

**ARMY PUBLIC SCHOOL, NAGROTA**

**PO-KANDOLI NAGROTA (JAMMU)**

**AFFILIATED WITH CBSE, NEW DELHI (AFFILIATION No 780009)**

**(Website:www.apsnagrota.com)**

**E-mail id: [apsnagrota@gmail.com](mailto:apsnagrota@gmail.com) Phone no. 0191-2673643**

**TENDER NOTICE**

1. APS Nagrota invites sealed Tenders from experienced vendors/firms for supplying and installation of 02 Smart Class Boards with educational software contents as per CBSE/AWES at Army Public School Nagrota, Jammu- 181221 as per the technical specification attached at Appex 'A'.

2. In case your firm is interested in supplying the above items, you are requested to forward your quotations in two separated envelopes (a) Technical Bid (b) Commercial Bid. While forwarding quotations following points may please be adhered to:-

(a) The quotations will be given for the item/items exactly as per the nomenclature used by us mentioning Make, Model, Regd No etc.

b) The price will be quoted by you on a printed letter head wherein your GST No will be included.

(c) The quotations will be forwarded in a sealed envelope to be opened by a board of officers only.

(d) VAT/ warranty should be mentioned in the quotation.

3. The quotations may be forwarded by 06 March 2021 up to 11:00 am to be accepted by us. Any quotations received later than the date and time mentioned above is liable to be rejected.

Sd/x-x-x-x-x  
Principal

**DETAILED TECHNICAL SPECIFICATIONS FOR SMART CLASS SOLUTION**

<b><u>Ser No</u></b>	<b><u>Nomenclature of Item</u></b>	<b><u>Required Specification</u></b>
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**MOUNTED CABINET**

01	Cabinet Pattern	Floor Mounted lockable enclosure
02	Material of the Cabinet	MDF or metal
03	Minimum partitions with tray for key board	Two with tray
04	Side Openings	Two

**DESKTOP CPU**

05	CPU	Country of origin apart from China
06	Processor Generation	I3 8 <sup>th</sup> gen or above
07	RAM (GB)	DDR-4 4GB and above
08	RAM upgradable upto (GB)	64
09	Hard Disk Capacity (GB)	1 TB or above
10	Hard Disk Upgradable upto (GB)	8 TB
11	OS Compatibility	Microsoft Windows (All versions)

12	VGA Port	01 minimum
13	No. of USB 2.0 and 3.0 Ports (Nos)	02 minimum each
14	LAN Port	01 minimum
15	Keyboard	Wireless
16	Mouse /Track Pad	Wireless
17	Operating System	Windows 10 Pro licensed
18	On site OEM Warranty	03 years above

### **INTERACTIVE BOARD**

19	Interactive Board surface	Ceramic Steel Surface
20	Board Diagonal size	85 inch or above
21	Display Resolution (pixels)	32768 and above
22	Board Aspect Ratio	4:3
23	Touch interface	Touch Sensitive and Pen Driven

		Both
24	Touch Technology	Infrared
25	Number of touch points	10 and above
26	Response time (milli seconds)	6 mili sec and below
27	Operating system Compatibility	Microsoft Windows
28	On site OEM Warranty	03 years and above

**PROJECTOR WITH ARM**

29	Material of Arm	Aluminium
30	Type	Long throw/Short throw
31	Technology	DLP
32	Native Resolution	800 X 600 and above
33	Brightness (Lumens)	3600 and above
34	Contrast Ratio (Minimum)	22000
35	Zoom Feature	Optical
36	Zoom ( in % age)	110 and above
37	Throw Ratio	Standard Throw (0.91 to 2.5)

38	Aspect Ratio	4:3
39	Keystone Correction	Manual
40	Projection Lamp	Front and Rear both
41	Minimum Life of projection Lamp (In Normal Mode) (Hours)	4000
42	Lamp Hour Counter (In-Built)	Yes
43	Video Compatibility	Through VGA port
44	Inbuilt Speaker	Preferable
45	Speaker Output (Watt)	2
46	On site OEM Warranty (Year)	03

**GREEN BOARD**

47	Material	Non-magnetic, HPL writing surface with aluminium frame
48	Dimension of Green Board (Length x Width)	6 X 4 feet

**SPEAKER**

49	Output	50 Watts and above
50	Weight	Not more than 7 Kgs

51	Body material	Wooden board or fibre
52	Minimum Standard	DTS 2.0

**UPS**

53	Certificates	CE,BIS,ISO
54	Conformity to Safety Standard	IEC/EN62040-1,EN 62040-1,EN 62040-2,EN62040-3
55	Input Phase	Single Phase
56	Minimum operational AC Input voltage (Volts)	110-120
57	Frequency Range	50 Hertz
58	Input Power Factor	0.9 - 0.98
59	Rated Power, kVA	1 - 1.2
60	Maximum operational AC Input voltage (Volts)	220-230

61	UPS Technology	PWM
62	Efficiency (Inverter)(%)	>=90%
63	Harmonic Distortion	<= 2 %
64	Waveform	Simulated Sine Wave

65	<b>Output Voltage</b>	220 - 230 V AC 1%
66	<b>Charging Current</b>	10% of AH Capacity
67	<b>Rated Battery Voltage</b>	12 Volt
68	<b>Audible Alarm</b>	Low Battery Alarm, Mains Failure Alarm, Overload
69	<b>LCD &amp; LED</b>	Charging Current, Mains ON, Overload, ON
70	<b>Protection</b>	Short Circuit, Overload, AC under, AC over
71	<b>Noise level (above ambient)</b>	< 40 dB
72	<b>Heat dissipation (BTU/h)</b>	200
73	<b>No. of sockets IEC 10A</b>	3
74	<b>Communication Interfaces Standard</b>	USB
75	<b>Max Operating temperature</b>	45 degree Celsius
76	<b>Protection index</b>	IP 20
77	<b>Warranty</b>	Minimum 3 years

