### **Technical Specifications**

# GD-91: Procurement of Computers, Accessories and Equipment including ACs for renovated Classroom of NAEM & ZDs

The Goods and Related Services shall comply with following Technical Specifications and Standards. The Bidder shall prepare a similar table to justify compliance with the requirements.

#### **List of Goods**

#### **Technical Specifications for Laptop**

Item No.	Name of Goods or Related Services	Technical Description, Specifications and Standards	Bidder's Offer
1	Laptop	Brand: Any Internationally Reputed Brand (To be mentioned by the Bidder) Model: To be mentioned by the Bidder. Country of Origin: To be mentioned by the Bidder. Country of Manufacture: To be mentioned by the Bidder. Processor: 8th Generation Intel Core i7-8550U (1.8 GHz base frequency, up to 4 GHz with Turbo Boost Technology, 8 MB cache, Higher-End Quad-Core) Motherboard: Intel Integrated with processor RAM: 8 GB DDR4-2400 MHz SDRAM; Hard Disk Drive: 1 TB 5400 rpm SATA; Optical Drive: DVD ±RW drive Graphics Adapter: Intel /AMD Radeon/NVIDIA GeForce HD Graphics	
		Integrated Display Size: 15" ~ 15.6" Display Resolution: FHD (1920 x 1080) with Anti-glare WLED-Backlit I/O Port: Minimum 3 USB ports (at least 1 port should be 3.0 or above), 1 HDMI port, SD Card reader, headphone/ Microphone combo jack Webcam: Integrated HD webcam with Microphone NIC: Integrated Gigabit Ethernet with RJ-45 Connectivity WLAN: 802.11a/b/g/n/ac Wi-Fi and Bluetooth 4.2 Combo Battery: Minimum 3-cell Lithium Ion battery with 4.5 hours backup time Features: Touchpad with multi-touch gesture support, Dual speakers Operating System: Windows 10 Professional with genuine License Antivirus: Any Reputed antivirus with 1 year subscription Accessories: USB optical Mouse of same brand, Original Carrying Bag. Others: Installation and configuring with all necessary software. Certification: ISO 9001: 2015 certificate for quality assurance and FCC class B certificate	

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Item	Name of Goods	Technical Description, Specifications and	Bidder's
No.	or Related	Standards	Offer
	Services		
		Warranty: 03 (three) years full warranty with spare parts and service. 01	
		Year warranty for Battery and adapter.	

## Technical Specifications for 2 Ton AC

No. Goods or Related Services		Technical Description, Specifications and Standards		Bidder's Offer
1	Air Conditioner	Brand	Any Reputed Brand (To be mentioned by the Bidder)	
		Model	To be mentioned by the Bidder	
		Country of Origin	To be mentioned by the Bidder	
		Country of Manufacture	To be mentioned by the Bidder	
		Capacity	2.0 Ton, 24,000 BTU / Hour	
		Category	Wall Mounted Split Type Air Conditioner	
	_a3	Power source (V/Ø/Hz)	220-240/1/50	
		Cooling input power (KW)	2.62-2.72	
		EER (cooling)	2.60-2.54	
		Running current (A)	12.8-13.4	
		Moisture removal (L/H)	2.5	
		Indoor airflow rate (M <sup>3</sup> /H)	880-950	
		Outdoor airflow rate (M³/H)	2,590	
		Refrigerant	R22	
		Noise Level (indoor)	Less than 45 dB	
		Noise Level (outdoor)	Less than 57 dB	
		Operation Range (°CDB)	20 to 52	
		Energy Rating	3 Star	
		Features	Powerful Cooling; Multi Airflow for better Air Circulation, Eco-friendly Gas; Low Noise Design, Smart Energy- Saving Operation, Indoor Temperature LED Display	
		Product certification	ISO 9001 Certified and ISO 14001 Certified	
		Installation including supply of all materials and labor	Supply, installation, testing and Commissioning at designated locations approved by SESIP as per following criteria:  • Mounting/ Fitting indoor & outdoor units at the respective locations as per	

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	testing and additional refrigerant charge if required.  • Supply & installation of suitable size copper refrigerant lines (suction and return) including insulation, elbow, bends, tees, joints, cutting, drilling, fitting, PVC channel setting, drain pipe and all necessary materials along with required electrical and control cabling as per standard practice.	
Warranty & services	Electrical Spare Parts: 2 Years; Compressor: 3 Years; Free Service: 3 Years	

