

CEO/Pilot/Online/2015  
Ministry of Civil Aviation  
Office of the Director General of Civil Aviation  
East Block – III, R K Puram, New Delhi-110066

28<sup>th</sup> April 2015

Subject: **Tender for providing required infrastructure, hardware, network and other facilities for conduct of Online ( Compute Based ) examination for issue of Licenses / Ratings**

The Central Examination Organisation, Office of the Director General of Civil Aviation, Ministry of Civil Aviation, invites technical & commercial bids for providing required Infrastructure, hard ware, network and other facilities for conducting online ( computer based ) examination for issue of License/Ratings. Interested Organizations involved in or capable of undertaking this issue may send their bids in a sealed envelope.

2. Objective, scope of work, timeline, information to be furnished by the organization, evaluation criteria for selection and other relevant details have been laid down in the following Pages of this document.

3. Bids shall be addressed to: Shri Pradeep Pathak, Director of Airworthiness, Central Examination Organisation, Office of the Director General of Civil Aviation, East Block – III, R K Puram, New Delhi-110066. **The last date for receipt of bids is 1<sup>st</sup> June 2015 by 3 PM.** Bids received after this date and time will not be considered. The bids received in time will be evaluated on the criteria fixed in the Tender Bid Document. Financial bid should be sent along with the technical bid but in a separate sealed envelope. No commercial information should be included in the technical bid. Financial bid of only those bidders who have qualified the technical bid will be opened. The sealed envelope should be marked as “Tender for providing required infrastructure, Hardware, and other facilities for conducting Online ( computer based ) Examination” and should include two separate sealed envelopes one each for technical bid and commercial bid. The same should be clearly indicated on each envelope.

This tender is also uploaded in DGCA website <http://dgca.nic.in>.

( Pradeep Pathak )  
Director of Airworthiness - CEO  
Directorate General of Civil Aviation

Office of the Director General of Civil Aviation  
Government of India  
Technical Centre, Opp. Safdarjung Airport  
New Delhi - 110003

Expression of Interest for Inviting Tender for Appointment of an Agency for providing required Infrastructure, hard ware, network and other facilities for conducting online (computer based) examination for issue of Licenses / Ratings.

**1. Introduction:**

1.0 Central Examination Organisation, Office of the Director General of Civil Aviation (DGCA) conducts Online (Computer Based) examinations for issue of licenses / ratings mainly in the cities of **Delhi (NCR), Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Lucknow, Ahmadabad, Bhopal, Bhubaneswar, Guwahati, Kochi, Patna, Kanpur** etc. Quotations are invited for appointment of an agency for providing required Infrastructure, hard ware, network and other facilities for conducting Online (computer based) examination for issue of Licenses / Ratings.

1.1 The tenderer should submit their bids in three envelopes.

**Envelope No. 1**

Shall contain signed copies of tender Documents, duly filled Form - 1 required for technical evaluation as detailed in Annexure I and Earnest Money Deposit (EMD) of Rs. 50000/- (Rupees fifty thousand only) in the form of a Demand Draft /Pay Order in favor of P.A.O, DGCA, MCA, New Delhi payable at New Delhi. The tender will not be considered if EMD is not submitted. The envelope should be super scribed "Technical Bid".

**Envelope No. 2**

Shall contain Price bid as per Form -2 and shall be super scribed "Financial Bid" on the envelope. Price bids of only those parties who qualify in Technical bid will be opened.

**Envelope No. 3**

Shall contain both Envelope No. 1 and Envelope No. 2.

All Envelopes should be properly sealed by Bidders and should be clearly super scribed with Envelope number and "**Tender for providing required Infrastructure, hardware, network and other facilities for conducting Online ( Computer Based ) Examinations**"

1.2 Late bids i.e., bids received after the specified date and time for receipt of bids shall not be considered.

1.3 The EMD should remain valid for a period of ninety days beyond the final bid validity period. EMD of unsuccessful bidders would be returned to them after the finalization of the tender.

- 1.4 The successful bidder will be required to furnish Performance Security of 10% of the contract value in the form of Fixed Deposit Receipt / Bank Guarantee from any Commercial Bank, Demand Draft/ Pay Order in favour of P.A.O, DGCA, MCA, New Delhi payable at New Delhi within two days of receipt of the work order. The Performance Security would be retained by DGCA till satisfactory completion of the work assigned and shall remain valid till ninety days of the completion of all contractual obligations.
- 1.5 The EMD would be returned to the successful bidder on receipt of Performance Security. No interest on Performance Security and EMD would be payable by DGCA under any circumstances.
- 1.6 Considering the confidentiality and sensitivity of the work involved, the bidders have to enclose a certificate along with the technical bid to the effect that it would not divulge any details pertaining to the examination to anybody without prior permission of DGCA and that it would take necessary preventive measures to ensure that nobody would come to know that the exam is being conducted by them. The agency will also have to certify that none of the relations of the personnel to be deployed for this work would appear for the exam to be conducted in the particular session.

