TENDER FORMAT

TENDER FOR SETTING UP OF CYBER FORENSIC LAB-CUM-TRAINING CENTRE FOR MIZORAM POLICE

1. NAME OF THE FIRM   :_____

2. CORRESPONDENCE ADDRESS
   WITH TELEPHONE AND FAX NO   :_____

3. LOCAL ADDRESS WITH TELEPHONE
   AND FAX NO.   :_____

4. WHETHER REGISTERED WITH NSIC
   /DGS&D IF YES ATTACH COPY   :_____

5. GST REGISTRATION & GST
   CLEARANCE CERTIFICATE   :_____

6. COPY OF AUTHORISED DISTRIBUTOR
   /DEALERSHIP/MANUFACTURER   :_____

7. SPECIFICATIONS OF THE SYSTEM
   ALONGWITH LITERATURE/BROCHURE: _____

8. APPLICATION FEE   :_____

9. EARNEST MONEY DETAIL   :_____

10. COPY OF TERMS AND CONDITION
    DULY SIGNED   :_____

SIGNATURE OF THE TENDERER
 WITH STAMP.

_____

_____

No.D.11014/CSS/CCPWC/17-DGP/61 : Dated Aizawl the 12th April, 2018.

TENDER NOTICE

Sealed tenders are invited in two bid systems i.e. Technical Bid and Price / Commercial bid by the undersigned from the manufacturers, authorized distributors for purchase of following item(s) through registered post or these can be put personally in the sealed tender box kept in the Construction Branch of the office of the Director General of Police, Mizoram, Aizawl.

Sl. No.	Name of items	Application fee	Earnest money
1.	Materials for Setting up of Cyber Forensic Lab-cum-Training Centre for Mizoram Police at Annexure	₹ 1000/- (Non-refundable)	2 % of the value of the quoted items

TERMS & CONDITIONS

The specifications of required items are enclosed with this notice. Tenderers are advised to quote their Rate after careful study of the tender specifications as well as the following terms and conditions:-

1. The tenders should reach the office of Director General of Police latest by **1200 hrs on 01.05.2018.**

2. Tender envelop(s) must be sealed and super scribed "TENDER FOR SETTING UP OF CYBER FORENSIC LAB-CUM-TRAINING CENTRE FOR MIZORAM POLICE" which shall be addressed to Director General of Police, Mizoram.

3. Separate envelope should be used for TECHNICAL BID as well as for PRICE BID. The word **"TECHNICAL BID / PRICE BID**" for purchase of Equipments for Mizoram Police due to open on **01.05.2018 at 2:00 PM** shall be prominently marked on the top of the envelope separately. Both these bids shall further be put in one envelope and sealed properly before putting in the tender Box duly super scribed. Tenderer (s) shall indicate complete specifications and all features of the items.

4. The Technical Bids will be opened first on **01.05.2018 at 2:00 PM** and the PRICE BIDS will be opened only after scrutiny of technical bid and technical evaluation of the system.

5. The item quoted with detail specification should be furnished in a separate sheet duly signed by the tenderer.

6. The tenderer can remain present himself or his authorize representative at the time of opening of tender.

7. A copy of terms and conditions duly signed by the tenderer, as a token of acceptance of the same should be attached alongwith the tender.

8. The tendering firm will also submit a certificate that the product offered by them is as per technical specifications of the tender.

9.   All the bidders whose technical bid is declared qualified by the Purchase Committee will demonstrate their product before the Technical Evaluation Committee at a short notice.

10.   **Only manufacturers, authorized distributors / authorized dealers can participate in the tender, the firm should submit proof of their manufacturing, authorized dealership / distributor. This is subject to verification if necessary**.

11.   **Only GST payee agencies are eligible to fill this tender**. Interested agencies shall quote their GST Registration Number in their quotation and also attach documentary proof of having registered for the sale of such store/items etc. with the technical bid.

12.   Latest/current sales clearance certificate in English on the enclosed prescribed proforma must be attached with technical bid.

13.   The application fee is non refundable.

14.   In case the firm fails to attach the receipt / draft of application fee, the tender shall be rejected.

15.   Incomplete tender/conditional tenders will not be accepted.

16.   All SSI units registered with NSIC/DGS&D for this item as per specification are exempted from the EMD. They have to enclose valid registration document /exemption certificate with their tender.

17.   No tender will be accepted without requisite E.M.D. as mentioned in tender notice. The E.M.D. shall be in the shape of A/C Payee Demand Draft in favour of Director General of Police, Mizoram payable at Aizawl. The EMD can also be submitted either in the shape of FDR, Banker's cheque or Bank Guarantee. No interest will be given on E.M.D.

18.   Tenderer would not be permitted to alter or modify their bids after expiry of the deadline for receipt of Bids.

19.   The quoted price must be inclusive of all taxes and other charges etc. No claim for taxes/charges will be entertained at a later stage. Nothing over and above the quoted price would be payable to the successful bidder. Tenderer must quote the net price both in words as well as in figures. Any over writing/cutting etc. render the tender invalid.

20.   The firm whose rates are accepted will have to deposit 2% of the total cost of the item as Performance Security in the shape of Bank Draft//Bank Guarantee FDR in favour of Director General of Police, Mizoram before the supply order is placed to the firm. In case, the firm does not complete the supply within the delivery period, **liquidated damage charges will be charged @ 2% of total cost per month of the item and action will be taken to blacklisting the firm and forfeiture of its Security money. No interest will be given on Security Money.**

21. In case the firm fails to deposit the security money, the EMD of the firm will be forfeited.

22. The purchase committee, in order to satisfy itself can order on the spot enquiry to verify the soundness & capability of the item and any other information given by the tendering firms.

23. The rates will be valid till supply of the item is completed, in all respect.

24. The rates will be F.O.R. at Aizawl - 796001.

25. In case the firm fails to supply the item within stipulated delivery period, the item will be procured from the open market and the difference of cost, if any, will be recovered from the Security Money and pending bills of the defaulting firm, by calling explanation after issuing notice.

26. The quantity of the items mentioned in the tender notice can be increased or decreased, at any stage till the delivery of consignment is completed.

27. Tenderer(s) shall indicate complete specifications and all features of the Equipment for Mizoram Police.

28. The payment will be made on receipt/acceptance of store in good condition as per prescribed specification. No advance payment will be made.

