.25 – 14.0 (inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Required Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : yes Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source It has to be detachable or should have 360 degree rotation				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
12	LAP12	Brand :- Type : 2 in 1 Size : 12.25 – 14.0 (inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : optional Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : yes Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source It has to be detachable or should have 360 degree rotation				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	LAP13	Brand :- Type : Business Size : 14.0 – 14.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
14	LAP14	Brand :- Type : Business Size : 14.0 – 14.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
15	LAP15	Brand :- Type : Laptop Size : 14.0 – 14.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
16	LAP16	Brand :- Type : Laptop Size : 14.0 – 14.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
17	LAP17	Brand :- Type : Thin and Light Size : 15.0 – 15.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
18	LAP18	Brand :- Type : Thin and Light Size : 15.0 – 15.9(inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				



Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
19	LAP19	Brand :- Type : 2 in 1 Size : 12.25-14.0 (inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Required Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : yes Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source It has to be detachable or should have 360 degree rotation				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
20	LAP20	Brand :- Type : 2 in 1 Size : 12.25-14.0 (inch) Processor : Intel i5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Required Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : yes Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source It has to be detachable or should have 360 degree rotation				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
21	LAP21	Brand :- Type : Business Size : 15.0 – 15.9(inch) Processor : Intel i7 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
22	LAP22	Brand :- Type : Business Size : 15.0 – 15.9(inch) Processor : Intel i7 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
23	LAP23	Brand :- Type : Laptop Size : 15.0 – 15.9(inch) Processor : Intel i7 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : requied with 4G Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
24	LAP24	Brand :- Type : Laptop Size : 15.0 – 15.9(inch) Processor : Intel i7 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : requied with 4G Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
25	LAP25	Brand :- Type : Workstation Size : 16.0 – 17.9(inch) Processor : Intel Quad Core Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : required with 8G Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
26	LAP26	Brand :- Type : Workstation Size : 16.0 – 17.9(inch) Processor : Intel Quad Core Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : required with 8G Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				



Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
27	LAP27	Brand :- Type : Business Size : 15.0 – 15.9(inch) Processor : AMD Ryzen 7 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
28	LAP28	Brand :- Type : Business Size : 15.0 – 15.9(inch) Processor : AMD Ryzen 7 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
29	LAP29	Brand :- Type : Laptop Size : 15.0 – 15.9(inch) Processor : AMD Ryzen 5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SATA HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

Sl. No.	Spec ID	Specification (LAPTOP)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
30	LAP30	Brand :- Type : Laptop Size : 15.0 – 15.9(inch) Processor : AMD Ryzen 5 Cache : 6mb RAM : 8 GB - DDR4 HDD Type : SSD HDD Size : 1024 GB Ethernet : required Bluetooth : v4.2 required Wifi : required VGA : Optional Display Port : Optional HDMI : required Audio Ports : USB : 3no's Minimum Color : Black/Grey Touch Screen : Optional Anti Glare : Required Graphic Processor : Optional Backlit : Required Hyper Treading : Required Turbo Boost : Required Multi Card Slot : Required Finger Sensor : Optional Web Cam : Required Active Stylus Pen : - Warranty : 3 years Minimum Accessories : PowerCord+Charger Operating System : Open Source				

**7 MONITOR**

Sl. No.	Spec ID	Specification (MONITOR)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	MON01	Brand : Undefined Type : LED Size : 22(inch) Resolution : default VGA : required HDMI/DP : required Audio Ports : Optional USB : 1 No. Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				
2	MON02	Brand : Undefined Type : LED Size : 24(inch) Resolution : default VGA : required HDMI/DP : required Audio Ports : Optional USB : 3no's Minimum Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				

Sl. No.	Spec ID	Specification (MONITOR)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
3	MON03	Brand : Undefined Type : LED Size : 27(inch) Resolution : default VGA : required HDMI/DP : required Audio Ports : Optional USB : 3no's Minimum Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				
4	MON04	Brand : Undefined Type : LED Size : 27(inch) Resolution : default VGA : required HDMI/DP : required Audio Ports : Optional USB : 3no's Minimum Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				
5	MON05	Brand : Undefined Type : LED Size : 30(inch) Resolution : default VGA : required HDMI/DP : required Audio Ports : Optional USB : 3no's Minimum Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				