## **2. Scope of work**

- 2.1 The National Informatics Center (NIC) has developed a software that includes all the pre-examination formalities like online application, allotting roll numbers, Exam Scheduling etc. in its first module ( L 1 ). The second module ( L 2 ) covers development and administration of test modules and the third module ( L 3 ), processing the exam results. DGCA intends to use the software developed and managed by NIC. The application developed by NIC would be implemented in a secure web application mode where hundreds of clients from several sites/cities access the Central web server directly (See the diagram in Annexure - II ). This Software works on Windows with IE 7 and above. DGCA in coordination with NIC will provide the necessary training to the selected agency's personnel.
- 2.2 The Centers / hired facility must preferably be owned and / or hired on long term basis with proper legal leased agreements with such facility directly so as to conduct the Online (Computer Based) Examinations in timely manner. The test Centers must also have the required infrastructure such as Seating arrangements with fixed partitions between two consecutive seats / desks, adequate space between two consecutive seats / desks & rows, CCTV with real time recording, computers, servers, UPS with minimum of 30 minute power backup capacity & generators commensurate with the number of seats / terminals, dedicated internet Connections from two different ISPs as per specification, LAN/WAN of required speed, routers, Network Management Switches, Firewalls and proxy servers etc. on regular basis and conditional provisions are not acceptable.
- 2.3 The examination will be conducted in cities as mentioned in Para.1 above for the number of days as decided by DGCA and in batches (as applicable) per day. The examination is proposed to be held during the third week of January, April, July and October of every year.

Note : The frequency, centre and date for examination can be changed at any point of time and DGCA has sole discretion on the matter

- 2.4 DGCA reserves the right to alter / change the number of candidates appearing for the test in each batch at each centre.
- 2.5 Agency shall provide the computers with required configurations and the necessary infrastructure to conduct the examination at all the centers as decided by DGCA. Agency shall also provide:-
- a. Test Centre Administrator / Coordinator : 1 (One for each Venue)
  - b. System Administrator - 1
  - c. Network Manager – 1
  - d. Invigilators 1 per 20 candidates.
  - e. Two Support Staff per 100 candidate
  - f. Two Security Guards per 100 candidates

Above requirement should be increased proportionately on the basis of candidates allotted to that Venue / centre. Further the manpower as required at above in (a), (b) & (c) should be in regular employment of the agency and their names and contact details shall be provided as part of technical bid.

- 2.6 Agency will provide details of the centre (Venue Address, No of m/c, List of Technical Support Personnel etc.) 30 Days in advance of scheduled examination to DGCA. The venue shall be selected which are well connected by the public transport system and acceptable to DGCA.
- 2.7 Agency shall ensure foolproof data security, data transfer, physical security and complete examination sanctity inside venues.
- 2.8 Agency shall provide sufficiently decent and quiet space to conduct the test. The space between two consecutive / adjacent seats / monitor must be of not less than 3 feet with a separator not less than 3 feet projection, out of the face of the monitor.
- 2.9 Agency shall provide suitable environment and sufficient infrastructure so that the CEO shall conduct the exam in batches as detailed in Para 2.3.
- 2.10 The Agency shall ensure that complete and comprehensive series of mock drills as deemed suitable by DGCA / NIC is carried out well before the commencement of exam in the presence of representatives of DGCA in all the venues / centers. The Mock Test is required to be carried out prior to the scheduled examination of a particular session as per the Checklist at Annexure – IV to this tender.
- 2.11 The LAN set up shall be virus free and fire-walled. The terminals and the servers including the backups shall also be virus free.
- 2.12 The agency shall provide the Hardware, Network and other facilities as per the following specifications / configurations:

### 2.12.1 Client System Configuration:

1. Dual Core 2.8GHzProcessor
2. Compatible Mother Board, Intel or Intel Chipset
3. 2GB RAM Expandable up to 4GB
4. 120 GB available free space
5. 104 Keys OEM Keyboard
6. Optical Scroll Mouse
7. 15” LCD or LED / 17” TFT Monitor
8. USB Port – 2nos ( only for controllers m/c )
9. Preinstalled with genuine Windows – 7 or above
10. Antivirus software (latest licensed version) valid till completion of the particular session of examination.
11. Internet Explorer 7 or above
12. Adobe Reader 7 or above

2.12.2 Network based Laser A4 size Printer (Minimum of 16 PPM) connected in LAN with the site controllers terminal. Centre wise candidate information, performance report of the candidates and any other cross tabulated Reports need to be printed.