29. No claim for interest in case of delayed payment will be entertained by the Department.

30. **The Purchase Committee reserves the right to relax any terms and condition in the govt. interest, with the approval of competent authority.**

31. The purchase committee reserves the right to reject any tender or all tenders without assigning any reasons thereof.

32. All disputes are subject to the jurisdiction of the Courts in Aizawl.

33. Foreign Companies shall participate in the tender, only through their Distributors / Agent in India. No foreign company shall be entertained directly.

34. In case of violation of any clause of contract/agreement deed, the explanation of the firm can be called by issuing show cause notice, if the reply is not found satisfactory. Security money can be forfeited as well as action for blacklisting can also be taken prior to taking any legal action.

35. The tender will be rejected straight way without assigning any reasons if the firm involves in   any criminal case, declared black listed by any Govt. / Semi govt. department/agencies etc.

36. In case of any differences, the firm can be called for negotiation to patch up the differences on table prior to approaching court.

37. The bidder should carry a warranty/guarantee of subjected store for a period of at least one year.

38. The Price bid should be in accordance with the format as at Annexure-A.

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(LALHULIANA FANAI) AIGP-II
for Director General of Police
Mizoram, Aizawl.

</div>

No.D.11014/CSS/CCPWC/17-DGP/ : **Dated Aizawl the** th **April, 2018.**
Copy to :-

1. The Director, I&PR for publication in the newspaper. Gist of the tender enclosed herewith for publish in 2 (two) leading local newspaper at the size not more than 9 x 12 cms. for 2 consecutive days.
2. S.P, CID (Crime), Aizawl for information.
3. Officer-in-Charge, Mizoram Police Website for information and necessary action.
4. Notice Board.

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(LALHULIANA FANAI) AIGP-II
for Director General of Police
Mizoram, Aizawl.

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NOTE :-

(A) DOCUMENTS REQUIRED TO BE ATTACHED WITH TECHNICAL BID IN THE FOLLOWING ORDER :-

1. E.M.D. in favour of Director General of Police, Mizoram, Aizawl - 796001 amounting ₹ _____/-.
2. GST Registration Certificate.
3. Latest GST Clearance Certificate / Tin No. of VAT.
4. Copy of authorized distributorship.
5. Certificate regarding registration with DGS&D, NSIC if claim EMD exemption.
6. **Copy of terms and conditions duly signed with seal of the firm, in token of acceptance of terms and conditions**.
7. **The Demand draft of application fee be attached with tender form.**
8. All Other supporting documents as required in the tender shall be attached.

(B) DOCUMENTS REQUIRED TO BE ATTACHED WITH COMMERCIAL/PRICE BID IN THE FOLLOWING ORDER :-

PRICE BID shall contain price only and no other documents shall be enclosed with the price bid.

1. Details of Rates, inclusive of all taxes including freight installation, commissioning & testing of each items quoted by the tenderer shall be submitted on their letter Pad in clear terms, in words and in figures. The cutting & over-writing not valid. The option in the rates will not be entertained.

(   )

SIGN. OF TENDERER _____

NAME IN BLOCK LETTERS:_____

FULL ADDRESS : _____

PROFORMA FOR PRICE SCHEDULE
(Enclose with commercial bid)

TENDER FOR PURCHASE OF EQUIPMENTS FOR MIZORAM POLICE

Date of opening............................... Time ....Hrs.

We_____hereby certify that we are established manufacturers/authorized representatives of M/s_____-with factories at _____which are fitted with modern equipment and where production methods, quality control and testing of all materials manufactured or used by us are open to inspection by the representative of the purchaser. We hereby offer to supply the following items at the prices indicated below :

S. No.	Description of work/item	Qty.	Unit Price In Indian Rupees	Extended Price In Indian Rupees	Sales Tax/VAT In Indian Rupees	Other Govt. Levies, if any (To be specified)	Incidental charges, if any (To be specified)	Total Price FOR Destination In Indian Rupees
a	b	c	d	e	f	g	h	i
1.								

It is hereby certified that we have understood all the terms and conditions specified in the tender document and are thoroughly aware of the nature of job required to be done and goods/items to be supplied. We agree to abide by all the tender terms and conditions.

We hereby offer to carry out the job and (or) supply the goods/items detailed above or such portion(s) thereof as you specify in the notification of award.

(Signature and seal of Bidder)

Dated:_____

I.   TECHNICAL SPECIFICATION OF EQUIPMENTS FOR CYBER FORENSIC LAB

S/No	Requirement	Quantity	Technical Specifications
1	**FRED SR - FORENSIC RECOVERY OF EVIDENCE**	1	**BASELINE SPECS** • 23 1/2" High (25 1/2" w/Wheels), 16 1/8" Wide, 28" Deep - 140 lbs • Dual(2) Intel Xeon® E5-2620 v3 CPU, (Hex Core) 2.4 GHz, 15MB Cache, 8.0 GT/s Intel® QPI • 128 GB PC3-17000 DDR4 2133 MHz Memory • 1 x 512 GB Solid State SATA III Drive - OS Drive • 1 x 512 GB Solid State SATA III Drive - Temp/Cache/DB Drive • 1 x 4.0 TB 7200 RPM SATA III Hard Drive - Data Drive installed in HotSwap Bay1 • Nvidia GTX 750Ti 2GB 128 bit DDR5 PCI-Express Video Card with 1 VGA (D-Dub), 1 HDMI, and 2 DVI ports - supports up 4 displays ▪ **Triple RAID Chassis Option** 16 Channel PCIe 6 Gb/s SAS/SATA RAID Controller Qty 3 - RAID Chassis with 5 removable drive bays ◦ **RAID Set #1** 2TB 7200 RPM SATA III Hard Drive Set (Set of 5 Drives) ◦ **RAID Set #2** 2 TB 7200 RPM SATA III Hard Drive Set (Set of 5 Drives) ◦ **RAID Set #3** 4 TB 7200 RPM SATA III Hard Drive Set (Set of 5 Drives) • **Integrated Hardware Write Blocker with the following capabilities:** ◦ **USB 3.0 integrated forensic bridge** ◦ **Touch screen display and a graphical user interface on the main front mounted write blocker for acquisition process monitoring providing ultimate flexibility** ◦ **write-blocked acquisitions from different types of storage media: IDE, SATA, SAS, USB 3.0/2.0, FireWire IEEE 1394b and PCIe port** ◦ **Simultaneous imaging of two suspect drive on any 2 ports on the main integrated write blocker unit** ◦ **Front Panel Write Protect Lock/ Unlock Feature for Read and write mode capabilities for all device ports controlled via touch screen with led colour differentiation** • 22" WideScreen LCD Monitor with Built-in Speakers • ATX Double-Wide Black Server Case 23 x 5 1/4" Bays • 1100 Watt Modular power supply

