



**SHORT TENDER CALL NOTICE**  
**BIJU PATNAIK STATE POLICE ACADEMY BHUBANESWAR**

Sealed tenders are invited for purchase of different equipments/ accessories for Biju Patnaik State Police Academy, Bhubaneswar as listed below. The approximate quantity required is noted below.

Sl. No	Name of the items	Quantity
1	Advance Weapon training Simulator Consisting of Video projection, instructor, Console basic Soft ware.	1 no
2	Driving Training Simulator	1 no
3	Gym Equipment	
	I)Trade Mill,	1 set
	II)Multi Gym	1 set
	III)Rowing Machine	1 set
	IV)Bench Press weight	1 set
4	AUDIO VISUAL PROJECTION SYSTEM(Including hardware and software)	3 nos
5	Crime Scene Simulator Software and Hardware	2 nos
6	Digital Interactive Conference System with CCTV Monitor	1 set

The quantity may vary during indent of the items depending upon the budgetary allocation.

1. The tender document may be obtained on payment of Rs 200/- (Rupees two hundred) only between 11 AM to 4PM on every working day from the Office of the undersigned in the address given below. Tender documents can also be obtained by sending a self-stamped ( Rs.80/-) envelop of size not less than 35 cms. X 25 cm. along with a Demand Draft, non –A/ C payee of Rs.200/- (Rupees two hundred) only payable at State Bank of India Govt Treasury Branch, Bhubaneswar drawn in favour of Director of Biju Patanaik State Police Academy, Bhubneswar. The tender duly filled in shall be submitted in the address given below.

- 1 The tender call notice, technical specification and quantities etc. shall also be available in our Website, i.e [www.bpspaorissa.gov.in](http://www.bpspaorissa.gov.in)
- 2 Bids submitted otherwise than in the manner prescribed in the tender document shall be rejected.
- 3 Tender Calling Authority has the right to accept or reject the tender without assigning any reasons thereof.
- 4 Date of issue of Tender Document is **15-2-2012**
- 5 Last date of issue of Tender Document is **25-2-2012**
- 6 Last date of receipt of sealed tender and sample **29-2-2012**
- 7 Date of Opening of sealed tenders/technical bids **1-3-2012**
- 8 Address:-The Asst Director, BPSPA, Ranasinghpur Odisha, Bhubaneswar-751019 , Tel.Ph-FAX-.0674- 2470366

The tenders received after the stipulated date will not be taken into consideration and liable for rejection.

Sd/-  
Asst, Director  
BPSPA, BHUBANESWAR

Sl.No	Name of the Items	Quantity	Technical Specification	EMD (in Rs.)
1.	Advance Weapon training Simulator Consisting of Video projection, instructor, Console basic Soft ware.	1 no	<ol style="list-style-type: none"> <li>1. The system should be scientifically structured to take a soldier gradually to advanced levels of training. The training should be structured at following six levels.               <ol style="list-style-type: none"> <li>(a) Level I: Squad post or basic marksmanship kills.</li> <li>(b) Level II: Grouping fire at short ranges.</li> <li>(c) Level III: Application and classification at long ranges.</li> <li>(d) Level IV: Advanced training for moving target/pop up targets</li> <li>(e) Level V: Engagement in CGI based tactical scenarios.</li> <li>(f) Level VI: Judgmental training in video based scenarios.</li> </ol> </li> <li>2. It should support all small Arms from pistol to LMG.</li> <li>3. Should have computer based tutorials for the trainees prior to firing, so that trainees become acquainted and conversant with small arms training Simulatre.</li> <li>4. Should have Jungle lane shooting wherein it appears that the firer is moving through a jungle lane and targets appear along the way as in actual.</li> <li>5. Ambidextrous firing should be possible.</li> <li>6. Advanced CGI scenarios should be created wherein all the characters can walk, run, crawl, fire from various firing positions from point to point as defined by the user.</li> <li>7. User should add the effect of blasts and smoke in the computer generated scenarios (CGI) scenarios at predetermined time and specific intervals.</li> <li>8. Operational Environment:- Different types of operational environment should be provided including built up area, high rise buildings, shopping malls, historical monuments, desert area, jungle and mountainous terrain etc. These Operational Environments should be available for integration into the system as and when required during warranty period. For conventional scenarios, highly realistic terrains should be included as, HAA, J&amp;K North East, Punjab, Canals, Semi-desert, desert, plain and Built up area.</li> <li>9. System should be able to fire different weapon simultaneously at different lanes each with different ranges.</li> <li>10. (a) The system shall be capable of functioning on all types of Small Arms including 5.56mm Insas Rifle, 5.56mm Insas LMG , 7.62mm SLR , 7.62 mm LMG , 9mm Carbine Machine , MP9 (B&amp;G), MP5, colt M4, M&amp;P 9mm Pistol, 9mm Pistol , AK-47, 9mm Auto Glock Pistol, 7.62mm Styer, Sniper Rifle.               <ol style="list-style-type: none"> <li>(b) Capability to integrate any type of small arms from bolt action to automatic weapons.</li> <li>(c) Weapons to be integrated should be original weapons for real training value.</li> <li>(d) Capability to impart weapon handling lessons like action on stoppages, weapon cleaning drills on original weapons.</li> </ol> </li> <li>11. Different types of targets should be provided including Fig 11, Fig 12, 1Ton Vehicle, 3 Ton Vehicle, 5 Ton Vehicle, Car, Jeep, Gypsy, Bus, 130 Cbt, 130 Czt, Fig 1x1 ,Fig 2x2 ,4x4 Target, Friend &amp; Foe , and bunker.</li> </ol>	50,000/-