2.12.4 Sufficient Online UPS system with serviceable batteries.

2.12.5 Services of the Truly Qualified System integrator and Network manager (one each) at each site (Their roles and responsibilities have been defined in Annexure III );

2.12.6 Internet Connections: Two internet Connections from two different ISPs as per following details:

Seating Capacity	Primary Line	Secondary Line	Alternate
1-100	4 Mbps – Dedicated Lease Line	4 Mbps – Dedicated Lease Line	One of the ISP may be with 10 Mbps Broadband with static IP
101-150	8 Mbps – Dedicated Lease Line	8 Mbps – Dedicated Lease Line	One of the ISP may be with 16 Mbps Broadband with static IP
151-250	10 Mbps – Dedicated Lease Line	10 Mbps – Dedicated Lease Line	One of the ISP may be with 20 Mbps Broadband with static IP

Public IP Addresses from these ISPs / lease lines / broad band received at the centers must be communicated to DGCA by the agency well in advance to enable additional security features. The agency must ensure that in case one of the ISP / lease line fails, they should be able to switchover to other ISP / lease line in minimum time preferably with auto switch over. It must be ensured that the ISPs / lease line / broad band selected for this purpose has good peering arrangement and also minimum latency to reach NICNET. The agency should make sure that the complete bandwidth at the test centre is available to the computer based exam. The bidder should ensure powerful proxy / Nat engine to ensure minimum latency due to this device.

- 2.12.7 Agency Bidder must maintain a good quality LAN with security policies implemented to keep virus/worm free network
- 2.12.8 Sharing the site for network integration with NIC for a Week time for security, proper handshaking and actual / testing before the exam conducted live at each site.
- 2.12.9 Disabling of CD/DVD drive, USB ports of client machines and disabling of right click of mouse, print screen/scroll function, special key functions of the key boards of client machines used for computer based examination.
- 2.12.10 Availability of sufficient numbers of back up machines ( at least 10% of the capacity of each venue ) to be used in case of machines malfunction during computer based examination.
- 2.12.11 Availability of adequate capacity back up power / generators to cater for the remaining duration of the examination from the time of main power failure.

### 3 Time frame

- 3.1 pre- Bid meeting :- **A Pre- Bid meeting with prospective agencies will be convened at 3 PM on 27<sup>th</sup> May 2015** in the O/o DGCA, Technical centre, opp. Safdarjung Airport, New – Delhi 10003. **Queries received, from the agencies up to 22<sup>nd</sup> May 2015 will be addressed.** The query can be sent to [ppathak.dgca@nic.in](mailto:ppathak.dgca@nic.in) with a copy to [ceo.dgca@nic.in](mailto:ceo.dgca@nic.in).
- 3.2 Time limit for receipt of bids: 1<sup>st</sup> June 2015 at 3 PM. (Bids received after this time limit shall not be entertained.)
- 3.4 Evaluation of Commercial Bids: Will be intimated via e-mail to those bidders who are qualified in the Technical Bid / evaluation.

### 4. Procedure of Evaluation and Selection

- 4.1 DGCA reserves the sole right to accept or reject any or all bids which is incomplete or has been received after the appointed time and date or does not satisfy the prequalification criteria specified here under, without assigning any reasons thereof. The technical bids shall not be considered for technical evaluation unless it is accompanied by the following:
- i. Submission of Earnest Money Deposit of Rs 50,000/-.
  - ii. Submission of Work Orders as per Sl. No. 8 in Form 1 on Particulars i.e., copy of work order wherein the party / company had administered online (computer based) test modules at all-India levels including setting up of the exam centers at various locations.

The evaluators of the technical bid shall not have access to the financial bid till technical evaluation is completed. The technical bids shall be opened by a Technical Evaluation Committee (TEC) constituted for the purpose. Technical evaluation shall be done keeping in view the following parameters:

Sl. No.	Parameter
A	<b>Past experience in work of similar nature:</b> The agency should have executed in the preceding 1 year, minimum of Two (2) projects of similar nature each of value not less than Rs. 50 lakh. Submission of original certificate from the customer indicating the value of work to this effect.
B	<b>Average turnover of the Agency:</b> In the last three financial years (2012-13, 2013-14, 2014-15) in online (computer based) examination Rs 5 Crore.
C	Compliance with ISO 27001 (Former BS7799-2) for the last 5 years.
D	<b>Infrastructure and other details :</b> Office, hardware, Network, LAN and software resources and Personnel including skills and competence in all the cities.
E	Party should have PAN and Service Tax Number.
F	Party should be able to furnish a copy of the Income Tax Return for the last three years along with a copy of TDS Certificates of the previous works done.
G	<b>Assessment of Technical capability of the agency:</b> Technical capability assessment shall include proposed venue / centre visits and inspection of infrastructure, hardware, network & other facility requirements as per the Checklist at Annexure – V to this tender by DGCA representatives. The dates of proposed facility / venue inspection shall be intimated to the bidders through e-mail.

Bids which are not otherwise rejected for the reasons indicated above will be evaluated on the basis of cost.

- 4.2 The financial bid should contain a quote fee for the assignment in Indian Rupees. The rates may be quoted per candidate per hour basis. Agency shall include in its price all taxes and other costs while quoting for the tender, in “Form 2: Price Offer” to be kept in Envelop No. 2. Actual payment will be on the basis of number of candidates admitted for the particular exam per the duration of the particular paper. The duration of each paper may vary from 30min to 200min. Income Tax will be deducted at source from the bills as applicable. The Agency needs to furnish its PAN number.
- 4.3 Financial bids of only those bidders who qualify the technical criteria will be opened. Of these the one quoting the lowest cost will be awarded the contract provided all other requirements are fulfilled.
- 4.4 DGCA shall have right to accept or reject any or all tenders without assigning any reasons thereof.

