

No. L.VII-4/2012-Prov(R) - 1080

भारत सरकार/Government of India

गृह मंत्रालय/Ministry of Home Affairs

पुलिस आधुनिकीकरण प्रभाग /Police Modernization Division

संभरण-I डेस्क /Prov.I Desk

26, Man Singh Road, Jaisalmer House  
New Delhi, the 2 June, 2015

To,

Director General  
CRPF,  
CGO Complex,  
Lodhi Road, New Delhi.

**Subject: QRs and Trial Directives of 14 Nos. Special Equipments for CoBRA Troops under CoBRA Sector.**

The QRs and Trial Directives in respect of following 14 Nos. special equipments for CoBRA troops under CoBRA Sector have been accepted by the Competent Authority in MHA:

1. Hot weather hat
2. CAMO Cream IRR Formula
3. Tactical 4 light torch LED
4. Fireball with sticker and compass
5. Water purification table (NADCC-Salt)
6. Multipurpose Light Weight Kulhari
7. Neoprene rubberized gloves
8. Electronic super Gen NVD inbuilt infrared and vision BW
9. 1.5 KV Generator Set
10. Light weight tent 8 men (Air beam frame)
11. Camp chair light weight folding.
12. Camp table light weight folding.
13. Flexi water tank (2000 ltr.)
14. Foldable Jerry Cane (10 ltr.)

2. CRPF will be accountable for correctness of QRs and Trial Directives of 14 Nos. special equipments for CoBRA troops under CoBRA Sector.

3. Henceforth, CRPF should procure the above item required by them strictly as per the laid down QRs.

Yours faithfully,

  
2/6/15  
(M. K. Chahar)

Under Secretary to the Govt. of India  
Tel: 23381278

Encl: As above.

Copy forwarded to SO (IT), MHA. with the request to host the QRs and Trial Directives of 14 Nos. special equipments for CoBRA troops under CoBRA Sector on

NCC may please upload,

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OS (IT)

the website of MHA (under the page Organizational Set up-Police Modernization Division-Qualitative Requirements-Special Equipments), soft copy is being sent through email also.

Copy to:

1. DG, BPR&D
2. DDG (Procurement), MHA.

QRs/SPECIFICATION OF HOT WEATHER HAT

Sl. No.	Item	Specifications
1	Specification	To wear in hot weather condition with protection from sun and well fit on head. Easy to wear and operate in Jungles.
2	Colour	Digital CoBRA pattern.
3	Cloth/material	1. NYCO (nylon 50% & cotton 50%) 2. Shrinkage free
4	Design	<ul style="list-style-type: none"> <li>• 360 Degree brim for improved sun protection.</li> <li>• Standard 2.25" to 2.38" extended floppy brim. Brim interlining and headed stay piece (non woven, continuous filament polyester cloth.</li> <li>• Weight – 0.1140 grms – 113 grms. 10 gm.</li> <li>• Single ply on top.</li> <li>• Integral poly crystal chambers.</li> <li>• Nylon lace chinstrap with plastic <b>adjusted</b>.</li> <li>• Piling-grade 4</li> <li>• tear strength (n) –warp35n. weft 35n</li> <li>• Weave-Rip-stop</li> <li>• Double layer on brim to give extra thickness and stability of brim flap.</li> </ul>
5	Measurement/Size	Crown or center front 2-3/4" at center back 3-1/2" with a Standard size 7-1/8 (57 cm)
6	Life	1 Year

TRIAL DIRECTIVES

1	Brim thickness – double layer
2	Poly crystal chamber- dipping it in water and after drying it for 5 minutes and wear to check its cooling effect. Normal temperature is to be taken first and after drying temperature to be checked. The difference should be 2-3 degree centigrade.
3	Weaving pattern strength – there should not be more than 3 breaks in between continuous weave
4.	Tear strength – to be checked by pulling it with both hands in normal way.

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QRs/SPECIFICATION OF CAMO CREAM IRR FORMULA

Sl.No.	Item	Specifications
1	Specification	Instant jungle camouflage for hands, face and skin with use of colored paints while operating in jungle.
2	Colour	5 Nos different colors – deep matt black, jungle green black, desert sand brown.
3	Ingredient	1) Non toxic formula material. 2) Mixed vegetable oil-approved quantity Silica/Polysorbate/Methyparaben. 3) Resistant to rain. 4) Resistant to sweat 5) Contains an insect repellent 6) Easily removable with mild soap or cammo remover added with cream.
4	Quality	1) Creates pattern disrupting stripes quickly and effectively 2) Moisturizes skin 3) Offers high sun protection @ 50 H 4) Anti irritant & no side effect.
5	Size of container	1) Compact plastic case with acrylic mirror in it's box 2) 8 x 7 x 1.5±2 cm 3) Each color should be housed separately.
6	Weight	50 gm plus minus 5 gm.

