Appendix-'1A(i)'

QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF MEDICAL EQUIPMENT OF ENT DEPARTMENT:

 1. Computerized Audiometer with	IS IT AVAILABLE IN PET (AS PER 100 BEDDED). IF YES THEN MENTIONED SL.NO OF PET Yes (1397- Audiometer Computerized for	PET (AS PER 100 MENTIONED SL.NO. T omputerized for
Computerized Audiometer with	Yes (1397- Audiometer Computerized for	or
Data Processor	ENT Surgeon)	

Member-I Member-II Member-IV Member-V Member-VI Member-VII Member-VIII Member-IX Member-X Member-X Member-XI Member-XII from limpy ch

Recommendation of Adh(Med)
Recommended (Not Recommended

Specifications for trial by board of Procedure suggested Results expected/Desired

- Special Key Feature: Full PC-integration (truehybrid) High performance andspeed demonstration. physically Board should check As per specification. during
- Internal storage for 500 patients/50,000 testsessions Large 5,7" adjustable high resolution graphical color display

documents undertaking

and this

OEM should submit an

Extensive diagnostic testbattery

- Integrated pre-recordedspeech
- Direct printoptions
- Compact and portabledesign

INPUT

Tone, Warble Tone, NB,CD1,CD2,Mic1, Mic2, Wavefiles

MASKING STIMULUS:

Automatic selection for narrow band noise (or white noise) for tone presentation and speech noise for speechpresentation.

AC left +Right, BC Left +Right, Insert Phone Left + Right, Insert Masking, FF1 andFF2

TRANSDUCERS:

TD39/DD45 Audiometric headset, B71 Boneconductor

TONE PRESENTATION:

Manual or Reverse. Single or multiplepulses

Member-II | Member-IV | Member-V | Member-VI | Member-VII Member-VIII Member-IX | Member-X | Member-XI Member-XII

Recommendation of Assimel Recommended Not Recommend

Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
One hand held pushbutton.	۵	check As per specification.
POWER SUPPLY:	demonstration.	
Built-in powersupply	d submi	
INTENSITY:	documents in this	
 AC: - 10 to 120 db HL in 1, 2 or 5 db steps. BC: 10 to 80 db in 1, 2 or 5 dbsteps 		
FREQENCY RANGE:		
125Hz to 20 KHZ for airconduction		
125 Hz to 8 KHZ for Boneconduction		
PATIENT COMMUNICATION:		
Talk forward/ TalkBack		
MONITOR:		
 Output through built-in speaker or through external earphone orspeaker 		
INTERNAL STORAGE:		
500 patients- or 50,000 testsessions		
SPECIAL TEST: Auto threshold, ABLB, Stenger, Stenger Speech, TEN Test, Speech Audiometer, SISI Test PC and printer		
INCLUDED PARTS:		
Monitor Headset		
B71 Bone conductor		
APS3 patient response button		
Microphone		
Power Cable		
		Λ

Recommended not Recommen

Member-II | Member-III | Member-IV | Member-V | Member-VI | Member-VII | Member-VII | Member-IX | Member-X | M

P.00

3

(Dr. Rakesh Tiwari) CMO (SG) (Anaesthesia),	(Dr. J Chatopadhayay) BSF Member-I	CE/FDA approved 2 years warranty and rate	AUDIOMETER STANDARDS • Audiometer : IEC 60645-1	• IEC 60601-1, ES60	Operation Manual CDMultilingual CE instructions foruseInbuiltprinter	
(Dr. Shaifali Gupta) Comdt /Spl. Gr.I (Ophthalmology), ITBP,	(Dr. Rohit Shyam Bobil) CMO(SG) (ENT) RH, ITBP, Gr. Noida Member-I	CE/FDA approved 2 years warranty and rates for 5 years CMC post warranty s	O645-1, ANSI S3.6, type 2.	EC 60601-1, ES60601-1, CAN/CSA-C22.2No.60601.1	CD ructions foruse	Specif
(Dr. Rajkamal Nimesh) Comdt /Spl. Gr-I (Surgery), ITBP,	(Dr. Saquib Khan) CMO (OG) (Radiology) CRPF, Member-III	inty s	DIOMETER STANDARDS: Audiometer: IEC 60645-1, ANSI S3.6, type 2. Speech: IEC 60645-2/ANSI S3.6, type B or B-E	5.60601.1		Specifications
(Dr. Gaitri Devi) CDS (SG), (Dental), SSB	(Dr. Ri Kuppul Samy) CMO(SG) (Paediatrics) CRPF Member-IV		SI S3.6, type B or B-E			
(Dr. Neera) Kúmar) CMO, (Medicine), ITBP	(Dr. Chandrima Kar) Comdt /Spl. Gr.I & (Obs Gyn), CRPF Member-V	documents in this regard.	d submit	Board should check physically during demonstration.		Procedure suggested for trial by board of officers
(Dr. Soumyesh Ghosh) Comdt./Spl. Gr.I (Pathology), ITBP	(Dr. Anurag Jain) Contractual, Spl (Orthopaedics), CRPF Member-VI			check As per during specification.		Results expected/ Desired