**HEADPHONE WITH MIC**

78	Headphone and Driver unit type	Closed, Dome Type, stereo mini jack
79	Impedance (Ohm)	47 Ohms (1 KHz)

80	Frequency response	4 Hz – 40,000 Hz
81	Cord type and length	Single, minimum 3.9 feet

**NOTE:** Desktop PC should have educational content/ software installed with minimum one-year license.



Annex A  
(Ref Para 2 and 3, Part II of RFP)

**PART II: TECHNICAL Q&A**

**DETAILED TECHNICAL SPECIFICATIONS FOR SMART BOARD SYSTEM**

  
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Technical Details - Specification/drawings.

Ser No	Nomenclature	Nomenclature of Item	Qualitative Requirement / Technical Specification	Make /Model	Compliance Yes/ No	Deviation
1.	Desktop CPU	CPU	Country of origin apart from China			
		Processor Generation	I3, 5 <sup>th</sup> gen or above			
		RAM (GB)	DDR-4 4GB and above			
		RAM upgradable upto (GB)	64			
		Hard Disk Capacity (GB)	1 TB or above			
		Hard Disk Upgradable upto (GB)	8 TB			
		OS Compatibility	Microsoft Windows (All versions)			
		VGA Port	01 minimum			
		No. of USB 2.0 and 3.0 Ports (Nos)	02 minimum each			
		LAN Port	01 minimum			
		Keyboard	Wireless			

		Mouse /Track Pad	Wireless			
		Operating System	Windows 10 Pro licensed			
		On site OEM Warranty	03 years or above			
2.	Mounted Cabinet	Cabinet Pattern	Floor Mounted lockable enclosure			
		Material of the Cabinet	MDF or metal			
		Minimum partitions with tray for key board	Two with tray			
		Side Openings	Two			
3.	Interactive Board	Interactive Board surface	Ceramic Steel Surface			
		Board Diagonal size	55 inch or above			
		Display Resolution (pixels)	32768 and above			
		Board Aspect Ratio	4:3			
		Touch interface	Touch Sensitive and Pen Driven Both			
		Touch Technology	Infrared			
		Number of touch points	10 and above			
		Response time (mill)	8 mill sec and below			

  
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		seconds)			
		Operating system Compatibility	Microsoft Windows		
		On site OEM Warranty	03 years and above		
4.	Projector with Arm	Material of Arm	Aluminium		
		Type	Long throw /short throw		
		Technology	DLP		
		Native Resolution	800 X 600 and above		
		Brightness (Lumens)	3600 and above		
		Contrast Ratio (Minimum)	2,000:		
		Zoom Feature	Optical		
		Zoom (in % age)	110 and above		
		Throw Ratio	Standard Throw (2.87 to 2.9)		
		Aspect Ratio	4:3		
		Keystone Correction	Manual		
		Projection Lamp	Projector Lamp		
		Minimum Life of projection Lamp (in Normal Mode) (Hours)	4000		

		Lamp Hour Counter (In-Built)	Yes			
		Video Compatibility	Through VGA port			
		Inbuilt Speaker	Preferable			
		Speaker Output (Watt)	2			
		On site OEM Warranty (Year)	03			
5.	Green Board	Material	Non-magnetic, HPL writing surface with aluminium frame			
		Dimension of Green Board (Length x Width)	6 X 4 feet			
6.	Speaker	Output	50 Watts and above			
		Weight	Not more than 7 Kgs			
		Body material	Wooden board or fibre			
		Minimum Standard	DTS 2.0			
7.	UPS	Certificates	CE, BIS, ISO			
		Conformity to Safety Standard	IEC/EN62040-1, EN 62040-1, EN 62040-2, EN62040-3			

  
 Residing officer

	Input Phase	Single Phase		
	Minimum operational AC Input voltage (Volts)	110-120		
	Frequency Range	50 Hertz		
	Input Power Factor	0.9 - 0.98		
	Rated Power, kVA	1 - 1.2		
	Maximum operational AC Input voltage (Volts)	220-230		
	UPS Technology	PWM		
	Efficiency (Inverter)(%)	>=90%		
	Harmonic Distortion	<= 3 %		
	Waveform	Simulated Sine Wave		
	Output Voltage	220 - 230 V AC 1%		
	Charging Current	10% of AH Capacity		
	Rated Battery Voltage	12 Volt		
	Audible Alarm	Low Battery Alarm, Mains Failure Alarm, Overload		
	LCD or LED	Charging Current, Mains ON, Overload, UPS ON		
	Protection	Short Circuit, Overload, AC under		

			AC over			
		Noise level (above ambient)	< 40 dB			
		Heat dissipation (BTUH)	200			
		No. of sockets IEC 10A	3			
		Communication Interfaces Standard	USB			
		Max Operating temperature	45 degree Celsius			
		Protection Index	IP 20			
		Warranty	Minimum 3 years			
8.	Educational Content	Compatible with the existing System				
		Licence	01 year or above			
9.	Headphone with risks	Headphone and Driver unit type	Closed, Dome Type, stereo mini jack			
		Impedance (Ohm)	47 Ohms (1 kHz)			
		Frequency response	4 Hz - 40,000 Hz			
		Cord type and length	Single, minimum 3.0 feet			