TRIAL DIRECTIVES

1	Five colors as per specification housed separately in container/box.
2	Plastic box and acrylic mirror – intact fittings.
3	Irritant test – apply for half an hour on face to test whether it is irritating and after wash any side effect like change in skin color or rashes etc. develops.
4	Apply or keep the box near to insect – to check insects move away or otherwise.
5	After applying, leave it for 15 minutes and wash to check. It should easily get removed.

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ANNEXURE-'III'QRs/SPECIFICATION OF TACTICAL 4 LIGHT TOUCH LED

Sl.No.	Item	Specifications
1	Description	Small, compact, simple to use torch as indicator with four colors, user selectable bezel for tactical use.
2	Type	<ol style="list-style-type: none"> <li>1. Torch- flash light for all occasions.</li> <li>2. Having option of four colors selectable by rotating bezel.</li> <li>3. With rotating on/off switch at tail cap of the torch</li> <li>4. Metal built clip</li> <li>5. LED</li> <li>6. Battery, AA L LR 6 (1.5V) battery or rechargeable battery</li> <li>7. Water resistant</li> <li>8. made with type III anodized aluminium.</li> </ol>
3	Performance	<ol style="list-style-type: none"> <li>1. 3 lumen output at least</li> <li>2. 5m range (distant at which someone holding a torch can read the top line of eye chart)</li> <li>3. 25 Hrs use from a single battery</li> </ol>
4	Weight	75 gms – 80 gms.
5	Size	<ol style="list-style-type: none"> <li>1. 8.4 to 10 cm long</li> <li>2. 18 to 3 mm dia.</li> <li>3. 28 to 4mm bezel dia</li> </ol>
6	Color	Torch – black Lenses- white/red/green/blue.

TRIAL DIRECTIVES

1	Visibility test – from 100 meters faint visibility of light (in night).
2	Weight – not more than prescribed weight i.e. 75-80 gms.
3	Size – not more than 10 cm.
4	Four colour lights independent display while rotating its bezel i.e. white/green/red/blue
5	Ruggedness – throw it from 15 meters to hard surface - it should not get break or damaged.
6	Water resistance – dip it in water for 5 minutes – check after opening it to see water has not entered inside and is still functioning.
7	Battery run time – Use it continuously for 3 hours to check if it can be used for three hours at least.

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REQUIREMENTS/SPECIFICATION OF FIREWALL WITH STICKER AND COMPASS

Sl. No.	Item	Specifications
1	Description	Tool must ignite fire even in wet and damp conditions.
2	Type	1. With a long detachable flint & compass in handle. 2. With three edge striker with long handle. 3. Flint locks together with striker for storage etc.
3	Design	Flint - there should be a molded handle at the end of flint, to allow the users thumb not to slip when used. Striker- (a) 3 separate striking points for left and right handle users (b) shaped and moulded grips on handle for optimum use. Compass - (a) 360° (b) each 30° indicated with a number prefix (c) North, East, South & West indicate with relevant single letter abbreviation. Handles- (a) molded ABS plastic (b) formed around flint/striker.
4	Weight	Flint-37 - 40 grams Striker-13- 15 gram Complete- 50-60 grams
5	Size/shape	Flint - 71 mm long $\pm$ 5mm with 8 mm dia & tinder card. Striker - 90 to 100 mm long/20 mm wide. Compass - 12 to 15mm diameter.
6	Misc	Good quantity of hexamine/camphor/sulphur should be added.

TRIAL DIRECTIVES

1	Weight - as per specs
2	Length/size - as per specs
3	Compass - reading to be tested with available regular compass
4	Flint - its compactness with molded plastic and strength
5	Striker - use it with flint for 50 time at least to check flare is emitting or otherwise
6	Flare - while using as above check its' flare burning capability.