		<p>In addition, user defined targets should be integrated, if required. Vehicle targets such as Light, Medium &amp; Heavy motor vehicles should be included.</p> <ol style="list-style-type: none"> <li>12. The system should be of four lanes and it should enable firers to fire simultaneously on different targets each at different ranges and capable of being controlled and operated by one instructor using a single console.</li> <li>13. Controller should be able to assign specific number of rounds to individual lanes or to all the lanes simultaneously, with one entry.</li> <li>14. Additional targets if required by user should be included. Each lane should be capable of using different weapons.</li> <li>15. System should be capable of showing aiming mark at all ranges at the option of the instructor. An aimer depicting point of aim with an option to disable the aimer should be provided</li> <li>16. Horizontal and vertical graph capturing movement of barrel before firing should be provided</li> <li>17. System should be capable of enabling the user to incorporate video shots into the simulation to include scenario for patrolling, ambush, hostage rescue, VIP security and various CI OPS. The system should also have ability to add more scenarios to a minimum of 100.</li> <li>18. Ranging from simple to complex, these video scenarios should be relevant to Indian security forces and to be created by the end user. Software should be provided.</li> <li>19. The system should be capable of generating 3-D scenario including humans, vehicles and structures. 3-D human targets should react to firing as would be in case of real humans. The software should be provided to enable user to create own 3D scenarios.</li> <li>20. System should be capable of simulating following conditions:- <ol style="list-style-type: none"> <li>a) Different modes of sky, such as clear, sparsely clouded densely clouded and rainy conditions.</li> <li>b) Wind velocity with direction and the resultant effect on bullets should be seen at the target.</li> <li>c) Different times of the day i.e dawn, day, dusk and night allowing instructor specify any point in day.</li> <li>d) Fog conditions with capability of depicting visibility range in meters. All the simulations should be able to be controlled by the instructor.</li> </ol> </li> <li>21. System should be capable of enabling end user to develop, modify and integrate targets. Once integrated the targets should appear in menu of the software.</li> <li>22. System should be capable of depicting ranges from 5 to 2000 mtrs in individual lanes or in all the lanes simultaneously.</li> <li>23. The system should provide pneumatic recoil to create realistic firing experience as per each weapon being fired on the system.</li> <li>24. Documentation <ol style="list-style-type: none"> <li>(a) The system should be able to store and display complete details of trainees including their personal details, score, date of firing and analysis.</li> </ol> </li> </ol>	
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		<p>b) The data should be available to the instructors under separate user groups. The system should allow the users to format this data as per their requirement.</p> <p>(c) Complete trainees details should be stored including their rank, score, etc. Their performance over a period of time should be stored and displayed as and when required. To accommodate specific needs of the organization the format should allow customization. The following documents should be provided:-</p> <ul style="list-style-type: none"> <li>i) Software test procedure</li> <li>ii) Software user manual</li> <li>iii) Software installation procedure document</li> <li>iv) Software and hardware bilingual user handbook in English and Hindi (Devnagri)</li> <li>v) Software verification and validation and reliability document.</li> <li>vi) Software should be upgradeable.</li> </ul> <p><b>25.</b> The system should be able to generate detailed reports of performance of trainees with facility to customize the same by the user. This generation of report should be both weapon and trainee specific.</p> <p><b>26.</b> Analysis of firing and corrective action should be suggested by software</p> <p><b>27.</b> Equipment should be semi portable and should be installed and dismantled in two hours each.</p> <p><b>28.</b> The system should have facility to preview the range and conditions in the set-up, without starting the exercise.</p> <p><b>29.</b> The system should have special arrangement for earthing. A lightning conductor kit should be provided.</p> <p><b>30.</b> The system should have facility for weapons calibration with the provision of storing details of the calibration.</p> <p><b>31.</b> Squad Post Training:</p> <ul style="list-style-type: none"> <li>(a) The system should provide facilities of squad post training in normal &amp; advanced modes with gradual increase in degree of complexity.