Sl. No.	Spec ID	Specification (MONITOR)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
6	MON06	Brand : Undefined Type : LED Size : 34(inch) Resolution : default VGA : required HDMI/DP: required Audio Ports : Optional USB : 3no's Minimum Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				
7	MON07	Brand : Undefined Type : LED Size : 37(inch) Resolution : default VGA : required HDMI/DP : required Audio Ports : Optional USB : 3no's Minimum Color : Black Touch Screen : Undefined Accessories : Cable+Connector+Power Cord				

**8 RAM**

Sl. No.	Spec ID	Specification (RAM)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	RAM01	Type : DDR3 Speed : 1066 Size : 4 GB				
2	RAM02	Type : DDR3 Speed : 1066 Size : 8GB				
3	RAM03	Type : DDR3 Speed : 1333 Size : 4GB				
4	RAM04	Type : DDR3 Speed : 1333 Size : 8GB				
5	RAM05	Type : DDR3 Speed : 1600 Size : 4GB				
6	RAM06	Type : DDR3 Speed : 1600 Size : 8GB				
7	RAM07	Type : DDR4 Speed : 1333 Size : 8GB				
8	RAM08	Type : DDR4 Speed : 1333 Size : 16GB				
9	RAM09	Type : DDR4 Speed : 1333 Size : 32GB				
10	RAM10	Type : DDR4 Speed : 2133 Size : 8GB				



Sl. No.	Spec ID	Specification (RAM)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
11	RAM11	Type : DDR4 Speed : 2133 Size : 16GB				
12	RAM12	Type : DDR4 Speed : 2133 Size : 32GB				
13	RAM13	Type : DDR4 Speed : 2666 Size : 8GB				
14	RAM14	Type : DDR4 Speed : 2666 Size : 16GB				
15	RAM15	Type : DDR4 Speed : 2666 Size : 32GB				
16	RAM16	Type : DDR4 Speed : 2800 Size : 8GB				
17	RAM17	Type : DDR4 Speed : 2800 Size : 16GB				
18	RAM18	Type : DDR4 Speed : 2800 Size : 32GB				
19	RAM19	Type : DDR4 Speed : 2933 Size : 8GB				
20	RAM20	Type : DDR4 Speed : 2933 Size : 16GB				
21	RAM21	Type : DDR4 Speed : 2933 Size : 32GB				

Sl. No.	Spec ID	Specification (RAM)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
22	RAM22	Type : DDR4 Speed : 4133 Size : 8GB				
23	RAM23	Type : DDR4 Speed : 4133 Size : 16GB				
24	RAM24	Type : DDR4 Speed : 4133 Size : 32GB				
25	RAM25	Type : DDR4 Speed : Size : 64GB				

**9 SERVER**

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	SRV01	Model : Tower No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6246 No. of Core : 12 Clock Speed : 3.3Ghz or Higher Chipset : C6xx or Higher Cache : 25 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos, USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
2	SRV02	Model : Tower No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6244 No. of Core : 8 Clock Speed : 3.6Ghz or Higher Chipset : C6xx or Higher Cache : 25 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 5 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
3	SRV03	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6254 No. of Core : 18 Clock Speed : 3.1Ghz or Higher Chipset : C6xx or Higher Cache : 25 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
4	SRV04	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6246 No. of Core : 12 Clock Speed : 3.3Ghz or Higher Chipset : C6xx or Higher Cache : 25 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
5	SRV05	Model : Tower No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6244 No. of Core : 8 Clock Speed : 3.6Ghz or Higher Chipset : C6xx or Higher Cache : 25 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 5 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
6	SRV06	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6242 No. of Core : 16 Clock Speed : 2.8Ghz or Higher Chipset : C6xx or Higher Cache : 22 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				



Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	SRV07	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6234 No. of Core : 8 Clock Speed : 3.4Ghz or Higher Chipset : C6xx or Higher Cache : 25 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
8	SRV08	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Gold 6226 No. of Core : 12 Clock Speed : 2.7Ghz or Higher Chipset : C6xx or Higher Cache : 19 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 4 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
9	SRV09	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Platinum 8268 No. of Core : 24 Clock Speed : 2.9Ghz or Higher Chipset : C6xx or Higher Cache : 36 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
10	SRV10	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Platinum 8270 No. of Core : 26 Clock Speed : 2.7Ghz or Higher Chipset : C6xx or Higher Cache : 36 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
11	SRV11	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Platinum 8280 No. of Core : 28 Clock Speed : 2.7Ghz or Higher Chipset : C6xx or Higher Cache : 39 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
12	SRV12	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Silver 4215 No. of Core : 8 Clock Speed : 2.5Ghz or Higher Chipset : C6xx or Higher Cache : 11 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	SRV13	Model : Rack No. of Processor & Socket : 2 Processor : AMD EPYC "ROME" 7272 No. of Core : 12 Clock Speed : 2.9Ghz or Higher Chipset : Equivalent Cache : 64 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
14	SRV14	Model : Rack No. of Processor & Socket : 2 Processor : AMD EPYC "ROME" 7302 No. of Core : 16 Clock Speed : 3.0Ghz or Higher Chipset : Equivalent Cache : 128 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				



Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
15	SRV15	Model : Rack No. of Processor & Socket : 2 Processor : AMD EPYC "ROME" 7402 No. of Core : 24 Clock Speed : 2.8Ghz or Higher Chipset : Equivalent Cache : 128 GB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
16	SRV16	Model : Rack No. of Processor & Socket : 2 Processor : AMD EPYC 7402 No. of Core : 24 Clock Speed : 2.8Ghz or Higher Chipset : Equivalent Cache : 128 MB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty GPU Supported : yes No. of GPU Cards : 2				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
17	SRV17	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Platinum 8270 No. of Core : 26 Clock Speed : 2.7Ghz or Higher Chipset : C6xx or Higher Cache : 36 MB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty GPU Supported : yes No. of GPU Cards : 2				

Sl. No.	Spec ID	Specification (SERVER)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
18	SRV18	Model : Rack No. of Processor & Socket : 2 Processor : Intel Xeon Platinum 8280 No. of Core : 28 Clock Speed : 2.7Ghz or Higher Chipset : C6xx or Higher Cache : 39 MB RAM : 32+32 GB HDD Size : 1000 HDD Type : SAS or More Network : 2 x Gigabit PCI x16 : 4 nos USB 3.x : 3 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Management Port : required with Licence Raid (0,1,5 and 10) : required with 2GB Cache Dual Power- HotPlug : required Easy Install Rail Kit : required Operating System : Centos Warranty : 3 Years Warranty GPU Supported : yes No. of GPU Cards : 4				

**10 TABLET**

Sl. No.	Spec ID	Specification (TABLET)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	TAB01	Brand : Standard TYPE : Tablet Screen Size (inch) : 9 and above Processor (equivalent) : 1.8Ghz + 1.6Ghz Qualcomm/Dragon/Kirin/Exynos Latest RAM : >=4GB Internal Memory (GB) : 64 External Memory (GB) : 128 Power : 6000Mah Ethernet : Wifi / Wifi + Calling Bluetooth > 4.2 : required Wifi compatible : Yes Audio ports : Yes USB/USB-C 3.x/OTG : Yes Color : Any Touch Screen: Yes Battery Cell : Replaceable Grollia Glass : Yes Backlit : Optional Multimedia : Yes Finger Print Sensor/Touch ID : Yes Web Cam : 8MP Back / 5MP Front are higher Active Stylus Pen : Option Warranty : 3 years Accessories (required) : Charger + Carry Case OS : Latest Android				

Sl. No.	Spec ID	Specification (TABLET)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
2	TAB02	Brand : Standard TYPE : Tablet Screen Size (inch) : 8.0 to 8.9 Processor (equivalent) : 1.8Ghz + 1.6Ghz Qualcomm/Dragon/Kirin/Exynos Latest RAM : >=4GB Internal Memory (GB) : 64 External Memory (GB) : 128 Power : 6000Mah Ethernet : Wifi / Wifi + Calling Bluetooth > 4.2 : required Wifi compatible : Yes Audio ports : Yes USB/USB-C 3.x/OTG : yes Color : Any Touch Screen : Yes Battery Cell : replaceable Grollia Glass : yes Backlit : Optional Multimedia : Yes Finger Print Sensor/Touch ID : Yes Web Cam : 8MP Back / 5MP Front are higher Active Stylus Pen : Option Warranty : 3 years Accessories (required) : Charger + Carry Case OS : Latest Android				

## 11 WORKSTATION

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	WRK01	Model : Tower No. of Processor & Socket : 1 Processor : AMD RyzenThreadripper 2970WX No. of Core : 24 Clock Speed : 3.0Ghz or Higher Chipset : Equivalent Cache : 64 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
2	WRK02	Model : Tower No. of Processor & Socket : 1 Processor : AMD RyzenThreadripper 2990WX No. of Core : 32 Clock Speed : 3.0 Ghz or Higher Chipset : X399 Cache : 64 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				



Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
3	WRK03	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3223 No. of Core : 8 Clock Speed : 3.5Ghz or Higher Chipset : C4xx or Higher Cache : 17 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
4	WRK04	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3225 No. of Core : 8 Clock Speed : 3.7Ghz or Higher Chipset : C4xx or Higher Cache : 17 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
5	WRK05	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3235 No. of Core : 12 Clock Speed : 3.2Ghz or Higher Chipset : C4xx or Higher Cache : 19 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
6	WRK06	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3245 No. of Core : 16 Clock Speed : 3.2Ghz or Higher Chipset : C4xx or Higher Cache : 22 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	WRK07	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3265 No. of Core : 24 Clock Speed : 2.70Ghz or Higher Chipset : C4xx or Higher Cache : 33 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
8	WRK08	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3275 No. of Core : 28 Clock Speed : 2.5Ghz or Higher Chipset : C4xx or Higher Cache : 39 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
9	WRK09	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon Gold 6209U No. of Core : 20 Clock Speed : 2.10Ghz or Higher Chipset : C6xx or Higher Cache : 28 GB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or more Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
10	WRK10	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-2175 No. of Core : 14 Clock Speed : 2.5Ghz or Higher Chipset : C4xx or Higher Cache : 19.25 MB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> <b>PCI x8 : 1 No. or More</b> USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or More Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				



Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
11	WRK11	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-2195 No. of Core : 18 Clock Speed : 2.3Ghz or Higher Chipset : C4xx or Higher Cache : 24.75 MB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> <b>PCI x8 : 1 No. or More</b> USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or More Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
12	WRK12	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-2155 No. of Core : 10 Clock Speed : 3.3Ghz or Higher Chipset : C4xx or Higher Cache : 13.75 MB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> <b>PCI x8 : 1 No. or More</b> USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or More Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	WRK13	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-2145 No. of Core : 8 Clock Speed : 3.7Ghz or Higher Chipset : C4xx or Higher Cache : 11 MB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> <b>PCI x8 : 1 No. or More</b> USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 800W or More Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
14	WRK14	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-3275 No. of Core : 28 Clock Speed : 2.5Ghz or Higher Chipset : C4xx or Higher Cache : 39 MB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit PCI x16 : 4 nos PCI x8 : 2 nos USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 1200W or More Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty GPU Supported : yes No. of GPU Cards : 4				

Sl. No.	Spec ID	Specification (WORKSTATION)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
15	WRK15	Model : Tower No. of Processor & Socket : 1 Processor : Intel Xeon W-2155 No. of Core : 10 Clock Speed : 3.3Ghz or Higher Chipset : C4xx or Higher Cache : 13.75 MB RAM : 32GB GB HDD Size : 1000 GB HDD Type : SATA or More Network : 2 x Gigabit <b>PCI x16 : 4 Nos / 2 nos (Double Width)</b> <b>PCI x8 : 1 No. or More</b> USB 3.x : 4 nos DVD R/W : required Keyboard/Mouse : required (usb) Hyper Threading : required Turbo Boost : required Raid (0,1,5) : required with 2GB Cache Dual Power- HotPlug : 1200W or More Easy Install Rail Kit : Tower to Rack Conversion Kit Operating System : Centos Warranty : 3 Years Warranty GPU Supported : yes No. of GPU Cards : 2				