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## ANNEXURE-'V'

QRs/SPECIFICATION OF WATER PURIFICATION TABLET (NADCC-SALT)

Sl. No.	Item	Specifications
1	Description	Sodium dichloro isocyanurat should have Environmental Protection Agency (EPA) & WHO and UNICEF approved material. Ingredients should have been formulated for accurate treatment of Water with strength for treatment of Water from 1 litre to 100000 litres and slow to fast dissolving with effervescence.
2	Components	10 tablets per strip, 100 per pack.
3	Chemical formula	<ol style="list-style-type: none"> <li>1. Sodium Dichloro Isocyanurate (DICHL OROS TRIAZINE 2-4-6 (1H-3H-5H) TRIONIC, Sodium Salt). This is a compound bearing dry chlorine (Hypochlorous Acid) useful even in hard water. Low PH. chlorine stabilizer.</li> <li>2. molecular formula – <math>Cl_2, N_2, NaO_3</math>.</li> <li>3. Co.name &amp; compound &amp; price with tax on leaf and box.</li> </ol>
4	Quality test	<ul style="list-style-type: none"> <li>• Release chlorine only when dissolved in water.</li> <li>• Tablet should be in a stable form.</li> <li>• Easy handling &amp; compact storage. No leaks or spillage.</li> <li>• In water it releases hypochlorous acid, an active ingredient having biocidal activity against Gram Positive &amp; Gram Negative bacteria.</li> <li>• Bacterial Spores, fungi, algae, viruses etc. are cleaned</li> <li>• Should prevent spoilage of organic material.</li> <li>• Dissolves quickly in water forming clear disinfecting acidic solution of ph upto 7</li> <li>• Economical</li> <li>• Less corrosive to rubber and stainless steel.</li> <li>• Yields known level of a available chlorine.</li> <li>• (supported/backed by report of UNICEF)</li> <li>• Purification – 30 minutes per litre/tablet</li> <li>• Odour –chlorinous</li> <li>• Appearance – white.</li> </ul>
5	Life	<ol style="list-style-type: none"> <li>1. Shelf life – 3 yrs in open storage.</li> <li>2. Manufacturing &amp; expiry date – visibly imprinted on the leaf as well as on the box.</li> </ol>

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1	Effervescent – Put it in water – to check bubbles coming out from the tablet
2	Chlorine test – hard water to be tested in lab first & after dissolving it in water chlorine presence should be checked in lab besides water portable quality.
3	Water purification – put the tablet in 1 litre hard water – get it tested in lab (report should contain desirable/permmissible limit of bacteria presence and its' hardness.

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ANNEXURE-VIQRs/SPECIFICATION OF MULTIPURPOSE LIGHT WEIGHT (KULHARI)

Sl. No.	Item	Specifications
1	Description	Multipurpose use either in operations specially in jungle terrain to make path by removing bushes, cutting small trunks, digging and support to climb high ground & even in rocky terrain.
2	Type	<ol style="list-style-type: none"> <li>1. multiple use method of entry</li> <li>2. to cut rope and cord</li> <li>3. breach through walls &amp; small cuts on rocks</li> <li>4. smash windows/hinges/door handles/locking mechanism</li> <li>5. pry open doors</li> <li>6. hammer head</li> </ol>
3	Construction	<ul style="list-style-type: none"> <li>• 420hc steel body (sheath)</li> <li>• treated wooden handle (water absorption minimum + tensile strength more)</li> <li>• MOLLE (modular light weight load) compatible</li> </ul> Sheath - Axe head is integrated into prying handle.
4	Weight	<ul style="list-style-type: none"> <li>• 0.86 kg without sheath (plus minus(140gm))</li> <li>• 1.02 kg with sheath (plus minus (140gm))</li> </ul>
5	Size	49 cm overall length plus minus (4 cm)
6	Colour	Black & desert tan and shine less material

TRIAL DIRECTIVES

1	Weight & length – as per specification.
2	<b>Wooden handle – duly covered with rubberized non slip grip.</b>
3	Pick head and adge – well forged alloy and finest tempered steel.
4	User advantage – 50 times cut or hammer – to check hydraulically seated head assembly does not come out or displaced from its position & sharpness does not damage
5	Wooden handle test – to be immersed in water for one day to check if it is soaking water or otherwise.
6	Handle can be tried to bend by putting on 3-4 kg weight in between – to check tensile strength.

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ANNEXURE-'VII'QRs/SPECIFICATION OF NEOPRENE RUBERIZED GLOVES

Sl.No.	Item	Specification
1	Description	Neoprene coated latex gloves which resist chemicals with the neoprene coating while the latex shell maintains flexibility. 28 mil thickness that resists punctures and wear. They are flock lined and chlorinated. For chemical Handling & heavy-duty maintenance.
2	Composition	1. Foam neoprene/synthetic rubber 2. Modacrylic (Liner material) 3. Kevlar (Liner Material) 4. Glass fibre (Liner material).
3	Type	1. Excellent cut resistance 2. Flame resistance 3. Arc flash, HRC 2 4. Washable and should also provide High level of comfort.
4	Test level	1. Abrasion resistance, Performance level 2 2. Blade cut resistance, Performance level 5 3. Tear resistance, Performance level 4 4. Puncture resistance, Performance level 2 5. Contact heat resistance, Performance level 1 Contact temperature 100°C>15s 6. Convective heat resistance, Performance level 2 Heat, Transfer Index >7s 7. Radiant heat resistance, Performance level 1 Heat Transfer>7s
5	Dimension	Gauze, 13 Length 225-260 mm. Construction, Knitted.
6	Colour	Black and Green/or disrupted green, grey, white and black.