</li> <li>(b) Squad post training should be provided in two modes with visual feedback normal (regular target) and Advanced (moving pendulum). In normal mode the trainee has to view the Bull's eye of the target. While, the trainee is on bull's eye a visual indicator should be given to the trainee. In advanced mode the trainee should continuously track a pendulum. The speed of the pendulum should be capable of being varied to change the complexity of the training. Feedback as to the percentage of time the trainee was on target should be displayed.</li> </ul> <p><b>32.</b> The system should provide static target for application and classification fire. These firing practices should include :-</p> <ul style="list-style-type: none"> <li>(a) Static Target Practice <ul style="list-style-type: none"> <li>i) Static Targets of application fire need to be provided in standard mode. Additional features in static targets should include.</li> <li>ii) Timed fire with facility to customize number of exposure and time by the user.</li> <li>iii) Exercise should be timed.</li> <li>iv) Facility to change range and firing conditions.</li> </ul> </li> </ul>	
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		<p>impact (follow through) need to be displayed. In the case of individual lanes the replay should be viewed in normal and zoom mode. This should enable the instructor to interpret the mistakes and suggest corrective measures.</p> <p>(d) Replay facility providing information on track and bullet numbers at the point of impact on the target should be provided.</p> <p>(e) The user should be able to control the speed of the replay.</p> <p><b>34.</b> The user should be able to carry out bullet by bullet analysis.</p> <p><b>35.</b> Print out of the result should included some or all of the parameters, as per the discretion of the user, with facility to preview the printout.</p> <p><b>36.</b> Graphical depiction of movement of weapon before release of bullet /pressing trigger, both in horizontal and vertical plain should be available to the user.</p> <p><b>37.</b> Option to facilitate rotation of targets on being hit should be available.</p> <p><b>38.</b> Random appearance of targets at different ranges should be available.</p> <p><b>39.</b> Facility to customize appearance of targets and their intervals at each lane should be available.</p> <p><b>40.</b> The system should provide for grouping exercises with facility to analyze groups to include feed back on percentage of accuracy in holding, aiming and trigger operations. The facility to measure the group should be available both in inches and centimetres with an option to choose one.</p> <p><b>41.</b> A grouping exercise which judges the grouping of bullets fired by a trainee, and provides Hold, Aim and Trigger (HAT) feedback with percentage accuracy.</p> <p><b>42.</b> Annual Range Course. Software should be provided to facilitate the end user to develop and incorporate annual range courses. Annual range course once designed should appear as integrated – as a menu item- in the software.</p> <p><b>43.</b> Miscellaneous.</p> <p>a) The software with Devnagri Script should also be supplied.</p> <p>b) The Proof of satisfactory after sale service should be enclosed from at least 5 different users in India.</p> <p>c) The firm should have service centers located in Eastern, Western, Northern, Southern and Central regions of the country.</p> <p>d) The system should be portable with facility to set it up within 2 hours. It should be possible to transport the Simulatre in Qualis/Innova size vehicles.</p> <p>e) Total weight of the system should not be more than 600kgs.</p> <p>f) The AMC clause should allow for AMC after expiry of the warranty.</p> <p>g) The system should work within normal voltage of 220 volts AC single phase/Generator/30 minutes UPS backup.</p> <p>h) The Computer with latest configuration 4 GB RAM, 320 GB HDD, CD- RW/DVD.</p> <p>i) The vendor should have supplied at least 50 such</p>	
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			<p>systems to security forces</p> <p>j) Should have supplied at least 20 such systems in last two years</p> <p>k) The Simulatres should be successfully installed within 45 days of issuing of PO</p> <p><b>44. Storage Capacity:-</b> There should be adequate data storage capacity for minimum 5 years available in the Simulatre for use during its life span.</p> <p><b>45. Endurance:-</b> It should be able to operate for 6 hours without a break and a minimum of 12 hours of operation in a day should be possible.</p> <p><b>46. Service Life:-</b> The service life should be minimum 10 years.</p> <p><b>47. Temperature Range:-</b> The Simulatre should be capable to operate effectively in the temperature ranging from (-) 2 degree Celsius to (+) 55 degree Celsius.