			• Dual Intel Socket 2011-3 Motherboard for Xeon processor E5-2600 v3 Product Family
			• Intel C612 Chipset
			• 7 PCI-Express 3.0(x16) Slots
			• 8 ports Intel 6 Gb/s SATA Controller
			• 1 port Intel SATA Express Controller (or 2 x SATA 6 Gb/s ports)
			• 1 port ASMedia SATA Express Controller (or 2 x SATA 6 Gb/s ports)
			• 8 Channel High Definition Audio CODEC
			• 2 Intel I210-AT Gigabit LAN RJ45 ports
			• 1 PS/2 Ports (Keyboard & Mouse Combo)
			• 10 USB 3.0/2.0 Ports - 7 Back Mounted, 3 Front Mounted
			• 2 USB 2.0/1.1 Ports - 2 Back Mounted
			• 2 eSATA 6 Gb/s ports - ASMedia controller
			• 16 USB 3.0/2.0 ports - 13 Back Mounted, 3 Front Mounted
			• 1 Write Blocked USB 3.0/2.0 port - Front Mounted
			• 2 FireWire IEEE 1394b (800 MB/s) ports - 1 Back Mounted, 1 Front
			• Mounted(Write Blocked)
			• 2 x Shock Mounted SATA Removable Hard Drive Bays (IDE Capable)
			• OS- Windows 8.1 pro 64 bit
			• 3 x HotSwap Shock Mounted Universal (IDE/SATA compatible) Removable Hard Drive Bays
			• BD-R/BD-RE/DVDÂ±RW/CDÂ±RW Blu-ray Burner Dual-Layer Combo Drive
			• Extendable/Retractable Imaging Workshelf with integrated ventilation to place hard drive (IDE/SATA/SAS/USB) connected to the Integrated Write Blocker
			
			✓ Toolbox Containing
			  CD Case: Containing system restore media.
			  System Keys: For removeable hard drive bays and front case bezel.
			✓ Adapters and Cables: Cables and adapters to image and process internal/external drives including SAS, SATA, IDE, microSATA, SATA LIF, MacBook Air Blade Type SSDs, mini/micro SSD cards, 1.8 inch IDE (iPod) and 2.5 inch IDE (laptop).
			✓ Digital Camera: Useful to document your suspect's environment and hardware.
			✓ Security Screwdriver Set: A varied assortment of popular security bits for opening computer enclosures

			that may have been locked down in a corporate environment. • Product Offered should be of International Repute & Brand and should not be assembled Machine. • In case of Distributor/ Reseller; OEM/ Manufacturer's Authorization for Supply and Service should be attached with the Tender. • Bidder should have OEM trained Manpower for Product Installation and support, Supporting document for the same to be attached.
2	**MAGNET AXIOM COMPLETE**	1	**BASELINE SPECS** • Ability to automatically queue multiple acquisition and processing actions – to increase efficiencies and save time • End-to-end experience that brings together acquisition, processing and analysis, creating integration and a more navigable and manageable digital evidence database • Support for a broad array of artifact types, and support for the latest versions of those apps and artifact types • Access to file system, registry and artifacts data and trace artifact evidence to its source data efficiently for a better verification process • The ability to present findings in a customizable way that fits their report needs and parameters. • Acquire images from any iOS or Android device, hard drives, and removable media • Recovers evidence from 300+ types of Internet Artifacts from Windows and Mac computers. • Recovers 165+ types of Smartphone Artifacts from iOS, Android, and Windows Phone powered smartphones and tablets. • Filter option to isolate evidence from a specific date or time range, or create filters to narrow results based on field values for any supported artifact type. • Tag functionality for easier and quickly analysis ofpatterns in evidence • Support for custom artifact definitions to find more artifact data or have Evidence Analyzer's Dynamic App Finder to automatically identify new apps and create artifact definitions. • Data Carving ability to recovers more artifacts from both allocated and unallocated space by extracting data from full files or carving for deleted data and traces of data elements/fragments left behind by apps and websites, presenting it in an organized and easy to read format. • Add hash sets to either filter out non-relevant files to enhance search performance and reduce false positives or add hash sets that will specifically call out and identify known bad pictures and videos. • Efficiently analyze large volumes of data • Explore file systems and registry hives for greater insights

			- Process and recover 500+ types of artifacts - Automate all acquisition and processing tasks required to prepare evidence for analysis. - Explore file systems and registry hives for greater insights - Trace artifact evidence back to its source data in seconds - built on the analysis capabilities allowing you to recover hundreds of types of digital forensic artifacts - easy-to-use interface that moves you through your investigation.
3	**FRED - Forensic Recovery of Evidence Laptop**	1	**Processor** - Intel Core i7-8700 Six Core, 3.7 GHz CPU, 12MB Intel Smart Cache **Chipset** - Intel Z370 Express **Memory** 16 GB PC4-19200 DDR4 2400, Configurable up to 64GB **Display** 16 GB PC4-19200 DDR4 2400, Configurable up to 64GB **Keyboard & Pointing device** - Full size, color illuminated, numeric pad. Integrated touchpad with Microsoft PTP multi-gesture and scrolling **Bio-identification & Security** - Integrated fingerprint reader Kensington lock slot **Software** - Microsoft Windows 10 Professional, 64-bit OpenSUSE Linux 64-bit Symantec Ghost CD/DVD authoring software **Graphic & Video Support** - NVIDIA GeForce GTX 1060 GPU with 6GB GDDR5 **Storage** - Up to four drives - Slot 1: SATA, 256 GB SSD Operating System. - Slot 2: SATA - Slot 3: M.2 SSD - Slot 4: M.2 SSD

Network Performance & Wireless
- 10/100/1000 Mbps Ethernet LAN port.
- Intel Dual Band Wireless-AC + Bluetooth 4.2