Recomm en dation of ADS (Med) Presiding Officer

(Dr. A C Bhaldwalian)
IG (Med.), RH, ITBP, Gr. Noida

Recommended Not Rommented

BORDER SECURITY FORCE

DIRECTOR GENERAL

APPROVED / NOT APPROVED

Appendix-'2A(i)'

QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF MEDICAL EQUIPMENT OF ENT DEPARTMENT:

S.N	NAME OF THE EQUIPMENT	IS IT AVAILABLE IN PET (AS PER 100	QRs AVAILABLE	Remarks
		OF PET	ON NO	
1	Fibre Optic Laryngoscope with Light Yes (802)	Yes (802)	NO	
	Source			
2.	Flexible Fibre Optic Naso- Pharyngo	Yes (1388-Flexible Naso- Pharyngoscope)	NO	
	Oesophago scope			
3.	Endodontic ENT Microscope	Yes (162- Operating Microscope(Zeiss)	NO	
4.	OTOLOGY MICRODEBRIDER	NO	NO	
	SYSTEM			

Member-I | Member-III | Member-IV | Member-V | Member-VI | Member-VII | Member-VIII And lung on the Re commenced Member-IX Member-X | Member-X | Member-XII | Member-XII

1. QRs AND TDS OF FIBRE OPTIC LARYNGOSCOPE WITH LIGHT SOURCE

CRITERIA	General	Specifications				Q. I	<u></u>		6	<u></u>		f)	ano.		a)		
	1. P	°a)	<u>b</u>)	c)	2. 0	a)	ь)	c)	9	e)			g)	3. A	a)	<u> </u>	
	Probe:	Probe effective length	Outer diameter	Probe type & flexibility	Optics :	Field of view	Direction of view	Depth of field	Recognition	Day/night viewing	capability	Light Source	Lamp Life	Articulation Section:	Articulation angle	Articulation control	
SPECIFICATIONS		01 mtr, 2 mtrs or more	8 mm or less	Flexible / Semi-flexible		70 degree or more	Forward	50 mm to infinity	Capable of recognizing a human target at least upto a	Should be able to recognize objects in pitch darkness	(standard dark room) & day light.	Eye safe infra-red (invisible to naked eye)	Minimum 1000 hours of operation		4 ways, up/down/right/left/90 degrees or more (to view 360 degrees). All movements should be controlled with joystick/control lever/articulation knobs.	Control with power assist mechanism including locking function. All movements should be electronic or joystick/ control lever/ articulation knobs controlled.	20 1
PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF						1				•							
RESULT EXPECTED/		•															

Member-II | Member-III | Member-IV | Member-V | Member-VI | Member-VII | Member-VII | Member-IX | Member-X | M Recommendation of AUX mest MemberxII

							ź									4				CRITERIA
.∞	c)	b)	a)	7.	d)	c)		b)		a)	6.			5.	d)	c)	b)	a)	4.	ope
Safety:	Memory	Frame rate	Encoding wideband	Recording:	Audio video interface	Control		Size		Туре	LCD Monitor:	flexible fiberscope	inbuilt/ external in	Audio :Microphone	Digital zoom	Lens	Camera resolution	Camera sensor	Camera	Specifications
Should be comply with MIL Std 810 G, IP-67 or better	Minimum 32 GB on detachable SD card	30 per sec or better	MPEG4/JPEG/AVI		Provision for audio & video interface should be provided.	Should have controls for brightness, contrast & zoom.	Maximum – 7" diagonal.	Minimum – 4" diagonal	strap for monitor is an optional requirement which is to be mentioned by the user at the time of indent).	Handheld LCD monitor to be provided. (shoulder harness/neck				Supersensitive audio microphone with 5-7 mtrs audio pickup.	5X or better	Wide angle 1.8mm or better	Should be 300000 pixels or more	CCD OR CMOS		
																	o			Procedure suggested for trial by board of officers
														,						Results expected/ Desired