## 5 Payment:

- 5.1 The payment will be made on satisfactory completion of the task assigned.

## **6 Conditions of the Tender:**

- 6.1 The Organization should be a registered company/ firm (minimum 5 years old) with its parent base in India. The agency should be operating in India for a minimum of Five (5) consecutive years immediately preceding the date of tender with an objective of offering relevant Solutions and Services that are the subject matter of this tender.
- 6.2 The agency shall be single point of contact with DGCA and shall be solely responsible for the execution and delivery of the work.
- 6.3 The agency should have on his pay roll sufficient number of Technical and Administrative employees for the proper execution of the contract. The agency should submit a list of the employees stating clearly how they would be involved in the assigned work. The agency must deploy sufficient technical staff as per Para 2.5 above at every test center.
- 6.4 The agency should have ready infrastructure & arrangements in all the proposed venue / centers.
- 6.5 Even though bidders may satisfy the above requirements, they may be disqualified if they have:
  1. Made misleading or false representation or facts or deliberately suppressed the information to be provided in the forms, statements and enclosures of this document. Record of poor performance such as abandoning work, not properly completing the contract or financial failures/weaknesses.
  2. If confidential enquiry reveals facts contrary to the information provided by the bidder.
  3. If confidential enquiry reveals unsatisfactory performance in any of the selection criteria.
  4. If bidder is engaged in any activity which can influence the conduct of professional exam such as conducting of coaching classes.
  5. The past experience of the agency with any organization / institution in conduct of online examination in the opinion of DGCA is unsatisfactory, etc.
- 6.6 Agency must show and submit suitable emergency management plan during any crisis situations/redundancy of servers, nodes additional venue / centre locations.
- 6.7 At any time before the submission of bids, DGCA may amend the tender by issuing an addendum in writing or by standard electronic means. The addendum shall be sent to all Bidders and will be binding on them. Bidders shall acknowledge receipt of all amendments.
- 6.8 The Agency will ensure complete and trouble free administration of Online ( Computer Based ) Tests & invigilation and also security & integrity of data all the time. Leakage of secured information in any form will be considered as a breach of contract and a cognizable offence.



- 6.2 DGCA reserves its right to terminate the contract for any reason at its absolute discretion.
- 6.3 DGCA reserves the right to claim damages, of which DGCA shall be the sole judge, in respect of delays directly or indirectly due to the failure/default on the part of Agency in carrying out the responsibilities/duties efficiently and promptly.
- 6.4 The submission of a tender by an Agency implies that he has read these instructions and has made himself aware of the scope of work and the conditions of the contract and DGCA will not therefore, pay any extra charges on any account in case the Agency finds later on to have misjudged the conditions.
- 6.5 Any act on part of the Agency or his employees which will be prejudicial to the interest of the DGCA shall be considered as grave breach of the condition of the contract and shall render the contract liable for immediate termination. Loss due to any act on part of the Agency will be entirely its responsibility.
- 6.6 The Agency shall engage adequate number of qualified and experienced persons who are in their own employment to carry out the assignment under contract successfully.
- 6.7 The workers employed by the Agency to perform the contract, shall be the employees of the Agency and the Agency alone shall be liable to pay the wages and all other payments as may be due to the workers and DGCA shall in no way be liable for the same. The Agency shall also comply with all the provisions under the laws of the land pertaining to its workers and their employment for the purpose of performing the contract if so awarded against this tender and the Agency shall also indemnify DGCA for any claims whatsoever made by such workers against DGCA in that behalf.
- 6.8 DGCA shall not be responsible for death, disablement, injury, accident to Agency's employees, which may arise out of and in the course of their duties with the Agency. DGCA shall not be liable to pay any damages or compensation to the Agency's employees. The same are to be paid by the Agency as per the provisions of Law.
- 6.9 Force Majeure: The agency shall not be responsible for any failure to perform its assigned function due to causes beyond its reasonable control such as acts of God, fire, flood, war riots, embargoes, strikes, lockouts, act of any Government authority, accidents or disruption or operations arising from causes not attributable to any malafide acts of firm.
- 6.10 The jurisdiction of court for redressal of any dispute arising out of this contract shall be that of the Delhi Courts.

## **7 Statutory Obligations:**

- 7.1 The Agency shall comply with all the Central, State and Municipal Laws & Rules and shall be solely responsible for the implementation of the provisions of the various Labour Laws and Rules there under and other statutory regulations, rules that are in force.