TRIAL DIRECTIVE

1	Size – As per specification
2	Comfort level – by wearing and or handling any device
3	Abrasion check – by rubbing it on any slight rough material.
4	Flame resistance – 1-2 seconds exposure to flames be given to check any damage etc.
5	Tear resistance – by pulling it with force to check any damage or crack.
6	Cut/puncture resistance – in normal by removing thorny bushes.
7	Flexibility – Same as Sl.No.5.

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QRs/SPECIFICATION OF ELECTRONIC SUPER GEN NVD WITH INBUILT  
INFRARED AND VISION BW

Sl. No.	Item	Specification		
1	Description	With powerful long range night vision binocular, 5 to 8 x magnifications for user high resolution and clarity over extended ranges. Waterproof and can withstand the rigors of almost any environment.		
2	Construction	<ul style="list-style-type: none"> <li>• Detachable Long Range infrared illuminator</li> <li>• Multi-coated all-glass optics</li> <li>• Adjustable Inter-pupillary Distance</li> <li>• Built-in Flood infrared illuminator</li> <li>• Tripod mountable (optional)</li> <li>• Water and fog resistant</li> <li>• Two-year warranty.</li> </ul>		
3	Specification	<table border="0"> <tr> <td style="vertical-align: top;"> <ol style="list-style-type: none"> <li>1. Total Darkness IR system - Yes.</li> <li>2. "SMART" Technology - optional</li> <li>3. Multi-Purpose System - optional</li> <li>4. IIT Generation - CGT</li> <li>5. Photocathode Type</li> <li>6. Multi - Alkali</li> <li>7. Resolution - 45-54 lp/mm</li> <li>8. Signal to Noise Ratio - 16-22</li> <li>9. Figure of Merit - &lt;1250</li> <li>10. MTTF - Mean Time Before Failure 10,000 hours</li> <li>11. Magnification - 5 to 8x</li> <li>12. Lens System-216 mm, Catadioptric</li> <li>13. Proshield Lens Coating</li> <li>14. FOV -6.5°</li> <li>15. Range of Focus - 20 m/y to infinity</li> <li>16. Diopter Adjustment - 6 to +5</li> <li>17. Controls - Direct</li> <li>18. Automatic Brightness Control</li> <li>19. Bright Light Cut-off</li> </ol> </td> <td style="vertical-align: top;"> <ol style="list-style-type: none"> <li>20. Automatic Shut-off system</li> <li>21. Infrared Illuminator</li> <li>22. IR Indicator</li> <li>23. Low Battery Indicator</li> <li>24. Power Supply - 1x3 V CR 123A type battery.</li> <li>25. Battery Life - 50 hrs</li> <li>26. Environmental Rating - Waterproof</li> <li>27. MIL-STD-810-Complies</li> <li>28. Operating Temperature - -40 to +50°C</li> <li>29. Storage Temperature - -50 to +70°C</li> <li>30. Dimensions - 212 x 150 x or 133 mm±2mm 8.4"x6"x5.3"</li> <li>31. Weight - 1.7 kg or 3.75 lbs</li> <li>32. Warranty - 2 years</li> </ol> </td> </tr> </table>	<ol style="list-style-type: none"> <li>1. Total Darkness IR system - Yes.</li> <li>2. "SMART" Technology - optional</li> <li>3. Multi-Purpose System - optional</li> <li>4. IIT Generation - CGT</li> <li>5. Photocathode Type</li> <li>6. Multi - Alkali</li> <li>7. Resolution - 45-54 lp/mm</li> <li>8. Signal to Noise Ratio - 16-22</li> <li>9. Figure of Merit - &lt;1250</li> <li>10. MTTF - Mean Time Before Failure 10,000 hours</li> <li>11. Magnification - 5 to 8x</li> <li>12. Lens System-216 mm, Catadioptric</li> <li>13. Proshield Lens Coating</li> <li>14. FOV -6.5°</li> <li>15. Range of Focus - 20 m/y to infinity</li> <li>16. Diopter Adjustment - 6 to +5</li> <li>17. Controls - Direct</li> <li>18. Automatic Brightness Control</li> <li>19. Bright Light Cut-off</li> </ol>	<ol style="list-style-type: none"> <li>20. Automatic Shut-off system</li> <li>21. Infrared Illuminator</li> <li>22. IR Indicator</li> <li>23. Low Battery Indicator</li> <li>24. Power Supply - 1x3 V CR 123A type battery.</li> <li>25. Battery Life - 50 hrs</li> <li>26. Environmental Rating - Waterproof</li> <li>27. MIL-STD-810-Complies</li> <li>28. Operating Temperature - -40 to +50°C</li> <li>29. Storage Temperature - -50 to +70°C</li> <li>30. Dimensions - 212 x 150 x or 133 mm±2mm 8.4"x6"x5.3"</li> <li>31. Weight - 1.7 kg or 3.75 lbs</li> <li>32. Warranty - 2 years</li> </ol>
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4	Additional specs	<ul style="list-style-type: none"> <li>• Extra battery</li> <li>• Charger unit with cable</li> <li>• Pack</li> <li>• Illustrated manuals</li> <li>• Handy Guide book</li> <li>• Tripod stand as an optional eqpt.</li> </ul>		