</p> <p><b>48. Tropical Condition:-</b> The system should be capable of operating up to (+) 35 degree Celsius with 90% relative humidity.</p> <p><b>49. Administrative Requirements</b></p> <p>(a) The firm should have sold such advanced weapons Simulatres to at least 10 different police organizations in India in the last 5 years. Certificate that the systems are working satisfactorily from last one year from four such organizations should be enclosed along with the technical bid.</p> <p>(b) A reasonable level of in house R&amp;D back up of the manufacturer in India is desirable as he end user would like to constantly review and upgrade the technology to cater to future training requirements. Such R&amp;D facility should be certified by Government of India.</p> <p>(c) The end-user may share confidential information with the firm for necessary customization to meet its specific requirements. To ensure that the firm has information security systems in place, the firm should be ISO / IEC 27001 (ISMS) certified and complaint.</p> <p>(d) The equipment should be portable and it should be possible to set it up at different sites within 2 hours.</p> <p>(e) The maximum time required to attend a service call should be less than 7 days from the date of receipt of call but on an average should not exceed 4 working days.</p> <p>(f) Comprehensive AMC should not be more than 8% of the invoice price and should allow for entering into the AMC contract after expiry of the warranty.</p> <p>(g) Life of system should be minimum 10 years. The warranty which will be of minimum three years period on comprehensive. AMC charges beyond the warranty period should be stated to arrive at the cost.</p>	
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2.	Driving Training Simulator with motion platform for light vehicle	1 No	<p><b>PART A: GENERAL INSTRUCTIONS</b></p> <ol style="list-style-type: none"> <li>1. Simulation: <ol style="list-style-type: none"> <li>a. The Equipment Simulator shall simulate the drivers operating conditions of the Motor Vehicle as mentioned in this document.</li> <li>b. Conditions to be simulated should include rain, fog, dust, night operations, slippery road conditions and hazards being experienced by the drivers.</li> <li>c. Series of training scenarios that varies in complexity from simplistic scenarios to very complex and difficult scenarios.</li> <li>d. The design is such that the assessment of drivers ability to reflect to emergency situations like: <ol style="list-style-type: none"> <li>i) Engine / Machine failure.</li> <li>ii) Failure of brakes resulting in sliding/rolling down conditions</li> <li>iii) Emergencies</li> </ol> </li> <li>e. Generation of complete report at the end of each training session.</li> <li>f. Facility to set own exercises as per the requirement of trainer and following the exercise by the trainee.</li> <li>g. Fault identification, analysis and rectification.</li> <li>h. Content of training course will be <ol style="list-style-type: none"> <li>i) Pre-Simulation</li> <li>ii) Description</li> <li>iii) Purpose</li> <li>iv) Operation</li> <li>v) Maintenance</li> <li>vi) Troubleshooting</li> <li>vii) Self Evaluation</li> </ol> </li> <li>i) The simulator should be designed such that the training can be imparted for New driver.</li> <li>ii) Evaluating the performance of the existing driver</li> <li>iii) Refresher training</li> </ol> </li> <li>2. Common Features <ol style="list-style-type: none"> <li>a) Should provide and promote high safety standards.</li> <li>b) Should have series of training scenarios that vary in complexity from simplistic scenarios to very complex and difficult scenarios.</li> <li>c) The simulator design should enable correct mechanical operation and assist to up-grade the skills of existing drivers.</li> <li>d) Should assist to assess reactions to emergency situations.</li> <li>e) Convert the challenges faced by drivers during their period of duty like maintaining fuel economy, adherence to timings and passenger safety, all at one time.</li> <li>f) Generate report at the end of each session.</li> <li>g) The simulator should be designed such that the training can be imparted for <ol style="list-style-type: none"> <li>i) New driver</li> <li>ii) Evaluating the performance of the existing driver</li> <li>iii) Refresher training</li> </ol> </li> <li>h) The weak points of drivers should immediately be highlighted and analyzed.</li> <li>i) The simulator should have the networking capability to connect up-to 5 driver cabins of various capacities with/without motion platform, which allows independent and simultaneous use of driver cabins. It should be flexible to connect different type of driving</li> </ol> </li> </ol>	50,000/-
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cabins to the same system.