## **8 Penalty Clause:**

- 8.1 If the Agency fails or delays to fulfill the obligations in the execution of work to the entire satisfaction of DGCA, DGCA reserves the right to terminate the contract and forfeit the performance security by way of en-cashing the demand draft/pay order/Fixed Deposit receipts or invoking the Bank Guarantee as the case may be, without prejudice to DGCA's further right to claim compensation from the Agency as a result of its failure or delay to fulfill the obligations.
- 8.2 If the examination is delayed or postponed or cancelled due to failure and/or malfunction of any of the hardware, network and other facilities including main & backup power supply provided by the agency in accordance with the Para 2.12 of this tender document, the agency shall be liable for payment of any compensation arising due to such failure at the sole discretion of DGCA and shall also be liable to provide the hardware, network and other facilities as specified under Para 2.12 of this tender documents free of cost at the centers and for the number of candidates at the sole discretion of DGCA for conducting the re-examination.

## **9 Validity of the Contract:**

- 9.1 The contract shall initially be valid for a period of 2 years subject to fulfilling the conditions as detailed in the tender.
- 9.2 The contract may be extended by period of another 1 year subject to satisfactory performance.

## Annexure I

Tenders are invited from experienced and reputed firms in the field of conducting online (computer based) examination. The profile of the bidder ought to be a well-established firm with a team of experienced staff, all India network, skilled manpower etc. The bidder should have experience to undertake works of similar type and magnitude.

In Support of above, party should submit the following documents/ information:

1. Profile of the organization.
2. Details of Networking to undertake fully online (computer based) test.
3. List of clients including PSUs, Educational institutions/ Central Government/ State Government etc. where similar jobs have been executed in past 3 years with copy of self-attested work orders.
4. List of test centers & Infrastructure facilities available on All India Basis. Attach Documentary evidence in support of the ownership and / or long term legal lease agreement of each facility.
5. Confirmation of testing system compliant with ISO 27001 for the past 5 years.
6. Copy of Annual Report for last 3 years.
7. Latest Income Tax return submission copy.
8. Copy of PAN & Service tax registration number.
9. Certificate by the authorized signatory that all the terms and conditions of the bid are acceptable to the bidder.
10. Sufficient proof to show the turn-over from the online (computer based) exam and overall turn-over to the satisfaction of the DGCA.
11. Name & contact details of the Test Centre Administrator / Coordinator, System Administrator and Network Manager of the agency. Appropriate evidence in support of their regular employment with the agency.
12. List of leased and / or broad band line available along with respective service provider, IPs details, bandwidth together with documentary evidence in support of the same for the proposed Centre / Venue are attached.

## **FORM 1: PARTICULARS**

Please fill in the form in the format given below.

1. Name of the Firm
2. Address of the Firm
3. Contact Person (s) with mobile number (s)
4. Email address
5. Telephone numbers
6. Details of EMD (Mention DD number, bank, amount)
7. ISO 27001 Certification for Online (computer based) Test Confidentiality: Yes/No  
If yes attach copy of the same
8. Whether you have administered the online (computer based) test modules at all-India levels including setting up of the exam centres at various locations: Yes/No  
If Yes, attach copy of Work Order
9. Whether signed copies of tender Documents attached: Yes / No
10. Whether enclosed Annual Reports of Past three years: Yes/No
11. Whether submitted Income Tax Returns for the past three years: Yes / No
12. Whether submitted a copy of TDS certificate of the previous works done : Yes/No
13. Whether submitted original certificate from the customer for the previous works completed clearly mentioning the value of work : Yes/No
14. Whether submitted PAN copy: Yes / No
15. Whether submitted Service Tax Registration Number: Yes / No
16. Whether a Certificate by the authorized signatory that all the terms and conditions of the bid are acceptable to the bidder is attached: Yes / No
17. Whether sufficient proof is attached to show the turn-over from the online (computer based) exam and overall turn-over to the satisfaction of the DGCA: Yes / No.
18. Whether the List of test centers & Infrastructure facilities available on All India Basis: Yes / No.
19. Whether documentary evidence in support of the ownership and / or long term legal lease agreement of each facility is attached: Yes / No
20. Whether the list of leased and / or broad band line available along with respective service provider, IPs details, bandwidth together with documentary evidence in support of the same for the proposed Centre / Venue are attached: Yes / No.
21. Name & contact details of the Test Centre Administrator / Coordinator, System Administrator and Network Manager of the agency along with the documentary evidence in support of their regular employment with the agency: Yes / No

Note:

- a) In case you have a consolidated work order which clearly spells out all the activities mentioned above (Sl. No. 8), you may attach the same.
- b) Non-submission of EMD and Work orders (Sr No 8) will disqualify you and in that case, your price bid shall not be opened.