Integrated Components
- 1 RJ-45 LAN (10/100/1000 Mbps)
- Intel Dual Band Wireless-AC 8260 – 802.11ac, Dual Band, 2x2 Wi-Fi + Bluetooth 4.2
- Card Reader 6-in-1 (MMC/RSMMC/SD/Mini-SD/SDHC/SDXC up to UHS-II)
- 2.0 Megapixel FHD Video Camera
- High Definition Audio
- Microphone
- Speakers (2)
- Illuminated, 19mm Full-Size Keyboard with Numeric Keypad
- Touch Pad pointing device (2 buttons) with multi-gesture and scrolling
- Finger Print Reader

Write Blocked Forensic Imaging
- A set of three UltraBlock write blockers (UltraBlock SATA/IDE,
- UltraBlock USB 3.0, UltraBlock SAS),
- Forensic Media Card Reader,
- UltraBlock power supplies

Media Card Reader
- Digital Intelligence Forensic Media Card Reader – RO and RW switchable

Imaging Software
- Tableau Image

External Connections and Expansion
- 1 RJ-45 Port
- 1 HDMI Port
- 2 Mini DisplayPort 1.3 ports
- 1 Thunderbolt 3 / USB 3.1 Gen 2 Combo Port (Type C)
- 1 USB 3.1 Gen 2 Port (Type C)
- 3 USB 3.0 ports
- 1 USB 2.0 Port
- 1 Headphone jack (2-in-1 Headphone/S/PDIF Optical)
- 1 Microphone jack

			• 1 Line-In jack
			• 1 Line-out jack
			Hardcase
			• 2 Airtight, watertight, hard-sided cases
			• High impact
			Adapter & Extras
			• DE hard drive adapter 2.5 inch
			• IDE hard drive adapter 1.8 inch
			• ZIF hard drive adapter
			• Micro SATA hard drive adapter
			• Micro/Mini SD to SD adapter kit
4	**PASSWARE KIT FORENSIC**	1	**BASELINE SPECS:** • Recovers passwords for **200+ file types** and decrypts hard disks providing an all-in-one user interface. • Scans computers and network for password-protected files (Encryption Analyzer Professional included). • Acquires memory images of the seized computers (FireWire Memory Imager included)! • Retrieves electronic evidence in a matter of minutes from a Windows Desktop Search Database (Search Index Examiner included). • Supports Distributed Password Recovery! • Runs from a USB thumb drive and recovers passwords without installation on a target PC (Portable Version included). • Instant decryption MS Word and Excel files up to version 2003. • Resets passwords for Local and Domain Windows Administrators instantly. • Recovers encryption keys for hard disks protected with BitLocker in minutes, including BitLocker ToGo! • Decrypts TrueCrypt volumes in minutes! • Provides 8 different password recovery attacks (and any combination of them) with an easy-to-use setup wizard and drag & drop attacks editor. • Uses multiple-core CPUs and NVIDIA GPUs efficiently to speed up the password recovery process by 3,500% • Provides detailed reports with MD5 hash values. • **Should be capable of recovering Mac User Login** passwords and **FileVault2 keys from computer** • Should Supports **Distributed and Cloud Computing** password recovery on both **Windows** and **Linux** platforms • Should Instantly decrypt MS Word and Excel files up to version 2003 • Passwords for Windows users should be recovered from a memory image or a standalone SAM file, including UPEK

			- Recovers passwords for email, websites and network connections from standalone registry files in a very short time. - Must have Search Index Examiner to retrieve electronic evidence from a Windows Desktop Search Database - Provides detailed reports with MD5 hash values - Able to passwords for Facebook, Google, and other websites from live memory images or hibernation files - Includes Special password recovery attacks: Rainbow Tables, Decryptum, SureZip, Zip Plaintext - Should support Password modifiers (case changes, reversed words, etc.)
5	**FORENSIC TOOLKIT (FTK) WITH CERBERUS FOR MALWARE ANALYSIS**	1	**BASELINE SPECS** - Create images, process a wide range of data types from forensic images to email archives, analyze the registry, conduct an investigation, decrypt files, crack passwords, and build a report all with a single solution. - database driven so that work associated with memory-based tools is not lost in the event of a GUI crash. Compartmentalized components allowing the processing workers to continue processing data without interruption. - Recover passwords from 100+ applications. - KFF hash library with 45 million hashes. - Advanced, automated analysis without the scripting. - True multi-threaded / multi-core support. - Wizard-driven processing to ensures no data is missed. - Cancel/Pause/Resume functionality - Real-time processing status - CPU resource throttling - Email notification upon processing completion - Pre- and post-processing refinement - Advanced data carving engine allows you to specify criteria, such as file size, data type and pixel size to reduce the amount of irrelevant data carved while increasing overall thoroughness. - Create, import and export reusable processing profiles with pre-defined processing options for different investigative needs. - Support for 700+ image, archive and file types - Notes NSF, Outlook PST/OST, Exchange EDB, Outlook Express DBX, Eudora, EML (Microsoft Internet Mail, Earthlink, Thunderbird, Quickmail, etc.), Netscape, AOL and RFC 833 - Process and analyze DMG (compressed and uncompressed), Ext4, exFAT, VxFS (Veritas File System), Microsoft VHD (Microsoft Virtual Hard Disk), Blackberry IPD backup files, Android YAFFS / YAFFS 2 and many more. - Create and process Advanced Forensic Format (AFF) images.

			• Supports Windows® (32- and 64-bit), Apple®, UNIX® and Linux® operating systems • Comprehensive analysis of volatile data • Static RAM analysis from an image or against a live system • Enumerate all running processes, including those hidden by rootkits, and display associated DLLs, network sockets and handles in context. • Dump a process and associated DLLs for further analysis in third-party tools. • Memory string search allows you to identify hits in memory and automatically map them back to a given process, DLL or piece of unallocated space and dump the corresponding item. • Provides VAD tree analysis and exposes registry artifacts in memory and will parse and display handle information from memory. • Internet / Chat tab • Advanced Google Chrome analysis • 50+ Internet, Chat, P2P and online game carvers to automatically expose this critical evidence during processing • Video thumbnails • Explicit Image Detection auto-identifies potentially pornographic images by analysing shapes, orientation and flesh tones. • Automated malware triage platform solution, empowering organizations to proactively identify compromised systems. first layer of defense against the risk of imaging unknown devices and allows one to identify infected files and avoid exporting them after processing data.
6	**UFED 4PC WITH UFED CHINEX, UFED CLOUD ANALYZER**	1	**GENERIC TECHNICAL SPECIFICATIONS:** • All-in-one mobile forensic Software solution adding flexibility and convenience to investigations • Trusted technology providing users with all physical, file system and logical extraction capabilities • Should come with specialized adaptor to connect mobile handset to mitigate driver issues for various mobile handset. • Physical extraction and decoding while bypassing pattern lock / password / PIN from Android devices including HTC, LG, Motorola, Samsung Galaxy S family (including Galaxy SIII and S4), and more • Widest support for extraction and decoding from Apple devices running iOS3+ • Physical extraction from BlackBerry® devices running OS 4-7. Exclusive decoding: BBM data, apps, emails, Bluetooth and more. • Physical extraction and decoding from locked Nokia BB5 devices – password extraction from selected devices