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TRIAL DIRECTIVES

1	Visibility – in low light and dark condition up to 300 meters and above.
2	Water, fog and moist condition does not affect its lenses – firm should produce national international certificates.
3	Size and weight as per specification.
4	Temperature – can be kept in cold storage to minimum possible temp and then operated to see if it works as was in normal condition. Similar test can be done for high temperature condition as provided.
5	Lens & its coating – wipe lens with lens cleanser and there should not get visible scratch sign.
6	Noise ratio should be almost faint while operating and clicking the device. – Firm should produce national/international certificates.
7	Auto on/off switch when not in use – firm should produce national/international certificates.
8	FOC- Firm should submit supporting specified parameters and national/international certificates. The test should be done at ATS (applied technical services lab or equivalent) as per testing procedure.
9	Accessories and paper should be checked physically as per specification.
10	Place one Jawan in camouflage dress at 300 meters within woods in night ability for detection – Should be in Black & White with visible image of human which can be an easily differentiated with other objects.
11	All specification should be supported with lab and test report of national/international standards.

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ANNEXURE-IXQRs/SPECIFICATION OF 1.5 KV GEN SET

Sl. No.	Item	Specification
1	Description	Portable generator 1.5 KVA to produce power upto 1500 watt.
2	Type	1. Easy to carry 2. Easy to install with proper base. 3. Diesel/Petrol version – 10 ltrs.
3	Technical specification	1. 220 volt portable Gen 1.5 KVA with AVR. 2. Good quality & service 3. OEM/ODM 4. CE SONCAP ISO9001
4	Features	1. Four stroke OHV motor, low POL consumption, stable performance 2. AC Generator, stable performance, low fault rate. 3. Separate DC output, battery loading function available. 4. Machine low oil alarm system, automatic protection of motor, damage free 5. High capacity of oil tank, long time operation. 6. Gen set should aggregate with 50 or 60hz values.

TRIAL DIRECTIVES

1	Test for Load capacity – 1400 watts connection
2	Fuel capacity – 10 ltrs
3	Sound vibration – Mechanical/sound vibration should be as less as possible
4	Ruggedness test – by pulling on hard surface to check fitted accessories or in build mechanism is not displaced and remain intact
5	Time duration – Gen set is made to run continuously for 6 hrs without any break
6	Separate DC output availability
7	Auto Cut – the system is to be checked by manually applying short circuit and at that time gen connection should automatically cut off from main supply and does not get any damage.

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QRs/SPECIFICATION OF LIGHT WEIGHT TENT 8 MEN (AIR BEAM FRAME)

Sl. No.	Item	Specification
1	Description	For shelter with interconnectivity, durable and easy for deployment Clean Span Engineered – all weather condition Portable/Re-locatable Light Weight Quick Installation Temporary
2	Type/design	<ol style="list-style-type: none"> <li>1. Clear span frame supported tension fabric structures, should be modular by design.</li> <li>2. There should not be internal columns or supports, Pre-engineered kits do not require on site fabrication or welding of frame or fabric to install or relocate.</li> <li>3. Structure is fully re-locatable, allowing for disassembly and reuse of all components (except anchors) without additional fabrication or welding.</li> <li>4. Preferably arch shape</li> <li>5. The tent is light weight and will preferably erect on arch shaped air beams.</li> <li>6. Tent should be complete and with ground sheet, door curtain and window curtains.</li> <li>7. Tent doors have full secondary mesh door that are ideal for extra ventilation while keeping even the smallest of insects out.</li> <li>8. Zipped cable entry at the base of the flysheet with internal cable ties.</li> <li>9. Low &amp; high level vents allow a pleasant and adjustable flow of air through the tent.</li> <li>10. Large Crystal Clear PVC windows, with privacy curtains, allow maximum light and visibility</li> <li>11. Roller bag for storing and carrying it.</li> </ol>
3	Frame spaces	<ol style="list-style-type: none"> <li>1. Frame should consists of series of identical twinge with connecting purloin and cables.</li> <li>2. The arches should have rounded eaves and ridge with snap button connections.</li> <li>3. Frame components for arches should be hollow oval beam design made from extruded corrosion resistant, anodized lightweight 6061Tâ T6 structural grade aluminum.</li> </ol>