**FORM 2: Price Offer**

Per candidate per hour charges for administering the online (computer based) exam at the cities [such as **Delhi(NCR), Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Lucknow, Ahmadabad, Bhopal, Bhubaneswar, Guwahati, Kochi, Patna, Kanpur** etc.] including setting up of the examination centers as specified in the tender document:

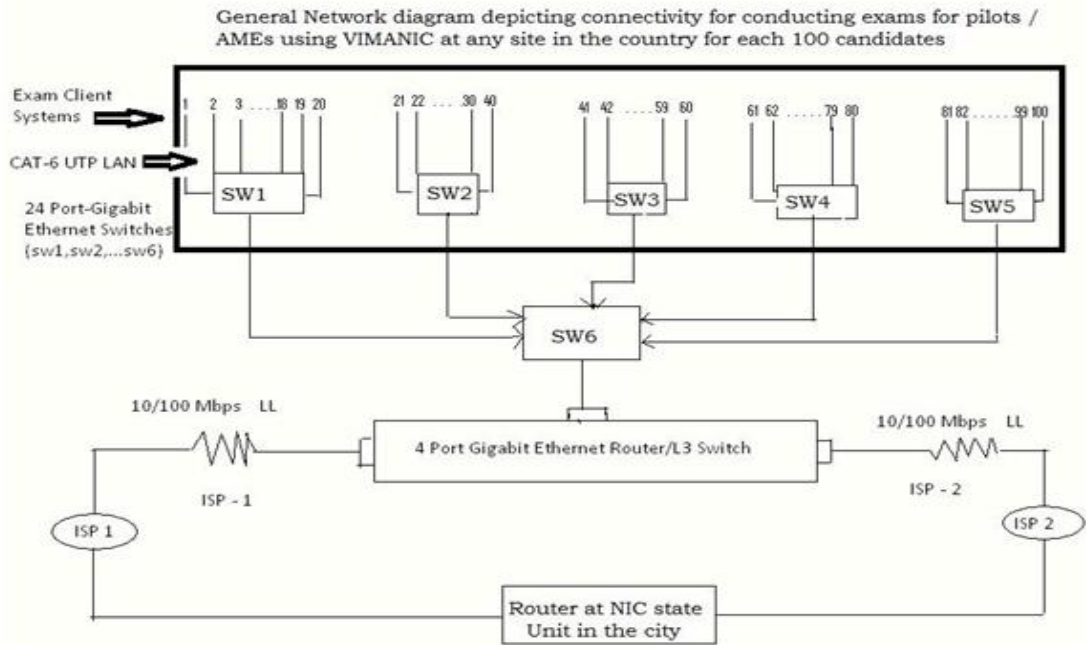
Amount in INR per Candidate per Hour \_\_\_\_\_(Inclusive of all taxes)

Signature:

Date:

Company Seal

## Annexure II



### Annexure – III

#### Roles and Responsibilities of System Integrator and Network Administrator

System Integrator and Network Administrator are to maintain and operate the computer system and network respectively.

A System Integrator's responsibilities include analyzing system logs and identifying potential issues with computer systems, performing checks of systems, performing backups, answering technical queries, ensure security of the system, troubleshoot any reported problem and System performance tuning.

A Network Administrator is to take care of network integration, security and sanitization of examination centres from possible intrusions, detection and prevention and ensure that the network infrastructure is up and running. Once the network is set up, it is the responsibility of network administrator to get it cyber security tested and make it vulnerable free.

Annexure – IV

**CHECKLIST FOR ENSURING COMPLIANCE TO SYSTEM SPECIFICATION  
REQUIREMENT DURING MOCK DRILL AND ACTUAL EXAMINATION.**

**I. General**

Sl. No	Item / Description	SAT / UNSAT	Remarks if any
1	Whether, the process of Registering the IP Addresses, both Primary and Secondary by local network administrator in coordination with NIC Hyderabad completed. Availability of The primary and secondary Internet Broadband / Lease Line <b>should not</b> be from the same Internet Service Provider.		
2	Has the Internet Service Provider furnished their details along with bandwidth (as per spec) & IP (Static) address?		
3	Whether all required number of seats & PCs are available. If not arrange it on priority in coordination with local centre admin.		
4	Whether all the Client & Examination Controller's System configuration requirement are as per System Requirement Checklist given below.		
5	Whether the Internet Explorer-Version -7 (IE-7) or above is installed on each machine with required browser settings		
6	Whether the Key Tweak software has been installed for disabling all special function keys on all client machines. Refer to Checklist for Keys to be Disabled as given below		
7	Whether the DVD / CD / USB drives, right click on mouse, print screen/scroll keys should be disabled on client machines. The COE machine also shall have these drives disabled other than those used for key board, mouse and printer.		
8	Whether the Wi-Fi, Bluetooth accessibility are disabled from both COE & candidate/ Client machines		
9	Whether the Site Controller machine (for DGCA officials) attached with a printer. Ensure stationery availability for printouts.		
10	Whether the proper power supply is made available for all the Client & COE Machines.		
11	Whether the adequate electrical Power Backup is made available.		
12	Whether procedure established to finalize the Invigilators and System / Network administrator for all the days and plan the seating arrangement in advance by consulting DGCA officials.		
13	Whether the latest Adobe Reader is installed on COE's machine, so that PIN Number report can be opened and print out can be taken.		
14	Whether the firewall settings on the network are established. No other than the provided URL can be accessible from client machine. Whether all other internet sites on client machine other than examination URL from network firewall settings are blocked.		
15	Whether correct browser settings on all client machines are installed		
16	Whether a system of cleaning the browsers for history, cookies, Temp. folders / files after every batch of examination is in place.		