			• Shall allow identification of mobile device by 8 visual elements selections • Shall be able to generate MD5 & SHA256 hash signatures for data authentication • Shall be able to generate Reports with the organization logo. • Shall have advanced image carving capability • Shall have entities and hex bookmarking capability • Shall have Python scripting facility to enhance decoding and add customized decoding functions according to specific needs • Unrivalled access to locked devices by bypassing, revealing or disabling the user lock code • File system extraction from any device running Windows phone 7.5 and 8 including Samsung, Nokia, HTC, Huawei and ZTE • Should recover physical data from phones with Chinese chipsets. Enables the physical extraction of evidentiary data and passwords from phones manufactured with Chinese chipsets, such as MTK, Spreadtrum and Infineon using specialized proprietary tips at least 25+ tips for Chinese phones and connectors and alligator clips. • TomTom® trip-log decryption, and data extraction from other portable GPS devices • Rich set of decoding: application data, passwords, emails, call history, SMS, contacts, calendar, media ¬files, location information etc. • Contains a unique, rich set of analysis features including timeline, project analytics, malware detection and watch list • Generate and customize easy-to-read reports and customize reports in different formats e. g. PDF, HTML, XML and Excel • Deploys custom boot loaders to ensure forensically sound extractions • Frequent updates to ensure compatibility with new phones as they enter the market • Exhibits multiple locations of a suspect on a single map • Unique evidence verification engine enables validation of recovered artifacts • User-friendly UI • Camera Kit to Add image categories and descriptions in the UFED to generate reports, Capture images/videos of the device as evidence, even when data is not extractable • Access private-user cloud data utilizing login information extracted from the mobile device • Login to private-user cloud data using usernames and passwords provided by the investigated subject, retrieved

			from personal files, contacts or via other discovery means.
			• Case containing specialized Tip Set inbuilt with boot loaders & Proprietary Cable Set, SIM ID Cloning Cards, Micro SIM ID Cloning Cards, Nano SIM ID Cloning Cards, Multi SIM Card Adapter, Memory Card Reader.
			• Bidder should be OEM or direct Authorized Distributor or Reseller in India. In case of Distributor/ Reseller; OEM/ Manufacturer's Authorization for Supply and Service should be attached with the Tender.
			• Bidder should have installed at-least 10 units of the offered product in at-least 5 different Central or State Government Organizations in India. Past Order copies to be attached for supporting the same.
			Bidders should have at least 3 years of experience in suppling Cyber/ Digital Forensic tools and setting up cyber labs in various organizations in India
7	**X1 SOCIAL DISCOVERY**	1	**BASELINE SPECS**
			1. It should have ability to collect and index data from social media streams, linked content and websites through APIs, webmail connectors and direct web navigation. Tool should aggregate data from these multiple sources in real time, in a highly scalable and case-centric manner.
			(i) Facebook
			(ii) Twitter
			(iii) Instagram
			(iv) You Tube
			(v) Tumblr
			(vi) Web pages & Websites
			(vii) Gmail
			(viii) Yahoo Mail
			(ix) Outlook.com
			(x) AOL Mail
			(xi) Internet Message Access Protocol (IMAP)
			2. Should perform broad, unified searches across multiple accounts, social media streams and websites from a single interface. Linked content is automatically indexed and searched through the tool fast-as user types search from one user interface. Results are aggregated for sorting, tagging and export consistent with standard e-Discovery, or investigative, workflow.
			3. MD5 hash values of individual items are calculated upon capture and maintained through export. Automated logging and reports generated. Key metadata unique to social media & web streams are captured through

| | | | deep integration with APIs provided by the publisher. The metadata is important to establishing chain of custody and also provides key evidence relevant to the substantive case as well as authentication. |
| | | | Should maintain data in a searchable native format from collection through production, uniquely providing a complete platform to address social media in the same manner as devices, e-mail and e- documents. Deliver collected email in PST format while maintaining hierarchical structural. |

II. TECHNICAL SPECIFICATION OF EQUIPMENTS FOR CYBER FORENSIC TRAINING CENTRE

S/No	Requirement	Quantity	Technical Specifications
1	**MICRO FRED - FORENSIC RECOVERY OF EVDENCE DEVICE FORENSIC WORKSTATION**	1	BASELINE SPECS • Intel Core i7-6700 Quad Core Processor, 3.4 GHz, 8MB L3 Cache • 32 GB PC4-17000 DDR4 Memory • 1 x 256 GB Solid State SATA III Drive (Internal) - OS Drive • 1 x 256 GB Solid State SATA III Hard Drive - Temp/Cache/DB Drive • 1 x 2 TB 7200 RPM 3.0 Gb/s SATA Hard Drive in Shock-Mounted Tray - Data Drive • Integrated Write Blocker with IDE/SATA/USB/SAS/FIREWIRE/PCIe interface. • Micro Portable Chassis (9in wide x 8 in tall x 13 in deep or smaller) with 450watt ATX power supply. • LGA 1151 Intel Z170 Chipset Mini ITX Motherboard • Intel Integrated HD Graphics 530 Controller w/Dual Monitor Support (1 HDMI and 1 DisplayPort) • 10/100/1000 Mbs Gigabit Ethernet Network Adapter • 1 PCI-Express 3.0(x16)Slot • 2 6 Gb/s SATA Ports • 1 SATA Express port OR 2 SATA 6.0 Gb/s ports • 1 x M.2 Socket 3 with M Key design (Supports both SATA & PCIE SSD) • 8 Channel SupremeFX High Definition Audio CODEC • Digital Optical S/PDIF audio output • 1 RJ45 LAN port (Intel I219V 1 x Gigabit LAN controller) • 802.11a/b/g/n/ac WiFi+ Bluetooth 4.0 • 4 USB 2.0 ports - 2 Back Mounted, 2 Front Mounted • 6 USB 3.0 ports - 4 Back Mounted, 2 Front Mounted • 3 USB 3.1 ports - Back Mounted • 1 USB 3.1 Type C port - Back Mounted • 1 Write Blocked USB 3.0/2.0 port - Front Mounted • 1 FireWire IEEE 1394b (800 MB/s) port - Front Mounted(Write Blocked) • 1 PS/2 Mouse/Keyboard Combo Port • 103 key Keyboard and Mouse Combo – Wireless • **Toolbox containing:** i. **CD Case:** Containing system restore media. ii. **System Keys:** For removeable hard drive bays and front case bezel. iii. **Adapters and Cables:** Cables and adapters to image and process internal/external drives including SAS, SATA, IDE,