Member-II | Member-III | Member-IV | Member-VI | Member-VII | Member-VIII | Member-VIII Recommendation of ADG(Med) | Member-IX | Member-X | Member-X

Recommended/Not-Recommended

Appendix-2A (iv)

CRITERIA Specifications	9. Power Supply:	a) Battery Rec	b) Battery working life Min	c) Battery charging time Less	d) Weight of complete Ope	system excluding	carrying case	10. Accessories with each Fibrescope:	a) Carrying case i) ii)	h) Spara hatteries 2 N.	Spare parteries	Battery charger	Battery charger Belt sets. (Optional	Battery charger Belt sets. (Optional requirement to be	Belt sets. (Optional requirement to be mentioned by the user at time of indent).	c) Battery charger Qua d) Belt sets. (Optional Belt requirement to be mentioned by the user at time of indent).	c) Battery charger Qua d) Belt sets. (Optional Belt requirement to be mentioned by the user at time of indent). 11. Literature: Operating & technic be in English language.	c) Battery charger Quantity 01 per fibres; d) Belt sets. (Optional requirement to be mentioned by the user at time of indent). 11. Literature: Operating & technical literature for eable in English language. Note: All firms are requested to provide the following:	c) Battery charger Quantity d) Belt sets. (Optional Belt set s requirement to be mentioned by the user at time of indent). 11. Literature: Operating & technical litt be in English language. Note: All firms are requested to provide the set of the set o	c) Battery charger Quant d) Belt sets. (Optional Belt set requirement to be mentioned by the user at time of indent). 11. Literature: Operating & technical be in English language. Note: All firms are requested to provide 1. Original Brochure of product by OE 2. Detail literature about the product.
		Rechargeable & replaceable Lithium Battery. Should be available in India.	Minimum 2 hours in day/night working conditions on full charge.	Less than 4 hours	Operational weight (excluding carrying case) – 2 kg or less.			pe:	Soft & hard carrying case with back strap	Soft & hard carrying case for transport (water proof)	ii) Soft & hard carrying case for transport (water proof) 2 Nos. Of spare batteries	ii) Soft & hard carrying case for transport (water proof) 2 Nos. Of spare batteries Quantity 01 per fibrescope. Should work with 220V/230V, AC, 50 Hz & battery to battery charging with 12 V battery.	case for transport (water process Should work with 220V) harging with 12 V battery.	220V/ tery.	220V/ tery.	220V/ tery.	Soft & hard carrying case for transport (water proof) los. Of spare batteries antity 01 per fibrescope. Should work with 220V/230V, AC, 50 & battery to battery charging with 12 V battery. t set should enable comfortable operation. t set should enable comfortable operation. cal literature for each discrete components of system should	ig case for transport (water pries) cope. Should work with 220V/y charging with 12 V battery. comfortable operation. ich discrete components of sy	ig case for transport (water pries cope. Should work with 220V) y charging with 12 V battery. comfortable operation.	ig case for transport (water pries cope. Should work with 220V) y charging with 12 V battery. comfortable operation.
Procedure suggested for trial by board of officers																				
Results expected/ Desired																				

Member-II Member-III Member-IV Member-V Member-VI Member-VII Member-VIII Member-IX Member-X Member-X Member-XII Member-XIII Recommendation of ADG (Med) Recommended Not Recommend