Sl. No	Item / Description	SAT / UNSAT	Remarks if any
17	Whether the availability of Infrastructure required for conducting examination like space, suitable partition between candidates & Web Cams / CCTV (with recording facility) to avoid unfair means are in place.		
18	Whether the software such as SKYPE or any other software capable of controlling remote operation of desktops are deleted from each of the client machines.		

## II. System Requirement for DGCA Examination:

Sl. No.	Item	Specification	SAT / UNSAT	Remarks if any
1	CPU	Dual core 2.80 Ghz, Compatible Mother Board, Intel or equivalent chipset.  Qty. – As per the Centre Requirement. In addition, adequate Number of Standby Machines (10%of batch strength) to Cater for Unforeseen System failures.  All the PCs must be connected with LAN		
2	Memory	2GB RAM expandable upto 4 GB		
3	Hard Disc	120 Gb of free Space		
4	Operating System	Preinstalled with genuine Windows – 7 or above		
5	Printer	Black & White Network based Laser A4 Size printer (Minimum of 16 PPM) connected in LAN with the site controllers terminal at each centre. Centre wise candidate information, performance report of the candidates and any other cross tabulated reports need to be printed.  Qty. 1 Dedicated Connected only to the COEs system		
6	Browser	Internet Explorer 7 or above (excluding IE9) and Appropriate Firewall & Security Settings.		
7	Other Items	104 Keys OEM keyboard. Optical OEM Scroll Mouse with Mouse Pad; TCO 05 certified 15” LCD or LED / 17” TFT Monitor, USB – 2 Nos. (Only for COE’s Machine) Antivirus latest version with one year validity on LAN setup and all machines; Adobe Reader 7 or above.		
8	Network	As per the following table:		

Two internet Connections from two different ISPs as per following details:

Seating Capacity	Primary Line	Secondary Line	Alternate
1-100	4 Mbps – Dedicated Lease Line	4 Mbps – Dedicated Lease Line	One of the ISP may be with 10 Mbps Broadband with static IP
101-150	8 Mbps – Dedicated Lease Line	8 Mbps – Dedicated Lease Line	One of the ISP may be with 16 Mbps Broadband with static IP
151-250	10 Mbps – Dedicated Lease Line	10 Mbps – Dedicated Lease Line	One of the ISP may be with 20 Mbps Broadband with static IP

Sl. No.	Item	Specification	SAT / UNSAT	Remarks if any
9	UPS & Power Backup System	Sufficient online UPS and power backup system to support all the terminals installed on each location. Systems and Router shall have to switch over to UPS automatically		
10	Misc	Whether the software such as SKYPE or any other software capable of controlling remote operation of desktops are deleted from each of the client machines.		

### III. Keys to be Disabled:

Sl. No.	Item / Description	SAT / UNSAT	Remarks If any
1	Whether Print Screen key is disabled		
2	Whether Windows Key (Both Left & Right) are disabled		
3	Whether all Special Function Keys are disabled		
4	Whether Arrow Keys (All Four) are disabled		
5	Whether Key functions Disabled through Key Tweak Software in addition to the above.		

Signature with Date:

Signature with Date:

System Administrator  
Name:

Network Administrator  
Name:

Company Designation:

Company Designation:

Signature of the DGCA Representative for having witnessed the Inspection / Test

Centre :

Name :

Designation :

Signature :

Date :

## Annexure – V

Check list for evaluation of Technical Capabilities with respect to infrastructure, hardware, network & other facility requirements.

Centre Name:

Name & contact details of the Nodal Person of the Facility:

Facility Address:

Sl. No.	Item / Description	SAT / UNSAT	Remarks if any
1	Whether the premises is well connected with public transport. Approachable during the inclement weather conditions.		
2	Basic amenities such as wash rooms / potable water, etc.		
3	Give the Names & Contact details of the Test Centre Administrator / Coordinator, System Administrator, Network Manager of the agency.  a. Name:  b. Name:  c. Name:		
4	Whether the hall(s) / room(s) individually or cumulatively can accommodate the required number of seats /client machines with sufficient distance between them as specified. Approximately the number of candidates expected are as follows: Delhi(NCR) - 250, Mumbai - 250, Kolkata - 50, Chennai - 100, Bangalore - 50, Hyderabad - 75, Lucknow – 50, Ahmadabad - 50, Bhopal - 50, Bhubaneswar - 50, Guwahati - 25, Kochi - 100, Patna – 50 & Kanpur – 25.		
5	Whether seats have gap of 4 feet (head to head distance) in all sides. The space between two consecutive / adjacent seats must be of not less than 3 feet with a separator not less than 3 feet projection.		
6	Whether the hall / rooms are well lit and the premises has back-up power supply for the lighting.		
7	The hall / rooms are well ventilated, Protected from rain & with suitable environment control depending upon the Seasonal Weather. A suitable power backup so as to maintain continuous environmental control during the examination.		
8	Whether the premises has a separate control room for Controller of Examination nearer to the identified examination halls.		