			microSATA, SATA LIF, MacBook Air Blade Type SSDs, mini/micro SSD cards, 1.8 inch IDE (iPod) and 2.5 inch IDE (laptop).
			iv. **Digital Camera:** Useful to document your suspects environment and hardware.
			v. **Security Screwdriver Set:** A varied assortment of popular security bits for opening computer enclosures that may have been locked down in a corporate environment.
			• Product Offered should be of International Repute & Brand and should not be assembled Machine.
			• In case of Distributor/ Reseller; OEM/ Manufacturer's Authorization for Supply and Service should be attached with the Tender.
			• Bidder should have OEM trained Manpower for Product Installation and support, Supporting document for the same to be attached.
2	**ULTRAKIT 4.1 WITH TD2U**	1	**BASELINE SPECS**
			➢ Portable kit which contains a complete family of hardware write blockers along with adapters and connectors
			➢ Should include Separate Portable write Blockers for **USB 3.0 IDE/SATA**, **SAS**, **USB3**, **FireWire**, **Forensic Card Reader**, Power Supplies, Cables and Adapters. All Write Blockers and accessories should be organised in a ruggedized pelican case
			➢ Used in acquiring a forensically sound image of virtually any hard drive or storage device you may encounter
			➢ Select the appropriate Write Blocker and attach it to the source drive and use your desktop or laptop to acquire a forensically protected disk image to an internal drive or externally connected drive enclosure.
			➢ Support for IDE/SATA, SAS, USB, Firewire
			➢ All drive interface cables, connectors/ adapters
			➢ Should have a Forensic Duplicator with capabilities to support Greater than 2TB HARD DRIVES
			• Image a 2TB HDD (2000GB)
			• Clone HDDs with no size limit
			➢ Forensically duplicates HDD 's faster than ever - up to 15 GB/min with hashing
			➢ Standard features include Disk-to-Disk (clone) and Disk-to-File (image) duplication, Format, Wipe, Hash (MD5 or SHA-1), HPA / DCO detection and removal, and Blank Disk Check.

			- Make one (1:1), two (1:2), or three (1:3) copies of evidence drives. - Acquisitions of USB 3.0, SATA, and IDE/PATA devices can be directed to either USB 3.0 or SATA output devices. - Option to acquire SAS drives with additional modules - outputs to raw DD, .e01 (compressed), .ex01 (compressed), or .dmg formats - USB 3.0 convenience and speed built in - extensive log files is easy to view and save - Built-in, user-selectable MD5 and SHA256 verification - Hash re-verification on read from destination(s) – user-selectable - Colour LCD user interface - All of content of the kit should be skilfully bundled in a rugged pelican waterproof case perfect for field acquisition.
3	**FORENSIC EXPLORER**	1	**BASELINE SPECS** - Software for **Live Boot virtualization, Shadow Copy, Meta extraction, Carving, Hash Sets, Index and Keyword search, Bookmarking** - flexible graphic user interface (GUI) with advanced sorting, filtering, keyword searching, previewing and scripting technology - Manage the analysis of large volumes of information from multiple sources in a case file structure; - Access and examine all available data, including hidden and system files, deleted files, file and disk slack and unallocated clusters; - Automate complex investigation tasks; - Produce detailed reports; and, Provide non forensic investigators a platform to easily review evidence. - supports the **analysis** of the following file formats: Apple DMG, DD or RAW, EnCase® (.E01, .L01, Ex01), Forensic File Format .AFF, FTK® (.E01, .AD1 formats), ISO (CD and DVD image files), Microsoft VHD, NUIX File Safe MFS01, ProDiscover, SMART, VMWare, XWays E01 and CTR - supports the analysis of .PST files. - Boot forensic image files, including Windows (all versions) and MAC - Easily add and analyze shadow copy files - Should be Unicode compliant. Investigators can search and view data in native language format such as Dutch or Arabic. - Access all areas of physical or imaged media at a file, text, or hex level. View and analyze system files, file and disk slack, swap files, print files, boot records, partitions, file allocation tables, unallocated clusters, etc. - Work with physical or forensically imaged RAID media, including software and hardware RAID, JBOD, RAID 0 and RAID 5. - Sector level keyword search of entire media using RegEx expressions with Built in multi-threaded DTSearch index and

			keyword search technology.
			• Add case notes to identify evidence and include case notes in a custom report builder.
			• Recover folders, files and partitions. Use an inbuilt data carving tool to carve more than 300 known file types or script your own
			• Should automatically verify the signature of every file in a case and identify those mismatching file extensions. Open and examine Windows registry hives. Filter, categorize and keyword search registry keys. Automate registry analysis with RegEx scripts.
4	**C5 CDR ANALYZER PROFESSIONAL**	1	**BASELINE SPECS**

BASELINE SPECS

➢ **Network Architecture:**Client, Server architecture, so that data should be stored centralized and operators can analyse CDRs on different locations. These clients will work as standalone and when connected to LAN/WAN they will work as client of Server, extendable to n number of client licenses.

➢ **Various File Formats CDR:** Accepts (able to upload) CDRs (Target No. CDR, IMEI CDR, International Gateway CDR, Tower CDR) from Excel, Txt, CSV, DBF, MS-Access, HTML and PDF format and all other common formats . Able to define, modify and update import formats for data across telecom service providers.

➢ **CDR/SDR/ISD Calls Data Importing:**Software to ensure automated acquisition and processes individual files or it should be done in batch mode.

➢ **File Integrity:**It Maintains the integrity of files imported using standard and accepted algorithms.