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		<ol style="list-style-type: none"> <li>The extrusion for arches should have integral inner and outer channels to accommodate exterior fabric shell and interior liner panels.</li> <li>The extrusion is designed to allow rapid attachment or relocation of lighting, rigging and other accessories without drilling or welding.</li> <li>Additional or spare screw and attachments etc should be included with tent.</li> </ol>
4	Engineering specs	<ol style="list-style-type: none"> <li>The structure designed to resist constant winds and gusts easily.</li> <li>Structure is capable of being equipped itself and do not require additional welding or drilling into the frame.</li> <li>The structure should be designed for installation on concrete, asphalt, or rough or grassy ground.</li> </ol>
5	Fabric specs	<ol style="list-style-type: none"> <li>Fabric shell should be flame resistant, strong enough to meet the performance of the characteristics required of the structure.</li> <li>Flysheet, ProTex 4000 polyester embossed 75D flysheet, Inner, Breathable lightweight polyester. The fabric may be 18 oz laminate or 22 oz coated and opaque or translucent.</li> <li>Fabric panels for the bays of the structure should be so designed that installation and removal can be accomplished by the persons on the ground.</li> <li>The fabric panels should become integral with the frame during installation so that unexpected winds during installation cannot sail the fabric away from the frame. Fabric panels are tensioned tightly with a ratchet system to frame.</li> <li>Fabric panels and optional inner liner fabric panels should be capable of being installed, replaced or removed individually while the structure is in erection and operational. Installation kits and Relocation kits are available.</li> <li>There will be two files or fabric layers of the tent. The tent will be made of 6000 mm water proof 75 denier breathable polyester flysheet. The fabric will be flame retardant as per CPAI-84 standard. The ground sheet will be of Sewn Polyester which keeps the tent comfortably scaled and protected from weather and insects.</li> </ol>
6	Total cubic area	Approx 15m <sup>3</sup> Space (volume) inside the whole tent. (Floor area of tent) and 5.6m <sup>2</sup> sleeping area.
7	Height when installed	2m interior, 3m exterior height approx to the maximum.
8	Closed dimensions	78x48x40cm appx
9	Total weight	Approx 28 to 30 kg
10	Erection time	10-15 mins
11	Life span	10 years in storage condition In use - 3-4 years.

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TRIAL DIRECTIVES

1	Size- as per specification.
2	Foldability check – can be rolled in one piece.
3	Portability check – can be easily dismantled and re-erected.
4	Strength – can withstand windy atmosphere and rain. Wind and rain can be simulated to check its strength and rainproof condition.
5	Space as mentioned should be check whether it can accommodate 8 persons or otherwise.
6	Transparency of window, window panes and air circulation for easy breathing, dwelling comfort etc. – may be checked by keeping manpower for one day.
7	Fabric i.e. protex polyster may be get checked or certificate from Govt. recognized firm should be produced as per fabric specs.
8	Fabric lining should be minutely checked to see that there is no break or damage visible after two to three uses. Fabric panels should be checked to see that these can be integrated, fixed and attached with panels easily.
9	Frame purloins should be identical and strong enough - 2/3 uses would be done to check its strength.
10	Fabric should be flame resistance or not easily inflammable and damaged by light flame – a test report may be produced.

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ANNEXURE-'XI'QRs/SPECIFICATION OF CAMP CHAIR LIGHT WEIGHT FOLDING

Sl. No.	Item	Specification
1	Description	Easy-folding outdoor folding chair with comfortable arm rest and mesh holder for glass/bottle etc. Ideal for the relaxed summer nights sitting in front of the fire with a cold beverage in hand. Lightweight, portable and includes a durable carrying bag.
2	Type	1. Easily folding design. 2. Lightweight and portable. 3. Water proof & all weather proof.
3	Material	1.600 polyester FABRIC.
4	Size	Size – 22x22x16.5/31.5inch ± 2 inches
5	Features	1. Comfortable arm rest with a mesh holder. 2. Frame – steel tube diameter 0.6 inch.
6	Capacity	90 to 100 kg load.