## **PART B -DRIVING SIMULATOR**

01) **PHYSICAL FIDELITY**-While sitting in driving seat of DTS, the driver should be in the vehicle cabin with real instrument panel board and perception of the following perception:

- a) Road and its width, markings, signs
- b) Side view mirror
- c) Traffic control devices
- d) Bridge
- e) Traffic and both directions
- f) Cabin and Road Background
- g) Width and Length of the Vehicle
- h) Street Lights
- i) Tree falling if required
- j) People Movement
- K) Speed Braker and Intersection

## **02ENVIRONMENTAL FIDELITY**

The DTS should give real simulation of the following effects:

- a) Rain, Fog, Snow fall and Sand.
- b) Hill and Cross Country Terrain
- c) All the above during Day and Night
- d) Sun glare
- e) Sand Storm
  
- f) Smoke

**03)LARGE SCREEN DISPLAY:** Three Large Flat Screens curved to 1800 field of view should be provided with the realistic picture with following parameters:

- a) Depth
- b) Magnification
- c) 3D

## **04)SOUND EFFECTS**

DTS should be capable of synchronizing real simulation of sound with action of followings:

- a) Engine start
- b) Engine idle condition
- c) Different gears
- d) Accelerator
- e) Crash
- f) Brake operation
- g) Tyre burst
- h) Horn
- i) Blinker
- j) Realistic environment sound effects
- k) Engine Start Failure Sound
- L) Voice assistance

## **05)MOTION PLATFORM FOR DRIVER CABIN**

For realistic feeling of driving in different situations and terrain the cabin of the vehicle should be mounted on a 6 DoF electrical motion platform to have the moving capabilities such as:-

- a) Pitch
- b) Roll
- c) Heave
- d) Yaw
- e) Surge

f) Sway

**06)CABIN FACILITY**

Real Vehicle Cabin should be provided as per the requirement of the user procured from the OEM of the Vehicle

**07)INSTRUCTOR STATION**

The Instructor station should be well-equipped instructor station. It should provide following facilities:-

- a) System diagnostics
- b) Individual driver records
- c) Individual performance analysis
- d) Introduction of events, emergency situations & Malfunctions like tyre burst, vehicular malfunctions etc.
- e) Error recording and illustration of actions frequently committed by drivers such as:-
  - (i) Time taken to take off foot from accelerator to brake
  - (ii) Right gear v/s right speed
  - (iii) Analyzing of clutch riding
  - (iv) Analyzing accidents
  - (v) Analyzing over speeding
  - (vi) Lane violation & Wrong parking
  - (vii) Traffic signal violation
  - (viii) Analysis of Vehicle Crash
  - (ix) Stall error, Accellator, Brake, Gear Error
  - (x) Speed breaker error
  - (xi) Stop Sign error, Wrong lane error Blinker error, Horn error
  - (xii) Round about error, Speed limit error, Headlight Error
  - (xiii) Analysis of reversing and garaging
  - (xiv) Instructor should be able to create spontaneous obstacles.
  - (xv) The software should enable the instructor to restart the simulation in any point in between.
- f) Reports can be generated date wise and trainee wise
- g) Graphical Representation of trainee performance
- h) Language localization software should be provided with English and Hindi languages by default.

**08)INSTRUCTOR PANEL**

Instructor Console should consist of high end processor configurations:-

- a) Clock speed = Quad Core or more
- b) RAM = 4 GB or more
- c) Video card = 512 MB or more
- d) DVD Combo
- e) Monitor – 17” LCD – 2 nos for VS & IS.
- f) Compatible Keyboard and Mouse
- g) Integrated communication and sound system for communication between instructor and trainee.
- h) Ethernet 1 Gbps
- i) 64 bit Windows Operating System and Instructor Station Software.
- 9) Training in following situations/conditions should be provided:-
  - a) Offensive Driving
  - b) Defensive Driving
  - c) Hill driving
  - d) Desert driving

- e) Driving in Rain/snow/fog/storm conditions
- f) Driving in Metropolis
- g) Cross country driving
- h) Convoy driving
- i) High way driving
- j) Over taking
- k) Parking

**10)INSTRUCTOR'S STATION**

The Basis Instructor station should be able to control one visual station. However the instructor station should be scalable to control upto 5 trainees.