➢ **CDR Analysis:** Able to perform powerful analysis on CDR data and has to provide the following information on single click

a. Frequency Analysis

b. Summary based on target numbers, IMEI, Cell-ID and date wise

c. Time-Line Summary

d. Call Details

e. Movements (Statistical data as well as GIS integration)

f. Time based search, should be able to identify the day and night calls.

g. Calls summary based on the calls wherein three or more persons are communicating on single call.

h. Common Numbers

i. Identification of selected person's geographical reach based on the calls made or received by him.

j. Graphical representation of statistical data using 2d and 3d pie charts, bar graph, etc.

k. Should be able to export the reports into various file formats like Excel, PDF, Word, HTML, CSV, Text, etc.

			➢ **Data Visualization:** Graphical interactive tool to analyse the CDR/Tower data by creating clusters or groups and should have the following functionality.
			   a. Identify the Node with maximum density.
			   b. Should highlight the common numbers.
			   c. Unwanted or irrelevant nodes should be removed on single click
			   d. Should be able to search for the given number and highlight the same.
			   e. Should be able to select the next level nodes of a desired node.
			   f. Should be able to move the required cluster of nodes or required nodes to new analysis screen.
			   g. Should be able to identify the common number with maximum density.
			   h. Should be able to remove the nodes that have links equal to less than the given number.
			   i. Should Identify the CDR numbers.
			   j. Should be able to display the SDR of the selected number.
			   k. Should display the details of the selected number.
			   l. Should save the generated chart as an image.
			   m. Should generate the following types of Charts
			   i. Peacock Chart
			   ii. Circular Chart
			   n. Panel should be available to change the appearance ofNodes and Links of
			   the graphical representation as per user's requirement
			
			➢ **Case Visualizer:** Software enable the IO to co-relate CDRs being analysed with physical evidence encountered during investigation and it should also represent the same visually.
			
			➢ **GIS Integration:**Segregates calls from Tower based on location of tower e.g. calls made/received between different locations at a particular time and from a particular Tower. Should plot and make a virtual map with respect to time and be capable of graphical presentation of location fixation over either GIS street level map to be provided with the system or on the freely available street level maps from providers like Google.
			
			➢ **Common Number Identification:**Common Number Identification analysis to find who is guiding crimes at some level.
			
			➢ **Link Analysis:** Able toidentify the direct or indirect relationship between two personsin a given number of CDR's.
			
			➢ **International Call Analysis:** System is able to integrate with International Calls Data source and should be capable of analysing the same.

			➢ **Searching:** Able to design his own search criteria by using all the possible standard parameters used during CDR analysis, and it should also be able to match between two or more different search result sets. ➢ **Watch Dog List:** Alert and flash the IMEI/Phone Number's if a watch dog number is present in the CDR that is currently imported. ➢ **SDR:**System Able to integrate with Subscriber Dump and the required SDR is displayed on screen during CDR analysis wherever it is needed and should also be capable of performing phonetic search on SDR Data. ➢ **Usage of Past/Archived Data:**Should match the given inputs with the past data stored in the archived database. In case of a match, the match is highlighted. **a.** Should be able to fetch the SDR of single or more numbers at a time. **b.** Should be able to fetch the Service Provider details of a given number or multiple numbers simultaneously. **c.** Should be able to fetch the details of a given STD or ISD code. **d.** Should provide an interface to register the users who can use this service and set the access level of the users. **e.** Should provide an interface to send the bulk SMS's to all the registered users or to a particular group of users or to desired persons based on the choice of the user. **f.** Should generate a report based on the usage
5	**PASSWARE KIT FORENSIC**	1	**BASELINE SPECS:** ➢ Recovers passwords for **200+ file types** and decrypts hard disks providing an all-in-one user interface. ➢ Scans computers and network for password-protected files (Encryption Analyzer Professional included). ➢ Acquires memory images of the seized computers (FireWire Memory Imager included)! ➢ Retrieves electronic evidence in a matter of minutes from a Windows Desktop Search Database (Search Index Examiner included). ➢ Supports Distributed Password Recovery! ➢ Runs from a USB thumb drive and recovers passwords without installation on a target PC (Portable Version included). ➢ Instantly recovers many password types. ➢ Instantly decrypts MS Word and Excel files up to version 2003 (20 Credits for Decryptum attack included). ➢ Resets passwords for Local and Domain Windows Administrators instantly. ➢ Recovers encryption keys for hard disks protected with BitLocker in minutes, including BitLocker ToGo! ➢ Decrypts TrueCrypt volumes in minutes! ➢ Provides 8 different password recovery attacks (and any combination of them) with an easy-to-use setup wizard and drag & drop attacks editor.

			➢ Uses multiple-core CPUs and NVIDIA GPUs efficiently to speed up the password recovery process by 3,500% ➢ Provides detailed reports with MD5 hash values. ➢ **Should be capable of recovering Mac User Login** passwords and **FileVault2 keys from computer** ➢ Should Supports **Distributed and Cloud Computing** password recovery on both **Windows** and **Linux** platforms ➢ Should Instantly decrypt MS Word and Excel files up to version 2003 ➢ Passwords for Windows users should be recovered from a memory image or a standalone SAM file, including UPEK ➢ Recovers passwords for email, websites and network connections from standalone registry files in a very short time. ➢ Must have Search Index Examiner to retrieve electronic evidence from a Windows Desktop Search Database ➢ Provides detailed reports with MD5 hash values ➢ Able to passwords for Facebook, Google, and other websites from live memory images or hibernation files ➢ Includes Special password recovery attacks: Rainbow Tables, Decryptum, SureZip, Zip Plaintext ➢ Should support Password modifiers (case changes, reversed words, etc.)
6	**MOBILE EDIT FORENSIC EXPRESS WITH CONNECTION KIT**	1	**BASELINE SPECS** • Solution should extract all the data from a phone with only a few clicks. data includes call history, phonebook, text messages, multimedia messages, files, calendars, notes, reminders and raw application data. • It will also retrieve all phone information such as IMEI, operating systems, firmware including SIM details (IMSI), ICCID and location area information • Should be able to retrieve bypass the passcode, PIN and phone backup encryption. • Bypass the passcode on iOS using the lockdown files method by importing the lockdown files that can be found on a suspect's computer. • Bypass the PIN code with an integrated SIM Cloning Tool • full extraction including contacts, messages, recordings, ringtones, notes, calendar, photos, videos and even apps along with their data from iTunes backup files • should enable investigator to retrieve the data from a live iPhone in a fast logical way without knowing the encryption key. • Should Get a list of Skype, Gmail or Facebook contacts without knowing the account passwords • Should support complete logical extraction using special forensic version of the connector app will be able to connect these phones via Wi-Fi • Should able to access the SIM card status information (IMSI, ICCID, LAI, PIN, PUK, call costs) as well as review and export a list of all SIM card applications. When available tool should also read deleted messages from the SIM card. • Comprehensive online database to quickly find any phone. Should also have instructions on how to enable debugging mode, setting up PC suite mode after connection etc. • 'Media' folder displays all media files divided into photos, recordings, videos etc. The 'User files' folder displays files

			created in the user area.
			• Should have unique driver detection and repair system provides additional assistance with connection
			Should include special collection of custom-made USB cables and should also come with a compilation of all necessary drivers.