TRIAL DIRECTIVES

1	Weight and size as per specification.
2	Folding test- all arms/legs/hand rest get folded to get a shape of one flat piece which can be stacked easily and carried along with bag-pack.
3	Water resistance test – drizzle water for 15 minutes and wipe – Further check water is not soaked.
4	Weight capacity test – put at least 120 kgs weight on its' seat – the seat cloth should get slacken off and comes back to normal shape.
5	Steel tube test – the material should be of steel even if chrome plated/coating.

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ANNEXURE-'XII'QRs/SPECIFICATION OF CAMP TABLE LIGHT WEIGHT FOLDING

Sl. No.	Item	Specification
1	Description	Quick and easy to set up, can be carried and light weight, all weather proof, collapsible.
1	Type	<ol style="list-style-type: none"> <li>1. Easily folding design with buckle and straps on each corner and adjustable for its tautness.</li> <li>2. Lightweight and portable.</li> <li>3. Water proof &amp; all weather proof.</li> </ol>
2	Cloth Material	Fabric, 600D Polyester Fabric
3	Specification	<ol style="list-style-type: none"> <li>1. Dimensions 27" wide x 27" long x 26" tall approx.</li> <li>2. Weight- 6-7 lbs approx.</li> </ol>
4	Features	<ul style="list-style-type: none"> <li>• Double Level Allows Top Level to be open for food &amp; games. Two layers, the lower level should have 4 built in beverage holders.</li> <li>• Buckles at Each Corner Offer Quick Setup</li> <li>• Buckles Allow User to Adjust the Tautness</li> <li>• Four Built in Beverage Holders</li> <li>• Shoulder Carry Bag.</li> </ul>

TRIAL DIRECTIVES

1	Weight & size as per specification.
2	Folding test – legs etc. folds to be one flat piece, easy to stack/carry.
3	Weight capacity test – put on 3-4 kg weight and check if it sustains and comes back to normal shape.
4	Buckle tautness test – put extra weight on top and check the straps gives leverage to tighten up.
5	Built in beverages holder – holding capability of 1 litre capacity bottles/strength of weave.
6	Steel tube test – the material should be of steel.
7	Water resistance test – drizzle water for 15 minutes and wipe – further check water is not soaked.

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ANNEXURE-'XIIIQRs/SPECIFICATION OF FLEXI WATER TANK (2000 LTR)

Sl. No.	Item	Specification
1	Description	Portable water tanks manufactured from 1100 gms high quality PVC to the UNICEF or Govt. authorized specification as well as being totally enclosed. Keeping the potable water free from contamination. The material incorporates a layer of black to eliminate all light penetration to prevent algae growth.
2	Type/Design	<ol style="list-style-type: none"> <li>1. The tanks should be designed to sit on the ground and are self supporting housed within an additional detachable cage container.</li> <li>2. Should be ideal for bulk liquid transportation in ISO shipping containers or box.</li> <li>3. Should be completely reusable</li> <li>4. Lid attached and detachable</li> <li>5. Capacity, 2000 liters (minimum) Volume 2.4 m<sup>3</sup></li> <li>6. Maximum Weight 18 to 20 Kgs. Area of Bottom of the Tank Appx 4.91 sqm±0.5 sqm meters</li> <li>7. Bottom diameter 2500 mm appx</li> <li>8. Top Dia meter 1250 mm appx</li> <li>9. Height 850 mm appx.</li> </ol>
3	Technical specification	<p>The Flexi water tank will be foldable and easy to carry water storage tank in onion shape and will be of the capacity of minimum 2000 ltrs. The tank will be made of Food Grade High tensile Polyester fabric laminated with non foam PVC. The outer of the fabric will be non reflective and matt finish. The tank and its fabric will meet food grade quality as per US-FDA, 175-300.</p> <p>The features of the tank with detachable holding container will be as under :-</p> <ol style="list-style-type: none"> <li>1. Unique Quality construction for safe drinking water liquid transportation.</li> <li>2. Standard 50 mm (2 inch) full/drain fittings with ball valve, dust cap and ball valve with male cam lock. Center vent non-pressure relief cap(with and without).</li> <li>3. Inlet strainer fitted and 90 mm outlet strainer supplied.</li> <li>4. Specification includes M.BSP outlets, pressure relief valve and repair kit. Extra - inlet/outlet, valves or groundsheets.</li> </ol>