- a) Instructor should be able to communicate with the trainees individually or all at a time.

**11) VISUAL STATION**

The visual station should consists of the following subsystems and modules (minimum requirement):-

- a) Original vehicle cabin of user choice
- b) Screen –Three Large Flat Screens Curved to 1800 field of view should be provided with the realistic picture with following parameters:
  - I. Depth
  - II. Magnification
  - III. 3D
- c) 6 DoF indigenous Electrical Motion platform with a pay load of 1000 kg or more
- d) Projection system- 3 Short Throw projectors with XGA 2700 lumens
- e) Premium Quad Pro based computer with 80GB V2, 1 Gbps Ethernet, 64 bit Windows Operating System, Graphic card 1 GB

**12)SOFTWARE**

Should be windows based and user-friendly software.

**13)POWER REQUIREMENT**

220V 50Hz on mains. Complete system (except motion-platform) should have integrated UPS backup with 50% over load safety with one hour backup.

**14)FAULT FINDING CAPABILITY**

The DTS should be capable of identifying committed errors, which should be recorded and replayed.

**15)FAULT CORRECTING SYSTEM**

By system and through trainers intervention online.

**16)DRIVING TRAINING CURRICULUM**

From basic training to advanced for skilled drivers on user selectable terrains.

- 17)TRAINING** Vendor should provide training for minimum 10 working days. Operating manual/user's handbook should be provided.

- 18) VALIDATION** Software validation from third party.

**22 19) MISCELLANEOUS:**

- a. User Documentation: The simulator software should be able to generate necessary reports and documentation. The software must contain self learning tutorial. It should also have provisions for recovery and troubleshooting
- b) Software updates: Free of cost periodic software updates with the latest software being sold by the company and regular technical support through e-mail, phone, fax during warranty and comprehensive AMC period.
- c) Softwaremaintenance: Remote maintenance of software and software updates, as may be required

		<p>d) After sales service: After sales service should be provided by the company directly The firm should be able to provide service support within 72 Working hours of intimating the fault</p> <p>e) Training: Appropriate training on operation, maintenance and trouble shooting of Simulator, to at least 10 personnel for each simulator will be provided by the successful bidder at the facility of the bidder before the supply or after the installation at end-users location.</p> <p>Training Software: The software content of training course will be training course will be</p> <ul style="list-style-type: none"> <li>i. Pre-Simulation</li> <li>ii. Description</li> <li>iii. Purpose</li> <li>iv. Operation</li> <li>v. Maintenance</li> <li>vi. Troubleshooting</li> <li>vii. Evaluation</li> </ul> <p>The simulator designed such that the training can be imparted for</p> <ul style="list-style-type: none"> <li>i. New driver</li> <li>ii. Evaluating the performance of the existing driver</li> <li>iii. Refresher training</li> <li>iv. The weak points of drivers are immediately highlighted and analyzed</li> </ul> <p>f) Vendor.</p> <ul style="list-style-type: none"> <li>a. The product including major sub-systems, Ex: Electrical Motion Platform and software should have been designed, developed and manufactured indigenously.</li> <li>b. Certificate to the effect that the 'Software, technology, design, developed and manufacturing of the simulator have been carried out at the 'works' of the firm(located within India)</li> <li>c. In-house R&amp;D back up of the manufacturer in India is mandatory as the end user would like to constantly review customize and upgrade the technology to cater to future training requirements. Such R &amp; D facility should be certified by Government of India.</li> <li>d. The supplier should have their service center stationed close to the location of installation to enable quick maintenance in case of equipment breakdowns.</li> <li>e. The company should have been in business of manufacturing, designing and developing such simulators for a minimum period of ten years.</li> <li>f. The company should have supplied at least thirty units of such simulators in India of which minimum ten should be supplied to government security forces with motion platform. Installation &amp; order copies to be enclosed. It should have proven track record of servicing such simulators</li> </ul>	
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3	Gym Equipment	1 set	<ol style="list-style-type: none"> <li>1. Trade mill Speed -0.5 to 10 mph, Elevation-0 to 16%, Motor-3.0 Hp(AC) onwards, Drive System Magnetic Flux Vector Control System, Running Surface-500(W) to 1500 (L) onwards, Display Readouts-Time Speed, Distance, Calorie, Heart Rate,Workout Programme, User Weight Capacity-350 to 400 lbs, Running area should not be less than 60" x 21" of any reputed brand like True, Lexco, Stex, Cybex, Life Fitness, Matrix</li> <li>2. Multi gym Four Station Heavy Duty Multy Gym, Leg press – 150 kg. Lying chest press -100 kg. , high lat pulley/ low row -75 kg., Butterfly – 60 kg. of any reputed make.</li> <li>3. Rowing machine Ergo meter ,Ergonomic design with natural rowing, Olympic competition size and quality of any reputed brand.Like Concept-2,First Degree, H-20.</li> <li>4. Bench press,weight Bench Press Machine Carrying weight Heavy Duty,11 Gauge Bio mechanically correct of (Reputed Brand).</li> </ol>	10,000/-