III. ADDITIONAL REQUIREMENTS FOR SETTING UP CYBER FORENSIC LAB AND CYBER FORENSIC TRAINING CENTRE

S/No	Requirement	Quantity	Technical Specifications
1	**Desktop Computer Core i5 7ᵗʰ Gen 8 GB DDR4/ Windows 10 with 22inch display**	19	BASELINE SPECS • **Operating System:**Windows 10 Pro • **Processor:**Intel® Core™ i5-7600/3.5 GHz; Quad-core • **Memory:**DDR4/8 GB (standard)Up to 64 GB (maximum) • **Storage:**1 TB hard drive/DVD-Writer/Drive Interface/SATA 6 Gbps • **Graphics:**Intel® HD Graphics 630/DDR4 Shared graphics memory • **Connectivity:**802.11ac wireless LAN/Gigabit LAN • **PCI Slots:**2x PCI Express® X16 • **Ports & Connectors:**4x USB 2.0/6x USB 3.1 Gen 1/Network (RJ-45)/DisplayPort™/HDMI® Output • **Power Supply:**300 W
2	**High Definition LED Projector with Ceiling Mount**	1	**BASELINE SPECS** • White and Colour Brightness at 3,200lm RGB liquid crystal shutter projection system • SVGA resolution High contrast ratio of 15,000:1 • Horizontal keystone slider, 10,000 hours lamp life in eco-mode • Includes :- Power Cable/Computer Cable (VGA Cable) / USB Cable (Type A/B)/Remote Control with Alkaline AA Battery/Soft Carrying Case • HDMI Connectivity Muti-PC Projection and Moderator Function • Wifi enabled • 3000 Lumens or higher
3	**Motorised Projector screen**	1	**BASELINE SPECS** • Screen Size : 8 ft X 6ft • Colour : White • Resolution :1920X1080 • Aspect Ratio: 4 : 3
4	**Air Conditioner 1.5 Ton**	3	**BASELINE SPECS** • Energy Rating: 3 Star (2018) or higher • Type: Split AC • Capacity :1.5 Ton • Condenser Type: Aluminium • Features: Turbo cool, LCD Remote Control, sleep mode, On and off Time • Connectivity: Wifi
5	**Computer Tables**	19	**BASELINE SPECS**

			• Standard Wooden Computer table with drawer • Dimension : Length (38.12 inches), Width (18.47 inches), Height (28.30 inches)
6	**Computer Chairs**	**19**	**BASELINE SPECS** • Ergonomic Computer Chair • Type : Revolving • Height: Adjustable
7	**24 Port Switch**	**1**	**BASELINE SPECS** **Ports** • 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T);Duplex: 10BASE-T/100BASE-TX: half or full 1000BASE-T: full only • 4 fixed Gigabit Ethernet SFP ports • 1 dual-personality (RJ-45 or USB micro-B) serial console port • Supports a maximum of 28 Gigabit Ethernet ports **Memory and processor** • ARM9E @ 800 MHz; 128 MB flash; packet buffer size: 1.5 MB dynamically allocated; 256 MB DDR3 DIMM **Latency** • 100 Mb Latency: < 7.4 us • 1000 Mb Latency: < 2.3 us **Throughput** • 41.6 million pps • Switching capacity56 Gb/s **Management features** • IMC - Intelligent Management Centre • command-line interface • Web browser configuration menu • out-of-band management (serial RS-232C or Micro USB) • IEEE 802.3 Ethernet MIB • Repeater MIB • Ethernet Interface MIB **Power consumption** • 48 W (maximum) **Input voltage** • 100 - 127 / 200 - 240 VAC

			Operating temperature range • 0 to 45C
8	**Wifi Router**	1	**BASELINE SPECS** • 300 Mbps • Support LAN • Warranty at least 1 year
9	**Wifi Repeater**	3	**BASELINE SPECS** • 300 Mbps • Support LAN • Warranty at least 1 year
10	**15 KV Diesel Genset**	1	**BASELINE SPECS** • No of cylinders : 3 • Output : 210 - 230 Volt • Rating : 15 kVA • Type : Silent • RPM: 1500 • Cooling System : Water • Phase: 3 • Current (AMP): 65.25 or above • Integrated Fuel Tank: 90 Ltrs or above
11	**15 kVA UPS**	1	**BASELINE SPECS** • Power rating: upto 15 kVA at 0.9 pf • Voltage : 220 V • Frequency : 50/60 Hz • VA : 15000/13500
12	**UPS Battery**	20	**BASELINE SPECS** • Type : Tabular • Capacity @ C20 : 150 AH or above • Life : 1200 cycles @ 80% DOD • Warranty : 42 months or more
13	**2 Way Active Speaker with Bluetooth connectivity**	2	**BASELINE SPECS** • Input : Mono/Stereo/XLR/Aux • Power rating: 500 W or above • Connectivity : Bluetooth or Wifi

| 14 | **Demonstration Table** | 1 | **BASELINE SPECS**
• Dimension: Height: 30" X Width: 24" X Length: 60"
• Material : Teak
• Finishing : Melamine
• Storage : 2 or more with door and lock
• Inscription : Mizoram Police Logo (Front) |
| 15 | **DSLR Camera with Tripod** | 1 | **BASELINE SPECS**
• 24 megapixel or higher
• CMOS image sensor
• DIGIC 6 image processor
• TFT colour liquid-crystal monitor
• 7 levels of manual brightness adjustment
• ISO sensitivity: Auto ISO 100 - ISO 6400
• 19 cross-type AF points for focusing, f/2.8 at centre
• WiFi and NFC connectivity
• Rechargeable lithium-ion battery with charger
• Tripod |