## **Technical Specifications for 2.5 Ton AC**

Item No.	Name of Goods or Related Services	Technical Description, Specifications and Standards		Bidder's Offer
1	Air Conditioner	Brand	Any Reputed Brand (To be mentioned by the Bidder)	
	8	Model	To be mentioned by the Bidder	
		Country of Origin	To be mentioned by the Bidder	
		Country of Manufacture	To be mentioned by the Bidder	
	120	Capacity	2.5 Ton 30,000 BTU/Hour	
		Category	Wall Mounted Split Type Air Conditioner	
		Power source (V/Ø/Hz)	220-240/1/50	
	-	Cooling input power (KW)	2.96-3.08	
		EER (cooling)	2.72-2.66	,
		Running current (A)	13.6-14.6	
		Moisture removal (L/H)	2.0	
		Noise Level (indoor)	Less than 50 dB	
	15	Noise Level (outdoor)	Less than 54 dB	
		Indoor airflow rate (M <sup>3</sup> /H)	1200	
		Outdoor airflow rate (M <sup>3</sup> /H)	3300	
		Refrigerant	R410A / R22	
		Energy Rating	3 Star	
		Features	Powerful Cooling; Multi Airflow for better Air Circulation, Eco-friendly Gas; Low Noise Design, Smart Energy-	

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		LED Display
	Product certification	ISO 9001 Certified and ISO 14001
		Certified
	Installation including supply of	Supply, installation, testing and
	all materials and labor	Commissioning at designated locations
	Southern of the same of the paper and antity to also repeated, respectively, restored, and the same and the s	approved by SESIP as per following
*	is in the second	criteria:
		<ul> <li>Mounting/ Fitting indoor &amp;</li> </ul>
		outdoor units at the respective
		locations as per standard practice
		including Leak testing and
		additional refrigerant charge if
		required.
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		Supply & installation of suitable
		size copper refrigerant lines
		(suction and return) including
 		insulation, elbow, bends, tees,
		joints, cutting, drilling, fitting,
		PVC channel setting, drain pipe
		and all necessary materials along
		with required electrical and control
		cabling as per standard practice.
	Warranty & services	Electrical Spare Parts: 2 Years;
		Compressor: 3 Years; Free Service: 3
		Years

## **Technical Specifications for 3 Ton AC**

Item No.	Name of Goods or Related Services	Technical Description, Specifications and Standards		Bidder's Offer
1	Air Conditioner	Brand	Any Reputed Brand (To be mentioned by the Bidder)	
		Model	To be mentioned by the Bidder	
		Country of Origin	To be mentioned by the Bidder	
		Country of Manufacture	To be mentioned by the Bidder	
		Capacity	3.0 Ton, 36,000 BTU/Hour	
		Category	Wall Mounted Split Type Air Conditioner	
		Power source (V/Ø/Hz)	220-240/1/50	
		Cooling input power (kw)	4.02-3.23	
	2	Indoor airflow rate (M <sup>3</sup> /H)	1400-1,520	
		Noise Level (indoor)	Less than 45 dB	



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	Noise Level (outdoor)	Less than 57 dB	
	Refrigerant	R410A /R22	
	Energy Rating	3 Star	
	Features	Powerful Cooling; Multi Airflow for	
		better Air Circulation, Eco-friendly Gas; Low Noise Design, Smart Energy- Saving Operation, Indoor Temperature	
20		LED Display	
	Product certification	ISO 9001 Certified and ISO 14001 Certified	
	Installation including supply of all materials and labor	Supply, installation, testing and Commissioning at designated locations approved by SESIP as per following criteria:	
		Mounting/ Fitting indoor & outdoor units at the respective	
		locations as per standard practice including Leak testing and additional refrigerant charge if required.	(3*
		<ul> <li>Supply &amp; installation of suitable size copper refrigerant lines (suction and return) including insulation, elbow, bends, tees, joints, cutting, drilling, fitting, PVC channel setting, drain pipe and all necessary materials along with required electrical and control cabling as per standard practice.</li> </ul>	
	Warranty & services	Electrical Spare Parts: 2 Years; Compressor: 3 Years; Free Service: 3 Years	

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