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		5. Size of detachable container to accommodate and provide all round support to flexi tank.
4	Fabric specs	<p><b>Base Fabric :</b> Made out of High Tenacity Polyester Filament Yarn  Coating Material : Non Foam PVC  Finish : MATT  Denier Warp/Weft : 1000/1000  Weave : Panama  Greige fabric : GSM 290</p> <p><b>Coated Fabric</b>  Weight/m<sup>2</sup> g : 1100 ± 5%  Thickness mm : 10 mm appx  Warp (kg) 60 Minimum.  Breaking Strength Weft kg/5 cm : 400 Minimum  Tear Strength (Sample size 200 mm x 150 mm with 50 mm tongue)  Water Proofness @ 220 psi : No leak IS : 7016 (PART 7)-1986.  As per BS : 3424 part 5, weft (kg) 60 minimum.  As per BS 3424 part 5 can also be included so that correct material is (2) adhesion to base fabric Warp (kg/5.0cm) : 7.0 minimum as per IS 7016 (part-v_1987 method7A)</p>
5	Size	Capacity – 2000 Ltrs

### TRIAL DIRECTIVES

1	Capacity – water to be filled up to 2000 ltr
2	Self seating test – in filled up condition and its stability
3	Strength – i) Can withhold said quantity. ii) Run the vehicle with it in loaded condition for 40-50 km to check it can sustain its compactness as well as its material does not tear out or damaged.
4	MPSB valves – check valve leakage
5	Water quality – the taste and odor of water should not change if kept for hours
6	Container – should be detachable and stacked flat when not needed. It can house flexi tank in filled up condition and give all round support.

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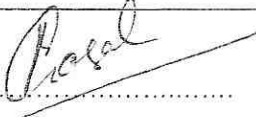
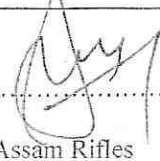
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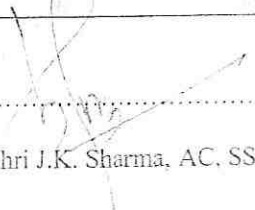
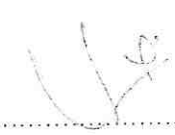
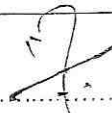
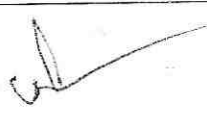
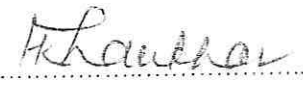
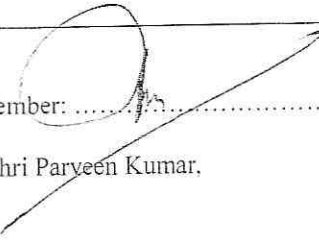
QRs/SPECIFICATION OF FOLDABLE JERRI CANE (10 LTRS)

Sl. No.	Item	Specification
1	Description	Use as water container, foldable/collapsible type with exterior packaging of water proof foil.
2	Type/Design	1. Foldable/collapsible 2. With integral handle attached with body, user can move, transport and store it easily. 3. One hand operation – easy filling, cap can be easily unscrewed. 4. Cap have additional tape type seal to save spill of water. 5. Shape – square. 6. Additional strap covering jerry cane handle – to give extra strength and stability.
3.	Size	Size – 30x20x25 cm Folding - 20x25x06±5
4	Weight	Full – 10.2 kg Empty – 180 gms
5	Colour	Nearly transparent With green handle Blue cap
6	Material	Low Density polyethylene, blow molded.
7	Shelf life	10 Years when kept in original packaging between 10° to 50° C.

TRIAL DIRECTIVES

1	Capacity test – water up to 10 ltrs be filled
2	Folding test – after folding it should shape flat and is easy to put in pouch or backpack.
3	Filled up water should be kept minimum for 4 hrs to check water odour and taste does not change
4	Cap and additional seal – water should not leak when packed and carried.
5	Transparency – water and its non soluble contents should be visible from outside

Member:.....  Shri M.M. Gosal, Dy. S.P., BPR&D	Member:.....  Shri S.K. Thakur, Assam Rifles
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<p>Member:  .....</p> <p>Shri J.K. Sharma, AC, SSB</p>	<p>Member:  .....</p> <p>Shri Sukhwinder Singh, AC, ITBP.</p>
<p>Member:  .....</p> <p>Shri Mruthyunjaya, S.D., A/C, CISF</p>	<p>Member:  .....</p> <p>Shri Chandra Shekhar, DC, CoBRA Sector</p>
<p>Member:  .....</p> <p>Shri Harjinder Kumar, Dy.Comdt. BSF</p>	<p>Member:  .....</p> <p>Shri Parveen Kumar, DIG(Prov), CRPF</p>