4.	AUDIO VISUAL PROJECTION SYSTEM(Including hardware and software)	3 sets	<p><b>1 LCD Projector (wireless)</b> LCD Technology, Resolution: 1024X768, Brightness: 3000 ANSI Lumens, Contrast Ratio: 2000:1, Zoom Ratio 1to 1.7, 10 bit signal processing, 16.7 million colours, Aspect Ratio: 4:3, Keystone: Vertical, 2 Computer Input, 1HDMI Input, Wired Lan Port:RJ45, USB PORT, Lamp Life Hours: 5000Hrs, Built in Speaker 10W , Lens: Manual Zoom, Focus, Remote with Battery, Wireless Technology.</p> <p><b>2. Visualizer</b> Visual presenter-Desktop type, CMOS Technology, SXGA (1280*1024), Frame Rate (fps):30fps, Zoom:12x Optical, 8X Digital, Remote control, 1,300,000 Pixel, 350 degree image rotation, Image Memory: 32images, Shooting Area: 210x297, Digital Imaging: B/W, Negative/Positive, Carrying case for visual presenter.</p> <p><b>3. Laptop computer Configuration:</b> intel core i-5 Computer Note Book Convertible Tablet with Windows-7 professional</p> <p><b>4. Laser Printer</b> Resolution (in dpi): colour 600x 600 , papersize- A4, printer speed in PPM (A4size):8 BW and C Port: USB Memory (in MB) NA, Net work card 10/100: yes, Duplexing:yes</p> <p><b>5. Document Scanner</b> Resolution (in dpi): 600 x 600, speed in PPM (A4 size): 8 ADF Capacity :30, Flat Bed Size- A4, Document size: legal though AD</p>	7,500/-
5.	Crime Scene Simulator (Soft ware and hard ware)	2 nos	<p>Provide training in the pre- collection and post – collection of evidences from crime scenes. The Simulator should be interactive and user friendly. Training to be provided for about 150 evidences. All the Collection and Detection tools required to collect the evidences to be built into the Simulator. All the Storage Kits required to store the evidences to be built into the Simulator. Preferred crime scenes must be Adulteration, Burglary, Bombs &amp; Explosives, Biology &amp; Bio-Medical, Ballistics, Computer Forensic and Documents, DNA, Narcotics Serology. The voice over should be in English and Hindi There should be a Proficiency Testing Module for Testing the Trainees including grading the Trainees. Administrator module to create Groups, Users, Assigning evidences to users etc.</p>	1000/-
6.	Digital Interactive conference system with CCTV monitor	1 set	<p>I ) Ultra Mini Dome/Metal body professional CCTV Camera, Wide Zoom lens as per requirements, switches for professional installation, wide input voltage range: 8V to 16 V D C, Lowest power consumption of 70 mA, lowest heat on board for long life of camera, super sensitive low light image capture, ultra clear image performance, Gold plated PCB ,optically corrected top dome cover).with Regulated Power Supply</p> <p>II) 16 Channel Professional Stand Alone Real Time Digital Video Recorder with 500 GB hard disk for monitoring and recording with date and time details for up to 16 numbers of cameras (Brand-AVCAP; USA, Dual Stream DVR H.264 Main USB backup,</p>	6000/-

			VGA option) III) LCD Monitor Stylish Design with Slim Bezel & Depth, Full HD (1920 x 1080p),DCR 100,000:!,Advanced IPS LCD Panel, 300 W PMPO, Picture wizard II,Smark Energy Saving,Div X HD,USB 2.0.	
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