2.QRs AND TDs OF FLEXIBLE FIBRE OPTIC NASO-PHARYNGO OESOPHAGOSCOPE

																							Specifications	General	CRITERIA	
Tin daffaction un /danua [9]	Field of view [°]	Working length (mm)	Instrument channel (0 mm)	Distal end (0 mm)	Insertion tube (0 mm)	Product		- y pe	High-Quality Fiberoptic Endoscopes	therapy.	 Optical instruments of the highest quality to support diagnosis and 	fiberoptic endoscopes	· Both diagnostic and therapeutic procedures are within reach with the	models and a therapeutic model with a 2.2 mm working channe	 The FNL product range offers a paediatric model, routine endoscopy 	Broad Field of Application:	solution.	 Maximum mobility can be achieved by an LED battery powered cordless 	devices.	versatility to provide compatibility with variety of different medical	 Fibreoptic endoscope 	with a rigid endoscope	 Flexible fibreoptic endoscopes can access places that cannot be reached 	Maximum Flexibility:		
130/130	75	300	-/-	2.2	2.4	FNL-7RP3		SIIII	doscopes		of the high		herapeutic	utic model	ge offers a	:		n be achiev		compatib		io	loscopes ca		SPECIF	
130/130	75	300	<i>÷</i>	3.2	3.5	FNL-10RP3	Rou	Laryngoscopes			nest quality		procedure	with a 2.2 n	n paediatric			ed by an LE		ility with v	llows light		an access pl		SPECIFICATIONS	
130/130	85	300	-/-	3.2	3.5	FNL-10RBS	Routine	yngo- opes			to support		s are within	nm working	model, rou			D battery po		ariety of di	source and		aces that car			
130/130	75	300	2.2	4.8	4.9	FNL-15RP3		Inerapeutic			t diagnosis and		reach with the	channel.	tine endoscopy			owered cordless		fferent medical	design allows light source and video camera		nnot be reached			
					the same.	Board should check and ensure		and specifications.	OEM should submit an										the salle.	the same		and specifications.	undertaking regarding its quality	OEM should submit an	PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF OFFICERS	
								specification.	As per														specification.	As per	RESULT EXPECTED/ DESIRED	

Member-II Member-III Member-IV Member-V Member-VI Member-VII Member-VIII Recommendation of Address Recommen Jed/ Not promin Member-IX | Member-X | Member-XI | Member-XII | Member-XII

P.D.

No. Spe	1 The	fror adju	2 The to +	3 It m or F 55m	Dim Obji Field	4 The zooi	5 It sh
Specifications	The system should have working-distance manual override facility, working distance	from 200 mm to 400mm or higher without exchange of objective lens with manual adjustment, integrated continuously variable illumination field.	The system should have Eyepieces: - 10x / 12.5x magnification, dioptre setting from -8D to +5D or better, also suitable for spectacles wearers.	It must have binocular tube 0° to 210° tiltable binocular tube with focal length 170mm or higher graduated knob for continuous adjustment of inter papillary distance from 55mm to 75mm, 360-degree rotatable binocular tube.	Dimensional parameter: Objective Lens should be 200mm to 400mm Field of view should be 55mm or more	The microscope must have easily manoeuvrable handgrips with adjustable keys for zoom, focus, illumination & magnetic brakes.	It should have latest generation illumination Xenon or LED Cold Light, illumination at par with Xenon 300 Watt. Lamp life 80000 hrs approximately
Procedure suggested for trial for Board of Officers	Board should check	physically during demonstration.	OEM should submit an undertaking and	regard.		(E. 11)	
Result expected/ desired	As per	specification.	~				

Member-II | Member-IV | Member-V | Member-VI | Member-VIII | Member-IX | Member-X | Memb Recommendation of ADh(Mcd)
Recommended Not Recommended Member-XII

SI. No.	Specifications	Procedure suggested Result for trial for Board of expected/ Officers desired	Result expected/desired
6	The magnification of the system should have motorized zoom 1:6 magnification system with apochromatic optics, Microscope should also have higher magnification upto 14-18x or above without using magnification multiplier / changer.		
7	The system should have routable floor stand on base with lockable castors, carrier and swivel arm large reach, the stand should be overhead capability. It should have free float magnetic system with magnetic brakes for unit stand with release of magnetic brakes by handgrips.		
∞	It should have semi-auto/ automatic, or software assisted guided balancing which can be done without manual involvement or rotating knobs.		
9	It should have video camera with recording facility with USB completely integrated full HD 1920x1080 p/ 4K inside the head of microscope and should not be visible from outside.		
10	This should have programming facilities at user end for starting illumination, magnification, working distance, zoom speed and focus speed for different users.		

Member-II | Member-III | Member-IV | Member-VI | Member-VII | Member-VIII | Member-IX | Member-X | Recommendation of ADb/med)

Recommended/Not Recommended

No.	Specifications	for trial for Board of expected/
		Officers
11	It should have completely integrated 24" or more touch screens monitor and user	
	interface for setting/ changing the parameters of system from monitor.	
12	It should have motorized variable working distance as well as manual adjustment with	
	separate knob to adjust manually during emergency or malfunction of microscope.	
13	It should have quality standard of European CE Certified/ USFDA approved	

4. QRs/TDs OF OTOLOGY MICRODEBRIDER SYSTEM

No.	Specifications	for trial for Board of expected/ Officers desired
		Officers
_	Single console should be capable of minimum these functions - Debridement, High	Board should check As
		physically during specification
3		demonstration.
2	Should support simultaneous connection of two motor output with automated motor	
	recognition	submi
ω	ve integrated microprocessor-controlled irrigation pump with quick connect	undertaking and documents in this
	nas Buigni	regard.