**11 SPARES**

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
1	SPA01	Category : Server/WorkStation Item : Network Card Description : 1Gb Quad Port Warranty : 3+ Years				
2	SPA02	Category : Server/WorkStation Item : Network Card Description : 10Gbe Dual Port, T-Base Warranty : 3+ Years				
3	SPA03	Category : Server/WorkStation Item : Network Card Description : 10Gbe Dual Port, SFP Warranty : 3+ Years Note : With suitable Transceiver				
4	SPA04	Category : Server/WorkStation Item : Network Card Description : 16Gb Dual Port, Fibrechannel Host Bus Adpater Warranty : 3+ Years Note : With suitable Transceiver				
5	SPA05	Category : Server/WorkStation Item : Network Card Description : 100Gb InfiniBand EDR Warranty : 3+ Years Note : with Accessories				
6	SPA06	Category : Server/WorkStation Item : Network Card Description : 100Gb InfiniBand OPA Warranty : 3+ Years Note : with Accessories				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
7	SPA07	Category : Server/WorkStation Item : Cable Description : 2Meter InfiniBand Warranty : 3+ Years Note : with Accessories				
8	SPA08	Category : Server/WorkStation Item : Cable Description : 3Meter InfiniBand Warranty : 3+ Years Note : with Accessories				
9	SPA09	Category : Server/WorkStation Item : Cable Description : 5Meter InfiniBand Warranty : 3+ Years Note : with Accessories				
10	SPA10	Category : Server/WorkStation Item : HDD Description : 24SFF Disk Enclosure Warranty : 3+ Years Note : with Necessary Accessories				
11	SPA11	Category : Server/WorkStation Item : HDD Description : 12LFF Disk Enclosure Warranty : 3+ Years Note : with Necessary Accessories				
12	SPA12	Category : Server/WorkStation Item : Power – SMPS Description : 100V - 240V AC Common Slot Power Supplies Warranty : 3+ Years Note : with Necessary Accessories				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
13	SPA13	Category : Server Item : Raid Card Description : 2G Cache Raid should support 0,1,5,6 and 10 Warranty : 3+ Years Note : Supported (0,1,5,6 and 10)				
14	SPA14	Category : Apple Item : Pencil Description : 1st Gen <b>Warranty : 1 Year</b>				
15	SPA15	Category : Apple Item : Pencil Description : 2nd Gen <b>Warranty : 1 Year</b>				
16	SPA16	Category : Apple Item : Pencil Tip Description : For 1st and 2nd Gen Pencil <b>Warranty : 1 Year</b>				
17	SPA17	Category : Apple Item : Cable Description : 2Meters Lightning to USB Cable 3.0 <b>Warranty : 1 Year</b> Note : Must connect will all ipads				
18	SPA18	Category : Apple Item : Cable Description : 2Meters USB-C Charge Cable <b>Warranty : 1 Year</b> Note : Must connect will all ipads				
19	SPA19	Category : Apple Item : Card Reader Description : USB-C to SD Card Reader <b>Warranty : 1 Year</b>				



Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
20	SPA20	Category : Apple Item : Cable Description : Apple Lightning to VGA Adapter <b>Warranty : 1 Year</b> <b>Note : Must connect with all iPad/iPad Air / iPad Mini</b>				
21	SPA21	Category : Apple Item : Cable Description : Apple Lightning to HDMI Adapter <b>Warranty : 1 Year</b>				
22	SPA22	Category : Apple Item : Cable Description : 30pin Apple Apple Dock Connector to VGA Adapter Warranty : 3+ Years				
23	SPA23	Category : Apple Item : Cable Description : 30pin Apple Dock Connector to HDMI Adapter Warranty : 3+ Years				
24	SPA24	Category : Apple Item : Cable Description : Apple HDMI to DVI Adapter <b>Warranty : 1 Year</b>				
25	SPA25	Category : Apple Item : Power Adapter Description : 12w Power Adapter for (Ipad Family) <b>Warranty : 1 Year</b>				
26	SPA26	Category : Apple Item : Power Adapter <b>Description : 61W USB-C Power Adapter for (MacBook Pro13")</b> <b>Warranty : 1 Year</b>				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
27	SPA27	Category : Apple Item : Power Adapter <b>Description : 30W Power Adapter for (MacBook Air)</b> <b>Warranty : 1 Year</b>				
28	SPA28	Category : Apple Item : Power Adapter Description : 5W Power Adapter for (Ipad Family) <b>Warranty : 1 Year</b>				
29	SPA29	Category : Apple Item : Power Adapter <b>Description : 96W USB-C Power Adapter for MacBook Pro 16"</b> <b>Warranty : 1 Year</b>				
30	SPA30	Category : Apple Item : smart keyboard <b>Description : Ipad Family(ipad / ipad Air)</b> <b>Warranty : 1 Year</b> Note : Must be support in all ipads.				
31	SPA31	Category : Apple Item : Smart Folio <b>Description : For Ipad Pro 12.9"</b> <b>Warranty : 1 Year</b> Note : Must be support in all ipads.				
32	SPA32	Category : Laptop Item : Cable Description : MS Mini DisplayPort to HDMI Adapter Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
33	SPA33	Category : Laptop Item : Cable Description : MS Mini DisplayPort to VGA Adapter Warranty : 3+ Years				
34	SPA34	Category : Laptop Item : Network Card Description : MS Ethernet Adapter Warranty : 3+ Years Note : External				
35	SPA35	Category : Laptop Item : Surface Description : Microsoft Surface Dock Station Pro/Pro 3/ Pro 4/Pro 6/Laptop/Laptop2/Book /Book2/Go Warranty : 3+ Years				
36	SPA36	Category : Laptop Item : Surface Description : Microsoft Surface 65W Power Supply Warranty : 3+ Years				
37	SPA37	Category : Laptop Item : Surface Description : Surface Pro Pen Warranty : 3+ Years				
38	SPA38	Category : Surface Item : Surface Description : Srfc Arc Mouse Commercial Black Warranty : 3+ Years				
39	SPA39	Category : Surface Item : Surface Description : Surface Pro Pen Tip Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
40	SPA40	Category : Surface Item : Surface Description : Ms Ethernet Adapter Warranty : 3+ Years				
41	SPA41	Category : Surface Item : Surface Description : Surface Mobile Mouse-Black Warranty : 3+ Years				
42	SPA42	Category : Surface Item : Surface Description : Spro Sigma Type cover Platinnium Warranty : 3+ Years				
43	SPA43	Category : Surface Item : Surface Description : Spro Type cover Black Warranty : 3+ Years				
44	SPA44	Category : Surface Item : Surface Description : Microsoft Surface Dock Station Warranty : 3+ Years				
45	SPA45	Category : Surface Item : Surface Description : Srfc Arc Mouse Light Gray Warranty : 3+ Years				
46	SPA46	Category : Surface Item : Surface Description : Surface pro Pen Silver Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
47	SPA47	Category : Surface Item : Surface Description : Microsoft Surface 44W Power Supply Warranty : 3+ Years				
48	SPA48	Category : Surface Item : Surface Description : Microsoft Surface 102W Power Supply Warranty : 3+ Years				
49	SPA49	Category : Surface Item : Surface Description : Book2 USB-C to VGA Adapter Warranty : 3+ Years				
50	SPA50	Category : Surface Item : Surface Description : Book2 USB-C to HDMI Adapter Warranty : 3+ Years				
51	SPA51	Category : Surface Item : Surface Description : Surf Go Sig TypecoverPlatinnium Warranty : 3+ Years				
52	SPA52	Category : Surface Item : Surface Description : Surf Go Typecover Black Warranty : 3+ Years				

Sl. No.	Spec ID	Specification (SPARES)	Proposed specification	Brand & Model No.	Relevant Supporting Document Page No.	Remarks
53	SPA53	Category : Surface Item : Surface Description : Surface Mobile Mouse - Burgandy Warranty : 3+ Years				
54	SPA54	Category : Network Item : Router Description : LAN Ports : 4 WAN Ports : 1 Data Signal Rate • 2.4 GHz - Up to 300 Mbps and above • 5 GHz - Up to 866 Mbps and above • Ethernet - 10/100/1000 Mbps (auto-negotiation) Warranty : 3+ Years Note : Router, 3 Detachable Antennas, Ethernet Cable, Power Adapter				
55	SPA55	Category : Network Item : Wireless Adapter / Wi-Fi Dongle Description : 5GHZ wireless speeds, 802.11b, 802.11g, 802.11n USB 3.0 Warranty : 3+ Years Note : Resource CD (if any) Frequency needs to be matched with User Appliance.				
56	SPA56	Category : Network Item : Patch Cord Description : 2 Meters CAT6E Warranty : -				
57	SPA57	Category : HDD Item : External Description : 2TB, USB 3.0, Slim Device Warranty : 3+ Years				

**Note:**

1. In Corrigendum/Addendum-II, Sl.No. 39, may be read as

(i)	In technical specification ID SRV01, SRV02, SRV05 the conversion of Tower Server to Rack is limited to 5U Server spacing. For GPU supported servers maximum supported spacing will be 4U and for rest of the servers the maximum supported spacing will be 2U.
(ii)	In all workstations, in Spec Id. WRK01 to WRK15, the conversion of tower model to rack mountable model, the server spacing will be maximum 5U.
<b>Instead of</b>	
In technical specification ID SRV01, SRV02, SRV05 and in WRK01 to WRK09, the conversion of Tower Server to Rack is limited to 5U Server spacing.	