Sl. No.	Description	SAT / UNSAT	Remarks if any																
9	Whether the halls / rooms and the premises of the test venue / centre is installed with CCTV camera and have facility to record the examination activity.																		
10	<p>Ensure availability of required number of client system (PCs) with the following configurations:</p> <ol style="list-style-type: none"> <li>1. Dual Core 2.8GHz Processor</li> <li>2. Compatible Mother Board, Intel or Intel Chipset</li> <li>3. 2GB RAM Expandable up to 4GB</li> <li>4. 120 GB available free space</li> <li>5. 104 Keys OEM Keyboard</li> <li>6. Optical Scroll Mouse</li> <li>7. 15" LCD or LED / 17" TFT Monitor</li> <li>8. USB Port – 2nos ( only for controllers m/c )</li> <li>9. Preinstalled with genuine Windows – 7 or above</li> <li>10. Antivirus software (latest licensed version) valid till completion of the particular session of examination.</li> <li>11. Internet Explorer 7 or above</li> <li>12. Adobe Reader 7 or above</li> <li>13. Others facility such as 104 Keys OEM keyboard. Optical OEM Scroll Mouse with Mouse Pad; TCO 05 certified 15" LCD or LED / 17" TFT Monitor, USB – 2 Nos (Only for COE's Machine) Antivirus latest version with one year validity on LAN setup and all machines; Adobe Reader 7 or above.</li> </ol>																		
11	<p>Ensure availability of Two internet Connections from two different ISPs as per following details:</p> <table border="1" data-bbox="280 1276 1089 1682"> <thead> <tr> <th data-bbox="280 1276 410 1352">Seating Capacity</th> <th data-bbox="410 1276 581 1352">Primary Line</th> <th data-bbox="581 1276 751 1352">Secondary Line</th> <th data-bbox="751 1276 1089 1352">Alternate</th> </tr> </thead> <tbody> <tr> <td data-bbox="280 1352 410 1461">1-100</td> <td data-bbox="410 1352 581 1461">4 Mbps – Dedicated Lease Line</td> <td data-bbox="581 1352 751 1461">4 Mbps – Dedicated Lease Line</td> <td data-bbox="751 1352 1089 1461">One of the ISP may be with 10 Mbps Broadband with static IP</td> </tr> <tr> <td data-bbox="280 1461 410 1570">101-150</td> <td data-bbox="410 1461 581 1570">8 Mbps – Dedicated Lease Line</td> <td data-bbox="581 1461 751 1570">8 Mbps – Dedicated Lease Line</td> <td data-bbox="751 1461 1089 1570">One of the ISP may be with 16 Mbps Broadband with static IP</td> </tr> <tr> <td data-bbox="280 1570 410 1682">151-250</td> <td data-bbox="410 1570 581 1682">10 Mbps – Dedicated Lease Line</td> <td data-bbox="581 1570 751 1682">10 Mbps – Dedicated Lease Line</td> <td data-bbox="751 1570 1089 1682">One of the ISP may be with 20 Mbps Broadband with static IP</td> </tr> </tbody> </table> <p>Mention the IP addresses &amp; band width of all lines</p>	Seating Capacity	Primary Line	Secondary Line	Alternate	1-100	4 Mbps – Dedicated Lease Line	4 Mbps – Dedicated Lease Line	One of the ISP may be with 10 Mbps Broadband with static IP	101-150	8 Mbps – Dedicated Lease Line	8 Mbps – Dedicated Lease Line	One of the ISP may be with 16 Mbps Broadband with static IP	151-250	10 Mbps – Dedicated Lease Line	10 Mbps – Dedicated Lease Line	One of the ISP may be with 20 Mbps Broadband with static IP		
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Sl. No.	Item / Description	SAT / UNSAT	Remarks if any
12	Availability of routers with auto changeover provision (with an indicator to show the working ISP) from one ISP to other ISP, the required number of switches with appropriate firewalls, hubs, LANs commensurate with the number of test computers (client machines)		
13	Availability of required manpower such as or arrangements for making available Test Centre Administrator / Coordinator : 1 (One for each Venue) System Administrator - 1 Network Manager – 1 Invigilators 1 per 20 candidates. Two Support Staff per 100 candidate Two Security Guards per 100 candidates Above requirement should be increased proportionately on the basis of candidates allotted to that Venue / centre.		
14	Mechanism to isolate the test centre with respect to use of ISPs from other rooms /halls of the centre / venue in case the center / venue is having live classes using IT		

1. Signature with Date:

System Administrator  
Name:

Company Designation:

3. Signature with Date:

Administrative Coordinator:

Company Designation:

Remarks:

2. Signature with Date:

Network Administrator  
Name:

Company Designation:

Signature of the DGCA Representative for having witnessed the Inspection

Centre :

Name :

Designation :

Signature :

Date :