Member-I | Member-III | Member-IV | Member-VI | Member-VII | Member-VIII | Member-VIII Recommendation of ADUCMEN Member-IX Member-X Member-X Member-XI MemberXII

Recommended / Not Recommender

Appendix-2A (ix)

SI.		Procedure suggested	Result expected/
No.	Specifications		desired
4	Should have manual/ Touch screen program display with microprocessor controlled continuously adjustable speed range.	e v	
5	The control of oscillation mode, micro motor, pump and speed should be possible from the console.		
6	Should come with Irrigation Rod, Main's cord, Two pedal foot switch, two-stage with proportional function, Silicon tubing set for irrigation, sterilisable, Spray for cleaning		
7	Should be operable at power supply 100-240 Volt, 50/60Hz.		
Specif	Specification for Shaver Hand piece		
9	Shaver hand piece should have ergonomic design and variable handle for comfortable work		
10	Should have special feature for harder surface and faster ablation of soft tissues		
11	Should have change mode of motor rotation: forward or reverse or oscillation from footswitch		
12	Should have max oscillation speed per minute of 5,000		

Member-II | Member-III | Member-IV | Member-VI | Member-VII | Member-VIII | Member-VIII Member-IX | Member-X | Member-X | Member-X

Recommended Not Recommended

Appendix-2A (x)

SI.	Specifications	Procedure suggested Result for trial for Board of desired	Result expected/ desired
		Officers	
13	Should have rotational speed per minute mode of 6,000 rpm to 12000 rpm.		
14	Should have straight suction channel and integrated irrigation		
15	Should have quick coupling mechanism for shaver blades and sinus shavers		
16	Should be completely immiscible and machine washable		
17	Should be autoclavable		
Specif	Specification for Shaver Blades		
1	Shaver blades should be disposable/reusable and available in following configurations	-	
	and color coded for easy identification		
2.	4mm, 0 Degree double serrated cutting edge – 5units		
ω	4mm curved 40°, cutting edge serrated backwards, double serrated – 5 units		
4	4mm curved 60°, cutting edge serrated backwards, double serrated -5		

Member-II Member-III Member-IV Member-V Member-VI Member-VII Member-VIII Member-VII Member-IX Member-X Member-X Member-X Member-XII Member-XIII Member-XIII Member-X Member-XIII Member-XI Recommendation of ASU(Med)
Recommended (Not Recommended James

Specifications	for trial for Board of desired	dure suggested Result expected/ al for Board of desired
Sinus Burrs 4mm with 15 degrees to be provided -5 units	Officers	
Sinus Burrs 4mm with 15 degrees to be provided -5 units		
The System should be US-FDA/ CE/ BIS Standards		

No.

Dr. J (hatopadhayay) Member-I

(Dr. Rohit Shyam Bobil) RH, ITBP, Gr. Noida CMO(SG) (ENT)

Member-I

(Dr.: Saquib Khan) CMO

(Radiology) CRPF

Member-III

(Dr. R Kuppu Samy) CMO(SG)

(Paediatrics) CRPF Member-IV

(Dr. Chandrima Kar)

(Obs Gyn), CRPF

Comdt /Spl. Gr.I & Member-V

CRPF Member-VI (Dr. Anurag Jain) (Orthopaedics), Contractual, Spl

(Dr. Rakesh Tiwari) CMO (SG) ITBP Member-VII (Anaesthesia),

(Dr. Shaifali Gupta) Comdt /Spl. Gr.I

(Ophthalmology), ITBP Member-VIII

> (Dr. Rajkamal Nimesh) Comdt /Spl. Gr-I

CDS (SG), (Dental),

(Dr. Gaitri Devi)

Member-X

(Surgery), ITBP, Member-IX

CMO, (Medicine), (Dr. Needa) Kurnar)

Member-XI

(Dr. Soumyesh Ghosh) Comdt./Spl. Gr.I (Pathology), ITBP Member-XII

APPROVED / NOTAPPROVED

Presiding Officer

IG (Med.), RH, ITBP, Gr. Noida (Dr. A C Bhardwajen)

DIRECTOR GENERAL

Recommendation of ADG (mel)
Recommended (Next Recommended)

BORDER SECHALTY FOACE